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

Cover Page

Order ID : Q2150

Project ID : South River WM Replacement

Client : CDM Smith

Lab Sample Number	Client Sample Number
Q2150-01	TP-44
Q2150-02	TP-42
Q2150-03	TP-39
Q2150-04	TP-48
Q2150-05	TP-47
Q2150-06	TP-50
Q2150-07	TP-51
Q2150-08	TP-52
Q2150-09	TP-54
Q2150-10	TP-53

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: 6/4/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q2150**

	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: **PRATIK PATEL** **Date:** **06/04/2025**

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

LAB CHRONICLE

OrderID:	Q2150	**OrderDate:**	5/28/2025 3:53:00 PM
Client:	CDM Smith	**Project:**	South River WM Replacement
Contact:	Marcie Ann Encinas	**Location:**	L41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2150-01	**TP-44**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-01DL	**TP-44DL**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	06/02/25	
Q2150-02	**TP-42**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-03	**TP-39**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-04	**TP-48**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-05	**TP-47**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-06	**TP-50**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-07	**TP-51**	**SOIL**			**05/27/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-08	**TP-52**	**SOIL**			**05/28/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-09	**TP-54**	**SOIL**			**05/28/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	
Q2150-10	**TP-53**	**SOIL**			**05/28/25**			**05/28/25**
			SVOC-TCL BNA -20	8270E		05/30/25	05/30/25	

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

Hit Summary Sheet
SW-846

SDG No.: Q2150

Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**TP-44**								
Q2150-01	TP-44	SOIL	Acenaphthylene		350.000		36.6	220	ug/Kg
Q2150-01	TP-44	SOIL	Acenaphthene		260.000		27	220	ug/Kg
Q2150-01	TP-44	SOIL	Dibenzofuran		210.000	J	28.7	220	ug/Kg
Q2150-01	TP-44	SOIL	Fluorene		450.000		32	220	ug/Kg
Q2150-01	TP-44	SOIL	Phenanthrene		2,200.000		26.4	220	ug/Kg
Q2150-01	TP-44	SOIL	Anthracene		1,100.000		42.1	220	ug/Kg
Q2150-01	TP-44	SOIL	Carbazole		170.000	J	39.5	220	ug/Kg
Q2150-01	TP-44	SOIL	Fluoranthene		5,200.000	E	38	220	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene		2,700.000		45.6	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(a)anthracene		2,700.000		29.1	220	ug/Kg
Q2150-01	TP-44	SOIL	Chrysene		2,200.000		25.2	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(b)fluoranthene		3,400.000	E	24	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(k)fluoranthene		1,500.000		28.3	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(a)pyrene		2,500.000		37.3	220	ug/Kg
Q2150-01	TP-44	SOIL	Indeno(1,2,3-cd)pyrene		1,000.000		36.8	220	ug/Kg
Q2150-01	TP-44	SOIL	Dibenzo(a,h)anthracene		320.000		34.7	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(g,h,i)perylene		1,200.000		32.5	220	ug/Kg
			Total Svoc :		**27,460.00**				
Q2150-01	TP-44	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB	0	0	ug/Kg
Q2150-01	TP-44	SOIL	4H-Cyclopenta[def]phenanthrene	*	1,100.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	9,10-Dimethylanthracene	*	470.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	9-Cyanophenanthrene	*	150.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Anthracene, 1-methyl-	*	250.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Anthracene, 2-methyl-	*	700.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Benzene, 1,1-(1,3-butadiyne-1,4-d	*	150.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Benzo[e]pyrene	*	600.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Benzophenone	*	230.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Cyclopenta(def)phenanthrenone	*	290.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Dibenzothiophene	*	230.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Fluoranthene, 2-methyl-	*	230.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene, 1-methyl-	*	150.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene, 4,5,9,10-tetrahydro-	*	390.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene, 4-methyl-	*	130.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	unknown10.851	*	130.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	unknown9.645	*	140.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Naphthalene, 2-phenyl-	*	260.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Perylene	*	1,800.000	J	0	0	ug/Kg

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

Hit Summary Sheet
SW-846

SDG No.: Q2150

Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q2150-01	TP-44	SOIL	Phenanthrene, 2-methyl-	*	280.000	J	0	0	ug/Kg
			Total Tics :		**7,930.00**				
			Total Concentration:		**35,390.00**				
Client ID :	**TP-44DL**								
Q2150-01DL	TP-44DL	SOIL	Fluorene		480.000	JD	160	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Phenanthrene		2,500.000	D	130	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Anthracene		1,100.000	D	210	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Fluoranthene		4,800.000	D	190	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Pyrene		3,100.000	D	230	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(a)anthracene		2,700.000	D	150	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Chrysene		2,600.000	D	130	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(b)fluoranthene		3,900.000	D	120	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(k)fluoranthene		1,200.000	D	140	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(a)pyrene		2,800.000	D	190	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Indeno(1,2,3-cd)pyrene		1,100.000	D	180	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(g,h,i)perylene		1,100.000	D	160	1100	ug/Kg
			Total Svoc :		**27,380.00**				
			Total Concentration:		**27,380.00**				
Client ID :	**TP-42**								
Q2150-02	TP-42	SOIL	Fluoranthene		130.000	J	34.7	200	ug/Kg
Q2150-02	TP-42	SOIL	Pyrene		100.000	J	41.7	200	ug/Kg
Q2150-02	TP-42	SOIL	Benzo(b)fluoranthene		77.900	J	22	200	ug/Kg
			Total Svoc :		**307.90**				
Q2150-02	TP-42	SOIL	Benzophenone	*	150.000	J	0	0	ug/Kg
Q2150-02	TP-42	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB	0	0	ug/Kg
Q2150-02	TP-42	SOIL	Heptadecyl trifluoroacetate	*	110.000	J	0	0	ug/Kg
Q2150-02	TP-42	SOIL	n-Hexadecanoic acid	*	190.000	J	0	0	ug/Kg
			Total Tics :		**700.00**				
			Total Concentration:		**1,007.90**				
Client ID :	**TP-39**								
Q2150-03	TP-39	SOIL	Phenanthrene		96.600	J	24.9	200	ug/Kg
Q2150-03	TP-39	SOIL	Fluoranthene		130.000	J	35.7	200	ug/Kg
Q2150-03	TP-39	SOIL	Pyrene		95.600	J	42.9	200	ug/Kg
Q2150-03	TP-39	SOIL	Bis(2-ethylhexyl)phthalate		370.000		70.5	200	ug/Kg
Q2150-03	TP-39	SOIL	Benzo(b)fluoranthene		83.100	J	22.6	200	ug/Kg
			Total Svoc :		**775.30**				
Q2150-03	TP-39	SOIL	n-Hexadecanoic acid	*	340.000	J	0	0	ug/Kg
Q2150-03	TP-39	SOIL	1,3-Dioxolane, 2,2-dimethyl-	*	160.000	J	0	0	ug/Kg
Q2150-03	TP-39	SOIL	1-Heneicosanol	*	140.000	J	0	0	ug/Kg

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

Hit Summary Sheet
SW-846

SDG No.: Q2150

Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q2150-03	TP-39	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	430.000	AB	0	0	ug/Kg
Q2150-03	TP-39	SOIL	Benzophenone	*	260.000	J	0	0	ug/Kg
			Total Tics :		**1,330.00**				
			Total Concentration:		**2,105.30**				
Client ID :	**TP-48**								
Q2150-04	TP-48	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	460.000	AB	0	0	ug/Kg
Q2150-04	TP-48	SOIL	Benzophenone	*	280.000	J	0	0	ug/Kg
Q2150-04	TP-48	SOIL	Heptadecyl heptafluorobutyrate	*	180.000	J	0	0	ug/Kg
Q2150-04	TP-48	SOIL	n-Hexadecanoic acid	*	430.000	J	0	0	ug/Kg
			Total Tics :		**1,350.00**				
			Total Concentration:		**1,350.00**				
Client ID :	**TP-47**								
Q2150-05	TP-47	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	290.000	AB	0	0	ug/Kg
Q2150-05	TP-47	SOIL	Benzophenone	*	180.000	J	0	0	ug/Kg
Q2150-05	TP-47	SOIL	n-Hexadecanoic acid	*	410.000	J	0	0	ug/Kg
Q2150-05	TP-47	SOIL	Octadecanoic acid	*	150.000	J	0	0	ug/Kg
Q2150-05	TP-47	SOIL	Trifluoroacetoxy hexadecane	*	200.000	J	0	0	ug/Kg
			Total Tics :		**1,230.00**				
			Total Concentration:		**1,230.00**				
Client ID :	**TP-50**								
Q2150-06	TP-50	SOIL	Phenanthrene		280.000		24.3	200	ug/Kg
Q2150-06	TP-50	SOIL	Anthracene		86.900	J	38.7	200	ug/Kg
Q2150-06	TP-50	SOIL	Fluoranthene		670.000		34.9	200	ug/Kg
Q2150-06	TP-50	SOIL	Pyrene		350.000		41.8	200	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(a)anthracene		340.000		26.7	200	ug/Kg
Q2150-06	TP-50	SOIL	Chrysene		290.000		23.1	200	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(b)fluoranthene		440.000		22.1	200	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(k)fluoranthene		150.000	J	26	200	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(a)pyrene		320.000		34.3	200	ug/Kg
Q2150-06	TP-50	SOIL	Indeno(1,2,3-cd)pyrene		110.000	J	33.8	200	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(g,h,i)perylene		130.000	J	29.9	200	ug/Kg
			Total Svoc :		**3,166.90**				
Q2150-06	TP-50	SOIL	11H-Benzo[a]fluoren-11-one	*	110.000	J	0	0	ug/Kg
Q2150-06	TP-50	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB	0	0	ug/Kg
Q2150-06	TP-50	SOIL	4H-Cyclopenta[def]phenanthrene	*	90.200	J	0	0	ug/Kg
Q2150-06	TP-50	SOIL	Benzo[e]pyrene	*	210.000	J	0	0	ug/Kg
Q2150-06	TP-50	SOIL	Benzophenone	*	130.000	J	0	0	ug/Kg
Q2150-06	TP-50	SOIL	n-Hexadecanoic acid	*	240.000	J	0	0	ug/Kg
			Total Tics :		**1,030.20**				

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

Hit Summary Sheet
SW-846

SDG No.: Q2150

Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
			Total Concentration:		**4,197.10**				
Client ID : TP-51									
Q2150-07	TP-51	SOIL	1-Tetracosene	*	430.000	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	410.000	AB	0	0	ug/Kg
Q2150-07	TP-51	SOIL	Benzophenone	*	200.000	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	n-Hexadecanoic acid	*	330.000	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	Pentadecafluorooctanoic acid, oct	*	110.000	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	unknown10.345	*	130.000	J	0	0	ug/Kg
			Total Tics :		**1,610.00**				
			Total Concentration:		**1,610.00**				
Client ID : TP-52									
Q2150-08	TP-52	SOIL	Acenaphthylene		92.600	J	33.7	200	ug/Kg
Q2150-08	TP-52	SOIL	Phenanthrene		270.000		24.3	200	ug/Kg
Q2150-08	TP-52	SOIL	Anthracene		140.000	J	38.8	200	ug/Kg
Q2150-08	TP-52	SOIL	Fluoranthene		1,300.000		34.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Pyrene		770.000		41.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(a)anthracene		750.000		26.8	200	ug/Kg
Q2150-08	TP-52	SOIL	Chrysene		780.000		23.2	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(b)fluoranthene		1,100.000		22.1	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(k)fluoranthene		360.000		26.1	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(a)pyrene		830.000		34.4	200	ug/Kg
Q2150-08	TP-52	SOIL	Indeno(1,2,3-cd)pyrene		300.000		33.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Dibenzo(a,h)anthracene		93.900	J	31.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(g,h,i)perylene		350.000		29.9	200	ug/Kg
			Total Svoc :		**7,136.50**				
Q2150-08	TP-52	SOIL	11H-Benzo[a]fluorene	*	130.000	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	290.000	AB	0	0	ug/Kg
Q2150-08	TP-52	SOIL	4H-Cyclopenta[def]phenanthrene	*	220.000	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	Ethanol, 2-butoxy-	*	79.600	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	Benzo[e]pyrene	*	190.000	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	Benzophenone	*	170.000	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	Pyrene, 4,5,9,10-tetrahydro-	*	83.100	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	n-Hexadecanoic acid	*	460.000	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	Pentadecafluorooctanoic acid, oct	*	94.400	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	Perylene	*	630.000	J	0	0	ug/Kg
Q2150-08	TP-52	SOIL	Phenanthrene, 2,5-dimethyl-	*	100.000	J	0	0	ug/Kg
			Total Tics :		**2,447.10**				
			Total Concentration:		**9,583.60**				
Client ID : TP-54									

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

Hit Summary Sheet
SW-846

SDG No.: Q2150

Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q2150-09	TP-54	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	360.000	AB	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Benzophenone	*	250.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	n-Hexadecanoic acid	*	550.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Octadecanoic acid	*	110.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Octadecyl trifluoroacetate	*	360.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Supraene	*	110.000	J	0	0	ug/Kg
			Total Tics :		**1,740.00**				
			Total Concentration:		**1,740.00**				
Client ID : TP-53									
Q2150-10	TP-53	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	270.000	AB	0	0	ug/Kg
Q2150-10	TP-53	SOIL	Benzophenone	*	130.000	J	0	0	ug/Kg
Q2150-10	TP-53	SOIL	n-Hexadecanoic acid	*	150.000	J	0	0	ug/Kg
Q2150-10	TP-53	SOIL	Trichloroacetic acid, hexadecyl es	*	160.000	J	0	0	ug/Kg
			Total Tics :		**710.00**				
			Total Concentration:		**710.00**				

QC SUMMARY

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

Surrogate Summary

SW-846

SDG No.: Q2150

Client: CDM Smith

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	High
PB168211BL	PB168211BL	2-Fluorophenol	150	120	80		18	112
		Phenol-d6	150	121	81		15	107
		Nitrobenzene-d5	100	74.3	74		18	107
		2-Fluorobiphenyl	100	71.1	71		20	109
		2,4,6-Tribromophenol	150	124	83		10	116
		Terphenyl-d14	100	68.4	68		10	105
PB168211BS	PB168211BS	2-Fluorophenol	150	118	78		18	112
		Phenol-d6	150	120	80		15	107
		Nitrobenzene-d5	100	73.3	73		18	107
		2-Fluorobiphenyl	100	70.5	70		20	109
		2,4,6-Tribromophenol	150	127	85		10	116
		Terphenyl-d14	100	73.7	74		10	105
Q2150-01	TP-44	2-Fluorophenol	150	69.9	47		18	112
		Phenol-d6	150	67.4	45		15	107
		Nitrobenzene-d5	100	47.1	47		18	107
		2-Fluorobiphenyl	100	50.2	50		20	109
		2,4,6-Tribromophenol	150	63.6	42		10	116
		Terphenyl-d14	100	31.1	31		10	105
Q2150-01DL	TP-44DL	2-Fluorophenol	150	78.1	52		18	112
		Phenol-d6	150	78.6	52		15	107
		Nitrobenzene-d5	100	48.2	48		18	107
		2-Fluorobiphenyl	100	53.3	53		20	109
		2,4,6-Tribromophenol	150	62.5	42		10	116
		Terphenyl-d14	100	33.9	34		10	105
Q2150-02	TP-42	2-Fluorophenol	150	78.1	52		18	112
		Phenol-d6	150	78.9	53		15	107
		Nitrobenzene-d5	100	48.9	49		18	107
		2-Fluorobiphenyl	100	46.0	46		20	109
		2,4,6-Tribromophenol	150	69.5	46		10	116
		Terphenyl-d14	100	37.3	37		10	105
Q2150-03	TP-39	2-Fluorophenol	150	122	81		18	112
		Phenol-d6	150	126	84		15	107
		Nitrobenzene-d5	100	77.9	78		18	107
		2-Fluorobiphenyl	100	71.9	72		20	109
		2,4,6-Tribromophenol	150	124	82		10	116
		Terphenyl-d14	100	67.6	68		10	105
Q2150-04	TP-48	2-Fluorophenol	150	128	85		18	112
		Phenol-d6	150	130	87		15	107
		Nitrobenzene-d5	100	83.0	83		18	107
		2-Fluorobiphenyl	100	74.0	74		20	109
		2,4,6-Tribromophenol	150	128	85		10	116
		Terphenyl-d14	100	67.5	67		10	105
Q2150-05	TP-47	2-Fluorophenol	150	81.7	54		18	112
		Phenol-d6	150	83.6	56		15	107
		Nitrobenzene-d5	100	51.5	51		18	107
		2-Fluorobiphenyl	100	49.7	50		20	109
		2,4,6-Tribromophenol	150	80.9	54		10	116
		Terphenyl-d14	100	45.5	45		10	105
Q2150-06	TP-50	2-Fluorophenol	150	77.6	52		18	112
		Phenol-d6	150	75.5	50		15	107
		Nitrobenzene-d5	100	49.6	50		18	107

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

Surrogate Summary

SW-846

SDG No.: Q2150

Client: CDM Smith

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q2150-06	TP-50	2-Fluorobiphenyl	100	53.5	53		20	109
		2,4,6-Tribromophenol	150	61.4	41		10	116
		Terphenyl-d14	100	33.4	33		10	105
Q2150-07	TP-51	2-Fluorophenol	150	122	81		18	112
		Phenol-d6	150	126	84		15	107
		Nitrobenzene-d5	100	78.0	78		18	107
		2-Fluorobiphenyl	100	72.9	73		20	109
		2,4,6-Tribromophenol	150	121	81		10	116
		Terphenyl-d14	100	70.5	71		10	105
Q2150-08	TP-52	2-Fluorophenol	150	89.7	60		18	112
		Phenol-d6	150	89.5	60		15	107
		Nitrobenzene-d5	100	57.0	57		18	107
		2-Fluorobiphenyl	100	55.0	55		20	109
		2,4,6-Tribromophenol	150	75.4	50		10	116
		Terphenyl-d14	100	36.4	36		10	105
Q2150-09	TP-54	2-Fluorophenol	150	108	72		18	112
		Phenol-d6	150	112	75		15	107
		Nitrobenzene-d5	100	68.7	69		18	107
		2-Fluorobiphenyl	100	62.7	63		20	109
		2,4,6-Tribromophenol	150	118	79		10	116
		Terphenyl-d14	100	62.3	62		10	105
Q2150-09MS	TP-54MS	2-Fluorophenol	150	86.9	58		18	112
		Phenol-d6	150	89.9	60		15	107
		Nitrobenzene-d5	100	55.3	55		18	107
		2-Fluorobiphenyl	100	52.7	53		20	109
		2,4,6-Tribromophenol	150	92.4	62		10	116
		Terphenyl-d14	100	51.3	51		10	105
Q2150-09MSD	TP-54MSD	2-Fluorophenol	150	88.2	59		18	112
		Phenol-d6	150	90.6	60		15	107
		Nitrobenzene-d5	100	55.6	56		18	107
		2-Fluorobiphenyl	100	53.1	53		20	109
		2,4,6-Tribromophenol	150	94.6	63		10	116
		Terphenyl-d14	100	52.7	53		10	105
Q2150-10	TP-53	2-Fluorophenol	150	82.6	55		18	112
		Phenol-d6	150	84.0	56		15	107
		Nitrobenzene-d5	100	51.5	52		18	107
		2-Fluorobiphenyl	100	47.6	48		20	109
		2,4,6-Tribromophenol	150	73.2	49		10	116
		Terphenyl-d14	100	43.9	44		10	105

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2150

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q2150-09MS		**Client Sample ID: TP-54MS**						**DataFile: BF142571.D**			
Benzaldehyde	2000	0	1500	ug/Kg	75				10	171	
Phenol	2000	0	1600	ug/Kg	80				51	122	
bis(2-Chloroethyl)ether	2000	0	1700	ug/Kg	85				54	125	
2-Chlorophenol	2000	0	1700	ug/Kg	85				51	121	
2-Methylphenol	2000	0	1600	ug/Kg	80				47	125	
2,2-oxybis(1-Chloropropane)	2000	0	1600	ug/Kg	80				46	119	
Acetophenone	2000	0	1700	ug/Kg	85				55	128	
3+4-Methylphenols	2000	0	1600	ug/Kg	80				49	125	
N-Nitroso-di-n-propylamine	2000	0	1600	ug/Kg	80				59	119	
Hexachloroethane	2000	0	1600	ug/Kg	80				51	116	
Nitrobenzene	2000	0	1700	ug/Kg	85				47	124	
Isophorone	2000	0	1600	ug/Kg	80				49	127	
2-Nitrophenol	2000	0	1800	ug/Kg	90				43	131	
2,4-Dimethylphenol	2000	0	1700	ug/Kg	85				63	151	
bis(2-Chloroethoxy)methane	2000	0	1700	ug/Kg	85				51	119	
2,4-Dichlorophenol	2000	0	1700	ug/Kg	85				50	122	
Naphthalene	2000	0	1700	ug/Kg	85				51	121	
4-Chloroaniline	2000	0	360	ug/Kg	18				10	100	
Hexachlorobutadiene	2000	0	1700	ug/Kg	85				44	126	
Caprolactam	2000	0	1800	ug/Kg	90				51	134	
4-Chloro-3-methylphenol	2000	0	1600	ug/Kg	80				57	132	
2-Methylnaphthalene	2000	0	1600	ug/Kg	80				59	123	
Hexachlorocyclopentadiene	4000	0	3200	ug/Kg	80				10	175	
2,4,6-Trichlorophenol	2000	0	1700	ug/Kg	85				33	141	
2,4,5-Trichlorophenol	2000	0	1700	ug/Kg	85				38	135	
1,1-Biphenyl	2000	0	1700	ug/Kg	85				55	131	
2-Chloronaphthalene	2000	0	1700	ug/Kg	85				48	124	
2-Nitroaniline	2000	0	1700	ug/Kg	85				47	134	
Dimethylphthalate	2000	0	1700	ug/Kg	85				54	120	
Acenaphthylene	2000	0	1700	ug/Kg	85				57	125	
2,6-Dinitrotoluene	2000	0	1800	ug/Kg	90				48	127	
3-Nitroaniline	2000	0	730	ug/Kg	37				10	112	
Acenaphthene	2000	0	1800	ug/Kg	90				70	121	
2,4-Dinitrophenol	4000	0	3700	ug/Kg	93				10	155	
4-Nitrophenol	4000	0	3500	ug/Kg	88				10	175	
Dibenzofuran	2000	0	1700	ug/Kg	85				52	114	
2,4-Dinitrotoluene	2000	0	1800	ug/Kg	90				41	140	
Diethylphthalate	2000	0	1700	ug/Kg	85				51	119	
4-Chlorophenyl-phenylether	2000	0	1700	ug/Kg	85				48	122	
Fluorene	2000	0	1600	ug/Kg	80				53	118	
4-Nitroaniline	2000	0	1700	ug/Kg	85				29	140	
4,6-Dinitro-2-methylphenol	2000	0	1900	ug/Kg	95				10	160	
N-Nitrosodiphenylamine	2000	0	1700	ug/Kg	85				73	118	
4-Bromophenyl-phenylether	2000	0	1700	ug/Kg	85				65	121	
Hexachlorobenzene	2000	0	1700	ug/Kg	85				67	118	
Atrazine	2000	0	1900	ug/Kg	95				45	175	

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2150

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Pentachlorophenol	4000	0	3400	ug/Kg	85				13	153	
Phenanthrene	2000	0	1700	ug/Kg	85				52	128	
Anthracene	2000	0	1700	ug/Kg	85				62	124	
Carbazole	2000	0	1700	ug/Kg	85				59	119	
Di-n-butylphthalate	2000	0	1800	ug/Kg	90				55	125	
Fluoranthene	2000	0	1600	ug/Kg	80				44	125	
Pyrene	2000	0	1500	ug/Kg	75				37	122	
Butylbenzylphthalate	2000	0	2100	ug/Kg	105				44	135	
3,3-Dichlorobenzidine	2000	0	870	ug/Kg	44				15	112	
Benzo(a)anthracene	2000	0	1800	ug/Kg	90				53	119	
Chrysene	2000	0	1700	ug/Kg	85				57	121	
bis(2-Ethylhexyl)phthalate	2000	0	2200	ug/Kg	110				42	169	
Di-n-octyl phthalate	2000	0	1900	ug/Kg	95				51	156	
Benzo(b)fluoranthene	2000	0	1700	ug/Kg	85				52	117	
Benzo(k)fluoranthene	2000	0	1700	ug/Kg	85				57	134	
Benzo(a)pyrene	2000	0	1800	ug/Kg	90				70	142	
Indeno(1,2,3-cd)pyrene	2000	0	1700	ug/Kg	85				40	129	
Dibenz(a,h)anthracene	2000	0	1700	ug/Kg	85				43	123	
Benzo(g,h,i)perylene	2000	0	1700	ug/Kg	85				24	125	
1,2,4,5-Tetrachlorobenzene	2000	0	1800	ug/Kg	90				52	134	
1,4-Dioxane	2000	0	1500	ug/Kg	75				46	112	
2,3,4,6-Tetrachlorophenol	2000	0	1700	ug/Kg	85				24	146	

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2150

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q2150-09MSD		**Client Sample ID: TP-54MSD**						**DataFile: BF142572.D**			
Benzaldehyde	2000	0	1500	ug/Kg	75	0			10	171	20
Phenol	2000	0	1700	ug/Kg	85	6			51	122	20
bis(2-Chloroethyl)ether	2000	0	1700	ug/Kg	85	0			54	125	20
2-Chlorophenol	2000	0	1700	ug/Kg	85	0			51	121	20
2-Methylphenol	2000	0	1700	ug/Kg	85	6			47	125	20
2,2-oxybis(1-Chloropropane)	2000	0	1700	ug/Kg	85	6			46	119	20
Acetophenone	2000	0	1700	ug/Kg	85	0			55	128	20
3+4-Methylphenols	2000	0	1600	ug/Kg	80	0			49	125	20
N-Nitroso-di-n-propylamine	2000	0	1600	ug/Kg	80	0			59	119	20
Hexachloroethane	2000	0	1700	ug/Kg	85	6			51	116	20
Nitrobenzene	2000	0	1700	ug/Kg	85	0			47	124	20
Isophorone	2000	0	1700	ug/Kg	85	6			49	127	20
2-Nitrophenol	2000	0	1800	ug/Kg	90	0			43	131	20
2,4-Dimethylphenol	2000	0	1700	ug/Kg	85	0			63	151	20
bis(2-Chloroethoxy)methane	2000	0	1700	ug/Kg	85	0			51	119	20
2,4-Dichlorophenol	2000	0	1700	ug/Kg	85	0			50	122	20
Naphthalene	2000	0	1700	ug/Kg	85	0			51	121	20
4-Chloroaniline	2000	0	400	ug/Kg	20	11			10	100	20
Hexachlorobutadiene	2000	0	1700	ug/Kg	85	0			44	126	20
Caprolactam	2000	0	1900	ug/Kg	95	5			51	134	20
4-Chloro-3-methylphenol	2000	0	1700	ug/Kg	85	6			57	132	20
2-Methylnaphthalene	2000	0	1600	ug/Kg	80	0			59	123	20
Hexachlorocyclopentadiene	4000	0	3200	ug/Kg	80	0			10	175	20
2,4,6-Trichlorophenol	2000	0	1800	ug/Kg	90	6			33	141	20
2,4,5-Trichlorophenol	2000	0	1700	ug/Kg	85	0			38	135	20
1,1-Biphenyl	2000	0	1700	ug/Kg	85	0			55	131	20
2-Chloronaphthalene	2000	0	1700	ug/Kg	85	0			48	124	20
2-Nitroaniline	2000	0	1700	ug/Kg	85	0			47	134	20
Dimethylphthalate	2000	0	1700	ug/Kg	85	0			54	120	20
Acenaphthylene	2000	0	1700	ug/Kg	85	0			57	125	20
2,6-Dinitrotoluene	2000	0	1800	ug/Kg	90	0			48	127	20
3-Nitroaniline	2000	0	750	ug/Kg	38	3			10	112	20
Acenaphthene	2000	0	1900	ug/Kg	95	5			70	121	20
2,4-Dinitrophenol	4000	0	3800	ug/Kg	95	2			10	155	20
4-Nitrophenol	4000	0	3500	ug/Kg	88	0			10	175	20
Dibenzofuran	2000	0	1700	ug/Kg	85	0			52	114	20
2,4-Dinitrotoluene	2000	0	1800	ug/Kg	90	0			41	140	20
Diethylphthalate	2000	0	1700	ug/Kg	85	0			51	119	20
4-Chlorophenyl-phenylether	2000	0	1700	ug/Kg	85	0			48	122	20
Fluorene	2000	0	1700	ug/Kg	85	6			53	118	20
4-Nitroaniline	2000	0	1700	ug/Kg	85	0			29	140	20
4,6-Dinitro-2-methylphenol	2000	0	1900	ug/Kg	95	0			10	160	20
N-Nitrosodiphenylamine	2000	0	1700	ug/Kg	85	0			73	118	20
4-Bromophenyl-phenylether	2000	0	1700	ug/Kg	85	0			65	121	20
Hexachlorobenzene	2000	0	1700	ug/Kg	85	0			67	118	20
Atrazine	2000	0	1900	ug/Kg	95	0			45	175	20

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2150

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Pentachlorophenol	4000	0	3400	ug/Kg	85	0			13	153	20
Phenanthrene	2000	0	1700	ug/Kg	85	0			52	128	20
Anthracene	2000	0	1700	ug/Kg	85	0			62	124	20
Carbazole	2000	0	1700	ug/Kg	85	0			59	119	20
Di-n-butylphthalate	2000	0	1900	ug/Kg	95	5			55	125	20
Fluoranthene	2000	0	1700	ug/Kg	85	6			44	125	20
Pyrene	2000	0	1600	ug/Kg	80	6			37	122	20
Butylbenzylphthalate	2000	0	2200	ug/Kg	110	5			44	135	20
3,3-Dichlorobenzidine	2000	0	860	ug/Kg	43	2			15	112	20
Benzo(a)anthracene	2000	0	1700	ug/Kg	85	6			53	119	20
Chrysene	2000	0	1800	ug/Kg	90	6			57	121	20
bis(2-Ethylhexyl)phthalate	2000	0	2200	ug/Kg	110	0			42	169	20
Di-n-octyl phthalate	2000	0	1900	ug/Kg	95	0			51	156	20
Benzo(b)fluoranthene	2000	0	1700	ug/Kg	85	0			52	117	20
Benzo(k)fluoranthene	2000	0	1800	ug/Kg	90	6			57	134	20
Benzo(a)pyrene	2000	0	1800	ug/Kg	90	0			70	142	20
Indeno(1,2,3-cd)pyrene	2000	0	1700	ug/Kg	85	0			40	129	20
Dibenz(a,h)anthracene	2000	0	1700	ug/Kg	85	0			43	123	20
Benzo(g,h,i)perylene	2000	0	1700	ug/Kg	85	0			24	125	20
1,2,4,5-Tetrachlorobenzene	2000	0	1800	ug/Kg	90	0			52	134	20
1,4-Dioxane	2000	0	1500	ug/Kg	75	0			46	112	20
2,3,4,6-Tetrachlorophenol	2000	0	1700	ug/Kg	85	0			24	146	20

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.: Q2150

Client: CDM Smith

Analytical Method: 8270E **DataFile:** BF142568.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB168211BS	Benzaldehyde	1700	1100	ug/Kg	65				10	133	
	Phenol	1700	1400	ug/Kg	82				62	112	
	bis(2-Chloroethyl)ether	1700	1400	ug/Kg	82				60	101	
	2-Chlorophenol	1700	1400	ug/Kg	82				65	112	
	2-Methylphenol	1700	1400	ug/Kg	82				61	108	
	2,2-oxybis(1-Chloropropane)	1700	1300	ug/Kg	76				51	100	
	Acetophenone	1700	1400	ug/Kg	82				66	98	
	3+4-Methylphenols	1700	1400	ug/Kg	82				58	111	
	N-Nitroso-di-n-propylamine	1700	1300	ug/Kg	76				63	95	
	Hexachloroethane	1700	1300	ug/Kg	76				72	108	
	Nitrobenzene	1700	1400	ug/Kg	82				57	101	
	Isophorone	1700	1400	ug/Kg	82				59	99	
	2-Nitrophenol	1700	1500	ug/Kg	88				61	111	
	2,4-Dimethylphenol	1700	1400	ug/Kg	82				46	141	
	bis(2-Chloroethoxy)methane	1700	1400	ug/Kg	82				66	97	
	2,4-Dichlorophenol	1700	1500	ug/Kg	88				62	107	
	Naphthalene	1700	1400	ug/Kg	82				62	100	
	4-Chloroaniline	1700	700	ug/Kg	41				16	100	
	Hexachlorobutadiene	1700	1300	ug/Kg	76				53	98	
	Caprolactam	1700	1700	ug/Kg	100				67	110	
	4-Chloro-3-methylphenol	1700	1500	ug/Kg	88				58	112	
	2-Methylnaphthalene	1700	1400	ug/Kg	82				60	104	
	Hexachlorocyclopentadiene	3300	2700	ug/Kg	82				45	165	
	2,4,6-Trichlorophenol	1700	1400	ug/Kg	82				59	102	
	2,4,5-Trichlorophenol	1700	1500	ug/Kg	88				61	98	
	1,1-Biphenyl	1700	1400	ug/Kg	82				57	103	
	2-Chloronaphthalene	1700	1400	ug/Kg	82				58	99	
	2-Nitroaniline	1700	1500	ug/Kg	88				66	101	
	Dimethylphthalate	1700	1500	ug/Kg	88				61	99	
	Acenaphthylene	1700	1400	ug/Kg	82				63	101	
	2,6-Dinitrotoluene	1700	1500	ug/Kg	88				61	104	
	3-Nitroaniline	1700	990	ug/Kg	58				28	100	
	Acenaphthene	1700	1600	ug/Kg	94				57	104	
	2,4-Dinitrophenol	3300	3600	ug/Kg	109				37	128	
	4-Nitrophenol	3300	3300	ug/Kg	100				48	119	
	Dibenzofuran	1700	1400	ug/Kg	82				63	99	
	2,4-Dinitrotoluene	1700	1600	ug/Kg	94				60	106	
	Diethylphthalate	1700	1500	ug/Kg	88				60	101	
	4-Chlorophenyl-phenylether	1700	1400	ug/Kg	82				58	98	
	Fluorene	1700	1400	ug/Kg	82				61	101	
	4-Nitroaniline	1700	1600	ug/Kg	94				64	103	
	4,6-Dinitro-2-methylphenol	1700	1700	ug/Kg	100				76	113	
	N-Nitrosodiphenylamine	1700	1400	ug/Kg	82				71	99	
	4-Bromophenyl-phenylether	1700	1400	ug/Kg	82				66	102	

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.: Q2150

Client: CDM Smith

Analytical Method: 8270E **DataFile:** BF142568.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB168211BS	Hexachlorobenzene	1700	1400	ug/Kg	82				64	98	
	Atrazine	1700	1600	ug/Kg	94				47	152	
	Pentachlorophenol	3300	2900	ug/Kg	88				67	105	
	Phenanthrene	1700	1400	ug/Kg	82				59	103	
	Anthracene	1700	1400	ug/Kg	82				61	105	
	Carbazole	1700	1500	ug/Kg	88				61	99	
	Di-n-butylphthalate	1700	1600	ug/Kg	94				58	104	
	Fluoranthene	1700	1500	ug/Kg	88				57	107	
	Pyrene	1700	1400	ug/Kg	82				59	103	
	Butylbenzylphthalate	1700	1700	ug/Kg	100				55	103	
	3,3-Dichlorobenzidine	1700	800	ug/Kg	47				42	91	
	Benzo(a)anthracene	1700	1500	ug/Kg	88				60	102	
	Chrysene	1700	1400	ug/Kg	82				59	101	
	bis(2-Ethylhexyl)phthalate	1700	1500	ug/Kg	88				54	135	
	Di-n-octyl phthalate	1700	1200	ug/Kg	71				52	137	
	Benzo(b)fluoranthene	1700	1500	ug/Kg	88				62	109	
	Benzo(k)fluoranthene	1700	1500	ug/Kg	88				62	109	
	Benzo(a)pyrene	1700	1500	ug/Kg	88				63	103	
	Indeno(1,2,3-cd)pyrene	1700	1400	ug/Kg	82				63	101	
	Dibenz(a,h)anthracene	1700	1400	ug/Kg	82				61	112	
	Benzo(g,h,i)perylene	1700	1400	ug/Kg	82				70	108	
	1,2,4,5-Tetrachlorobenzene	1700	1300	ug/Kg	76				53	101	
	1,4-Dioxane	1700	1200	ug/Kg	71				50	96	
	2,3,4,6-Tetrachlorophenol	1700	1500	ug/Kg	88				59	108	

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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168211BL

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG NO.: Q2150

Lab File ID: BF142567.D Lab Sample ID: PB168211BL

Instrument ID: BNA_F Date Extracted: 05/30/2025

Matrix: (soil/water) SOIL Date Analyzed: 05/30/2025

Level: (low/med) LOW Time Analyzed: 13:49

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168211BS	PB168211BS	BF142568.D	05/30/2025
TP-39	Q2150-03	BF142580.D	05/30/2025
TP-48	Q2150-04	BF142581.D	05/30/2025
TP-42	Q2150-02	BF142583.D	05/30/2025
TP-44	Q2150-01	BF142586.D	05/30/2025
TP-47	Q2150-05	BF142569.D	05/30/2025
TP-54	Q2150-09	BF142570.D	05/30/2025
TP-54MS	Q2150-09MS	BF142571.D	05/30/2025
TP-54MSD	Q2150-09MSD	BF142572.D	05/30/2025
TP-51	Q2150-07	BF142579.D	05/30/2025
TP-53	Q2150-10	BF142582.D	05/30/2025
TP-50	Q2150-06	BF142584.D	05/30/2025
TP-52	Q2150-08	BF142585.D	05/30/2025

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: CHEMTECH Contract: CAMP02

Lab Code: CHEM SAS No.: Q2150 SDG NO.: Q2150

Lab File ID: BF142465.D DFTPP Injection Date: 05/20/2025

Instrument ID: BNA_F DFTPP Injection Time: 11:13

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	27.4
68	Less than 2.0% of mass 69	0.5 (1.9) 1
69	Mass 69 relative abundance	24.7
70	Less than 2.0% of mass 69	0.1 (0.5) 1
127	10.0 - 80.0% of mass 198	33.5
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	4.9
275	10.0 - 60.0% of mass 198	22.3
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	14.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19 (19) 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
SSTDICC2.5	SSTDICC2.5	BF142467.D	05/20/2025	12:10
SSTDICC005	SSTDICC005	BF142468.D	05/20/2025	12:38
SSTDICC010	SSTDICC010	BF142469.D	05/20/2025	13:07
SSTDICC020	SSTDICC020	BF142470.D	05/20/2025	13:36
SSTDICCC040	SSTDICCC040	BF142471.D	05/20/2025	14:05
SSTDICC050	SSTDICC050	BF142472.D	05/20/2025	14:34
SSTDICC060	SSTDICC060	BF142473.D	05/20/2025	15:03
SSTDICC080	SSTDICC080	BF142474.D	05/20/2025	15:31

Raw Data: **BF142565.D**

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: CHEMTECH Contract: CAMP02

Lab Code: CHEM SAS No.: Q2150 SDG NO.: Q2150

Lab File ID: BF142565.D DFTPP Injection Date: 05/30/2025

Instrument ID: BNA_F DFTPP Injection Time: 12:23

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.7
68	Less than 2.0% of mass 69	0.5 (1.8) 1
69	Mass 69 relative abundance	28.6
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	38.8
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	5.7
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	15.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.2 (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
SSTDCCC040	SSTDCCC040	BF142566.D	05/30/2025	13:20
PB168211BL	PB168211BL	BF142567.D	05/30/2025	13:49
PB168211BS	PB168211BS	BF142568.D	05/30/2025	14:18
TP-47	Q2150-05	BF142569.D	05/30/2025	14:52
TP-54	Q2150-09	BF142570.D	05/30/2025	15:21
TP-54MS	Q2150-09MS	BF142571.D	05/30/2025	15:50
TP-54MSD	Q2150-09MSD	BF142572.D	05/30/2025	16:19
TP-51	Q2150-07	BF142579.D	05/30/2025	19:45
TP-39	Q2150-03	BF142580.D	05/30/2025	20:14
TP-48	Q2150-04	BF142581.D	05/30/2025	20:43
TP-53	Q2150-10	BF142582.D	05/30/2025	21:13
TP-42	Q2150-02	BF142583.D	05/30/2025	21:42
TP-50	Q2150-06	BF142584.D	05/30/2025	22:11
TP-52	Q2150-08	BF142585.D	05/30/2025	22:41
TP-44	Q2150-01	BF142586.D	05/30/2025	23:10

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: CHEMTECH Contract: CAMP02

Lab Code: CHEM SAS No.: Q2150 SDG NO.: Q2150

Lab File ID: BF142589.D DFTPP Injection Date: 06/02/2025

Instrument ID: BNA_F DFTPP Injection Time: 11:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	27
68	Less than 2.0% of mass 69	0.4 (1.8) 1
69	Mass 69 relative abundance	24.1
70	Less than 2.0% of mass 69	0.1 (0.6) 1
127	10.0 - 80.0% of mass 198	33.6
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	4.9
275	10.0 - 60.0% of mass 198	21.6
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	15.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.3 (19.3) 2

1-Value is % mass 69 2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF142590.D	06/02/2025	11:30
TP-44DL	Q2150-01DL	BF142598.D	06/02/2025	15:34

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG NO.: Q2150

EPA Sample No.: SSTDCCC040 Date Analyzed: 05/30/2025

Lab File ID: BF142566.D Time Analyzed: 13:20

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	109753	6.898	434666	8.19	234624	9.95
	UPPER LIMIT	219506	7.398	869332	8.686	469248	10.445
	LOWER LIMIT	54876.5	6.398	217333	7.686	117312	9.445
	EPA SAMPLE NO.						
01	PB168211BL	120363	6.90	465933	8.18	259895	9.94
02	PB168211BS	122043	6.90	476655	8.19	264068	9.95
03	TP-44	127932	6.90	419456	8.18	173324	9.94
04	TP-42	143411	6.90	545898	8.18	276939	9.93
05	TP-39	122275	6.90	460916	8.18	242076	9.93
06	TP-48	128466	6.90	478682	8.18	251559	9.93
07	TP-47	119655	6.90	452665	8.18	237881	9.94
08	TP-50	131837	6.90	470624	8.18	213475	9.93
09	TP-51	123122	6.90	465540	8.18	241553	9.93
10	TP-52	133645	6.90	476744	8.18	213806	9.94
11	TP-54	118247	6.90	441924	8.18	231484	9.93
12	TP-54MS	123670	6.90	460723	8.18	236866	9.94
13	TP-54MSD	119675	6.90	451884	8.19	233525	9.94
14	TP-53	130201	6.90	494621	8.18	254536	9.93

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.

Alliance TECHNICAL GROUP
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: CHEMTECH

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG NO.: Q2150

EPA Sample No.: SSTDCCC040 Date Analyzed: 05/30/2025

Lab File ID: BF142566.D Time Analyzed: 13:20

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	409802	11.427	223422	14.074	206730	15.568
	UPPER LIMIT	819604	11.927	446844	14.574	413460	16.068
	LOWER LIMIT	204901	10.927	111711	13.574	103365	15.068
	EPA SAMPLE NO.						
01	PB168211BL	480220	11.43	319274	14.07	249124	15.57
02	PB168211BS	470473	11.43	271265	14.07	242037	15.57
03	TP-44	272258	11.43	273238	14.07	220770	15.57
04	TP-42	434462	11.42	256745	14.07	308145	15.56
05	TP-39	399449	11.42	234709	14.07	243865	15.56
06	TP-48	419835	11.42	239865	14.07	260798	15.56
07	TP-47	379317	11.42	213577	14.07	233735	15.56
08	TP-50	294969	11.42	274370	14.07	279386	15.56
09	TP-51	396120	11.42	234971	14.06	241563	15.56
10	TP-52	298216	11.43	272466	14.07	264844	15.57
11	TP-54	379392	11.42	216438	14.07	226398	15.56
12	TP-54MS	378954	11.43	208599	14.07	243037	15.57
13	TP-54MSD	376587	11.43	204232	14.07	234981	15.57
14	TP-53	398630	11.42	231944	14.06	262922	15.56

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.

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG NO.: Q2150

EPA Sample No.: SSTDCCC040 Date Analyzed: 06/02/2025

Lab File ID: BF142590.D Time Analyzed: 11:30

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	112830	6.898	441878	8.19	241388	9.94
	UPPER LIMIT	225660	7.398	883756	8.686	482776	10.439
	LOWER LIMIT	56415	6.398	220939	7.686	120694	9.439
	EPA SAMPLE NO.						
01	TP-44DL	127289	6.90	470532	8.18	232054	9.94

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: CHEMTECH

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG NO.: Q2150

EPA Sample No.: SSTDCCC040 Date Analyzed: 06/02/2025

Lab File ID: BF142590.D Time Analyzed: 11:30

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	415282	11.427	230387	14.074	238851	15.568
	UPPER LIMIT	830564	11.927	460774	14.574	477702	16.068
	LOWER LIMIT	207641	10.927	115194	13.574	119426	15.068
	EPA SAMPLE NO.						
01	TP-44DL	325882	11.43	250994	14.07	278926	15.57

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

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

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

SAMPLE DATA

Raw Data: **BF142586.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-44	SDG No.:	Q2150
Lab Sample ID:	Q2150-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	78.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142586.D	1	05/30/25 09:50	05/30/25 23:10	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	200	U	200	420	ug/Kg
108-95-2	Phenol	28.0	U	28.0	220	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	30.7	U	30.7	220	ug/Kg
95-57-8	2-Chlorophenol	30.9	U	30.9	220	ug/Kg
95-48-7	2-Methylphenol	37.8	U	37.8	220	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	47.4	U	47.4	220	ug/Kg
98-86-2	Acetophenone	37.3	U	37.3	220	ug/Kg
65794-96-9	3+4-Methylphenols	52.0	U	52.0	420	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	60.0	U	60.0	100	ug/Kg
67-72-1	Hexachloroethane	22.3	U	22.3	220	ug/Kg
98-95-3	Nitrobenzene	23.2	U	23.2	220	ug/Kg
78-59-1	Isophorone	41.5	U	41.5	220	ug/Kg
88-75-5	2-Nitrophenol	73.6	U	73.6	220	ug/Kg
105-67-9	2,4-Dimethylphenol	82.0	U	82.0	220	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	39.0	U	39.0	220	ug/Kg
120-83-2	2,4-Dichlorophenol	35.8	U	35.8	220	ug/Kg
91-20-3	Naphthalene	28.7	U	28.7	220	ug/Kg
106-47-8	4-Chloroaniline	44.8	U	44.8	220	ug/Kg
87-68-3	Hexachlorobutadiene	32.0	U	32.0	220	ug/Kg
105-60-2	Caprolactam	65.9	U	65.9	420	ug/Kg
59-50-7	4-Chloro-3-methylphenol	36.3	U	36.3	220	ug/Kg
91-57-6	2-Methylnaphthalene	32.4	U	32.4	220	ug/Kg
77-47-4	Hexachlorocyclopentadiene	150	U	150	420	ug/Kg
88-06-2	2,4,6-Trichlorophenol	25.1	U	25.1	220	ug/Kg
95-95-4	2,4,5-Trichlorophenol	36.8	U	36.8	220	ug/Kg
92-52-4	1,1-Biphenyl	27.6	U	27.6	220	ug/Kg
91-58-7	2-Chloronaphthalene	28.5	U	28.5	220	ug/Kg
88-74-4	2-Nitroaniline	60.9	U	60.9	220	ug/Kg
131-11-3	Dimethylphthalate	34.3	U	34.3	220	ug/Kg

Raw Data: **BF142586.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-44	SDG No.:	Q2150
Lab Sample ID:	Q2150-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	78.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142586.D	1	05/30/25 09:50	05/30/25 23:10	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	350		36.6	220	ug/Kg
606-20-2	2,6-Dinitrotoluene	42.5	U	42.5	220	ug/Kg
99-09-2	3-Nitroaniline	58.2	U	58.2	220	ug/Kg
83-32-9	Acenaphthene	260		27.0	220	ug/Kg
51-28-5	2,4-Dinitrophenol	290	U	290	420	ug/Kg
100-02-7	4-Nitrophenol	140	U	140	420	ug/Kg
132-64-9	Dibenzofuran	210	J	28.7	220	ug/Kg
121-14-2	2,4-Dinitrotoluene	63.4	U	63.4	220	ug/Kg
84-66-2	Diethylphthalate	35.8	U	35.8	220	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.8	U	33.8	220	ug/Kg
86-73-7	Fluorene	450		32.0	220	ug/Kg
100-01-6	4-Nitroaniline	81.2	U	81.2	220	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	130	U	130	420	ug/Kg
86-30-6	n-Nitrosodiphenylamine	41.6	U	41.6	220	ug/Kg
101-55-3	4-Bromophenyl-phenylether	35.2	U	35.2	220	ug/Kg
118-74-1	Hexachlorobenzene	32.0	U	32.0	220	ug/Kg
1912-24-9	Atrazine	43.0	U	43.0	220	ug/Kg
87-86-5	Pentachlorophenol	64.9	U	64.9	420	ug/Kg
85-01-8	Phenanthrene	2200		26.4	220	ug/Kg
120-12-7	Anthracene	1100		42.1	220	ug/Kg
86-74-8	Carbazole	170	J	39.5	220	ug/Kg
84-74-2	Di-n-butylphthalate	60.6	U	60.6	220	ug/Kg
206-44-0	Fluoranthene	5200	E	38.0	220	ug/Kg
129-00-0	Pyrene	2700		45.6	220	ug/Kg
85-68-7	Butylbenzylphthalate	90.3	U	90.3	220	ug/Kg
91-94-1	3,3-Dichlorobenzidine	46.4	U	46.4	420	ug/Kg
56-55-3	Benzo(a)anthracene	2700		29.1	220	ug/Kg
218-01-9	Chrysene	2200		25.2	220	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	74.9	U	74.9	220	ug/Kg
117-84-0	Di-n-octyl phthalate	110	U	110	420	ug/Kg
205-99-2	Benzo(b)fluoranthene	3400	E	24.0	220	ug/Kg

Raw Data: **BF142586.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-44	SDG No.:	Q2150
Lab Sample ID:	Q2150-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	78.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142586.D	1	05/30/25 09:50	05/30/25 23:10	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1500		28.3	220	ug/Kg
50-32-8	Benzo(a)pyrene	2500		37.3	220	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1000		36.8	220	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	320		34.7	220	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1200		32.5	220	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	32.4	U	32.4	220	ug/Kg
123-91-1	1,4-Dioxane	57.2	U	57.2	220	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	34.7	U	34.7	220	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	69.9		18 - 112	47%	SPK: 150
13127-88-3	Phenol-d6	67.4		15 - 107	45%	SPK: 150
4165-60-0	Nitrobenzene-d5	47.1		18 - 107	47%	SPK: 100
321-60-8	2-Fluorobiphenyl	50.2		20 - 109	50%	SPK: 100
118-79-6	2,4,6-Tribromophenol	63.6		10 - 116	42%	SPK: 150
1718-51-0	Terphenyl-d14	31.1		10 - 105	31%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	128000	6.898			
1146-65-2	Naphthalene-d8	419000	8.181			
15067-26-2	Acenaphthene-d10	173000	9.939			
1517-22-2	Phenanthrene-d10	272000	11.428			
1719-03-5	Chrysene-d12	273000	14.074			
1520-96-3	Perylene-d12	221000	15.574			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB		5.11	ug/Kg
	unknown9.645	140	J		9.64	ug/Kg
000119-61-9	Benzophenone	230	J		10.6	ug/Kg
	unknown10.851	130	J		10.9	ug/Kg
000132-65-0	Dibenzothiophene	230	J		11.3	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	280	J		11.9	ug/Kg
000613-12-7	Anthracene, 2-methyl-	700	J		12.0	ug/Kg

Raw Data: **BF142586.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-44	SDG No.:	Q2150
Lab Sample ID:	Q2150-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	78.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142586.D	1	05/30/25 09:50	05/30/25 23:10	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000610-48-0	Anthracene, 1-methyl-	250	J		12.0	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	1100	J		12.0	ug/Kg
000612-94-2	Naphthalene, 2-phenyl-	260	J		12.2	ug/Kg
000781-43-1	9,10-Dimethylanthracene	470	J		12.5	ug/Kg
000781-17-9	Pyrene, 4,5,9,10-tetrahydro-	390	J		12.5	ug/Kg
005737-13-3	Cyclopenta(def)phenanthrenone	290	J		12.6	ug/Kg
002510-55-6	9-Cyanophenanthrene	150	J		12.7	ug/Kg
000886-66-8	Benzene, 1,1-(1,3-butadiyne-1,4-d	150	J		12.7	ug/Kg
002381-21-7	Pyrene, 1-methyl-	150	J		13.1	ug/Kg
033543-31-6	Fluoranthene, 2-methyl-	230	J		13.2	ug/Kg
003353-12-6	Pyrene, 4-methyl-	130	J		13.3	ug/Kg
000192-97-2	Benzo[e]pyrene	600	J		15.2	ug/Kg
000198-55-0	Perylene	1800	J		15.4	ug/Kg

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_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Time: May 31 00:12:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

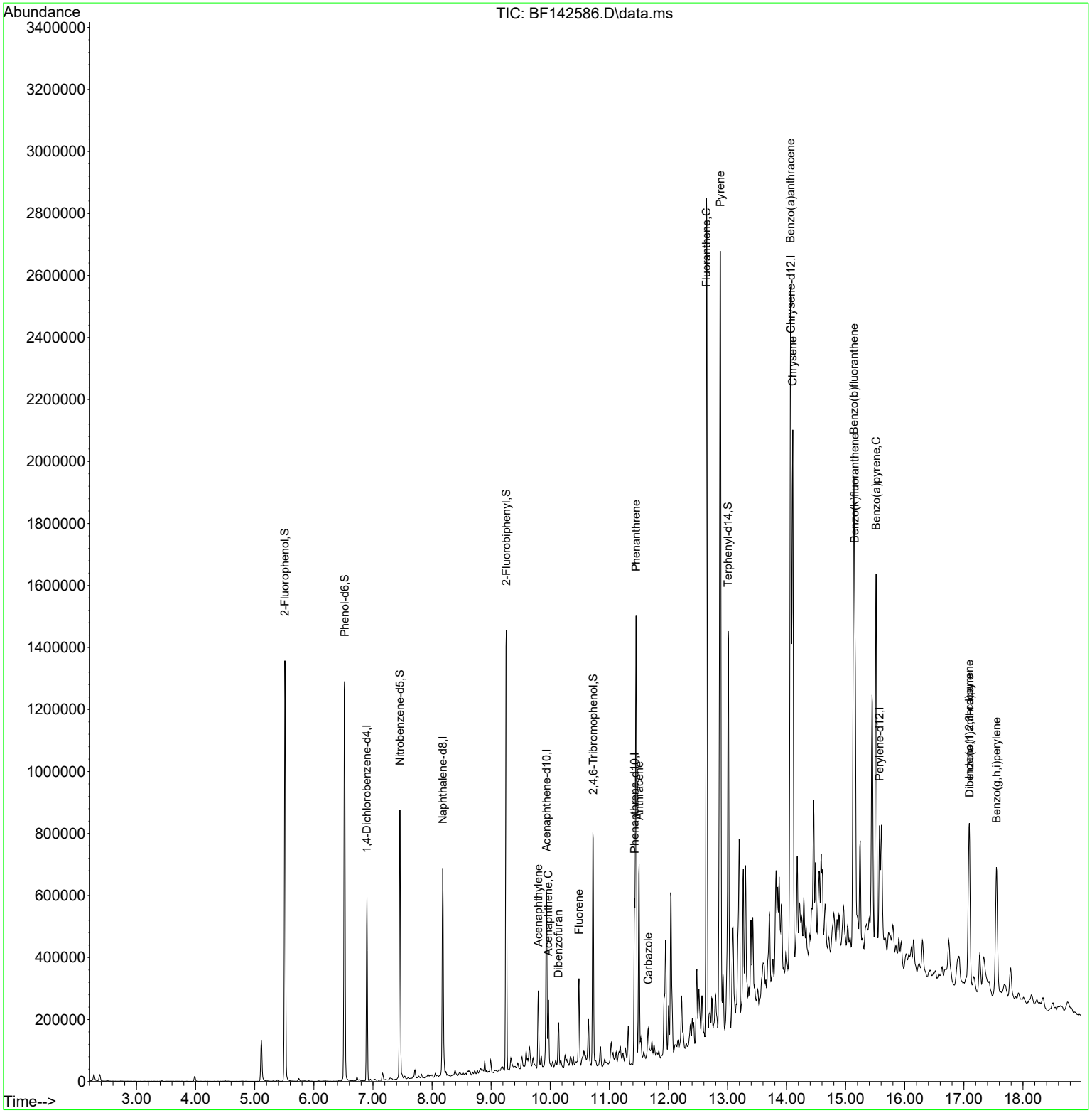
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	127932	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	419456	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	173324	20.000	ng	0.00
64) Phenanthrene-d10	11.428	188	272258	20.000	ng	0.00
76) Chrysene-d12	14.074	240	273238	20.000	ng	# 0.00
86) Perylene-d12	15.574	264	220770	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	530834	69.906	ng	0.00
7) Phenol-d6	6.522	99	616313	67.425	ng	-0.01
23) Nitrobenzene-d5	7.457	82	362018	47.062	ng	-0.02
42) 2,4,6-Tribromophenol	10.728	330	122333	63.593	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	648355	50.195	ng	-0.01
79) Terphenyl-d14	13.010	244	620873	31.052	ng	0.00
Target Compounds						Qvalue
49) Acenaphthylene	9.798	152	139334	8.306	ng	99
52) Acenaphthene	9.969	154	63172	6.167	ng	99
55) Dibenzofuran	10.139	168	71986	4.883	ng	98
58) Fluorene	10.486	166	122179	10.729	ng	100
71) Phenanthrene	11.451	178	761506	52.337	ng	100
72) Anthracene	11.504	178	375473	25.285	ng	99
73) Carbazole	11.657	167	50150	3.950	ng	99
75) Fluoranthene	12.645	202	1677367	123.377	ng	97
78) Pyrene	12.880	202	1627047	63.833	ng	98
81) Benzo(a)anthracene	14.069	228	1158541	63.497	ng	92
83) Chrysene	14.104	228	860064	52.460	ng	96
87) Indeno(1,2,3-cd)pyrene	17.092	276	403177	24.326	ng	97
88) Benzo(b)fluoranthene	15.139	252	1057398m	80.926	ng	
89) Benzo(k)fluoranthene	15.151	252	444893m	36.354	ng	
90) Benzo(a)pyrene	15.516	252	736688	59.815	ng	97
91) Dibenzo(a,h)anthracene	17.098	278	103346	7.688	ng	# 91
92) Benzo(g,h,i)perylene	17.551	276	385367	28.662	ng	98

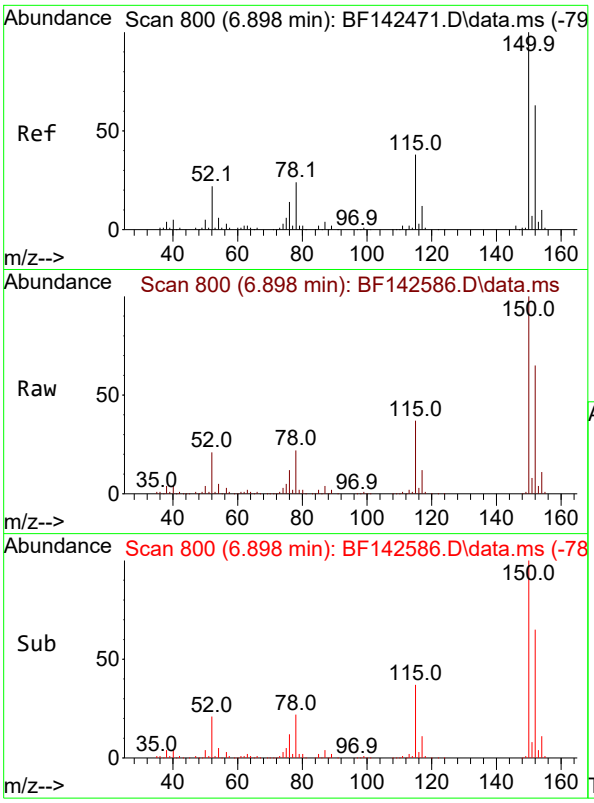
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Time: May 31 00:12:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



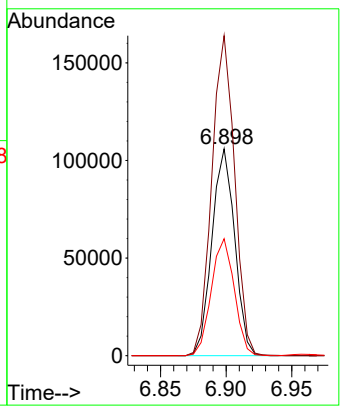


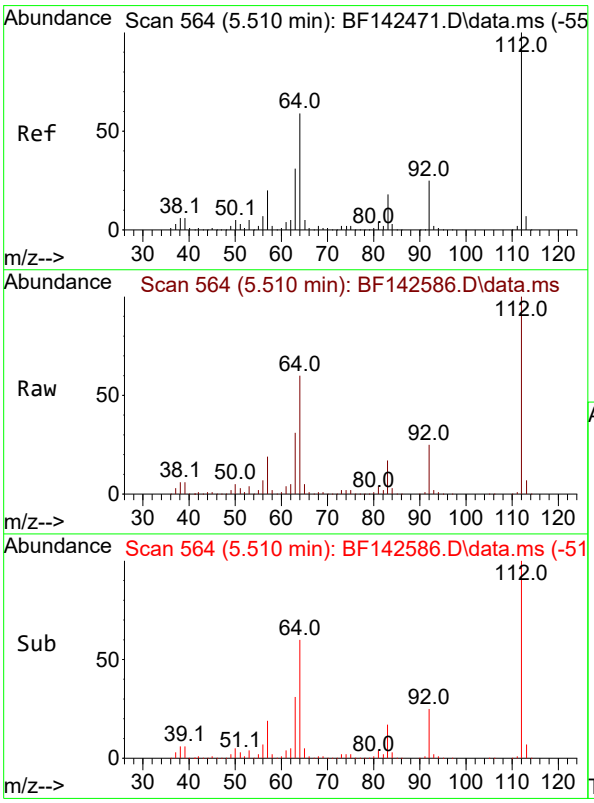
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:152 Resp: 127932

Ion	Ratio	Lower	Upper
152	100		
150	154.7	128.2	192.4
115	56.5	48.3	72.5

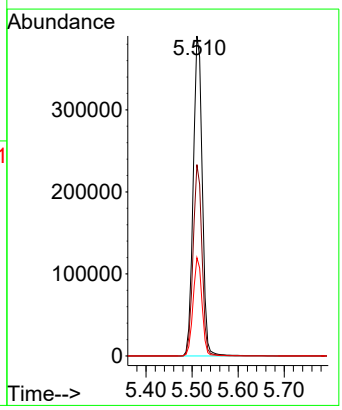


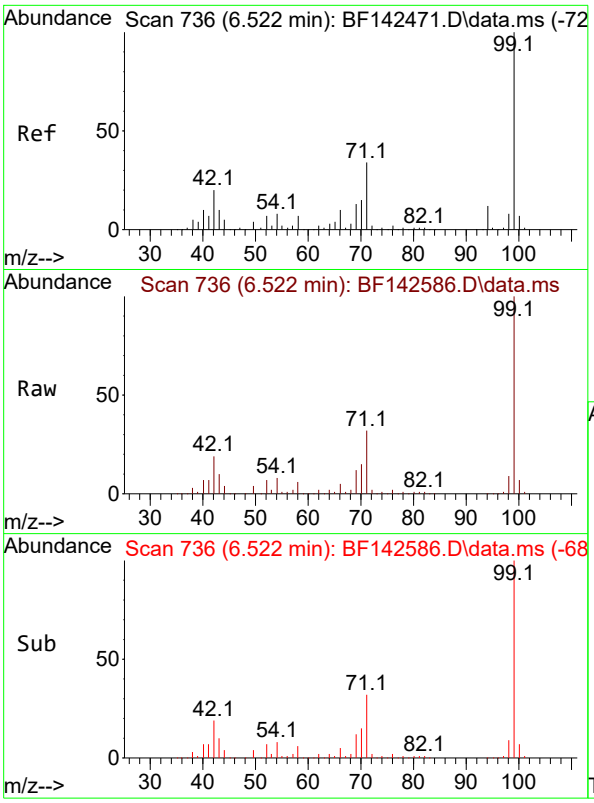


#5
2-Fluorophenol
Concen: 69.906 ng
RT: 5.510 min Scan# 564
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:112 Resp: 530834

Ion	Ratio	Lower	Upper
112	100		
64	59.8	47.5	71.3
63	30.7	24.9	37.3



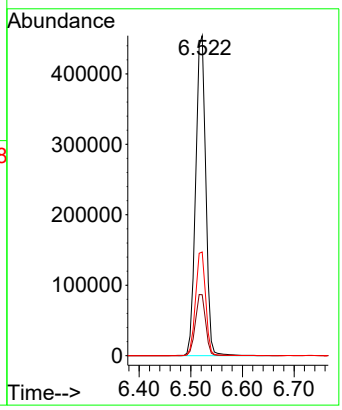


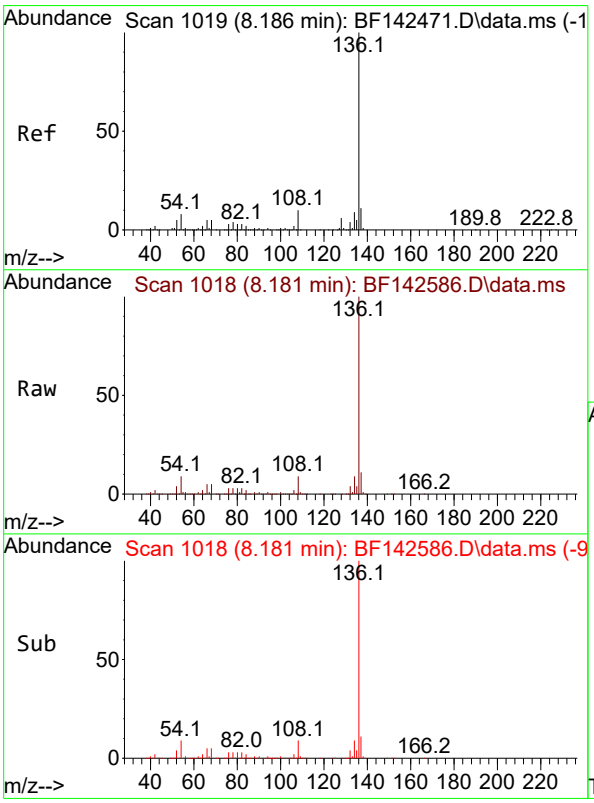
#7
Phenol-d6
Concen: 67.425 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion: 99 Resp: 616313

Ion	Ratio	Lower	Upper
99	100		
42	19.0	16.2	24.2
71	32.4	27.3	40.9

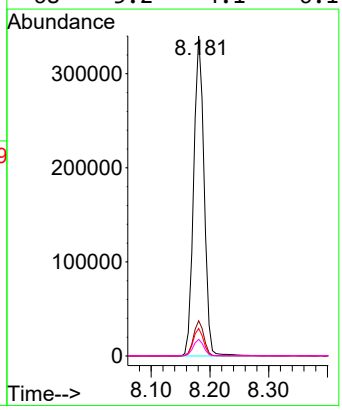


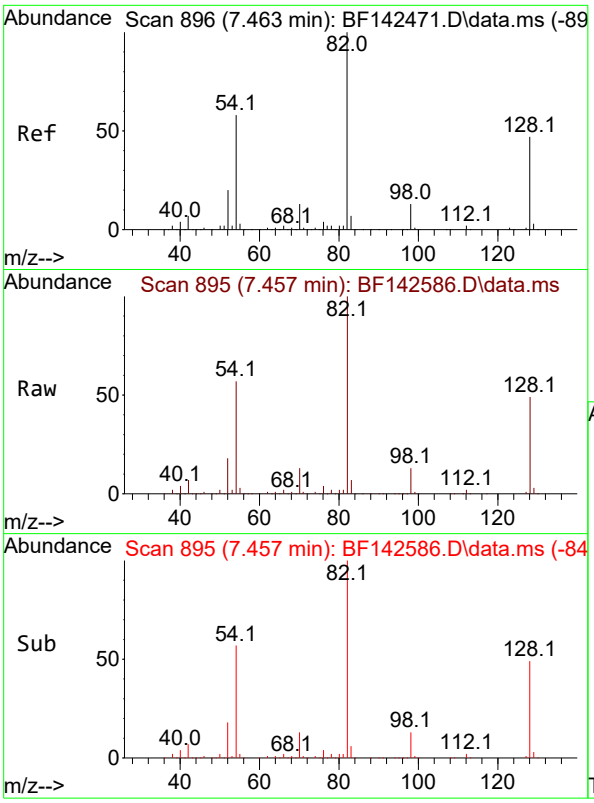


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:136 Resp: 419456

Ion	Ratio	Lower	Upper
136	100		
137	11.0	8.6	13.0
54	8.6	6.6	10.0
68	5.2	4.1	6.1



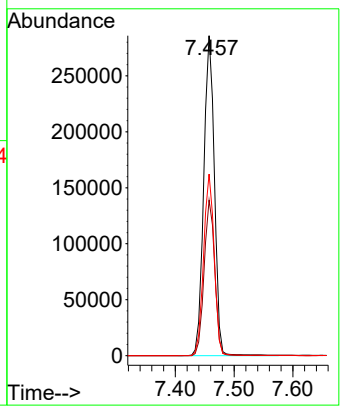


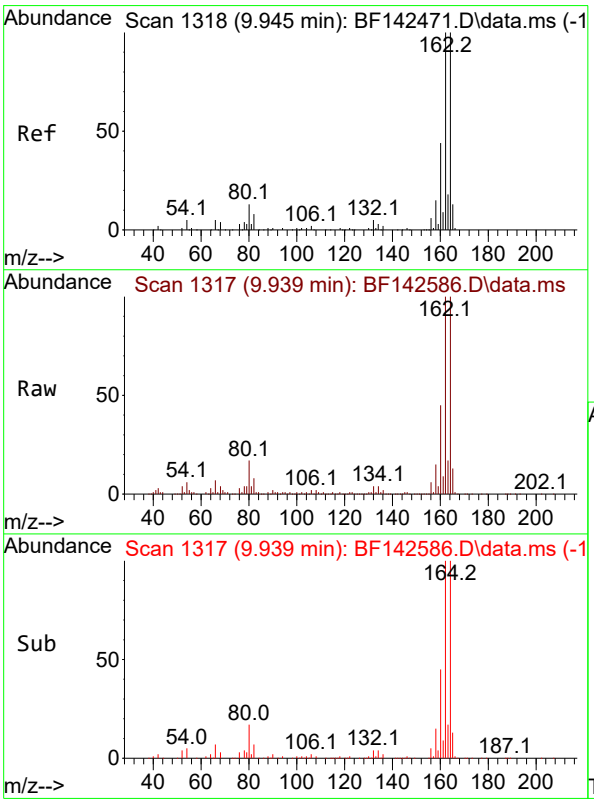
#23
Nitrobenzene-d5
Concen: 47.062 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.017 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion: 82 Resp: 362018

Ion	Ratio	Lower	Upper
82	100		
128	48.6	37.4	56.2
54	56.7	46.6	70.0

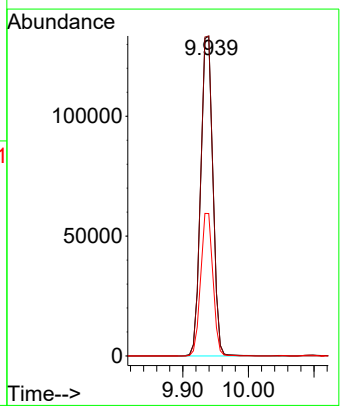


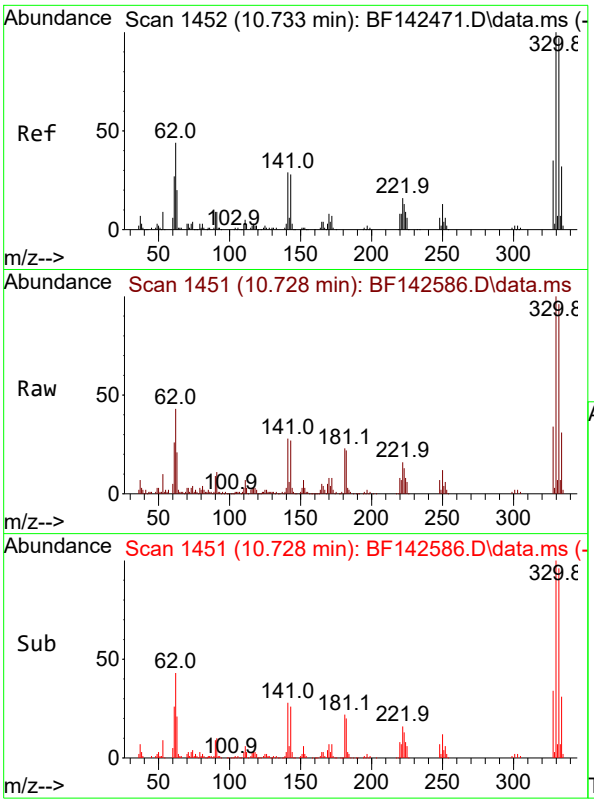


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:164 Resp: 173324

Ion	Ratio	Lower	Upper
164	100		
162	100.1	80.2	120.4
160	44.6	35.6	53.4



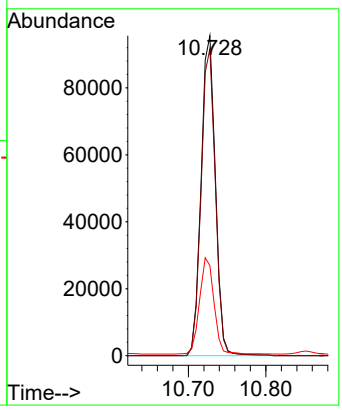


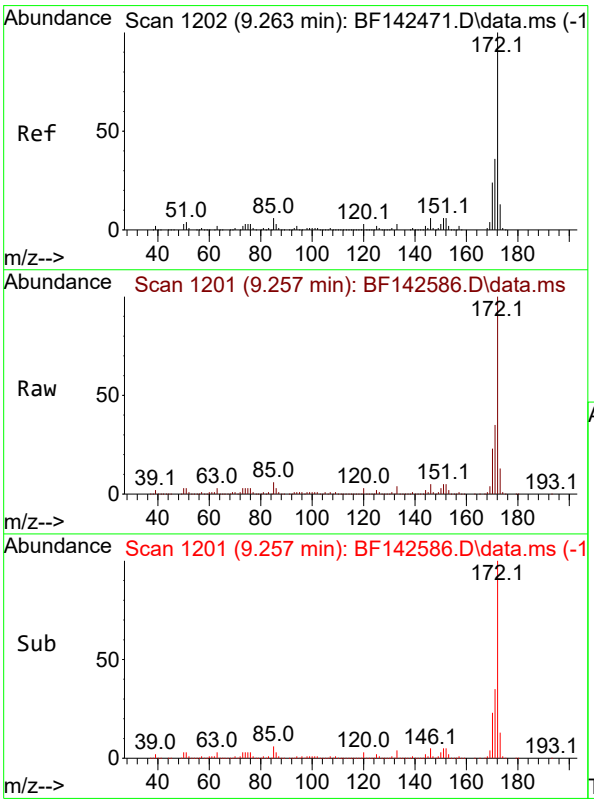
#42
2,4,6-Tribromophenol
Concen: 63.593 ng
RT: 10.728 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:330 Resp: 122333

Ion	Ratio	Lower	Upper
330	100		
332	95.4	77.6	116.4
141	30.6	24.6	36.8

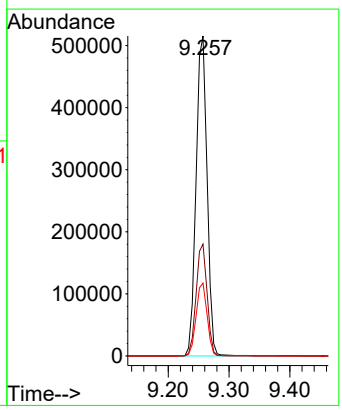


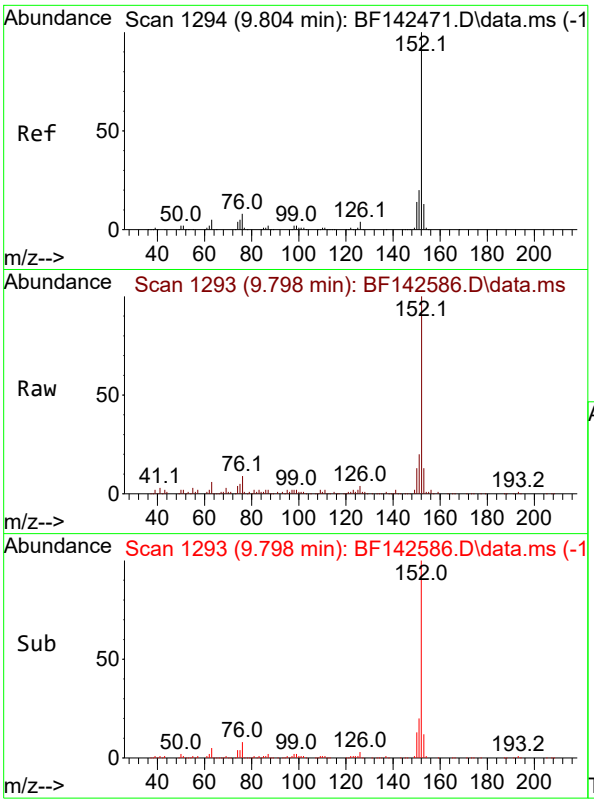


#45
2-Fluorobiphenyl
Concen: 50.195 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.011 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:172 Resp: 648355

Ion	Ratio	Lower	Upper
172	100		
171	35.0	28.6	42.8
170	22.8	18.9	28.3



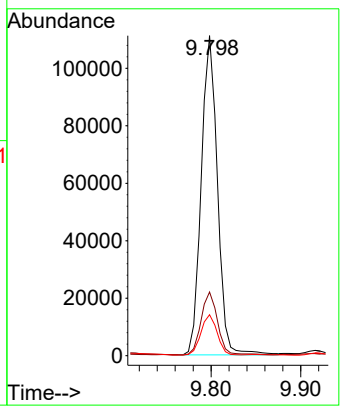


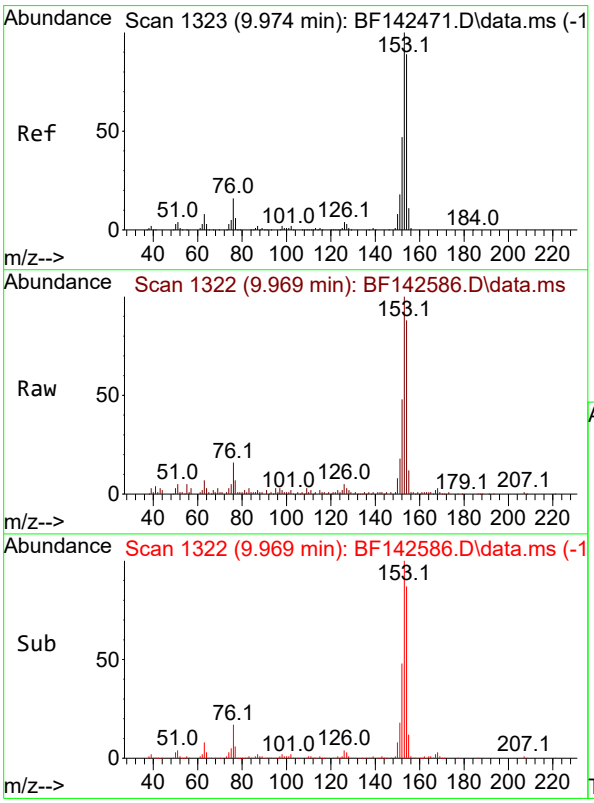
#49
Acenaphthylene
Concen: 8.306 ng
RT: 9.798 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:152 Resp: 139334

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.8
153	12.8	10.6	15.8

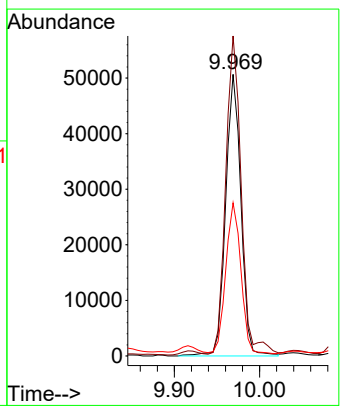


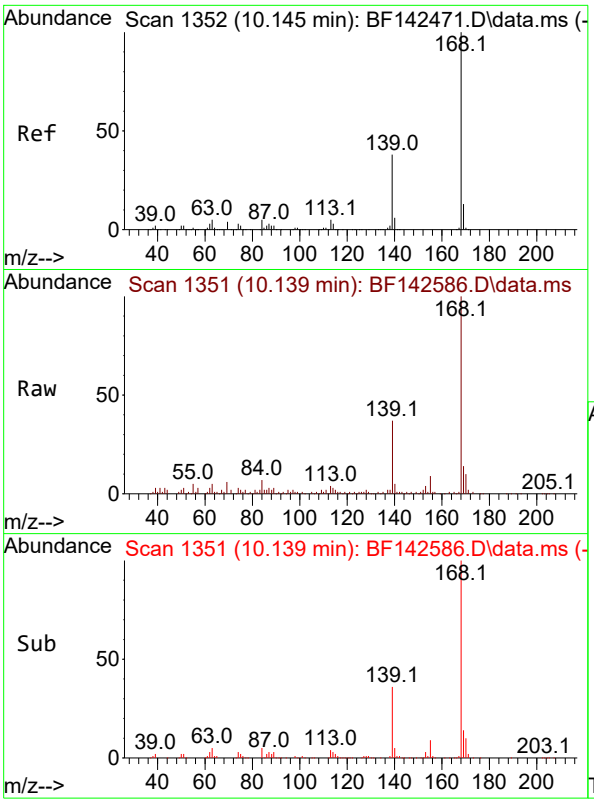


#52
Acenaphthene
Concen: 6.167 ng
RT: 9.969 min Scan# 1322
Delta R.T. -0.011 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:154 Resp: 63172

Ion	Ratio	Lower	Upper
154	100		
153	113.6	90.0	135.0
152	54.4	42.6	64.0



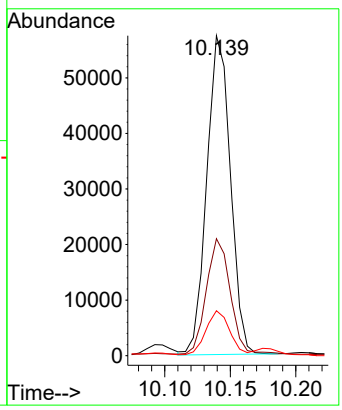


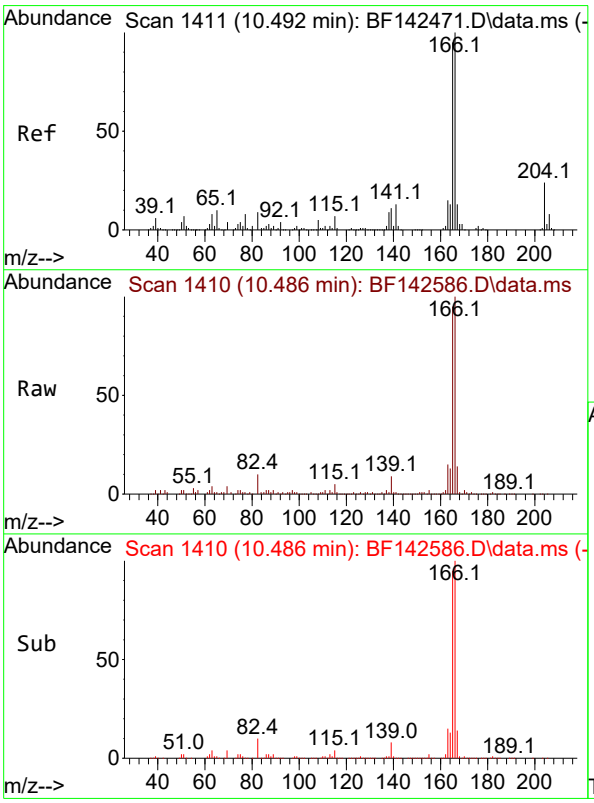
#55
Dibenzofuran
Concen: 4.883 ng
RT: 10.139 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:168 Resp: 71986

Ion	Ratio	Lower	Upper
168	100		
139	36.5	30.2	45.2
169	14.0	10.7	16.1

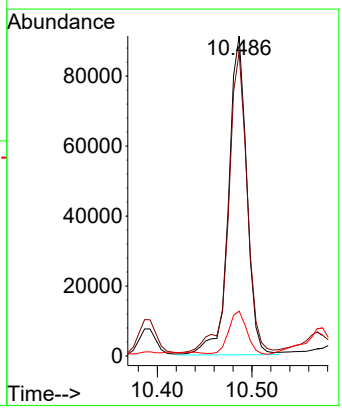


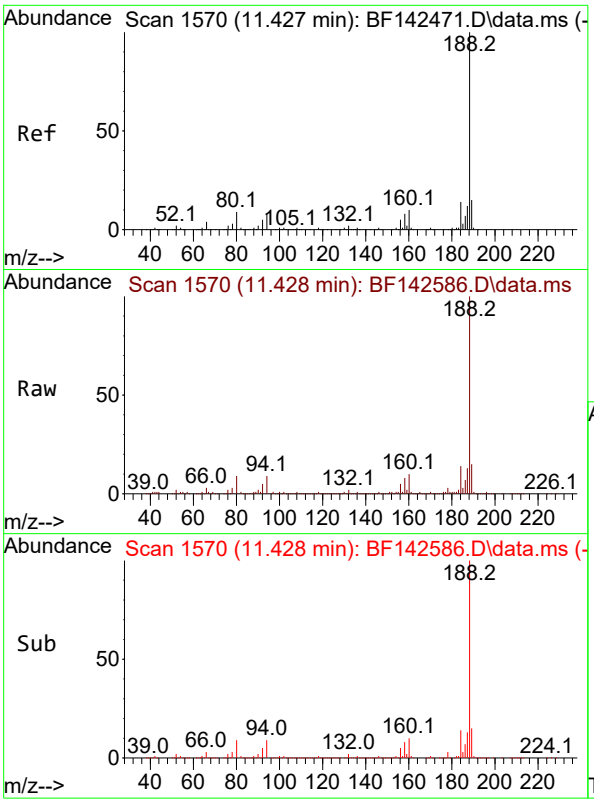


#58
Fluorene
Concen: 10.729 ng
RT: 10.486 min Scan# 1410
Delta R.T. -0.011 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:166 Resp: 122179

Ion	Ratio	Lower	Upper
166	100		
165	95.0	75.8	113.8
167	14.0	10.6	16.0



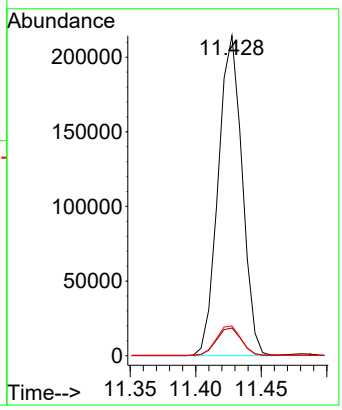


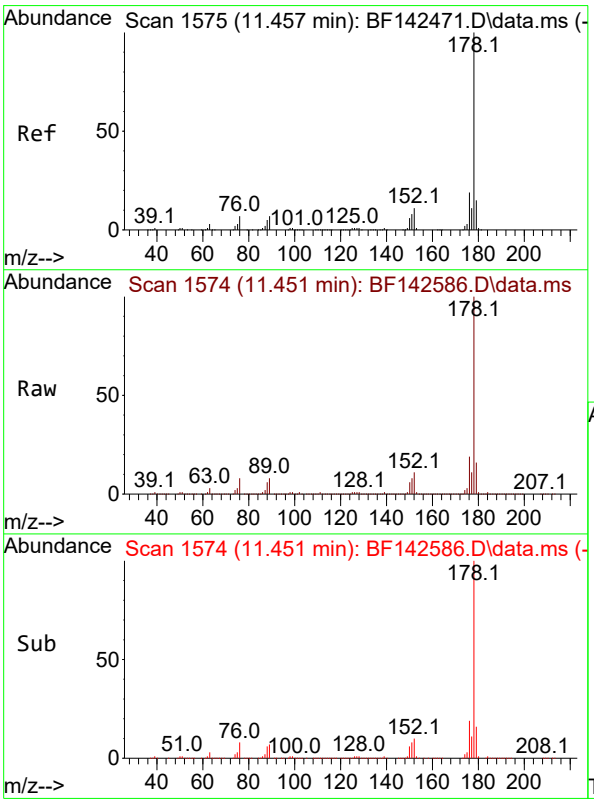
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.428 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:188 Resp: 272258

Ion	Ratio	Lower	Upper
188	100		
94	8.6	6.6	10.0
80	9.3	7.4	11.0

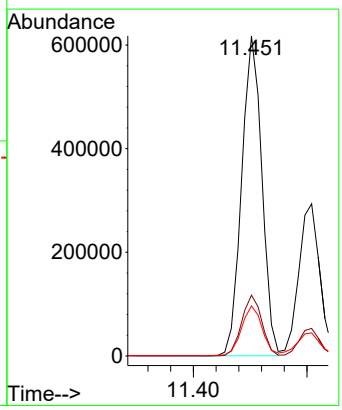


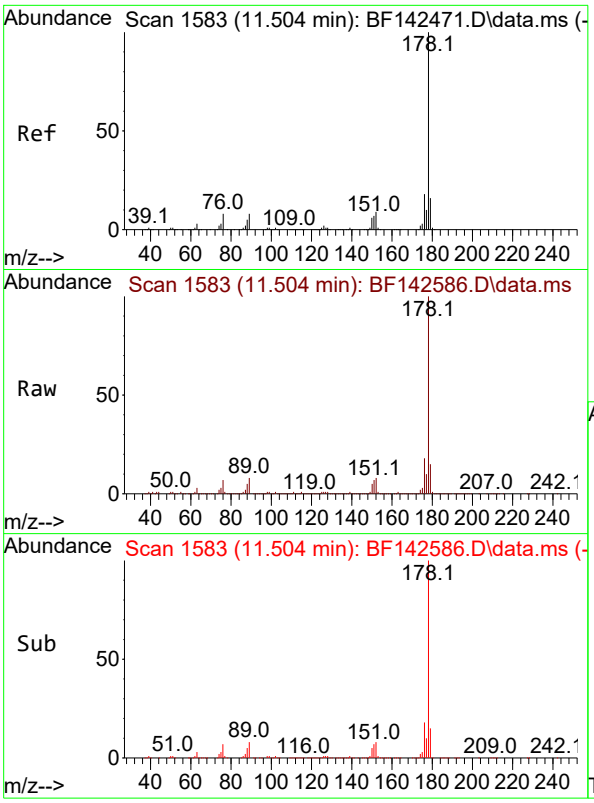


#71
Phenanthrene
Concen: 52.337 ng
RT: 11.451 min Scan# 1574
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:178 Resp: 761506

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.4	23.0
179	15.7	12.3	18.5



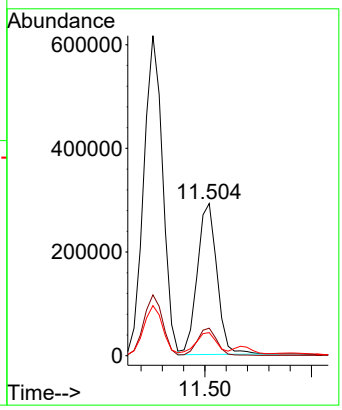


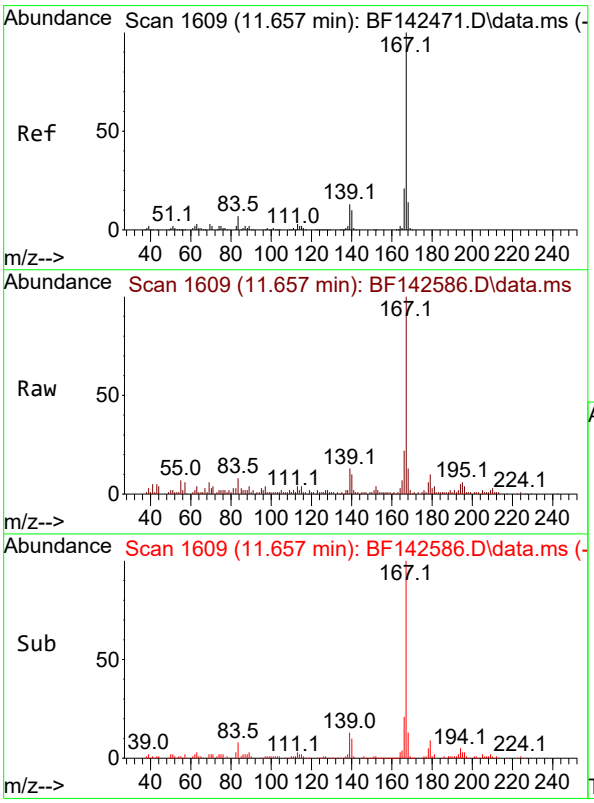
#72
Anthracene
Concen: 25.285 ng
RT: 11.504 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:178 Resp: 375473

Ion	Ratio	Lower	Upper
178	100		
176	18.0	14.6	21.8
179	15.2	12.4	18.6

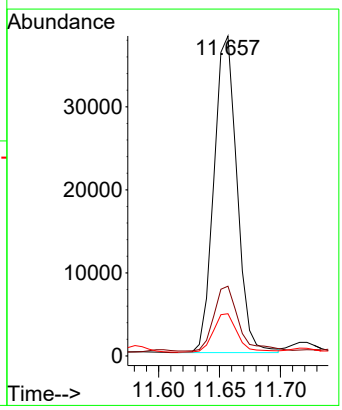


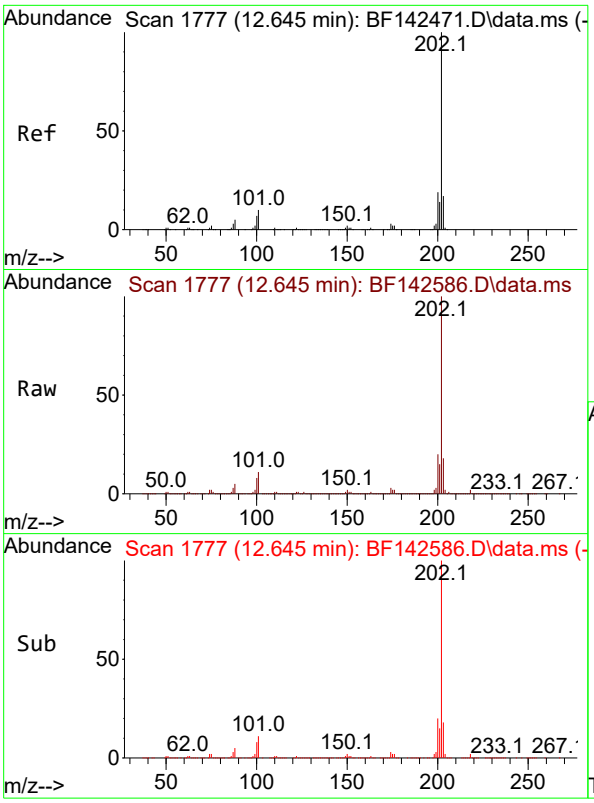


#73
Carbazole
Concen: 3.950 ng
RT: 11.657 min Scan# 1609
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:167 Resp: 50150

Ion	Ratio	Lower	Upper
167	100		
166	21.8	16.9	25.3
139	13.2	10.2	15.4



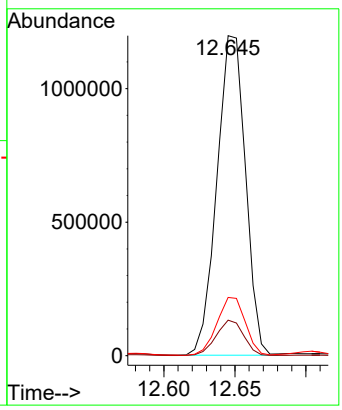


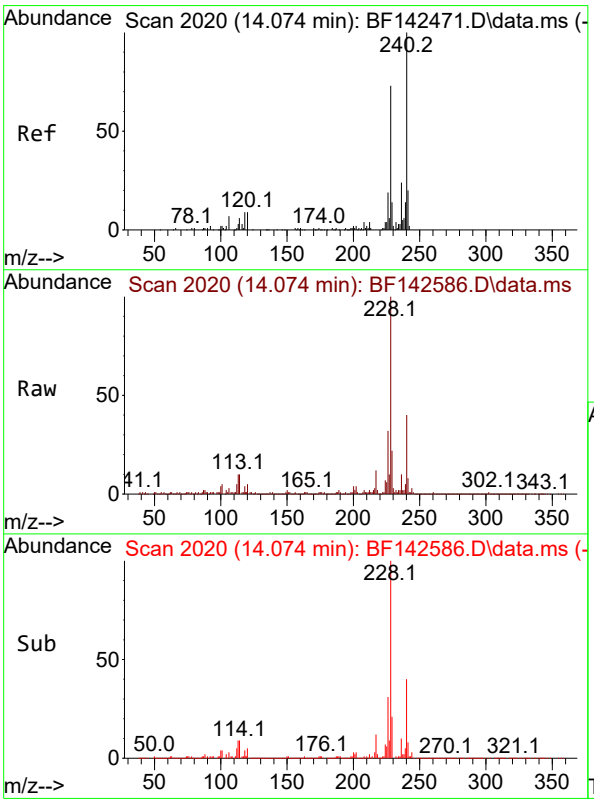
#75
Fluoranthene
Concen: 123.377 ng
RT: 12.645 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:202 Resp: 1677367

Ion	Ratio	Lower	Upper
202	100		
101	11.1	0.0	29.6
203	18.2	0.0	37.2

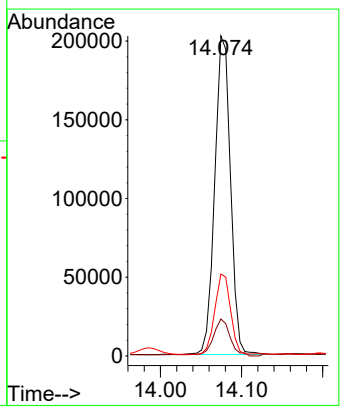


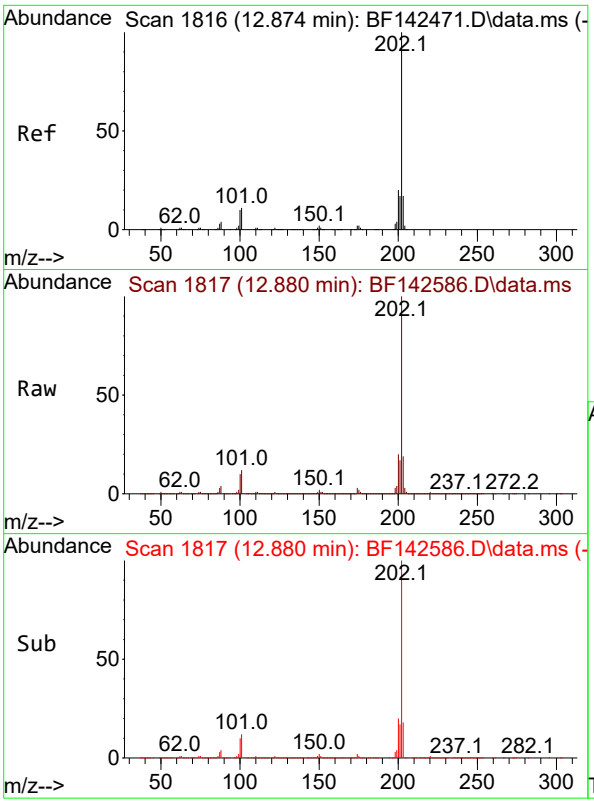


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:240 Resp: 273238

Ion	Ratio	Lower	Upper
240	100		
120	11.6	7.5	11.3#
236	25.6	19.6	29.4



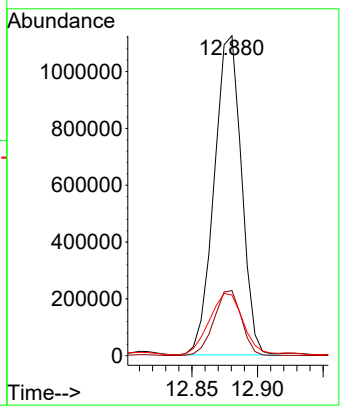


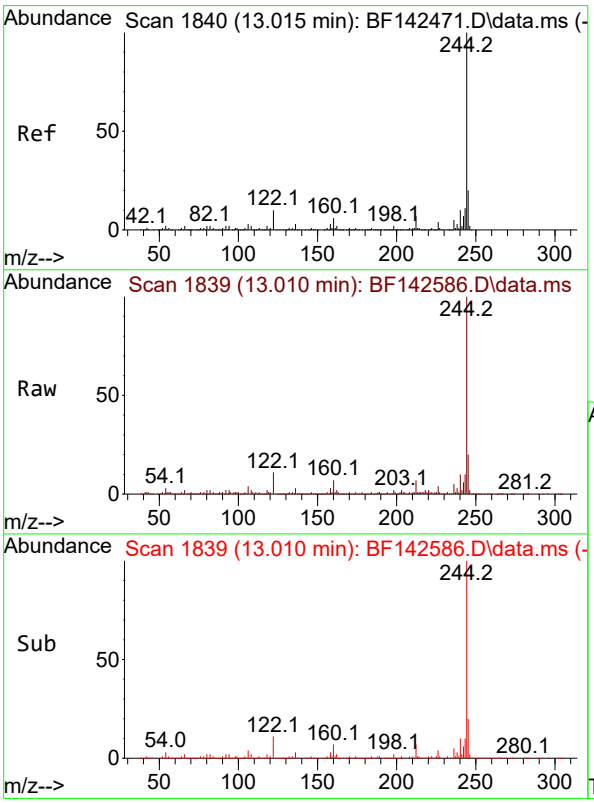
#78
Pyrene
Concen: 63.833 ng
RT: 12.880 min Scan# 1
Delta R.T. 0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:202 Resp: 1627047

Ion	Ratio	Lower	Upper
202	100		
200	20.3	16.1	24.1
203	19.0	13.9	20.9

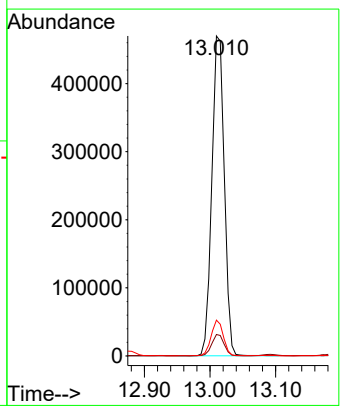


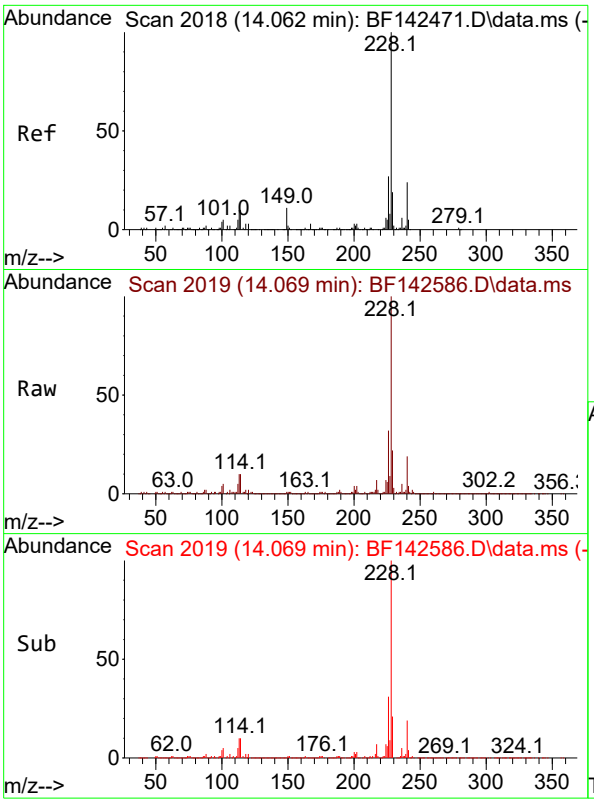


#79
Terphenyl-d14
Concen: 31.052 ng
RT: 13.010 min Scan# 1839
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:244 Resp: 620873

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.3	7.9
122	11.2	8.2	12.2



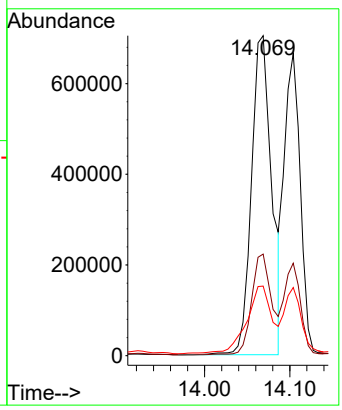


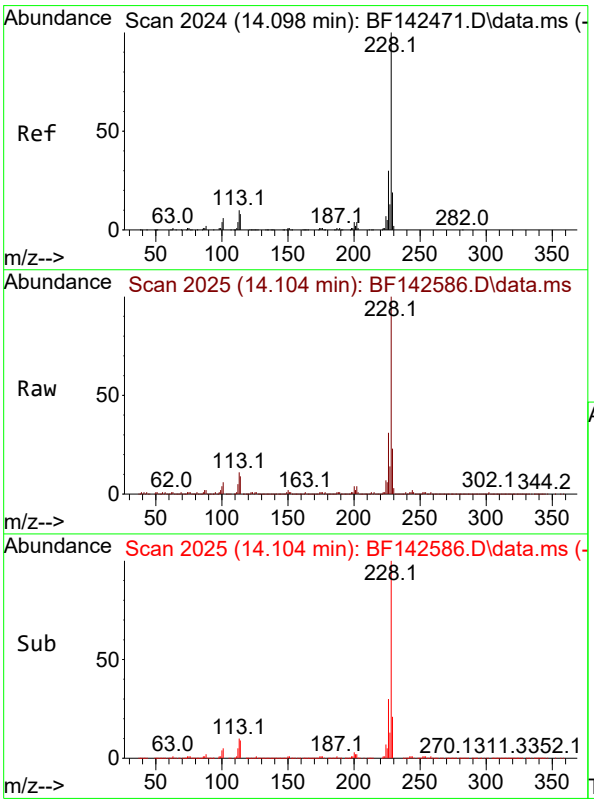
#81
Benzo(a)anthracene
Concen: 63.497 ng
RT: 14.069 min Scan# 2
Delta R.T. 0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:228 Resp: 1158541

Ion	Ratio	Lower	Upper
228	100		
226	31.7	21.2	31.8
229	21.8	15.5	23.3

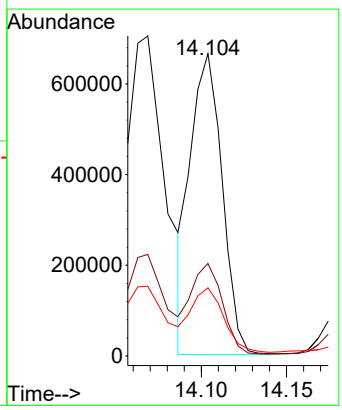


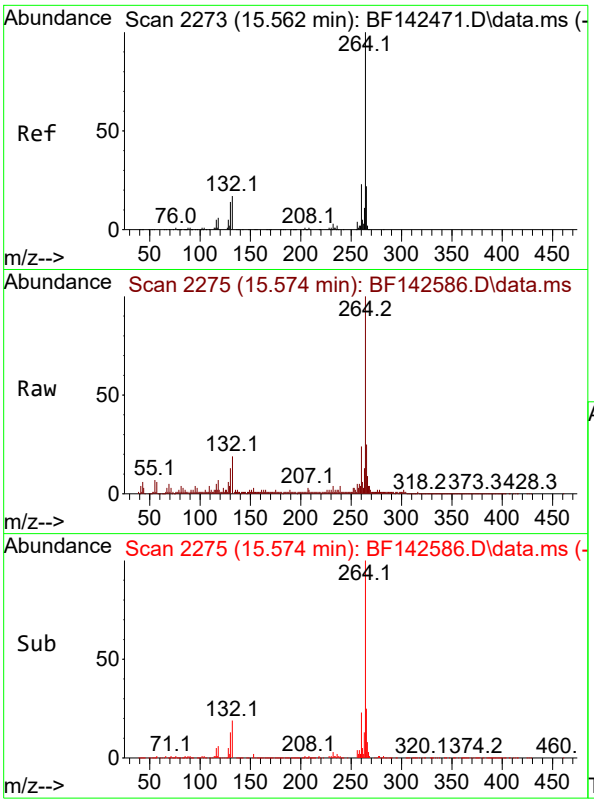


#83
Chrysene
Concen: 52.460 ng
RT: 14.104 min Scan# 2025
Delta R.T. 0.000 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:228 Resp: 860064

Ion	Ratio	Lower	Upper
228	100		
226	30.6	23.8	35.6
229	22.5	15.4	23.2



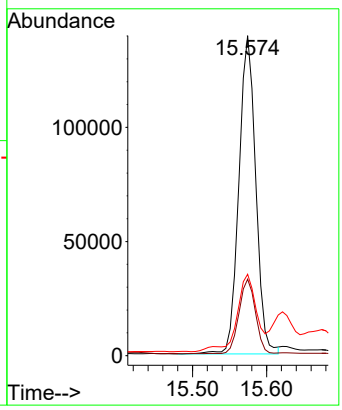


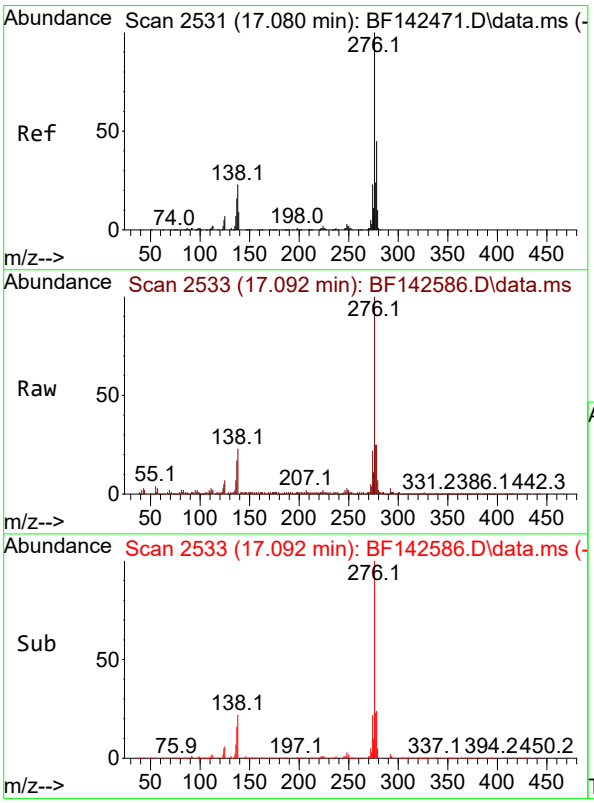
#86
Perylene-d12
Concen: 20.000 ng
RT: 15.574 min Scan# 2
Delta R.T. 0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:264 Resp: 220770

Ion	Ratio	Lower	Upper
264	100		
260	23.9	18.6	28.0
265	25.5	17.7	26.5

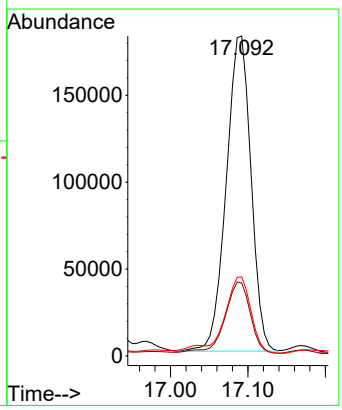


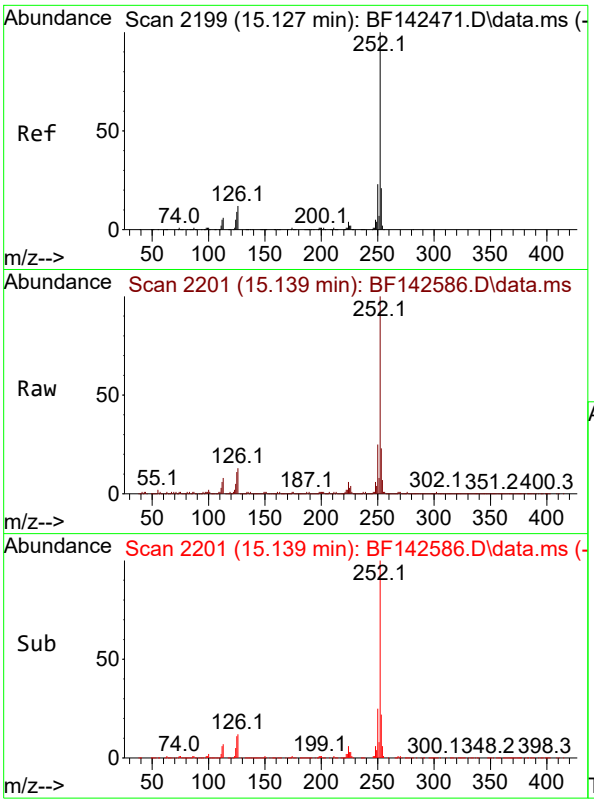


#87
Indeno(1,2,3-cd)pyrene
Concen: 24.326 ng
RT: 17.092 min Scan# 2533
Delta R.T. 0.000 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:276 Resp: 403177

Ion	Ratio	Lower	Upper
276	100		
138	23.1	19.9	29.9
277	26.8	20.2	30.2



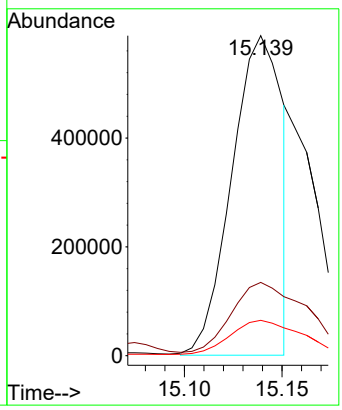


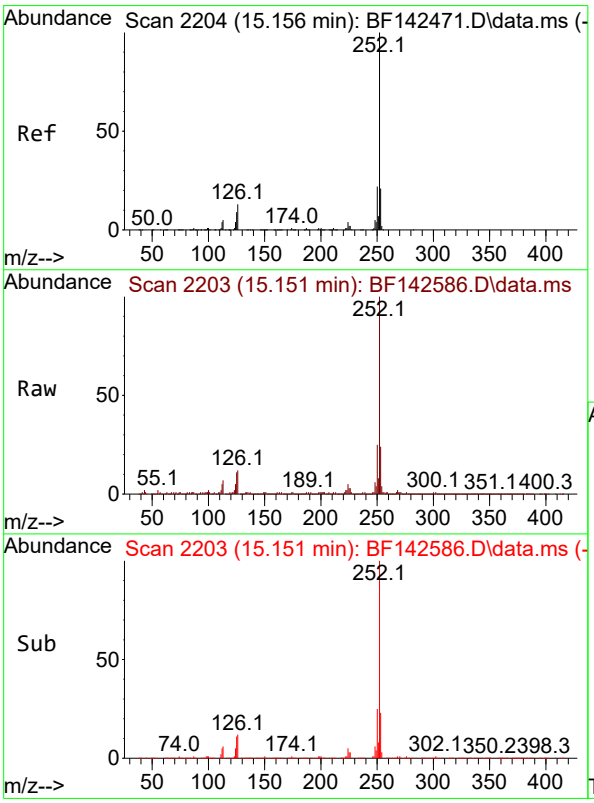
#88
Benzo(b)fluoranthene
Concen: 80.926 ng m
RT: 15.139 min Scan# 2
Delta R.T. 0.012 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:252 Resp: 1057398

Ion	Ratio	Lower	Upper
252	100		
253	22.9	17.0	25.4
125	11.1	7.4	11.0#

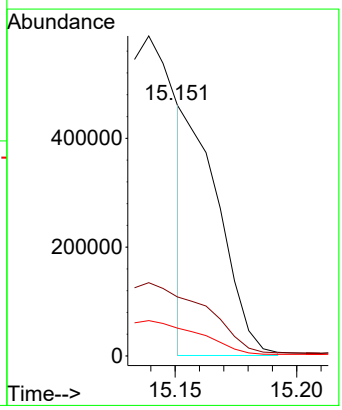


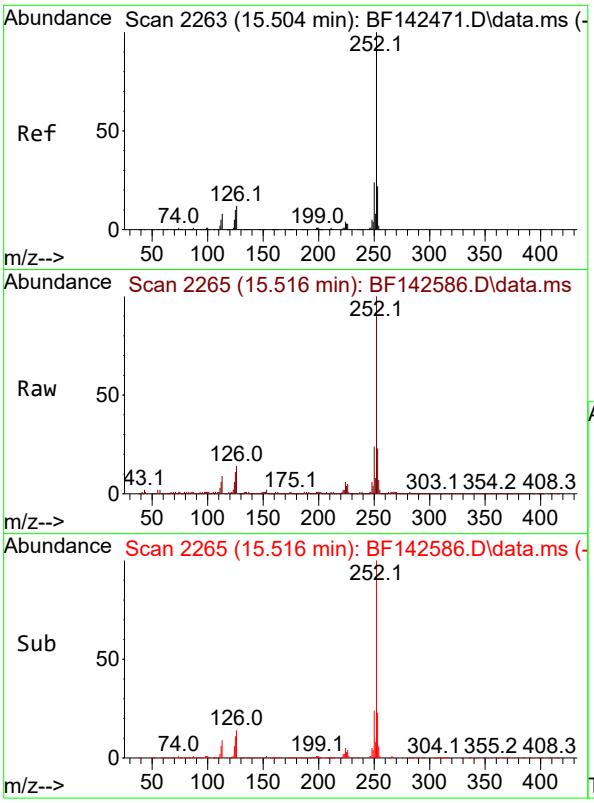


#89
Benzo(k)fluoranthene
Concen: 36.354 ng m
RT: 15.151 min Scan# 2203
Delta R.T. -0.012 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:252 Resp: 444893

Ion	Ratio	Lower	Upper
252	100		
253	23.5	17.0	25.4
125	11.1	7.3	10.9#



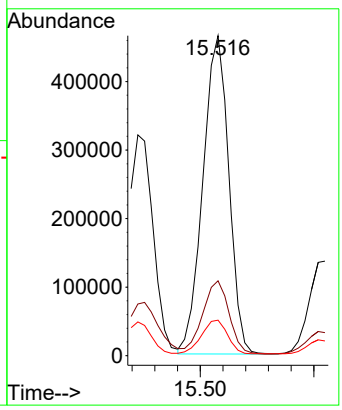


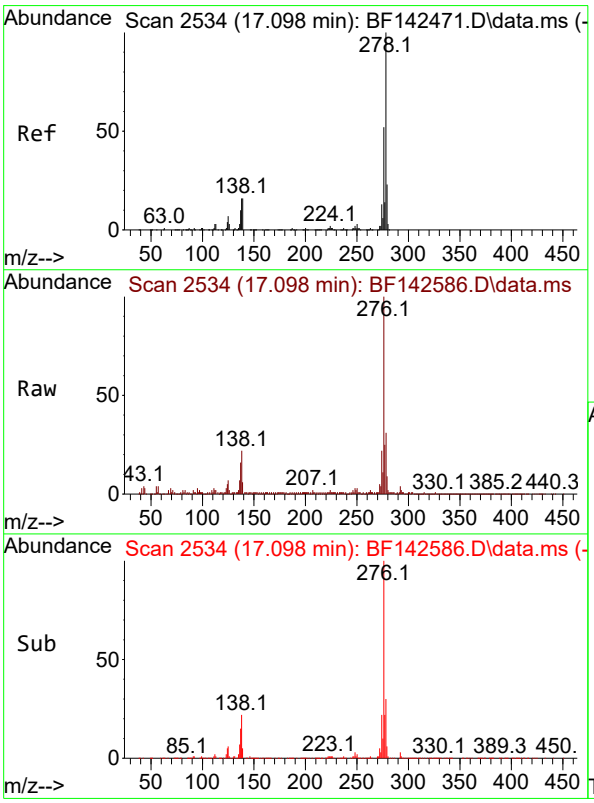
#90
Benzo(a)pyrene
Concen: 59.815 ng
RT: 15.516 min Scan# 2
Delta R.T. 0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:252 Resp: 736688

Ion	Ratio	Lower	Upper
252	100		
253	23.4	17.4	26.0
125	11.1	7.9	11.9

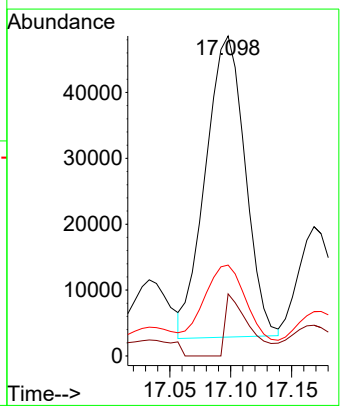


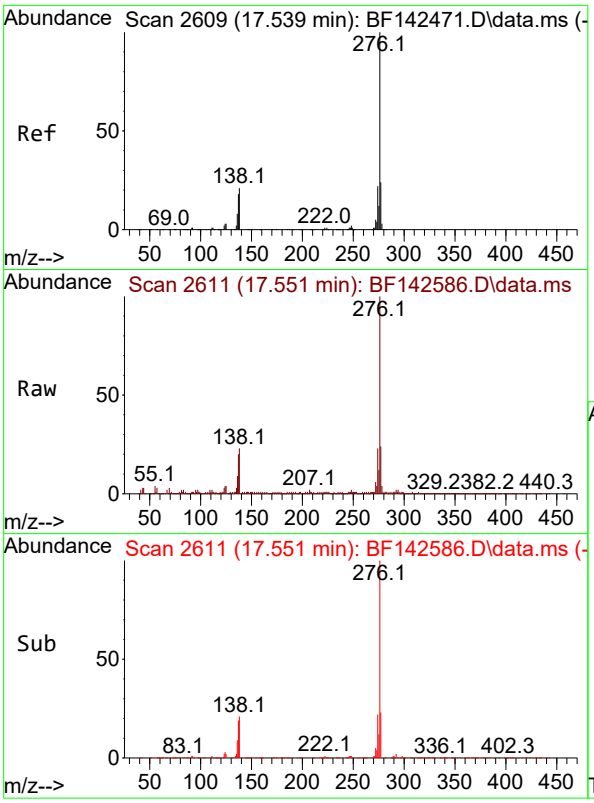


#91
Dibenzo(a,h)anthracene
Concen: 7.688 ng
RT: 17.098 min Scan# 2534
Delta R.T. -0.017 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Tgt Ion:278 Resp: 103346

Ion	Ratio	Lower	Upper
278	100		
139	19.4	12.8	19.2#
279	28.4	18.6	28.0#



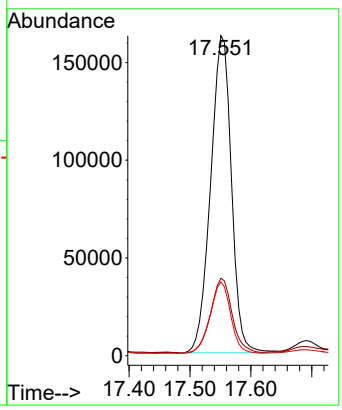


#92
Benzo(g,h,i)perylene
Concen: 28.662 ng
RT: 17.551 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142586.D
Acq: 30 May 2025 23:10

Instrument :
BNA_F
ClientSampleId :
TP-44

Tgt Ion:276 Resp: 385367

Ion	Ratio	Lower	Upper
276	100		
277	24.2	19.2	28.8
138	23.1	16.8	25.2



Sample Results: **BF142586.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142586.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.110	487	496	511	rBV	133766	210435	4.91%	0.399%
2	5.510	553	564	584	rBV	1356665	1834317	42.78%	3.477%
3	6.522	730	736	754	rVB	1288178	1763669	41.13%	3.343%
4	6.898	795	800	805	rBV	591069	716473	16.71%	1.358%
5	7.457	884	895	900	rBV	870836	1118766	26.09%	2.120%
6	8.181	1011	1018	1025	rBV	669527	891603	20.79%	1.690%
7	8.992	1152	1156	1164	rVB	41394	54433	1.27%	0.103%
8	9.257	1195	1201	1206	rBV	1421425	1799868	41.98%	3.411%
9	9.334	1210	1214	1221	rBV2	38798	80303	1.87%	0.152%
10	9.522	1241	1246	1250	rBV	38978	63669	1.48%	0.121%
11	9.592	1254	1258	1261	rVV	56993	85430	1.99%	0.162%
12	9.645	1264	1267	1274	rVV4	69315	127302	2.97%	0.241%
13	9.710	1274	1278	1288	rVB3	32452	68546	1.60%	0.130%
14	9.798	1288	1293	1298	rBV	249202	321119	7.49%	0.609%
15	9.845	1298	1301	1306	rVV2	36223	50580	1.18%	0.096%
16	9.934	1310	1316	1320	rVV	562462	793014	18.50%	1.503%
17	9.969	1320	1322	1330	rVB	214657	244887	5.71%	0.464%
18	10.139	1347	1351	1355	rBV	135464	167432	3.91%	0.317%
19	10.251	1366	1370	1373	rBV2	39237	62209	1.45%	0.118%
20	10.345	1382	1386	1391	rBV5	28390	51528	1.20%	0.098%
21	10.486	1405	1410	1415	rVB	279172	364763	8.51%	0.691%
22	10.569	1416	1424	1427	rBV4	43256	104816	2.44%	0.199%
23	10.645	1433	1437	1445	rVB	149368	219972	5.13%	0.417%
24	10.722	1445	1450	1456	rBV	750873	1009350	23.54%	1.913%
25	10.851	1467	1472	1477	rVB2	64286	101801	2.37%	0.193%
26	11.034	1498	1503	1506	rBV2	61595	93264	2.18%	0.177%
27	11.275	1540	1544	1548	rBV2	39269	63658	1.48%	0.121%
28	11.322	1548	1552	1558	rVB	123244	173381	4.04%	0.329%
29	11.428	1565	1570	1571	rBV	537520	647926	15.11%	1.228%
30	11.451	1571	1574	1578	rVV	1439727	1793751	41.84%	3.400%
31	11.504	1578	1583	1586	rVV	630191	827641	19.30%	1.569%
32	11.533	1586	1588	1593	rVB2	63634	78077	1.82%	0.148%
33	11.657	1605	1609	1616	rBV	82169	135870	3.17%	0.258%
34	11.722	1617	1620	1623	rVV	44903	56437	1.32%	0.107%
35	11.757	1623	1626	1631	rVB3	35388	48796	1.14%	0.092%
36	11.928	1651	1655	1656	rBV	193431	215971	5.04%	0.409%

Sample Results: **BF142586.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

37	11.951	1656	1659	1664	rVV2	364325	540511	12.61%	1.024%
38	12.004	1664	1668	1670	rVV	153266	192956	4.50%	0.366%
39	12.039	1670	1674	1682	rVB	515468	875380	20.42%	1.659%
40	12.222	1701	1705	1709	rBV	149550	202180	4.72%	0.383%
41	12.404	1733	1736	1738	rBV	57161	60032	1.40%	0.114%
42	12.480	1744	1749	1752	rBV	239894	364695	8.51%	0.691%
43	12.516	1752	1755	1761	rVV2	165767	299770	6.99%	0.568%
44	12.569	1761	1764	1772	rVB3	136919	218972	5.11%	0.415%
45	12.645	1772	1777	1782	rBV	2704129	3724141	86.86%	7.059%
46	12.704	1782	1787	1789	rVV2	62323	118193	2.76%	0.224%
47	12.733	1789	1792	1796	rVB	100015	118568	2.77%	0.225%
48	12.798	1799	1803	1809	rVB3	104605	183412	4.28%	0.348%
49	12.875	1809	1816	1822	rBV	2504817	4287590	100.00%	8.127%
50	12.922	1822	1824	1829	rVB2	178314	227409	5.30%	0.431%
51	13.010	1831	1839	1847	rVB2	1278209	2115090	49.33%	4.009%
52	13.092	1847	1853	1860	rBV4	320415	693878	16.18%	1.315%
53	13.198	1864	1871	1875	rVB	560113	1032510	24.08%	1.957%
54	13.269	1879	1883	1886	rVV	423772	554161	12.92%	1.050%
55	13.304	1886	1889	1896	rVB2	424173	595676	13.89%	1.129%
56	13.398	1901	1905	1907	rBV	244419	296785	6.92%	0.563%
57	13.427	1907	1910	1914	rVB	224820	269706	6.29%	0.511%
58	13.710	1951	1958	1962	rBV2	220399	407211	9.50%	0.772%
59	13.822	1972	1977	1979	rBV3	330427	512024	11.94%	0.970%
60	13.874	1984	1986	1990	rVB2	188343	227411	5.30%	0.431%
61	14.069	2012	2019	2022	rBV2	2195525	3780788	88.18%	7.166%
62	14.104	2022	2025	2031	rVB	1701299	2322671	54.17%	4.402%
63	14.180	2035	2038	2041	rVB	248893	291907	6.81%	0.553%
64	14.292	2054	2057	2061	rVB2	131674	160172	3.74%	0.304%
65	14.457	2081	2085	2088	rBV	361347	482225	11.25%	0.914%
66	14.492	2089	2091	2095	rVB	226872	231224	5.39%	0.438%
67	14.586	2104	2107	2109	rBV	159422	195761	4.57%	0.371%
68	15.139	2194	2201	2210	rBV	1511861	3877801	90.44%	7.350%
69	15.245	2215	2219	2223	rVB	320204	444418	10.37%	0.842%
70	15.445	2248	2253	2259	rVB	782088	1319042	30.76%	2.500%
71	15.516	2259	2265	2270	rVV	1174673	1823846	42.54%	3.457%
72	15.574	2271	2275	2278	rVV	366569	621877	14.50%	1.179%
73	15.604	2278	2280	2288	rVB2	368518	576723	13.45%	1.093%
74	17.092	2526	2533	2541	rVB2	520999	1150182	26.83%	2.180%
75	17.551	2605	2611	2621	rVB	402404	922232	21.51%	1.748%

Sample Results: **BF142586.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Sum of corrected areas: 52760187

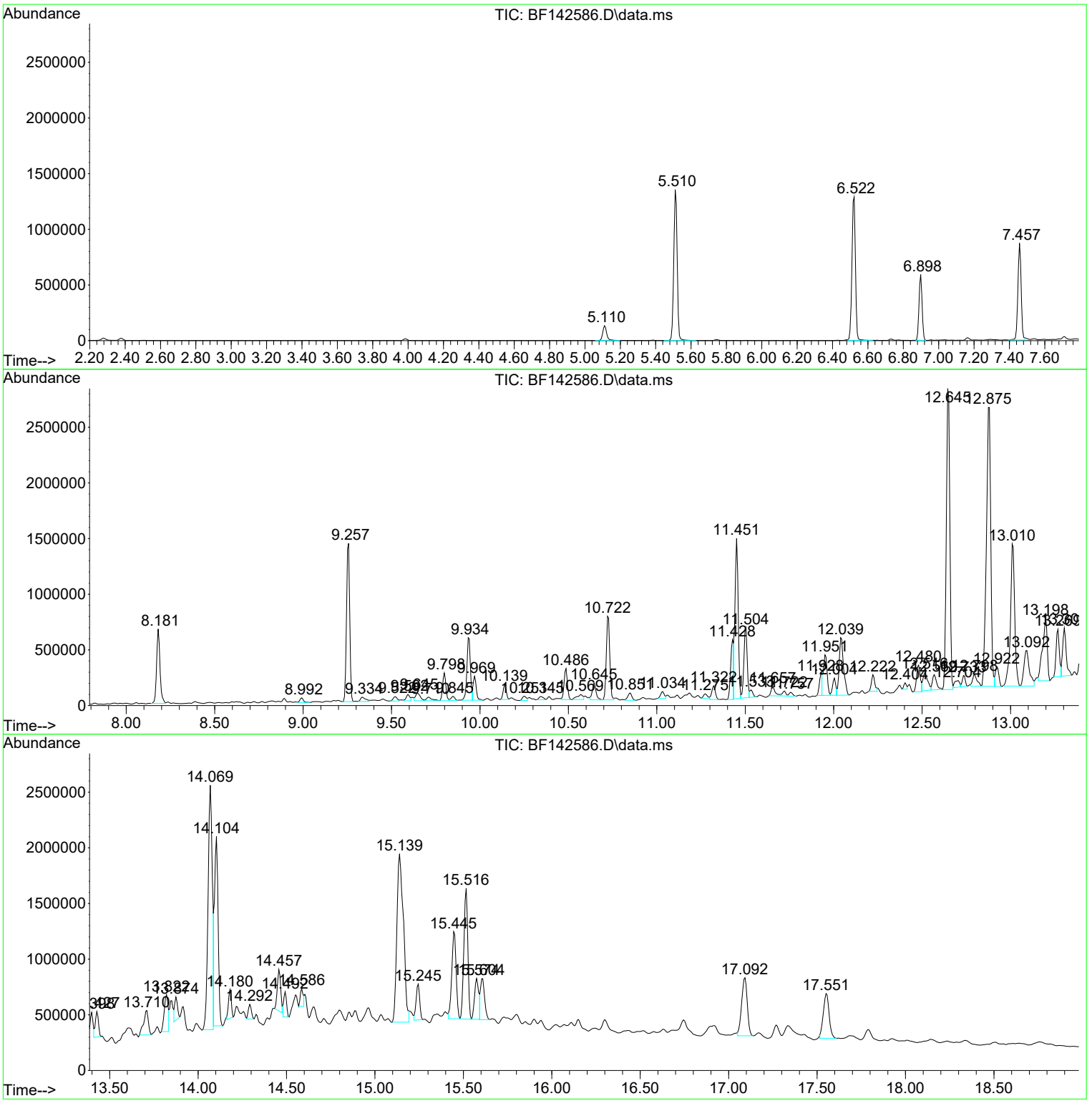
Sample Results: **BF142586.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

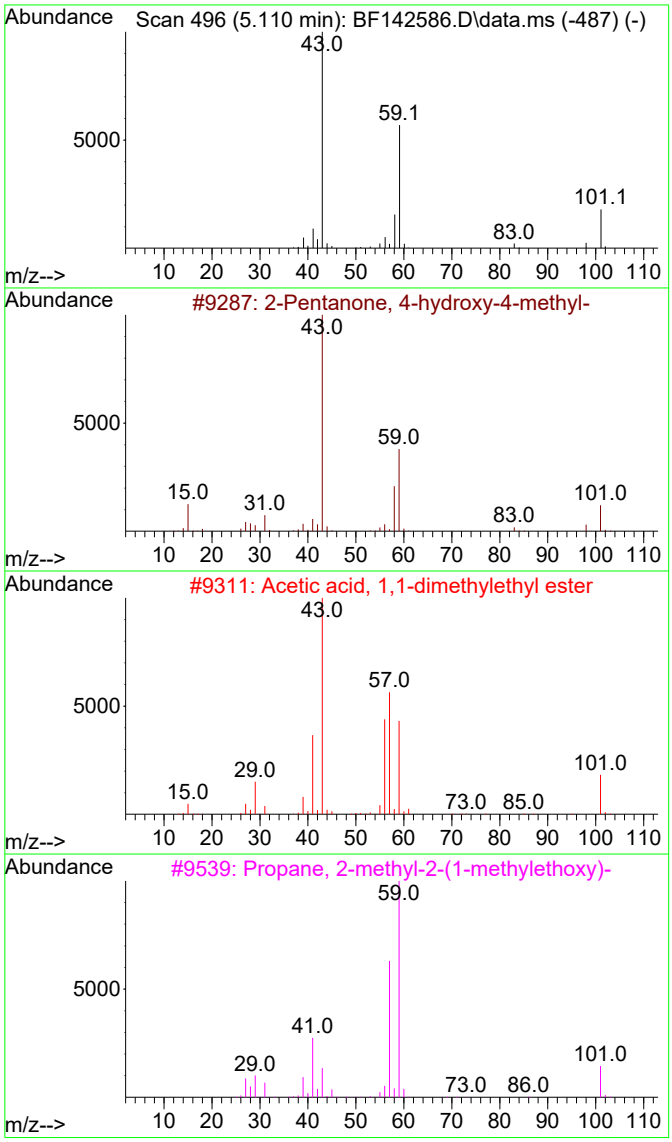
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

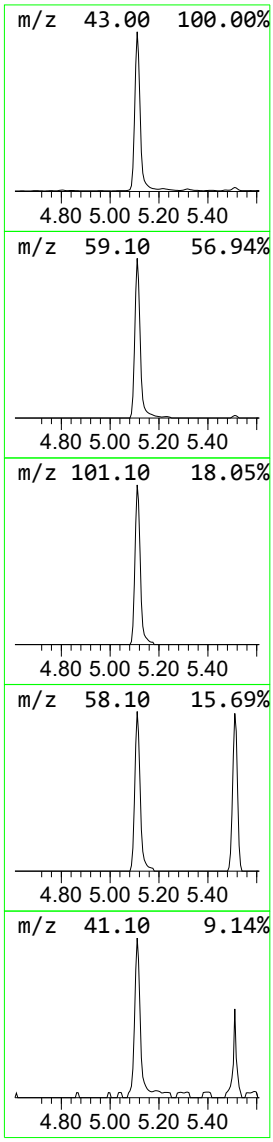
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.110	5.87 ng	210435	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45
2	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	39
3	Propane, 2-methyl-2-(1-methyleth...	116	C7H16O	017348-59-3	33
4	3-Hexanol, 4-methyl-	116	C7H16O	000615-29-2	33
5	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25





Sample Results: **BF142586.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

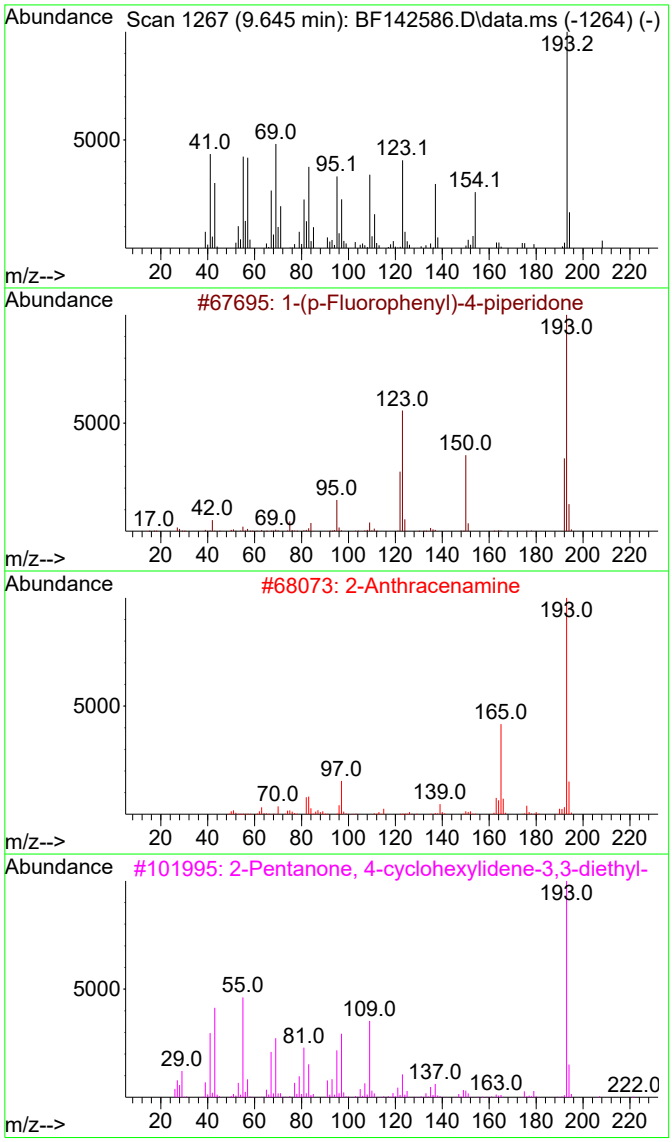
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

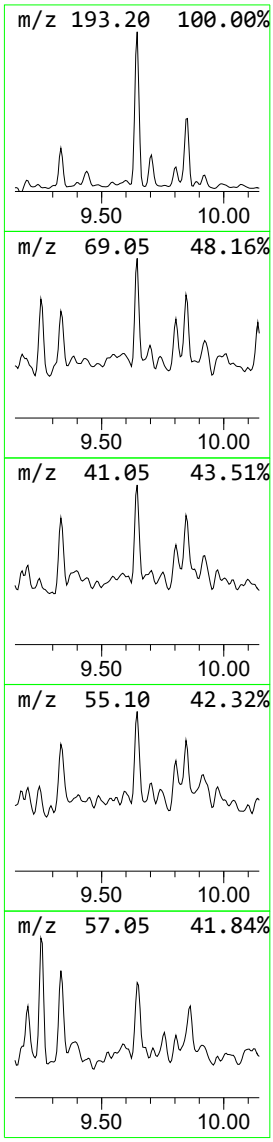
****

Peak Number 2 unknown9.645 Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.645	3.21 ng	127302	Acenaphthene-d10	9.939

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-(p-Fluorophenyl)-4-piperidone	193	C11H12FNO	1000238-56-7	46
2	2-Anthracenamine	193	C14H11N	000613-13-8	35
3	2-Pentanone, 4-cyclohexylidene-3...	222	C15H26O	313253-65-5	35
4	Butan-2-one, 1-[3-(3,3-dimethyl-...	278	C16H26N2O2	1000303-34-2	35
5	Pyrazole, 5-methyl-3-(5-nitro-2-...	193	C8H7N3O3	016239-90-0	27





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

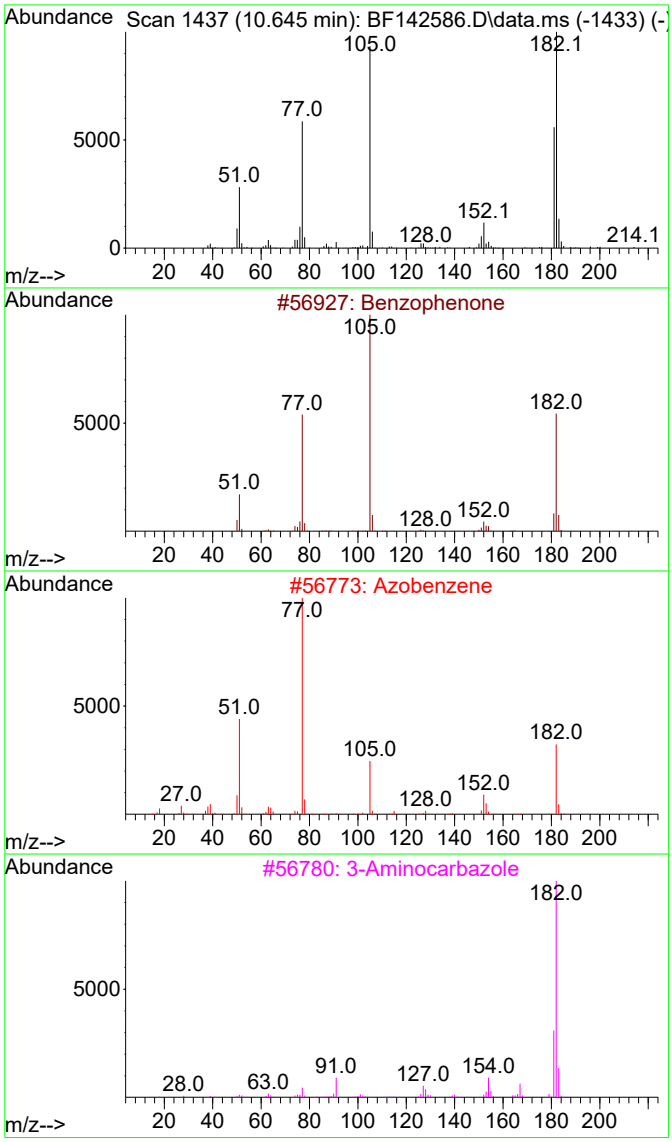
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

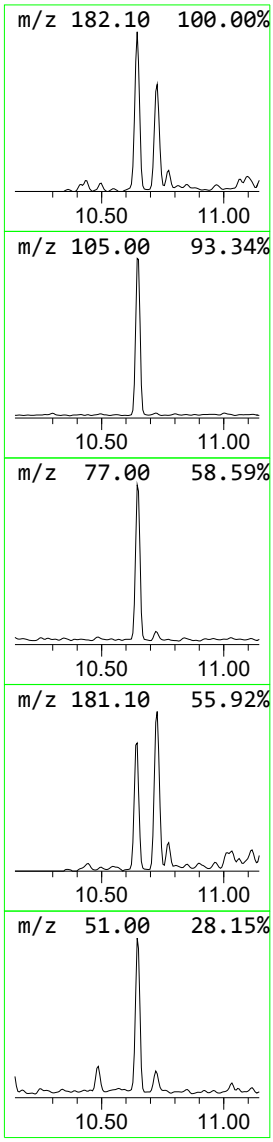
****

Peak Number 3 Benzophenone Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.645	5.55 ng	219972	Acenaphthene-d10	9.939

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	87
2	Azobenzene	182	C12H10N2	000103-33-3	53
3	3-Aminocarbazole	182	C12H10N2	006377-12-4	38
4	Phenyl 4-pyridyl ketone	183	C12H9NO	014548-46-0	38
5	Benzenecarbothioic acid, S-methy...	152	C8H8OS	005925-68-8	38





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

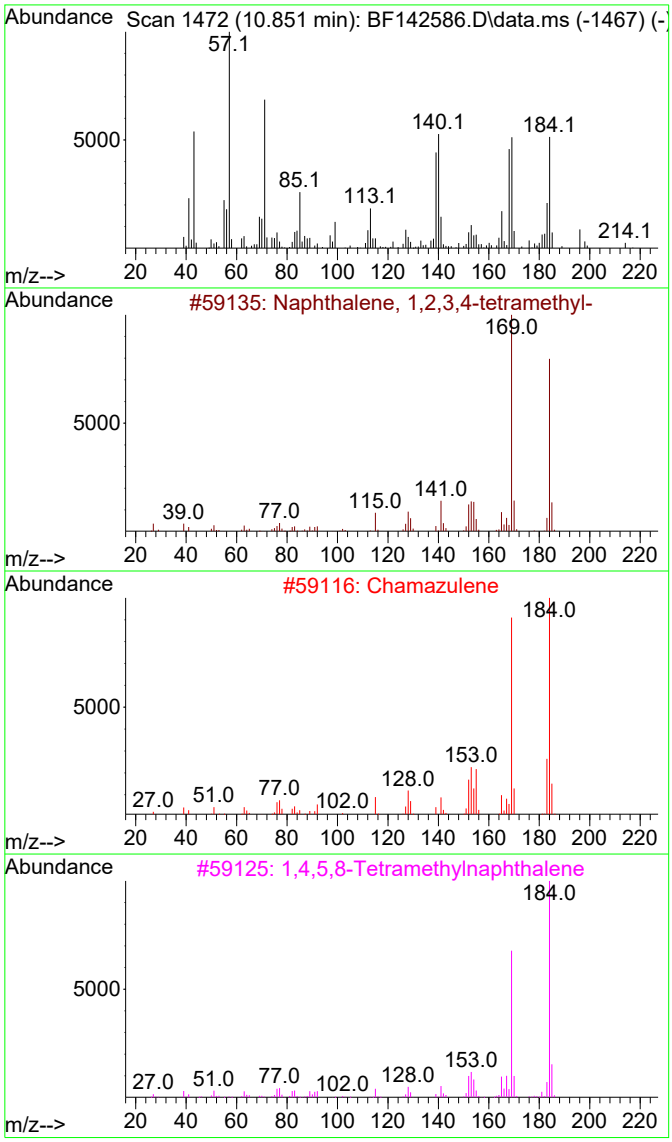
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

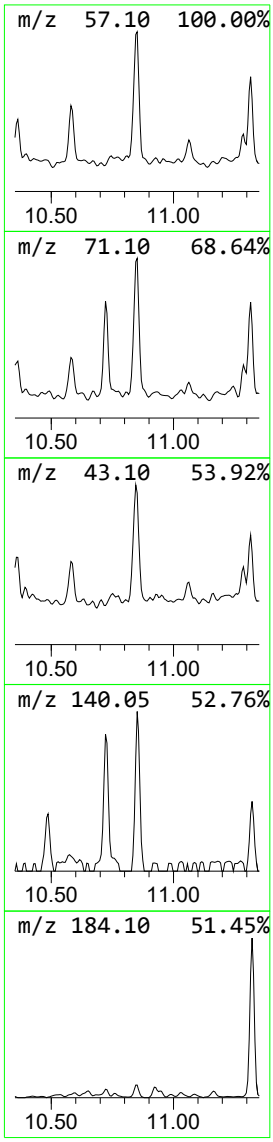
****

Peak Number 4 unknown10.851 Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.851	3.14 ng	101801	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetramethyl-	184	C14H16	003031-15-0	35
2	Chamazulene	184	C14H16	000529-05-5	35
3	1,4,5,8-Tetramethylnaphthalene	184	C14H16	002717-39-7	35
4	Benzene, (4,5,5-trimethyl-1,3-cy...	184	C14H16	033930-85-7	35
5	2,4,6(1H,3H,5H)-Pyrimidinetrione...	184	C8H12N2O3	007391-61-9	30





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

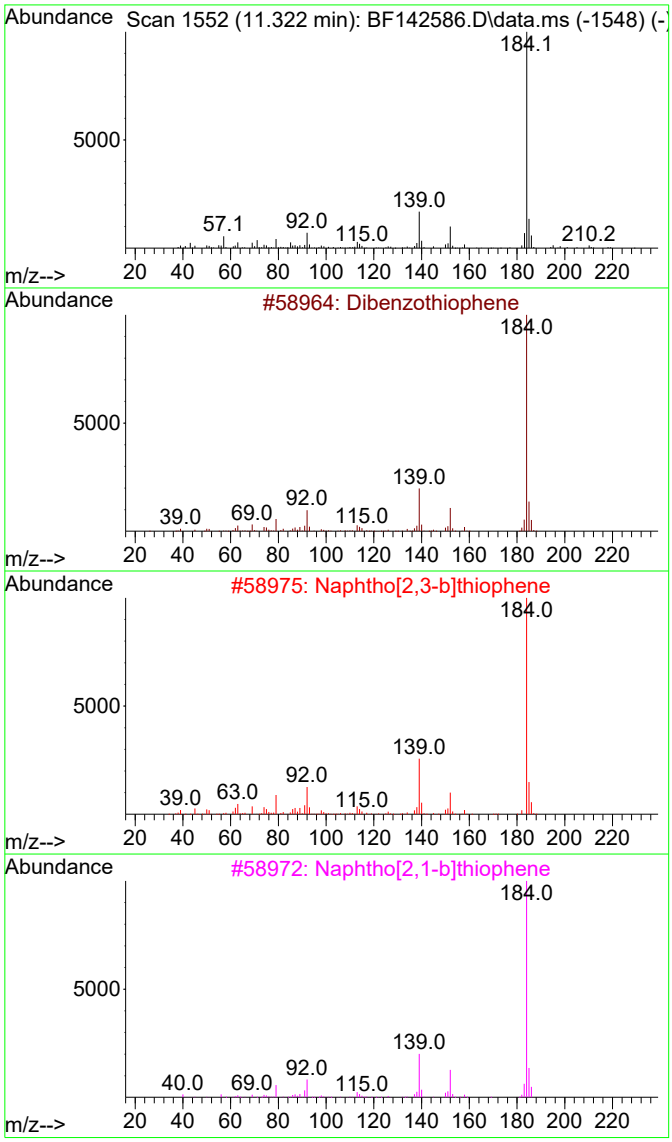
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

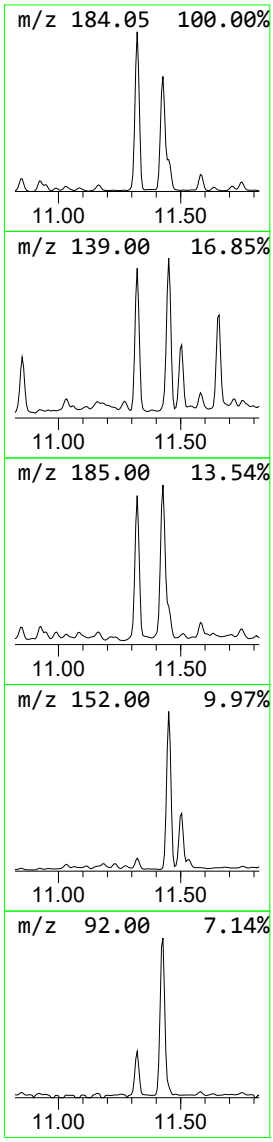
****

Peak Number 5 Dibenzothiophene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.322	5.35 ng	173381	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenzothiophene	184	C12H8S	000132-65-0	97
2	Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	97
3	Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	95
4	Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	95
5	Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

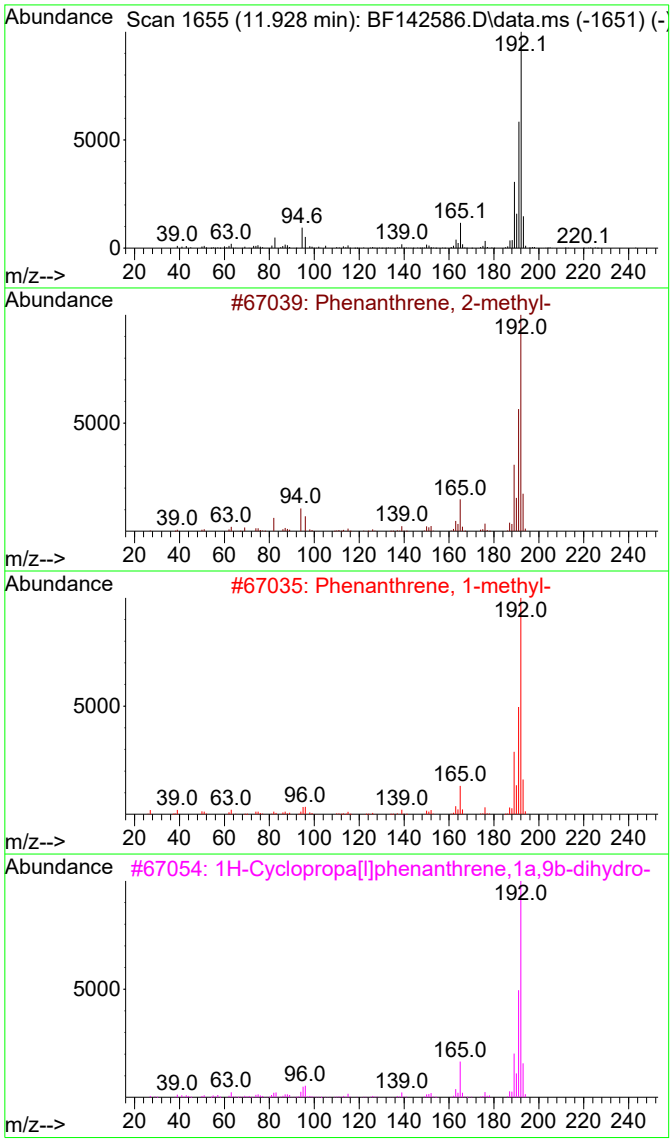
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

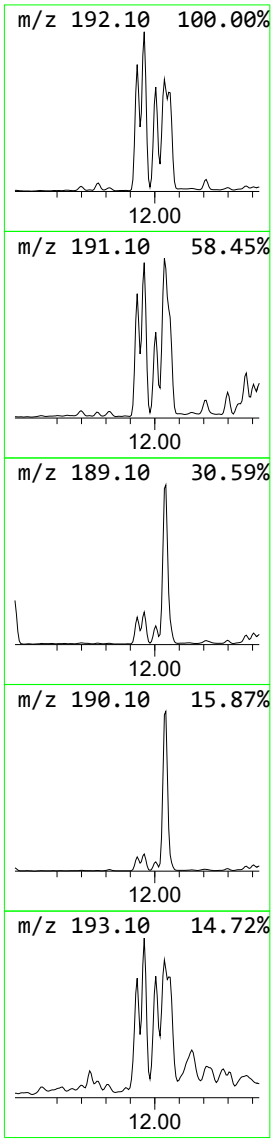
****

Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.928	6.67 ng	215971	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	95
2	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	94
3	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	94
4	Anthracene, 2-methyl-	192	C15H12	000613-12-7	94
5	1H-Indene, 1-phenyl-	192	C15H12	001961-96-2	93





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

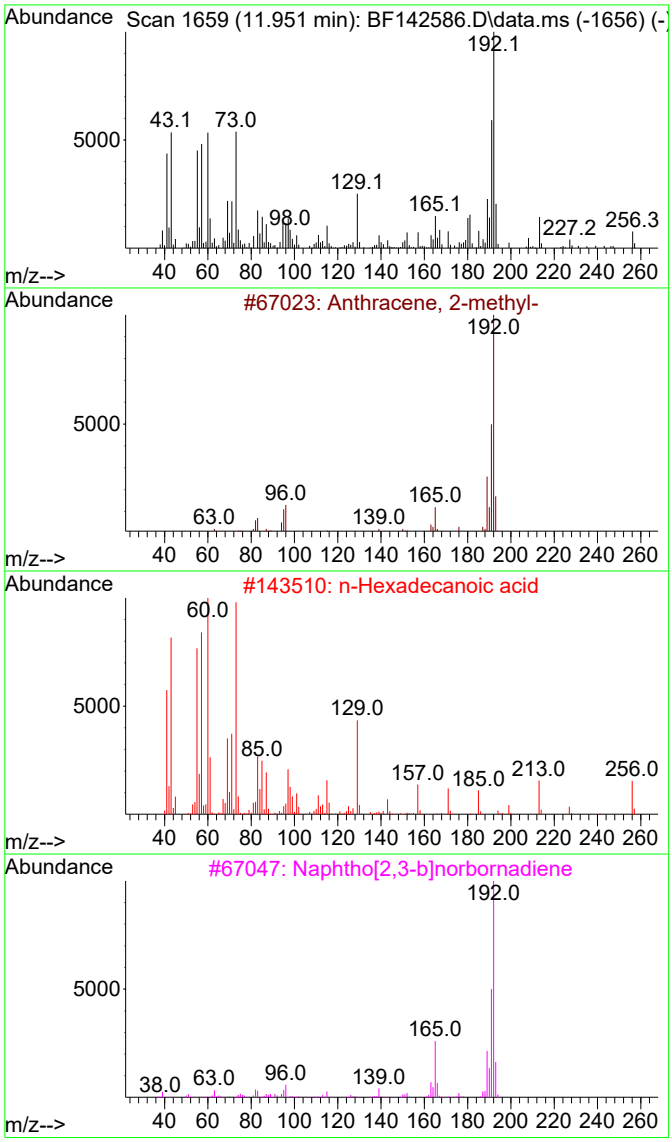
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

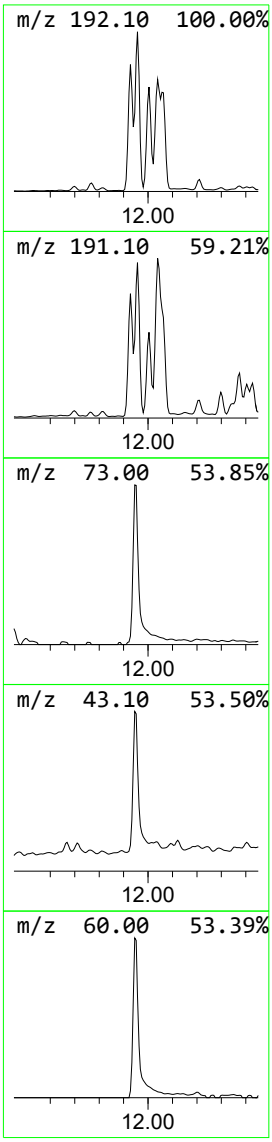
****

Peak Number 7 Anthracene, 2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.951	16.68 ng	540511	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	91
3	Naphtho[2,3-b]norbornadiene	192	C15H12	107426-38-0	90
4	Anthracene, 1-methyl-	192	C15H12	000610-48-0	87
5	Phenanthrene, 3-methyl-	192	C15H12	000832-71-3	70





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

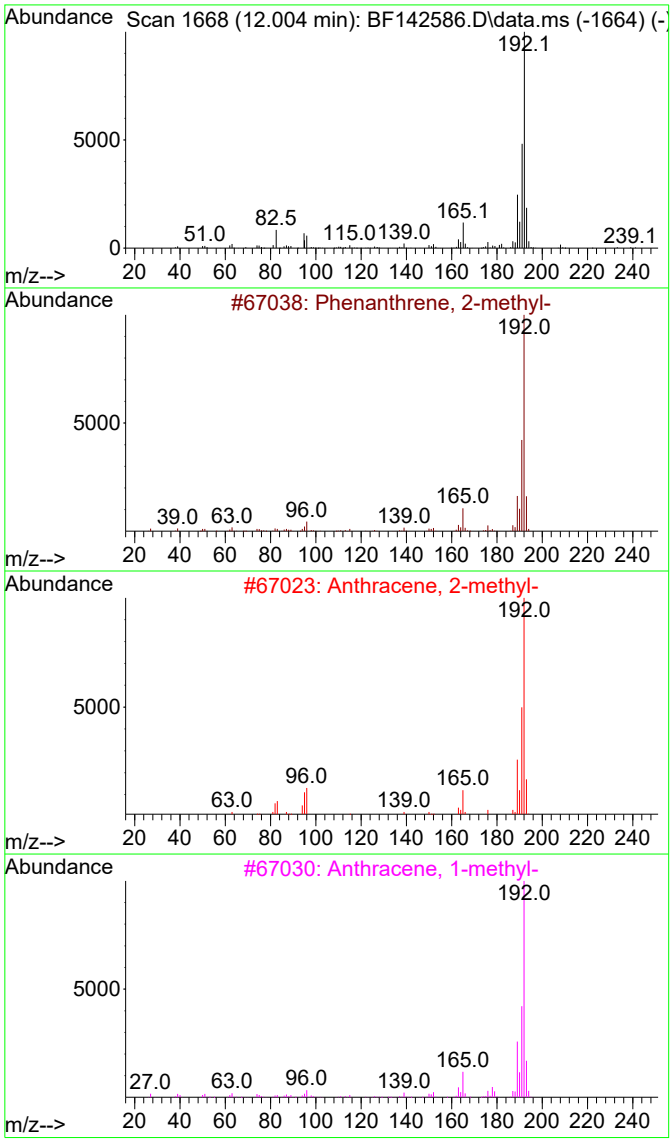
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

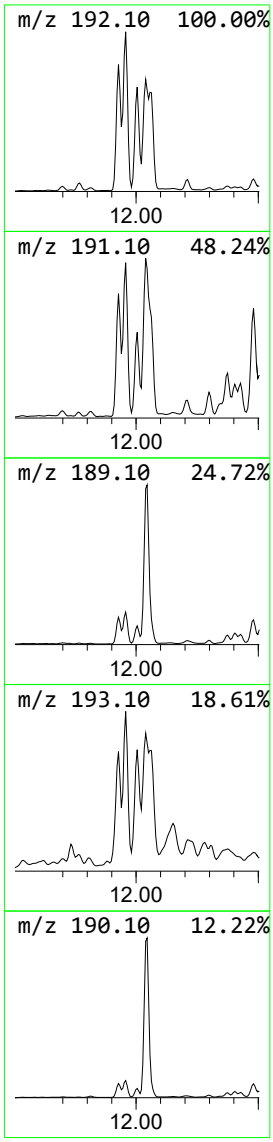
****

Peak Number 8 Anthracene, 1-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.004	5.96 ng	192956	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	95
3	Anthracene, 1-methyl-	192	C15H12	000610-48-0	95
4	1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	94
5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	94





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

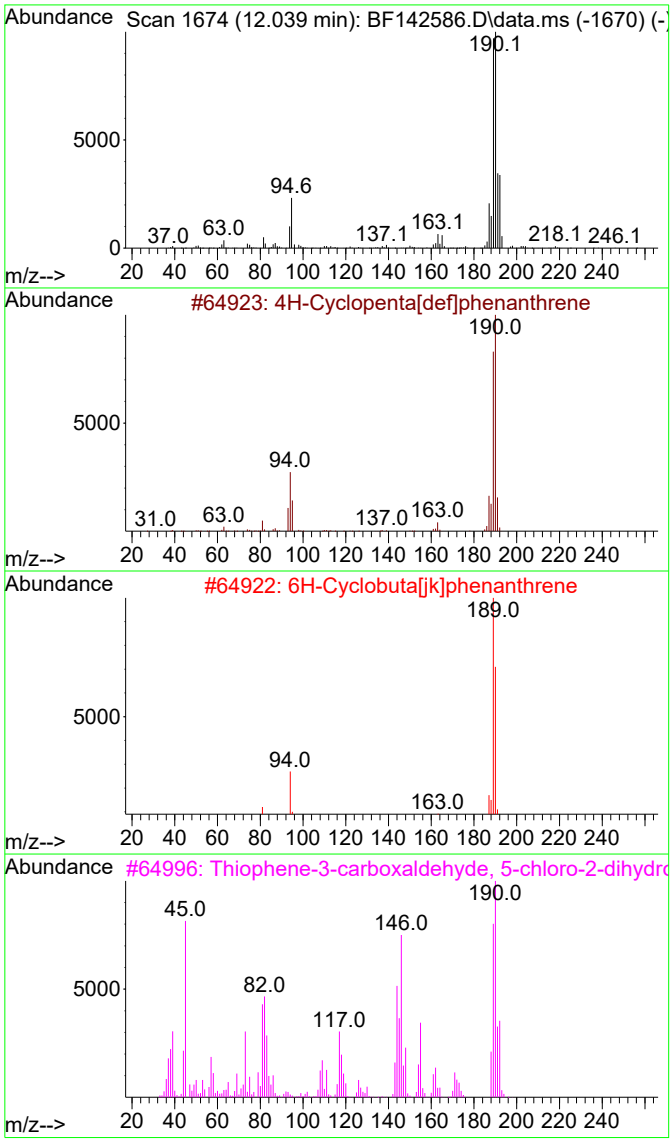
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

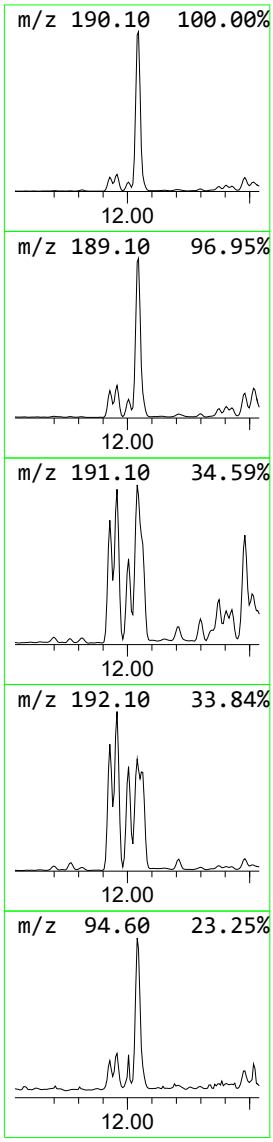
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.039	27.02 ng	875380	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	94
2	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	72
3	Thiophene-3-carboxaldehyde, 5-ch...	190	C5H4BClO3S	036155-87-0	52
4	2,3,5,6-Tetramethylterephthalald...	190	C12H14O2	007072-01-7	50
5	Methyl diselenide	190	C2H6Se2	007101-31-7	46





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

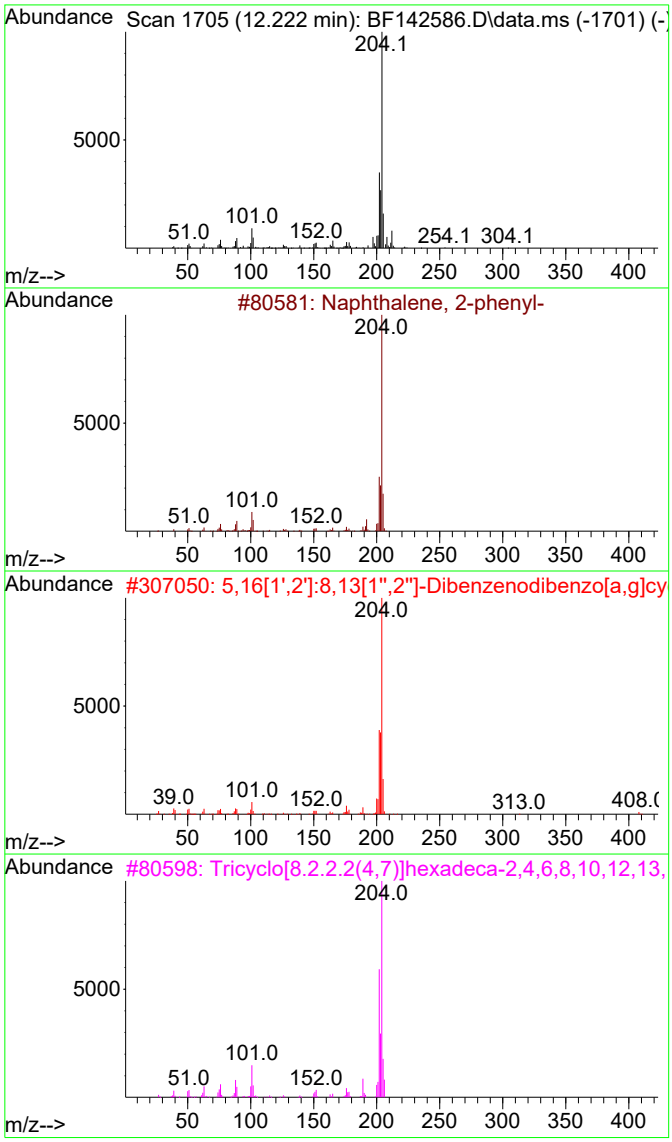
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

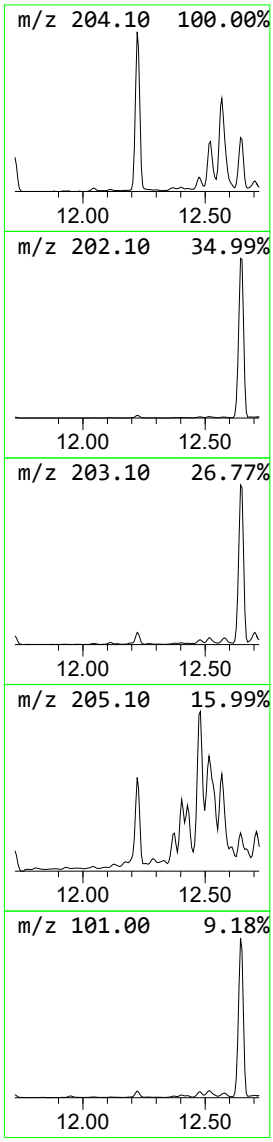
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 10 Naphthalene, 2-phenyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.222	6.24 ng	202180	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	93
2	5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	87
3	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	74
4	3,4-Biphenyldicarbonitrile	204	C14H8N2	004128-63-6	52
5	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	52





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

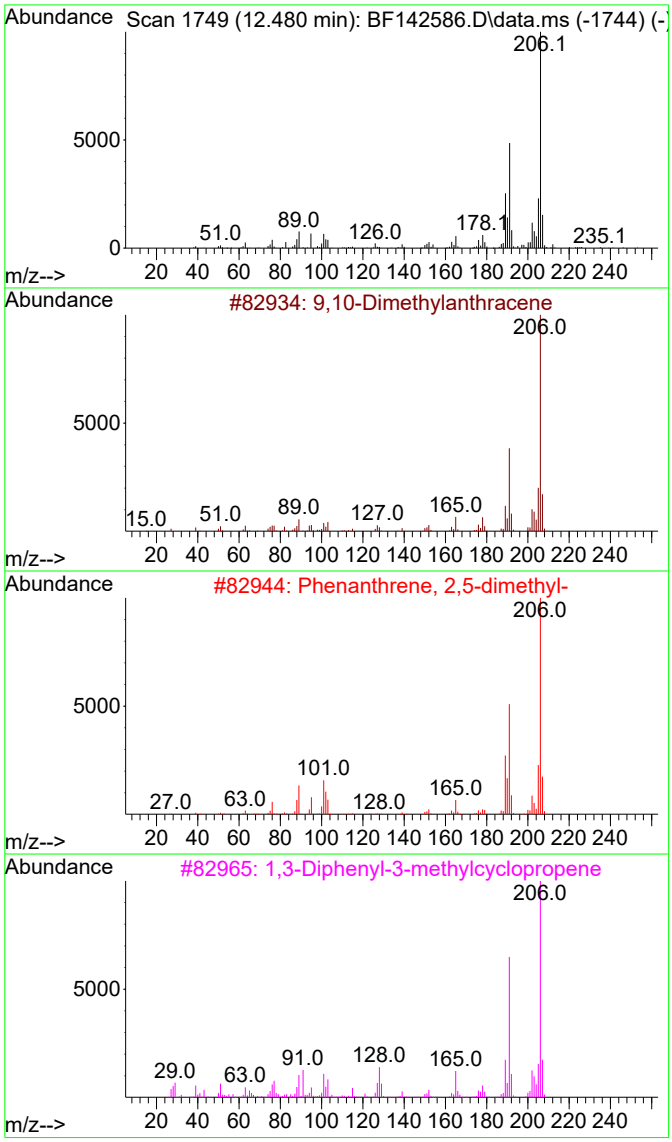
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

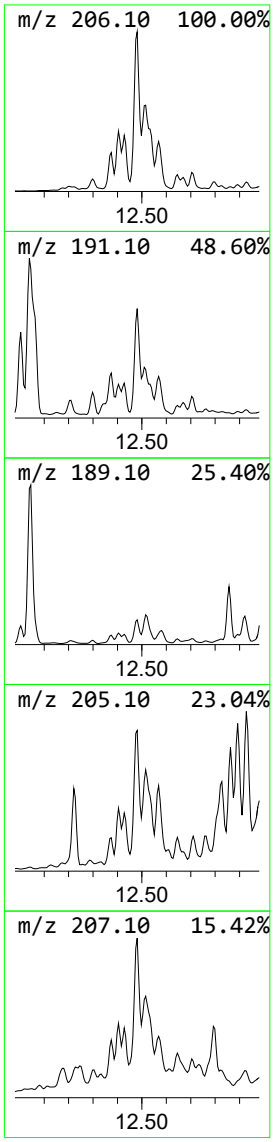
****

Peak Number 11 9,10-Dimethylanthracene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.480	11.26 ng	364695	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Dimethylanthracene	206	C16H14	000781-43-1	95
2	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	95
3	1,3-Diphenyl-3-methylcyclopropene	206	C16H14	086544-79-8	90
4	3,4-Dimethylphenanthrene	206	C16H14	1000452-24-5	87
5	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	87





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

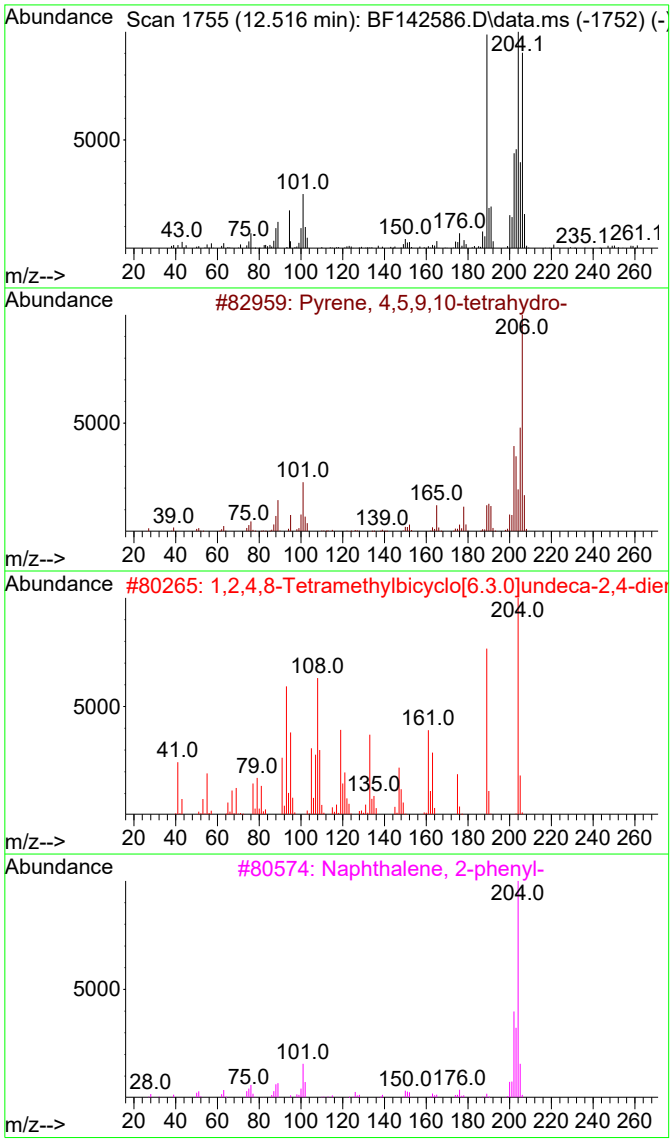
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

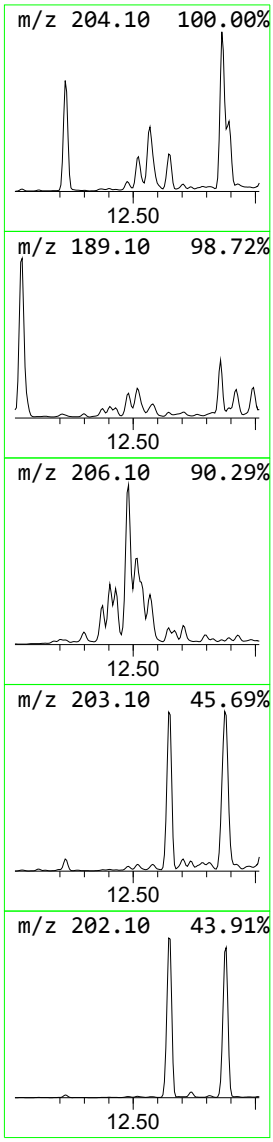
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 12 Pyrene, 4,5,9,10-tetrahydro- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.516	9.25 ng	299770	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	55
2	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	38
3	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	38
4	Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	35
5	Benzoic acid, p-[[(dimethylamino...	206	C11H14N2O2	029390-16-7	30





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

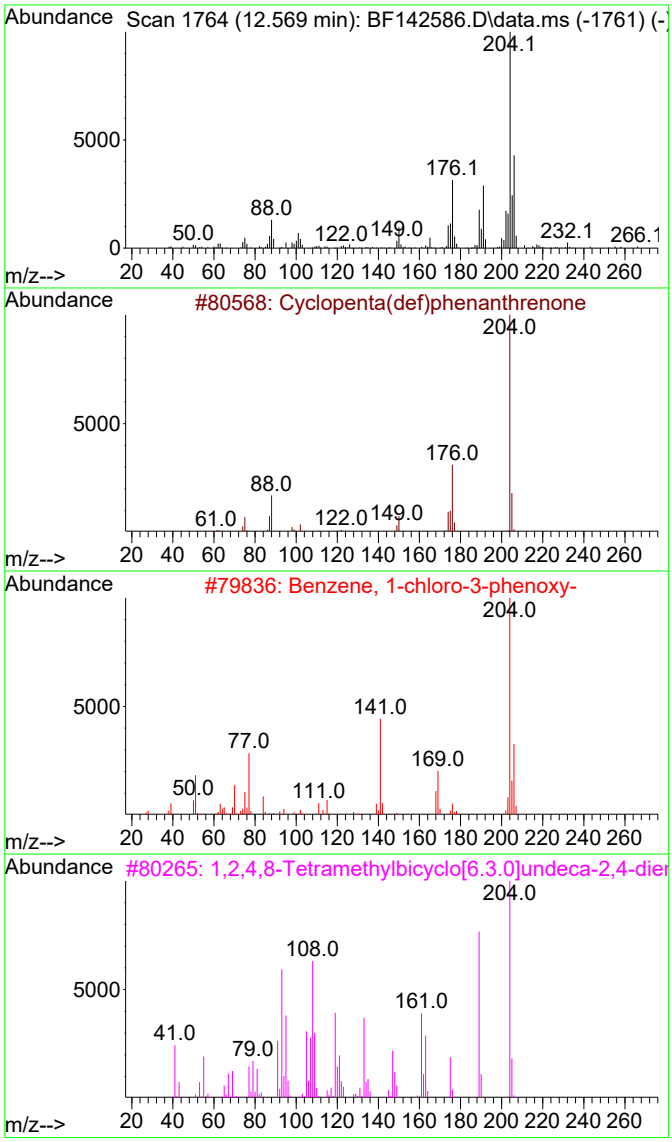
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

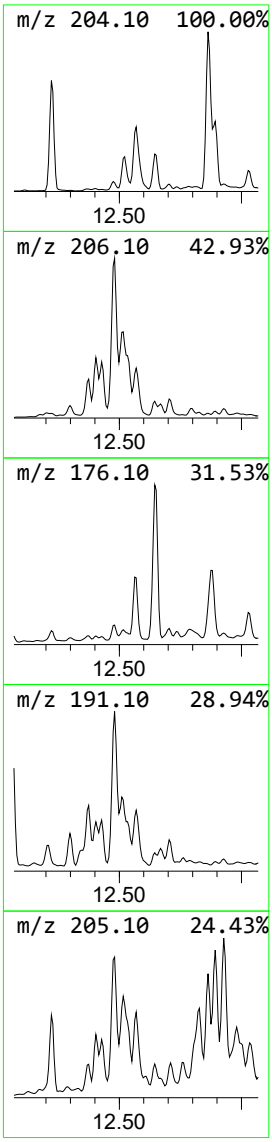
****

Peak Number 13 Cyclopenta(def)phenanthrenone Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.569	6.76 ng	218972	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	90
2	Benzene, 1-chloro-3-phenoxy-	204	C12H9ClO	006452-49-9	50
3	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	50
4	5,6,7,8-Tetrahydrothieno[2,3-b]q...	204	C11H12N2S	122914-50-5	50
5	[1,1'-Biphenyl]-4-ol, 4'-chloro-	204	C12H9ClO	028034-99-3	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

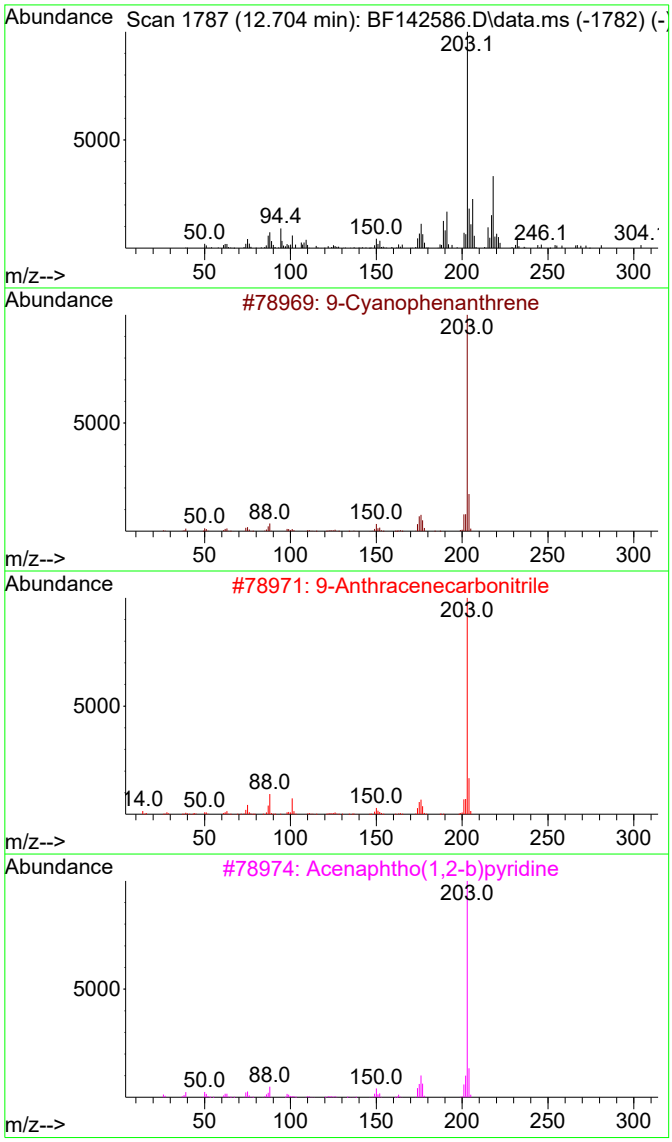
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

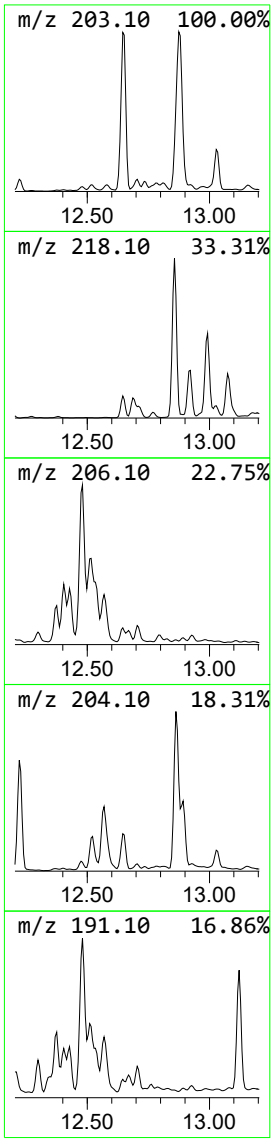
****

Peak Number 14 9-Cyanophenanthrene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.704	3.65 ng	118193	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Cyanophenanthrene	203	C15H9N	002510-55-6	90
2	9-Anthracenecarbonitrile	203	C15H9N	001210-12-4	90
3	Acenaphtho(1,2-b)pyridine	203	C15H9N	000206-49-5	64
4	6-Quinoxalinol, TMS derivative	218	C11H14N2OSi	1000474-34-3	52
5	3H-1,2,4-Triazole-3-thione, 2,4-...	218	C10H10N4S	091813-63-7	50





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

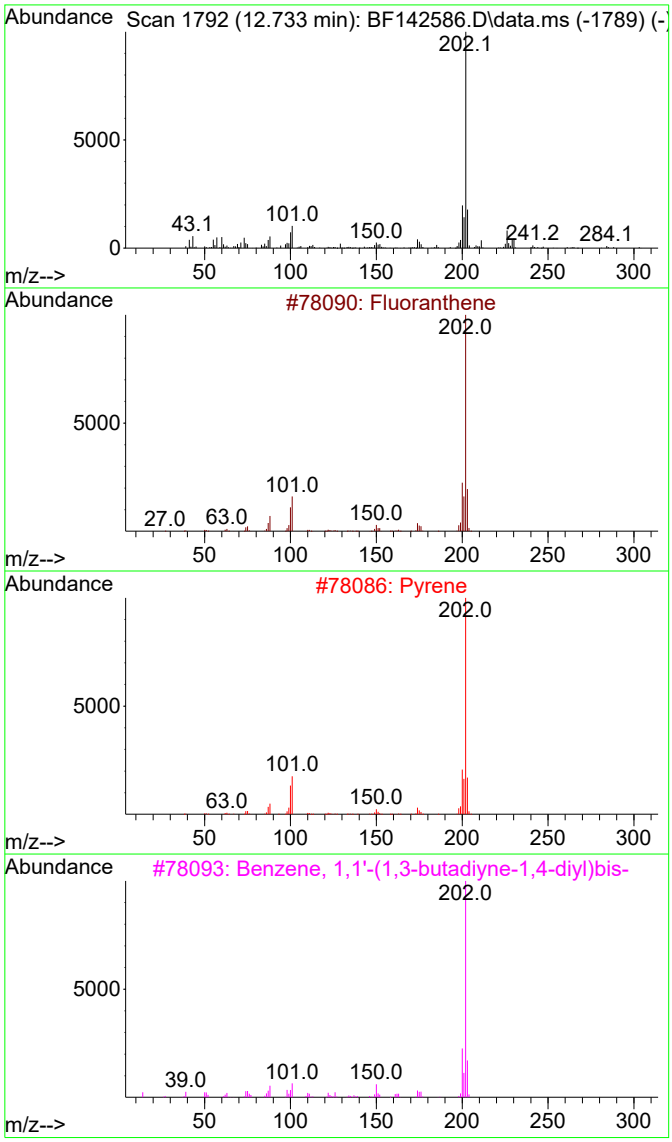
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

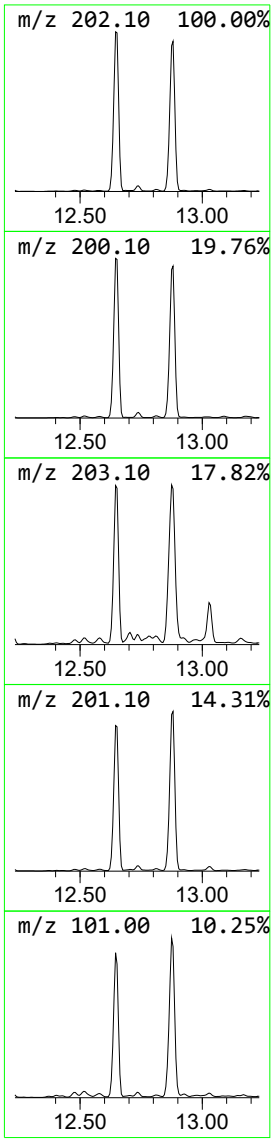
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 15 Benzene, 1,1'-(1,3-butadiyn... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.733	3.66 ng	118568	Phenanthrene-d10	11.428

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Fluoranthene	202	C16H10	000206-44-0	96
2	Pyrene	202	C16H10	000129-00-0	83
3	Benzene, 1,1'-(1,3-butadiyne-1,4...	202	C16H10	000886-66-8	70
4	4,4'-Bis(tetrahydrothiopyran)	202	C10H18S2	116196-83-9	60
5	3(2H)-Pyridazinone, 6-(4-methoxy...	202	C11H10N2O2	002166-33-8	50





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

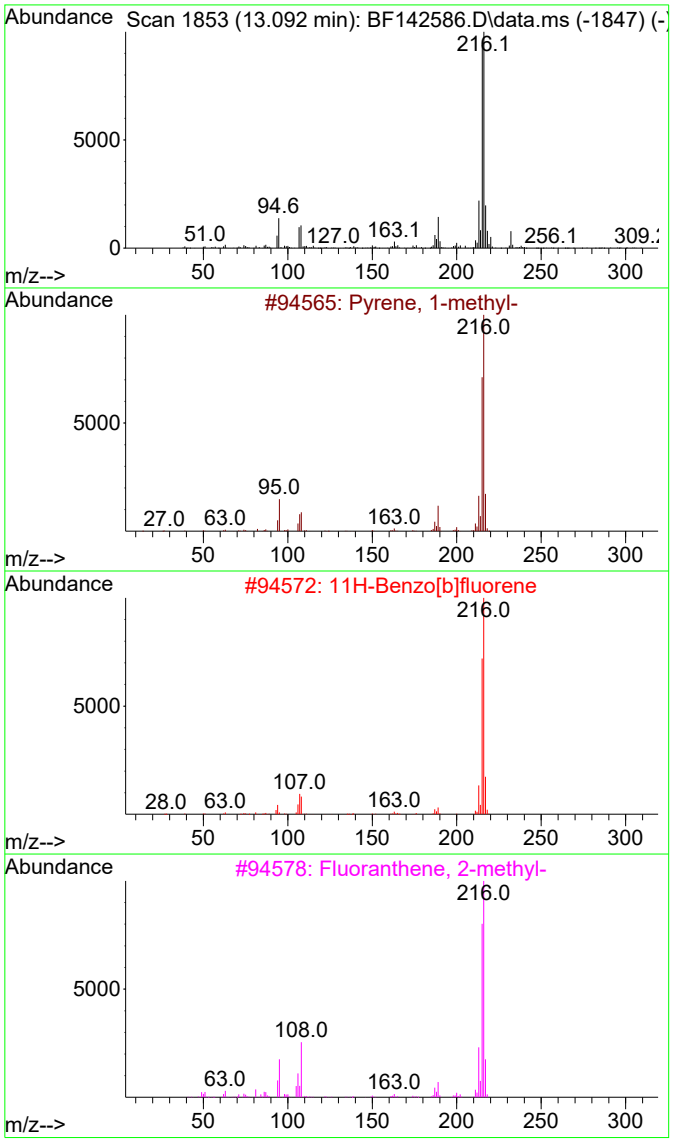
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

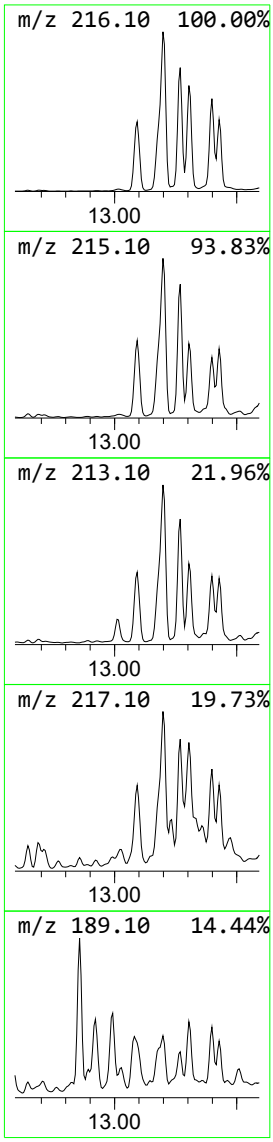
****

Peak Number 16 Pyrene, 1-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.092	3.67 ng	693878	Chrysene-d12	14.075

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 1-methyl-	216	C17H12	002381-21-7	96
2	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	91
3	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	90
4	Pyrene, 2-methyl-	216	C17H12	003442-78-2	89
5	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	83





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

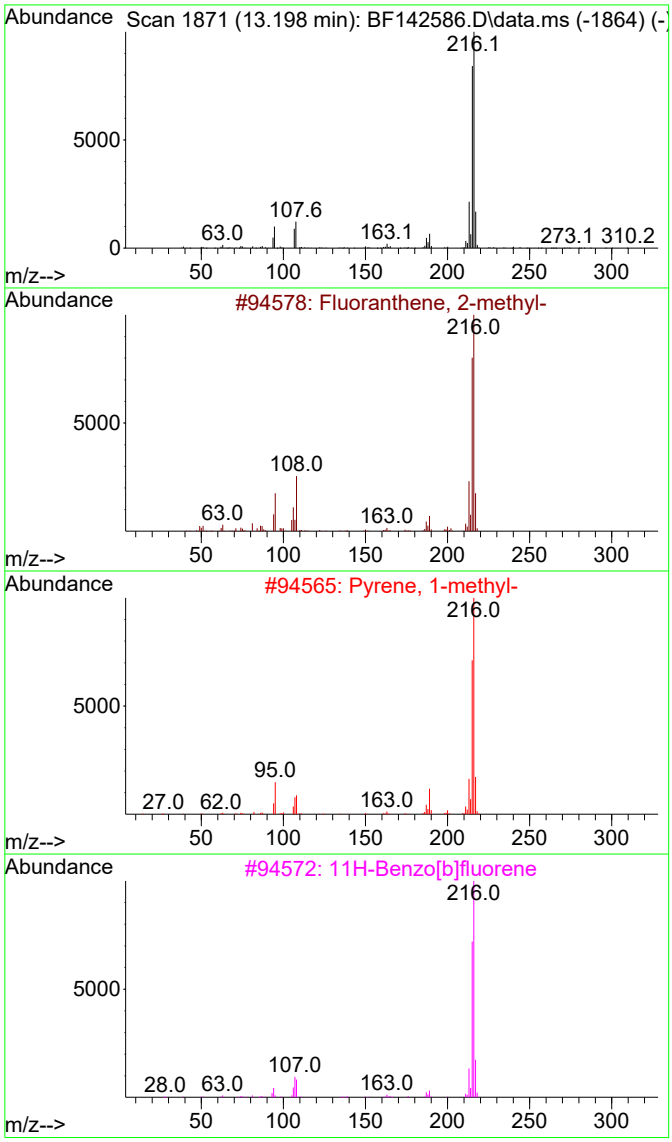
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

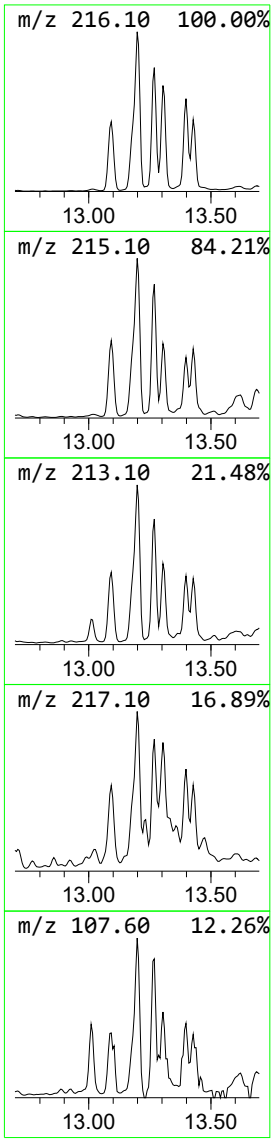
****

Peak Number 17 Fluoranthene, 2-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.198	5.46 ng	1032510	Chrysene-d12	14.075

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	95
2	Pyrene, 1-methyl-	216	C17H12	002381-21-7	94
3	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	93
4	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	93
5	7H-Benzo[c]fluorene	216	C17H12	000205-12-9	87





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

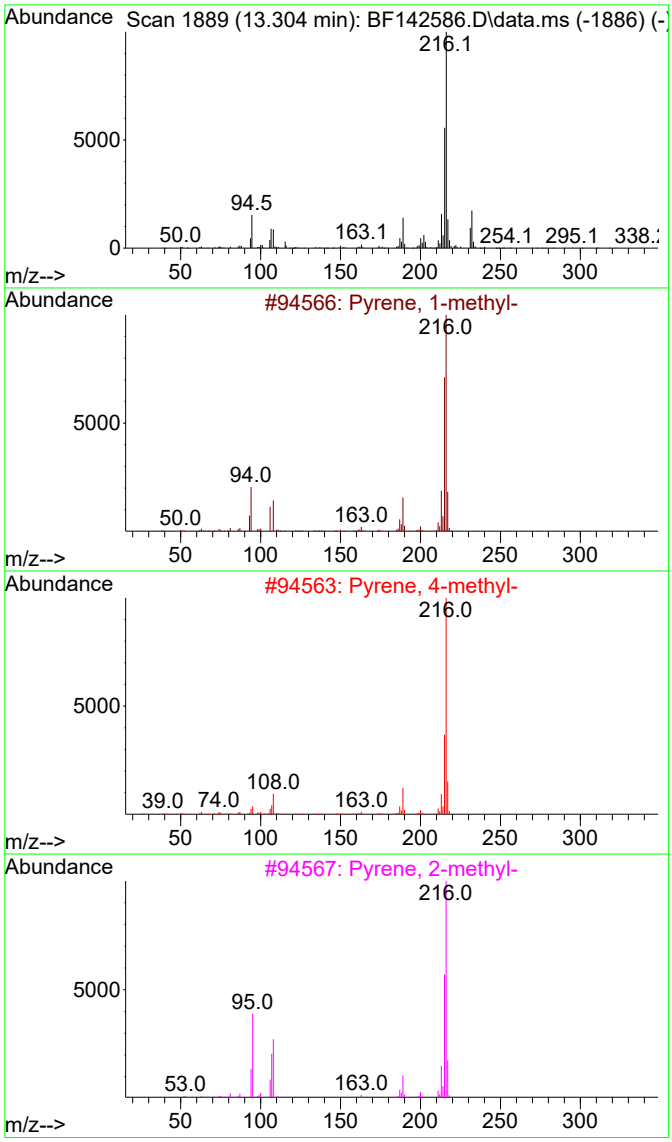
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

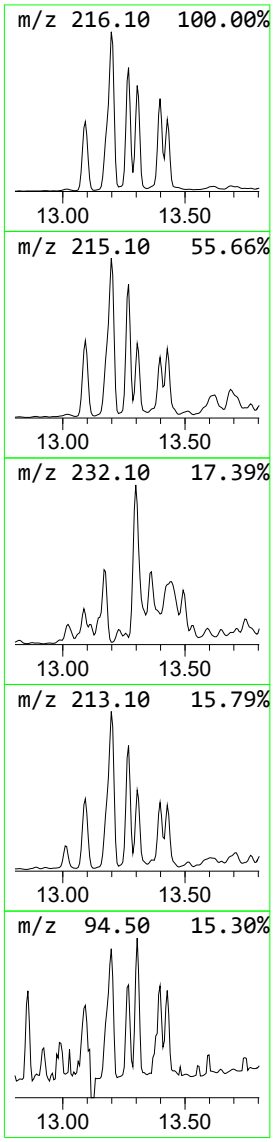
****

Peak Number 18 Pyrene, 4-methyl- Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.304	3.15 ng	595676	Chrysene-d12	14.075

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 1-methyl-	216	C17H12	002381-21-7	96
2	Pyrene, 4-methyl-	216	C17H12	003353-12-6	93
3	Pyrene, 2-methyl-	216	C17H12	003442-78-2	93
4	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	92
5	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	81





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

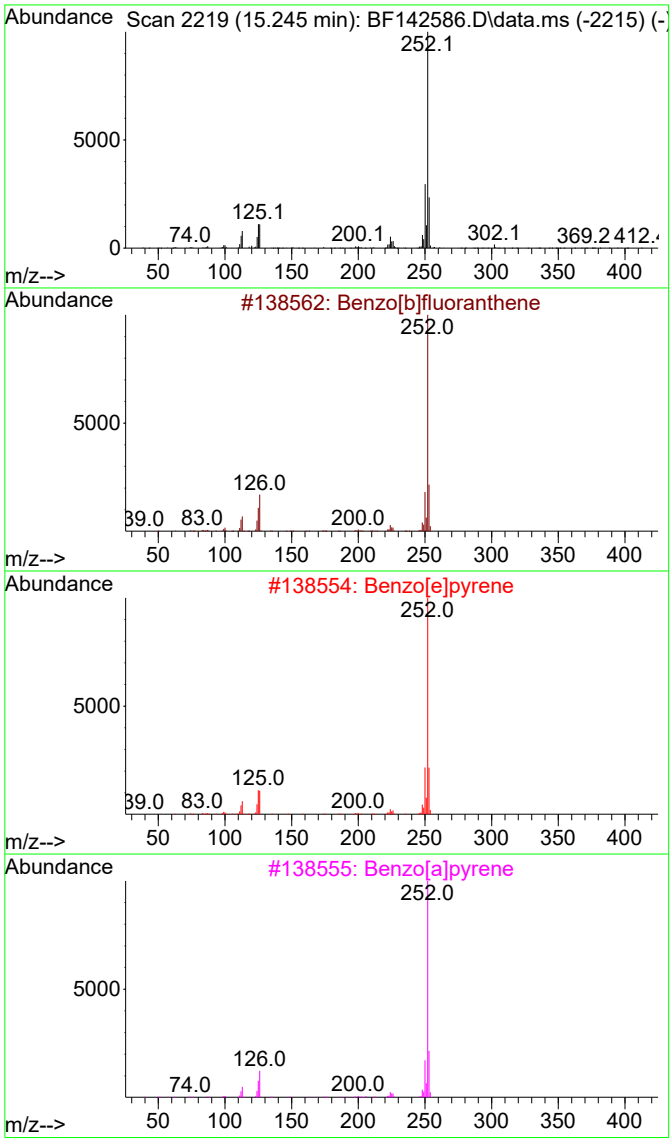
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

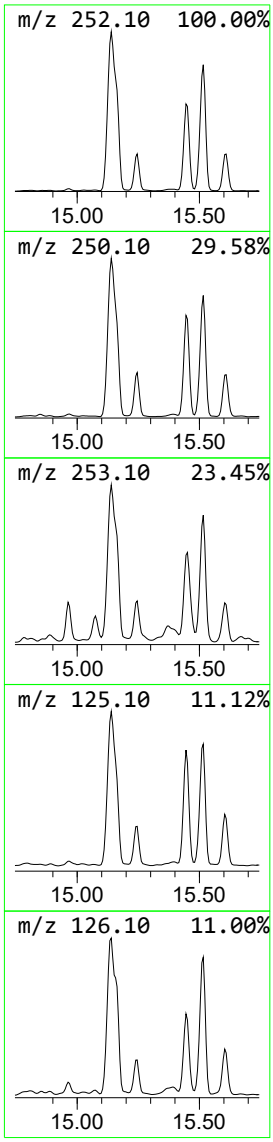
****

Peak Number 19 Benzo[e]pyrene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.245	14.29 ng	444418	Perylene-d12	15.574

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]fluoranthene	252	C20H12	000205-99-2	97
2	Benzo[e]pyrene	252	C20H12	000192-97-2	93
3	Benzo[a]pyrene	252	C20H12	000050-32-8	90
4	Benzo[k]fluoranthene	252	C20H12	000207-08-9	90
5	Benzo[j]fluoranthene	252	C20H12	000205-82-3	81





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

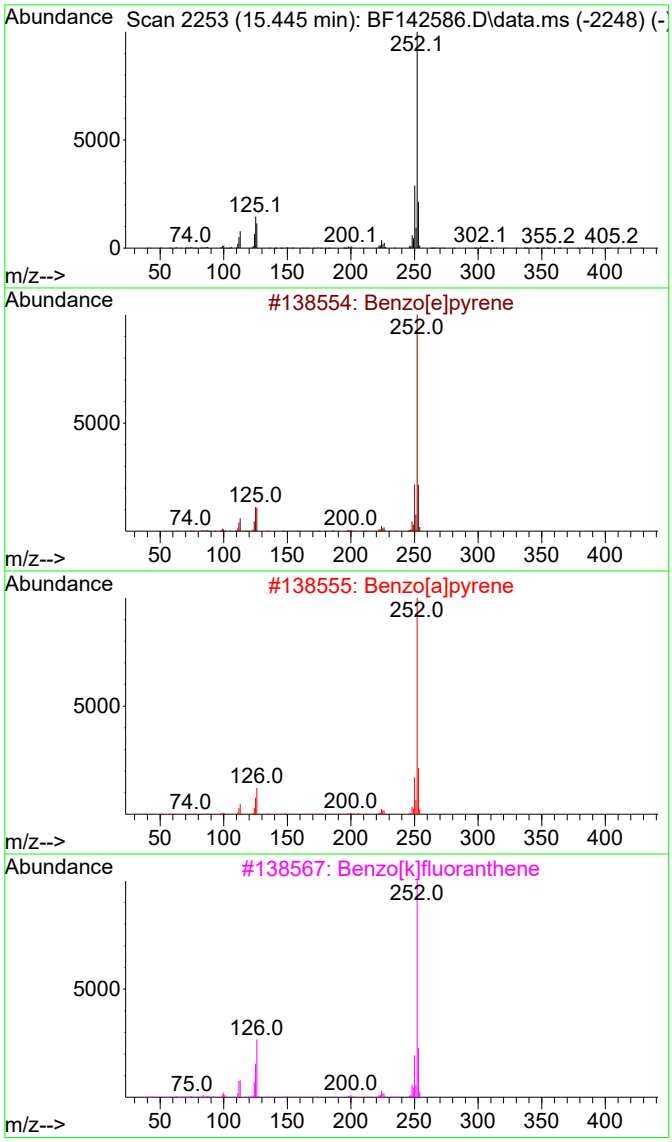
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

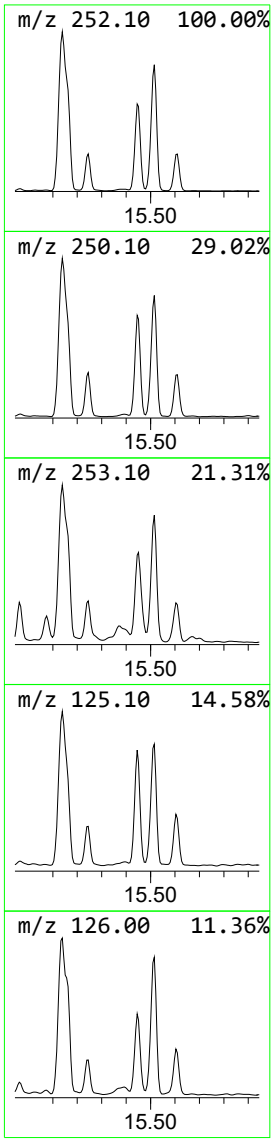
****

Peak Number 20 Perylene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.445	42.42 ng	1319040	Perylene-d12	15.574

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	94
2	Benzo[a]pyrene	252	C20H12	000050-32-8	93
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
4	Perylene	252	C20H12	000198-55-0	90
5	Benzo[b]fluoranthene	252	C20H12	000205-99-2	90





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142586.D
Acq On : 30 May 2025 23:10
Operator : RC/JU
Sample : Q2150-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-44

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.110	5.9	ng	210435	1	6.898	716473	20.0
unknown9.645	9.645	3.2	ng	127302	3	9.939	793014	20.0
Benzophenone	10.645	5.5	ng	219972	3	9.939	793014	20.0
unknown10.851	10.851	3.1	ng	101801	4	11.428	647926	20.0
Dibenzothiophene	11.322	5.3	ng	173381	4	11.428	647926	20.0
Phenanthrene, 2...	11.928	6.7	ng	215971	4	11.428	647926	20.0
Anthracene, 2-m...	11.951	16.7	ng	540511	4	11.428	647926	20.0
Anthracene, 1-m...	12.004	6.0	ng	192956	4	11.428	647926	20.0
4H-Cyclopenta[d...	12.039	27.0	ng	875380	4	11.428	647926	20.0
Naphthalene, 2-...	12.222	6.2	ng	202180	4	11.428	647926	20.0
9,10-Dimethylan...	12.480	11.3	ng	364695	4	11.428	647926	20.0
Pyrene, 4,5,9,1...	12.516	9.3	ng	299770	4	11.428	647926	20.0
Cyclopenta(def)...	12.569	6.8	ng	218972	4	11.428	647926	20.0
9-Cyanophenanth...	12.704	3.6	ng	118193	4	11.428	647926	20.0
Benzene, 1,1'-(...	12.733	3.7	ng	118568	4	11.428	647926	20.0
Pyrene, 1-methyl-	13.092	3.7	ng	693878	5	14.075	3780790	20.0
Fluoranthene, 2...	13.198	5.5	ng	1032510	5	14.075	3780790	20.0
Pyrene, 4-methyl-	13.304	3.1	ng	595676	5	14.075	3780790	20.0
Benzo[e]pyrene	15.245	14.3	ng	444418	6	15.574	621877	20.0
Perylene	15.445	42.4	ng	1319040	6	15.574	621877	20.0

Raw Data: **BF142598.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-44DL	SDG No.:	Q2150
Lab Sample ID:	Q2150-01DL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	78.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142598.D	5	05/30/25 09:50	06/02/25 15:34	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	990	UD	990	2100	ug/Kg
108-95-2	Phenol	140	UD	140	1100	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	150	UD	150	1100	ug/Kg
95-57-8	2-Chlorophenol	150	UD	150	1100	ug/Kg
95-48-7	2-Methylphenol	190	UD	190	1100	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	240	UD	240	1100	ug/Kg
98-86-2	Acetophenone	190	UD	190	1100	ug/Kg
65794-96-9	3+4-Methylphenols	260	UD	260	2100	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	300	UD	300	510	ug/Kg
67-72-1	Hexachloroethane	110	UD	110	1100	ug/Kg
98-95-3	Nitrobenzene	120	UD	120	1100	ug/Kg
78-59-1	Isophorone	210	UD	210	1100	ug/Kg
88-75-5	2-Nitrophenol	370	UD	370	1100	ug/Kg
105-67-9	2,4-Dimethylphenol	410	UD	410	1100	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	190	UD	190	1100	ug/Kg
120-83-2	2,4-Dichlorophenol	180	UD	180	1100	ug/Kg
91-20-3	Naphthalene	140	UD	140	1100	ug/Kg
106-47-8	4-Chloroaniline	220	UD	220	1100	ug/Kg
87-68-3	Hexachlorobutadiene	160	UD	160	1100	ug/Kg
105-60-2	Caprolactam	330	UD	330	2100	ug/Kg
59-50-7	4-Chloro-3-methylphenol	180	UD	180	1100	ug/Kg
91-57-6	2-Methylnaphthalene	160	UD	160	1100	ug/Kg
77-47-4	Hexachlorocyclopentadiene	730	UD	730	2100	ug/Kg
88-06-2	2,4,6-Trichlorophenol	130	UD	130	1100	ug/Kg
95-95-4	2,4,5-Trichlorophenol	180	UD	180	1100	ug/Kg
92-52-4	1,1-Biphenyl	140	UD	140	1100	ug/Kg
91-58-7	2-Chloronaphthalene	140	UD	140	1100	ug/Kg
88-74-4	2-Nitroaniline	300	UD	300	1100	ug/Kg
131-11-3	Dimethylphthalate	170	UD	170	1100	ug/Kg

Raw Data: **BF142598.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-44DL	SDG No.:	Q2150
Lab Sample ID:	Q2150-01DL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	78.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142598.D	5	05/30/25 09:50	06/02/25 15:34	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	180	UD	180	1100	ug/Kg
606-20-2	2,6-Dinitrotoluene	210	UD	210	1100	ug/Kg
99-09-2	3-Nitroaniline	290	UD	290	1100	ug/Kg
83-32-9	Acenaphthene	130	UD	130	1100	ug/Kg
51-28-5	2,4-Dinitrophenol	1400	UD	1400	2100	ug/Kg
100-02-7	4-Nitrophenol	680	UD	680	2100	ug/Kg
132-64-9	Dibenzofuran	140	UD	140	1100	ug/Kg
121-14-2	2,4-Dinitrotoluene	320	UD	320	1100	ug/Kg
84-66-2	Diethylphthalate	180	UD	180	1100	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	170	UD	170	1100	ug/Kg
86-73-7	Fluorene	480	JD	160	1100	ug/Kg
100-01-6	4-Nitroaniline	410	UD	410	1100	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	650	UD	650	2100	ug/Kg
86-30-6	n-Nitrosodiphenylamine	210	UD	210	1100	ug/Kg
101-55-3	4-Bromophenyl-phenylether	180	UD	180	1100	ug/Kg
118-74-1	Hexachlorobenzene	160	UD	160	1100	ug/Kg
1912-24-9	Atrazine	220	UD	220	1100	ug/Kg
87-86-5	Pentachlorophenol	320	UD	320	2100	ug/Kg
85-01-8	Phenanthrene	2500	D	130	1100	ug/Kg
120-12-7	Anthracene	1100	D	210	1100	ug/Kg
86-74-8	Carbazole	200	UD	200	1100	ug/Kg
84-74-2	Di-n-butylphthalate	300	UD	300	1100	ug/Kg
206-44-0	Fluoranthene	4800	D	190	1100	ug/Kg
129-00-0	Pyrene	3100	D	230	1100	ug/Kg
85-68-7	Butylbenzylphthalate	450	UD	450	1100	ug/Kg
91-94-1	3,3-Dichlorobenzidine	230	UD	230	2100	ug/Kg
56-55-3	Benzo(a)anthracene	2700	D	150	1100	ug/Kg
218-01-9	Chrysene	2600	D	130	1100	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	370	UD	370	1100	ug/Kg
117-84-0	Di-n-octyl phthalate	550	UD	550	2100	ug/Kg
205-99-2	Benzo(b)fluoranthene	3900	D	120	1100	ug/Kg

Raw Data: **BF142598.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-44DL	SDG No.:	Q2150
Lab Sample ID:	Q2150-01DL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	78.9
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142598.D	5	05/30/25 09:50	06/02/25 15:34	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1200	D	140	1100	ug/Kg
50-32-8	Benzo(a)pyrene	2800	D	190	1100	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1100	D	180	1100	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	170	UD	170	1100	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1100	D	160	1100	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	160	UD	160	1100	ug/Kg
123-91-1	1,4-Dioxane	290	UD	290	1100	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	170	UD	170	1100	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	78.1		18 - 112	52%	SPK: 150
13127-88-3	Phenol-d6	78.6		15 - 107	52%	SPK: 150
4165-60-0	Nitrobenzene-d5	48.2		18 - 107	48%	SPK: 100
321-60-8	2-Fluorobiphenyl	53.3		20 - 109	53%	SPK: 100
118-79-6	2,4,6-Tribromophenol	62.5		10 - 116	42%	SPK: 150
1718-51-0	Terphenyl-d14	33.9		10 - 105	34%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	127000	6.898			
1146-65-2	Naphthalene-d8	471000	8.181			
15067-26-2	Acenaphthene-d10	232000	9.939			
1517-22-2	Phenanthrene-d10	326000	11.427			
1719-03-5	Chrysene-d12	251000	14.068			
1520-96-3	Perylene-d12	279000	15.568			

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_F\Data\BF060225\
Data File : BF142598.D
Acq On : 02 Jun 2025 15:34
Operator : RC/JU
Sample : Q2150-01DL 5X
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 02 16:03:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	127289	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	470532	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	232054	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	325882	20.000	ng	0.00
76) Chrysene-d12	14.068	240	250994	20.000	ng	# 0.00
86) Perylene-d12	15.568	264	278926	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.504	112	117955	15.612	ng	-0.01
7) Phenol-d6	6.516	99	142903	15.713	ng	-0.02
23) Nitrobenzene-d5	7.451	82	83225	9.645	ng	-0.02
42) 2,4,6-Tribromophenol	10.727	330	32201	12.503	ng	-0.01
45) 2-Fluorobiphenyl	9.251	172	184171	10.650	ng	-0.02
79) Terphenyl-d14	13.010	244	124670	6.788	ng	0.00
Target Compounds						Qvalue
58) Fluorene	10.486	166	35042	2.298	ng	98
71) Phenanthrene	11.451	178	208888	11.994	ng	100
72) Anthracene	11.504	178	91928	5.172	ng	100
75) Fluoranthene	12.639	202	373090	22.927	ng	98
78) Pyrene	12.869	202	347198	14.829	ng	98
81) Benzo(a)anthracene	14.057	228	215675	12.868	ng	94
83) Chrysene	14.092	228	187480	12.449	ng	98
87) Indeno(1,2,3-cd)pyrene	17.074	276	104960	5.012	ng	97
88) Benzo(b)fluoranthene	15.127	252	305919m	18.531	ng	
89) Benzo(k)fluoranthene	15.145	252	85656m	5.540	ng	
90) Benzo(a)pyrene	15.504	252	206792	13.289	ng	97
92) Benzo(g,h,i)perylene	17.533	276	92128	5.423	ng	99

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

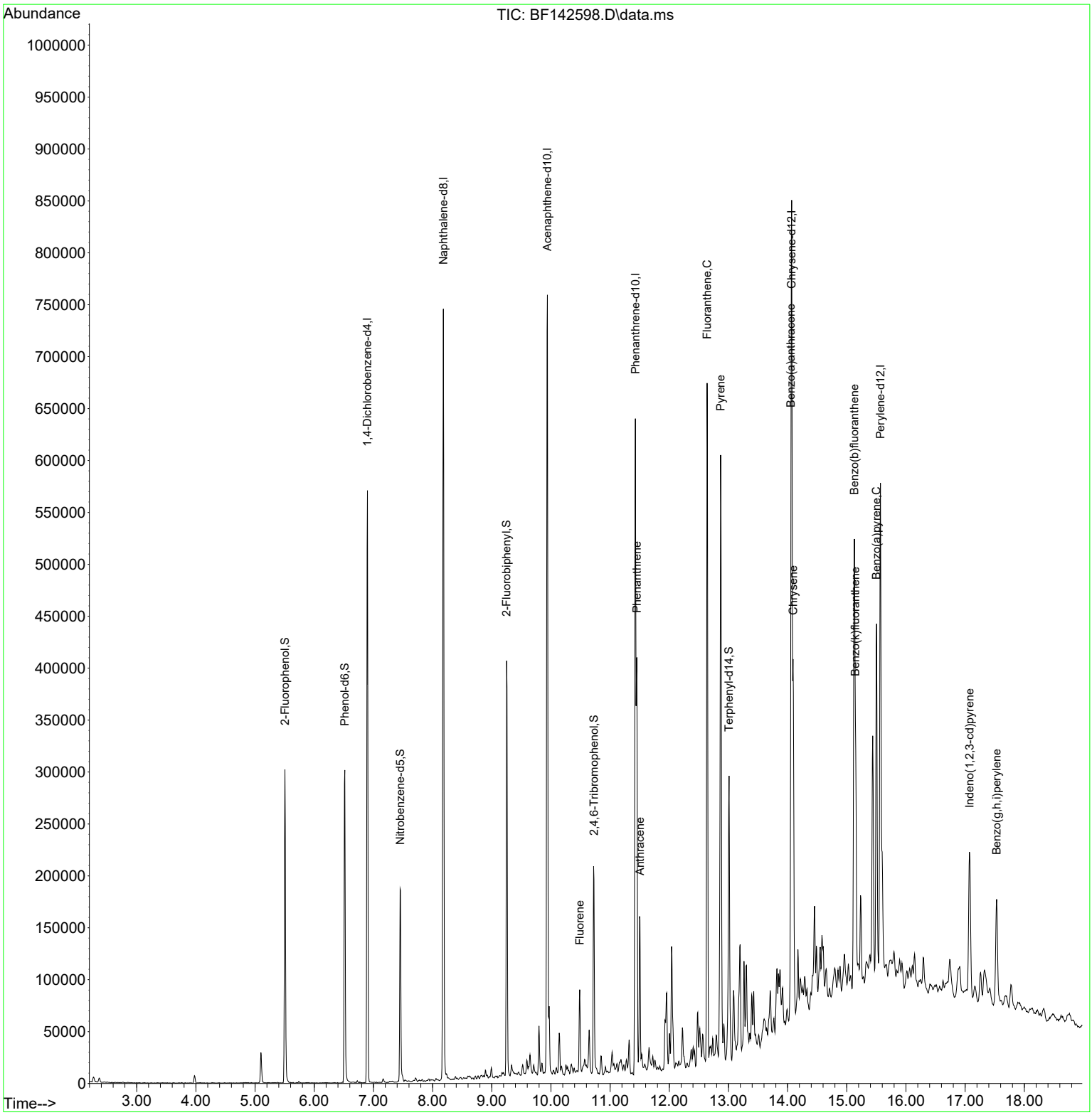
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142598.D
Acq On : 02 Jun 2025 15:34
Operator : RC/JU
Sample : Q2150-01DL 5X
Misc :
ALS Vial : 10 Sample Multiplier: 1

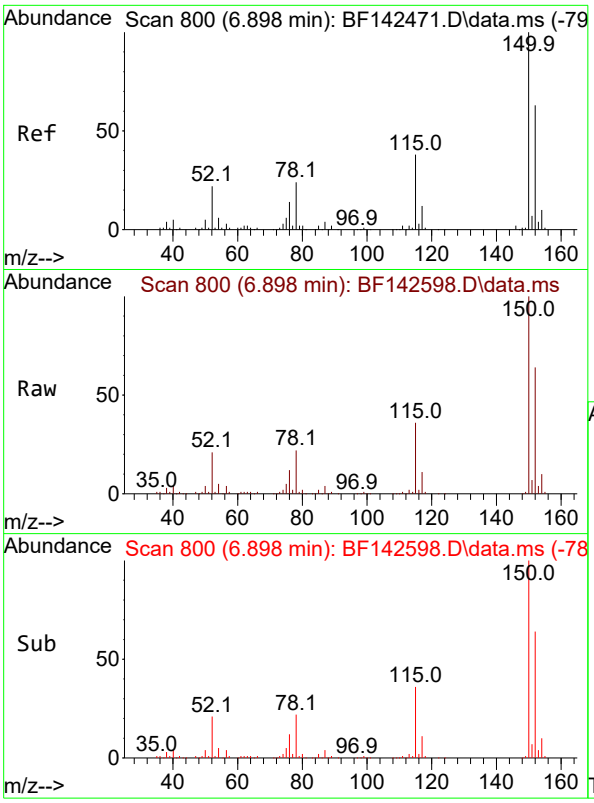
Quant Time: Jun 02 16:03:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

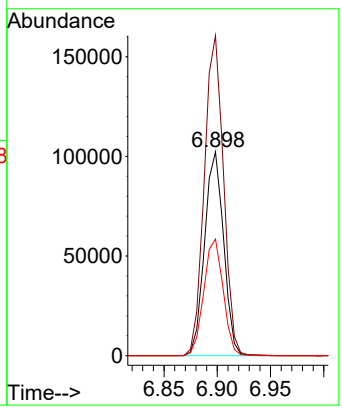




#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:152 Resp: 12728

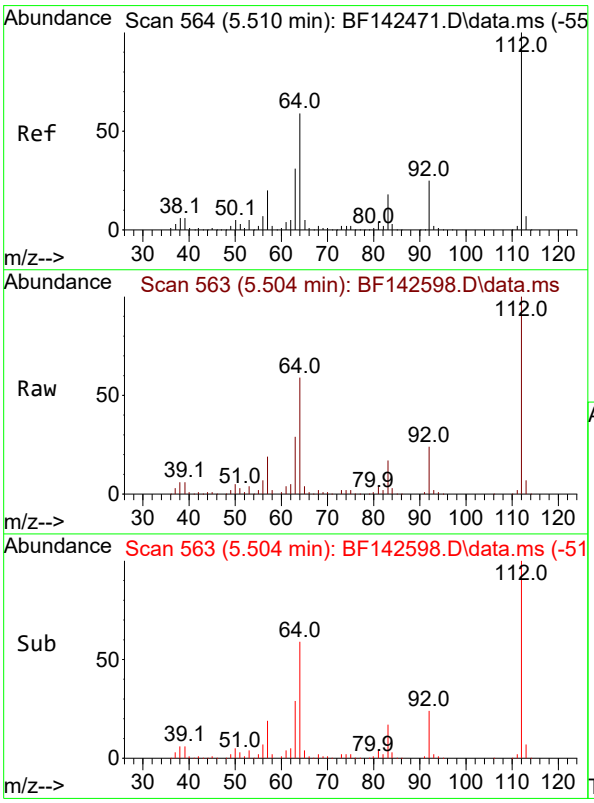
Ion	Ratio	Lower	Upper
152	100		
150	156.9	128.2	192.4
115	57.2	48.3	72.5



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

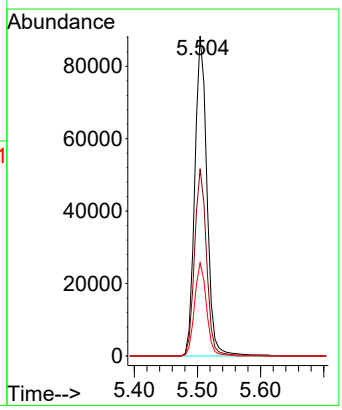
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

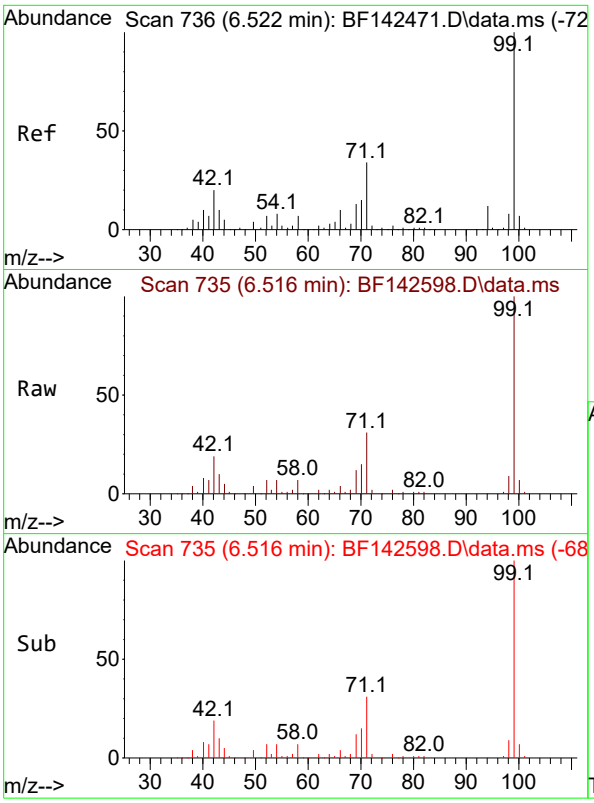


#5
2-Fluorophenol
Concen: 15.612 ng
RT: 5.504 min Scan# 563
Delta R.T. -0.012 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:112 Resp: 117955

Ion	Ratio	Lower	Upper
112	100		
64	58.5	47.5	71.3
63	29.1	24.9	37.3

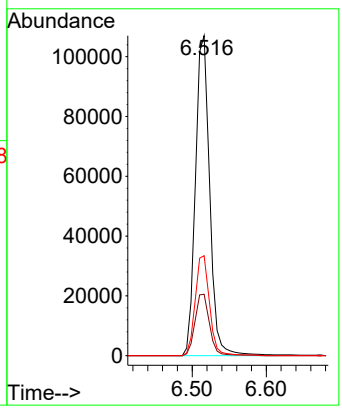




#7
Phenol-d6
Concen: 15.713 ng
RT: 6.516 min Scan# 7
Delta R.T. -0.018 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion: 99 Resp: 14290

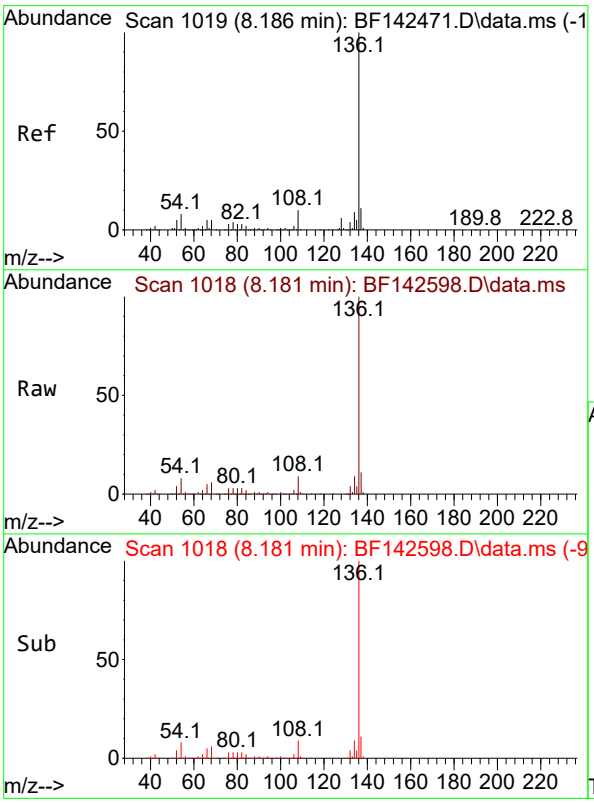
Ion	Ratio	Lower	Upper
99	100		
42	19.2	16.2	24.2
71	31.2	27.3	40.9



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

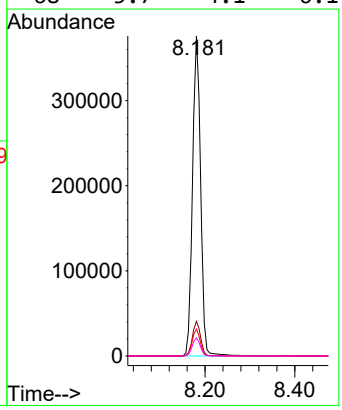
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

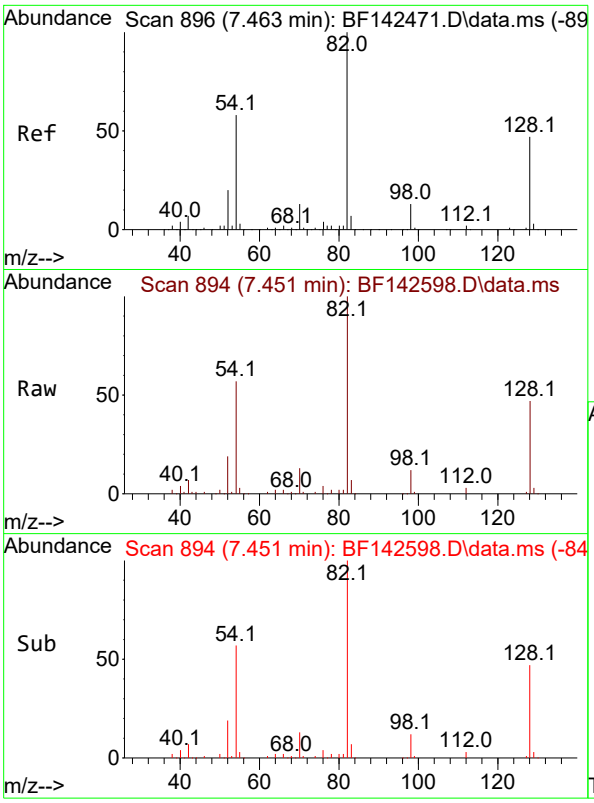


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:136 Resp: 470532

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.6	13.0
54	8.4	6.6	10.0
68	5.7	4.1	6.1

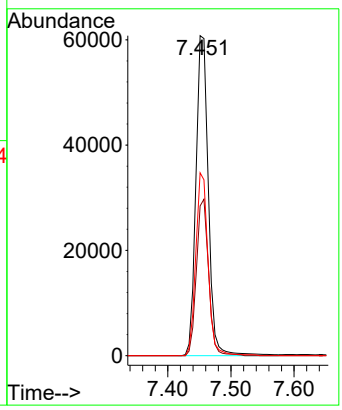




#23
Nitrobenzene-d5
Concen: 9.645 ng
RT: 7.451 min Scan# 8
Delta R.T. -0.023 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion: 82 Resp: 8322

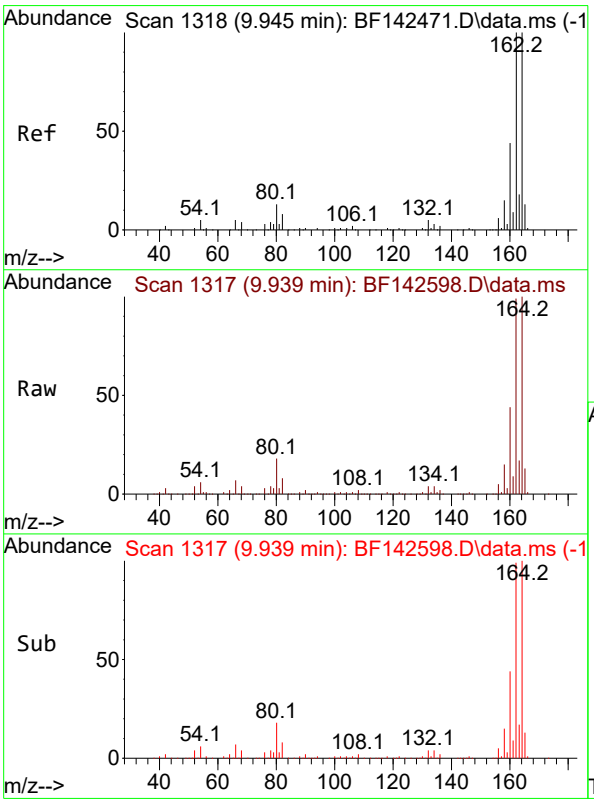
Ion	Ratio	Lower	Upper
82	100		
128	46.8	37.4	56.2
54	57.2	46.6	70.0



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

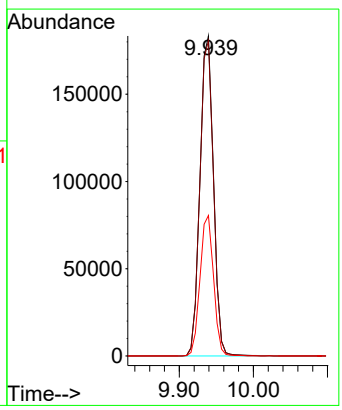
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

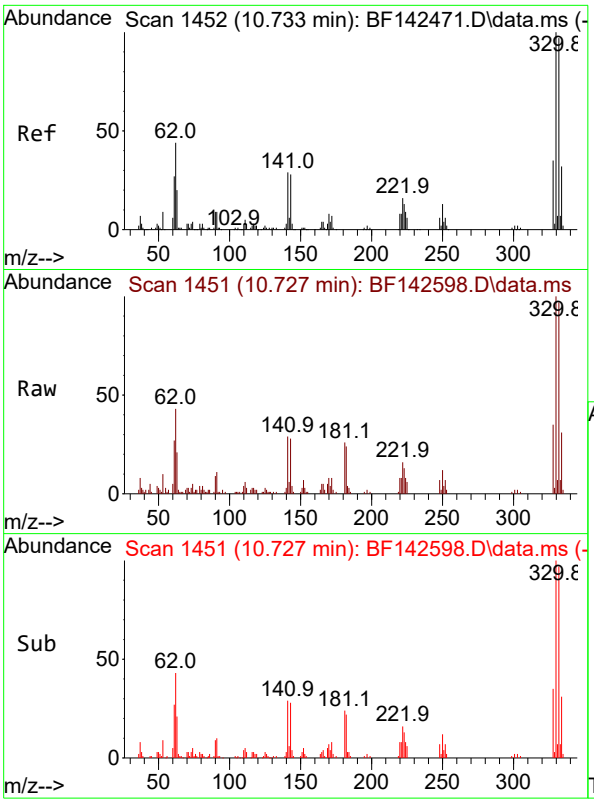


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:164 Resp: 232054

Ion	Ratio	Lower	Upper
164	100		
162	98.5	80.2	120.4
160	43.9	35.6	53.4





#42
2,4,6-Tribromophenol
Concen: 12.503 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

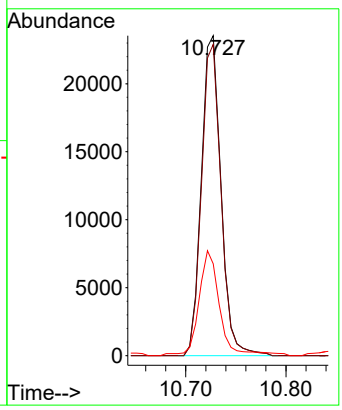
Tgt Ion:330 Resp: 3220

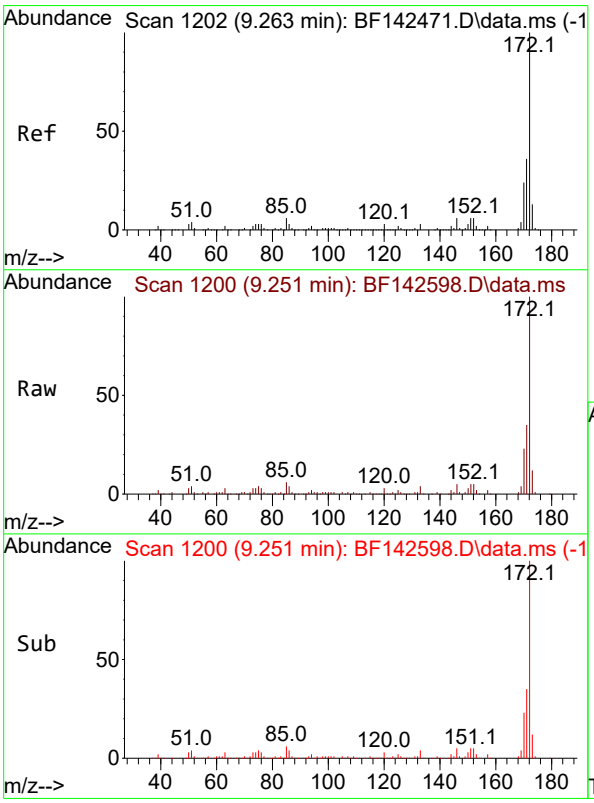
Ion	Ratio	Lower	Upper
330	100		
332	96.5	77.6	116.4
141	34.6	24.6	36.8

Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

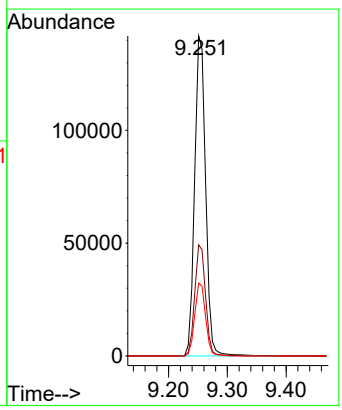


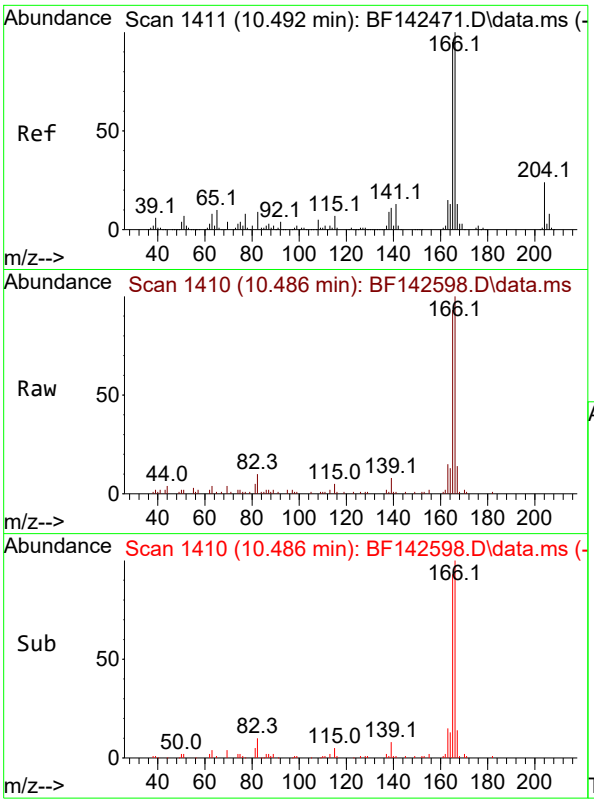


#45
2-Fluorobiphenyl
Concen: 10.650 ng
RT: 9.251 min Scan# 1200
Delta R.T. -0.018 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:172 Resp: 184171

Ion	Ratio	Lower	Upper
172	100		
171	34.7	28.6	42.8
170	22.8	18.9	28.3

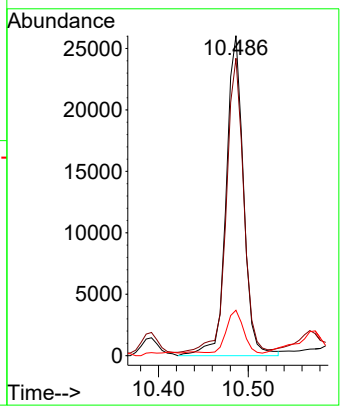




#58
Fluorene
Concen: 2.298 ng
RT: 10.486 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:166 Resp: 3504

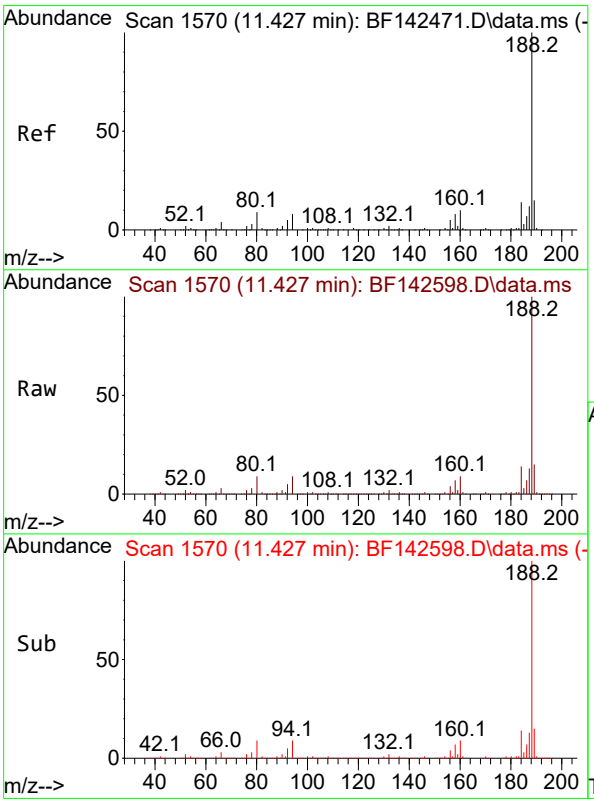
Ion	Ratio	Lower	Upper
166	100		
165	93.0	75.8	113.8
167	14.2	10.6	16.0



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

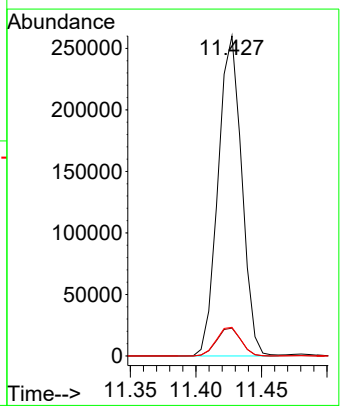
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

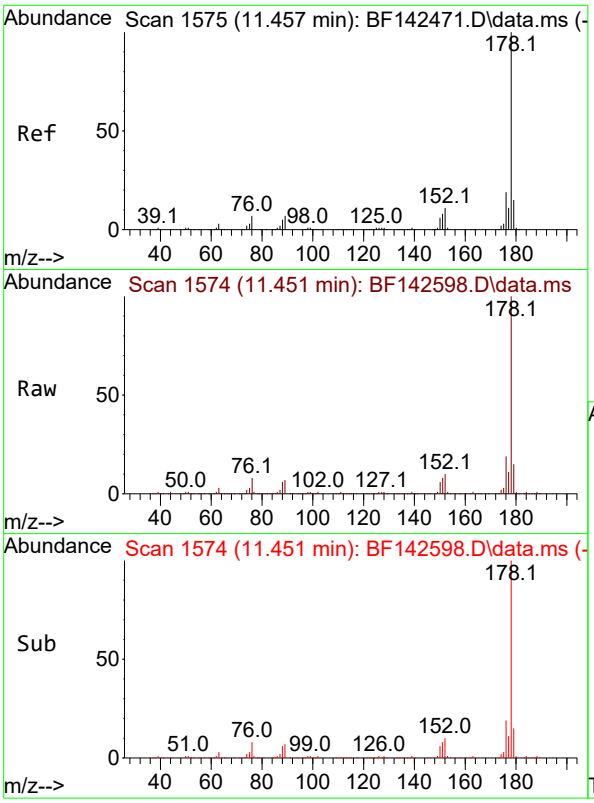


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:188 Resp: 325882

Ion	Ratio	Lower	Upper
188	100		
94	8.7	6.6	10.0
80	8.9	7.4	11.0

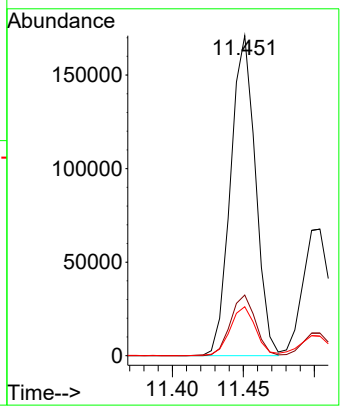




#71
Phenanthrene
Concen: 11.994 ng
RT: 11.451 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:178 Resp: 20888

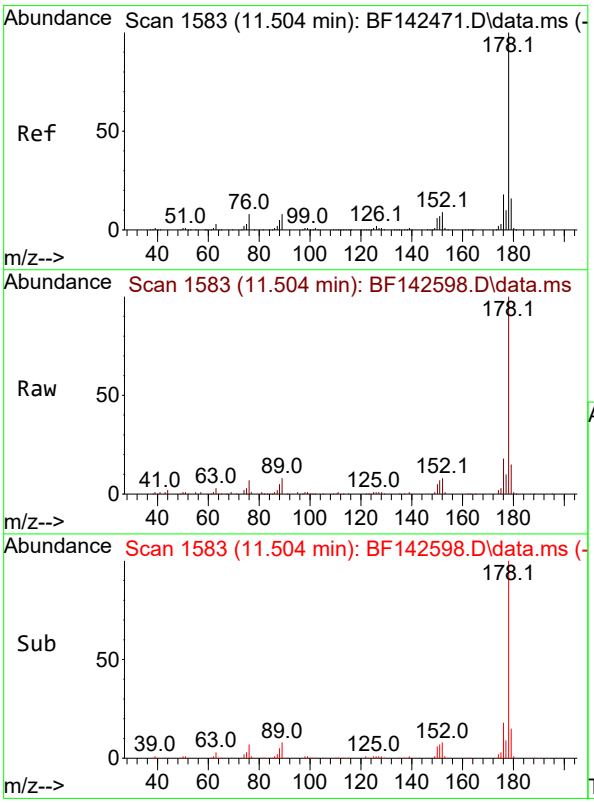
Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.4	23.0
179	15.3	12.3	18.5



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

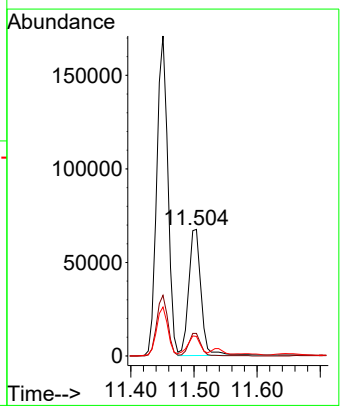
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

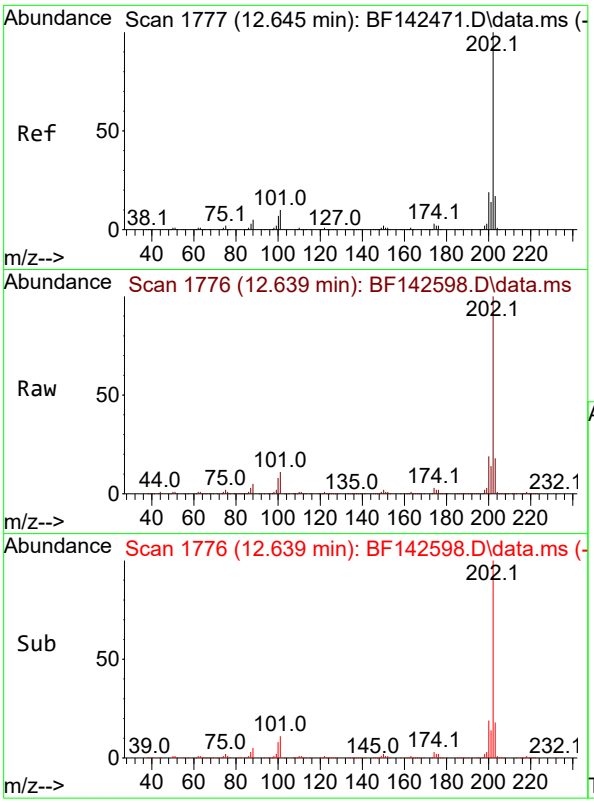


#72
Anthracene
Concen: 5.172 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:178 Resp: 91928

Ion	Ratio	Lower	Upper
178	100		
176	17.9	14.6	21.8
179	15.4	12.4	18.6





#75
Fluoranthene
Concen: 22.927 ng
RT: 12.639 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

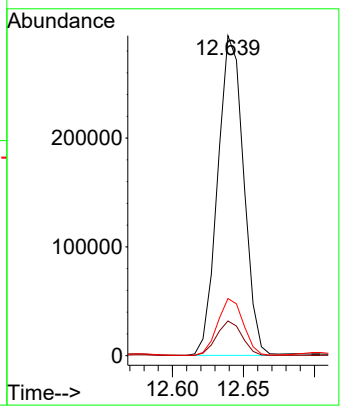
Tgt Ion:202 Resp: 373090

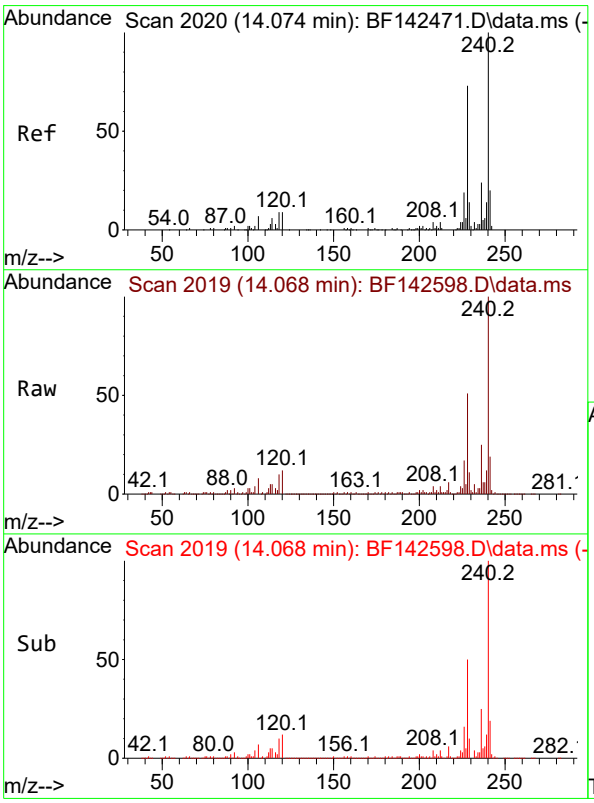
Ion	Ratio	Lower	Upper
202	100		
101	10.9	0.0	29.6
203	17.8	0.0	37.2

Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

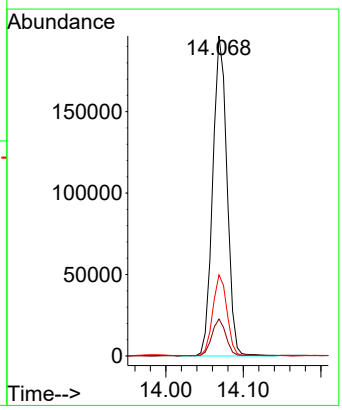


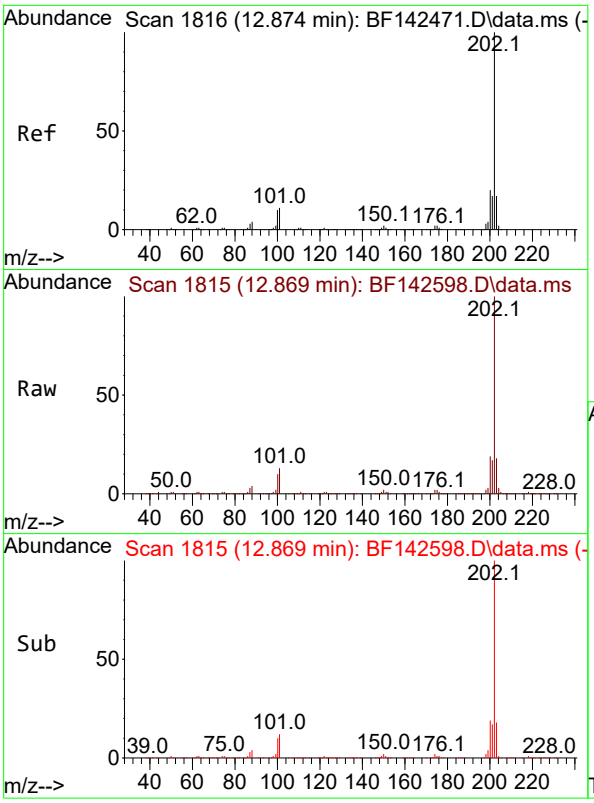


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:240 Resp: 250994

Ion	Ratio	Lower	Upper
240	100		
120	11.6	7.5	11.3#
236	25.4	19.6	29.4

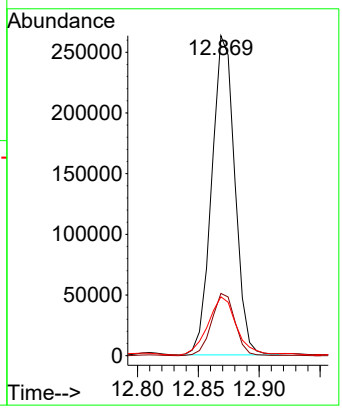




#78
Pyrene
Concen: 14.829 ng
RT: 12.869 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:202 Resp: 34719

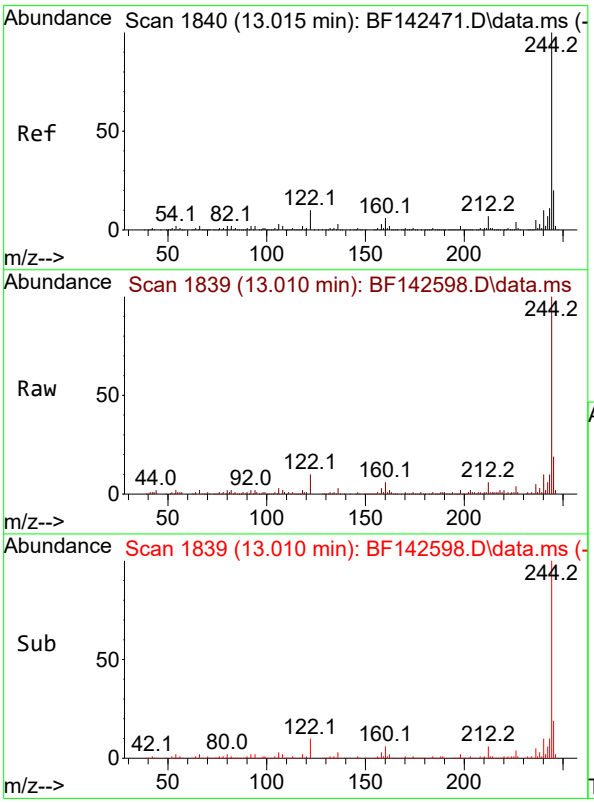
Ion	Ratio	Lower	Upper
202	100		
200	19.5	16.1	24.1
203	18.4	13.9	20.9



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

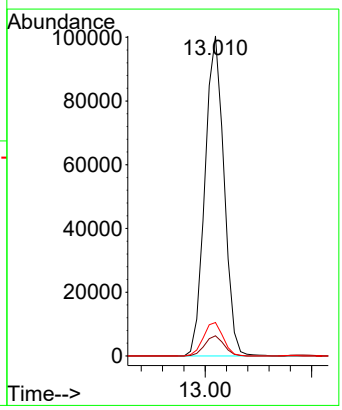
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

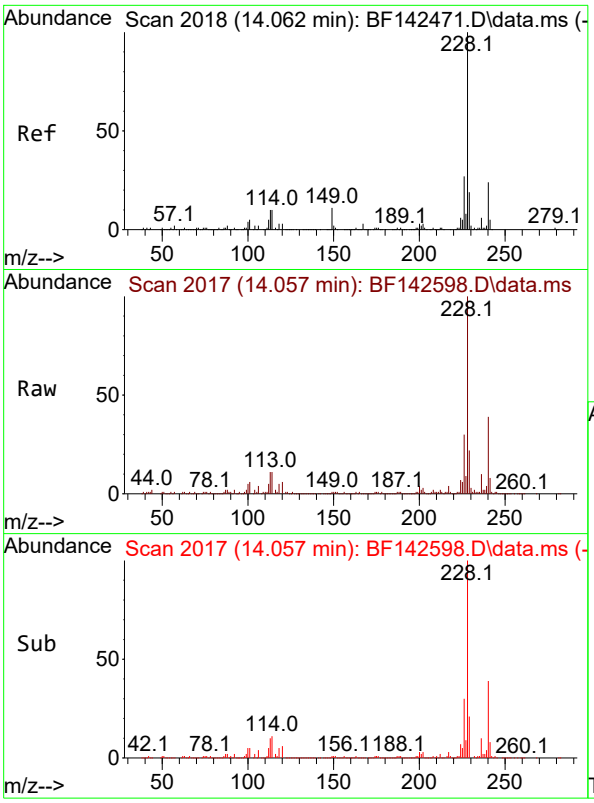


#79
Terphenyl-d14
Concen: 6.788 ng
RT: 13.010 min Scan# 1839
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:244 Resp: 124670

Ion	Ratio	Lower	Upper
244	100		
212	6.3	5.3	7.9
122	10.4	8.2	12.2





#81
Benzo(a)anthracene
Concen: 12.868 ng
RT: 14.057 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

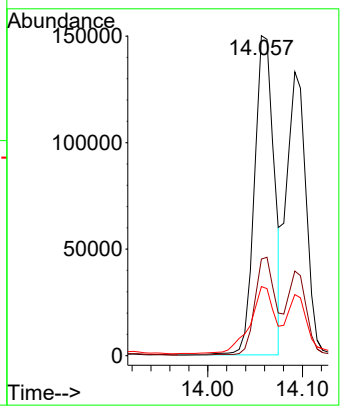
Instrument :
BNA_F
ClientSampleId :
TP-44DL

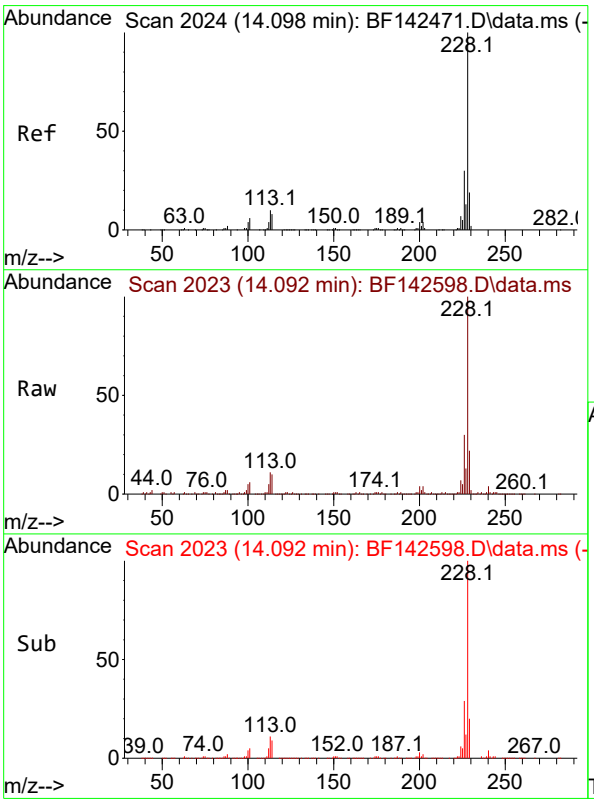
Tgt Ion:228 Resp: 21567

Ion	Ratio	Lower	Upper
228	100		
226	30.2	21.2	31.8
229	21.6	15.5	23.3

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

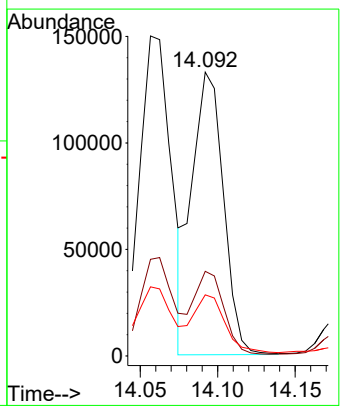


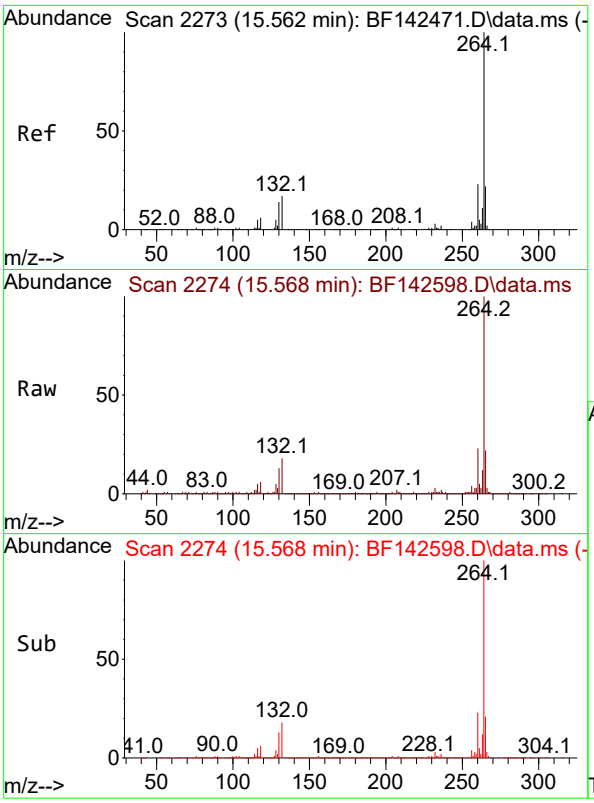


#83
Chrysene
Concen: 12.449 ng
RT: 14.092 min Scan# 2023
Delta R.T. -0.012 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:228 Resp: 187480

Ion	Ratio	Lower	Upper
228	100		
226	29.8	23.8	35.6
229	21.6	15.4	23.2

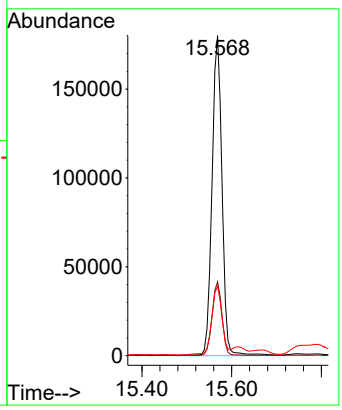




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:264 Resp: 27892

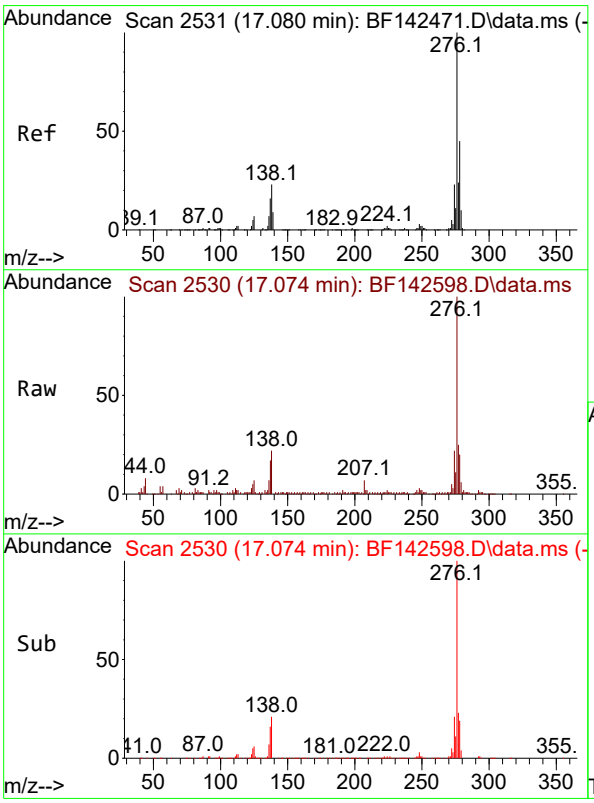
Ion	Ratio	Lower	Upper
264	100		
260	23.1	18.6	28.0
265	21.7	17.7	26.5



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

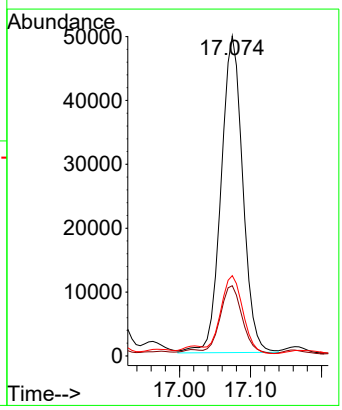
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

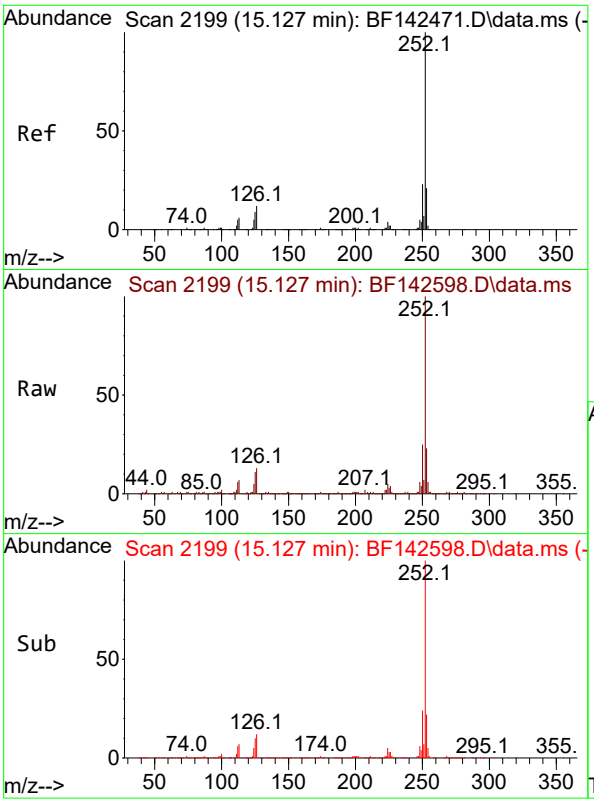


#87
Indeno(1,2,3-cd)pyrene
Concen: 5.012 ng
RT: 17.074 min Scan# 2530
Delta R.T. -0.018 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:276 Resp: 104960

Ion	Ratio	Lower	Upper
276	100		
138	21.5	19.9	29.9
277	25.2	20.2	30.2

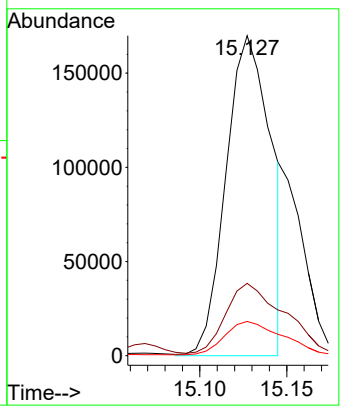




#88
Benzo(b)fluoranthene
Concen: 18.531 ng m
RT: 15.127 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:252 Resp: 30591

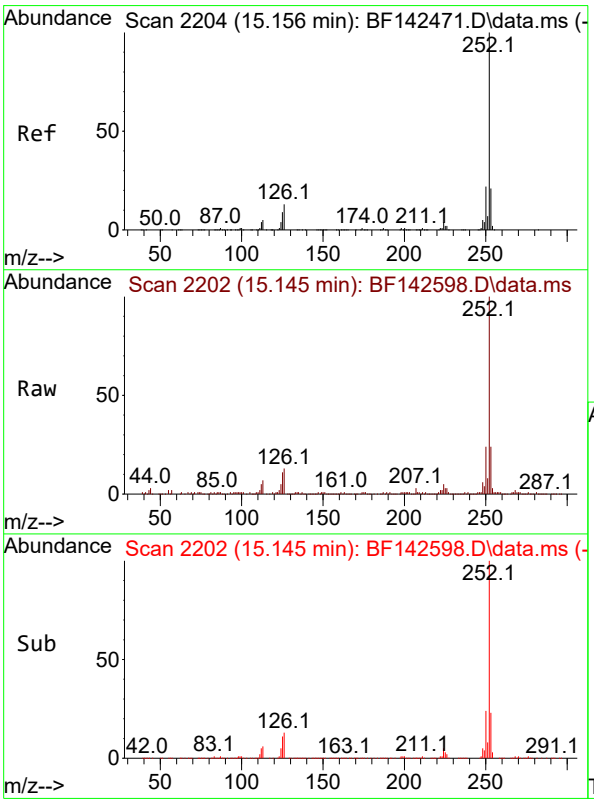
Ion	Ratio	Lower	Upper
252	100		
253	22.6	17.0	25.4
125	10.7	7.4	11.0



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

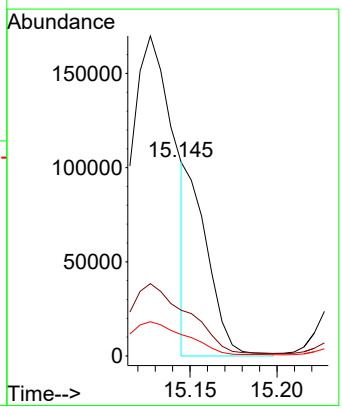
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025

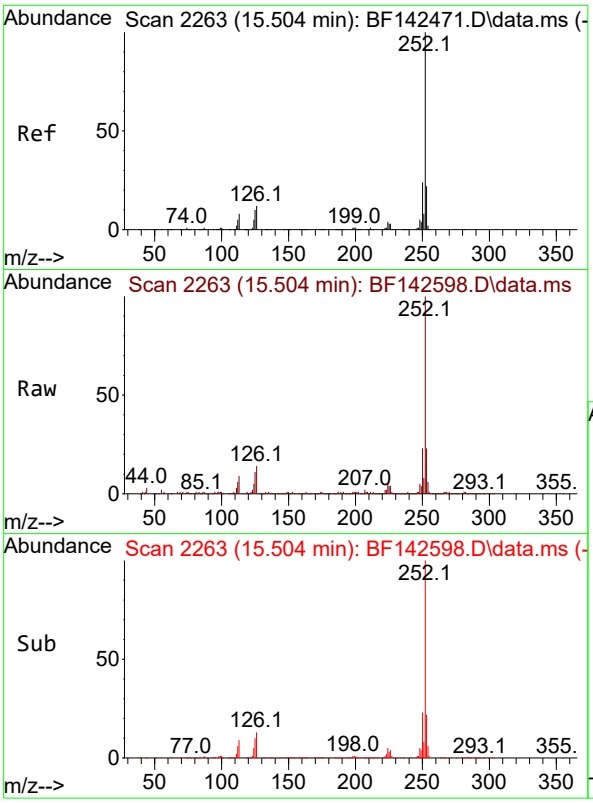


#89
Benzo(k)fluoranthene
Concen: 5.540 ng m
RT: 15.145 min Scan# 2202
Delta R.T. -0.018 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:252 Resp: 85656

Ion	Ratio	Lower	Upper
252	100		
253	23.6	17.0	25.4
125	11.1	7.3	10.9#

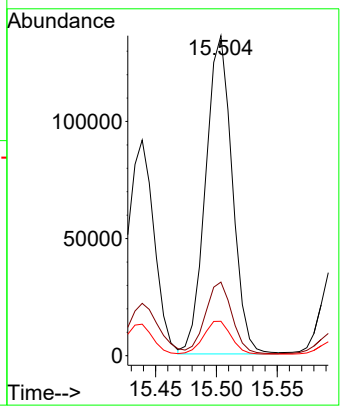




#90
Benzo(a)pyrene
Concen: 13.289 ng
RT: 15.504 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:252 Resp: 20679

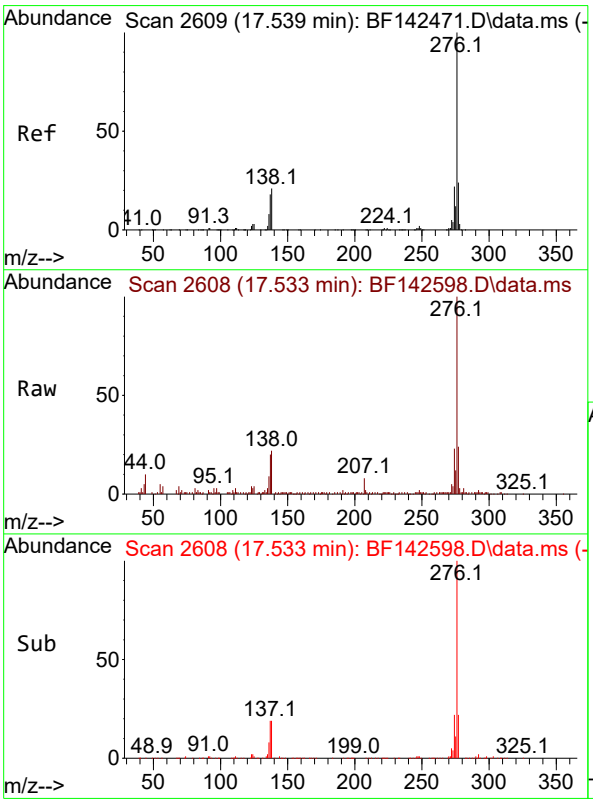
Ion	Ratio	Lower	Upper
252	100		
253	23.0	17.4	26.0
125	10.8	7.9	11.9



Instrument :
BNA_F
ClientSampleId :
TP-44DL

Manual Integrations
APPROVED

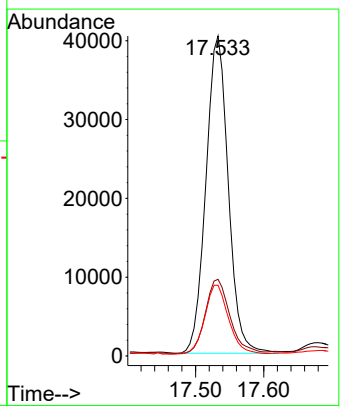
Reviewed By :Rahul Chavli 06/03/2025
Supervised By :Jagrut Upadhyay 06/03/2025



#92
Benzo(g,h,i)perylene
Concen: 5.423 ng
RT: 17.533 min Scan# 2608
Delta R.T. -0.023 min
Lab File: BF142598.D
Acq: 02 Jun 2025 15:34

Tgt Ion:276 Resp: 92128

Ion	Ratio	Lower	Upper
276	100		
277	23.9	19.2	28.8
138	22.1	16.8	25.2



Raw Data: **BF142583.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-42	SDG No.:	Q2150
Lab Sample ID:	Q2150-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.2
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142583.D	1	05/30/25 09:50	05/30/25 21:42	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	180	U	180	380	ug/Kg
108-95-2	Phenol	25.6	U	25.6	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.1	U	28.1	200	ug/Kg
95-57-8	2-Chlorophenol	28.2	U	28.2	200	ug/Kg
95-48-7	2-Methylphenol	34.6	U	34.6	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.4	U	43.4	200	ug/Kg
98-86-2	Acetophenone	34.2	U	34.2	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.6	U	47.6	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.9	U	54.9	92.6	ug/Kg
67-72-1	Hexachloroethane	20.4	U	20.4	200	ug/Kg
98-95-3	Nitrobenzene	21.2	U	21.2	200	ug/Kg
78-59-1	Isophorone	38.0	U	38.0	200	ug/Kg
88-75-5	2-Nitrophenol	67.4	U	67.4	200	ug/Kg
105-67-9	2,4-Dimethylphenol	75.0	U	75.0	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.7	U	35.7	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.8	U	32.8	200	ug/Kg
91-20-3	Naphthalene	26.3	U	26.3	200	ug/Kg
106-47-8	4-Chloroaniline	41.0	U	41.0	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.3	U	29.3	200	ug/Kg
105-60-2	Caprolactam	60.3	U	60.3	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.2	U	33.2	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.6	U	29.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.9	U	22.9	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.7	U	33.7	200	ug/Kg
92-52-4	1,1-Biphenyl	25.2	U	25.2	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.1	U	26.1	200	ug/Kg
88-74-4	2-Nitroaniline	55.7	U	55.7	200	ug/Kg
131-11-3	Dimethylphthalate	31.4	U	31.4	200	ug/Kg

Raw Data: **BF142583.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-42	SDG No.:	Q2150
Lab Sample ID:	Q2150-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.2
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142583.D	1	05/30/25 09:50	05/30/25 21:42	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.5	U	33.5	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.9	U	38.9	200	ug/Kg
99-09-2	3-Nitroaniline	53.3	U	53.3	200	ug/Kg
83-32-9	Acenaphthene	24.7	U	24.7	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	380	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	380	ug/Kg
132-64-9	Dibenzofuran	26.3	U	26.3	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.0	U	58.0	200	ug/Kg
84-66-2	Diethylphthalate	32.8	U	32.8	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.9	U	30.9	200	ug/Kg
86-73-7	Fluorene	29.3	U	29.3	200	ug/Kg
100-01-6	4-Nitroaniline	74.3	U	74.3	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.1	U	38.1	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.2	U	32.2	200	ug/Kg
118-74-1	Hexachlorobenzene	29.3	U	29.3	200	ug/Kg
1912-24-9	Atrazine	39.4	U	39.4	200	ug/Kg
87-86-5	Pentachlorophenol	59.4	U	59.4	380	ug/Kg
85-01-8	Phenanthrene	24.2	U	24.2	200	ug/Kg
120-12-7	Anthracene	38.6	U	38.6	200	ug/Kg
86-74-8	Carbazole	36.1	U	36.1	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.5	U	55.5	200	ug/Kg
206-44-0	Fluoranthene	130	J	34.7	200	ug/Kg
129-00-0	Pyrene	100	J	41.7	200	ug/Kg
85-68-7	Butylbenzylphthalate	82.7	U	82.7	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.5	U	42.5	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.6	U	26.6	200	ug/Kg
218-01-9	Chrysene	23.0	U	23.0	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.5	U	68.5	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	77.9	J	22.0	200	ug/Kg

Raw Data: **BF142583.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-42	SDG No.:	Q2150
Lab Sample ID:	Q2150-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.2
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142583.D	1	05/30/25 09:50	05/30/25 21:42	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.9	U	25.9	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.2	U	34.2	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.7	U	33.7	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.7	U	31.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.8	U	29.8	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.6	U	29.6	200	ug/Kg
123-91-1	1,4-Dioxane	52.3	U	52.3	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.7	U	31.7	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	78.1		18 - 112	52%	SPK: 150
13127-88-3	Phenol-d6	78.9		15 - 107	53%	SPK: 150
4165-60-0	Nitrobenzene-d5	48.9		18 - 107	49%	SPK: 100
321-60-8	2-Fluorobiphenyl	46.0		20 - 109	46%	SPK: 100
118-79-6	2,4,6-Tribromophenol	69.5		10 - 116	46%	SPK: 150
1718-51-0	Terphenyl-d14	37.3		10 - 105	37%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	143000	6.898			
1146-65-2	Naphthalene-d8	546000	8.181			
15067-26-2	Acenaphthene-d10	277000	9.933			
1517-22-2	Phenanthrene-d10	434000	11.421			
1719-03-5	Chrysene-d12	257000	14.068			
1520-96-3	Perylene-d12	308000	15.562			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB		5.12	ug/Kg
000119-61-9	Benzophenone	150	J		10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	190	J		11.9	ug/Kg
1010351-87-0	Heptadecyl trifluoroacetate	110	J		13.9	ug/Kg

Raw Data: **BF142583.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-42	SDG No.:	Q2150
Lab Sample ID:	Q2150-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.2
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142583.D	1	05/30/25 09:50	05/30/25 21:42	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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: **BF142583.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Quant Time: May 30 22:29:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

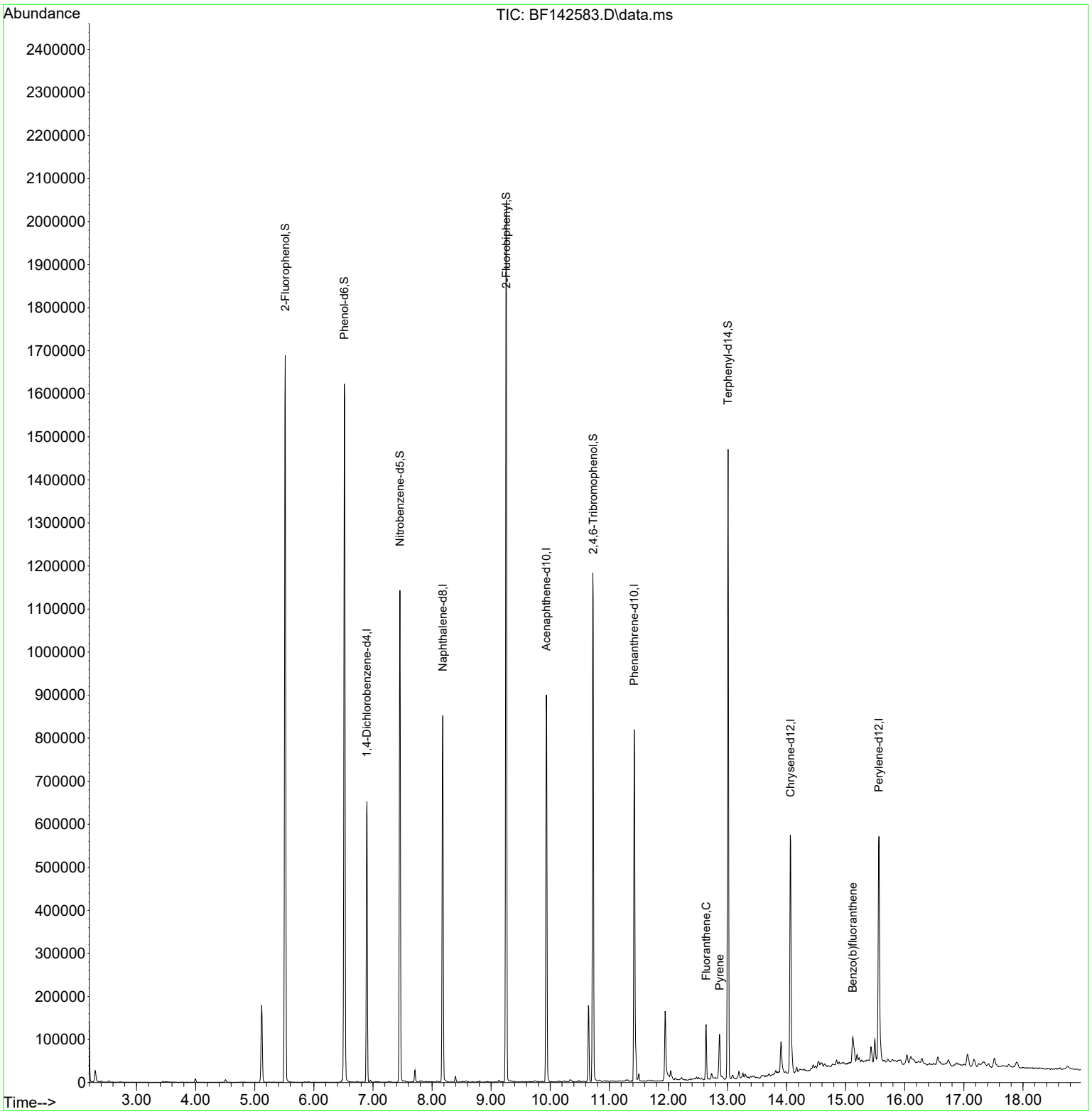
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	143411	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	545898	20.000	ng	0.00
39) Acenaphthene-d10	9.933	164	276939	20.000	ng	-0.01
64) Phenanthrene-d10	11.421	188	434462	20.000	ng	-0.01
76) Chrysene-d12	14.068	240	256745	20.000	ng	0.00
86) Perylene-d12	15.562	264	308145	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.516	112	665218	78.148	ng	0.00
7) Phenol-d6	6.516	99	808288	78.882	ng	-0.02
23) Nitrobenzene-d5	7.457	82	489226	48.868	ng	-0.02
42) 2,4,6-Tribromophenol	10.727	330	213548	69.476	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	949387	46.001	ng	-0.01
79) Terphenyl-d14	13.010	244	700083	37.262	ng	0.00
Target Compounds						Qvalue
75) Fluoranthene	12.639	202	75247	3.468	ng	100
78) Pyrene	12.868	202	63857	2.666	ng	97
88) Benzo(b)fluoranthene	15.121	252	36811m	2.018	ng	

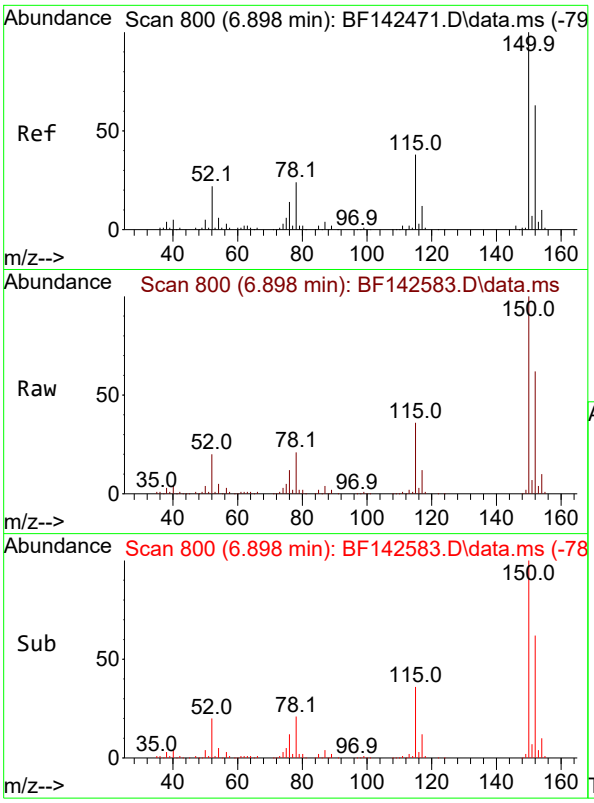
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Quant Time: May 30 22:29:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



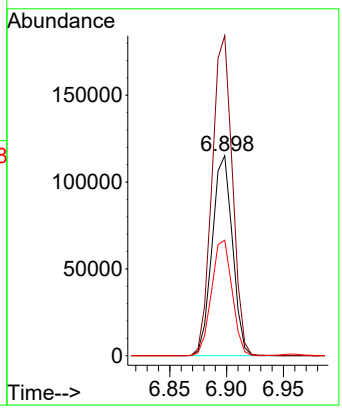


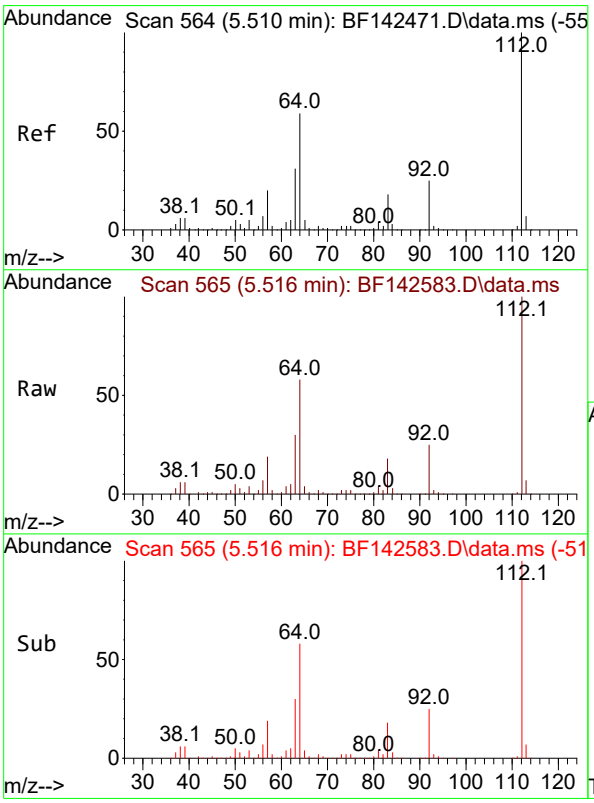
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion:152 Resp: 143411

Ion	Ratio	Lower	Upper
152	100		
150	160.0	128.2	192.4
115	57.8	48.3	72.5

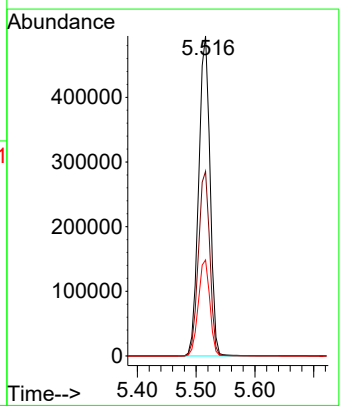


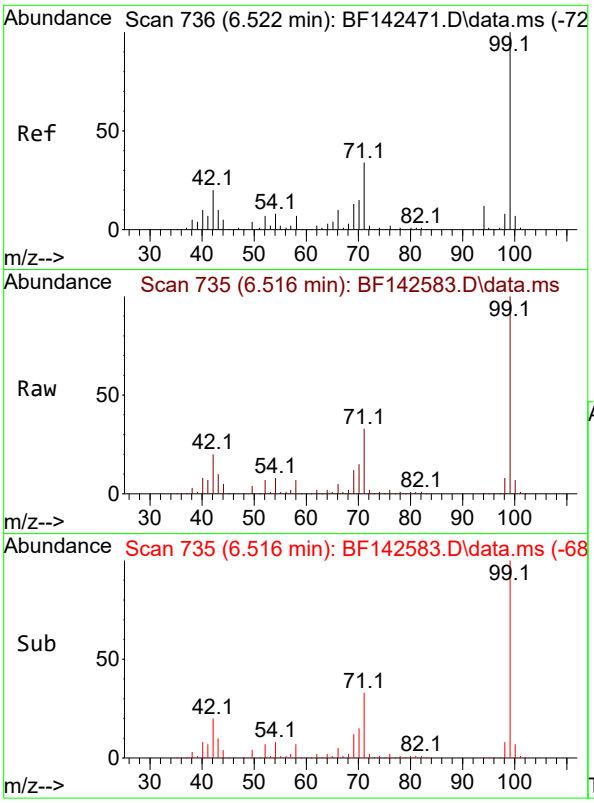


#5
2-Fluorophenol
Concen: 78.148 ng
RT: 5.516 min Scan# 565
Delta R.T. 0.000 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Tgt Ion:112 Resp: 665218

Ion	Ratio	Lower	Upper
112	100		
64	57.7	47.5	71.3
63	30.0	24.9	37.3



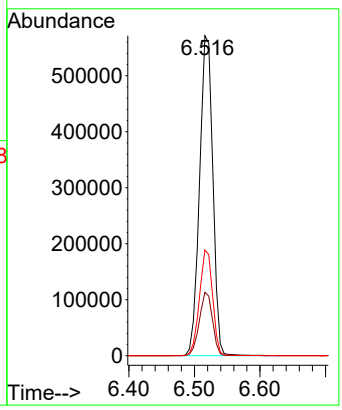


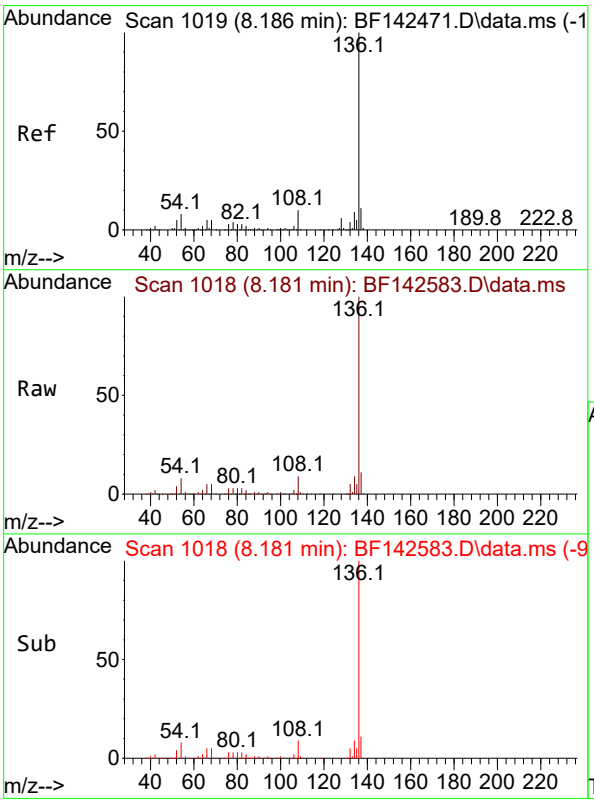
#7
Phenol-d6
Concen: 78.882 ng
RT: 6.516 min Scan# 7
Delta R.T. -0.018 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion: 99 Resp: 808288

Ion	Ratio	Lower	Upper
99	100		
42	19.8	16.2	24.2
71	33.0	27.3	40.9

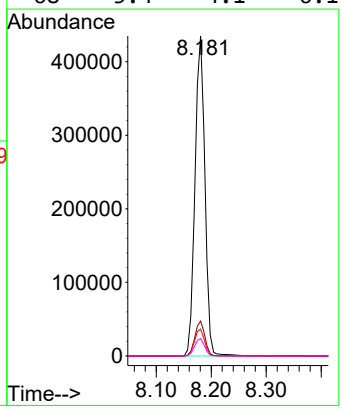


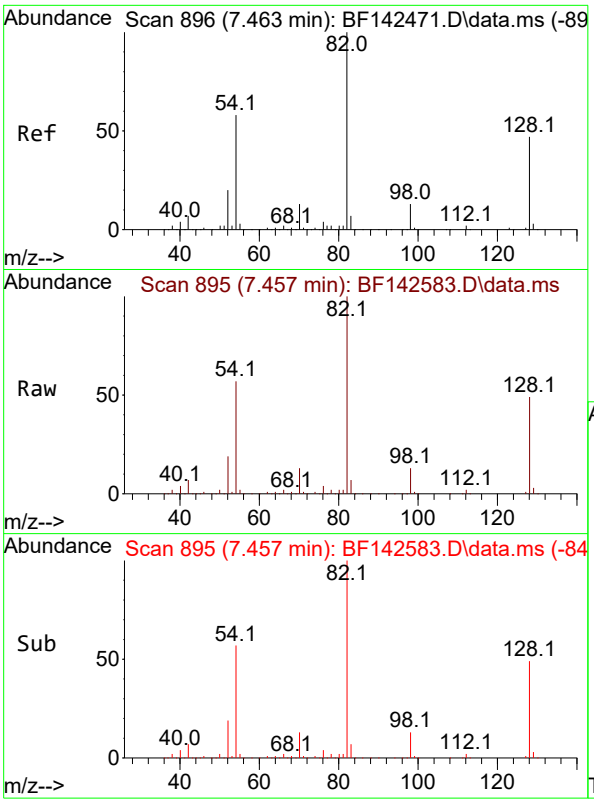


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Tgt Ion:136 Resp: 545898

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	8.4	6.6	10.0
68	5.4	4.1	6.1



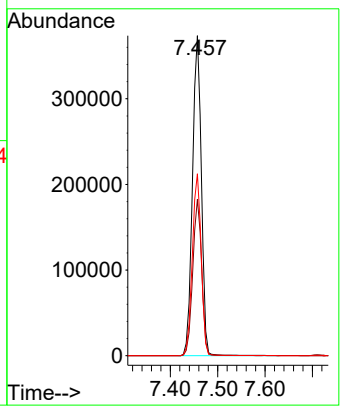


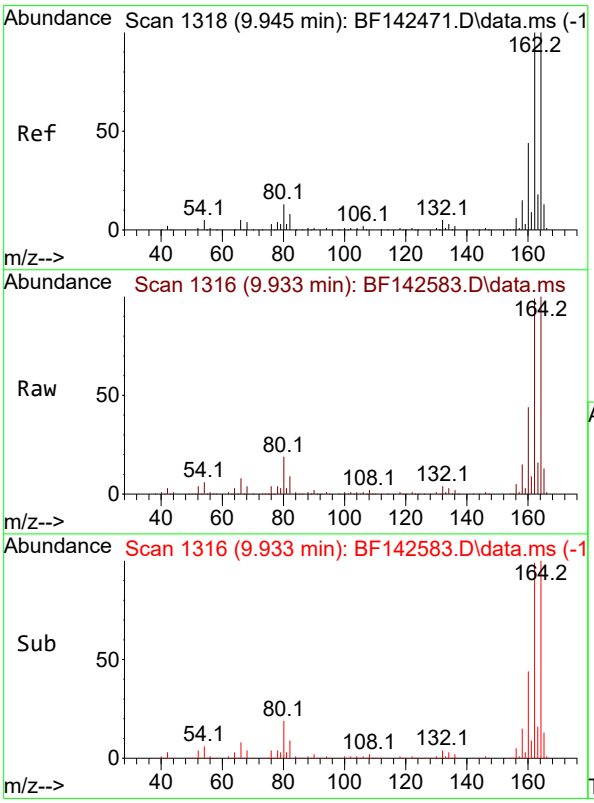
#23
Nitrobenzene-d5
Concen: 48.868 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion: 82 Resp: 489226

Ion	Ratio	Lower	Upper
82	100		
128	48.9	37.4	56.2
54	56.9	46.6	70.0

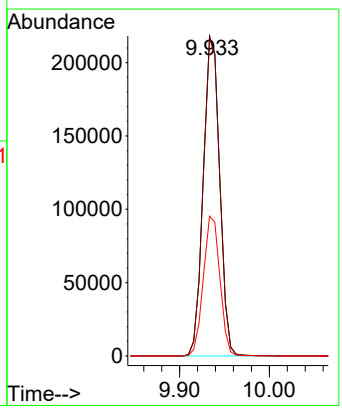


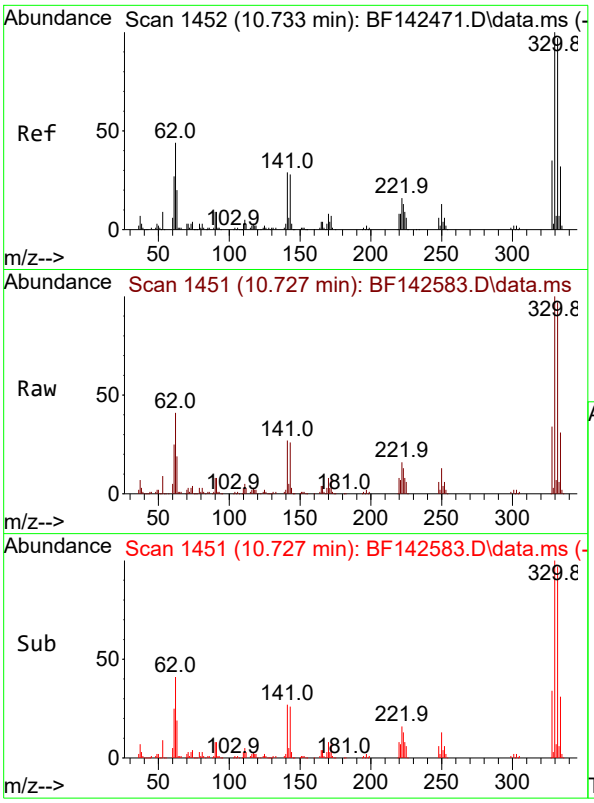


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.933 min Scan# 1316
Delta R.T. -0.012 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Tgt Ion:164 Resp: 276939

Ion	Ratio	Lower	Upper
164	100		
162	99.2	80.2	120.4
160	43.7	35.6	53.4



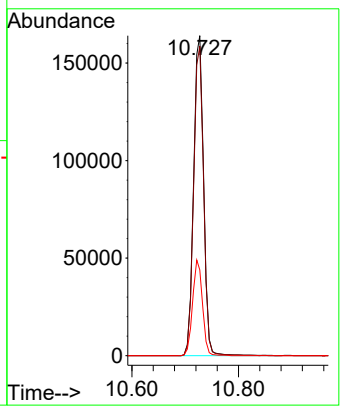


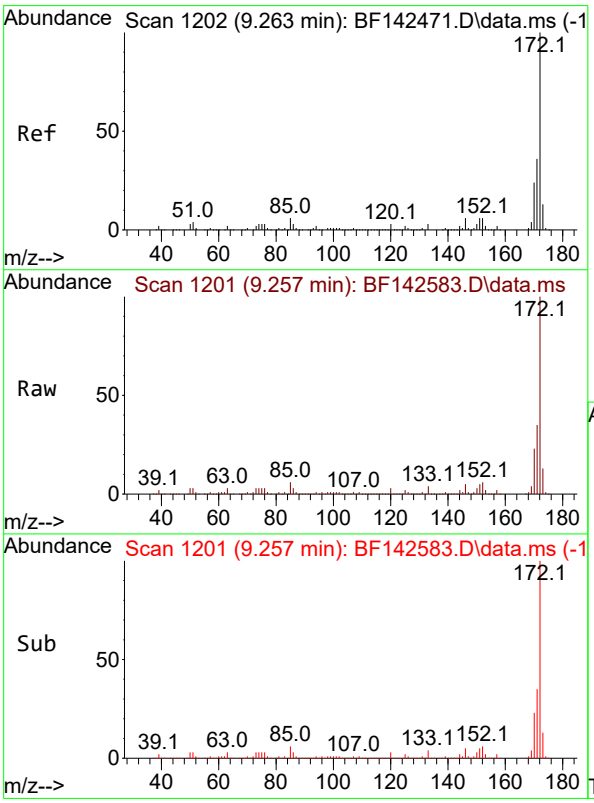
#42
2,4,6-Tribromophenol
Concen: 69.476 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion:330 Resp: 213548

Ion	Ratio	Lower	Upper
330	100		
332	96.4	77.6	116.4
141	29.6	24.6	36.8

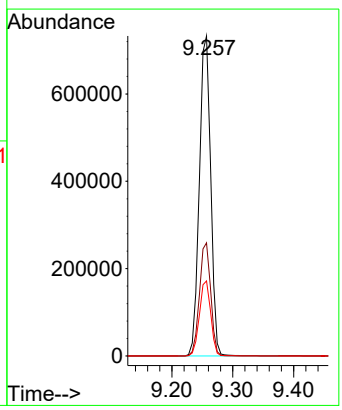


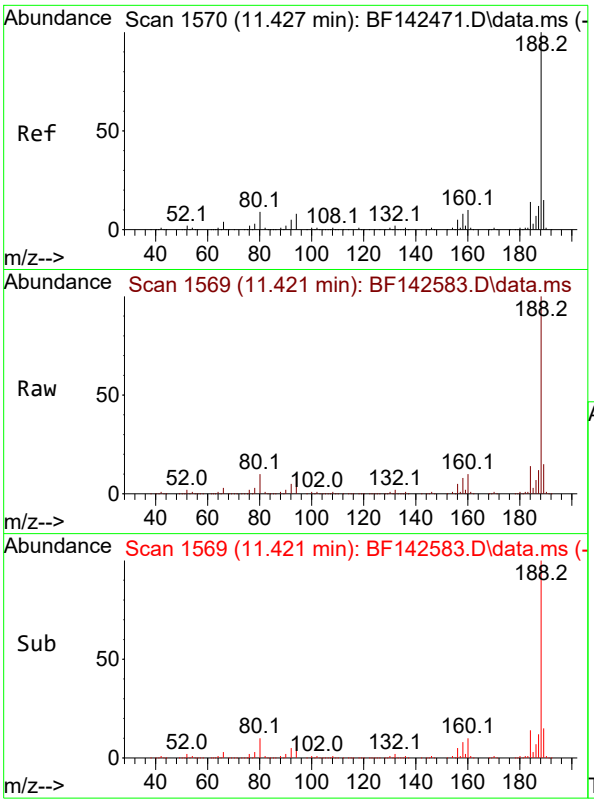


#45
2-Fluorobiphenyl
Concen: 46.001 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Tgt Ion:172 Resp: 949387

Ion	Ratio	Lower	Upper
172	100		
171	35.3	28.6	42.8
170	23.4	18.9	28.3



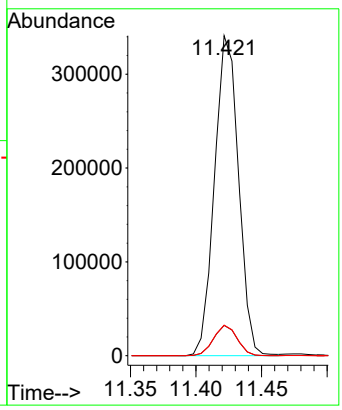


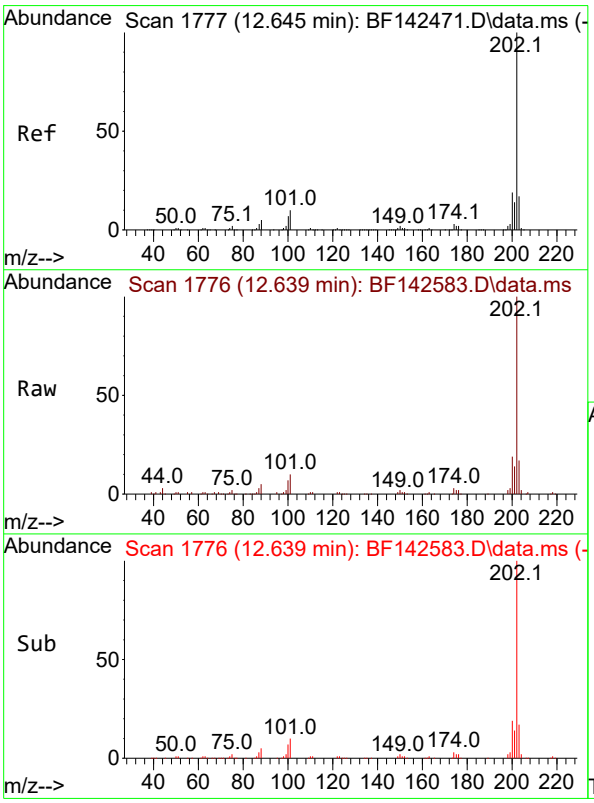
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.421 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion:188 Resp: 434462

Ion	Ratio	Lower	Upper
188	100		
94	9.4	6.6	10.0
80	9.5	7.4	11.0

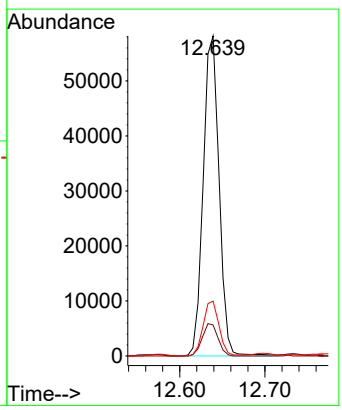


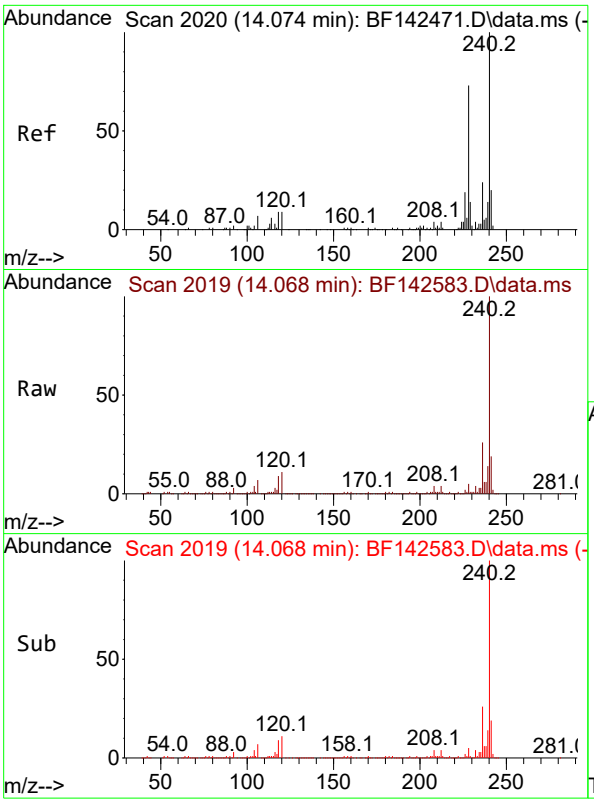


#75
Fluoranthene
Concen: 3.468 ng
RT: 12.639 min Scan# 1776
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Tgt Ion:202 Resp: 75247

Ion	Ratio	Lower	Upper
202	100		
101	9.7	0.0	29.6
203	17.2	0.0	37.2



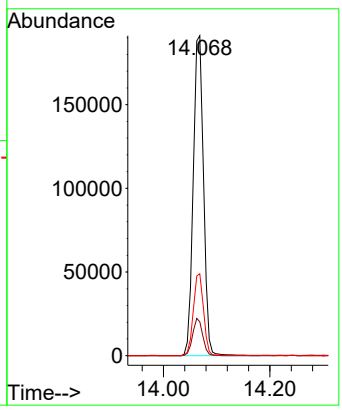


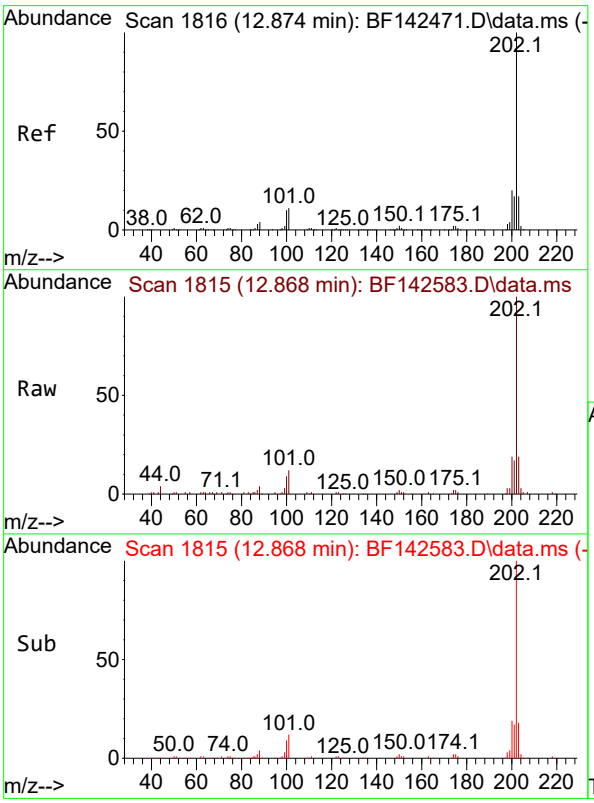
#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion:240 Resp: 256745

Ion	Ratio	Lower	Upper
240	100		
120	10.6	7.5	11.3
236	25.6	19.6	29.4

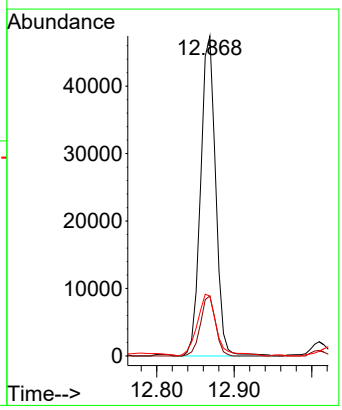


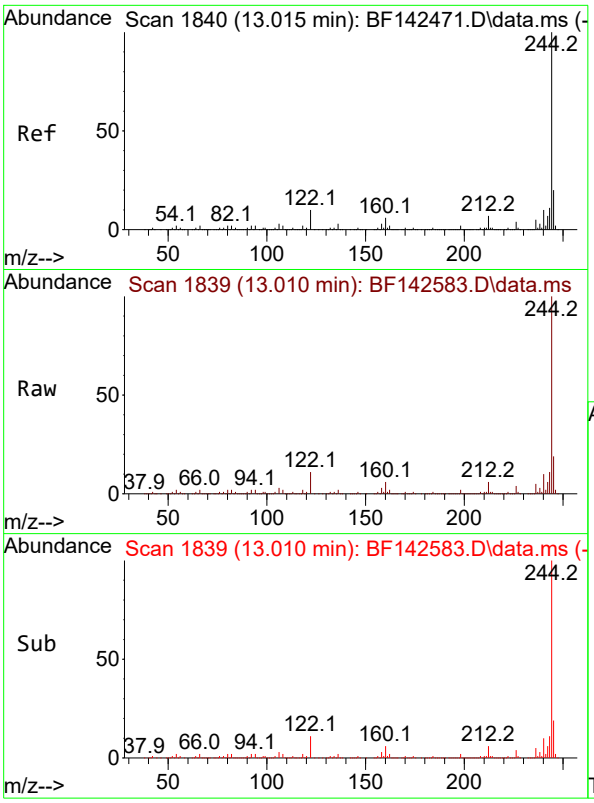


#78
Pyrene
Concen: 2.666 ng
RT: 12.868 min Scan# 1815
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Tgt Ion:202 Resp: 63857

Ion	Ratio	Lower	Upper
202	100		
200	18.8	16.1	24.1
203	18.7	13.9	20.9



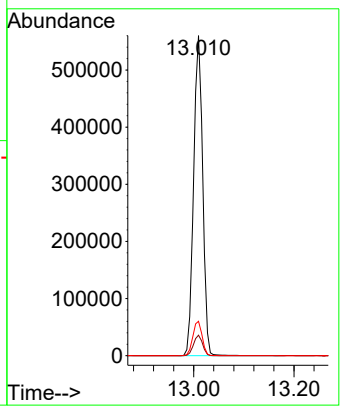


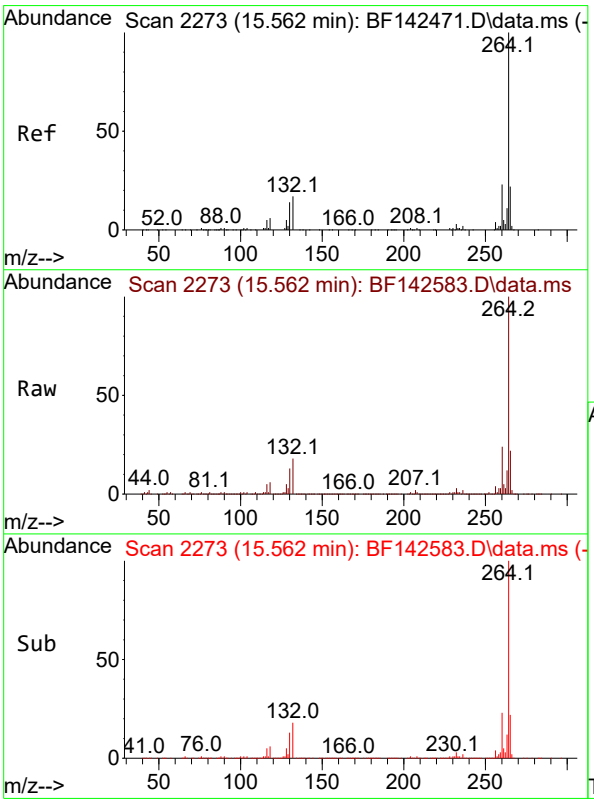
#79
Terphenyl-d14
Concen: 37.262 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion:244 Resp: 700083

Ion	Ratio	Lower	Upper
244	100		
212	6.4	5.3	7.9
122	10.7	8.2	12.2

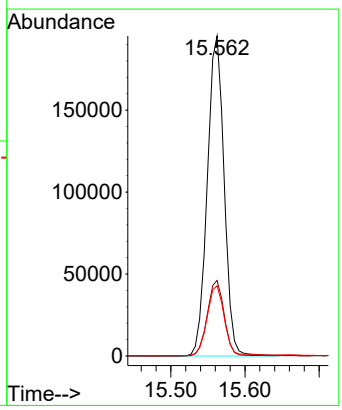


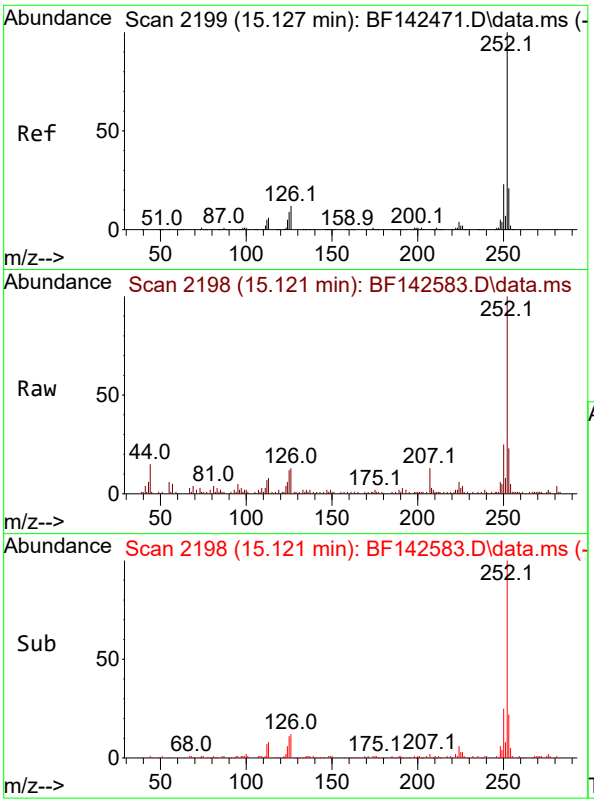


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Tgt Ion:264 Resp: 308145

Ion	Ratio	Lower	Upper
264	100		
260	23.6	18.6	28.0
265	21.9	17.7	26.5



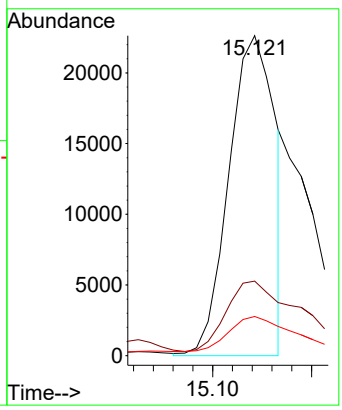


#88
Benzo(b)fluoranthene
Concen: 2.018 ng m
RT: 15.121 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142583.D
Acq: 30 May 2025 21:42

Instrument :
BNA_F
ClientSampleId :
TP-42

Tgt Ion:252 Resp: 36811

Ion	Ratio	Lower	Upper
252	100		
253	23.3	17.0	25.4
125	12.2	7.4	11.0#



Sample Results: **BF142583.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142583.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.299	13	18	29	rVB2	26093	45733	1.72%	0.231%
2	5.116	489	497	514	rBV	179059	265837	9.99%	1.344%
3	5.516	558	565	570	rBV	1687789	2272847	85.44%	11.488%
4	6.516	729	735	741	rBV	1617452	2288359	86.03%	11.567%
5	6.898	794	800	805	rBV	651980	820738	30.85%	4.148%
6	7.457	888	895	900	rBV	1142551	1486624	55.89%	7.514%
7	7.710	934	938	949	rVB	27327	36740	1.38%	0.186%
8	8.181	1012	1018	1034	rVB	851172	1068726	40.18%	5.402%
9	9.257	1195	1201	1206	rBV	2048441	2660074	100.00%	13.446%
10	9.933	1311	1316	1326	rVB	898361	1147703	43.15%	5.801%
11	10.645	1432	1437	1445	rBV	176557	224303	8.43%	1.134%
12	10.722	1445	1450	1464	rBV	1181528	1553082	58.38%	7.850%
13	11.421	1564	1569	1577	rBV	817404	1125115	42.30%	5.687%
14	11.945	1651	1658	1670	rBV3	162543	281753	10.59%	1.424%
15	12.039	1670	1674	1684	rVB	20943	43368	1.63%	0.219%
16	12.639	1771	1776	1781	rBV	127377	163810	6.16%	0.828%
17	12.863	1808	1814	1819	rBV	101751	156773	5.89%	0.792%
18	13.010	1833	1839	1844	rBV	1461213	1832329	68.88%	9.262%
19	13.192	1863	1870	1875	rBV	16585	29542	1.11%	0.149%
20	13.904	1987	1991	2002	rVB2	71319	122975	4.62%	0.622%
21	14.063	2012	2018	2030	rVB	552999	850896	31.99%	4.301%
22	15.121	2193	2198	2206	rBV	58576	133880	5.03%	0.677%
23	15.427	2247	2250	2256	rVB	35049	55991	2.10%	0.283%
24	15.492	2257	2261	2266	rVV	50730	80108	3.01%	0.405%
25	15.562	2267	2273	2285	rVB	522027	889041	33.42%	4.494%
26	16.039	2350	2354	2359	rVB	18415	31818	1.20%	0.161%
27	17.062	2523	2528	2537	rVB2	28432	68089	2.56%	0.344%
28	17.515	2601	2605	2617	rVB	19664	47821	1.80%	0.242%

Sum of corrected areas: 19784075

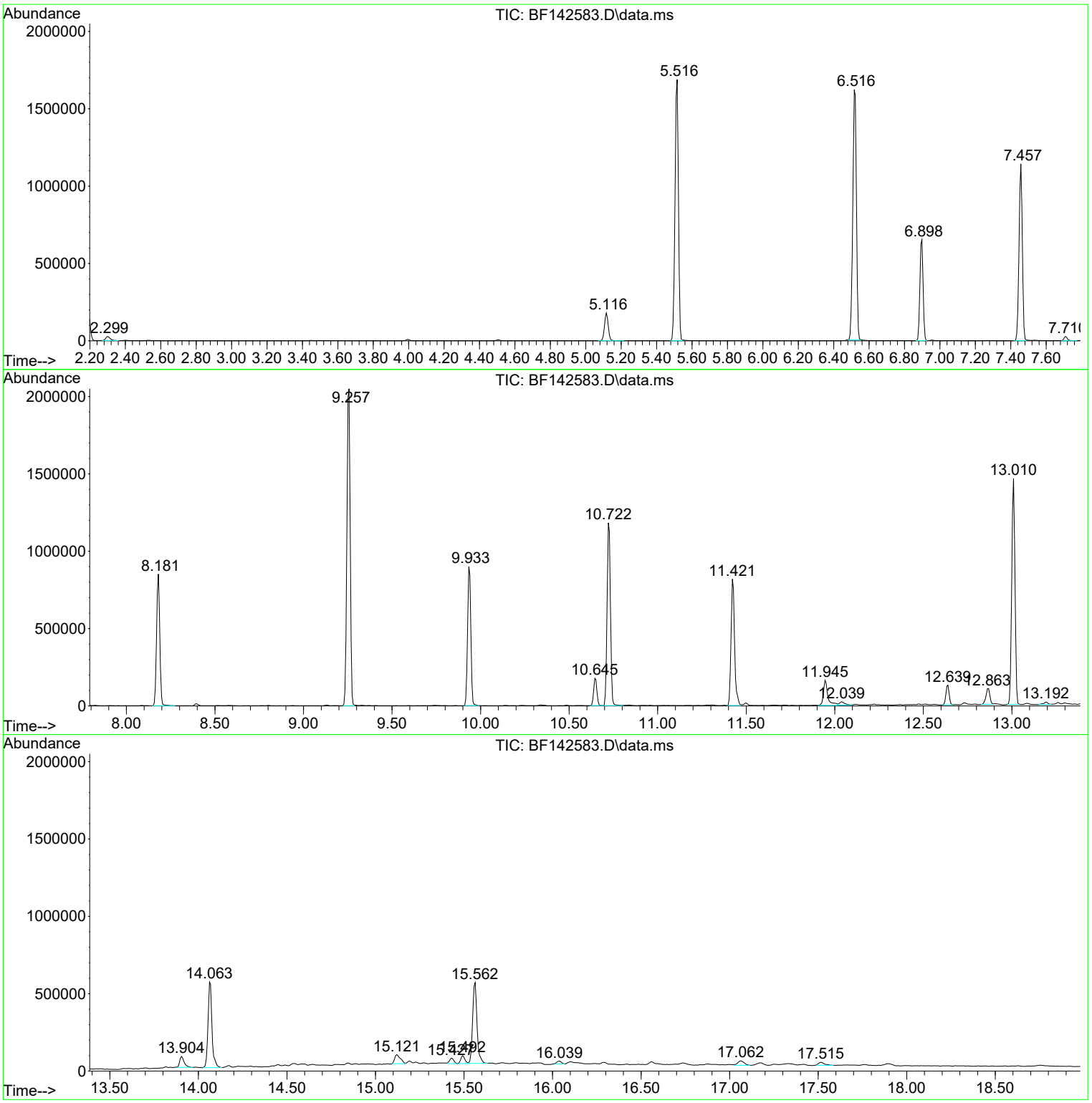
Sample Results: **BF142583.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Sample Results: **BF142583.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

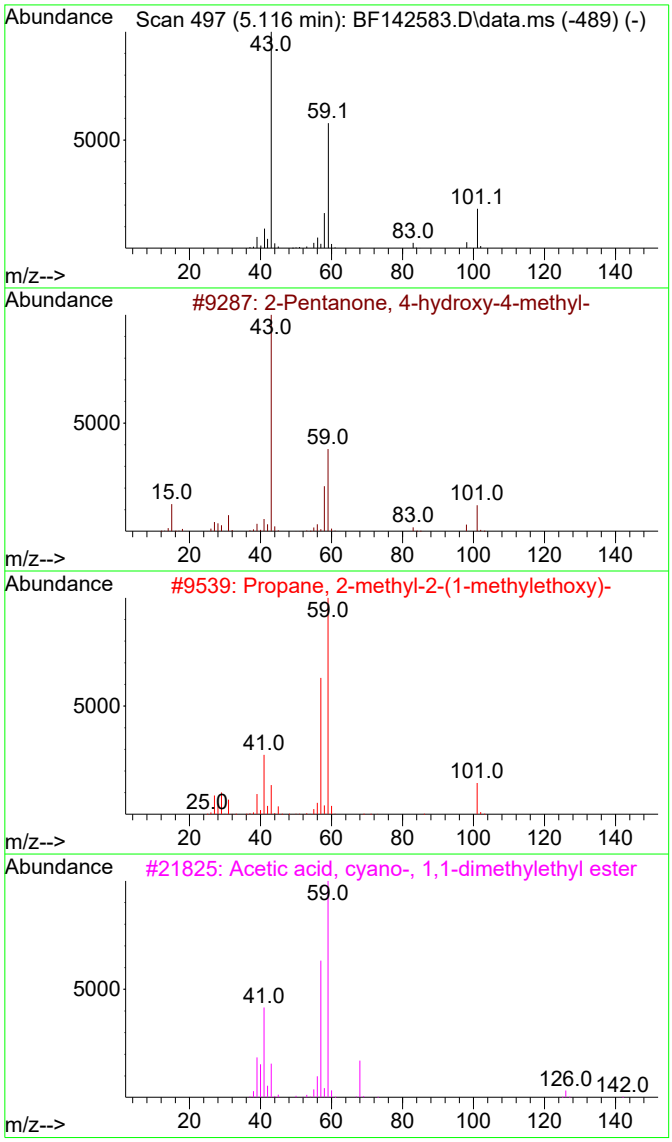
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

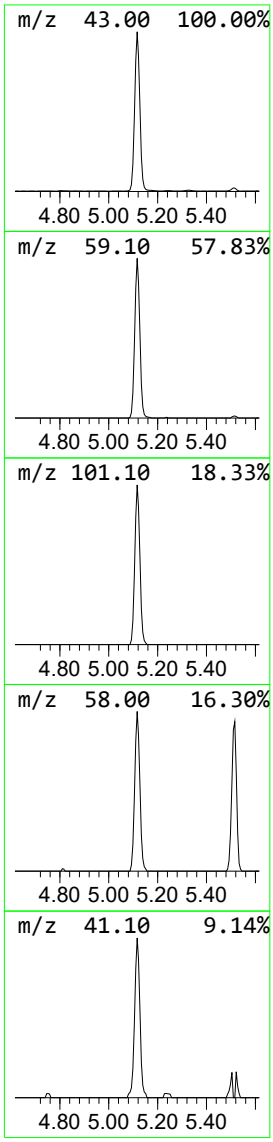
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.116	6.48 ng	265837	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	Propane, 2-methyl-2-(1-methyleth...	116	C7H16O	017348-59-3	36
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	32
4	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





Sample Results: **BF142583.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

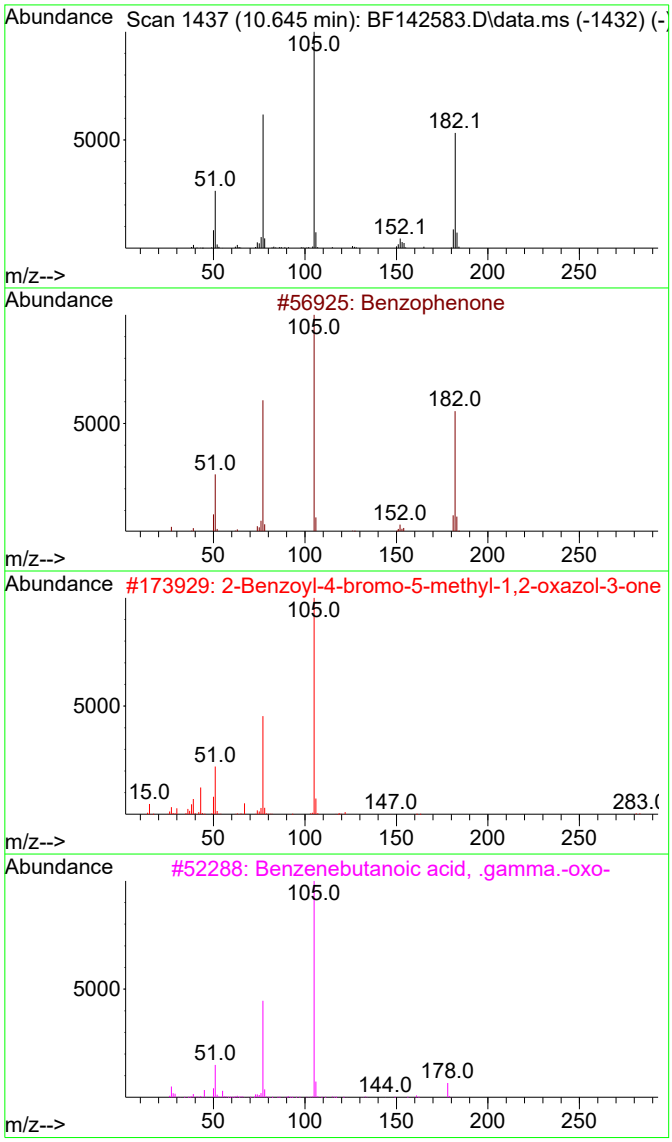
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

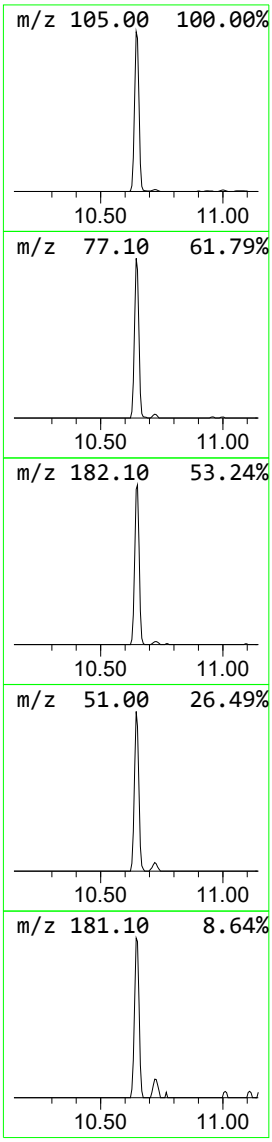
****

Peak Number 2 Benzophenone Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.645	3.91 ng	224303	Acenaphthene-d10	9.933

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	2-Benzoyl-4-bromo-5-methyl-1,2-o...	281	C11H8BrNO3	1000444-92-3	47
3	Benzenebutanoic acid, .gamma.-oxo-	178	C10H10O3	002051-95-8	47
4	1,2,4-Triazine-3,5(2H,4H)-dione,...	249	C10H7N3O3S	024168-34-1	47
5	1-Propanone, 3-chloro-1-phenyl-	168	C9H9ClO	000936-59-4	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

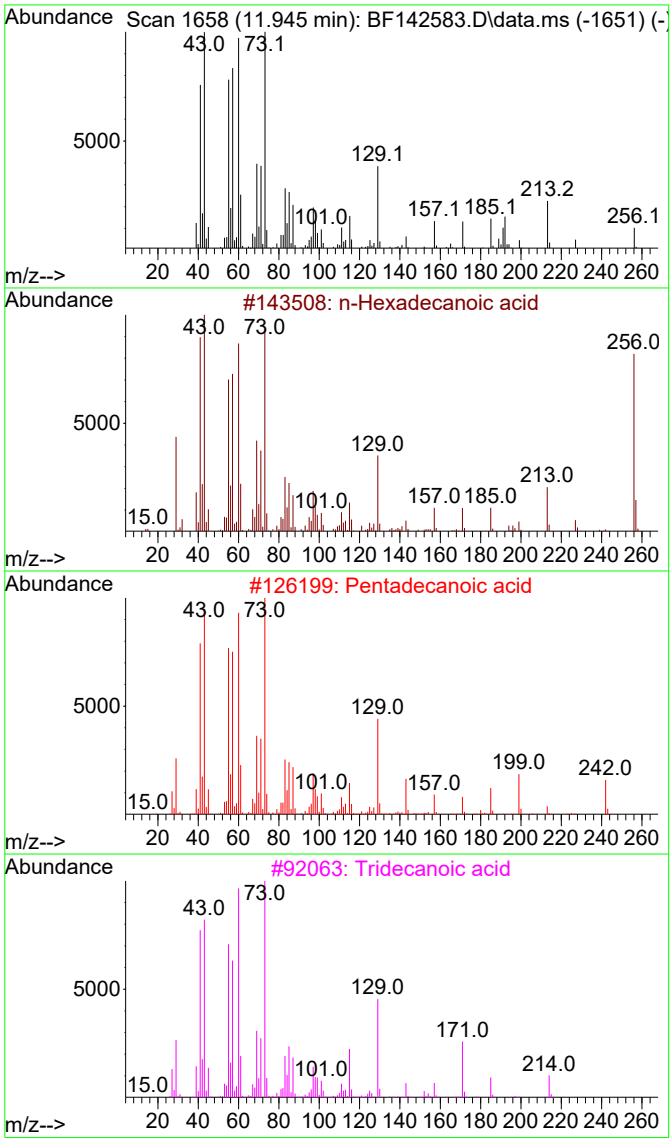
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

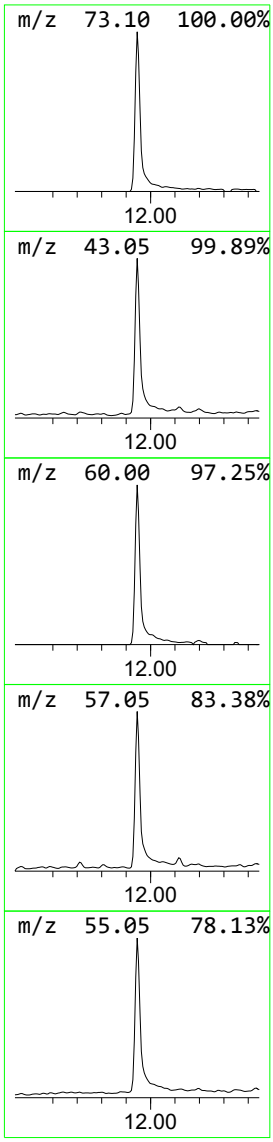
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.945	5.01 ng	281753	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	93
3	Tridecanoic acid	214	C13H26O2	000638-53-9	93
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	87
5	n-Decanoic acid	172	C10H20O2	000334-48-5	76





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

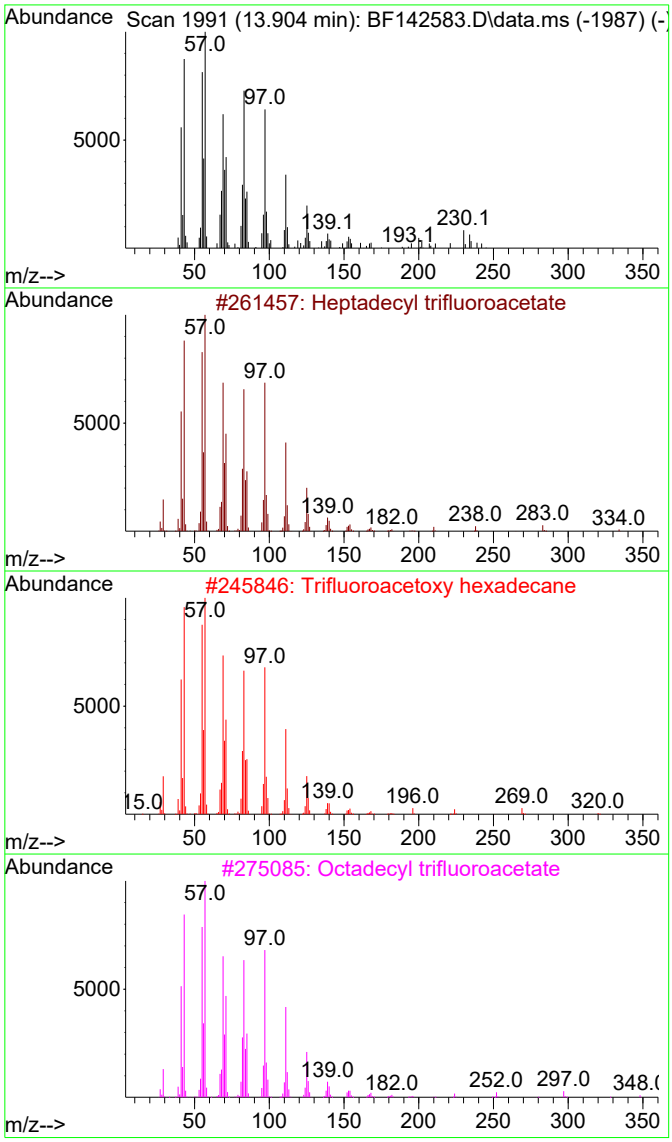
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

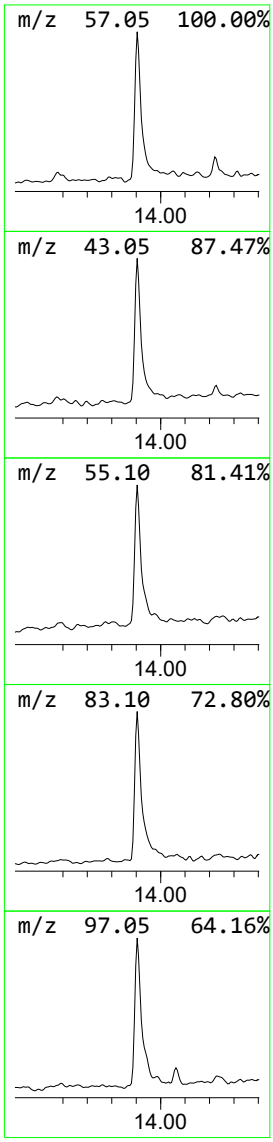
****

Peak Number 4 Heptadecyl trifluoroacetate Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.904	2.89 ng	122975	Chrysene-d12	14.068

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecyl trifluoroacetate	352	C19H35F3O2	1010351-87-0	95
2	Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	95
3	Octadecyl trifluoroacetate	366	C20H37F3O2	079392-43-1	94
4	Heptafluorobutyric acid, hexadec...	438	C20H33F7O2	006385-15-5	94
5	Heptadecyl heptafluorobutyrate	452	C21H35F7O2	959085-66-6	94





Sample Results: **BF142583.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142583.D
Acq On : 30 May 2025 21:42
Operator : RC/JU
Sample : Q2150-02
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-42

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.116	6.5	ng	265837	1	6.898	820738	20.0
Benzophenone	10.645	3.9	ng	224303	3	9.933	1147700	20.0
n-Hexadecanoic ...	11.945	5.0	ng	281753	4	11.422	1125120	20.0
Heptadecyl trif...	13.904	2.9	ng	122975	5	14.068	850896	20.0

Raw Data: **BF142580.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-39	SDG No.:	Q2150
Lab Sample ID:	Q2150-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.7
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142580.D	1	05/30/25 09:50	05/30/25 20:14	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	190	U	190	390	ug/Kg
108-95-2	Phenol	26.3	U	26.3	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	29.0	U	29.0	200	ug/Kg
95-57-8	2-Chlorophenol	29.1	U	29.1	200	ug/Kg
95-48-7	2-Methylphenol	35.6	U	35.6	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	44.7	U	44.7	200	ug/Kg
98-86-2	Acetophenone	35.2	U	35.2	200	ug/Kg
65794-96-9	3+4-Methylphenols	49.0	U	49.0	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	56.5	U	56.5	95.3	ug/Kg
67-72-1	Hexachloroethane	21.0	U	21.0	200	ug/Kg
98-95-3	Nitrobenzene	21.8	U	21.8	200	ug/Kg
78-59-1	Isophorone	39.1	U	39.1	200	ug/Kg
88-75-5	2-Nitrophenol	69.3	U	69.3	200	ug/Kg
105-67-9	2,4-Dimethylphenol	77.2	U	77.2	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	36.7	U	36.7	200	ug/Kg
120-83-2	2,4-Dichlorophenol	33.7	U	33.7	200	ug/Kg
91-20-3	Naphthalene	27.0	U	27.0	200	ug/Kg
106-47-8	4-Chloroaniline	42.2	U	42.2	200	ug/Kg
87-68-3	Hexachlorobutadiene	30.1	U	30.1	200	ug/Kg
105-60-2	Caprolactam	62.1	U	62.1	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	34.2	U	34.2	200	ug/Kg
91-57-6	2-Methylnaphthalene	30.5	U	30.5	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.6	U	23.6	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	34.7	U	34.7	200	ug/Kg
92-52-4	1,1-Biphenyl	26.0	U	26.0	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.8	U	26.8	200	ug/Kg
88-74-4	2-Nitroaniline	57.3	U	57.3	200	ug/Kg
131-11-3	Dimethylphthalate	32.3	U	32.3	200	ug/Kg

Raw Data: **BF142580.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-39	SDG No.:	Q2150
Lab Sample ID:	Q2150-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.7
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142580.D	1	05/30/25 09:50	05/30/25 20:14	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	34.4	U	34.4	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	40.0	U	40.0	200	ug/Kg
99-09-2	3-Nitroaniline	54.8	U	54.8	200	ug/Kg
83-32-9	Acenaphthene	25.4	U	25.4	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	390	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	390	ug/Kg
132-64-9	Dibenzofuran	27.0	U	27.0	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	59.7	U	59.7	200	ug/Kg
84-66-2	Diethylphthalate	33.7	U	33.7	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.8	U	31.8	200	ug/Kg
86-73-7	Fluorene	30.1	U	30.1	200	ug/Kg
100-01-6	4-Nitroaniline	76.5	U	76.5	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	39.2	U	39.2	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.1	U	33.1	200	ug/Kg
118-74-1	Hexachlorobenzene	30.1	U	30.1	200	ug/Kg
1912-24-9	Atrazine	40.5	U	40.5	200	ug/Kg
87-86-5	Pentachlorophenol	61.1	U	61.1	390	ug/Kg
85-01-8	Phenanthrene	96.6	J	24.9	200	ug/Kg
120-12-7	Anthracene	39.7	U	39.7	200	ug/Kg
86-74-8	Carbazole	37.2	U	37.2	200	ug/Kg
84-74-2	Di-n-butylphthalate	57.1	U	57.1	200	ug/Kg
206-44-0	Fluoranthene	130	J	35.7	200	ug/Kg
129-00-0	Pyrene	95.6	J	42.9	200	ug/Kg
85-68-7	Butylbenzylphthalate	85.1	U	85.1	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	43.7	U	43.7	390	ug/Kg
56-55-3	Benzo(a)anthracene	27.4	U	27.4	200	ug/Kg
218-01-9	Chrysene	23.7	U	23.7	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	370		70.5	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	83.1	J	22.6	200	ug/Kg

Raw Data: **BF142580.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-39	SDG No.:	Q2150
Lab Sample ID:	Q2150-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.7
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142580.D	1	05/30/25 09:50	05/30/25 20:14	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	26.7	U	26.7	200	ug/Kg
50-32-8	Benzo(a)pyrene	35.2	U	35.2	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	34.7	U	34.7	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	32.6	U	32.6	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	30.6	U	30.6	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	30.5	U	30.5	200	ug/Kg
123-91-1	1,4-Dioxane	53.9	U	53.9	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	32.6	U	32.6	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	122		18 - 112	81%	SPK: 150
13127-88-3	Phenol-d6	126		15 - 107	84%	SPK: 150
4165-60-0	Nitrobenzene-d5	77.9		18 - 107	78%	SPK: 100
321-60-8	2-Fluorobiphenyl	71.9		20 - 109	72%	SPK: 100
118-79-6	2,4,6-Tribromophenol	124		10 - 116	82%	SPK: 150
1718-51-0	Terphenyl-d14	67.6		10 - 105	68%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	122000	6.898			
1146-65-2	Naphthalene-d8	461000	8.181			
15067-26-2	Acenaphthene-d10	242000	9.933			
1517-22-2	Phenanthrene-d10	399000	11.422			
1719-03-5	Chrysene-d12	235000	14.068			
1520-96-3	Perylene-d12	244000	15.562			
TENTATIVE IDENTIFIED COMPOUNDS						
002916-31-6	1,3-Dioxolane, 2,2-dimethyl-	160	J		2.41	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	430	AB		5.12	ug/Kg
000119-61-9	Benzophenone	260	J		10.7	ug/Kg
000057-10-3	n-Hexadecanoic acid	340	J		12.0	ug/Kg
015594-90-8	1-Heneicosanol	140	J		13.9	ug/Kg

Raw Data: **BF142580.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-39	SDG No.:	Q2150
Lab Sample ID:	Q2150-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.7
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142580.D	1	05/30/25 09:50	05/30/25 20:14	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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: **BF142580.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Quant Time: May 30 22:29:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

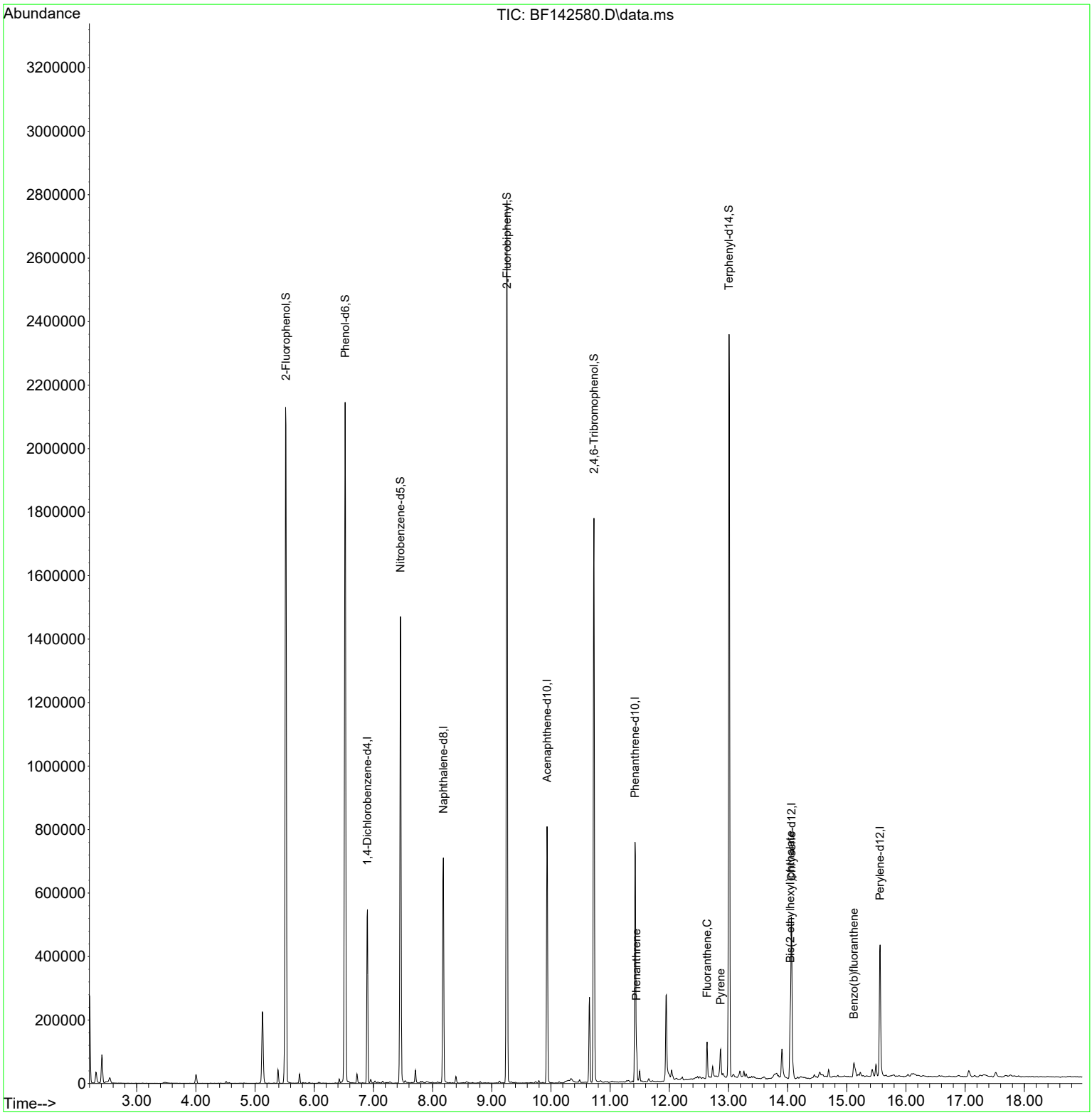
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	122275	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	460916	20.000	ng	0.00
39) Acenaphthene-d10	9.933	164	242076	20.000	ng	-0.01
64) Phenanthrene-d10	11.422	188	399449	20.000	ng	-0.01
76) Chrysene-d12	14.068	240	234709	20.000	ng	0.00
86) Perylene-d12	15.562	264	243865	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.522	112	881832	121.502	ng	0.00
7) Phenol-d6	6.522	99	1097956	125.674	ng	-0.01
23) Nitrobenzene-d5	7.457	82	658106	77.857	ng	-0.02
42) 2,4,6-Tribromophenol	10.727	330	332339	123.696	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	1296910	71.890	ng	-0.01
79) Terphenyl-d14	13.010	244	1161574	67.630	ng	0.00
Target Compounds						Qvalue
71) Phenanthrene	11.445	178	51900	2.431	ng	99
75) Fluoranthene	12.639	202	64278	3.222	ng	99
78) Pyrene	12.868	202	52703	2.407	ng	98
84) Bis(2-ethylhexyl)phtha...	14.045	149	72176	9.319	ng	98
88) Benzo(b)fluoranthene	15.121	252	30210m	2.093	ng	

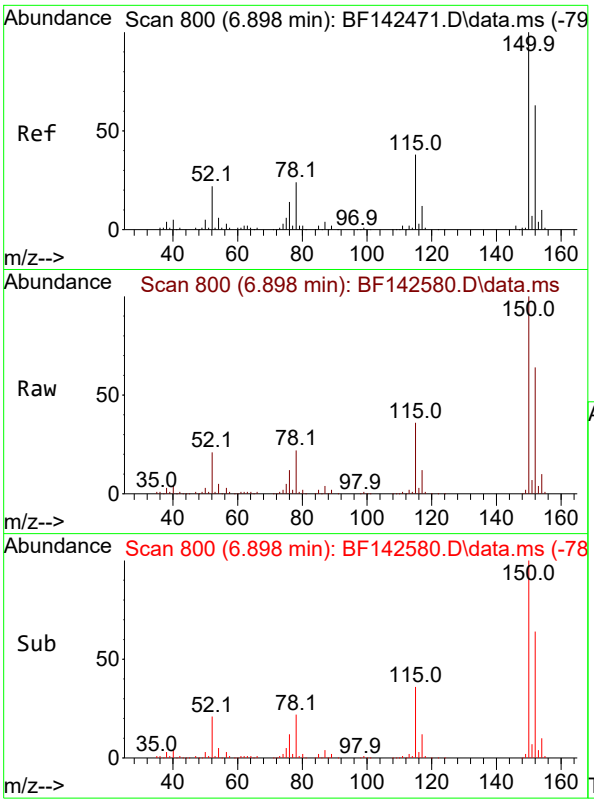
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Quant Time: May 30 22:29:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



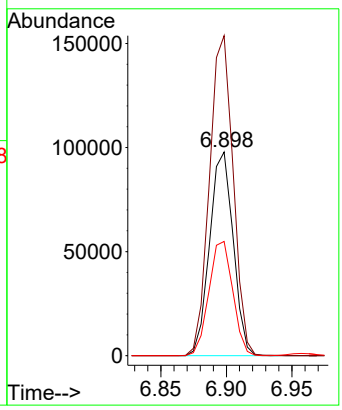


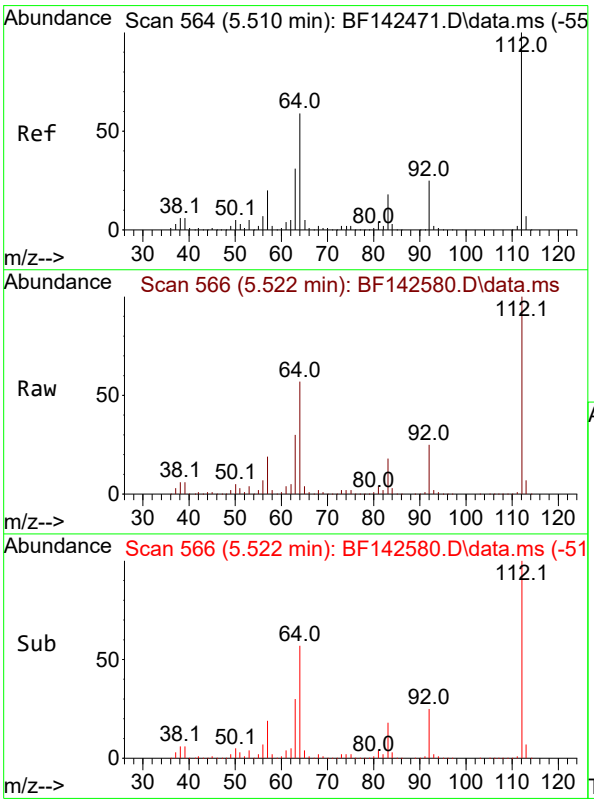
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion:152 Resp: 122275

Ion	Ratio	Lower	Upper
152	100		
150	157.0	128.2	192.4
115	56.0	48.3	72.5

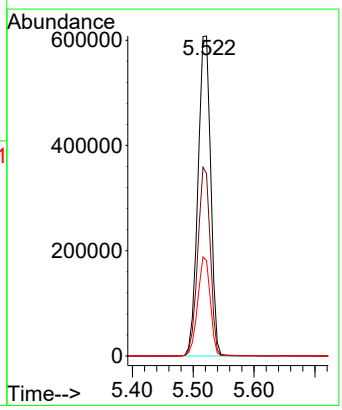


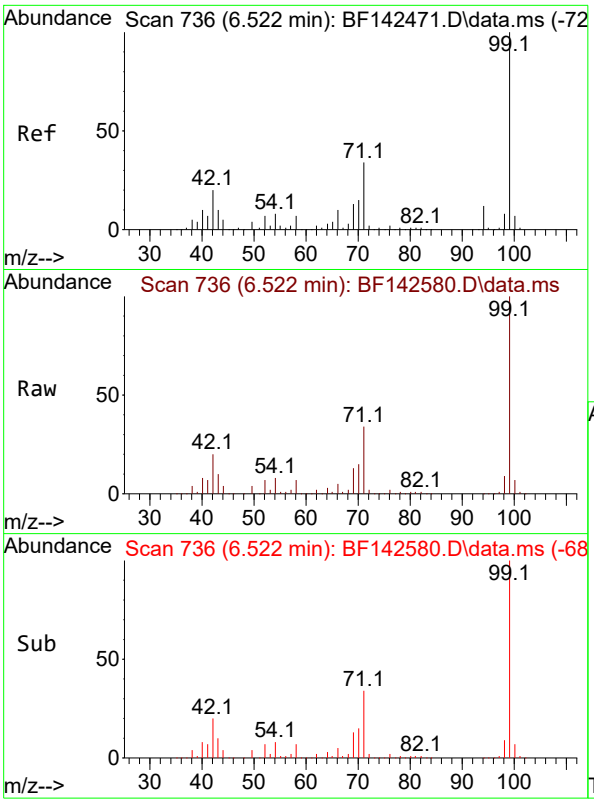


#5
2-Fluorophenol
Concen: 121.502 ng
RT: 5.522 min Scan# 566
Delta R.T. 0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:112 Resp: 881832

Ion	Ratio	Lower	Upper
112	100		
64	57.0	47.5	71.3
63	29.8	24.9	37.3



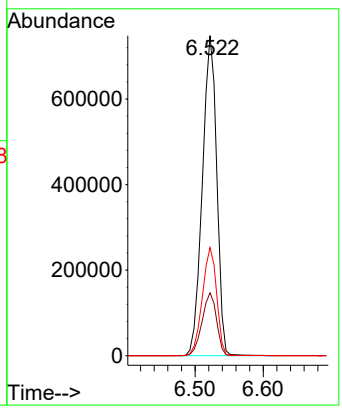


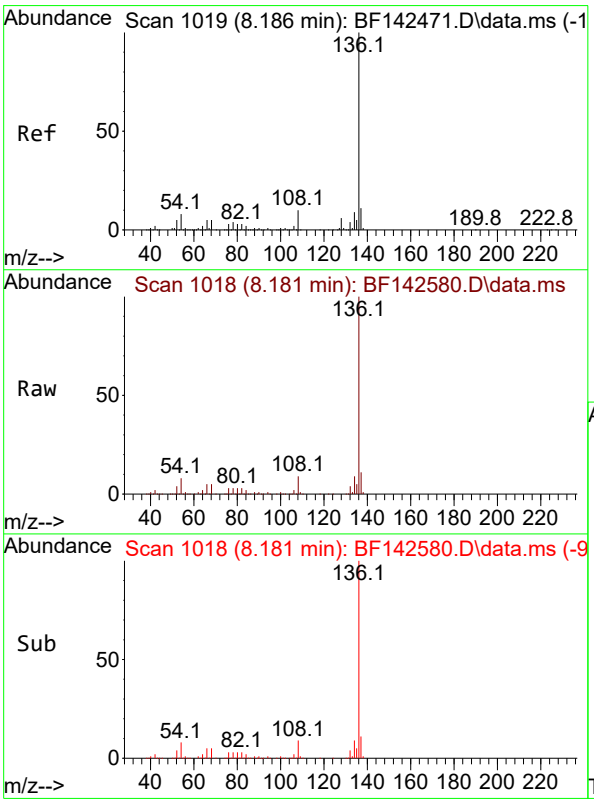
#7
Phenol-d6
Concen: 125.674 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion: 99 Resp: 1097956

Ion	Ratio	Lower	Upper
99	100		
42	19.7	16.2	24.2
71	33.8	27.3	40.9

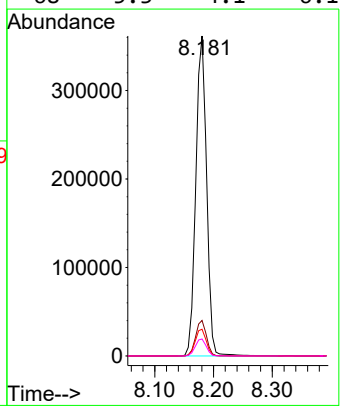


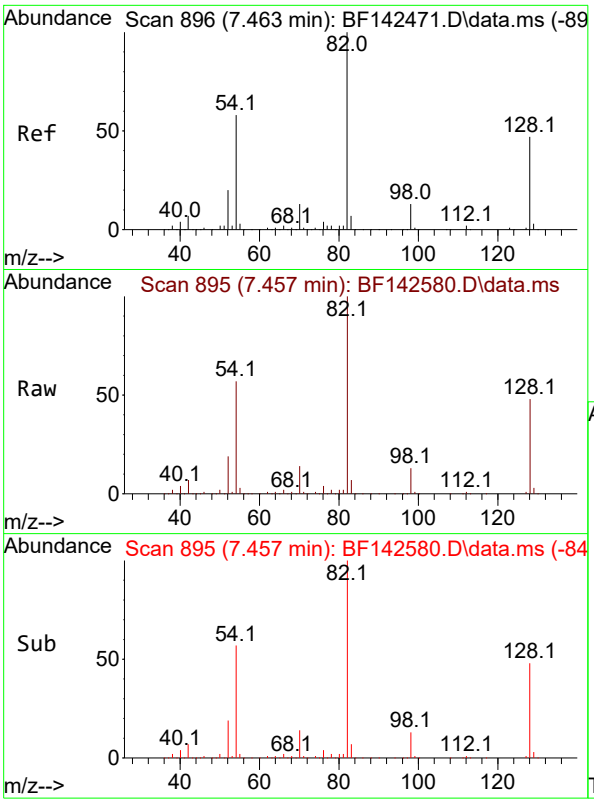


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:136 Resp: 460916

Ion	Ratio	Lower	Upper
136	100		
137	11.1	8.6	13.0
54	8.4	6.6	10.0
68	5.3	4.1	6.1



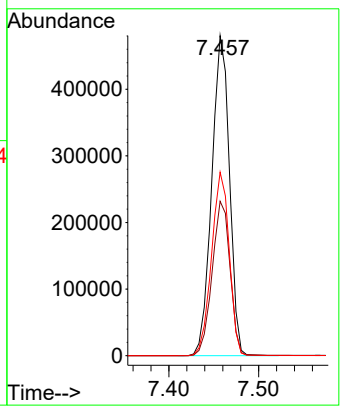


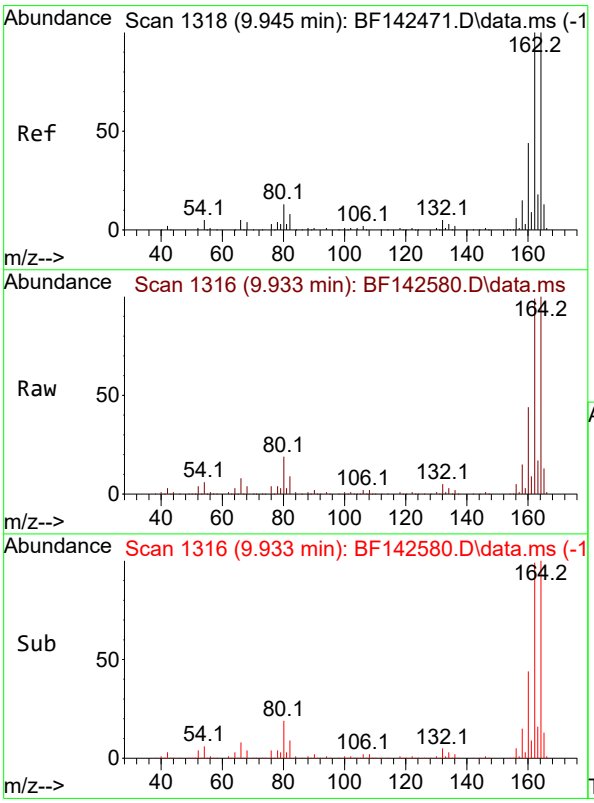
#23
Nitrobenzene-d5
Concen: 77.857 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion: 82 Resp: 658106

Ion	Ratio	Lower	Upper
82	100		
128	48.2	37.4	56.2
54	57.4	46.6	70.0

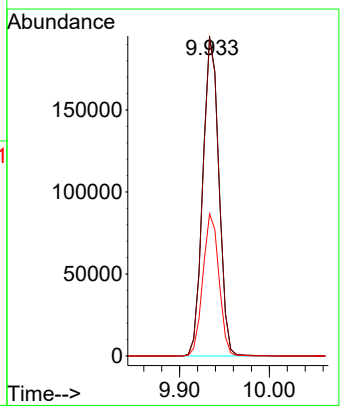


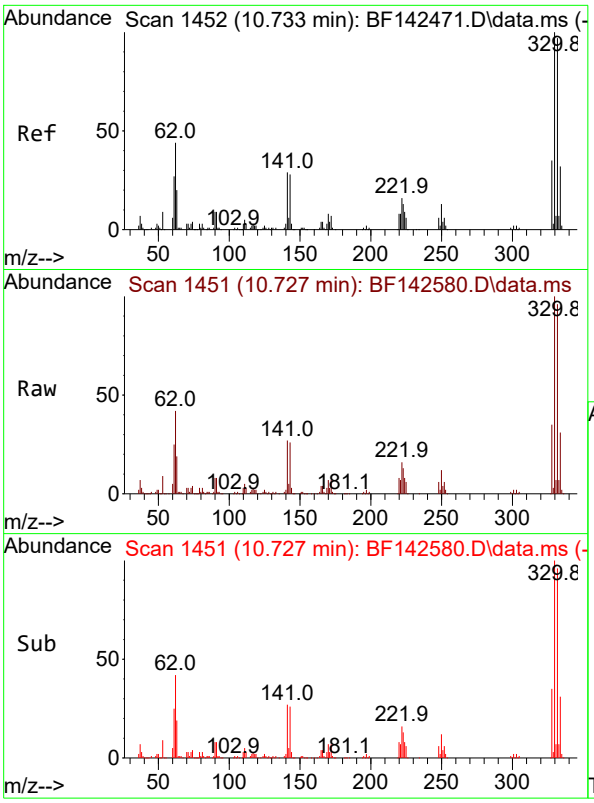


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.933 min Scan# 1316
Delta R.T. -0.012 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:164 Resp: 242076

Ion	Ratio	Lower	Upper
164	100		
162	99.1	80.2	120.4
160	44.4	35.6	53.4



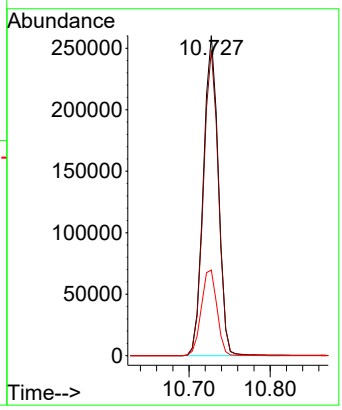


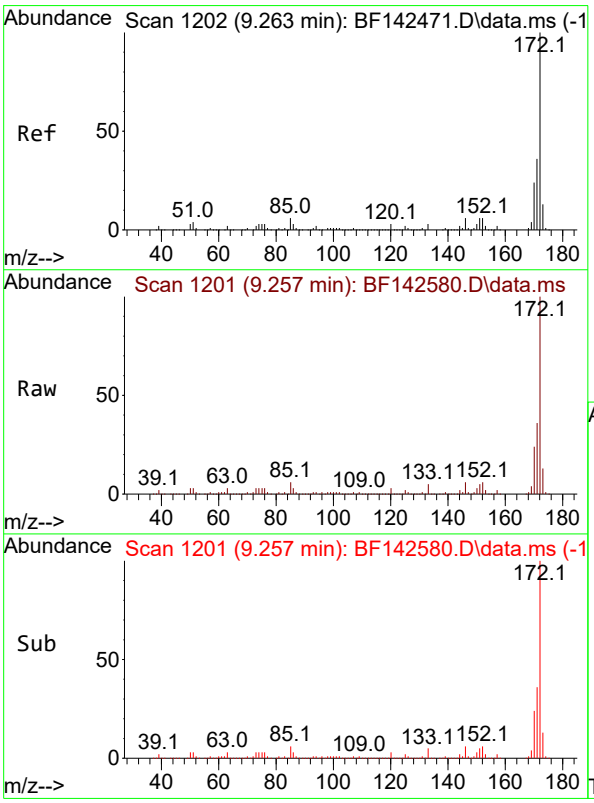
#42
2,4,6-Tribromophenol
Concen: 123.696 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion:330 Resp: 332339

Ion	Ratio	Lower	Upper
330	100		
332	96.0	77.6	116.4
141	28.1	24.6	36.8

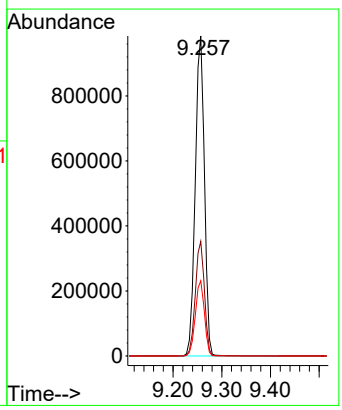


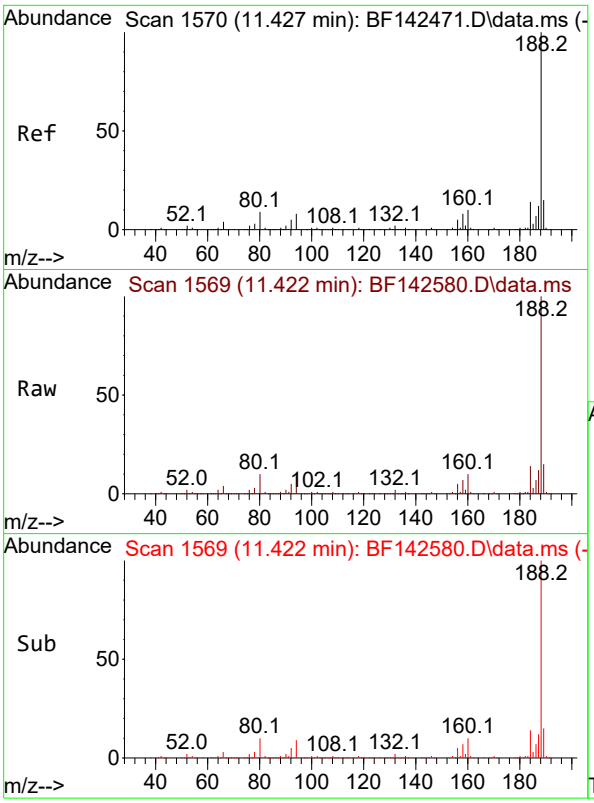


#45
2-Fluorobiphenyl
Concen: 71.890 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:172 Resp: 1296910

Ion	Ratio	Lower	Upper
172	100		
171	35.8	28.6	42.8
170	23.5	18.9	28.3



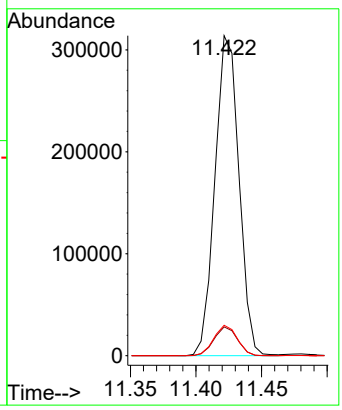


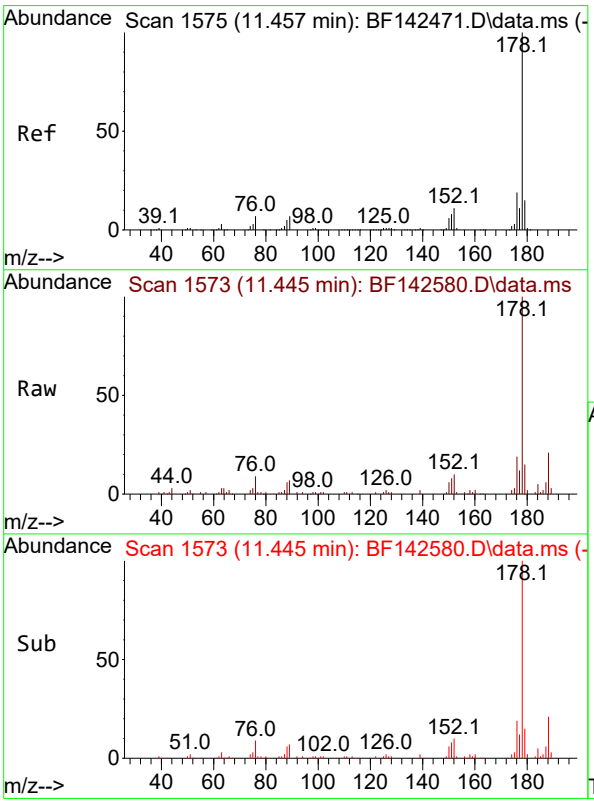
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.422 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion:188 Resp: 399449

Ion	Ratio	Lower	Upper
188	100		
94	9.0	6.6	10.0
80	9.5	7.4	11.0

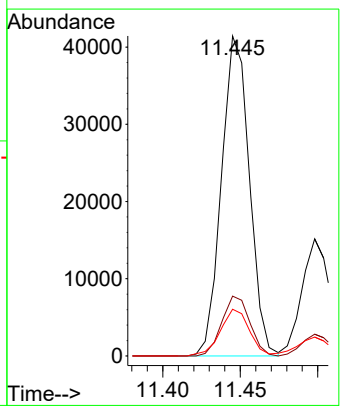


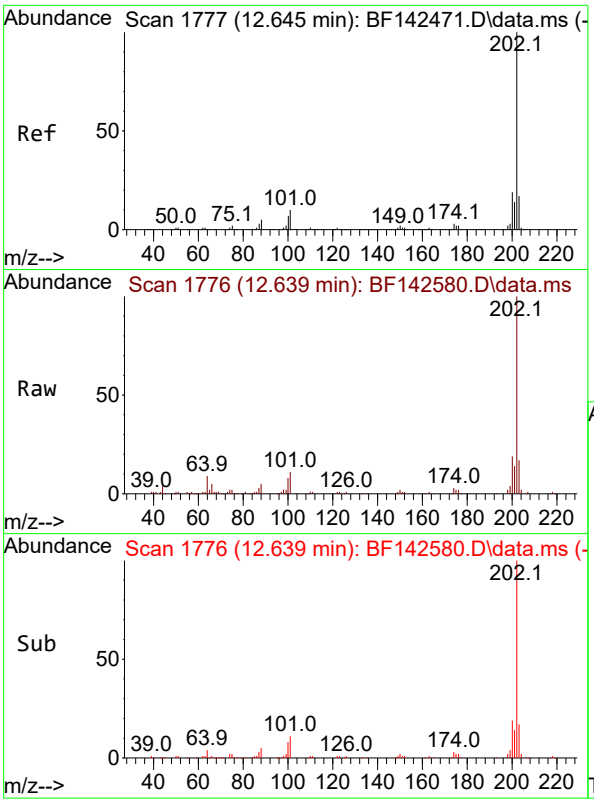


#71
Phenanthrene
Concen: 2.431 ng
RT: 11.445 min Scan# 1573
Delta R.T. -0.012 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:178 Resp: 51900

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.4	23.0
179	14.6	12.3	18.5



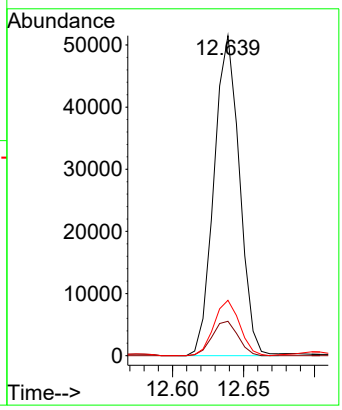


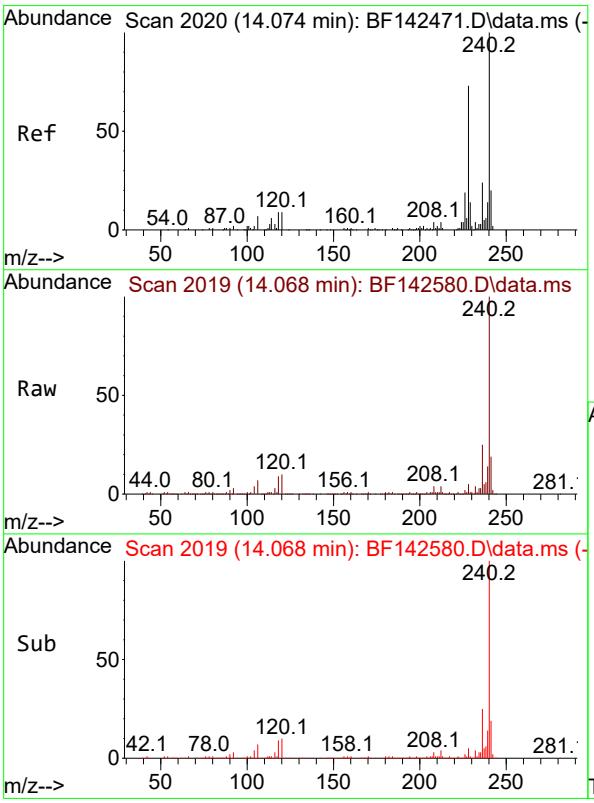
#75
Fluoranthene
Concen: 3.222 ng
RT: 12.639 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion:202 Resp: 64278

Ion	Ratio	Lower	Upper
202	100		
101	10.8	0.0	29.6
203	17.3	0.0	37.2

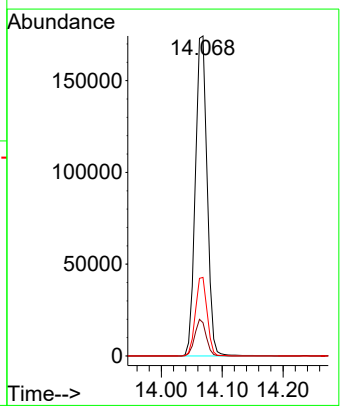


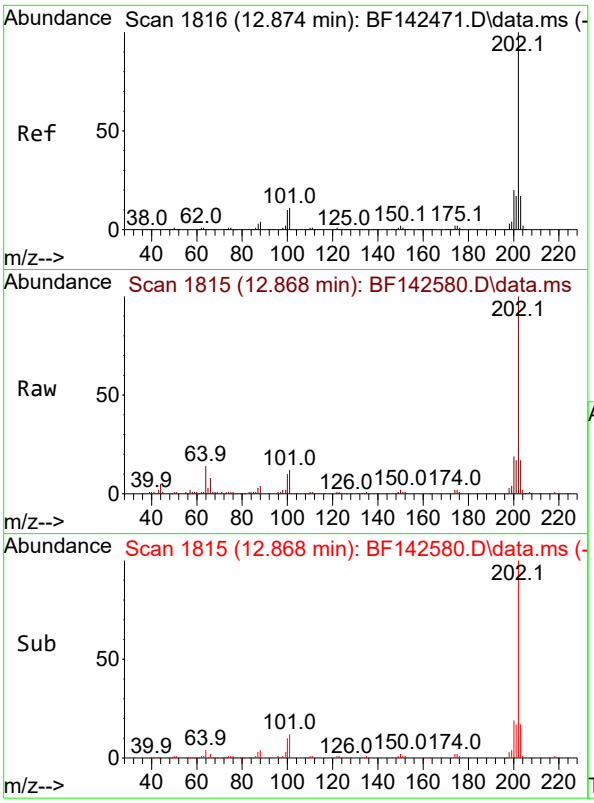


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:240 Resp: 234709

Ion	Ratio	Lower	Upper
240	100		
120	10.4	7.5	11.3
236	24.5	19.6	29.4



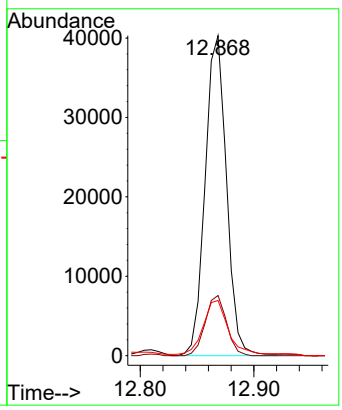


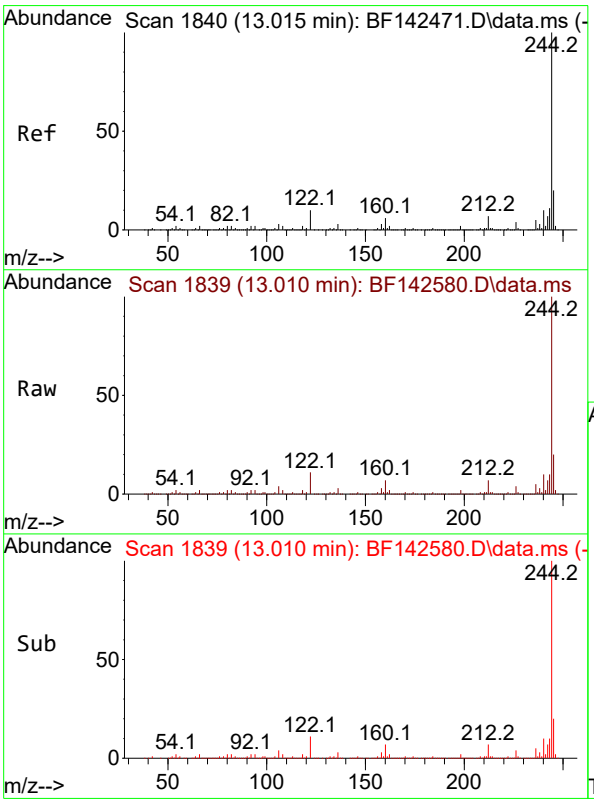
#78
Pyrene
Concen: 2.407 ng
RT: 12.868 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion:202 Resp: 52703

Ion	Ratio	Lower	Upper
202	100		
200	18.8	16.1	24.1
203	17.2	13.9	20.9

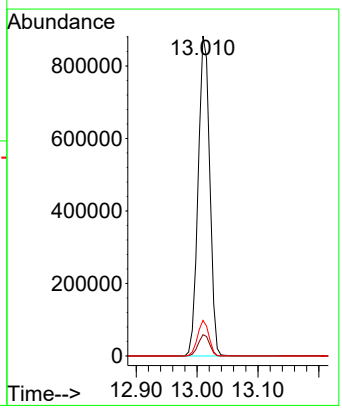


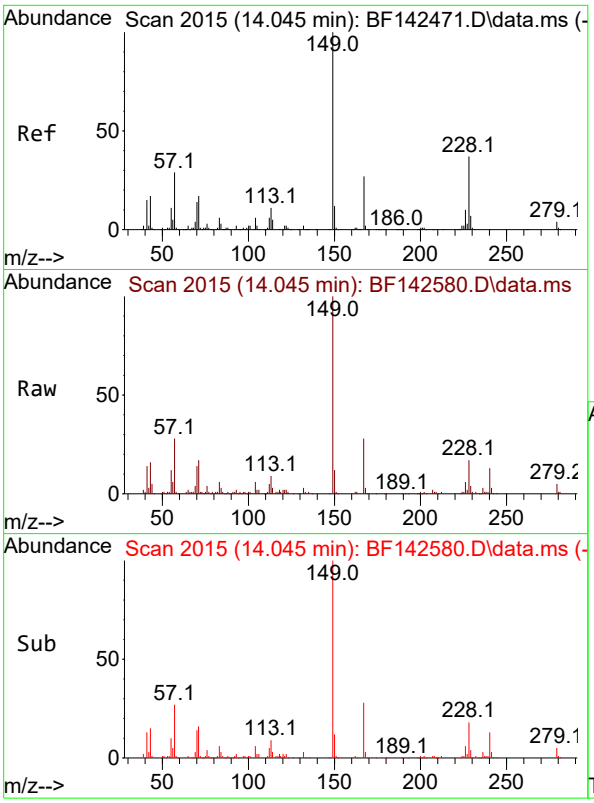


#79
Terphenyl-d14
Concen: 67.630 ng
RT: 13.010 min Scan# 1839
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:244 Resp: 1161574

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.3	7.9
122	11.1	8.2	12.2



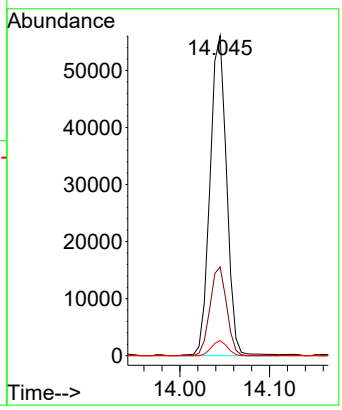


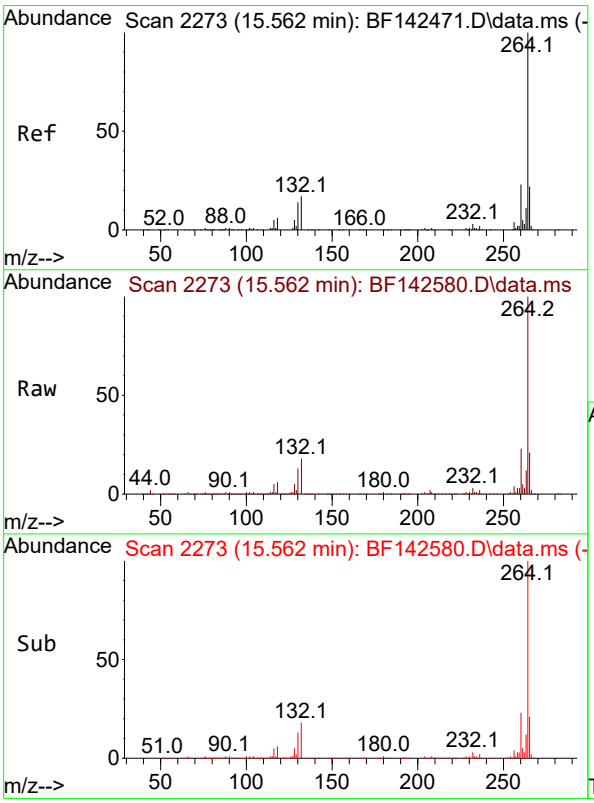
#84
Bis(2-ethylhexyl)phthalate
Concen: 9.319 ng
RT: 14.045 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion:149 Resp: 72176

Ion	Ratio	Lower	Upper
149	100		
167	27.7	21.5	32.3
279	4.7	3.2	4.8

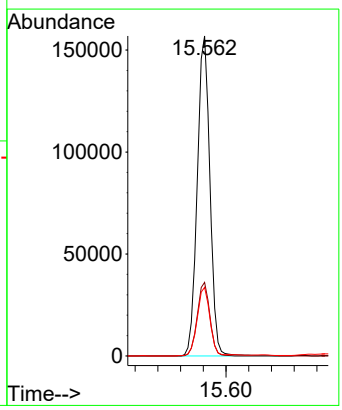


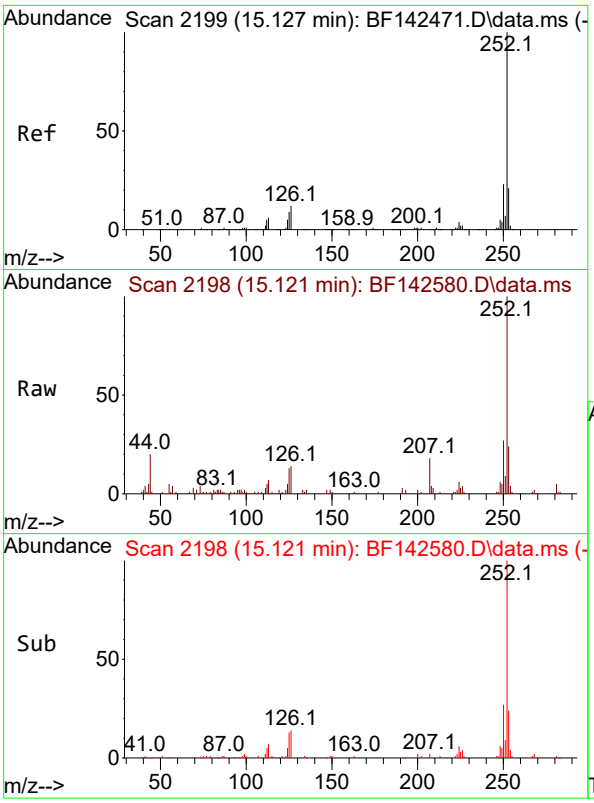


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Tgt Ion:264 Resp: 243865

Ion	Ratio	Lower	Upper
264	100		
260	23.0	18.6	28.0
265	21.5	17.7	26.5



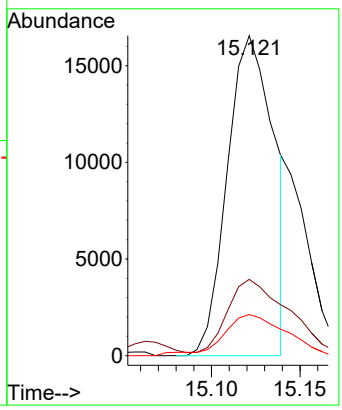


#88
Benzo(b)fluoranthene
Concen: 2.093 ng m
RT: 15.121 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142580.D
Acq: 30 May 2025 20:14

Instrument :
BNA_F
ClientSampleId :
TP-39

Tgt Ion:252 Resp: 30210

Ion	Ratio	Lower	Upper
252	100		
253	23.9	17.0	25.4
125	12.9	7.4	11.0#



Sample Results: **BF142580.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142580.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.310	12	20	31	rBV2	33588	60128	1.64%	0.240%
2	2.410	31	37	44	rVB	88497	140598	3.84%	0.561%
3	4.004	299	308	316	rBV	27508	44396	1.21%	0.177%
4	5.122	487	498	507	rBV	225791	372705	10.18%	1.487%
5	5.387	538	543	548	rVB	42918	53795	1.47%	0.215%
6	5.516	556	565	571	rBV	2129479	3094571	84.54%	12.343%
7	6.522	726	736	741	rBV	2142221	3166768	86.51%	12.631%
8	6.722	765	770	776	rBV2	28795	37009	1.01%	0.148%
9	6.898	794	800	805	rBV	547254	693801	18.95%	2.767%
10	7.457	888	895	900	rBV	1469913	2021148	55.22%	8.061%
11	7.710	933	938	946	rVB	39662	52923	1.45%	0.211%
12	8.181	1012	1018	1032	rVB	709119	910743	24.88%	3.632%
13	9.257	1194	1201	1206	rBV	2780800	3660397	100.00%	14.599%
14	9.933	1311	1316	1328	rVB	807758	1003179	27.41%	4.001%
15	10.651	1432	1438	1445	rBV	268098	334321	9.13%	1.333%
16	10.727	1445	1451	1456	rBV	1776778	2335126	63.79%	9.314%
17	11.422	1564	1569	1578	rBV2	755144	1081310	29.54%	4.313%
18	11.498	1578	1582	1586	rVB	32386	40489	1.11%	0.161%
19	11.951	1650	1659	1670	rBV3	273057	465643	12.72%	1.857%
20	12.039	1670	1674	1682	rVB2	29559	58024	1.59%	0.231%
21	12.639	1771	1776	1781	rBV	115271	149091	4.07%	0.595%
22	12.733	1788	1792	1799	rBV	34064	51446	1.41%	0.205%
23	12.868	1808	1815	1819	rBV2	85115	127187	3.47%	0.507%
24	13.010	1833	1839	1845	rBV	2337381	3054203	83.44%	12.182%
25	13.192	1863	1870	1875	rBV2	19775	36865	1.01%	0.147%
26	13.904	1986	1991	2009	rVB	93928	177374	4.85%	0.707%
27	14.063	2010	2018	2030	rVB2	510537	986172	26.94%	3.933%
28	15.121	2193	2198	2206	rBV	44170	101833	2.78%	0.406%
29	15.492	2256	2261	2266	rBV	36639	55069	1.50%	0.220%
30	15.562	2266	2273	2285	rVV	412791	663248	18.12%	2.645%
31	17.062	2523	2528	2537	rVB2	19244	42728	1.17%	0.170%

Sum of corrected areas: 25072290

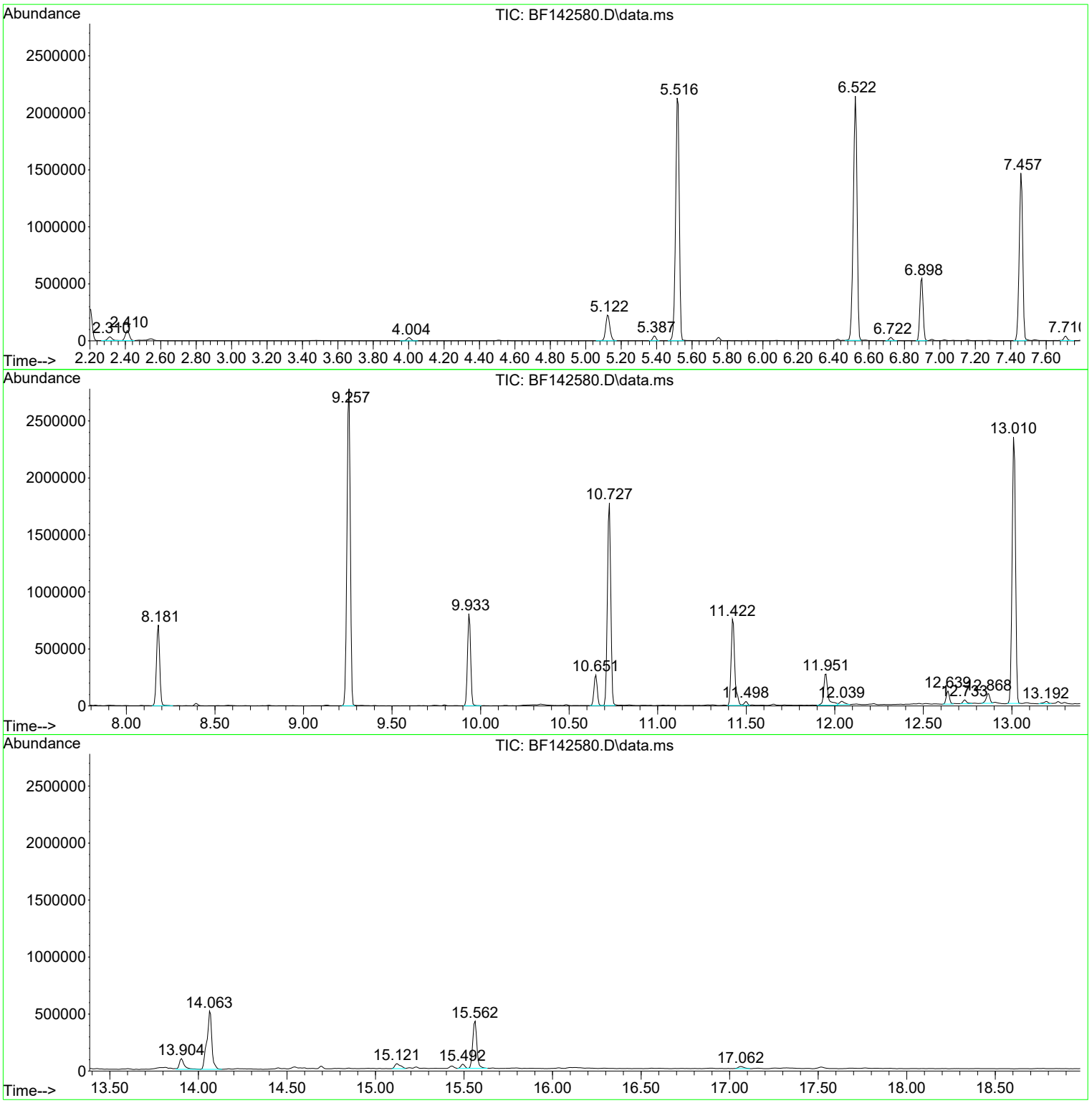
Sample Results: **BF142580.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

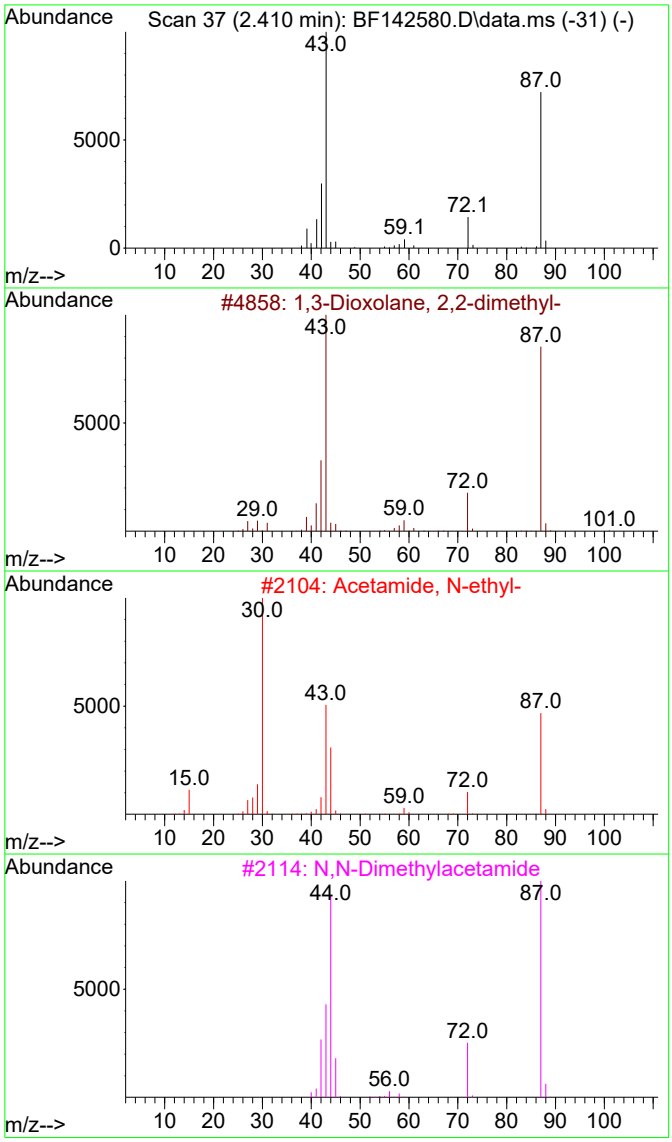
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

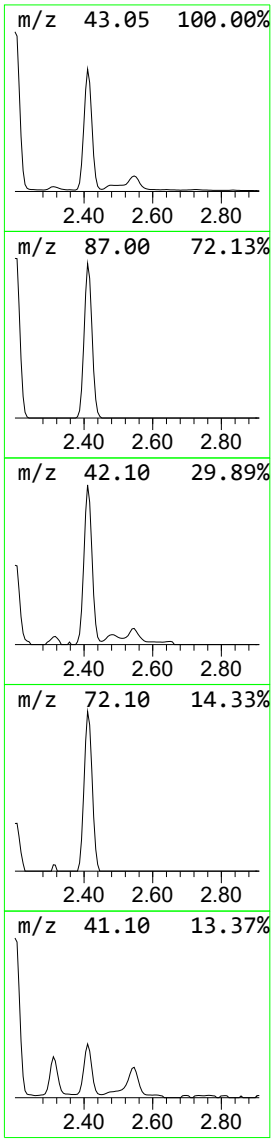
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 1,3-Dioxolane, 2,2-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.410	4.05 ng	140598	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Dioxolane, 2,2-dimethyl-	102	C5H10O2	002916-31-6	90
2	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	64
3	N,N-Dimethylacetamide	87	C4H9NO	000127-19-5	47
4	2-Propanone, O-methyloxime	87	C4H9NO	003376-35-0	43
5	Ethanol, 2,2'-oxybis-, diacetate	190	C8H14O5	000628-68-2	38





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

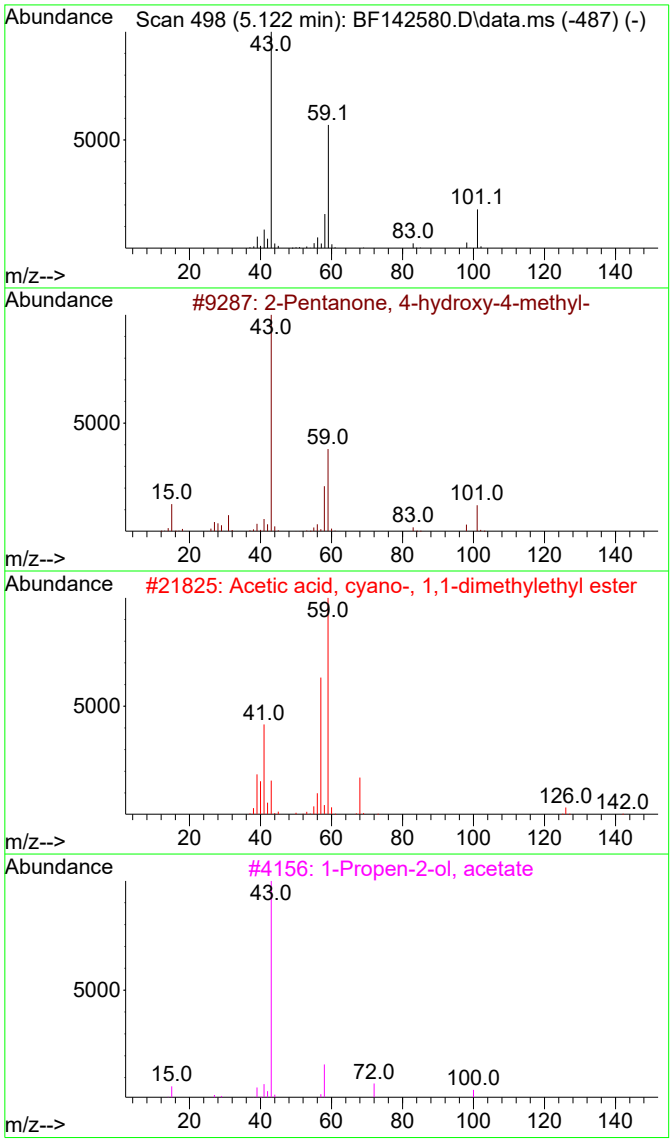
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

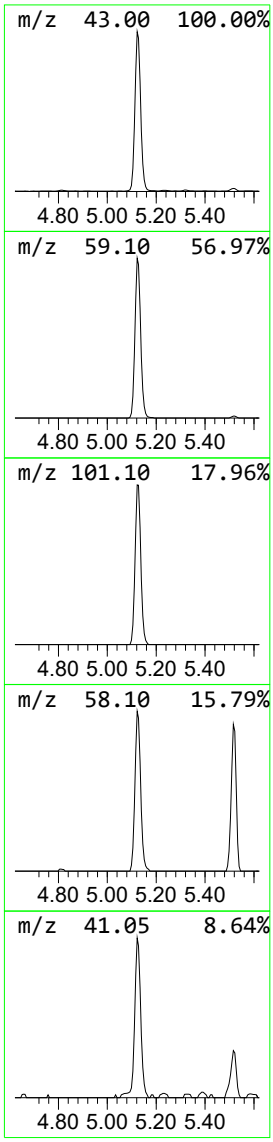
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.122	10.74 ng	372705	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25
3	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
4	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	9
5	Ethanol, pentamethyl-	116	C7H16O	000594-83-2	9





Sample Results: **BF142580.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

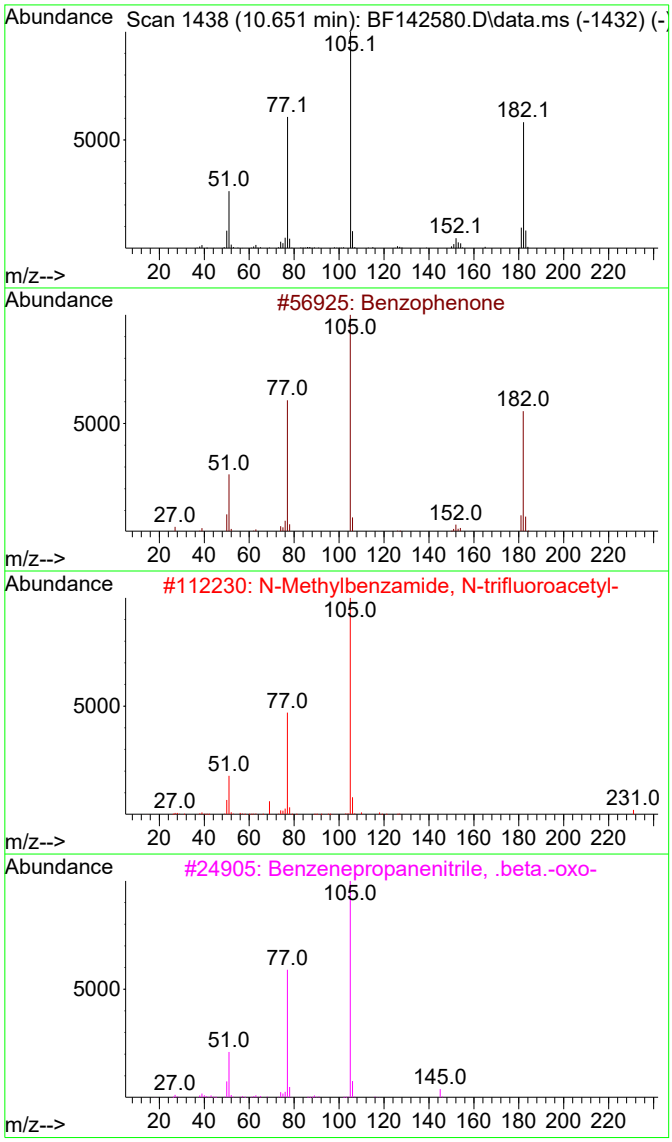
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

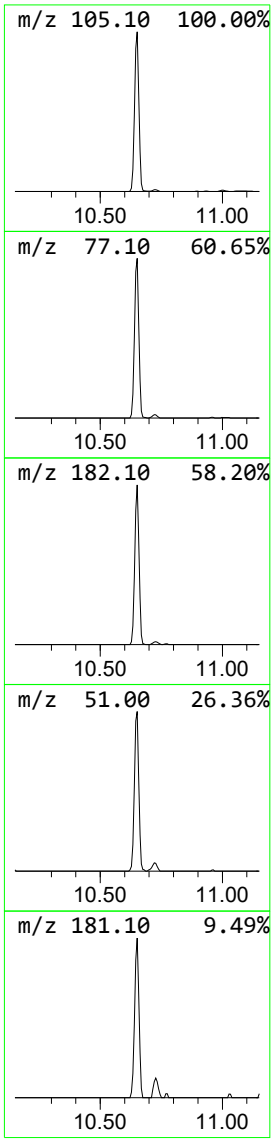
****

Peak Number 3 Benzophenone Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.651	6.67 ng	334321	Acenaphthene-d10	9.933

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	N-Methylbenzamide, N-trifluoroac...	231	C10H8F3NO2	1000446-91-5	47
3	Benzenepropanenitrile, .beta.-oxo-	145	C9H7NO	000614-16-4	47
4	Benzenebutanoic acid, .gamma.-oxo-	178	C10H10O3	002051-95-8	47
5	acetic acid, 2-bromo-, 2-oxo-2-p...	256	C10H9BrO3	1000401-50-0	47





Sample Results: **BF142580.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

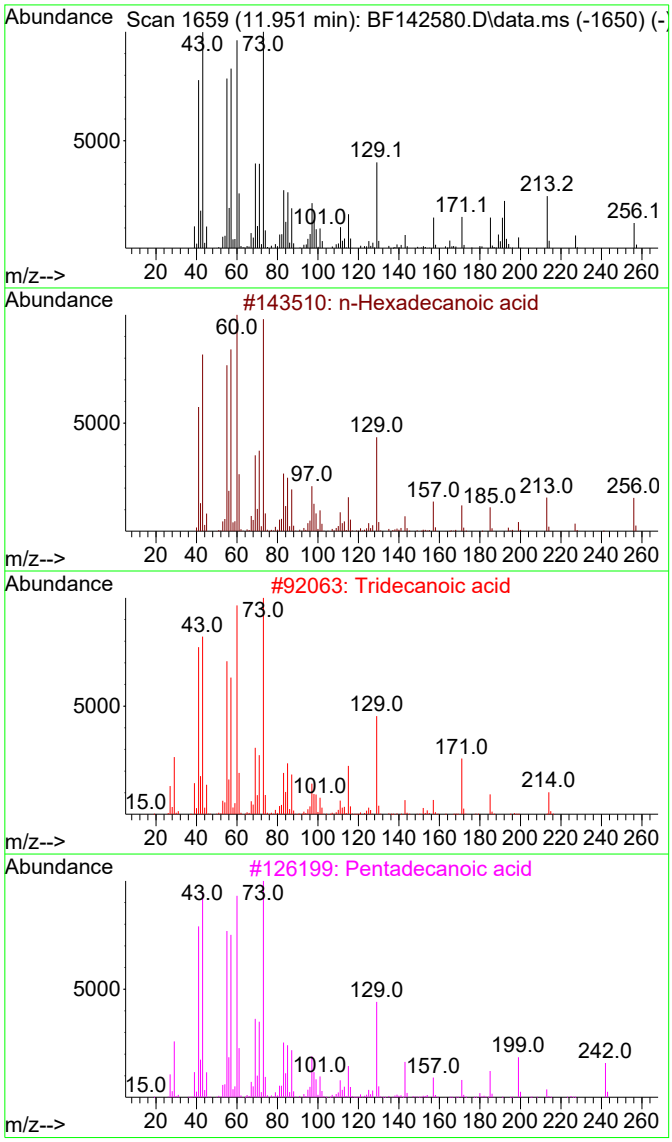
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

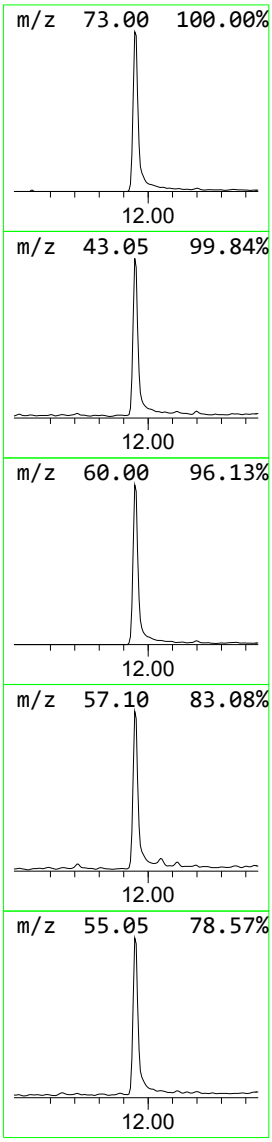
****

Peak Number 4 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.951	8.61 ng	465643	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	91
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	90
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	74
5	n-Decanoic acid	172	C10H20O2	000334-48-5	60





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

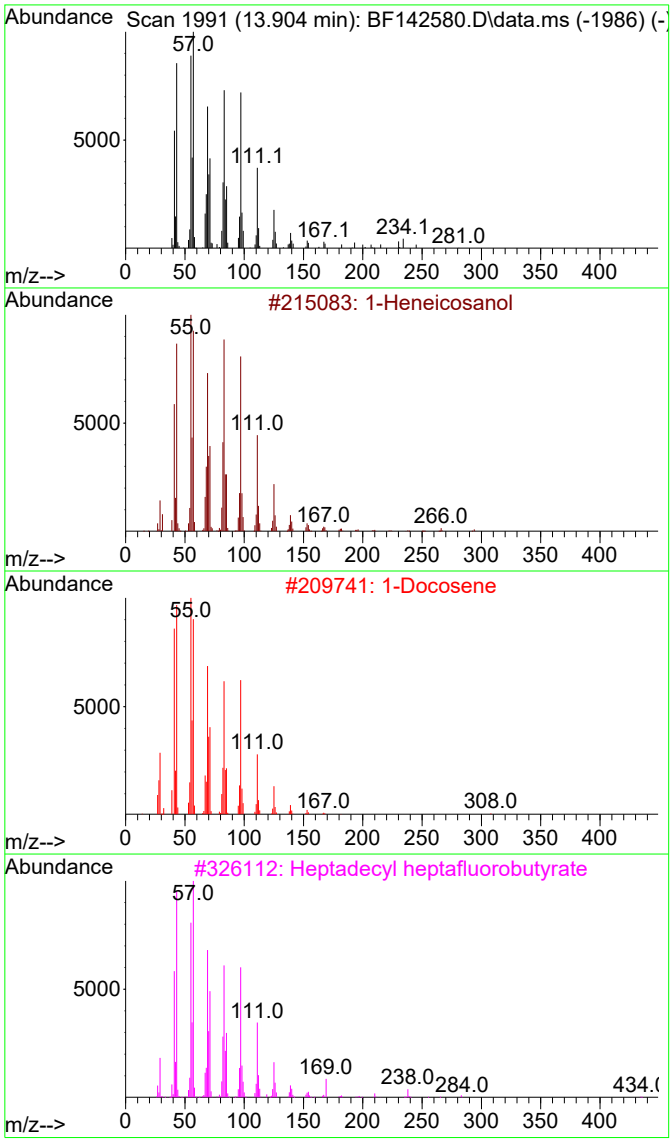
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

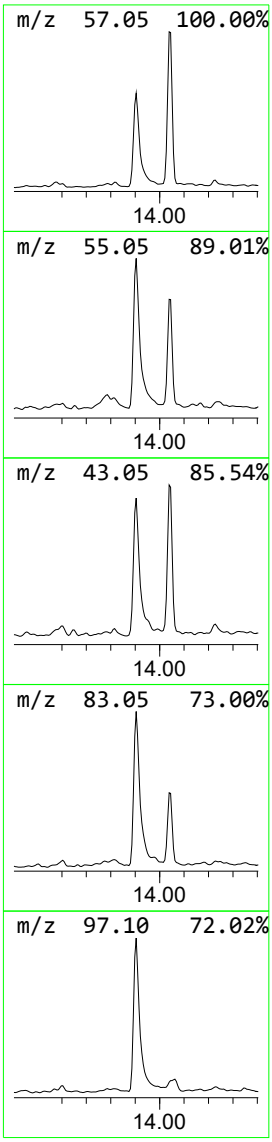
****

Peak Number 5 1-Heneicosanol Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.904	3.60 ng	177374	Chrysene-d12	14.068

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Heneicosanol	312	C21H44O	015594-90-8	95
2	1-Docosene	308	C22H44	001599-67-3	94
3	Heptadecyl heptafluorobutyrate	452	C21H35F7O2	959085-66-6	94
4	Octadecyl trifluoroacetate	366	C20H37F3O2	079392-43-1	94
5	n-Tetracosanol-1	354	C24H50O	000506-51-4	93





Sample Results: **BF142580.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142580.D
Acq On : 30 May 2025 20:14
Operator : RC/JU
Sample : Q2150-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-39

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1,3-Dioxolane, ...	2.410	4.0	ng	140598	1	6.898	693801	20.0
2-Pentanone, 4-...	5.122	10.7	ng	372705	1	6.898	693801	20.0
Benzophenone	10.651	6.7	ng	334321	3	9.933	1003180	20.0
n-Hexadecanoic ...	11.951	8.6	ng	465643	4	11.422	1081310	20.0
1-Heneicosanol	13.904	3.6	ng	177374	5	14.068	986172	20.0

Raw Data: **BF142581.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-48	SDG No.:	Q2150
Lab Sample ID:	Q2150-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	80.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142581.D	1	05/30/25 09:50	05/30/25 20:43	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	190	U	190	410	ug/Kg
108-95-2	Phenol	27.3	U	27.3	210	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	30.1	U	30.1	210	ug/Kg
95-57-8	2-Chlorophenol	30.2	U	30.2	210	ug/Kg
95-48-7	2-Methylphenol	37.0	U	37.0	210	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	46.4	U	46.4	210	ug/Kg
98-86-2	Acetophenone	36.5	U	36.5	210	ug/Kg
65794-96-9	3+4-Methylphenols	50.8	U	50.8	410	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	58.6	U	58.6	99.0	ug/Kg
67-72-1	Hexachloroethane	21.8	U	21.8	210	ug/Kg
98-95-3	Nitrobenzene	22.6	U	22.6	210	ug/Kg
78-59-1	Isophorone	40.6	U	40.6	210	ug/Kg
88-75-5	2-Nitrophenol	72.0	U	72.0	210	ug/Kg
105-67-9	2,4-Dimethylphenol	80.2	U	80.2	210	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	38.1	U	38.1	210	ug/Kg
120-83-2	2,4-Dichlorophenol	35.0	U	35.0	210	ug/Kg
91-20-3	Naphthalene	28.1	U	28.1	210	ug/Kg
106-47-8	4-Chloroaniline	43.8	U	43.8	210	ug/Kg
87-68-3	Hexachlorobutadiene	31.3	U	31.3	210	ug/Kg
105-60-2	Caprolactam	64.5	U	64.5	410	ug/Kg
59-50-7	4-Chloro-3-methylphenol	35.5	U	35.5	210	ug/Kg
91-57-6	2-Methylnaphthalene	31.7	U	31.7	210	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	410	ug/Kg
88-06-2	2,4,6-Trichlorophenol	24.5	U	24.5	210	ug/Kg
95-95-4	2,4,5-Trichlorophenol	36.0	U	36.0	210	ug/Kg
92-52-4	1,1-Biphenyl	27.0	U	27.0	210	ug/Kg
91-58-7	2-Chloronaphthalene	27.8	U	27.8	210	ug/Kg
88-74-4	2-Nitroaniline	59.5	U	59.5	210	ug/Kg
131-11-3	Dimethylphthalate	33.5	U	33.5	210	ug/Kg

Raw Data: **BF142581.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-48	SDG No.:	Q2150
Lab Sample ID:	Q2150-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	80.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142581.D	1	05/30/25 09:50	05/30/25 20:43	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	35.8	U	35.8	210	ug/Kg
606-20-2	2,6-Dinitrotoluene	41.6	U	41.6	210	ug/Kg
99-09-2	3-Nitroaniline	56.9	U	56.9	210	ug/Kg
83-32-9	Acenaphthene	26.4	U	26.4	210	ug/Kg
51-28-5	2,4-Dinitrophenol	280	U	280	410	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	410	ug/Kg
132-64-9	Dibenzofuran	28.1	U	28.1	210	ug/Kg
121-14-2	2,4-Dinitrotoluene	62.0	U	62.0	210	ug/Kg
84-66-2	Diethylphthalate	35.0	U	35.0	210	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.0	U	33.0	210	ug/Kg
86-73-7	Fluorene	31.3	U	31.3	210	ug/Kg
100-01-6	4-Nitroaniline	79.4	U	79.4	210	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	130	U	130	410	ug/Kg
86-30-6	n-Nitrosodiphenylamine	40.7	U	40.7	210	ug/Kg
101-55-3	4-Bromophenyl-phenylether	34.4	U	34.4	210	ug/Kg
118-74-1	Hexachlorobenzene	31.3	U	31.3	210	ug/Kg
1912-24-9	Atrazine	42.1	U	42.1	210	ug/Kg
87-86-5	Pentachlorophenol	63.5	U	63.5	410	ug/Kg
85-01-8	Phenanthrene	25.9	U	25.9	210	ug/Kg
120-12-7	Anthracene	41.2	U	41.2	210	ug/Kg
86-74-8	Carbazole	38.6	U	38.6	210	ug/Kg
84-74-2	Di-n-butylphthalate	59.3	U	59.3	210	ug/Kg
206-44-0	Fluoranthene	37.1	U	37.1	210	ug/Kg
129-00-0	Pyrene	44.5	U	44.5	210	ug/Kg
85-68-7	Butylbenzylphthalate	88.3	U	88.3	210	ug/Kg
91-94-1	3,3-Dichlorobenzidine	45.4	U	45.4	410	ug/Kg
56-55-3	Benzo(a)anthracene	28.5	U	28.5	210	ug/Kg
218-01-9	Chrysene	24.6	U	24.6	210	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	73.2	U	73.2	210	ug/Kg
117-84-0	Di-n-octyl phthalate	110	U	110	410	ug/Kg
205-99-2	Benzo(b)fluoranthene	23.5	U	23.5	210	ug/Kg

Raw Data: **BF142581.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-48	SDG No.:	Q2150
Lab Sample ID:	Q2150-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	80.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142581.D	1	05/30/25 09:50	05/30/25 20:43	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	27.7	U	27.7	210	ug/Kg
50-32-8	Benzo(a)pyrene	36.5	U	36.5	210	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	36.0	U	36.0	210	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.9	U	33.9	210	ug/Kg
191-24-2	Benzo(g,h,i)perylene	31.8	U	31.8	210	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	31.7	U	31.7	210	ug/Kg
123-91-1	1,4-Dioxane	55.9	U	55.9	210	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.9	U	33.9	210	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	128		18 - 112	85%	SPK: 150
13127-88-3	Phenol-d6	130		15 - 107	87%	SPK: 150
4165-60-0	Nitrobenzene-d5	83.0		18 - 107	83%	SPK: 100
321-60-8	2-Fluorobiphenyl	74.0		20 - 109	74%	SPK: 100
118-79-6	2,4,6-Tribromophenol	128		10 - 116	85%	SPK: 150
1718-51-0	Terphenyl-d14	67.5		10 - 105	67%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	128000	6.898			
1146-65-2	Naphthalene-d8	479000	8.181			
15067-26-2	Acenaphthene-d10	252000	9.933			
1517-22-2	Phenanthrene-d10	420000	11.421			
1719-03-5	Chrysene-d12	240000	14.068			
1520-96-3	Perylene-d12	261000	15.562			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	460	AB		5.13	ug/Kg
000119-61-9	Benzophenone	280	J		10.7	ug/Kg
000057-10-3	n-Hexadecanoic acid	430	J		12.0	ug/Kg
959085-66-6	Heptadecyl heptafluorobutyrate	180	J		13.9	ug/Kg

Raw Data: **BF142581.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-48	SDG No.:	Q2150
Lab Sample ID:	Q2150-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	80.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142581.D	1	05/30/25 09:50	05/30/25 20:43	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

Quant Time: May 30 22:29:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

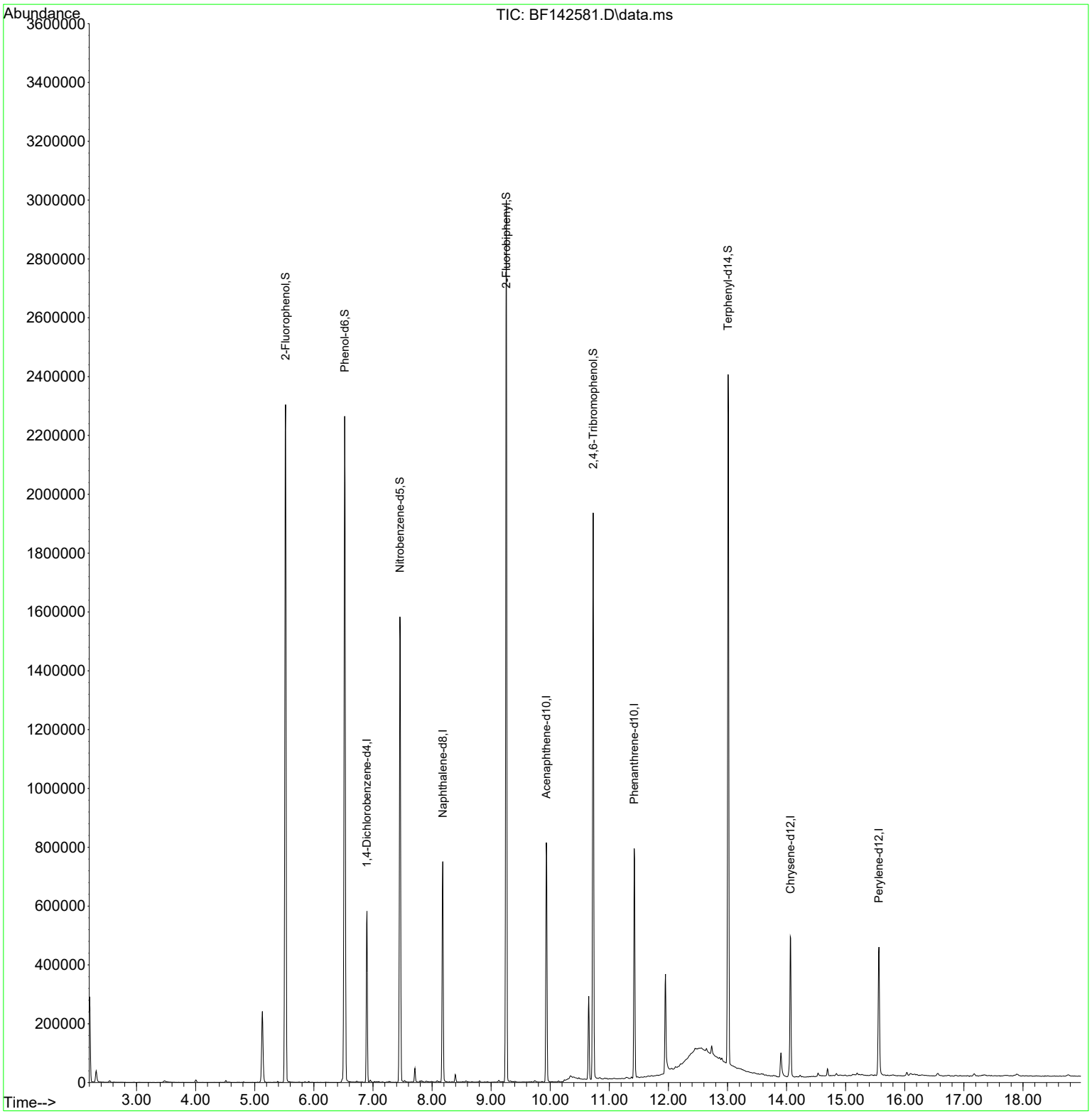
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	128466	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	478682	20.000	ng	0.00
39) Acenaphthene-d10	9.933	164	251559	20.000	ng	-0.01
64) Phenanthrene-d10	11.421	188	419835	20.000	ng	-0.01
76) Chrysene-d12	14.068	240	239865	20.000	ng	0.00
86) Perylene-d12	15.562	264	260798	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.522	112	973305	127.643	ng	0.00
7) Phenol-d6	6.522	99	1194091	130.091	ng	-0.01
23) Nitrobenzene-d5	7.457	82	728299	82.964	ng	-0.02
42) 2,4,6-Tribromophenol	10.727	330	357324	127.982	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	1386957	73.983	ng	-0.01
79) Terphenyl-d14	13.010	244	1184744	67.497	ng	0.00
Target Compounds						Qvalue

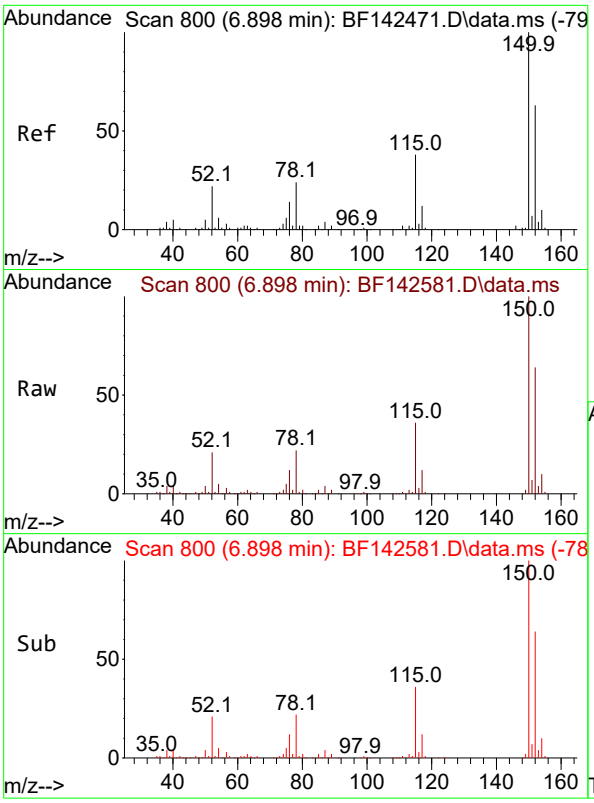
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

Quant Time: May 30 22:29:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



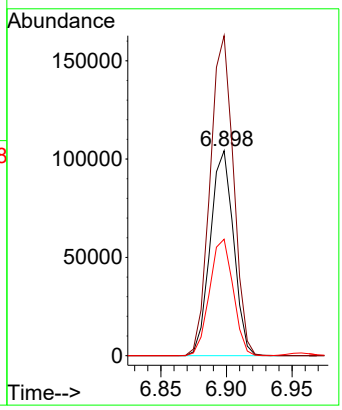


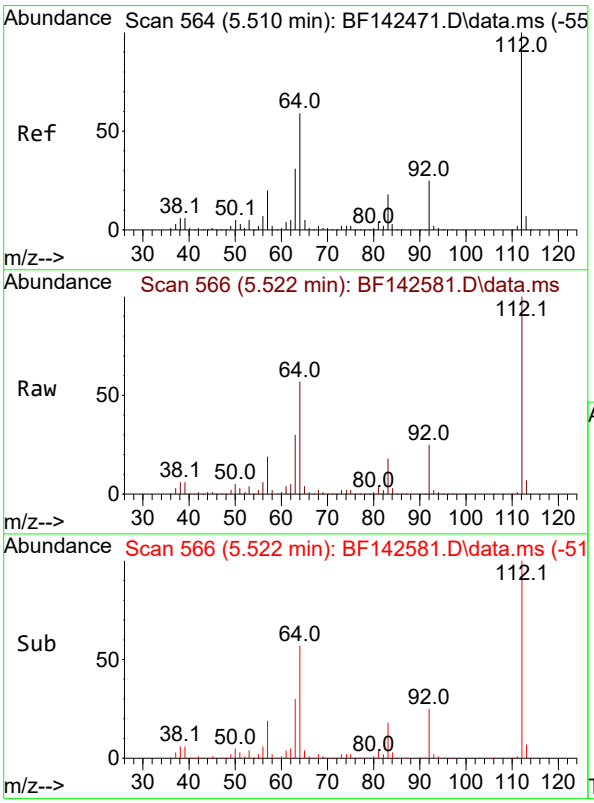
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Instrument :
BNA_F
ClientSampleId :
TP-48

Tgt Ion:152 Resp: 128466

Ion	Ratio	Lower	Upper
152	100		
150	156.1	128.2	192.4
115	56.8	48.3	72.5

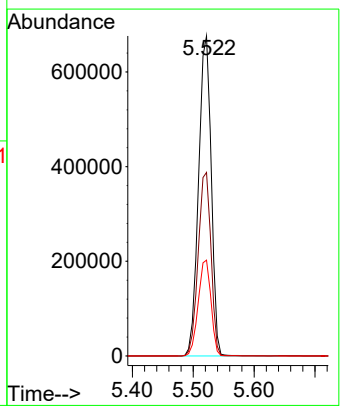


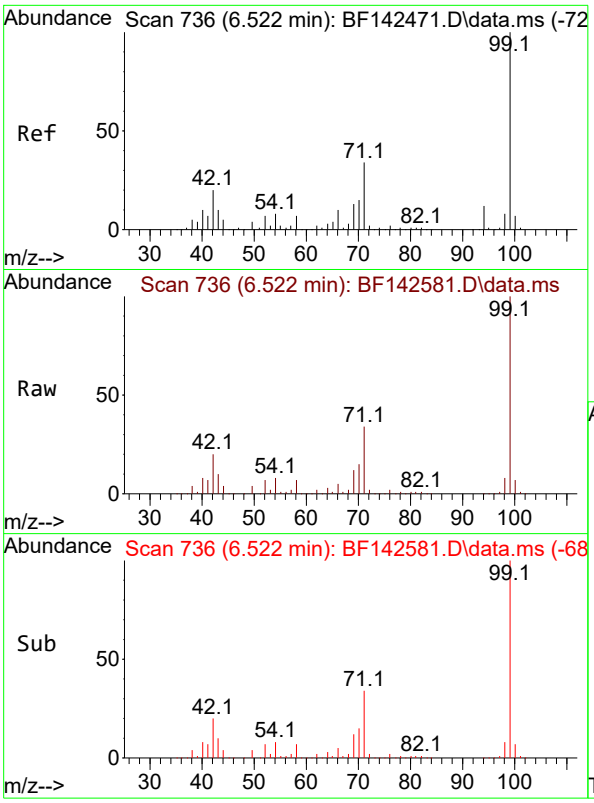


#5
2-Fluorophenol
Concen: 127.643 ng
RT: 5.522 min Scan# 566
Delta R.T. 0.006 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Tgt Ion:112 Resp: 973305

Ion	Ratio	Lower	Upper
112	100		
64	57.3	47.5	71.3
63	30.0	24.9	37.3



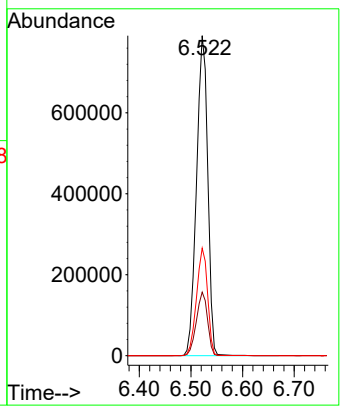


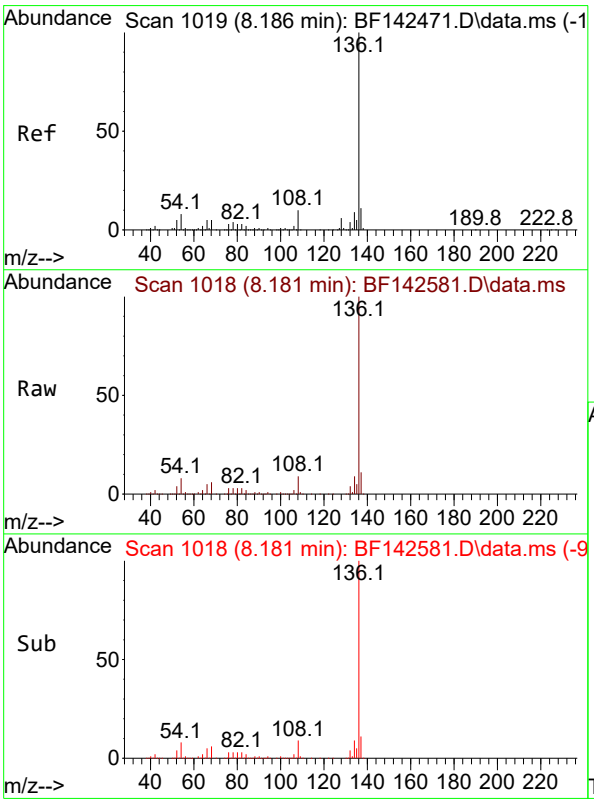
#7
Phenol-d6
Concen: 130.091 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Instrument :
BNA_F
ClientSampleId :
TP-48

Tgt Ion: 99 Resp: 1194091

Ion	Ratio	Lower	Upper
99	100		
42	19.8	16.2	24.2
71	33.6	27.3	40.9

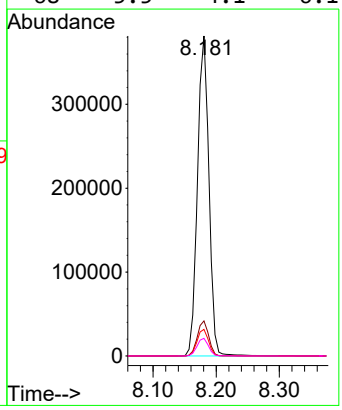


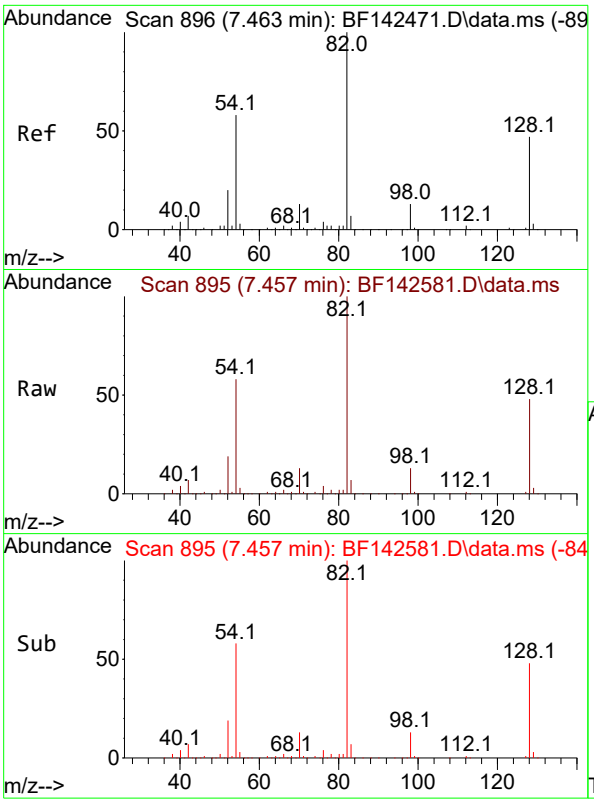


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Tgt Ion:136 Resp: 478682

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	8.3	6.6	10.0
68	5.5	4.1	6.1



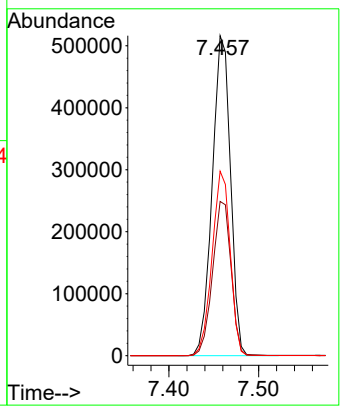


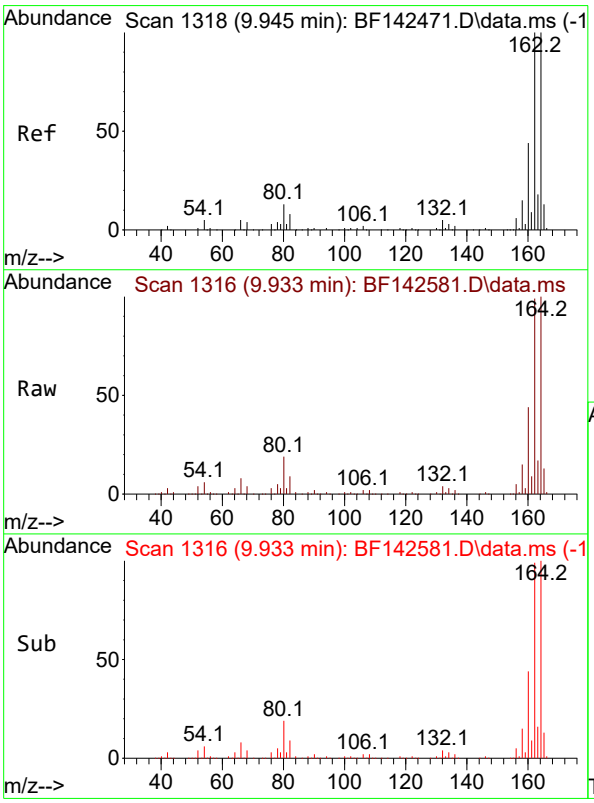
#23
Nitrobenzene-d5
Concen: 82.964 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Instrument :
BNA_F
ClientSampleId :
TP-48

Tgt Ion: 82 Resp: 728299

Ion	Ratio	Lower	Upper
82	100		
128	48.2	37.4	56.2
54	57.6	46.6	70.0

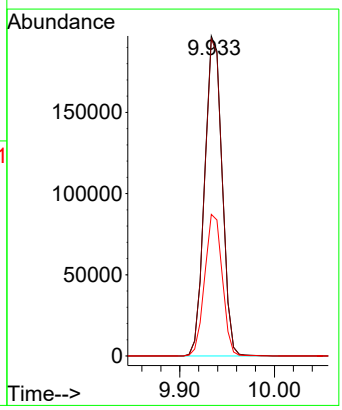


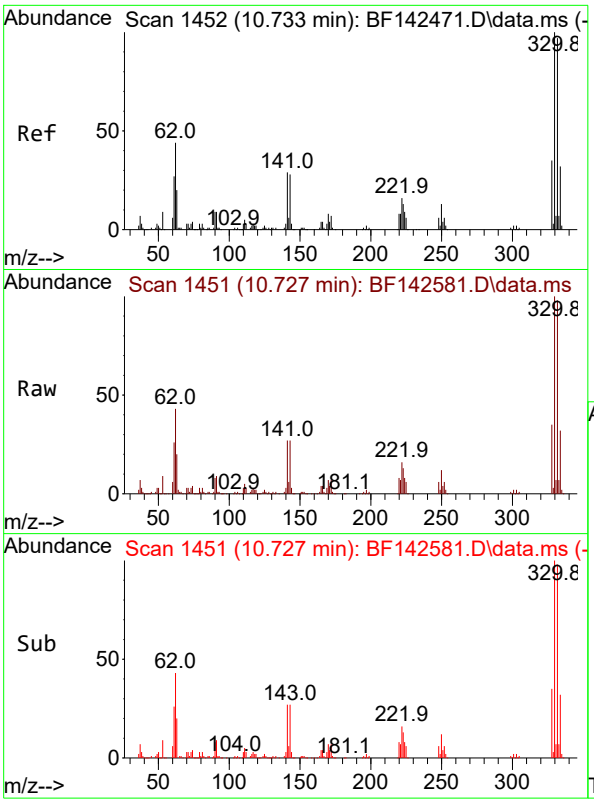


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.933 min Scan# 1316
Delta R.T. -0.012 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Tgt Ion:164 Resp: 251559

Ion	Ratio	Lower	Upper
164	100		
162	99.1	80.2	120.4
160	44.3	35.6	53.4



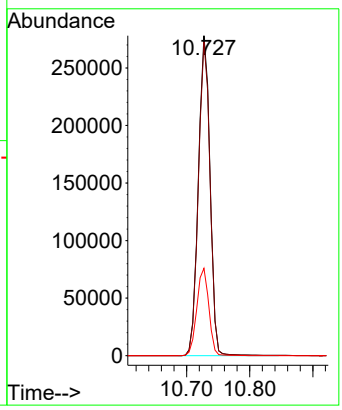


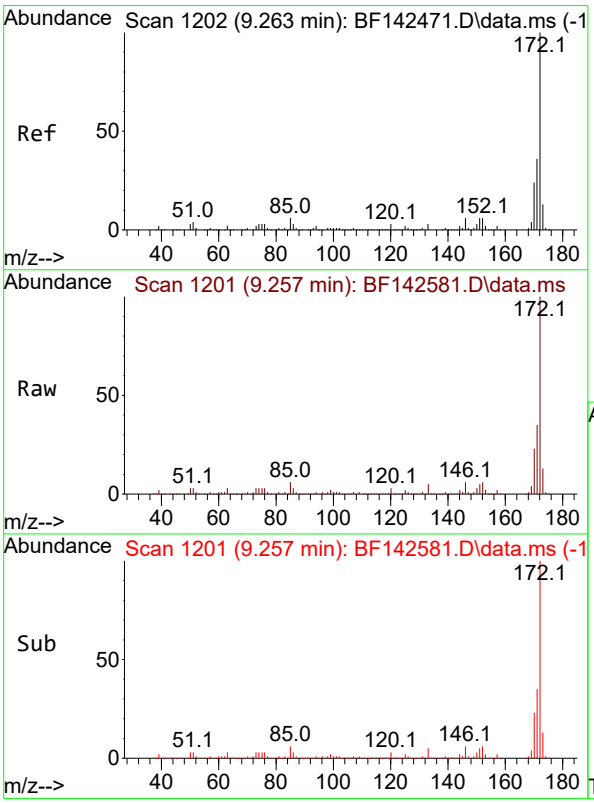
#42
2,4,6-Tribromophenol
Concen: 127.982 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Instrument :
BNA_F
ClientSampleId :
TP-48

Tgt Ion:330 Resp: 357324

Ion	Ratio	Lower	Upper
330	100		
332	97.9	77.6	116.4
141	28.0	24.6	36.8

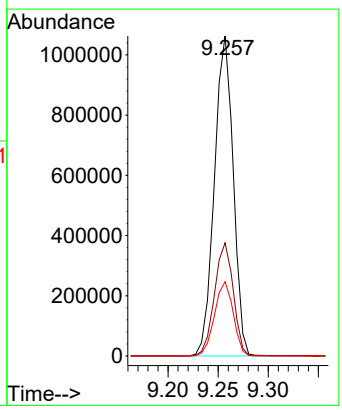


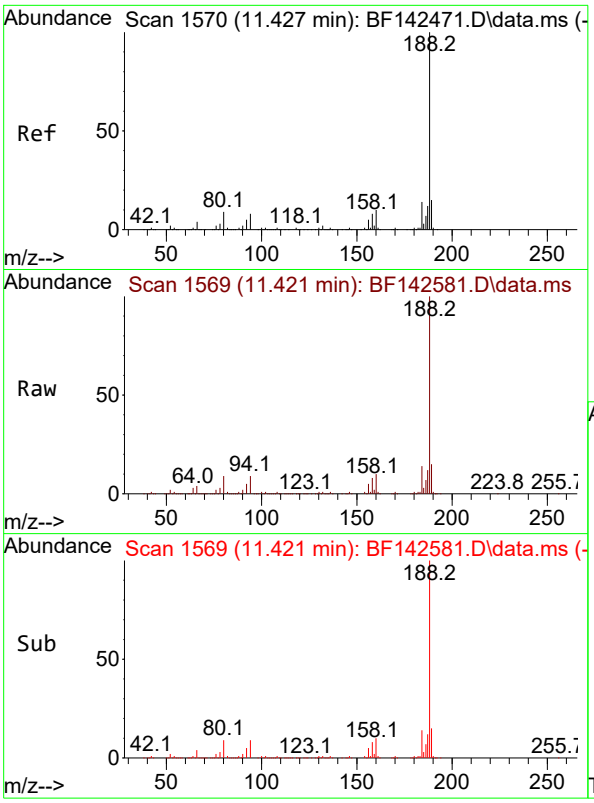


#45
2-Fluorobiphenyl
Concen: 73.983 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Tgt Ion:172 Resp: 1386957

Ion	Ratio	Lower	Upper
172	100		
171	35.4	28.6	42.8
170	23.2	18.9	28.3



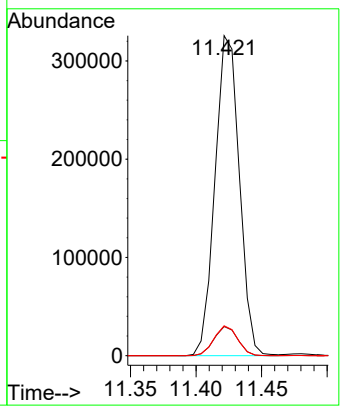


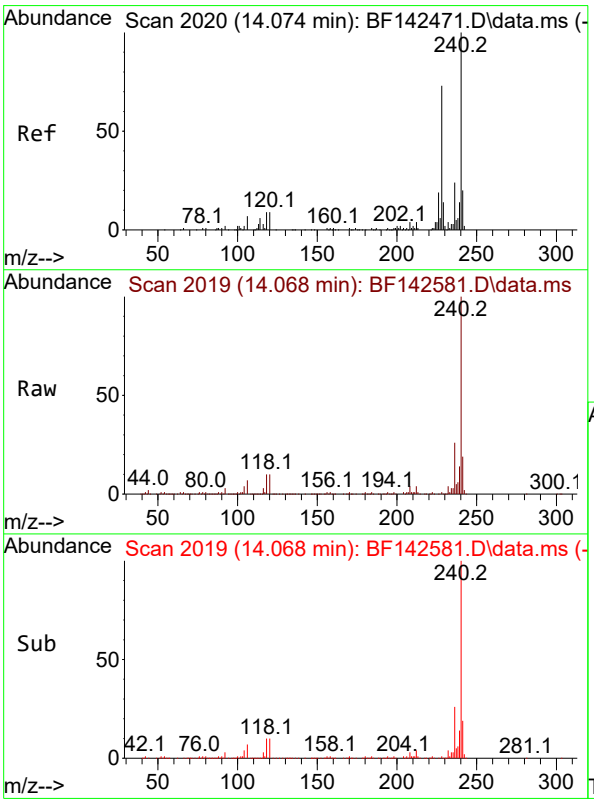
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.421 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Instrument :
BNA_F
ClientSampleId :
TP-48

Tgt Ion:188 Resp: 419835

Ion	Ratio	Lower	Upper
188	100		
94	9.1	6.6	10.0
80	9.4	7.4	11.0

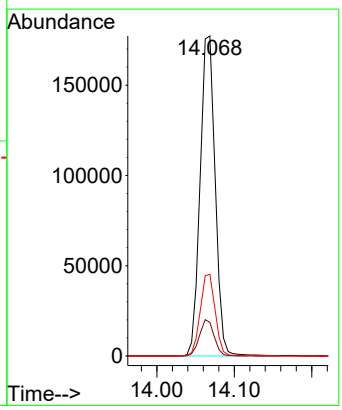


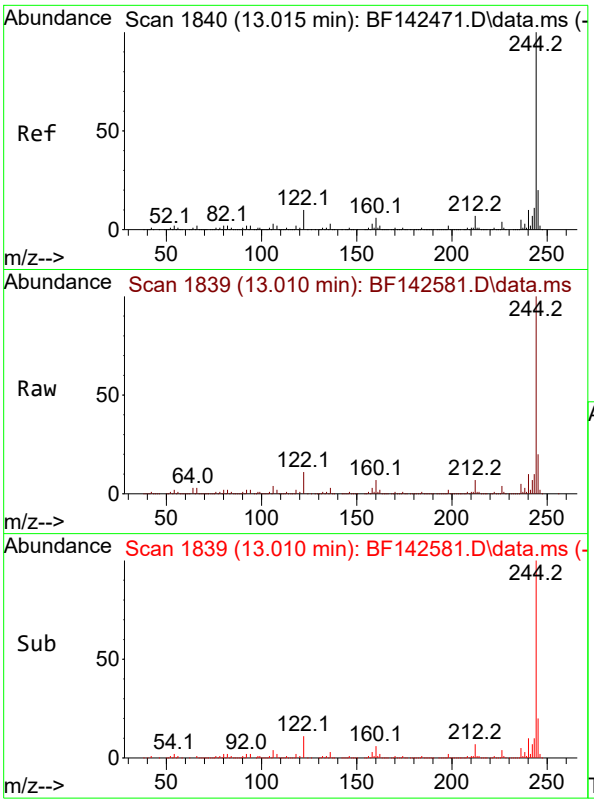


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Tgt Ion:240 Resp: 239865

Ion	Ratio	Lower	Upper
240	100		
120	10.5	7.5	11.3
236	25.5	19.6	29.4



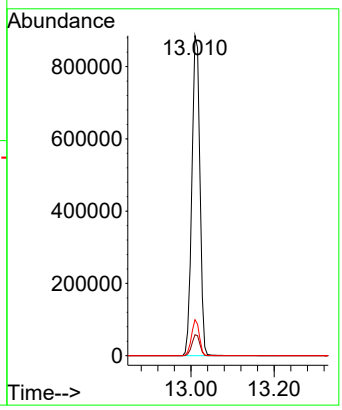


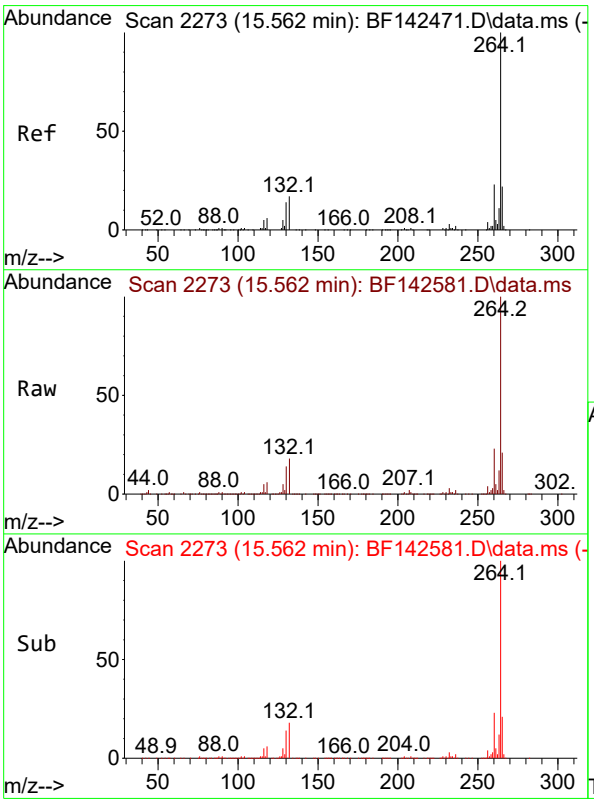
#79
Terphenyl-d14
Concen: 67.497 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Instrument :
BNA_F
ClientSampleId :
TP-48

Tgt Ion:244 Resp: 1184744

Ion	Ratio	Lower	Upper
244	100		
212	6.6	5.3	7.9
122	11.2	8.2	12.2

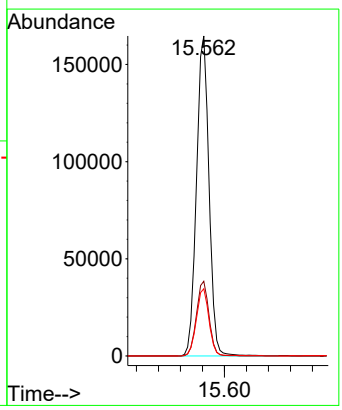




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142581.D
Acq: 30 May 2025 20:43

Tgt Ion:264 Resp: 260798

Ion	Ratio	Lower	Upper
264	100		
260	23.4	18.6	28.0
265	21.0	17.7	26.5



Sample Results: **BF142581.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142581.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.316	15	21	30	rVB2	38154	64036	1.64%	0.255%
2	5.128	489	499	512	rBV	241088	403121	10.31%	1.603%
3	5.522	559	566	571	rBV	2303653	3331907	85.23%	13.249%
4	6.522	729	736	742	rVB	2257320	3400334	86.98%	13.521%
5	6.898	794	800	805	rBV	581292	728417	18.63%	2.896%
6	7.457	888	895	901	rBV	1582513	2233089	57.12%	8.879%
7	7.710	933	938	949	rVB	46550	59356	1.52%	0.236%
8	8.181	1012	1018	1035	rVB	749614	942941	24.12%	3.749%
9	9.257	1194	1201	1206	rBV	2998857	3909208	100.00%	15.544%
10	9.933	1311	1316	1327	rBV	813874	1042063	26.66%	4.144%
11	10.651	1433	1438	1445	rVB	282618	349242	8.93%	1.389%
12	10.727	1445	1451	1456	rBV	1926228	2496703	63.87%	9.928%
13	11.421	1564	1569	1576	rBV	780561	1013025	25.91%	4.028%
14	11.951	1654	1659	1671	rBV	337931	524586	13.42%	2.086%
15	13.010	1834	1839	1845	rVB	2344237	3099718	79.29%	12.325%
16	13.904	1986	1991	2009	rBV	82090	152440	3.90%	0.606%
17	14.062	2010	2018	2030	rVB	478064	685497	17.54%	2.726%
18	15.562	2266	2273	2287	rBV	436763	713201	18.24%	2.836%

Sum of corrected areas: 25148884

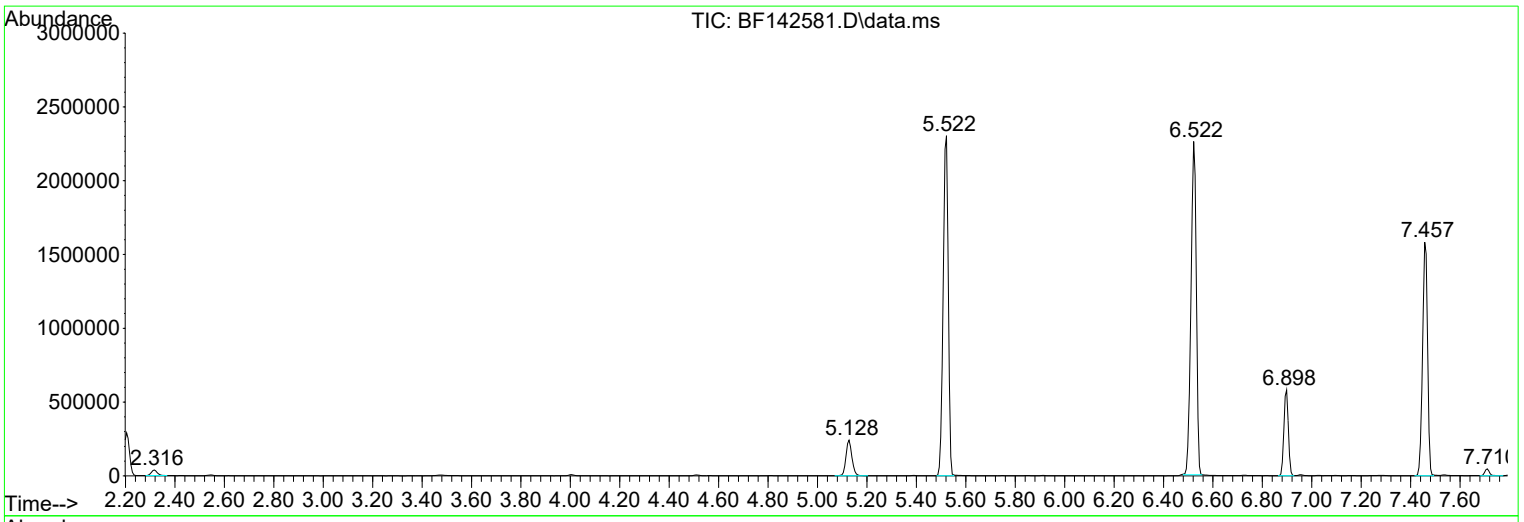
Sample Results: **BF142581.D**

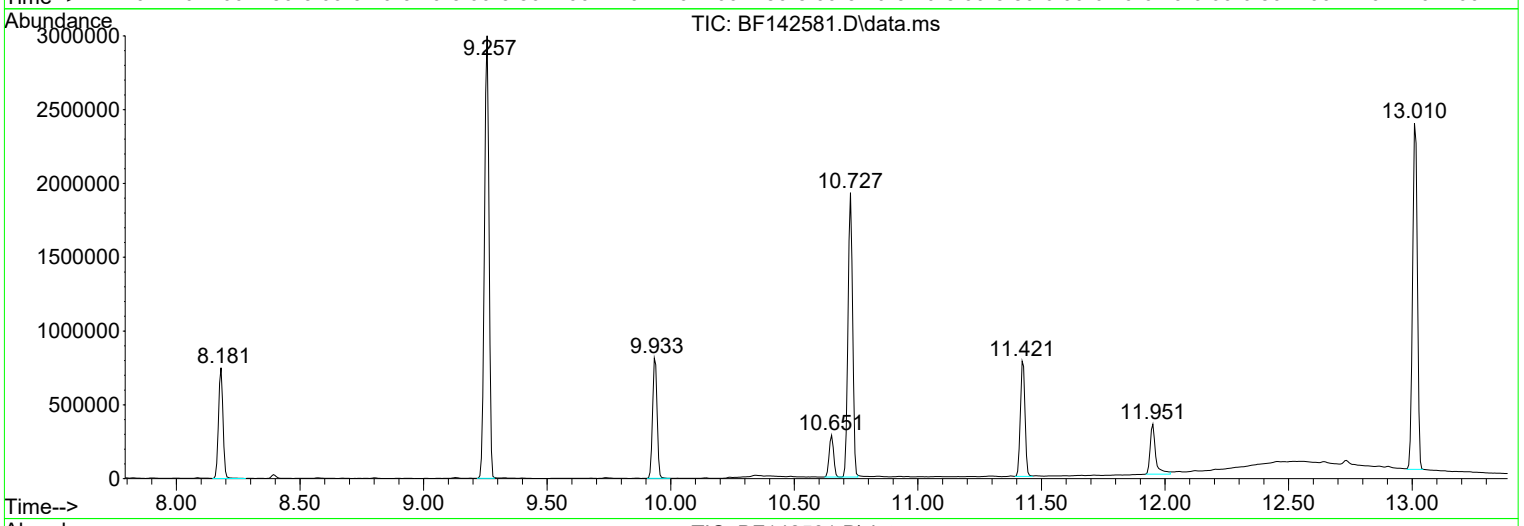
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

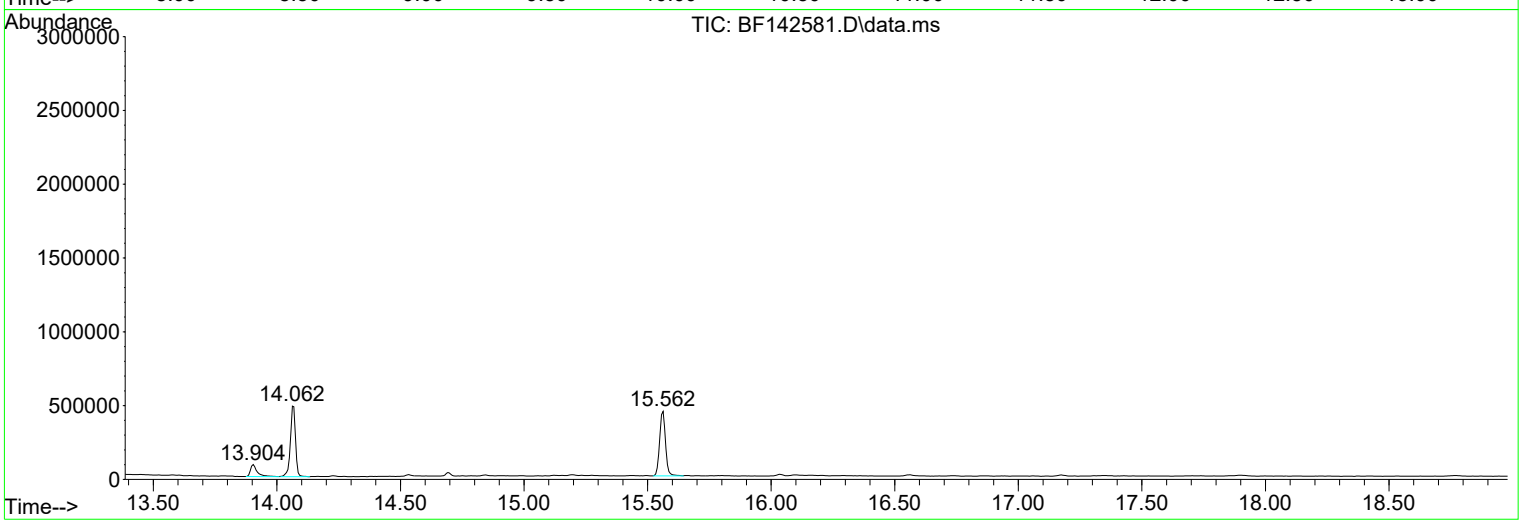
Instrument :
BNA_F
ClientSampleId :
TP-48

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

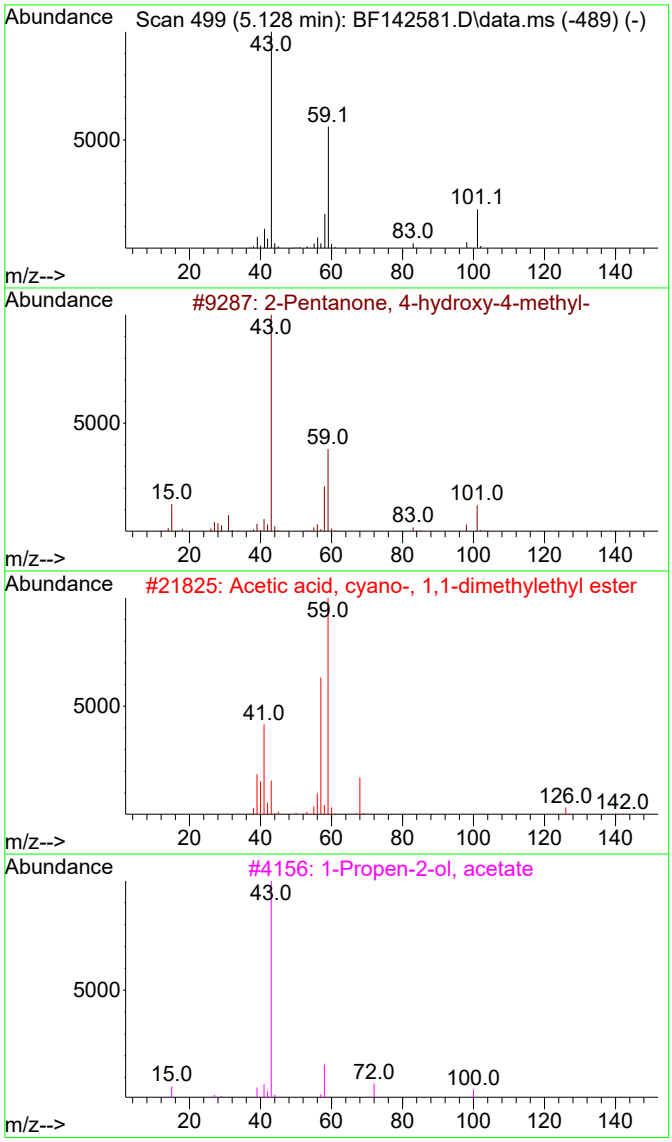
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

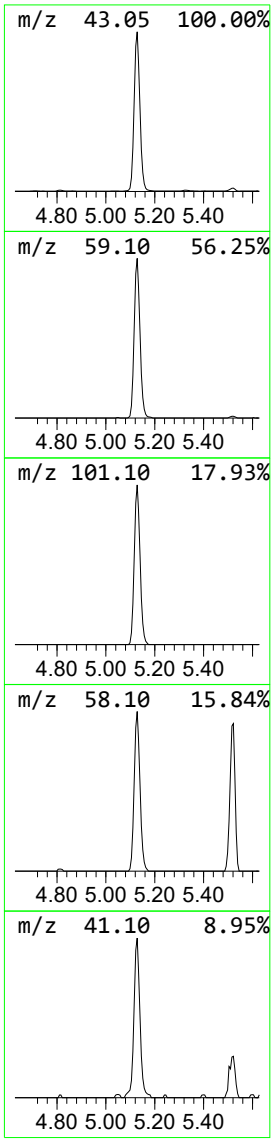
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.128	11.07 ng	403121	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	32
3	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
4	2-Propanone, 1-(1-methylethoxy)-	116	C6H12O2	042781-12-4	9
5	2-Hexanol, 2-methyl-	116	C7H16O	000625-23-0	9





Sample Results: **BF142581.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

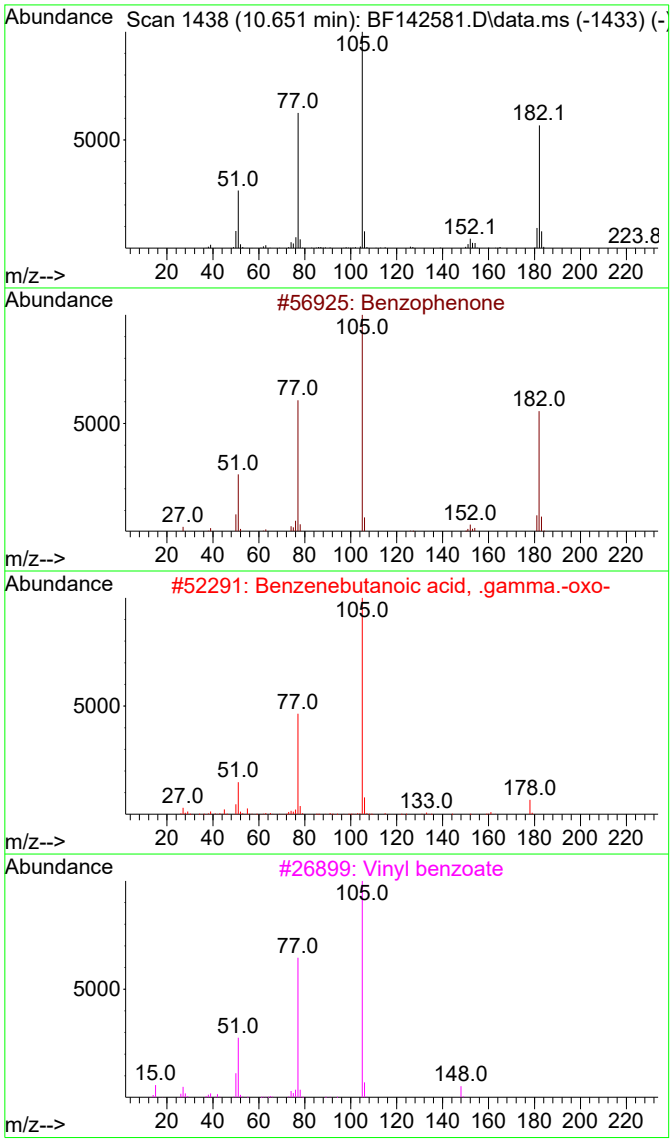
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

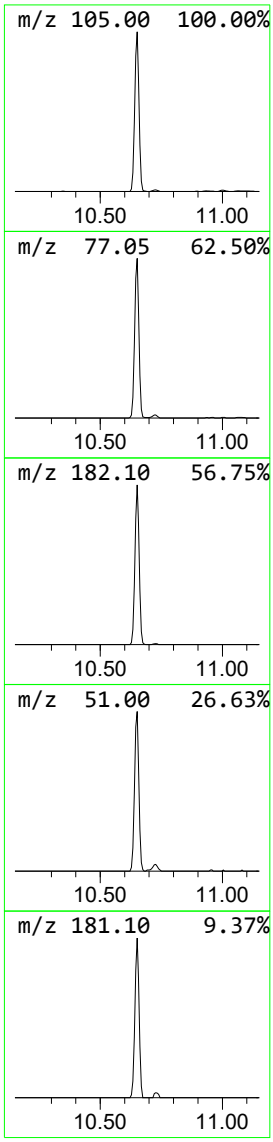
****

Peak Number 2 Benzophenone Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.651	6.70 ng	349242	Acenaphthene-d10	9.933

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	Benzenebutanoic acid, .gamma.-oxo-	178	C10H10O3	002051-95-8	47
3	Vinyl benzoate	148	C9H8O2	000769-78-8	47
4	2-Benzoyl-4-bromo-5-methyl-1,2-o...	281	C11H8BrNO3	1000444-92-3	47
5	N-Methoxy-N-methylbenzamide	165	C9H11NO2	006919-61-5	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

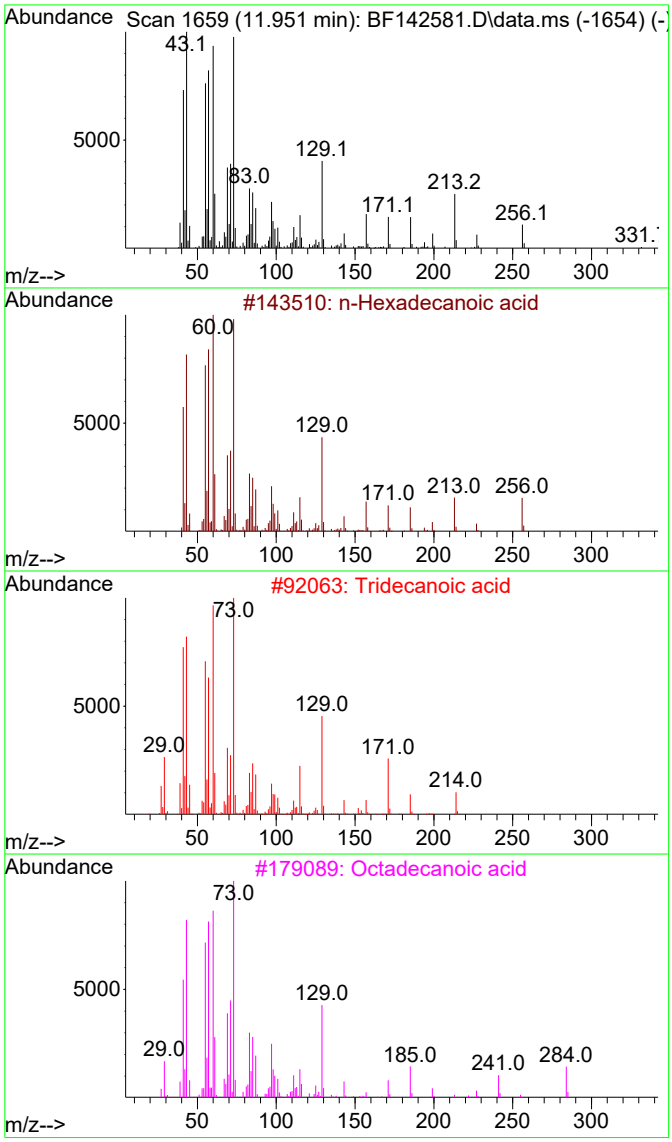
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

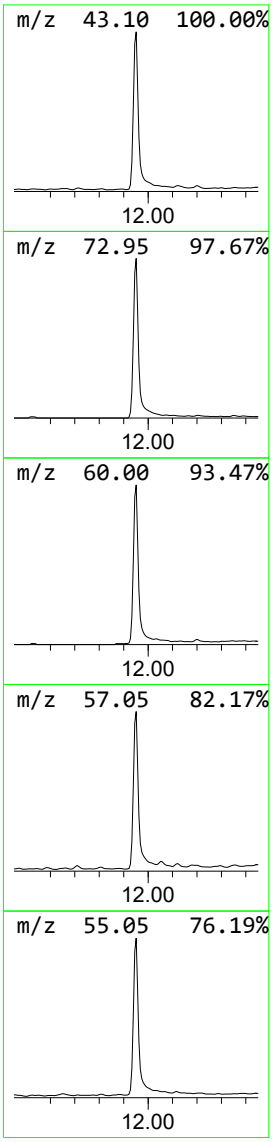
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.951	10.36 ng	524586	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	93
3	Octadecanoic acid	284	C18H36O2	000057-11-4	93
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	91
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	83





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

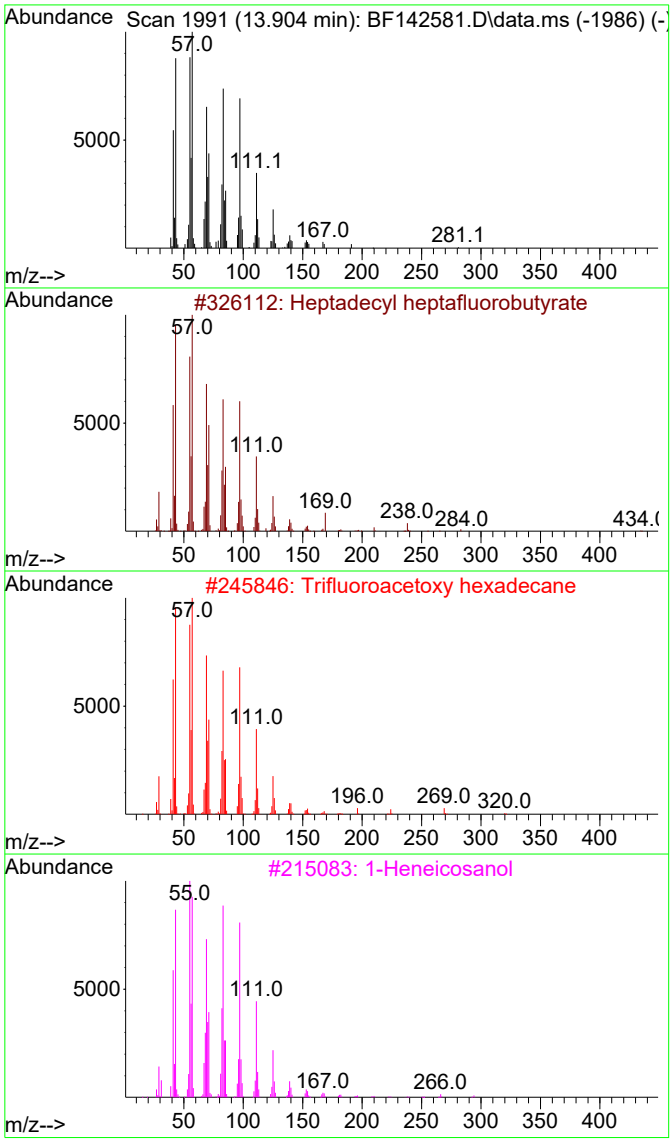
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

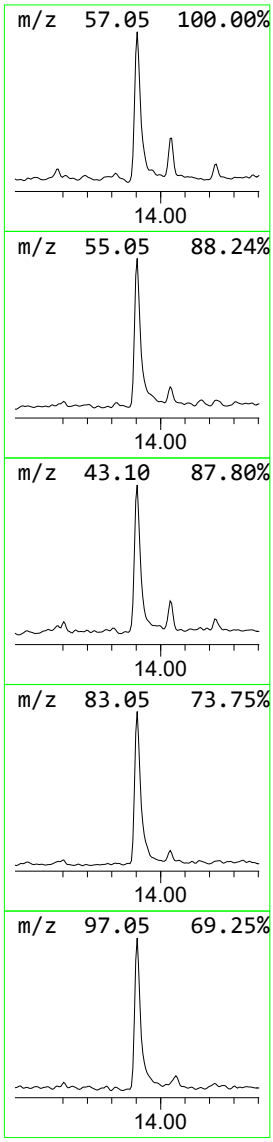
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Heptadecyl heptafluorobutyrate Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.904	4.45 ng	152440	Chrysene-d12	14.068

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecyl heptafluorobutyrate	452	C21H35F7O2	959085-66-6	95
2	Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	95
3	1-Heneicosanol	312	C21H44O	015594-90-8	93
4	Heptafluorobutyric acid, pentade...	424	C19H31F7O2	959261-23-5	93
5	Pentafluoropropionic acid, penta...	374	C18H31F5O2	959092-08-1	93





Sample Results: **BF142581.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142581.D
Acq On : 30 May 2025 20:43
Operator : RC/JU
Sample : Q2150-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-48

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.128	11.1	ng	403121	1	6.898	728417	20.0
Benzophenone	10.651	6.7	ng	349242	3	9.933	1042060	20.0
n-Hexadecanoic ...	11.951	10.4	ng	524586	4	11.422	1013030	20.0
Heptadecyl hept...	13.904	4.5	ng	152440	5	14.068	685497	20.0

Raw Data: **BF142569.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-47	SDG No.:	Q2150
Lab Sample ID:	Q2150-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	81
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142569.D	1	05/30/25 09:50	05/30/25 14:52	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	190	U	190	410	ug/Kg
108-95-2	Phenol	27.2	U	27.2	210	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	30.0	U	30.0	210	ug/Kg
95-57-8	2-Chlorophenol	30.1	U	30.1	210	ug/Kg
95-48-7	2-Methylphenol	36.9	U	36.9	210	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	46.2	U	46.2	210	ug/Kg
98-86-2	Acetophenone	36.4	U	36.4	210	ug/Kg
65794-96-9	3+4-Methylphenols	50.7	U	50.7	410	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	58.4	U	58.4	98.6	ug/Kg
67-72-1	Hexachloroethane	21.7	U	21.7	210	ug/Kg
98-95-3	Nitrobenzene	22.6	U	22.6	210	ug/Kg
78-59-1	Isophorone	40.4	U	40.4	210	ug/Kg
88-75-5	2-Nitrophenol	71.8	U	71.8	210	ug/Kg
105-67-9	2,4-Dimethylphenol	79.9	U	79.9	210	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	38.0	U	38.0	210	ug/Kg
120-83-2	2,4-Dichlorophenol	34.9	U	34.9	210	ug/Kg
91-20-3	Naphthalene	28.0	U	28.0	210	ug/Kg
106-47-8	4-Chloroaniline	43.6	U	43.6	210	ug/Kg
87-68-3	Hexachlorobutadiene	31.2	U	31.2	210	ug/Kg
105-60-2	Caprolactam	64.2	U	64.2	410	ug/Kg
59-50-7	4-Chloro-3-methylphenol	35.4	U	35.4	210	ug/Kg
91-57-6	2-Methylnaphthalene	31.6	U	31.6	210	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	410	ug/Kg
88-06-2	2,4,6-Trichlorophenol	24.4	U	24.4	210	ug/Kg
95-95-4	2,4,5-Trichlorophenol	35.9	U	35.9	210	ug/Kg
92-52-4	1,1-Biphenyl	26.9	U	26.9	210	ug/Kg
91-58-7	2-Chloronaphthalene	27.7	U	27.7	210	ug/Kg
88-74-4	2-Nitroaniline	59.3	U	59.3	210	ug/Kg
131-11-3	Dimethylphthalate	33.4	U	33.4	210	ug/Kg

Raw Data: **BF142569.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-47	SDG No.:	Q2150
Lab Sample ID:	Q2150-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	81
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142569.D	1	05/30/25 09:50	05/30/25 14:52	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	35.6	U	35.6	210	ug/Kg
606-20-2	2,6-Dinitrotoluene	41.4	U	41.4	210	ug/Kg
99-09-2	3-Nitroaniline	56.7	U	56.7	210	ug/Kg
83-32-9	Acenaphthene	26.3	U	26.3	210	ug/Kg
51-28-5	2,4-Dinitrophenol	280	U	280	410	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	410	ug/Kg
132-64-9	Dibenzofuran	28.0	U	28.0	210	ug/Kg
121-14-2	2,4-Dinitrotoluene	61.8	U	61.8	210	ug/Kg
84-66-2	Diethylphthalate	34.9	U	34.9	210	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	32.9	U	32.9	210	ug/Kg
86-73-7	Fluorene	31.2	U	31.2	210	ug/Kg
100-01-6	4-Nitroaniline	79.2	U	79.2	210	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	130	U	130	410	ug/Kg
86-30-6	n-Nitrosodiphenylamine	40.6	U	40.6	210	ug/Kg
101-55-3	4-Bromophenyl-phenylether	34.3	U	34.3	210	ug/Kg
118-74-1	Hexachlorobenzene	31.2	U	31.2	210	ug/Kg
1912-24-9	Atrazine	41.9	U	41.9	210	ug/Kg
87-86-5	Pentachlorophenol	63.2	U	63.2	410	ug/Kg
85-01-8	Phenanthrene	25.8	U	25.8	210	ug/Kg
120-12-7	Anthracene	41.1	U	41.1	210	ug/Kg
86-74-8	Carbazole	38.5	U	38.5	210	ug/Kg
84-74-2	Di-n-butylphthalate	59.1	U	59.1	210	ug/Kg
206-44-0	Fluoranthene	37.0	U	37.0	210	ug/Kg
129-00-0	Pyrene	44.4	U	44.4	210	ug/Kg
85-68-7	Butylbenzylphthalate	88.0	U	88.0	210	ug/Kg
91-94-1	3,3-Dichlorobenzidine	45.2	U	45.2	410	ug/Kg
56-55-3	Benzo(a)anthracene	28.4	U	28.4	210	ug/Kg
218-01-9	Chrysene	24.5	U	24.5	210	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	73.0	U	73.0	210	ug/Kg
117-84-0	Di-n-octyl phthalate	110	U	110	410	ug/Kg
205-99-2	Benzo(b)fluoranthene	23.4	U	23.4	210	ug/Kg

Raw Data: **BF142569.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-47	SDG No.:	Q2150
Lab Sample ID:	Q2150-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	81
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142569.D	1	05/30/25 09:50	05/30/25 14:52	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	27.6	U	27.6	210	ug/Kg
50-32-8	Benzo(a)pyrene	36.4	U	36.4	210	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	35.9	U	35.9	210	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.8	U	33.8	210	ug/Kg
191-24-2	Benzo(g,h,i)perylene	31.7	U	31.7	210	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	31.6	U	31.6	210	ug/Kg
123-91-1	1,4-Dioxane	55.7	U	55.7	210	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.8	U	33.8	210	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	81.7		18 - 112	54%	SPK: 150
13127-88-3	Phenol-d6	83.6		15 - 107	56%	SPK: 150
4165-60-0	Nitrobenzene-d5	51.5		18 - 107	51%	SPK: 100
321-60-8	2-Fluorobiphenyl	49.7		20 - 109	50%	SPK: 100
118-79-6	2,4,6-Tribromophenol	80.9		10 - 116	54%	SPK: 150
1718-51-0	Terphenyl-d14	45.5		10 - 105	45%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	120000	6.898			
1146-65-2	Naphthalene-d8	453000	8.181			
15067-26-2	Acenaphthene-d10	238000	9.939			
1517-22-2	Phenanthrene-d10	379000	11.422			
1719-03-5	Chrysene-d12	214000	14.068			
1520-96-3	Perylene-d12	234000	15.563			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	290	AB		5.12	ug/Kg
000119-61-9	Benzophenone	180	J		10.7	ug/Kg
000057-10-3	n-Hexadecanoic acid	410	J		11.9	ug/Kg
000057-11-4	Octadecanoic acid	150	J		12.7	ug/Kg
006222-03-3	Trifluoroacetoxy hexadecane	200	J		13.9	ug/Kg

Raw Data: **BF142569.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-47	SDG No.:	Q2150
Lab Sample ID:	Q2150-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	81
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142569.D	1	05/30/25 09:50	05/30/25 14:52	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

Quant Time: May 30 15:13:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

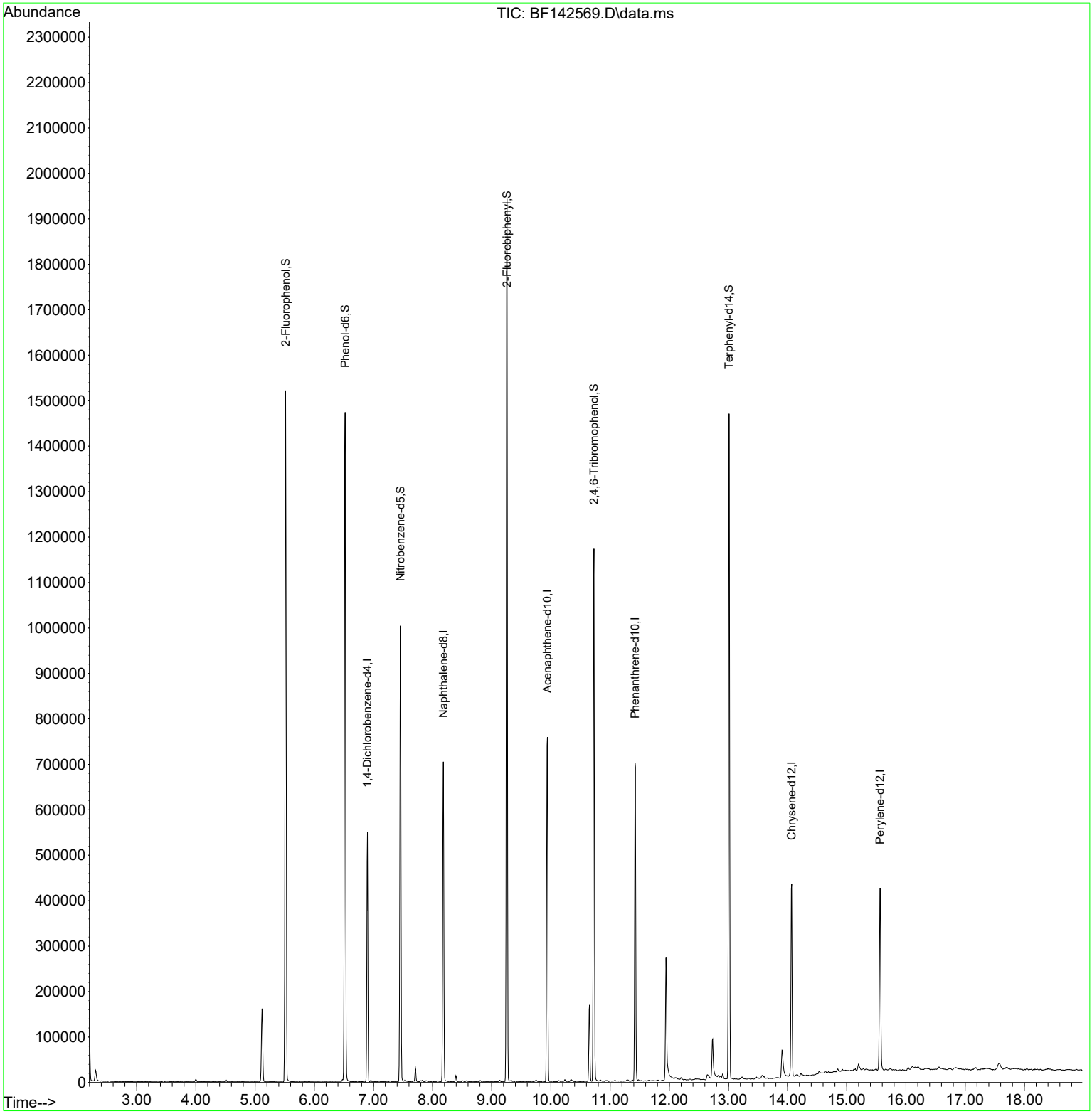
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	119655	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	452665	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	237881	20.000	ng	0.00
64) Phenanthrene-d10	11.422	188	379317	20.000	ng	-0.01
76) Chrysene-d12	14.068	240	213577	20.000	ng	0.00
86) Perylene-d12	15.563	264	233735	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.516	112	580421	81.724	ng	0.00
7) Phenol-d6	6.522	99	715121	83.646	ng	-0.01
23) Nitrobenzene-d5	7.457	82	427464	51.493	ng	-0.02
42) 2,4,6-Tribromophenol	10.728	330	213540	80.881	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	880377	49.661	ng	-0.01
79) Terphenyl-d14	13.010	244	710605	45.467	ng	0.00
Target Compounds						Qvalue

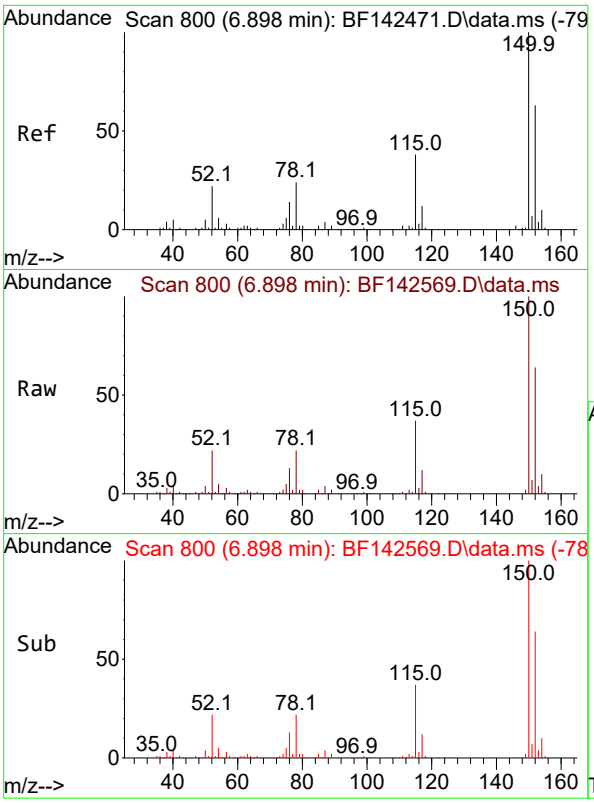
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

Quant Time: May 30 15:13:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



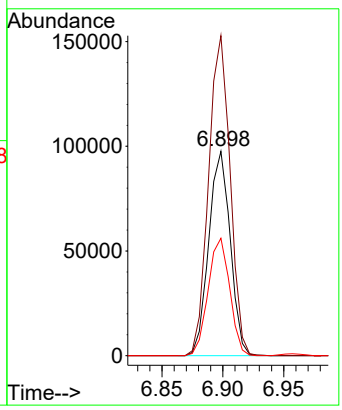


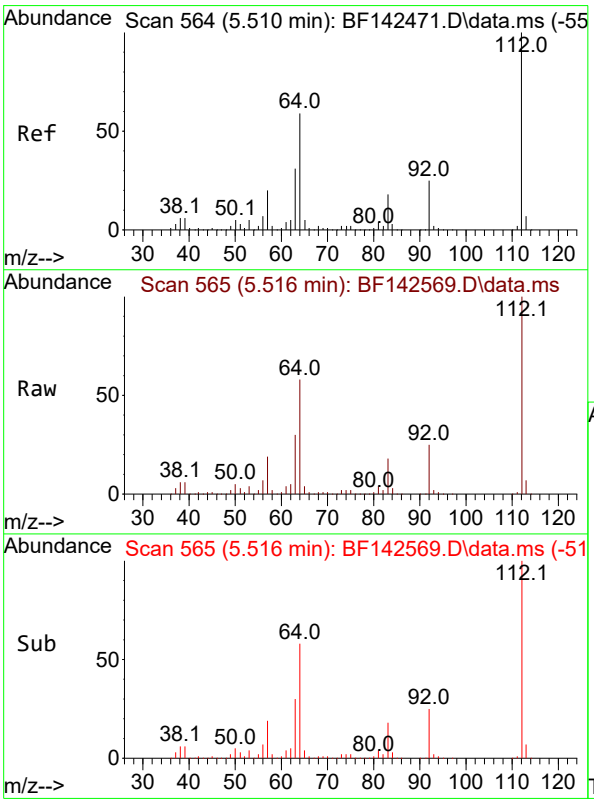
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Instrument :
BNA_F
ClientSampleId :
TP-47

Tgt Ion:152 Resp: 119655

Ion	Ratio	Lower	Upper
152	100		
150	156.6	128.2	192.4
115	57.5	48.3	72.5

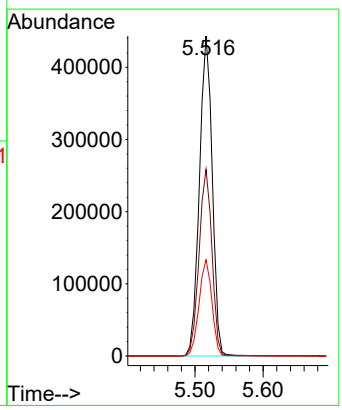


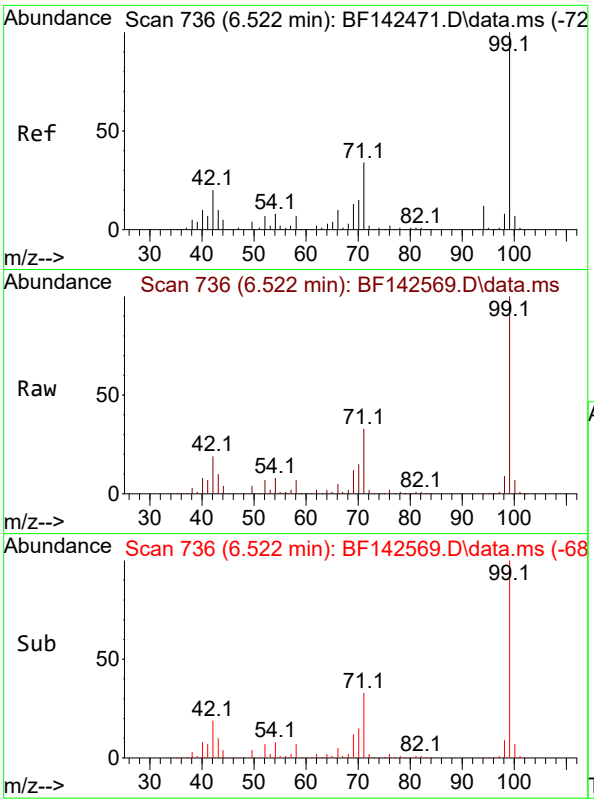


#5
2-Fluorophenol
Concen: 81.724 ng
RT: 5.516 min Scan# 565
Delta R.T. 0.000 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Tgt Ion:112 Resp: 580421

Ion	Ratio	Lower	Upper
112	100		
64	58.3	47.5	71.3
63	30.1	24.9	37.3



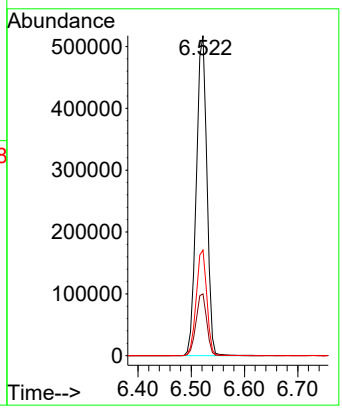


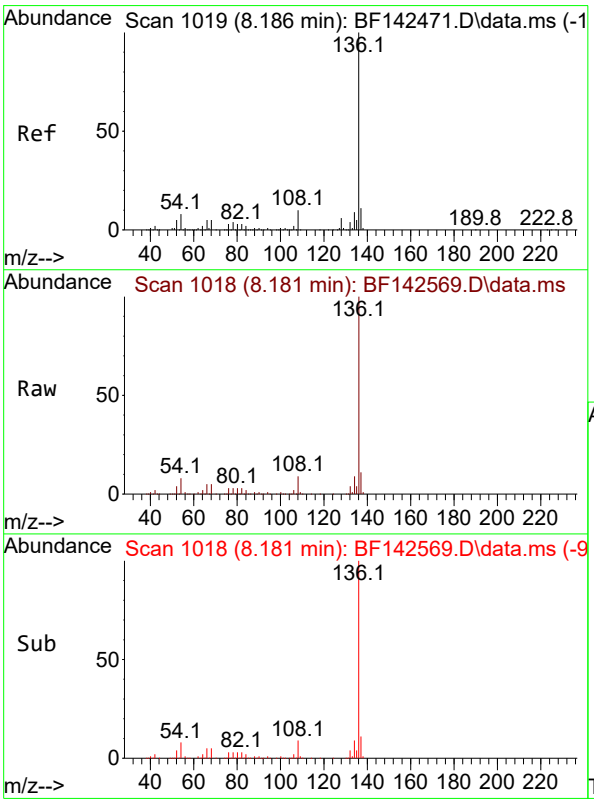
#7
Phenol-d6
Concen: 83.646 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Instrument :
BNA_F
ClientSampleId :
TP-47

Tgt Ion: 99 Resp: 715121

Ion	Ratio	Lower	Upper
99	100		
42	19.3	16.2	24.2
71	33.0	27.3	40.9

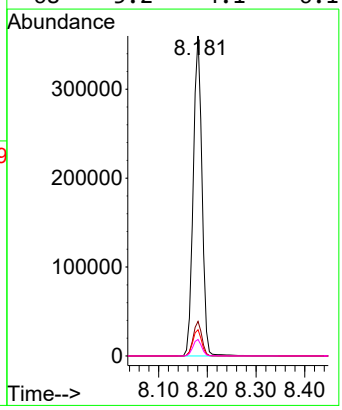


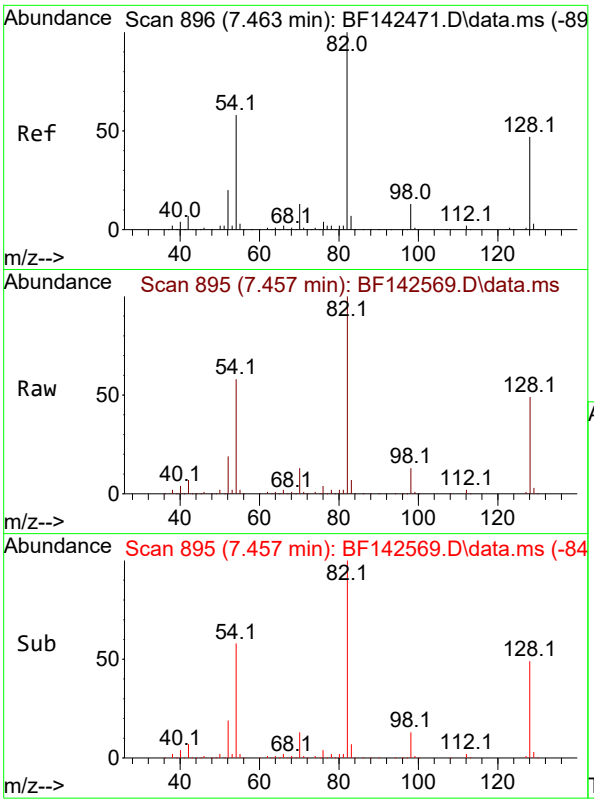


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Tgt Ion:136 Resp: 452665

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.6	13.0
54	8.2	6.6	10.0
68	5.2	4.1	6.1



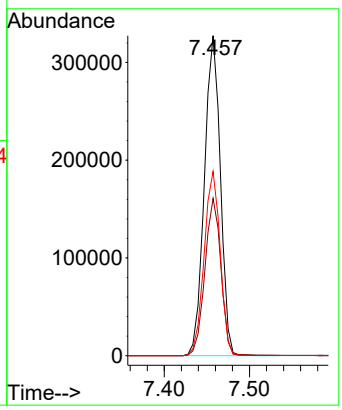


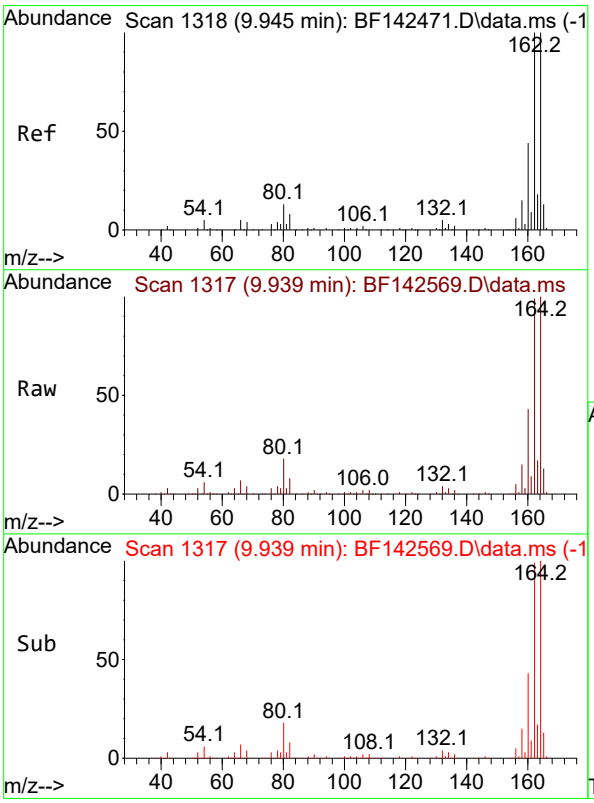
#23
Nitrobenzene-d5
Concen: 51.493 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.017 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Instrument :
BNA_F
ClientSampleId :
TP-47

Tgt Ion: 82 Resp: 427464

Ion	Ratio	Lower	Upper
82	100		
128	49.1	37.4	56.2
54	57.6	46.6	70.0

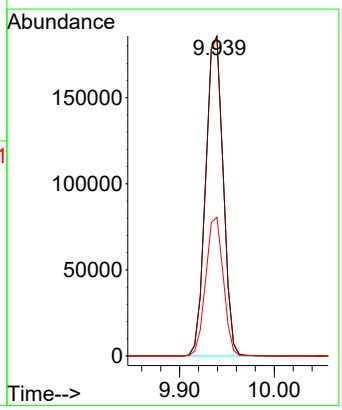


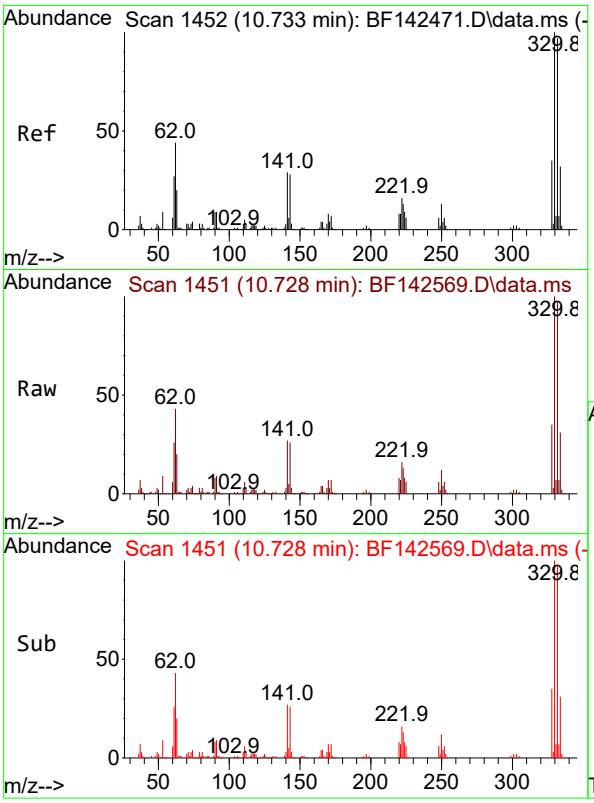


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Tgt Ion:164 Resp: 237881

Ion	Ratio	Lower	Upper
164	100		
162	99.4	80.2	120.4
160	43.4	35.6	53.4



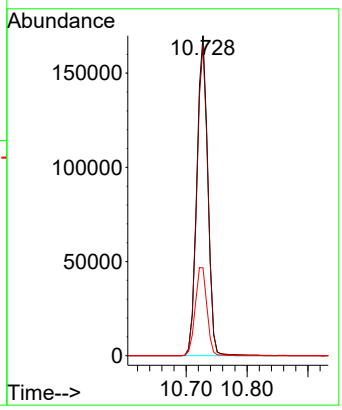


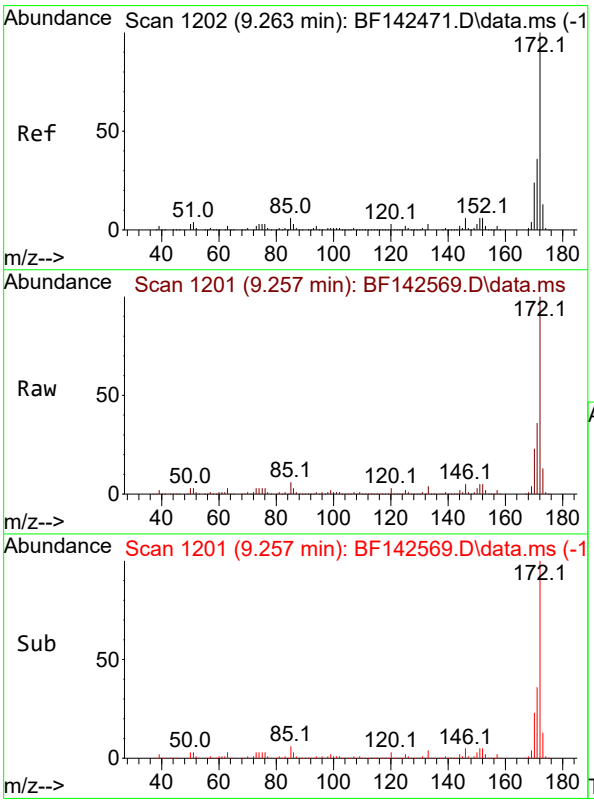
#42
2,4,6-Tribromophenol
Concen: 80.881 ng
RT: 10.728 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Instrument :
BNA_F
ClientSampleId :
TP-47

Tgt Ion:330 Resp: 213540

Ion	Ratio	Lower	Upper
330	100		
332	96.7	77.6	116.4
141	29.2	24.6	36.8

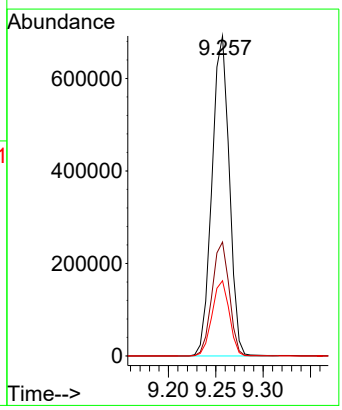


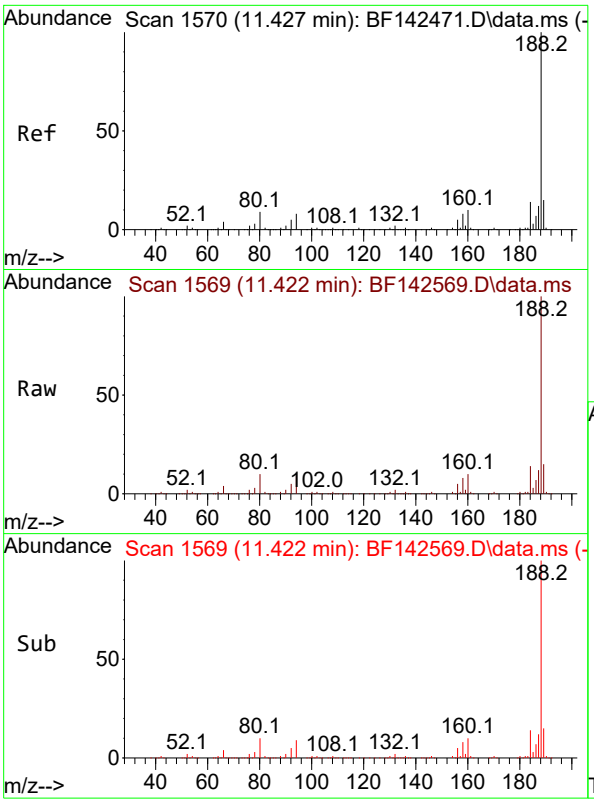


#45
2-Fluorobiphenyl
Concen: 49.661 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Tgt Ion:172 Resp: 880377

Ion	Ratio	Lower	Upper
172	100		
171	35.6	28.6	42.8
170	23.5	18.9	28.3



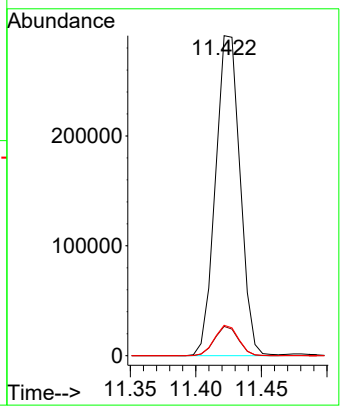


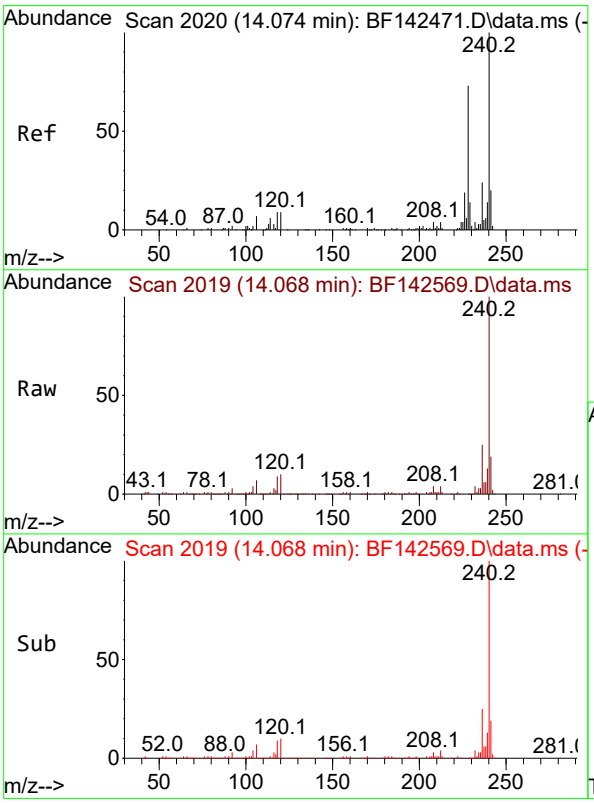
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.422 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Instrument :
BNA_F
ClientSampleId :
TP-47

Tgt Ion:188 Resp: 379317

Ion	Ratio	Lower	Upper
188	100		
94	9.2	6.6	10.0
80	9.5	7.4	11.0

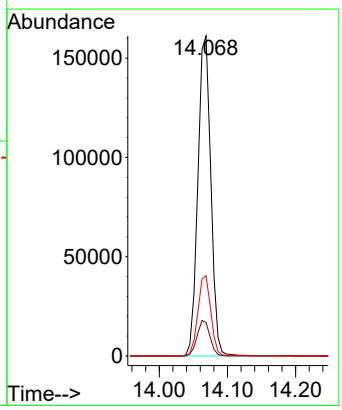


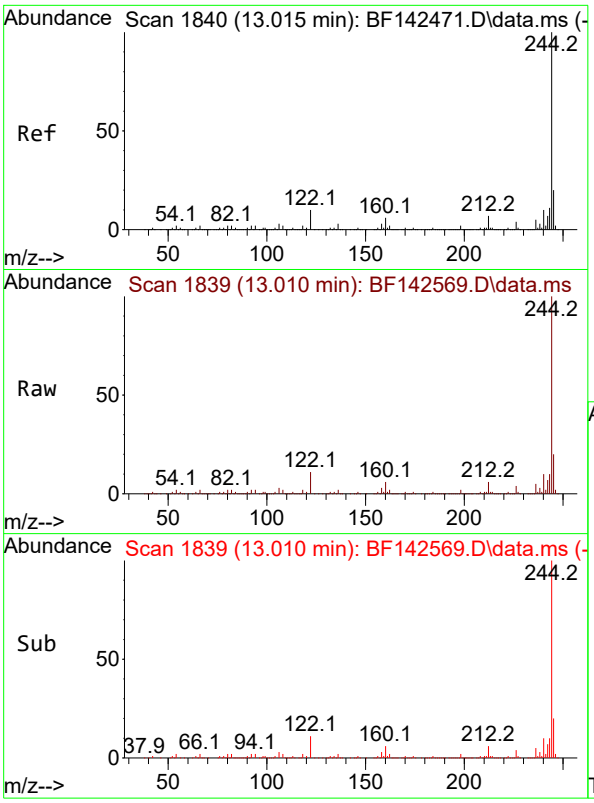


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Tgt Ion:240 Resp: 213577

Ion	Ratio	Lower	Upper
240	100		
120	10.5	7.5	11.3
236	25.1	19.6	29.4



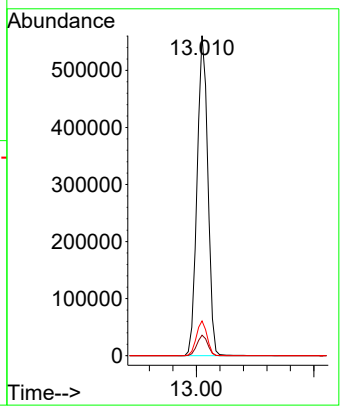


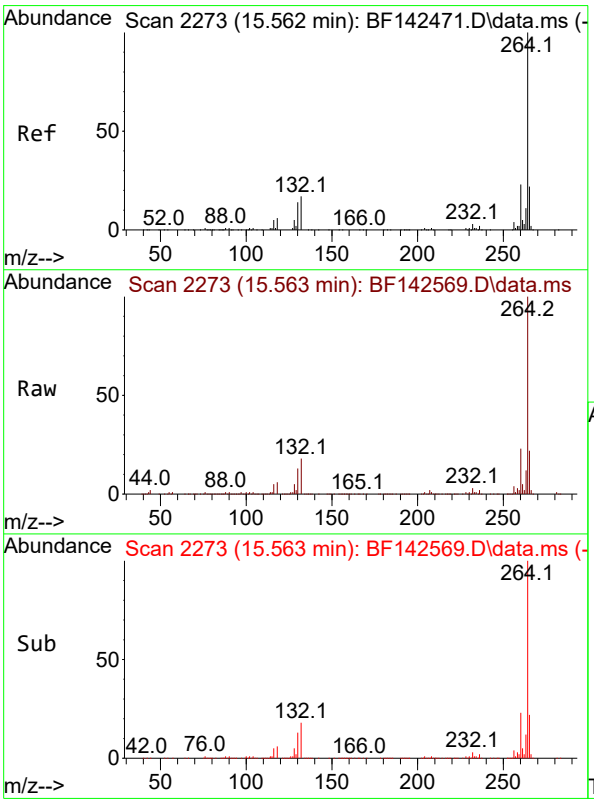
#79
Terphenyl-d14
Concen: 45.467 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Instrument :
BNA_F
ClientSampleId :
TP-47

Tgt Ion:244 Resp: 710605

Ion	Ratio	Lower	Upper
244	100		
212	6.4	5.3	7.9
122	10.9	8.2	12.2

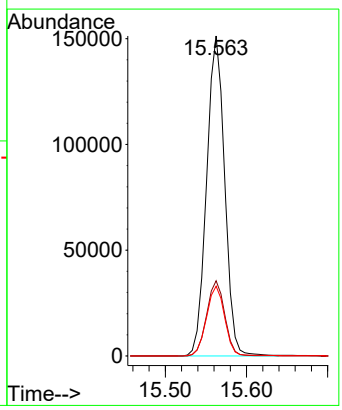




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.563 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142569.D
Acq: 30 May 2025 14:52

Tgt Ion:264 Resp: 233735

Ion	Ratio	Lower	Upper
264	100		
260	23.5	18.6	28.0
265	21.8	17.7	26.5



Sample Results: **BF142569.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142569.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.305	14	19	33	rVB2	23803	43463	1.76%	0.253%
2	5.116	489	497	508	rBV	161275	238633	9.64%	1.391%
3	5.516	559	565	570	rBV	1521441	1982878	80.14%	11.557%
4	6.522	729	736	747	rVB	1471626	2045280	82.66%	11.921%
5	6.898	795	800	805	rBV	550419	678910	27.44%	3.957%
6	7.457	889	895	900	rBV	1003469	1306695	52.81%	7.616%
7	7.710	934	938	944	rVB	28059	34336	1.39%	0.200%
8	8.181	1012	1018	1026	rBV	703631	879909	35.56%	5.129%
9	9.257	1195	1201	1206	rBV	1941885	2474302	100.00%	14.421%
10	9.939	1311	1317	1322	rBV	757613	978352	39.54%	5.702%
11	10.651	1432	1438	1445	rBV	168011	212672	8.60%	1.240%
12	10.728	1445	1451	1461	rBV	1171370	1524740	61.62%	8.887%
13	11.422	1564	1569	1576	rBV	700093	910343	36.79%	5.306%
14	11.945	1651	1658	1680	rBV	269944	455982	18.43%	2.658%
15	12.645	1772	1777	1786	rBV6	11212	33255	1.34%	0.194%
16	12.733	1786	1792	1805	rVV	85848	162859	6.58%	0.949%
17	13.010	1833	1839	1844	rBV	1463095	1841426	74.42%	10.733%
18	13.904	1986	1991	2005	rBV	61133	138903	5.61%	0.810%
19	14.068	2011	2019	2026	rVB	422603	567387	22.93%	3.307%
20	15.198	2207	2211	2219	rBV7	12607	24746	1.00%	0.144%
21	15.563	2267	2273	2283	rVB	399645	621975	25.14%	3.625%

Sum of corrected areas: 17157046

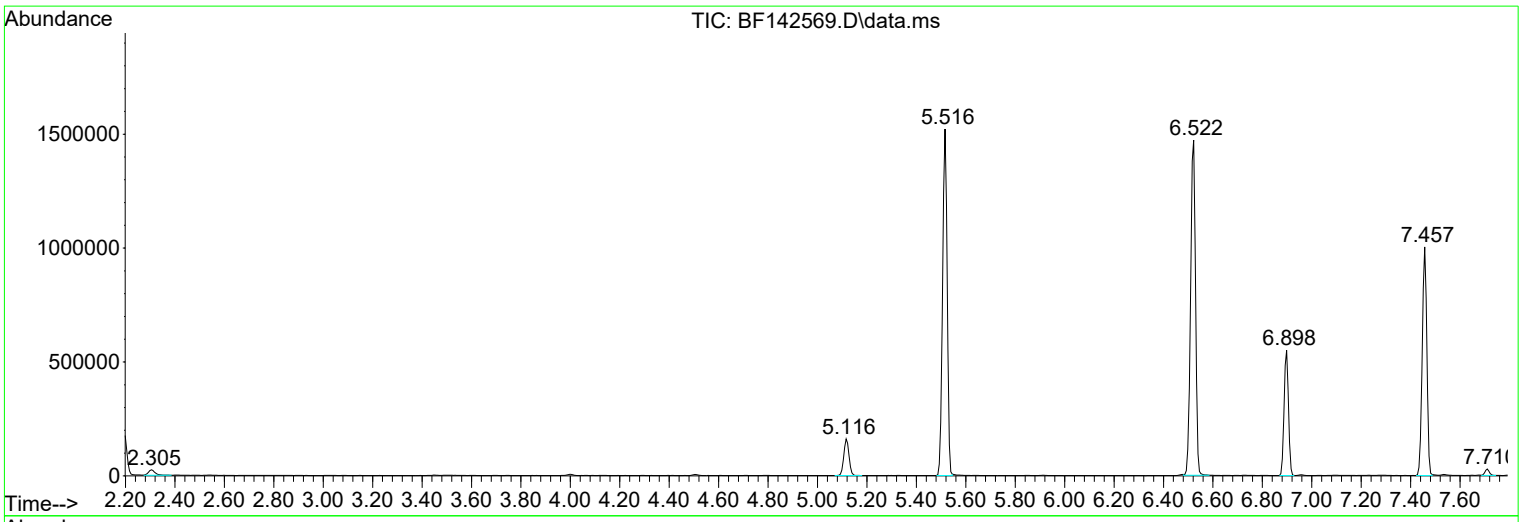
Sample Results: **BF142569.D**

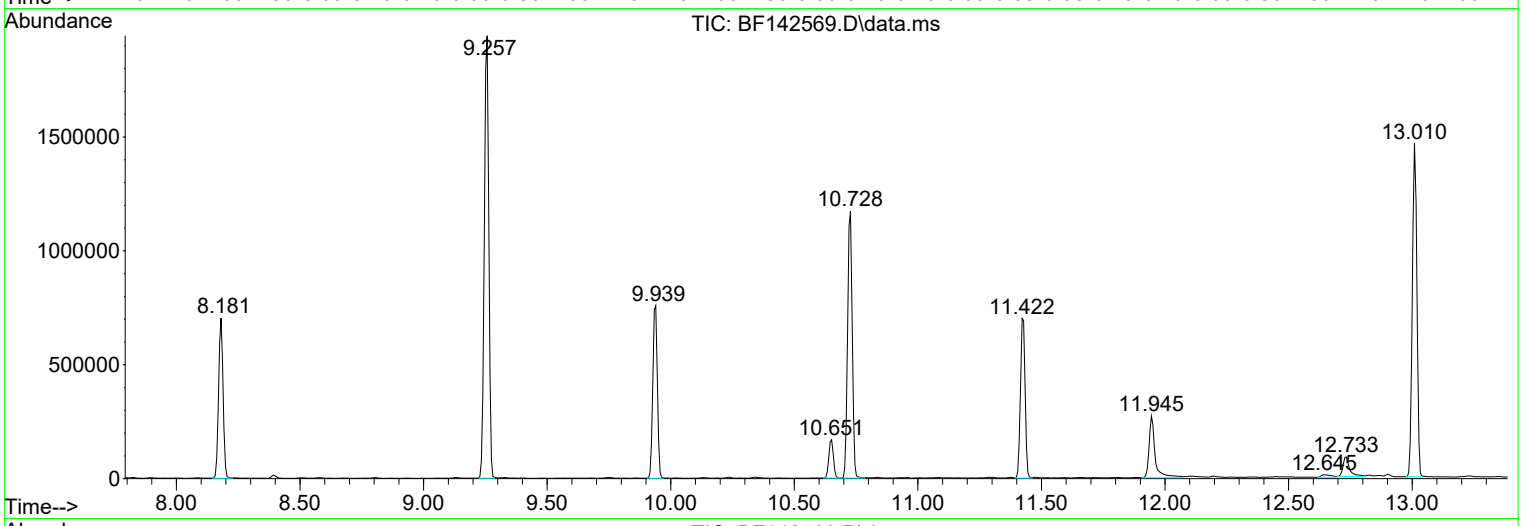
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

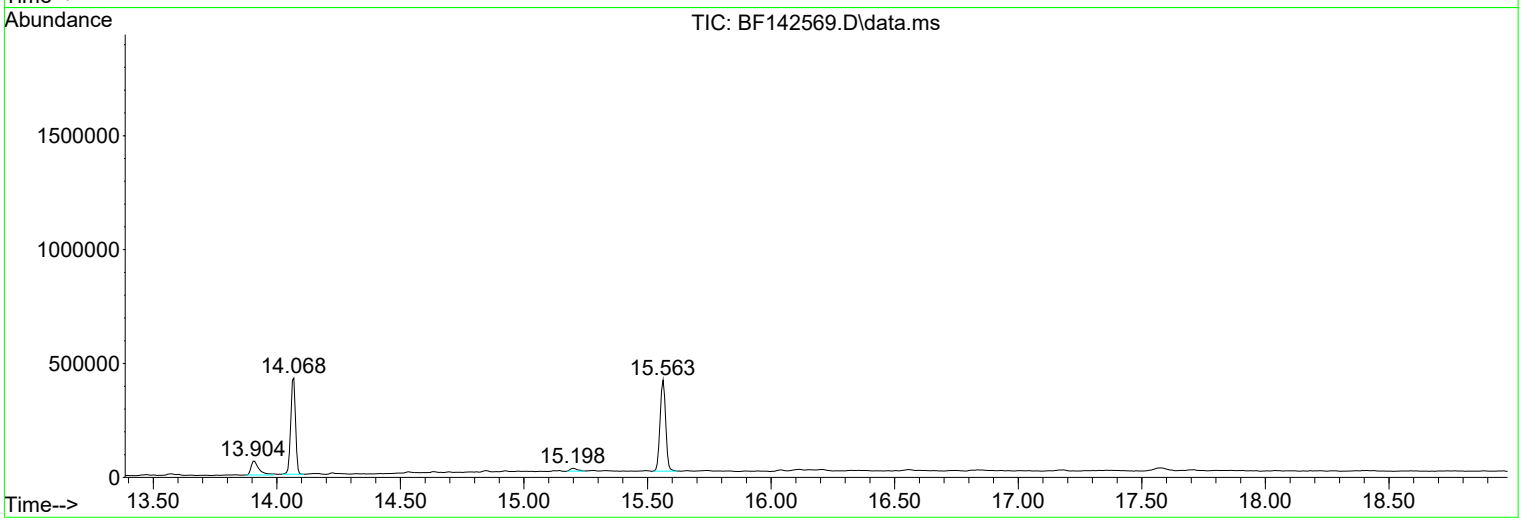
Instrument :
BNA_F
ClientSampleId :
TP-47

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Sample Results: **BF142569.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

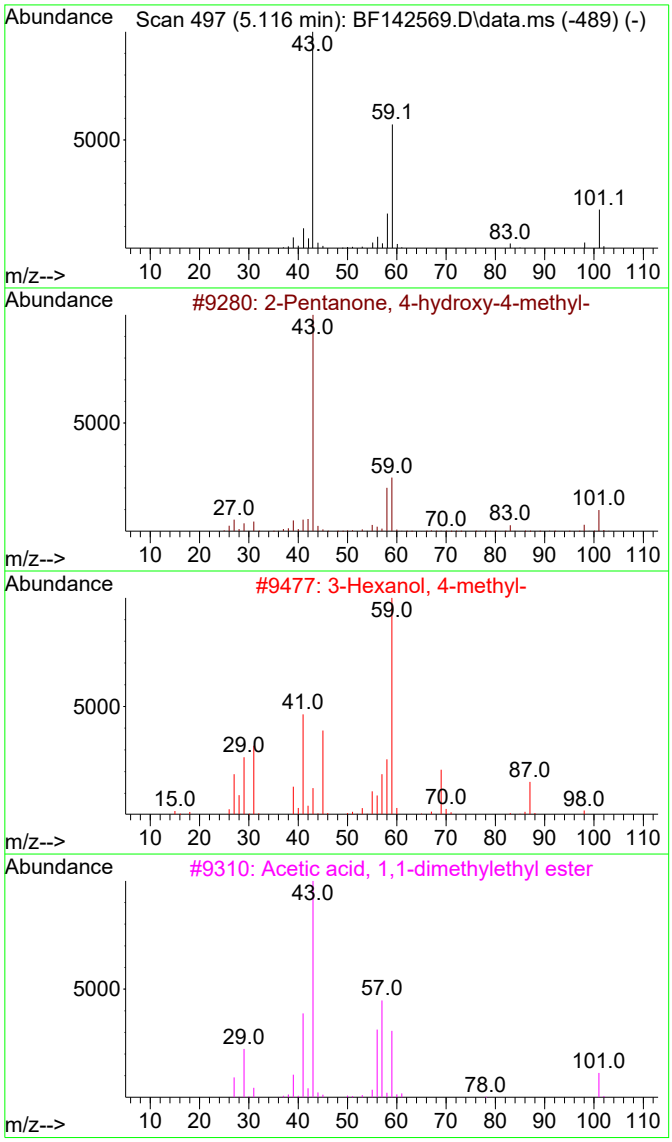
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

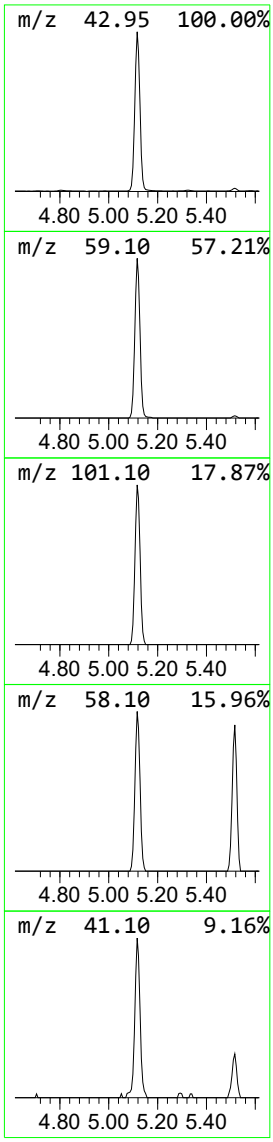
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.116	7.03 ng	238633	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	3-Hexanol, 4-methyl-	116	C7H16O	000615-29-2	33
3	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
4	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25
5	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12





Sample Results: **BF142569.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

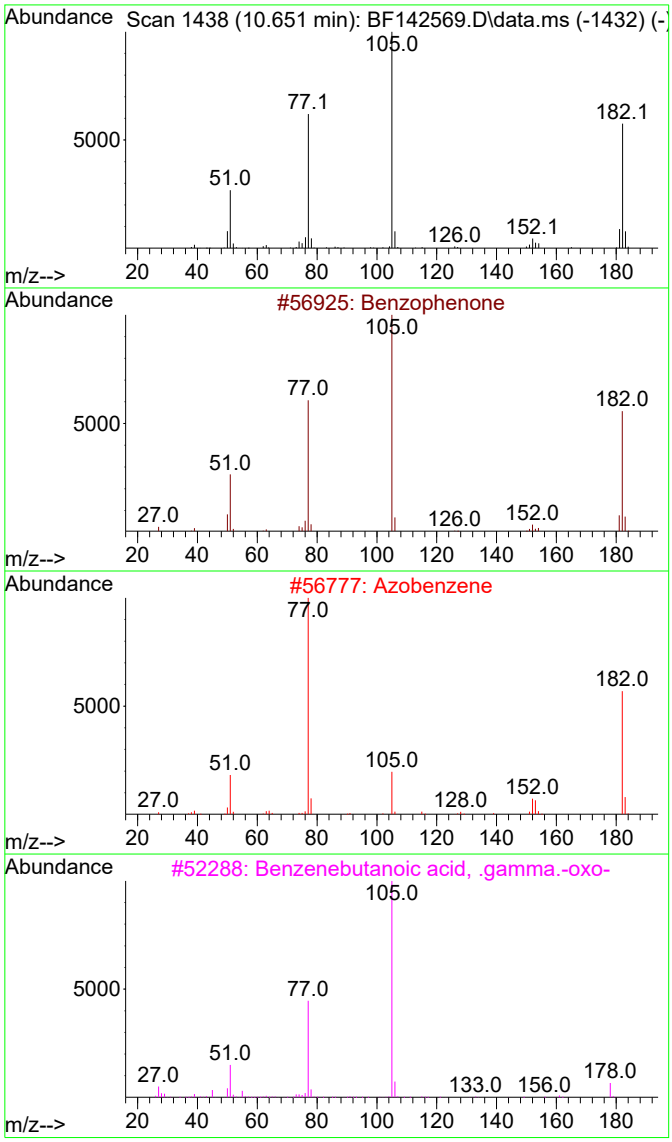
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

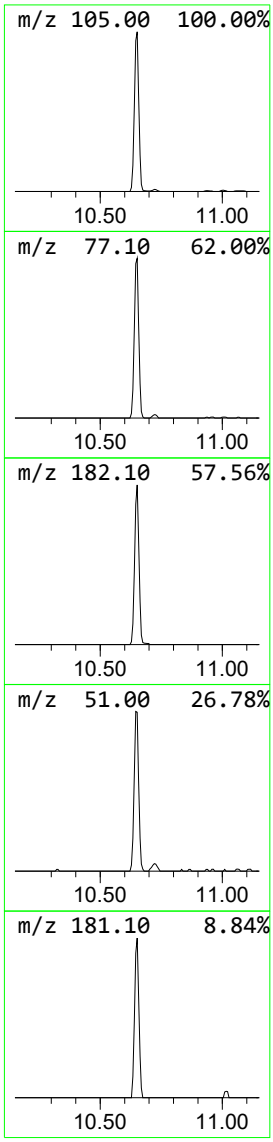
****

Peak Number 2 Benzophenone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.651	4.35 ng	212672	Acenaphthene-d10	9.939

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	Azobenzene	182	C12H10N2	000103-33-3	59
3	Benzenebutanoic acid, .gamma.-oxo-	178	C10H10O3	002051-95-8	47
4	Benzeneacetic acid, .alpha.-oxo-...	178	C10H10O3	001603-79-8	47
5	2-Benzoyl-4-bromo-5-methyl-1,2-o...	281	C11H8BrNO3	1000444-92-3	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

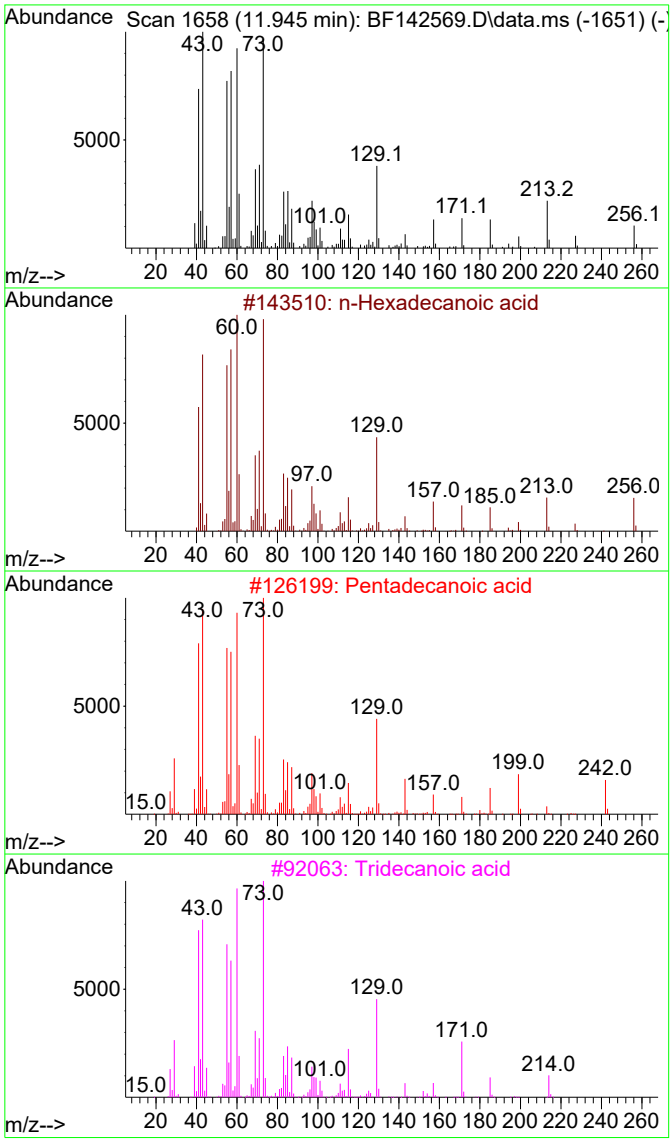
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

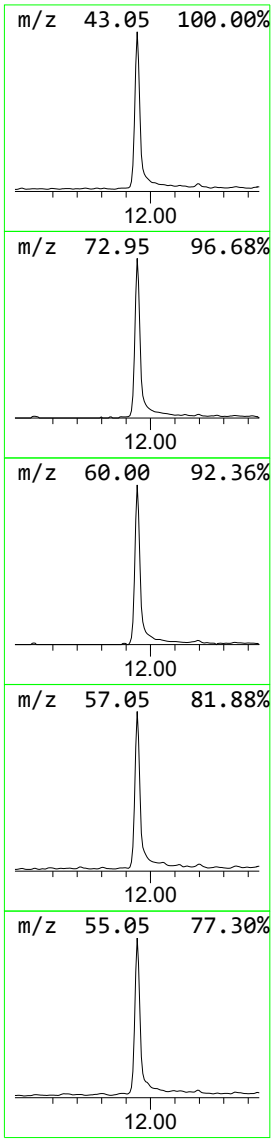
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.945	10.02 ng	455982	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	91
3	Tridecanoic acid	214	C13H26O2	000638-53-9	91
4	n-Decanoic acid	172	C10H20O2	000334-48-5	70
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	62





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

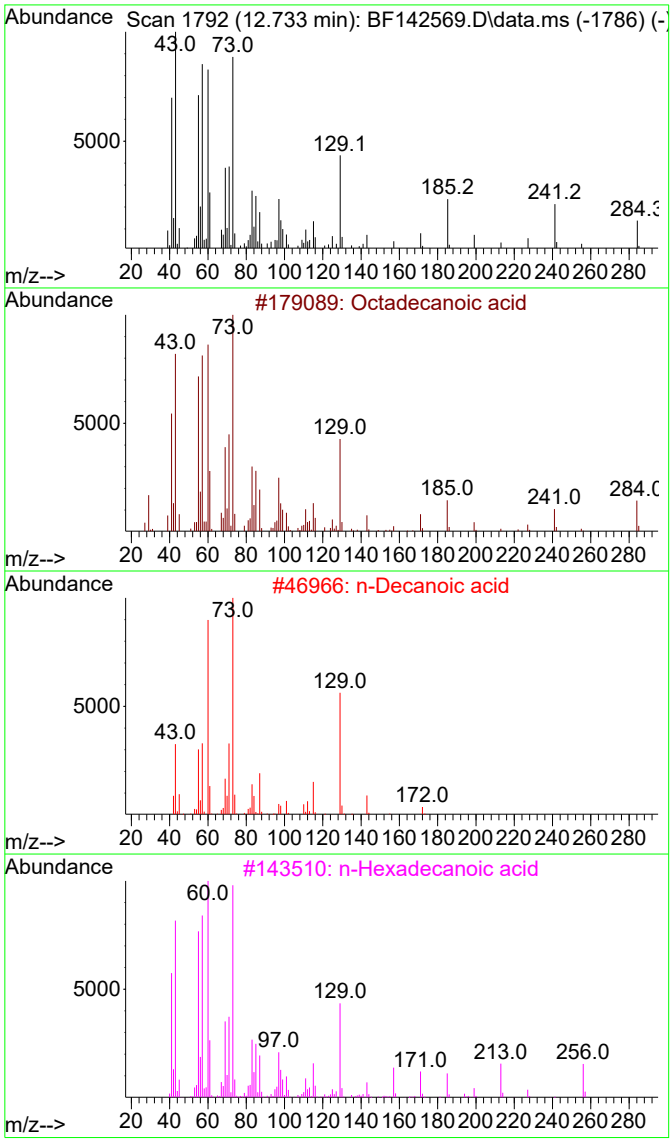
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

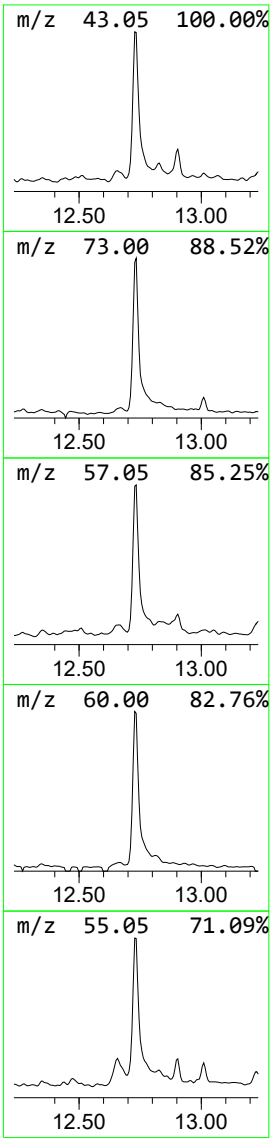
****

Peak Number 4 Octadecanoic acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.733	3.58 ng	162859	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	n-Decanoic acid	172	C10H20O2	000334-48-5	87
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	83
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	74
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	70





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

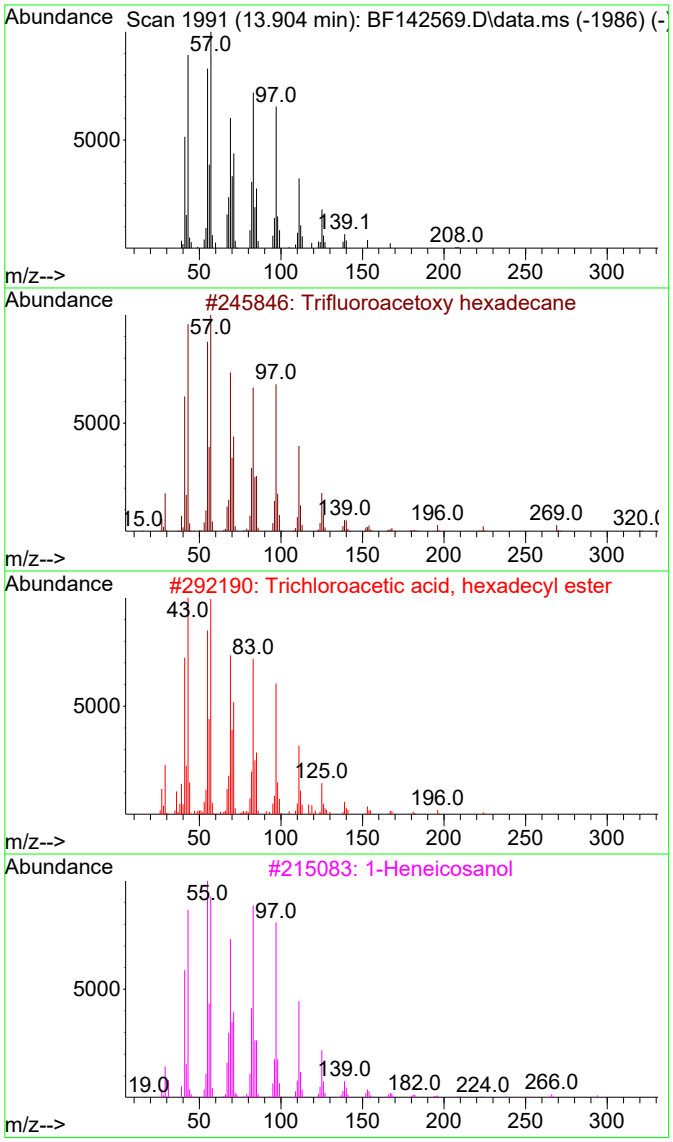
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

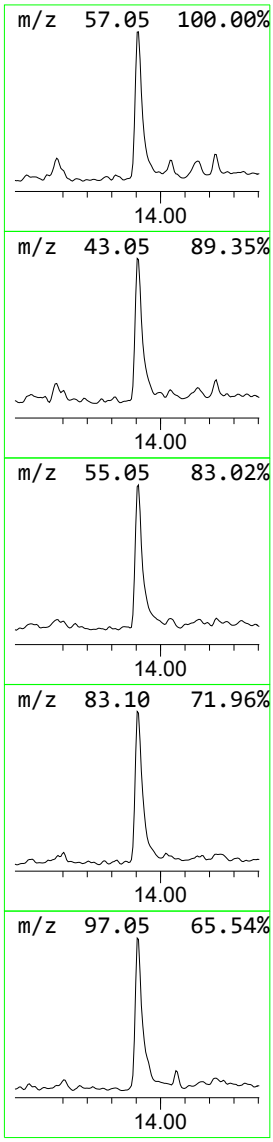
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Trifluoroacetoxy hexadecane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.904	4.90 ng	138903	Chrysene-d12	14.069

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	95
2	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	94
3	1-Heneicosanol	312	C21H44O	015594-90-8	93
4	Octacosanol	410	C28H58O	000557-61-9	93
5	1-Heptacosanol	396	C27H56O	002004-39-9	93





Sample Results: **BF142569.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142569.D
Acq On : 30 May 2025 14:52
Operator : RC/JU
Sample : Q2150-05
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-47

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.116	7.0	ng	238633	1	6.898	678910	20.0
Benzophenone	10.651	4.3	ng	212672	3	9.939	978352	20.0
n-Hexadecanoic ...	11.945	10.0	ng	455982	4	11.422	910343	20.0
Octadecanoic acid	12.733	3.6	ng	162859	4	11.422	910343	20.0
Trifluoroacetox...	13.904	4.9	ng	138903	5	14.069	567387	20.0

Raw Data: **BF142584.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-50	SDG No.:	Q2150
Lab Sample ID:	Q2150-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142584.D	1	05/30/25 09:50	05/30/25 22:11	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	180	U	180	380	ug/Kg
108-95-2	Phenol	25.7	U	25.7	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.2	U	28.2	200	ug/Kg
95-57-8	2-Chlorophenol	28.4	U	28.4	200	ug/Kg
95-48-7	2-Methylphenol	34.7	U	34.7	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.6	U	43.6	200	ug/Kg
98-86-2	Acetophenone	34.3	U	34.3	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.8	U	47.8	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	55.1	U	55.1	93.0	ug/Kg
67-72-1	Hexachloroethane	20.5	U	20.5	200	ug/Kg
98-95-3	Nitrobenzene	21.3	U	21.3	200	ug/Kg
78-59-1	Isophorone	38.1	U	38.1	200	ug/Kg
88-75-5	2-Nitrophenol	67.6	U	67.6	200	ug/Kg
105-67-9	2,4-Dimethylphenol	75.3	U	75.3	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.8	U	35.8	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.9	U	32.9	200	ug/Kg
91-20-3	Naphthalene	26.4	U	26.4	200	ug/Kg
106-47-8	4-Chloroaniline	41.1	U	41.1	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.4	U	29.4	200	ug/Kg
105-60-2	Caprolactam	60.5	U	60.5	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.3	U	33.3	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.7	U	29.7	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.0	U	23.0	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.8	U	33.8	200	ug/Kg
92-52-4	1,1-Biphenyl	25.3	U	25.3	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.1	U	26.1	200	ug/Kg
88-74-4	2-Nitroaniline	55.9	U	55.9	200	ug/Kg
131-11-3	Dimethylphthalate	31.5	U	31.5	200	ug/Kg

Raw Data: **BF142584.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-50	SDG No.:	Q2150
Lab Sample ID:	Q2150-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142584.D	1	05/30/25 09:50	05/30/25 22:11	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.6	U	33.6	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	39.0	U	39.0	200	ug/Kg
99-09-2	3-Nitroaniline	53.5	U	53.5	200	ug/Kg
83-32-9	Acenaphthene	24.8	U	24.8	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	380	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	380	ug/Kg
132-64-9	Dibenzofuran	26.4	U	26.4	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.2	U	58.2	200	ug/Kg
84-66-2	Diethylphthalate	32.9	U	32.9	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.0	U	31.0	200	ug/Kg
86-73-7	Fluorene	29.4	U	29.4	200	ug/Kg
100-01-6	4-Nitroaniline	74.6	U	74.6	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.2	U	38.2	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.3	U	32.3	200	ug/Kg
118-74-1	Hexachlorobenzene	29.4	U	29.4	200	ug/Kg
1912-24-9	Atrazine	39.5	U	39.5	200	ug/Kg
87-86-5	Pentachlorophenol	59.6	U	59.6	380	ug/Kg
85-01-8	Phenanthrene	280		24.3	200	ug/Kg
120-12-7	Anthracene	86.9	J	38.7	200	ug/Kg
86-74-8	Carbazole	36.3	U	36.3	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.7	U	55.7	200	ug/Kg
206-44-0	Fluoranthene	670		34.9	200	ug/Kg
129-00-0	Pyrene	350		41.8	200	ug/Kg
85-68-7	Butylbenzylphthalate	83.0	U	83.0	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.6	U	42.6	380	ug/Kg
56-55-3	Benzo(a)anthracene	340		26.7	200	ug/Kg
218-01-9	Chrysene	290		23.1	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.8	U	68.8	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	440		22.1	200	ug/Kg

Raw Data: **BF142584.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-50	SDG No.:	Q2150
Lab Sample ID:	Q2150-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142584.D	1	05/30/25 09:50	05/30/25 22:11	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	150	J	26.0	200	ug/Kg
50-32-8	Benzo(a)pyrene	320		34.3	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	110	J	33.8	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.8	U	31.8	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	130	J	29.9	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.7	U	29.7	200	ug/Kg
123-91-1	1,4-Dioxane	52.5	U	52.5	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.8	U	31.8	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	77.6		18 - 112	52%	SPK: 150
13127-88-3	Phenol-d6	75.5		15 - 107	50%	SPK: 150
4165-60-0	Nitrobenzene-d5	49.6		18 - 107	50%	SPK: 100
321-60-8	2-Fluorobiphenyl	53.5		20 - 109	53%	SPK: 100
118-79-6	2,4,6-Tribromophenol	61.4		10 - 116	41%	SPK: 150
1718-51-0	Terphenyl-d14	33.4		10 - 105	33%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	132000	6.898			
1146-65-2	Naphthalene-d8	471000	8.181			
15067-26-2	Acenaphthene-d10	213000	9.934			
1517-22-2	Phenanthrene-d10	295000	11.422			
1719-03-5	Chrysene-d12	274000	14.069			
1520-96-3	Perylene-d12	279000	15.563			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB		5.12	ug/Kg
000119-61-9	Benzophenone	130	J		10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	240	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	90.2	J		12.0	ug/Kg
000479-79-8	11H-Benzo[a]fluoren-11-one	110	J		13.9	ug/Kg
000192-97-2	Benzo[e]pyrene	210	J		15.4	ug/Kg

Raw Data: **BF142584.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-50	SDG No.:	Q2150
Lab Sample ID:	Q2150-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142584.D	1	05/30/25 09:50	05/30/25 22:11	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Quant Time: May 31 00:11:34 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

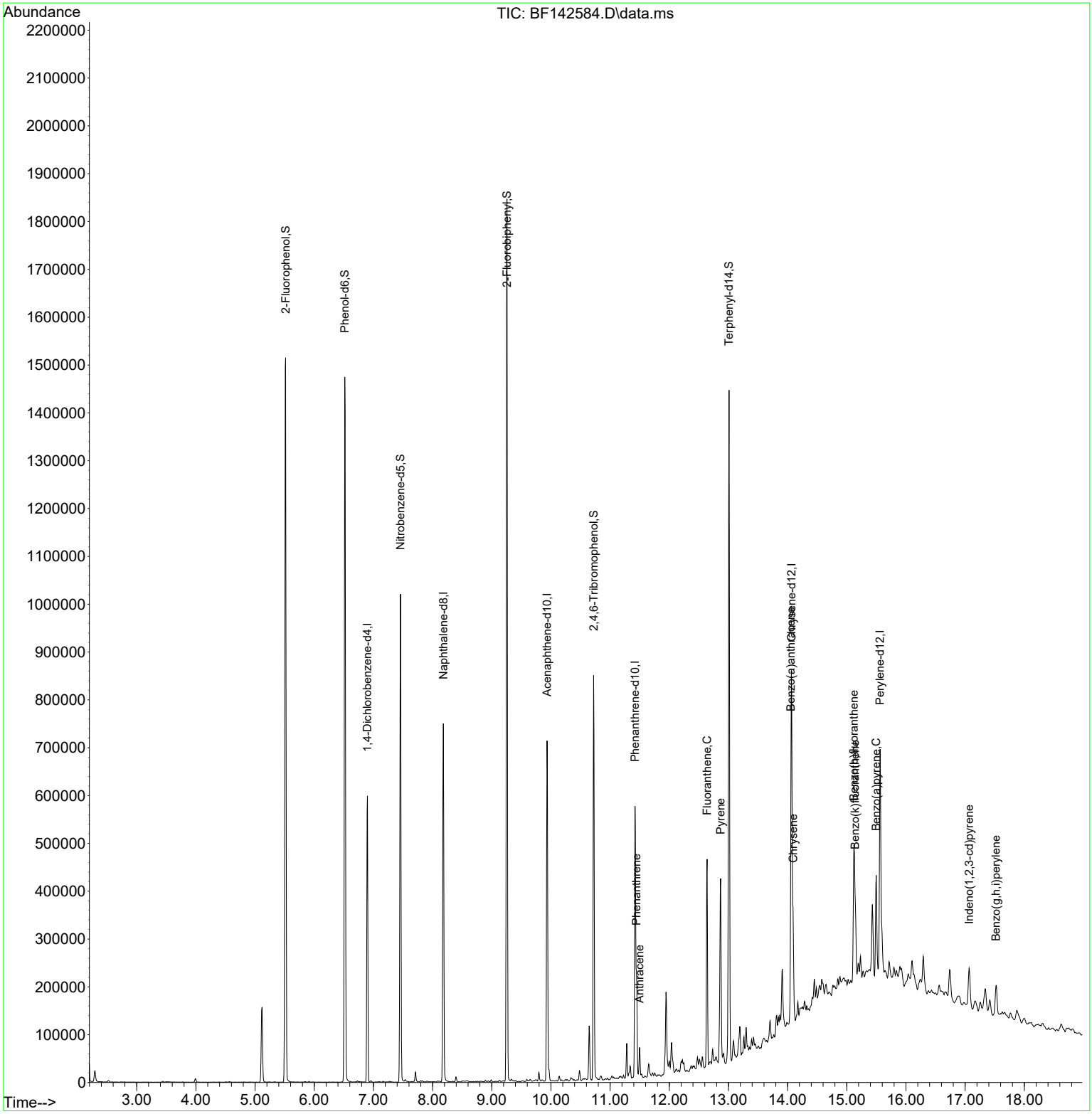
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	131837	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	470624	20.000	ng	0.00
39) Acenaphthene-d10	9.934	164	213475	20.000	ng	-0.01
64) Phenanthrene-d10	11.422	188	294969	20.000	ng	-0.01
76) Chrysene-d12	14.069	240	274370	20.000	ng	0.00
86) Perylene-d12	15.563	264	279386	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.516	112	606974	77.566	ng	0.00
7) Phenol-d6	6.516	99	711329	75.514	ng	-0.02
23) Nitrobenzene-d5	7.457	82	427869	49.575	ng	-0.02
42) 2,4,6-Tribromophenol	10.722	330	145565	61.438	ng	-0.02
45) 2-Fluorobiphenyl	9.257	172	850482	53.460	ng	-0.01
79) Terphenyl-d14	13.010	244	670828	33.412	ng	0.00
Target Compounds						Qvalue
71) Phenanthrene	11.445	178	113607	7.207	ng	100
72) Anthracene	11.498	178	36095	2.244	ng	99
75) Fluoranthene	12.639	202	254483	17.277	ng	100
78) Pyrene	12.869	202	230618	9.010	ng	99
81) Benzo(a)anthracene	14.057	228	161449	8.812	ng	95
83) Chrysene	14.092	228	122044	7.413	ng	97
87) Indeno(1,2,3-cd)pyrene	17.068	276	60492	2.884	ng	97
88) Benzo(b)fluoranthene	15.121	252	189779m	11.477	ng	
89) Benzo(k)fluoranthene	15.139	252	61390m	3.964	ng	
90) Benzo(a)pyrene	15.498	252	130312	8.361	ng	97
92) Benzo(g,h,i)perylene	17.521	276	58698	3.450	ng	95

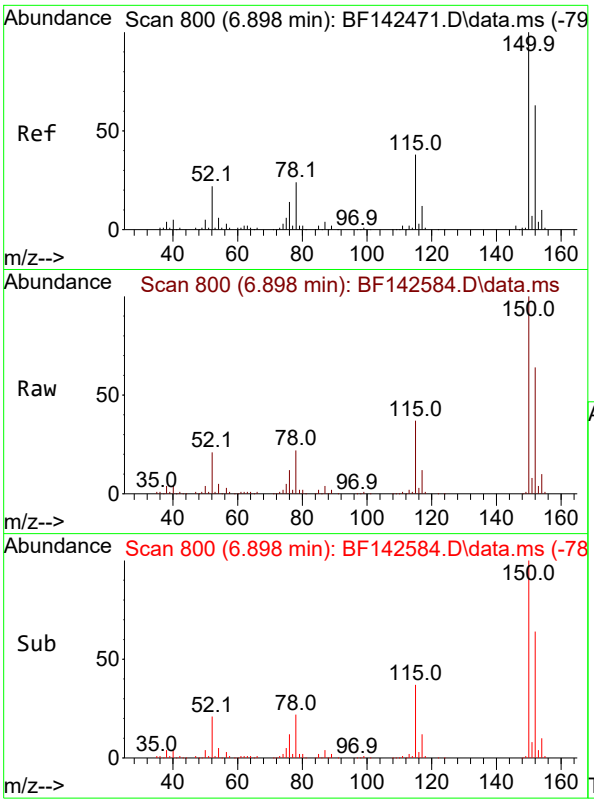
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Quant Time: May 31 00:11:34 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



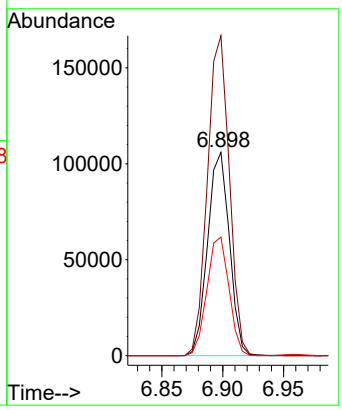


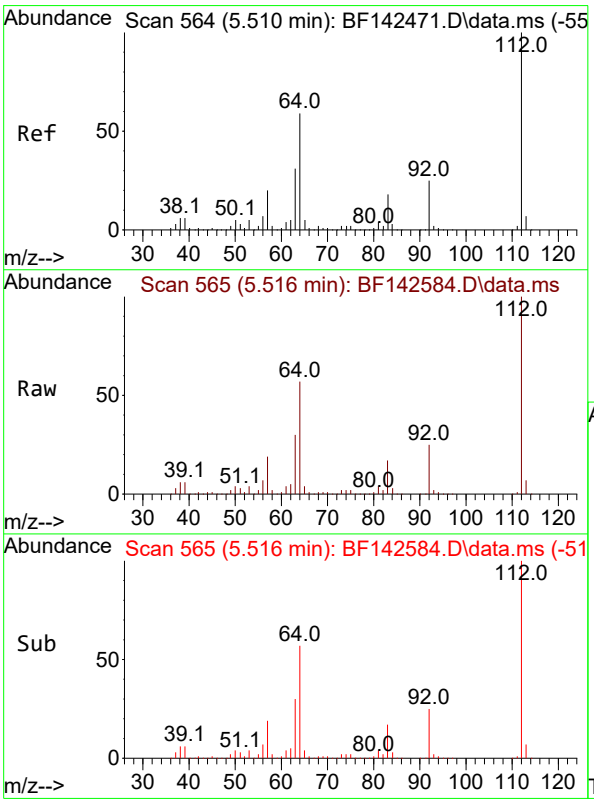
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:152 Resp: 131837

Ion	Ratio	Lower	Upper
152	100		
150	157.3	128.2	192.4
115	58.3	48.3	72.5

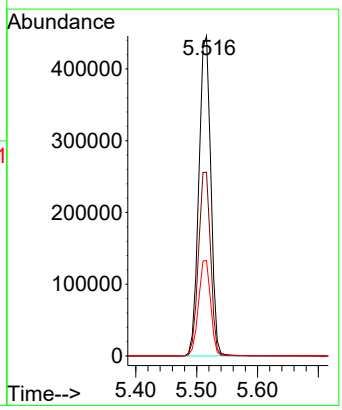


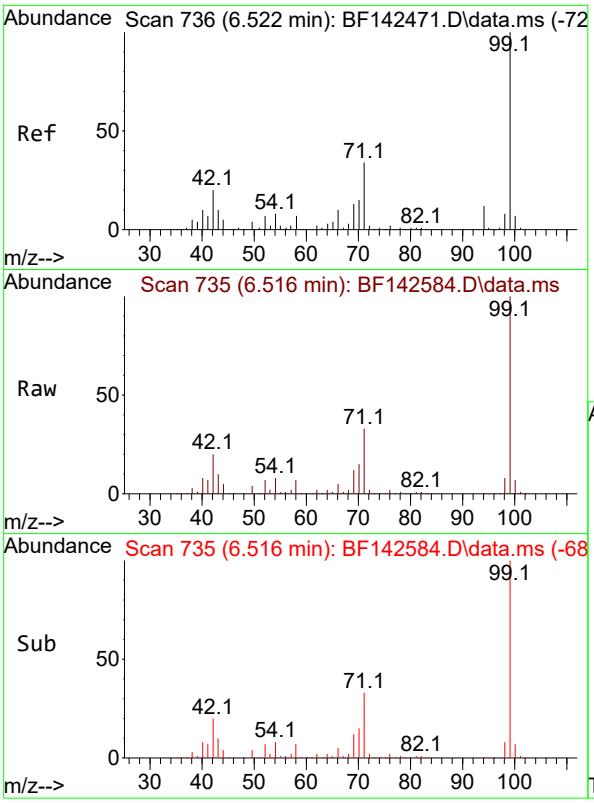


#5
2-Fluorophenol
Concen: 77.566 ng
RT: 5.516 min Scan# 565
Delta R.T. 0.000 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:112 Resp: 606974

Ion	Ratio	Lower	Upper
112	100		
64	57.4	47.5	71.3
63	29.8	24.9	37.3



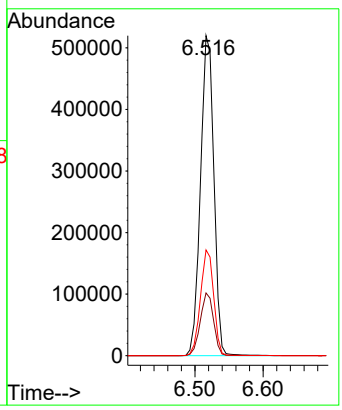


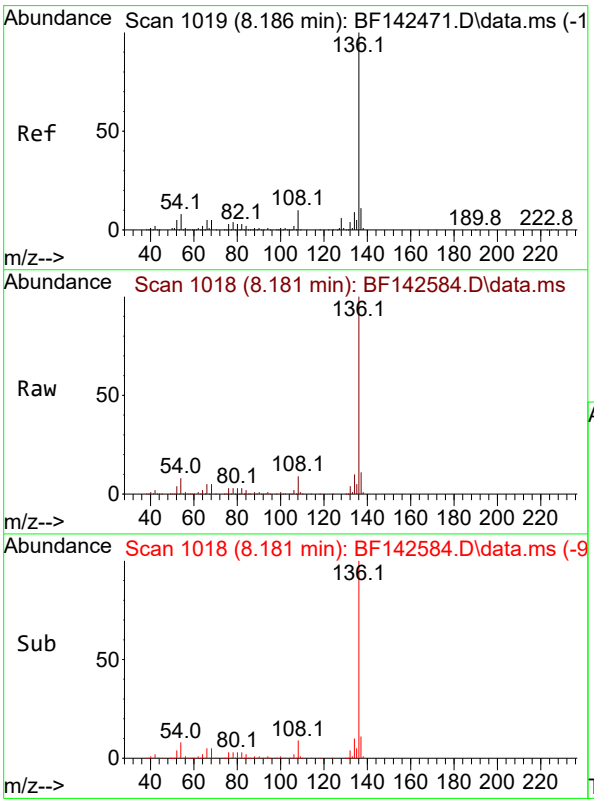
#7
Phenol-d6
Concen: 75.514 ng
RT: 6.516 min Scan# 7
Delta R.T. -0.017 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion: 99 Resp: 711329

Ion	Ratio	Lower	Upper
99	100		
42	19.6	16.2	24.2
71	33.1	27.3	40.9

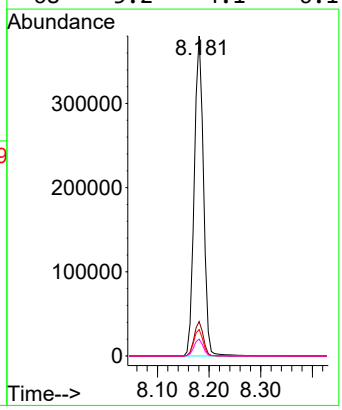


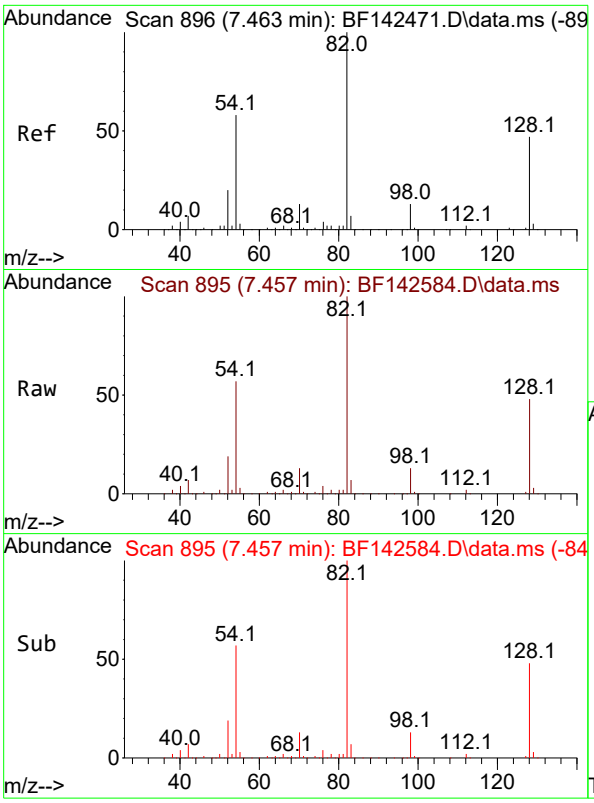


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:136 Resp: 470624

Ion	Ratio	Lower	Upper
136	100		
137	10.7	8.6	13.0
54	8.3	6.6	10.0
68	5.2	4.1	6.1



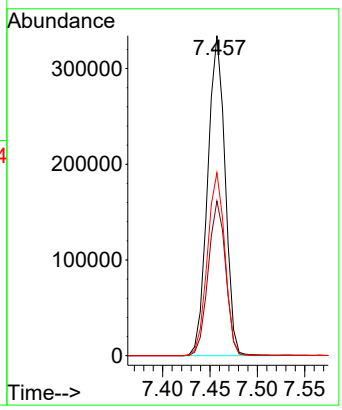


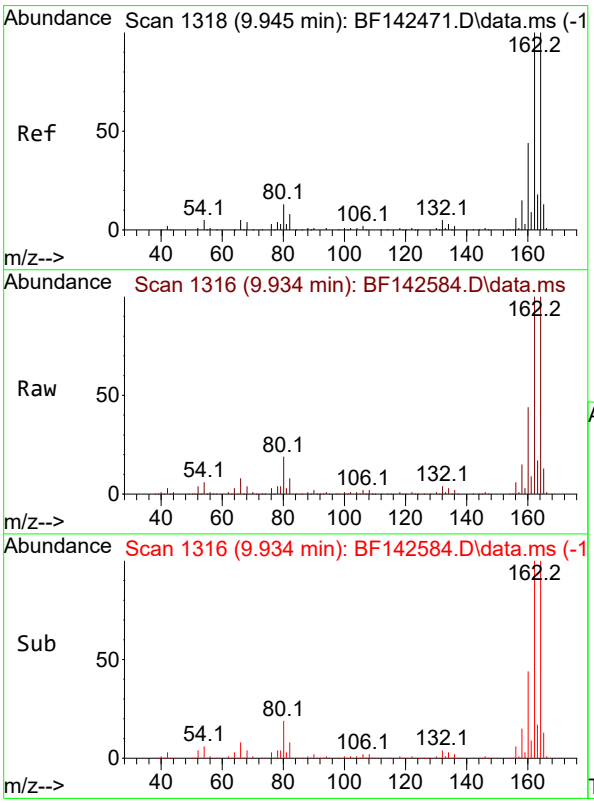
#23
Nitrobenzene-d5
Concen: 49.575 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.017 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion: 82 Resp: 427869

Ion	Ratio	Lower	Upper
82	100		
128	48.4	37.4	56.2
54	57.2	46.6	70.0

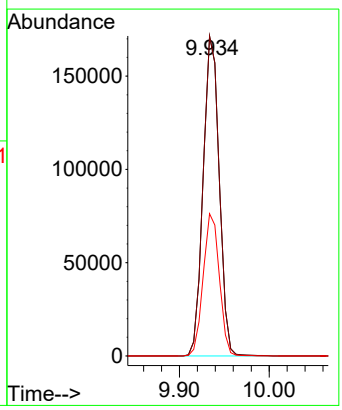


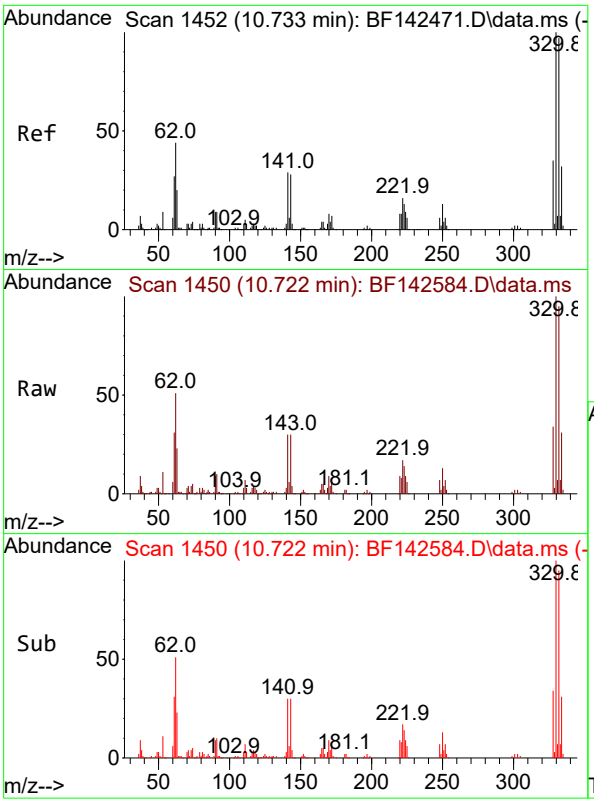


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.934 min Scan# 1316
Delta R.T. -0.012 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:164 Resp: 213475

Ion	Ratio	Lower	Upper
164	100		
162	100.1	80.2	120.4
160	44.5	35.6	53.4



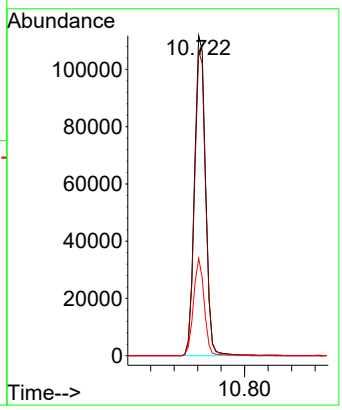


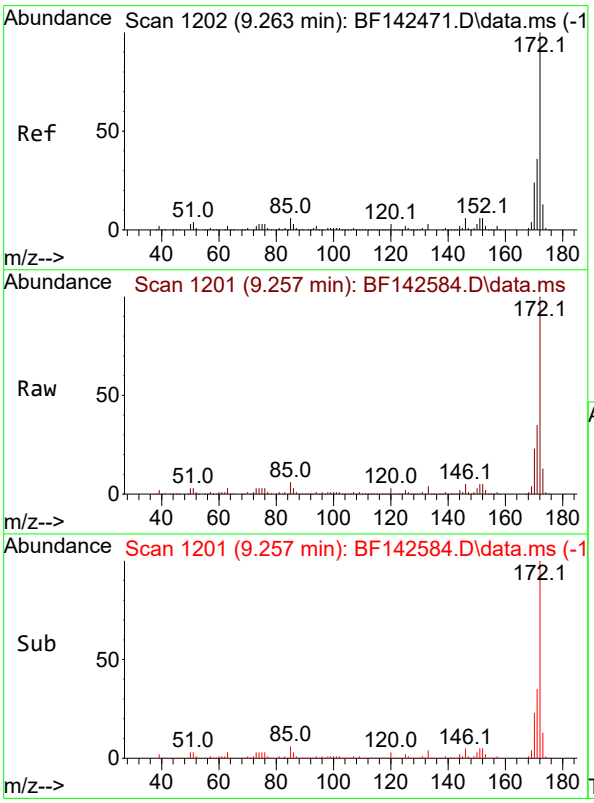
#42
2,4,6-Tribromophenol
Concen: 61.438 ng
RT: 10.722 min Scan# 14
Delta R.T. -0.017 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:330 Resp: 145565

Ion	Ratio	Lower	Upper
330	100		
332	95.7	77.6	116.4
141	29.7	24.6	36.8

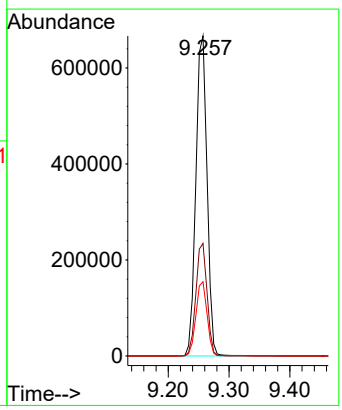


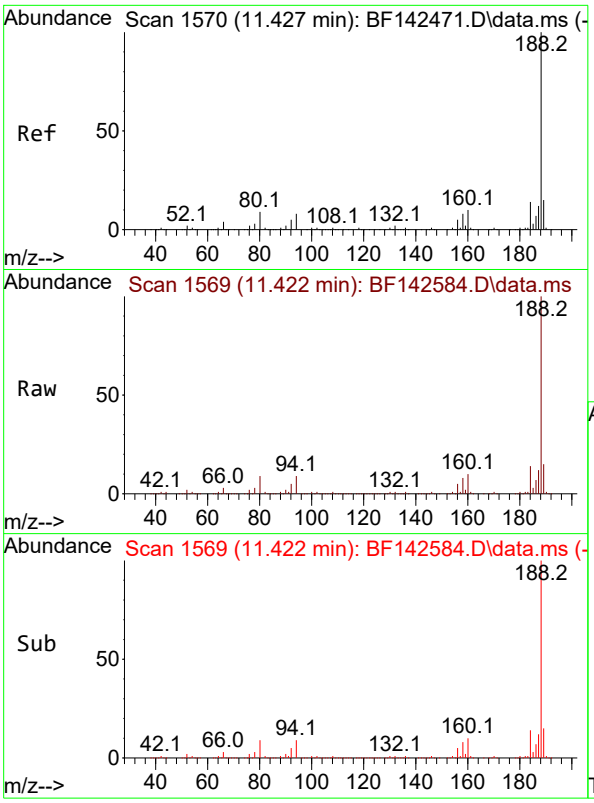


#45
2-Fluorobiphenyl
Concen: 53.460 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:172 Resp: 850482

Ion	Ratio	Lower	Upper
172	100		
171	35.1	28.6	42.8
170	23.2	18.9	28.3



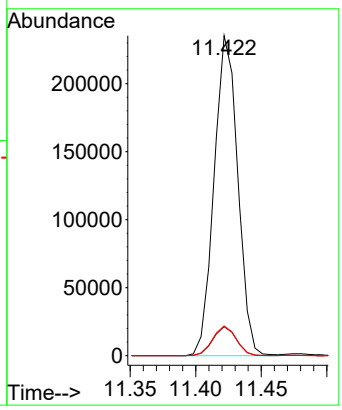


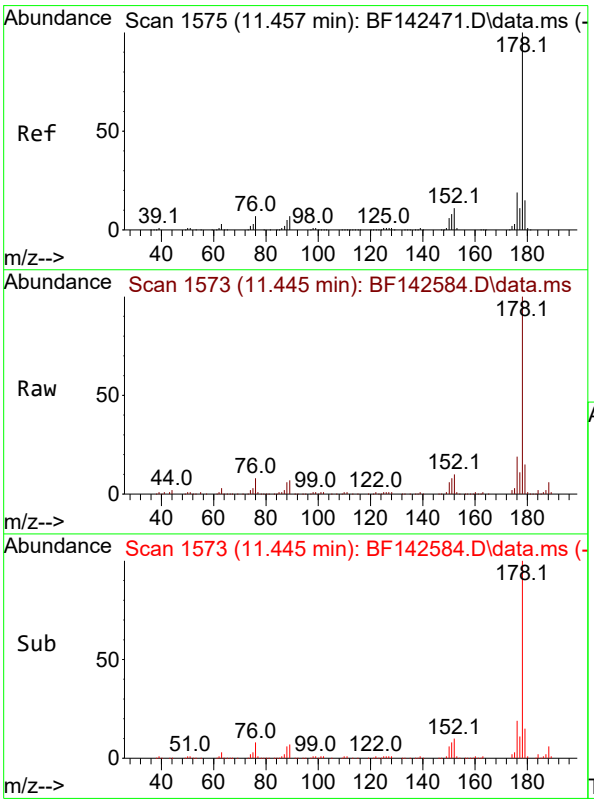
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.422 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:188 Resp: 294969

Ion	Ratio	Lower	Upper
188	100		
94	9.0	6.6	10.0
80	9.3	7.4	11.0

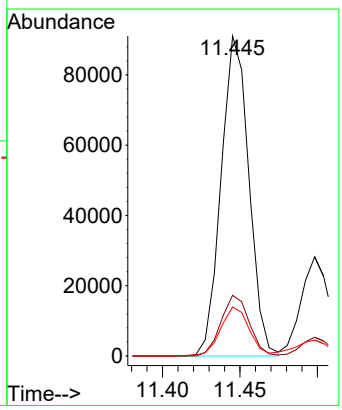


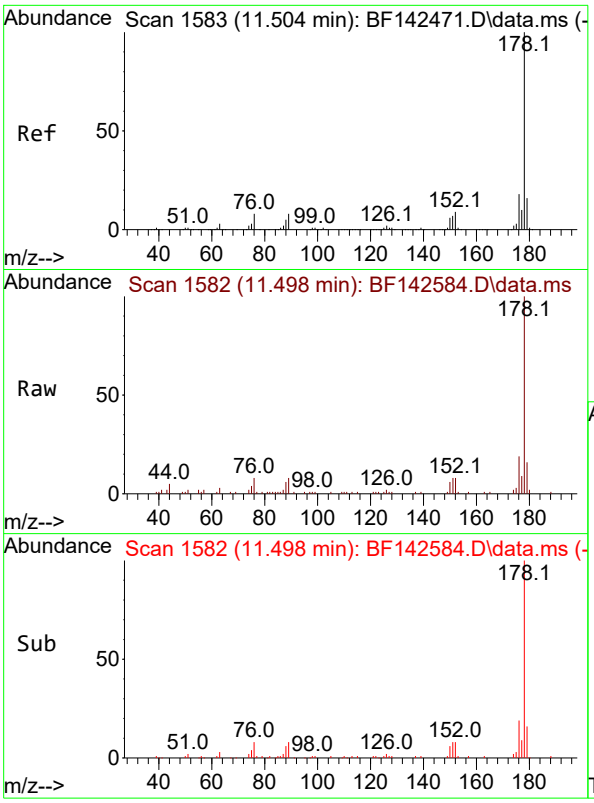


#71
Phenanthrene
Concen: 7.207 ng
RT: 11.445 min Scan# 1573
Delta R.T. -0.012 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:178 Resp: 113607

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.4	23.0
179	15.3	12.3	18.5



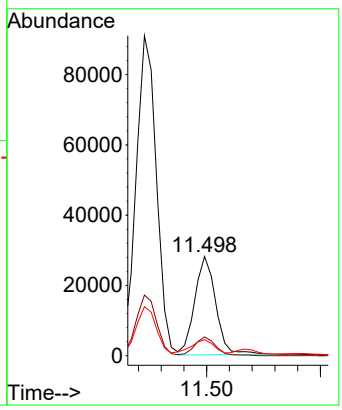


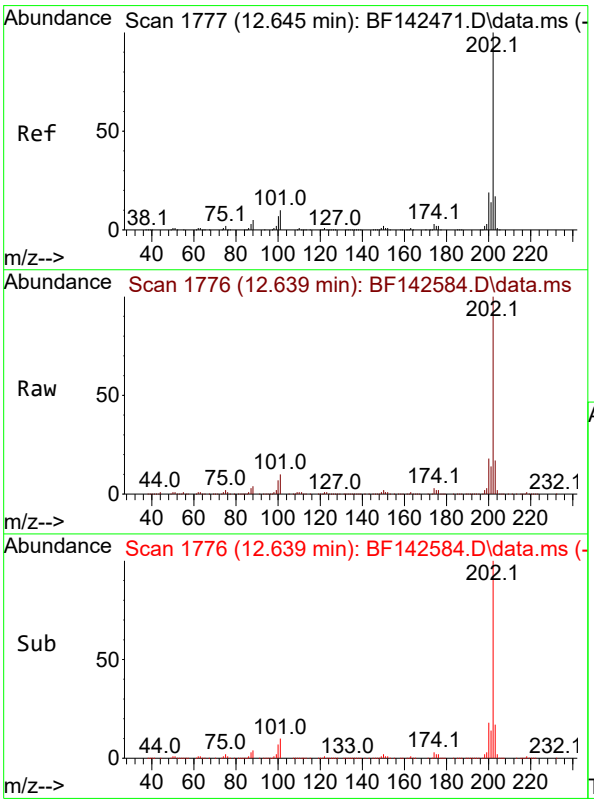
#72
Anthracene
Concen: 2.244 ng
RT: 11.498 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:178 Resp: 36095

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.6	21.8
179	16.1	12.4	18.6

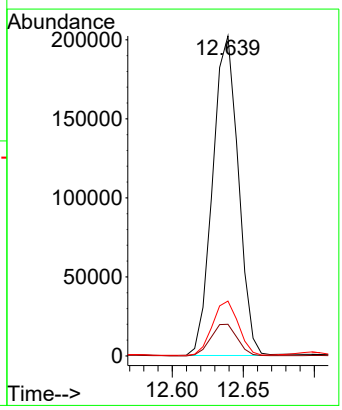


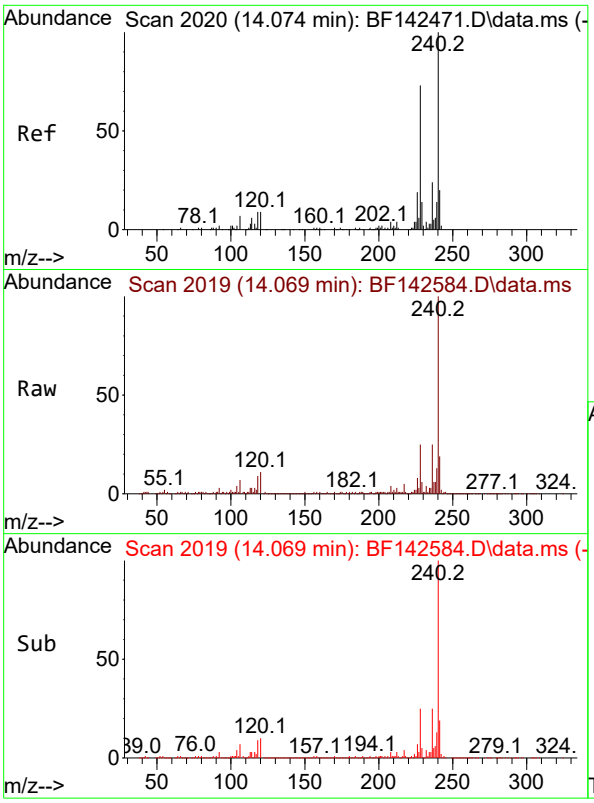


#75
Fluoranthene
Concen: 17.277 ng
RT: 12.639 min Scan# 1776
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:202 Resp: 254483

Ion	Ratio	Lower	Upper
202	100		
101	9.9	0.0	29.6
203	17.1	0.0	37.2



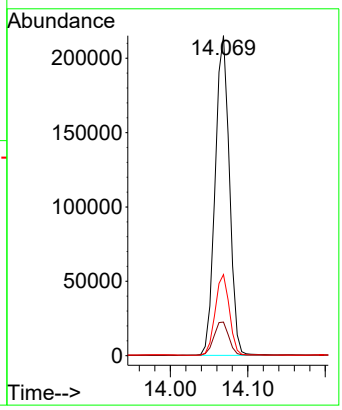


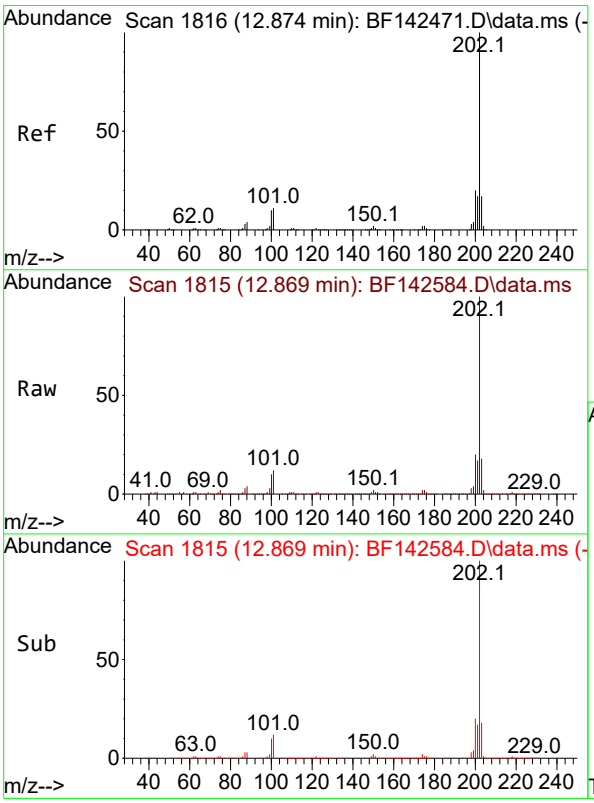
#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.069 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:240 Resp: 274370

Ion	Ratio	Lower	Upper
240	100		
120	10.5	7.5	11.3
236	25.4	19.6	29.4

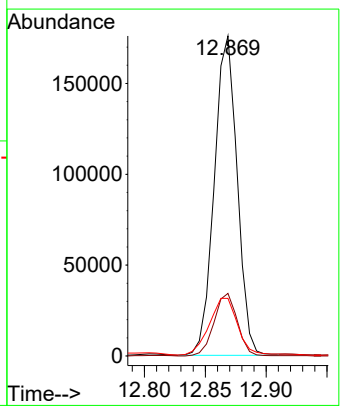


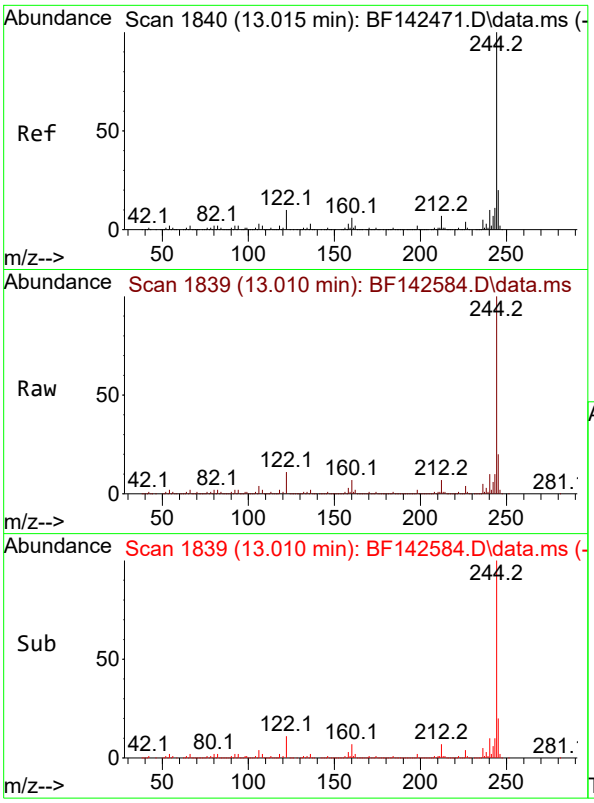


#78
Pyrene
Concen: 9.010 ng
RT: 12.869 min Scan# 1815
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:202 Resp: 230618

Ion	Ratio	Lower	Upper
202	100		
200	19.6	16.1	24.1
203	18.0	13.9	20.9



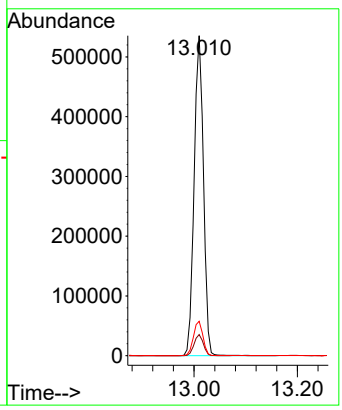


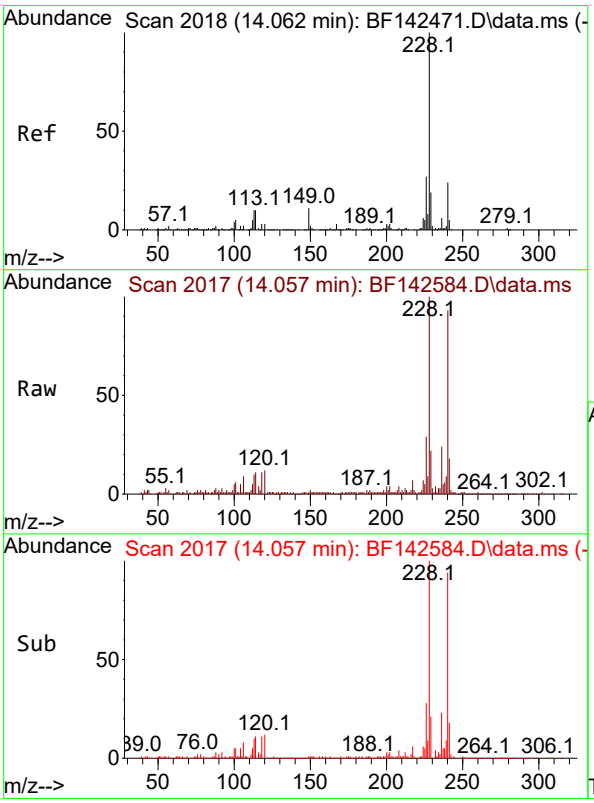
#79
Terphenyl-d14
Concen: 33.412 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:244 Resp: 670828

Ion	Ratio	Lower	Upper
244	100		
212	6.6	5.3	7.9
122	10.8	8.2	12.2

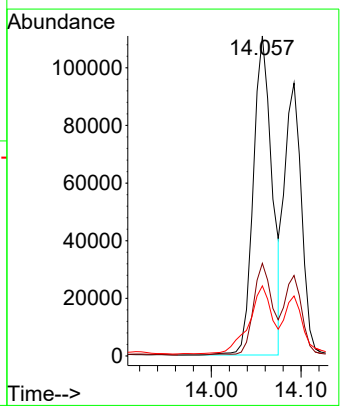


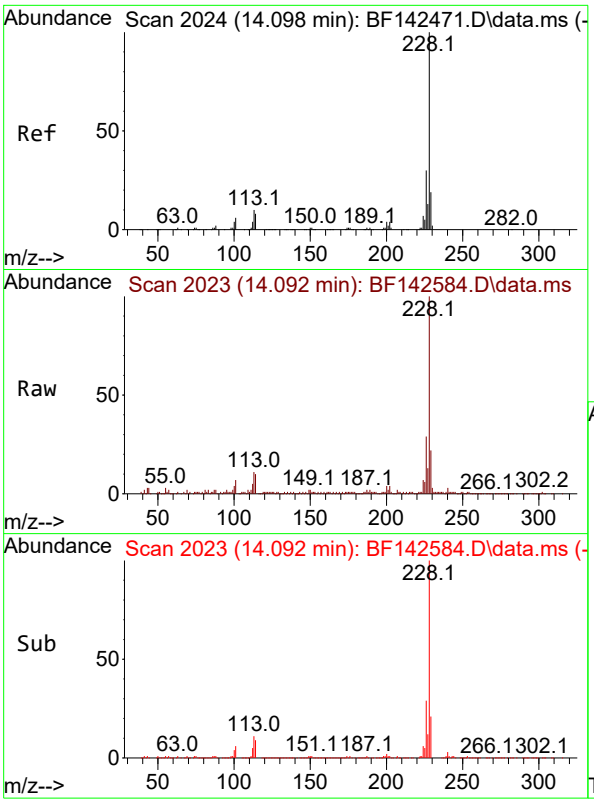


#81
Benzo(a)anthracene
Concen: 8.812 ng
RT: 14.057 min Scan# 2017
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:228 Resp: 161449

Ion	Ratio	Lower	Upper
228	100		
226	29.0	21.2	31.8
229	21.9	15.5	23.3



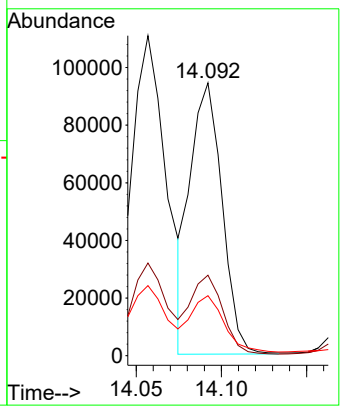


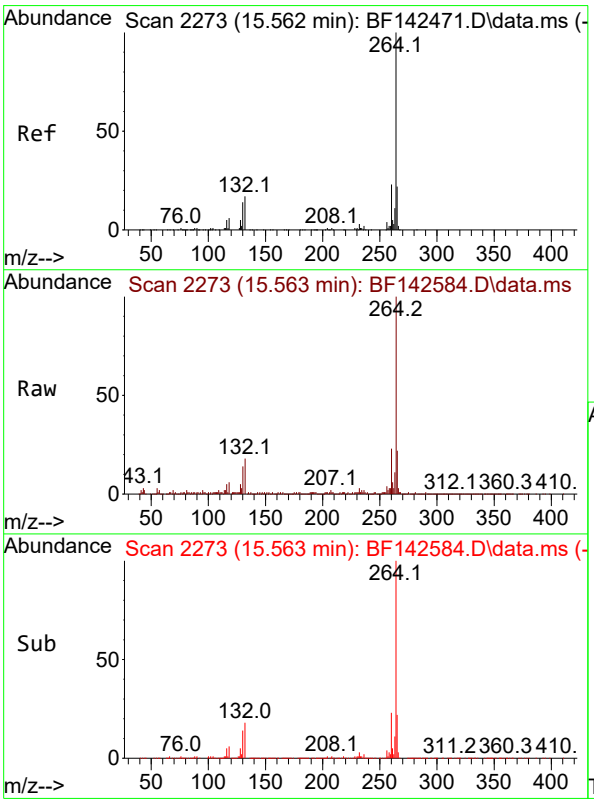
#83
Chrysene
Concen: 7.413 ng
RT: 14.092 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:228 Resp: 122044

Ion	Ratio	Lower	Upper
228	100		
226	29.5	23.8	35.6
229	22.0	15.4	23.2

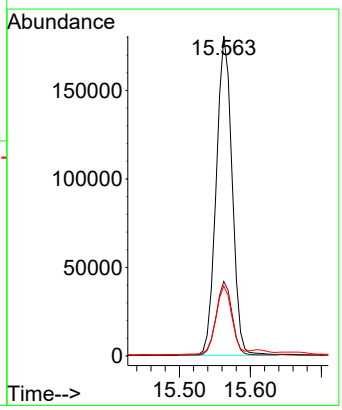


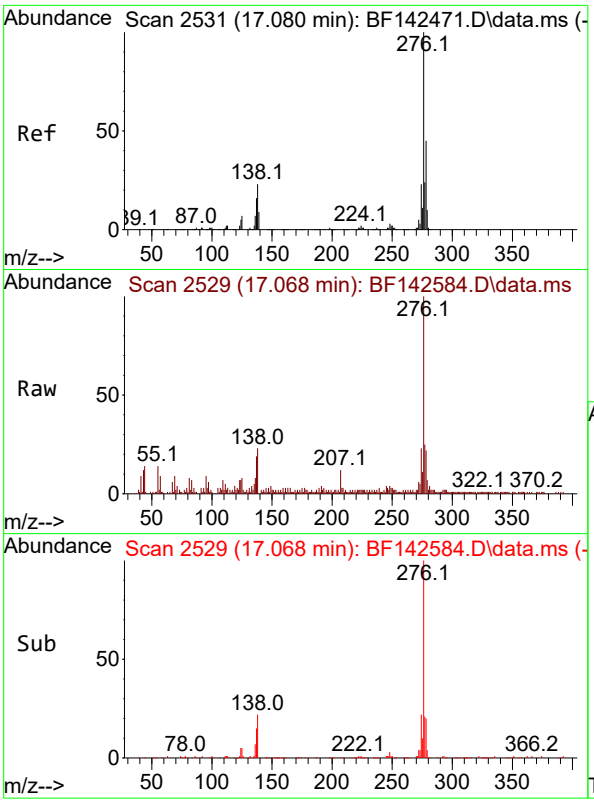


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.563 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:264 Resp: 279386

Ion	Ratio	Lower	Upper
264	100		
260	23.3	18.6	28.0
265	21.8	17.7	26.5



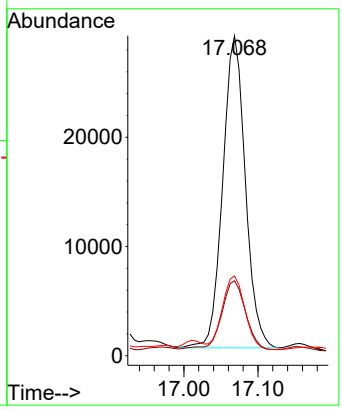


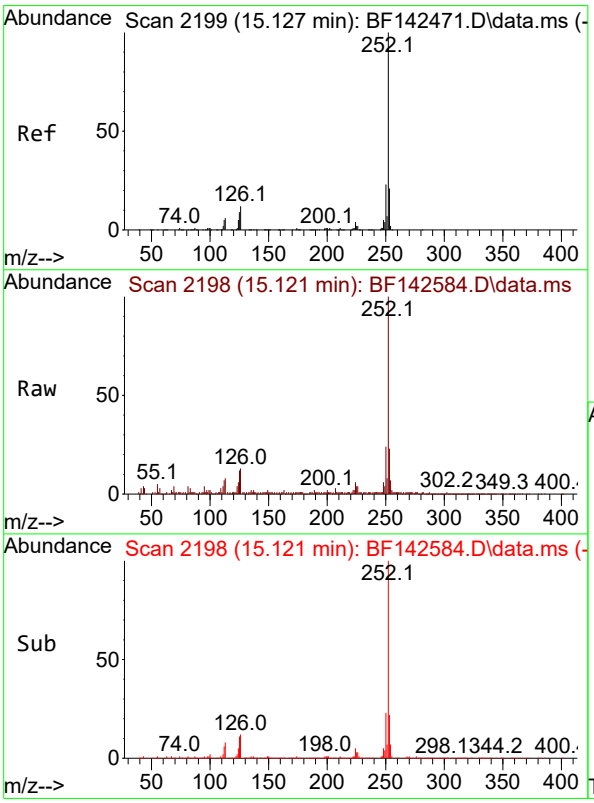
#87
Indeno(1,2,3-cd)pyrene
Concen: 2.884 ng
RT: 17.068 min Scan# 2
Delta R.T. -0.023 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:276 Resp: 60492

Ion	Ratio	Lower	Upper
276	100		
138	23.4	19.9	29.9
277	23.5	20.2	30.2

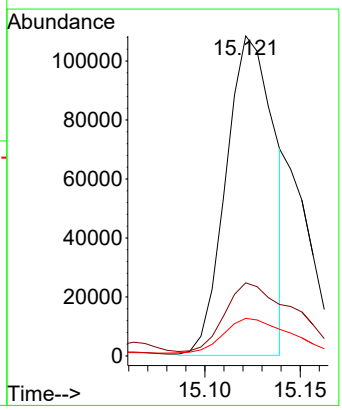


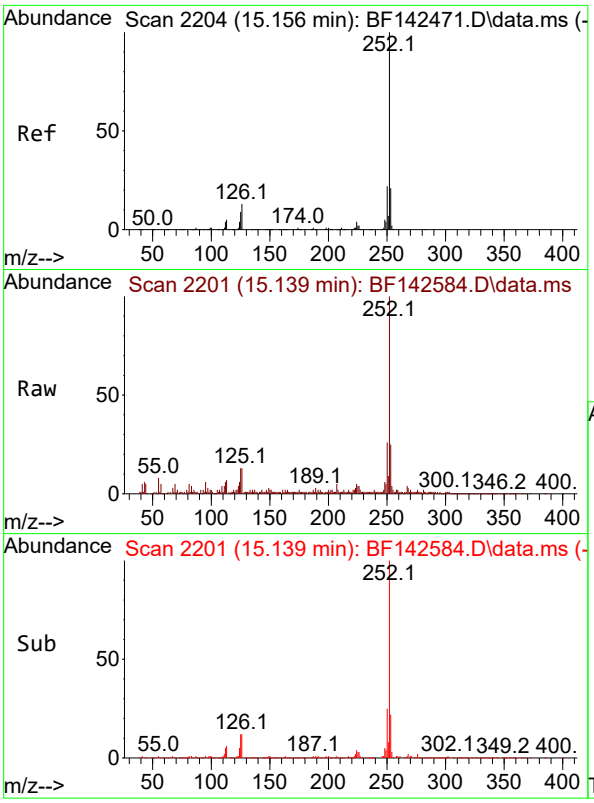


#88
Benzo(b)fluoranthene
Concen: 11.477 ng m
RT: 15.121 min Scan# 2198
Delta R.T. -0.006 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:252 Resp: 189779

Ion	Ratio	Lower	Upper
252	100		
253	22.9	17.0	25.4
125	11.8	7.4	11.0#



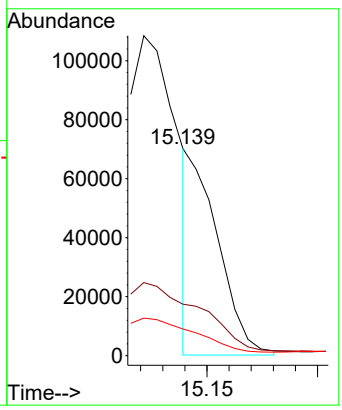


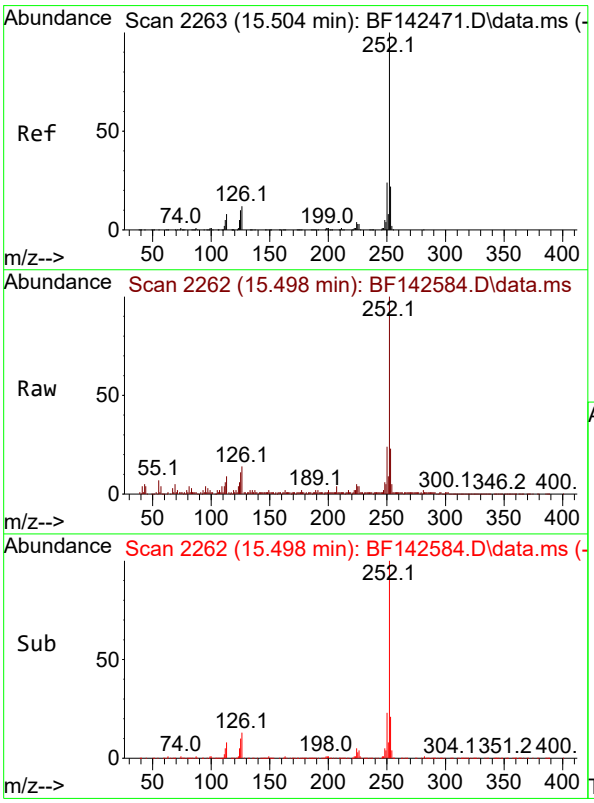
#89
Benzo(k)fluoranthene
Concen: 3.964 ng m
RT: 15.139 min Scan# 2
Delta R.T. -0.023 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:252 Resp: 61390

Ion	Ratio	Lower	Upper
252	100		
253	24.8	17.0	25.4
125	12.9	7.3	10.9#

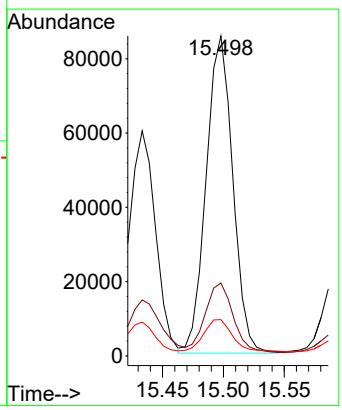


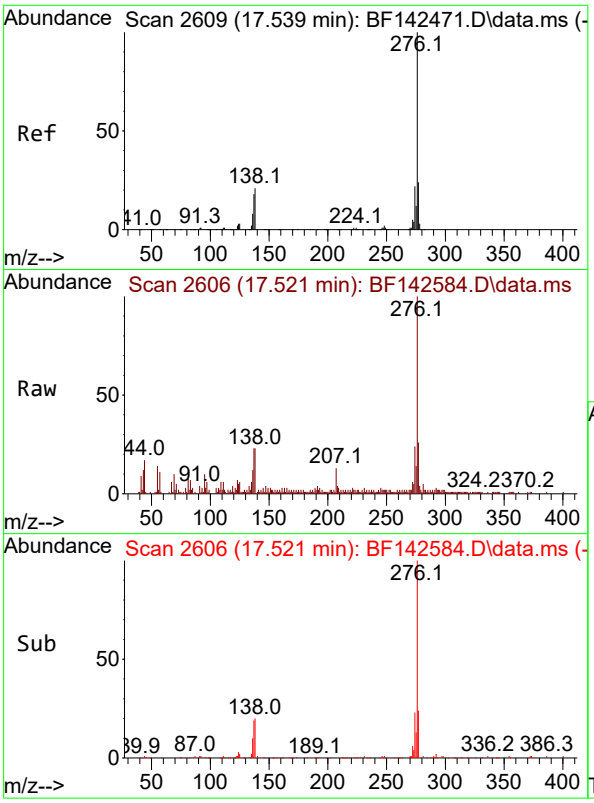


#90
Benzo(a)pyrene
Concen: 8.361 ng
RT: 15.498 min Scan# 2262
Delta R.T. -0.012 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Tgt Ion:252 Resp: 130312

Ion	Ratio	Lower	Upper
252	100		
253	22.8	17.4	26.0
125	11.4	7.9	11.9



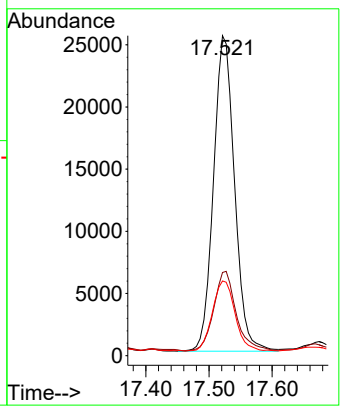


#92
Benzo(g,h,i)perylene
Concen: 3.450 ng
RT: 17.521 min Scan# 2
Delta R.T. -0.035 min
Lab File: BF142584.D
Acq: 30 May 2025 22:11

Instrument :
BNA_F
ClientSampleId :
TP-50

Tgt Ion:276 Resp: 58698

Ion	Ratio	Lower	Upper
276	100		
277	26.0	19.2	28.8
138	23.4	16.8	25.2



Sample Results: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142584.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.293	11	17	29	rVB	22407	39153	1.65%	0.188%
2	5.116	488	497	507	rBV	156927	237811	10.05%	1.141%
3	5.516	558	565	570	rBV	1514657	2071322	87.50%	9.934%
4	6.516	729	735	749	rVB	1472988	2021827	85.41%	9.696%
5	6.898	794	800	805	rBV	598320	750434	31.70%	3.599%
6	7.457	889	895	900	rBV	1020565	1305577	55.15%	6.261%
7	7.710	934	938	949	rVB	20316	27863	1.18%	0.134%
8	8.181	1013	1018	1030	rBV	748295	928074	39.20%	4.451%
9	9.257	1195	1201	1206	rBV	1845056	2367318	100.00%	11.353%
10	9.934	1311	1316	1321	rBV	710782	895006	37.81%	4.292%
11	10.481	1405	1409	1415	rVB	20887	28170	1.19%	0.135%
12	10.645	1432	1437	1445	rVB	113423	144926	6.12%	0.695%
13	10.722	1445	1450	1466	rBV	846599	1081535	45.69%	5.187%
14	11.281	1540	1545	1549	rBV2	72827	92708	3.92%	0.445%
15	11.339	1549	1555	1559	rVB2	24799	43302	1.83%	0.208%
16	11.422	1564	1569	1578	rBV2	566025	973547	41.12%	4.669%
17	11.498	1578	1582	1586	rVB	57450	69333	2.93%	0.333%
18	11.651	1603	1608	1616	rBV2	27204	50559	2.14%	0.242%
19	11.945	1651	1658	1664	rBV2	172289	300309	12.69%	1.440%
20	12.039	1670	1674	1682	rVB2	62549	113191	4.78%	0.543%
21	12.198	1697	1701	1703	rBV4	21211	31224	1.32%	0.150%
22	12.475	1744	1748	1751	rBV	24286	34467	1.46%	0.165%
23	12.510	1751	1754	1759	rVV2	17264	27360	1.16%	0.131%
24	12.563	1759	1763	1768	rVB2	23016	32932	1.39%	0.158%
25	12.639	1771	1776	1780	rBV	434455	553254	23.37%	2.653%
26	12.733	1788	1792	1796	rBV2	29834	41467	1.75%	0.199%
27	12.869	1808	1815	1820	rBV	384967	593346	25.06%	2.846%
28	13.010	1831	1839	1846	rBV	1406482	1830782	77.34%	8.780%
29	13.086	1847	1852	1856	rBV2	40405	71342	3.01%	0.342%
30	13.192	1863	1870	1874	rBV	60998	112525	4.75%	0.540%
31	13.263	1878	1882	1884	rBV	33273	38793	1.64%	0.186%
32	13.298	1884	1888	1892	rVV2	44393	54578	2.31%	0.262%
33	13.392	1901	1904	1906	rBV	20950	23854	1.01%	0.114%
34	13.704	1954	1957	1961	rVB	36981	48034	2.03%	0.230%
35	13.816	1972	1976	1978	rBV2	38028	56352	2.38%	0.270%
36	13.910	1988	1992	2001	rVB	119906	201180	8.50%	0.965%

Sample Results: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

37	14.063	2012	2018	2029	rBV2	732753	1452452	61.35%	6.966%
38	15.121	2193	2198	2207	rBV	284551	659973	27.88%	3.165%
39	15.433	2247	2251	2257	rVB	148894	240930	10.18%	1.155%
40	15.498	2257	2262	2267	rBV	209688	331522	14.00%	1.590%
41	15.563	2268	2273	2285	rVB	467765	872822	36.87%	4.186%

Sum of corrected areas: 20851154

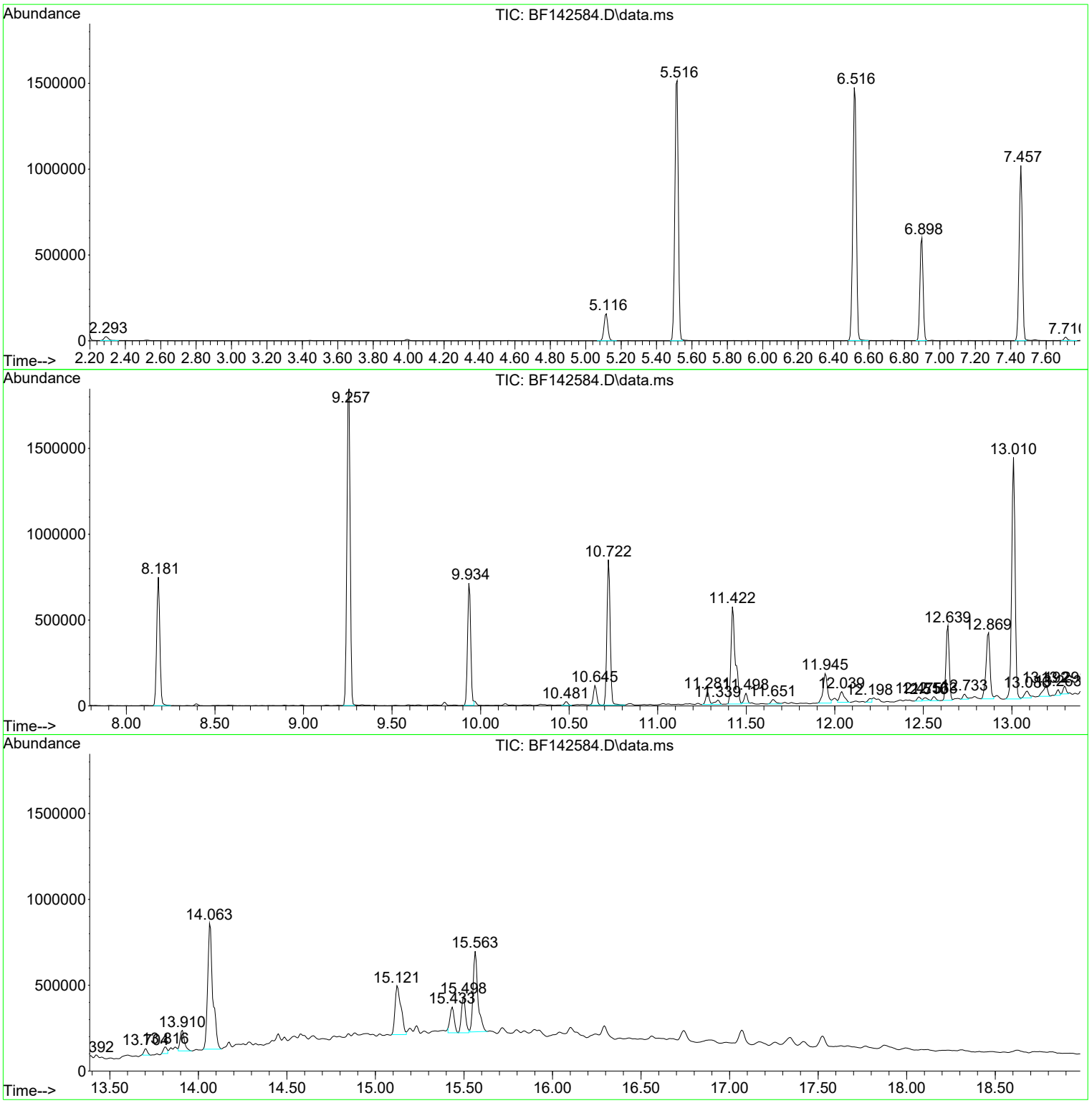
Sample Results: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

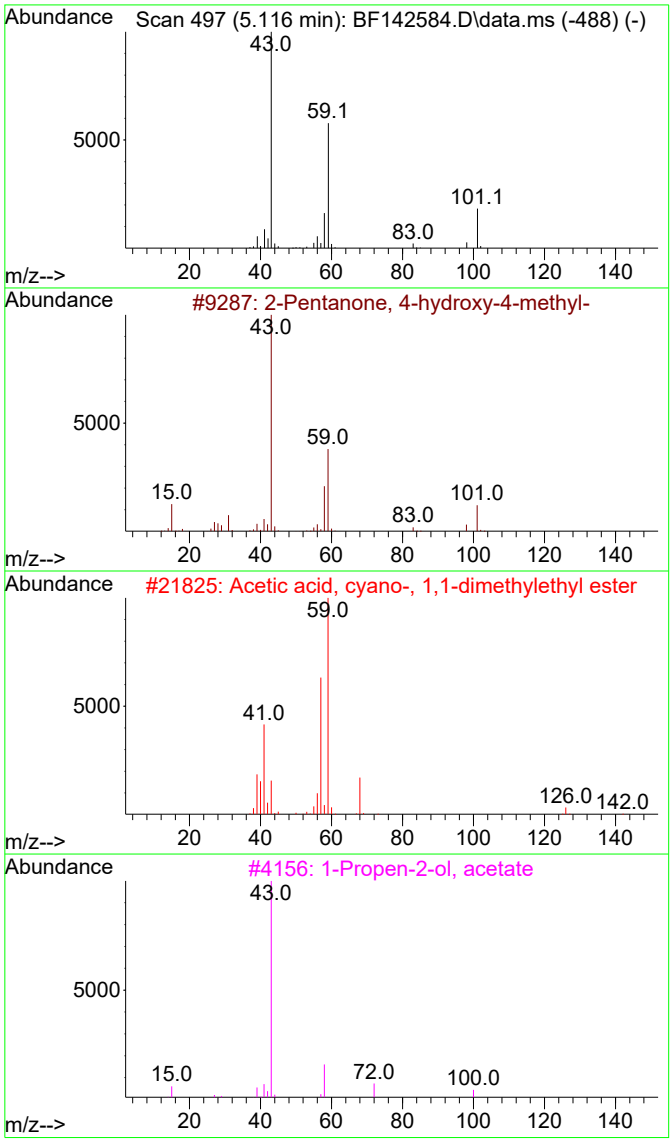
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

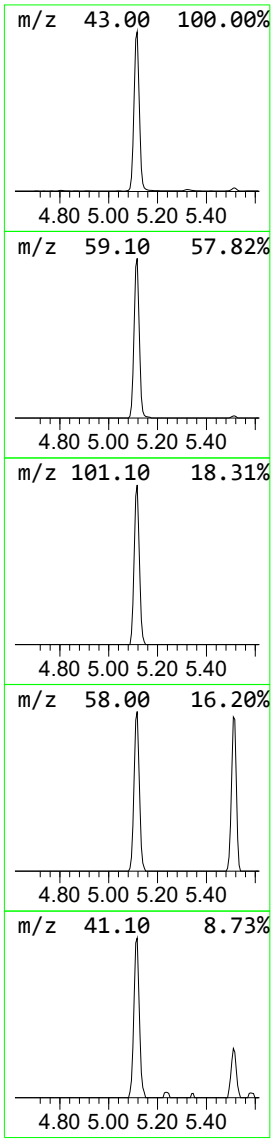
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.116	6.34 ng	237811	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25
3	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	1-Butanol, 3-methoxy-	104	C5H12O2	002517-43-3	9





Sample Results: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

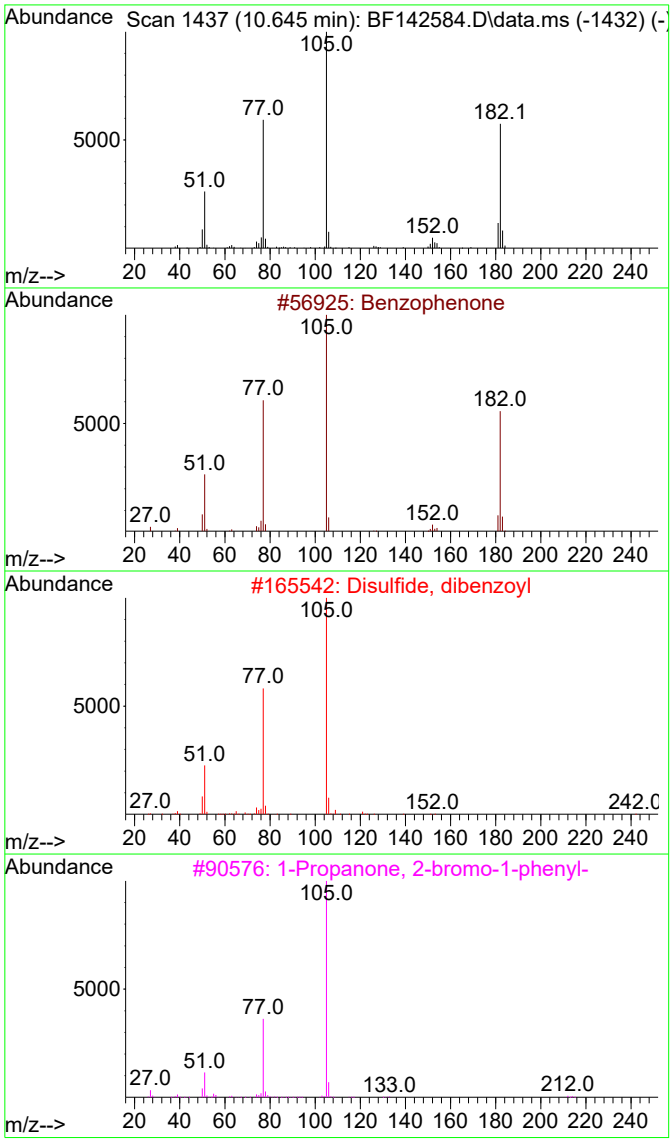
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

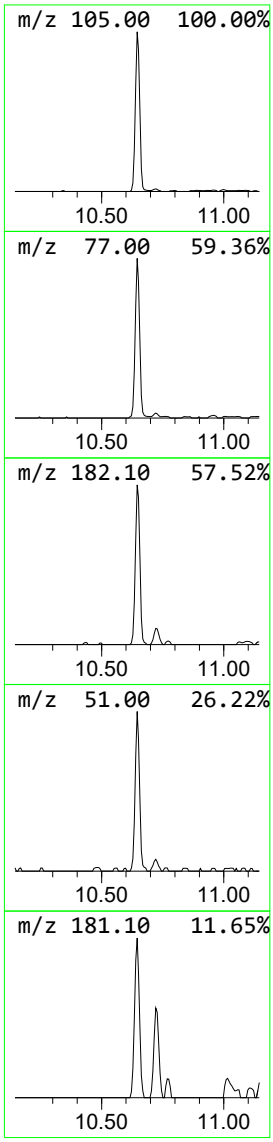
****

Peak Number 2 Benzophenone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.645	3.24 ng	144926	Acenaphthene-d10	9.934

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	Disulfide, dibenzoyl	274	C14H10O2S2	000644-32-6	49
3	1-Propanone, 2-bromo-1-phenyl-	212	C9H9BrO	002114-00-3	47
4	acetic acid, 2-bromo-, 2-oxo-2-p...	256	C10H9BrO3	1000401-50-0	47
5	Benzenebutanoic acid, .gamma.-oxo-	178	C10H10O3	002051-95-8	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

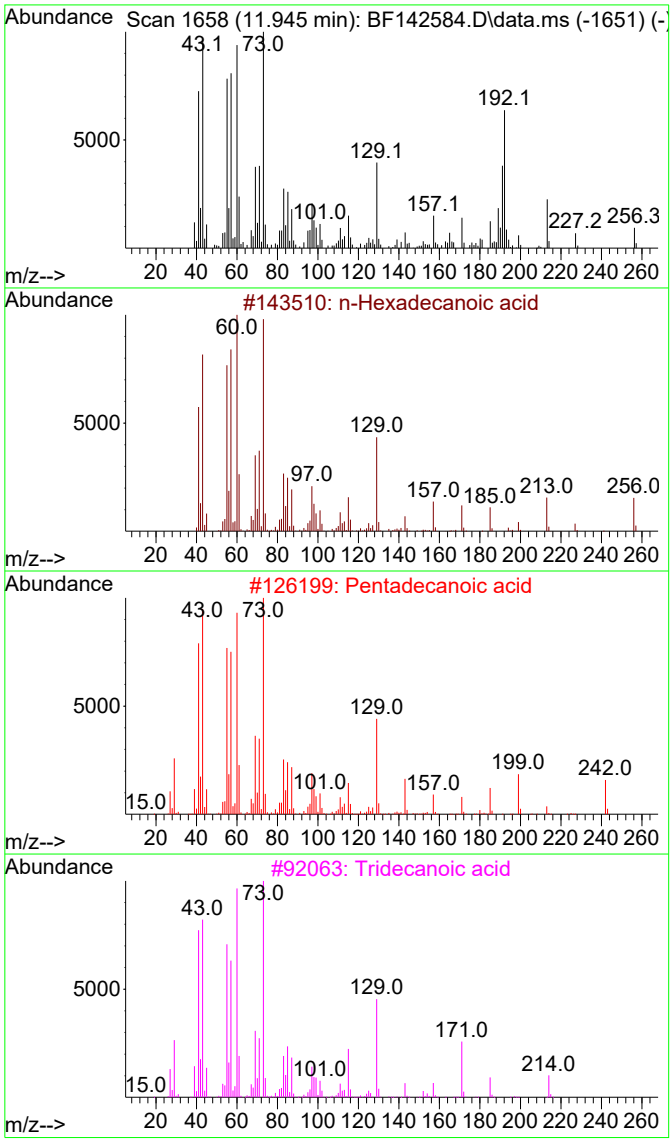
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

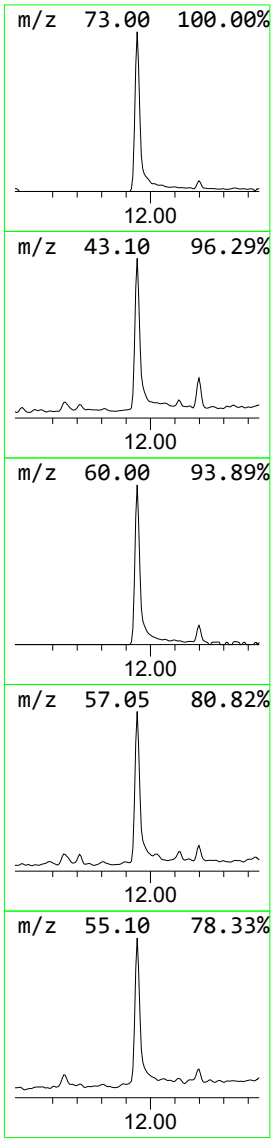
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.945	6.17 ng	300309	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	86
3	Tridecanoic acid	214	C13H26O2	000638-53-9	83
4	Anthracene, 1-methyl-	192	C15H12	000610-48-0	59
5	Anthracene, 9-methyl-	192	C15H12	000779-02-2	55





Sample Results: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

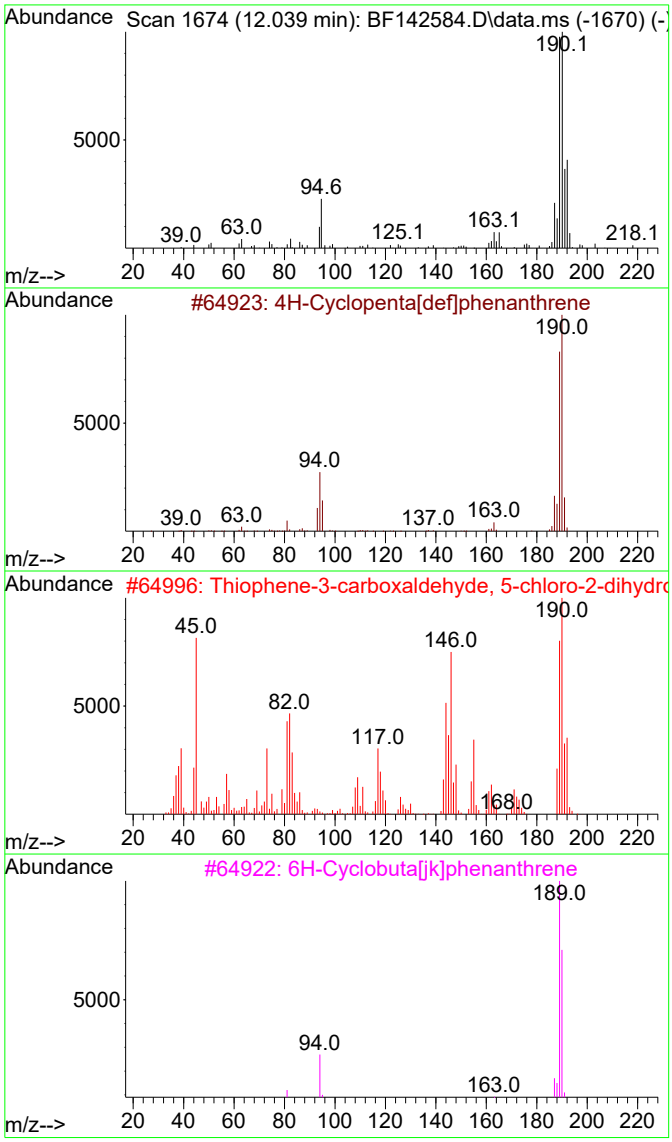
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

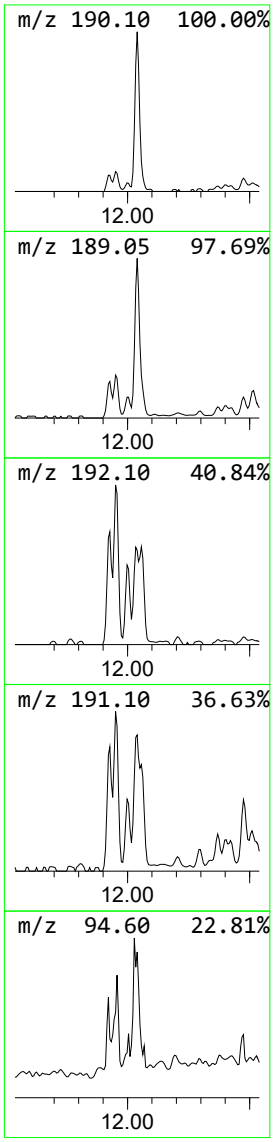
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 4H-Cyclopenta[def]phenanthrene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.039	2.33 ng	113191	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	81
2	Thiophene-3-carboxaldehyde, 5-ch...	190	C5H4BClO3S	036155-87-0	50
3	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	45
4	Carbonic acid, ethyl 2-formyl-4,...	262	C10H8Cl2O4	1000331-34-4	40
5	2,2'-Bis(4,5-dimethylimidazole)	190	C10H14N4	069286-06-2	36





Sample Results: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

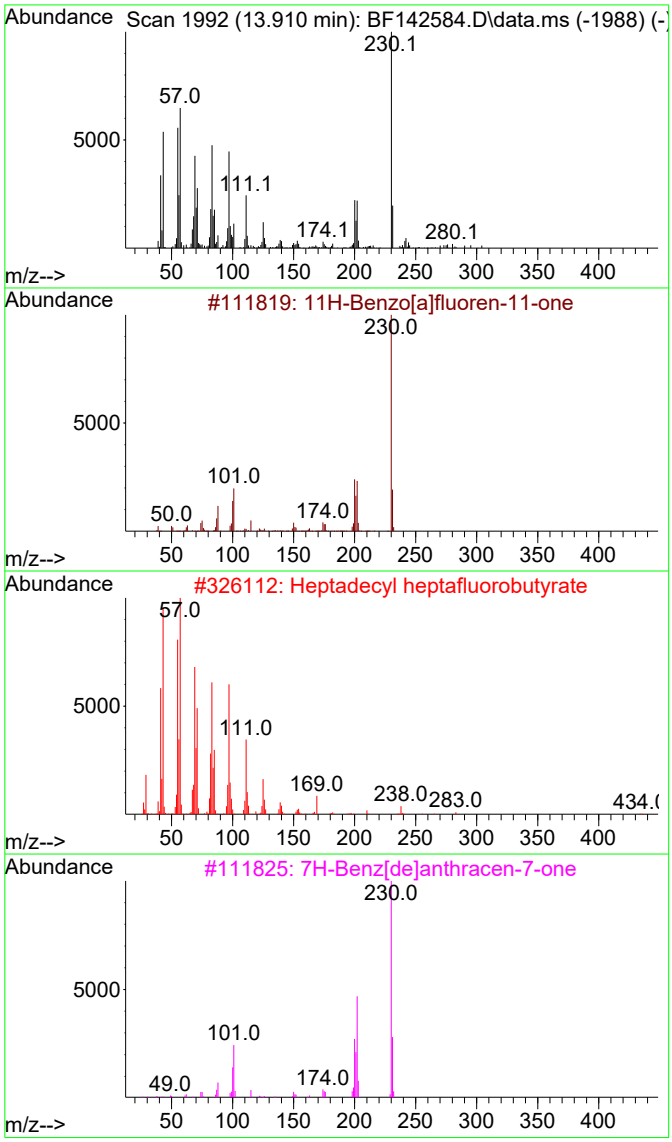
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

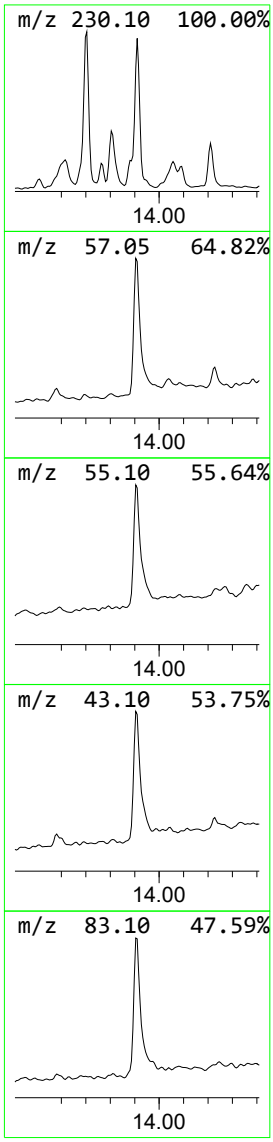
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 11H-Benzo[a]fluoren-11-one Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.910	2.77 ng	201180	Chrysene-d12	14.069

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	11H-Benzo[a]fluoren-11-one	230	C17H10O	000479-79-8	89
2	Heptadecyl heptafluorobutyrate	452	C21H35F7O2	959085-66-6	55
3	7H-Benz[de]anthracen-7-one	230	C17H10O	000082-05-3	55
4	Heptafluorobutyric acid, hexadec...	438	C20H33F7O2	006385-15-5	53
5	Cycloeicosane	280	C20H40	000296-56-0	45





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

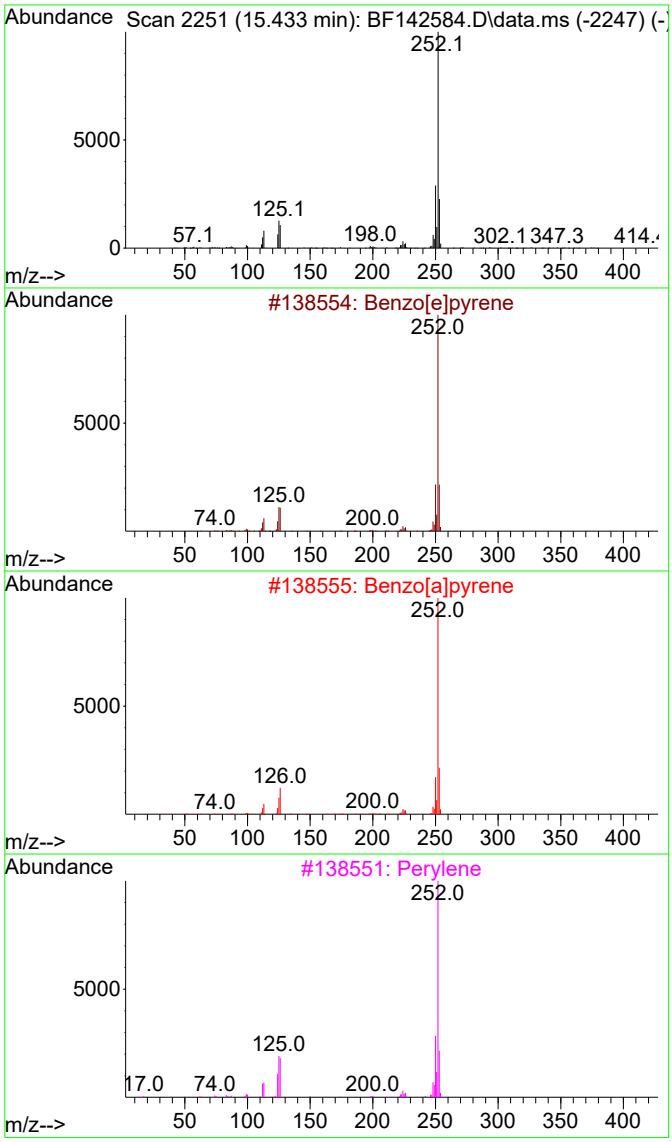
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

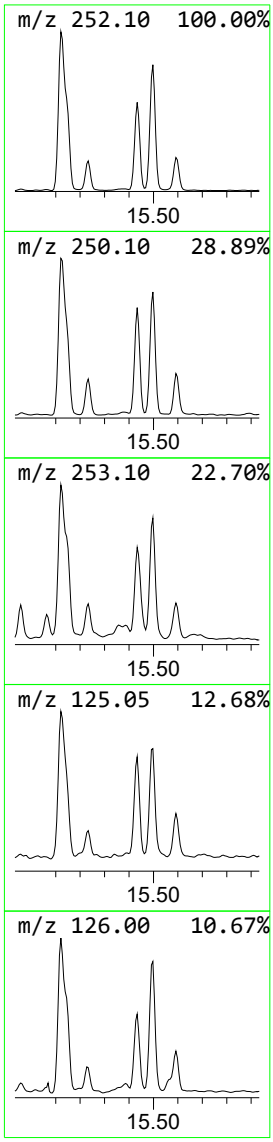
****

Peak Number 6 Benzo[e]pyrene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.433	5.52 ng	240930	Perylene-d12	15.563

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	99
2	Benzo[a]pyrene	252	C20H12	000050-32-8	97
3	Perylene	252	C20H12	000198-55-0	93
4	Benzo[b]fluoranthene	252	C20H12	000205-99-2	93
5	Benzo[k]fluoranthene	252	C20H12	000207-08-9	90





Sample Results: **BF142584.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142584.D
Acq On : 30 May 2025 22:11
Operator : RC/JU
Sample : Q2150-06
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-50

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.116	6.3	ng	237811	1	6.898	750434	20.0
Benzophenone	10.645	3.2	ng	144926	3	9.934	895006	20.0
n-Hexadecanoic ...	11.945	6.2	ng	300309	4	11.422	973547	20.0
4H-Cyclopenta[d...	12.039	2.3	ng	113191	4	11.422	973547	20.0
11H-Benzo[a]flu...	13.910	2.8	ng	201180	5	14.069	1452450	20.0
Benzo[e]pyrene	15.433	5.5	ng	240930	6	15.563	872822	20.0

Raw Data: **BF142579.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-51	SDG No.:	Q2150
Lab Sample ID:	Q2150-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142579.D	1	05/30/25 09:50	05/30/25 19:45	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	190	U	190	390	ug/Kg
108-95-2	Phenol	26.4	U	26.4	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	29.0	U	29.0	200	ug/Kg
95-57-8	2-Chlorophenol	29.1	U	29.1	200	ug/Kg
95-48-7	2-Methylphenol	35.7	U	35.7	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	44.8	U	44.8	200	ug/Kg
98-86-2	Acetophenone	35.2	U	35.2	200	ug/Kg
65794-96-9	3+4-Methylphenols	49.1	U	49.1	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	56.6	U	56.6	95.5	ug/Kg
67-72-1	Hexachloroethane	21.0	U	21.0	200	ug/Kg
98-95-3	Nitrobenzene	21.8	U	21.8	200	ug/Kg
78-59-1	Isophorone	39.1	U	39.1	200	ug/Kg
88-75-5	2-Nitrophenol	69.5	U	69.5	200	ug/Kg
105-67-9	2,4-Dimethylphenol	77.3	U	77.3	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	36.8	U	36.8	200	ug/Kg
120-83-2	2,4-Dichlorophenol	33.8	U	33.8	200	ug/Kg
91-20-3	Naphthalene	27.1	U	27.1	200	ug/Kg
106-47-8	4-Chloroaniline	42.3	U	42.3	200	ug/Kg
87-68-3	Hexachlorobutadiene	30.2	U	30.2	200	ug/Kg
105-60-2	Caprolactam	62.2	U	62.2	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	34.3	U	34.3	200	ug/Kg
91-57-6	2-Methylnaphthalene	30.6	U	30.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.6	U	23.6	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	34.7	U	34.7	200	ug/Kg
92-52-4	1,1-Biphenyl	26.0	U	26.0	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.9	U	26.9	200	ug/Kg
88-74-4	2-Nitroaniline	57.4	U	57.4	200	ug/Kg
131-11-3	Dimethylphthalate	32.3	U	32.3	200	ug/Kg

Raw Data: **BF142579.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-51	SDG No.:	Q2150
Lab Sample ID:	Q2150-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142579.D	1	05/30/25 09:50	05/30/25 19:45	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	34.5	U	34.5	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	40.1	U	40.1	200	ug/Kg
99-09-2	3-Nitroaniline	54.9	U	54.9	200	ug/Kg
83-32-9	Acenaphthene	25.4	U	25.4	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	390	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	390	ug/Kg
132-64-9	Dibenzofuran	27.1	U	27.1	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	59.8	U	59.8	200	ug/Kg
84-66-2	Diethylphthalate	33.8	U	33.8	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.9	U	31.9	200	ug/Kg
86-73-7	Fluorene	30.2	U	30.2	200	ug/Kg
100-01-6	4-Nitroaniline	76.6	U	76.6	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	39.3	U	39.3	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.2	U	33.2	200	ug/Kg
118-74-1	Hexachlorobenzene	30.2	U	30.2	200	ug/Kg
1912-24-9	Atrazine	40.6	U	40.6	200	ug/Kg
87-86-5	Pentachlorophenol	61.2	U	61.2	390	ug/Kg
85-01-8	Phenanthrene	24.9	U	24.9	200	ug/Kg
120-12-7	Anthracene	39.7	U	39.7	200	ug/Kg
86-74-8	Carbazole	37.2	U	37.2	200	ug/Kg
84-74-2	Di-n-butylphthalate	57.2	U	57.2	200	ug/Kg
206-44-0	Fluoranthene	35.8	U	35.8	200	ug/Kg
129-00-0	Pyrene	43.0	U	43.0	200	ug/Kg
85-68-7	Butylbenzylphthalate	85.2	U	85.2	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	43.8	U	43.8	390	ug/Kg
56-55-3	Benzo(a)anthracene	27.5	U	27.5	200	ug/Kg
218-01-9	Chrysene	23.8	U	23.8	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	70.7	U	70.7	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	22.7	U	22.7	200	ug/Kg

Raw Data: **BF142579.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/27/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-51	SDG No.:	Q2150
Lab Sample ID:	Q2150-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142579.D	1	05/30/25 09:50	05/30/25 19:45	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	26.7	U	26.7	200	ug/Kg
50-32-8	Benzo(a)pyrene	35.2	U	35.2	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	34.7	U	34.7	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	32.7	U	32.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	30.7	U	30.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	30.6	U	30.6	200	ug/Kg
123-91-1	1,4-Dioxane	53.9	U	53.9	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	32.7	U	32.7	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	122		18 - 112	81%	SPK: 150
13127-88-3	Phenol-d6	126		15 - 107	84%	SPK: 150
4165-60-0	Nitrobenzene-d5	78.0		18 - 107	78%	SPK: 100
321-60-8	2-Fluorobiphenyl	72.9		20 - 109	73%	SPK: 100
118-79-6	2,4,6-Tribromophenol	121		10 - 116	81%	SPK: 150
1718-51-0	Terphenyl-d14	70.5		10 - 105	71%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	123000	6.898			
1146-65-2	Naphthalene-d8	466000	8.181			
15067-26-2	Acenaphthene-d10	242000	9.933			
1517-22-2	Phenanthrene-d10	396000	11.422			
1719-03-5	Chrysene-d12	235000	14.063			
1520-96-3	Perylene-d12	242000	15.562			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	410	AB		5.13	ug/Kg
	unknown10.345	130	J		10.3	ug/Kg
000119-61-9	Benzophenone	200	J		10.7	ug/Kg
000057-10-3	n-Hexadecanoic acid	330	J		11.9	ug/Kg
010192-32-2	1-Tetracosene	430	J		13.9	ug/Kg
1000406-04-8	Pentadecafluorooctanoic acid, octa	110	J		14.5	ug/Kg

Raw Data: **BF142579.D**

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

Report of Analysis

Client:	CDM Smith			Date Collected:	05/27/25
Project:	South River WM Replacement			Date Received:	05/28/25
Client Sample ID:	TP-51			SDG No.:	Q2150
Lab Sample ID:	Q2150-07			Matrix:	SOIL
Analytical Method:	8270E			% Solid:	83.7
Sample Wt/Vol:	30.03	Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOC-TCL BNA -20
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142579.D	1	05/30/25 09:50	05/30/25 19:45	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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: **BF142579.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Quant Time: May 30 22:29:02 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

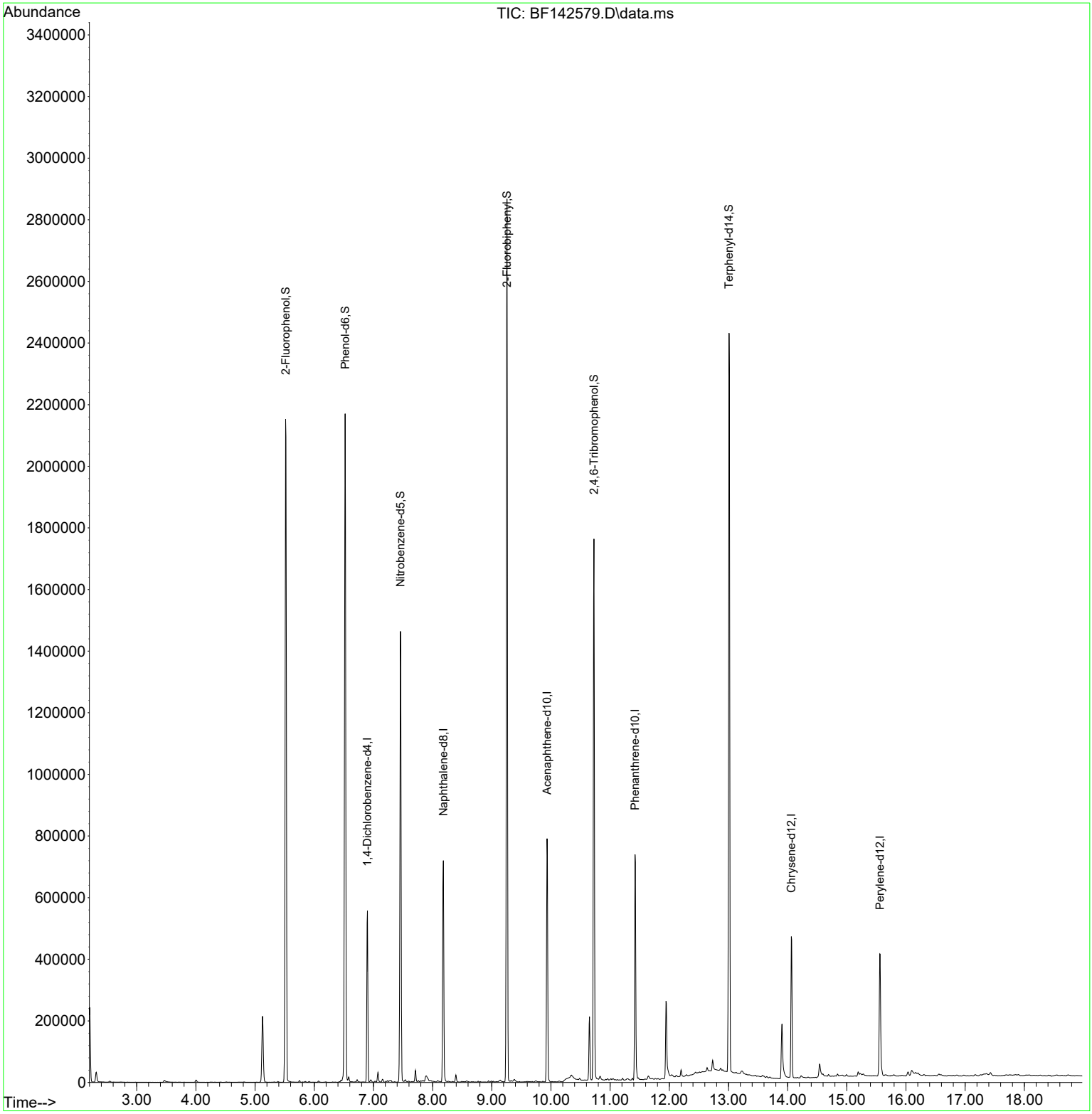
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	123122	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	465540	20.000	ng	0.00
39) Acenaphthene-d10	9.933	164	241553	20.000	ng	-0.01
64) Phenanthrene-d10	11.422	188	396120	20.000	ng	-0.01
76) Chrysene-d12	14.063	240	234971	20.000	ng	-0.01
86) Perylene-d12	15.562	264	241563	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.516	112	892849	122.174	ng	0.00
7) Phenol-d6	6.522	99	1110920	126.283	ng	-0.01
23) Nitrobenzene-d5	7.457	82	666097	78.020	ng	-0.02
42) 2,4,6-Tribromophenol	10.727	330	325495	121.411	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	1311542	72.858	ng	-0.01
79) Terphenyl-d14	13.010	244	1212570	70.521	ng	0.00
Target Compounds						Qvalue

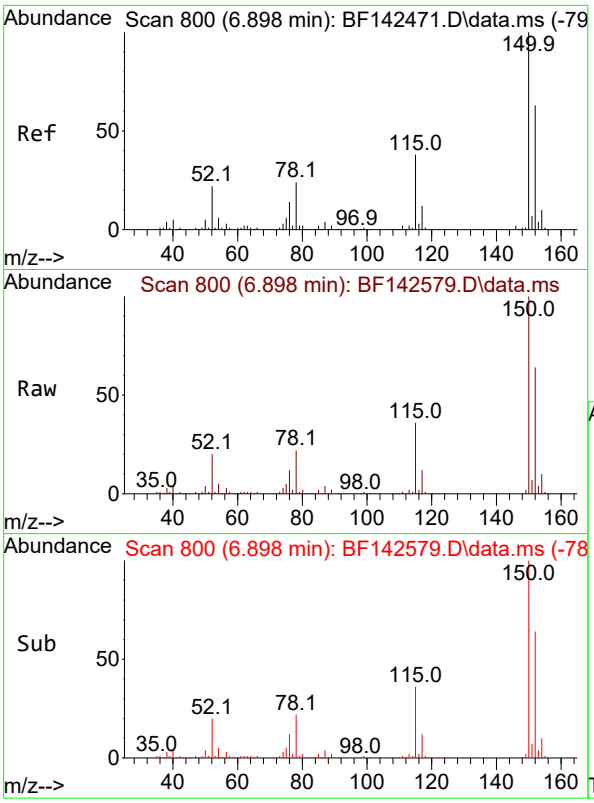
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Quant Time: May 30 22:29:02 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



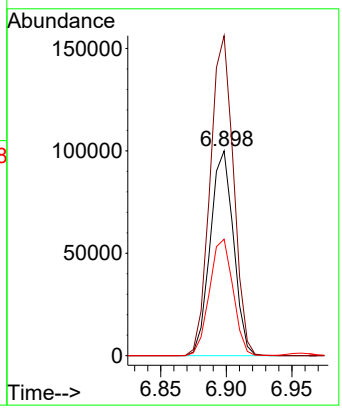


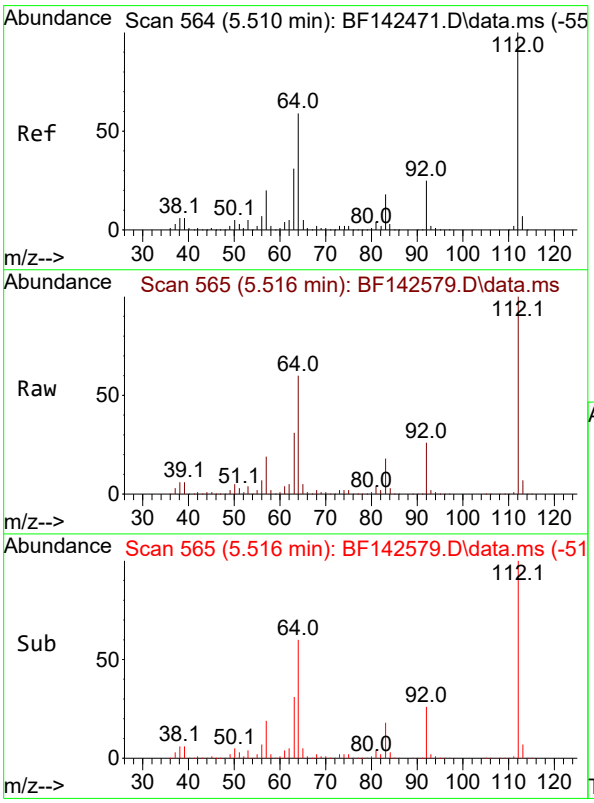
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Instrument :
BNA_F
ClientSampleId :
TP-51

Tgt Ion:152 Resp: 123122

Ion	Ratio	Lower	Upper
152	100		
150	156.2	128.2	192.4
115	56.8	48.3	72.5

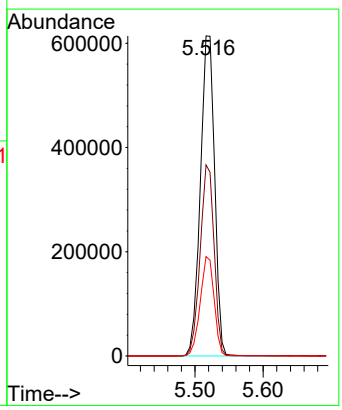


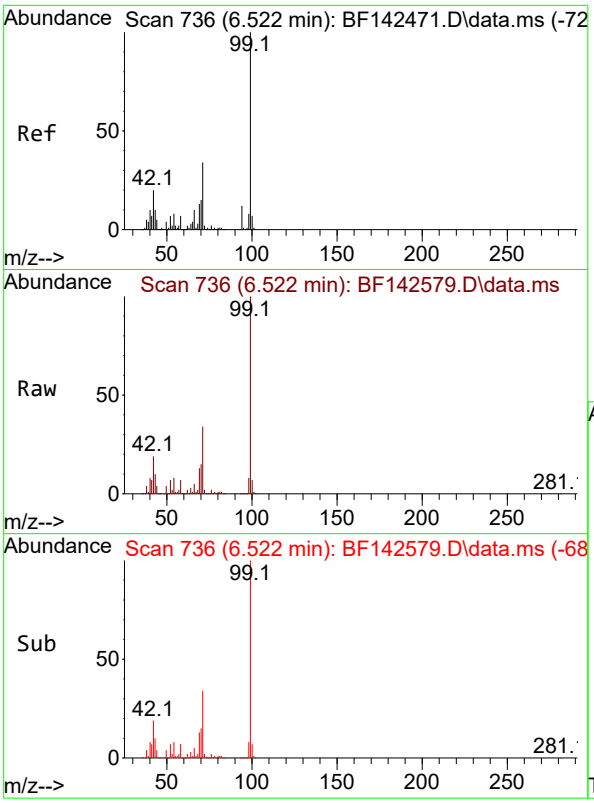


#5
2-Fluorophenol
Concen: 122.174 ng
RT: 5.516 min Scan# 565
Delta R.T. 0.000 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Tgt Ion:112 Resp: 892849

Ion	Ratio	Lower	Upper
112	100		
64	59.7	47.5	71.3
63	31.1	24.9	37.3



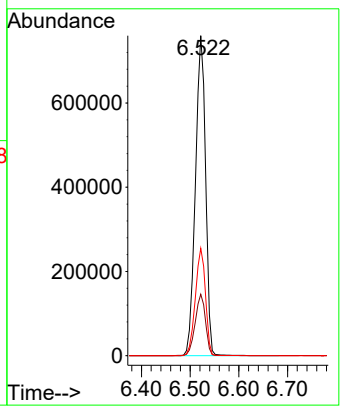


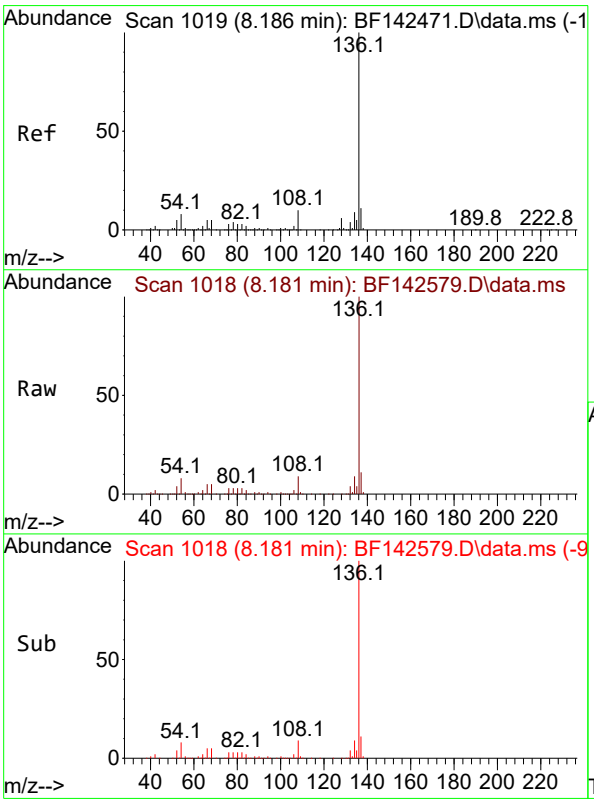
#7
Phenol-d6
Concen: 126.283 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Instrument :
BNA_F
ClientSampleId :
TP-51

Tgt Ion: 99 Resp: 1110920

Ion	Ratio	Lower	Upper
99	100		
42	19.2	16.2	24.2
71	33.6	27.3	40.9

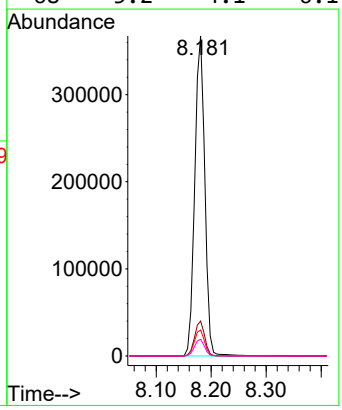


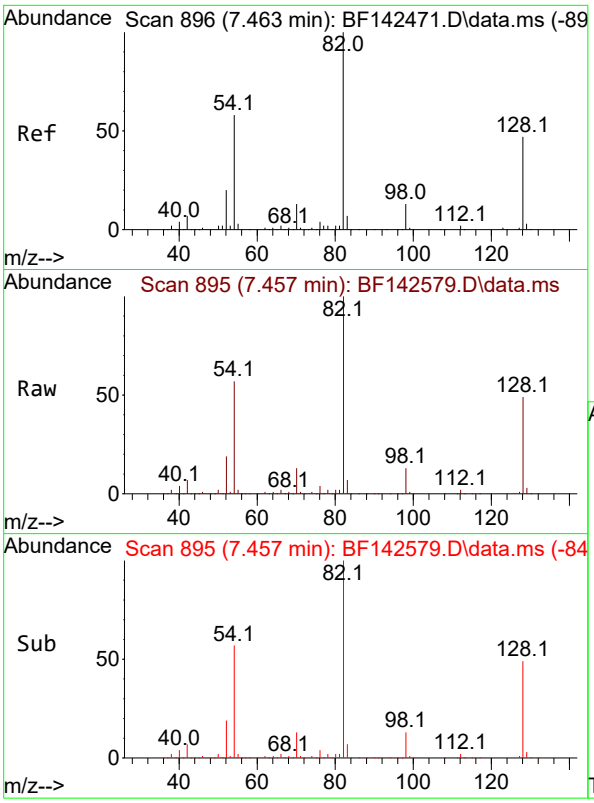


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Tgt Ion:136 Resp: 465540

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	8.1	6.6	10.0
68	5.2	4.1	6.1



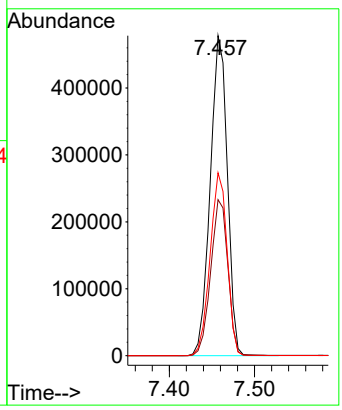


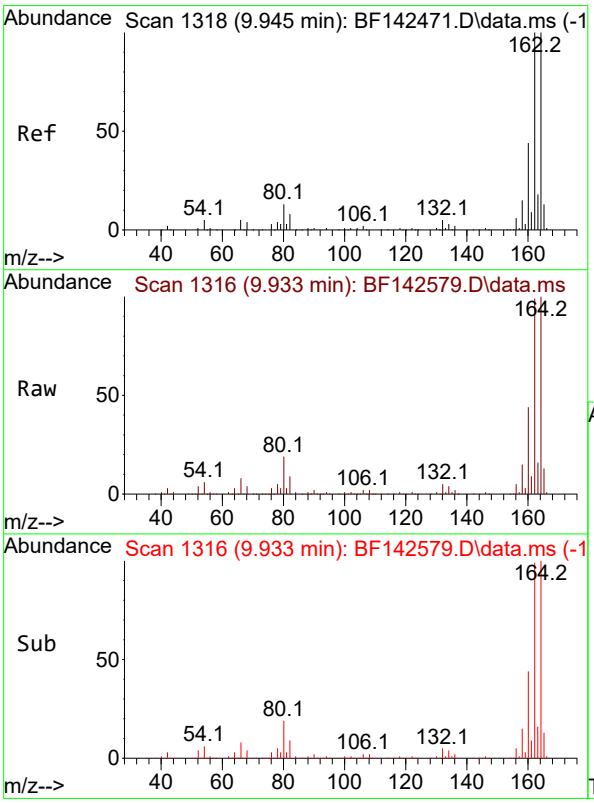
#23
Nitrobenzene-d5
Concen: 78.020 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Instrument :
BNA_F
ClientSampleId :
TP-51

Tgt Ion: 82 Resp: 666097

Ion	Ratio	Lower	Upper
82	100		
128	48.7	37.4	56.2
54	57.2	46.6	70.0

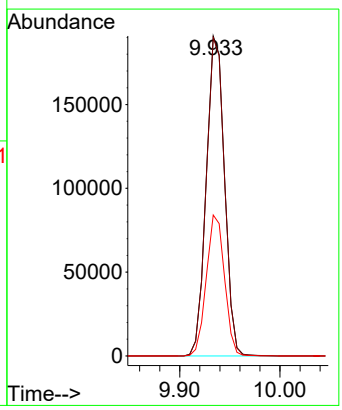


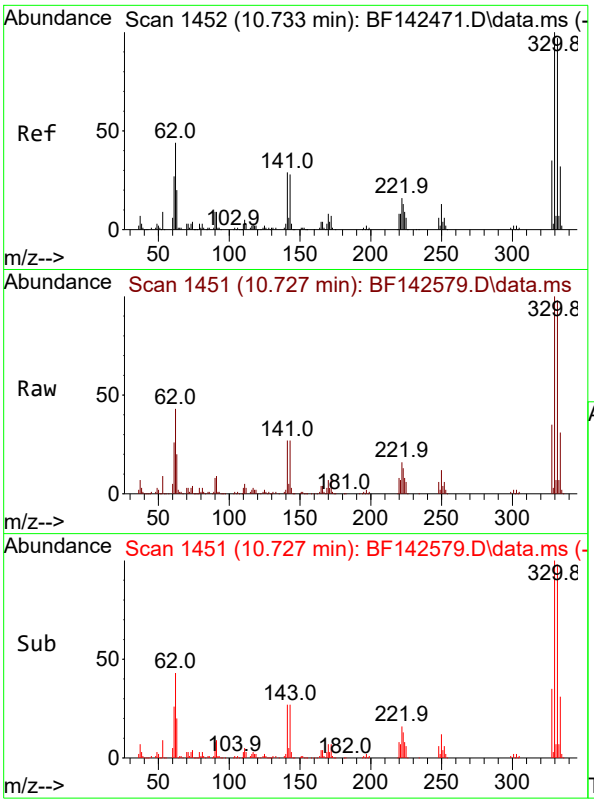


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.933 min Scan# 1316
Delta R.T. -0.012 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Tgt Ion:164 Resp: 241553

Ion	Ratio	Lower	Upper
164	100		
162	99.5	80.2	120.4
160	44.0	35.6	53.4



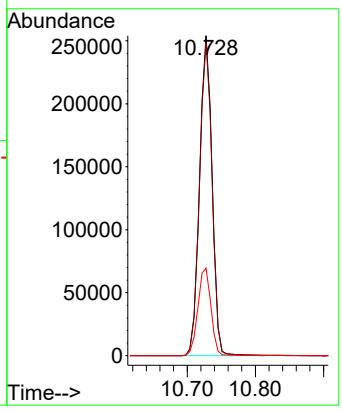


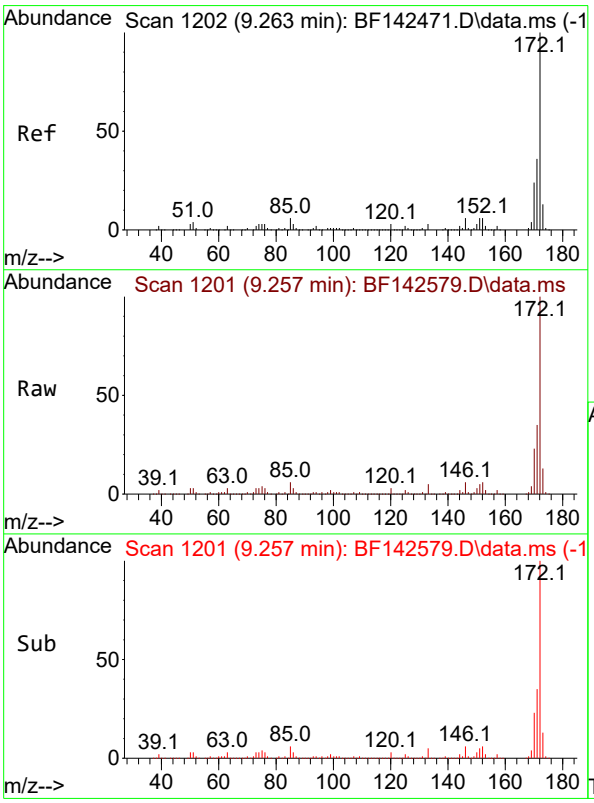
#42
2,4,6-Tribromophenol
Concen: 121.411 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Instrument :
BNA_F
ClientSampleId :
TP-51

Tgt Ion:330 Resp: 325495

Ion	Ratio	Lower	Upper
330	100		
332	97.7	77.6	116.4
141	28.5	24.6	36.8

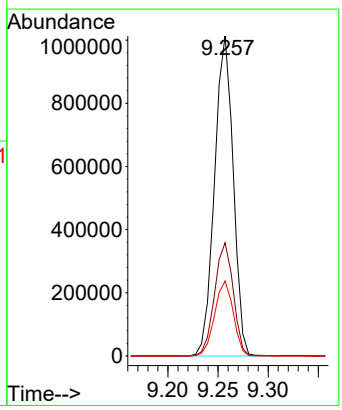


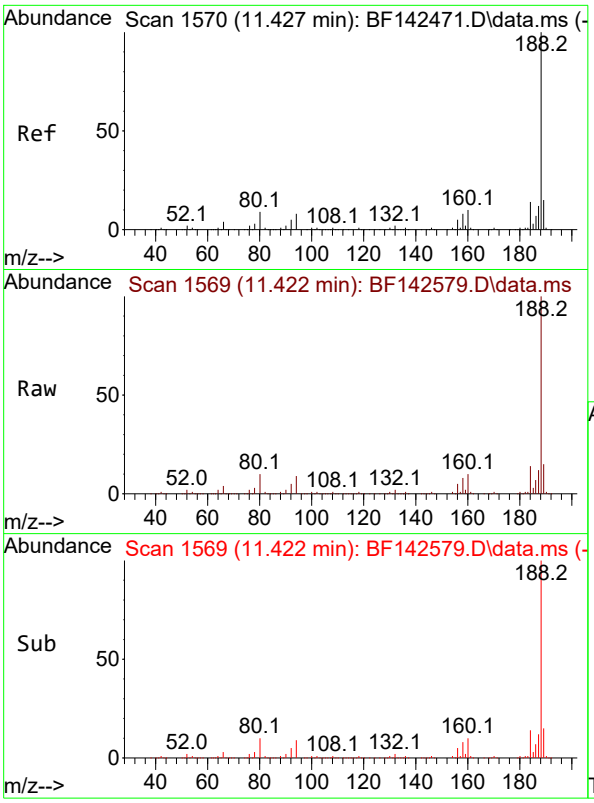


#45
2-Fluorobiphenyl
Concen: 72.858 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Tgt Ion:172 Resp: 1311542

Ion	Ratio	Lower	Upper
172	100		
171	35.4	28.6	42.8
170	23.4	18.9	28.3



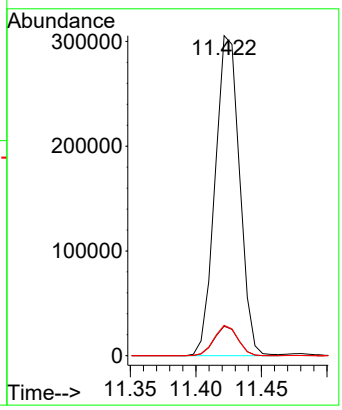


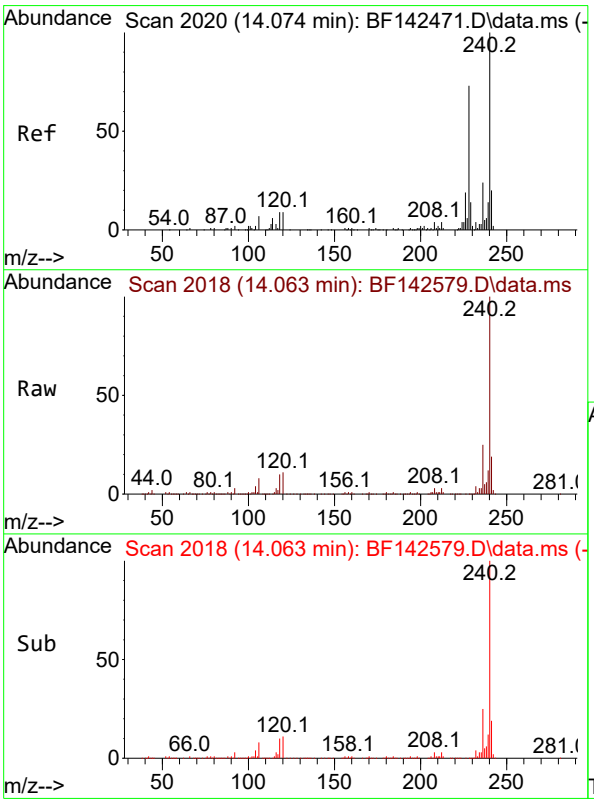
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.422 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Instrument :
BNA_F
ClientSampleId :
TP-51

Tgt Ion:188 Resp: 396120

Ion	Ratio	Lower	Upper
188	100		
94	9.2	6.6	10.0
80	9.5	7.4	11.0

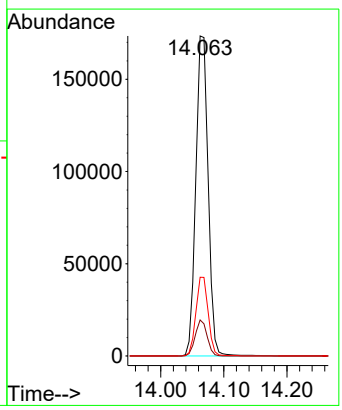


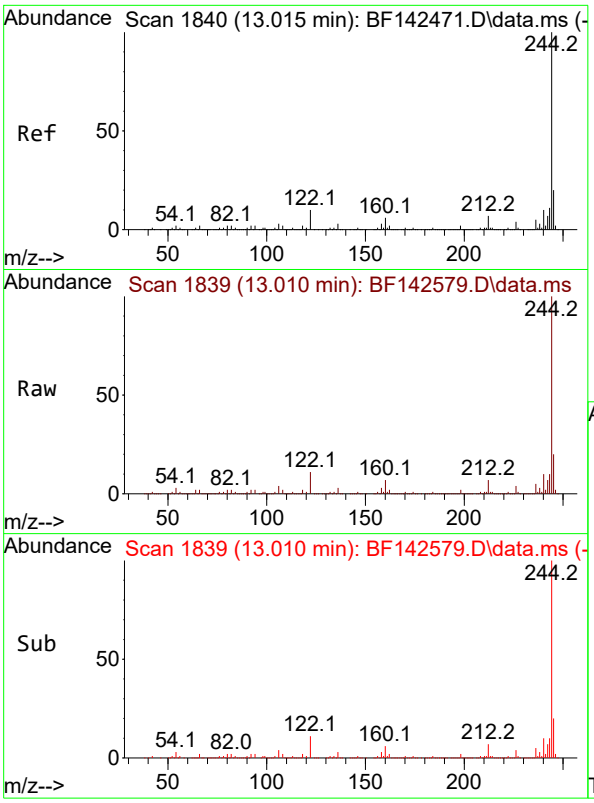


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.063 min Scan# 2018
Delta R.T. -0.012 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Tgt Ion:240 Resp: 234971

Ion	Ratio	Lower	Upper
240	100		
120	11.2	7.5	11.3
236	24.6	19.6	29.4



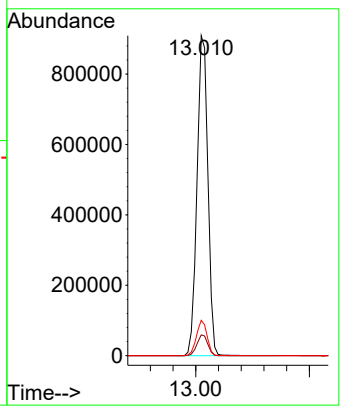


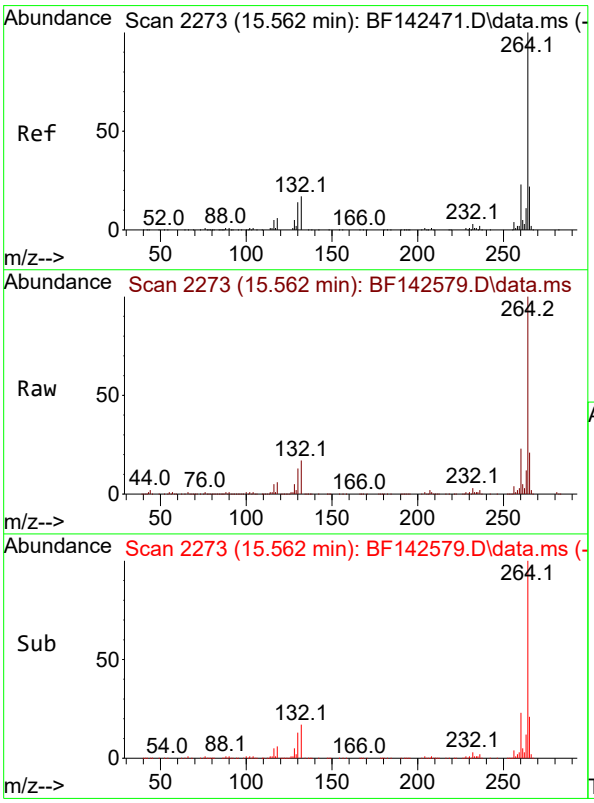
#79
Terphenyl-d14
Concen: 70.521 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Instrument :
BNA_F
ClientSampleId :
TP-51

Tgt Ion:244 Resp: 1212570

Ion	Ratio	Lower	Upper
244	100		
212	6.5	5.3	7.9
122	11.1	8.2	12.2

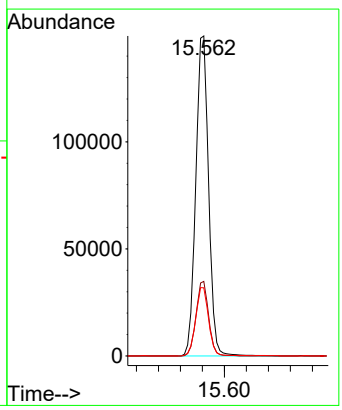




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142579.D
Acq: 30 May 2025 19:45

Tgt Ion:264 Resp: 241563

Ion	Ratio	Lower	Upper
264	100		
260	23.3	18.6	28.0
265	21.3	17.7	26.5



Sample Results: **BF142579.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142579.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.316	15	21	32	rBV2	32604	57893	1.56%	0.239%
2	5.128	490	499	508	rBV	213507	358975	9.67%	1.481%
3	5.516	558	565	571	rBV	2151792	3082394	83.05%	12.720%
4	6.522	726	736	743	rBV	2164691	3183733	85.78%	13.138%
5	6.898	794	800	805	rBV	556730	693690	18.69%	2.863%
6	7.075	826	830	839	rVB	31128	39807	1.07%	0.164%
7	7.457	884	895	901	rBV	1463263	2045750	55.12%	8.442%
8	7.710	930	938	943	rBV	37128	48326	1.30%	0.199%
9	7.892	964	969	978	rBV4	17117	46710	1.26%	0.193%
10	8.181	1012	1018	1027	rBV	718169	919727	24.78%	3.795%
11	9.257	1194	1201	1206	rBV	2865612	3711360	100.00%	15.315%
12	9.933	1311	1316	1327	rVB	789539	1001490	26.98%	4.133%
13	10.345	1361	1386	1401	rBV4	21435	161203	4.34%	0.665%
14	10.651	1433	1438	1445	rBV	204759	252562	6.81%	1.042%
15	10.728	1445	1451	1456	rBV	1755696	2292160	61.76%	9.459%
16	11.422	1564	1569	1576	rBV	731533	975449	26.28%	4.025%
17	11.945	1653	1658	1669	rBV	251228	402114	10.83%	1.659%
18	12.733	1788	1792	1800	rBV	33339	57158	1.54%	0.236%
19	13.010	1833	1839	1845	rBV	2396808	3165768	85.30%	13.064%
20	13.904	1986	1991	2010	rBV	177278	330809	8.91%	1.365%
21	14.063	2013	2018	2027	rVB	458518	613277	16.52%	2.531%
22	14.539	2094	2099	2107	rBV	41226	87826	2.37%	0.362%
23	15.557	2266	2272	2283	rBV	396225	661147	17.81%	2.728%
24	16.098	2359	2364	2372	rBV3	15289	43525	1.17%	0.180%

Sum of corrected areas: 24232853

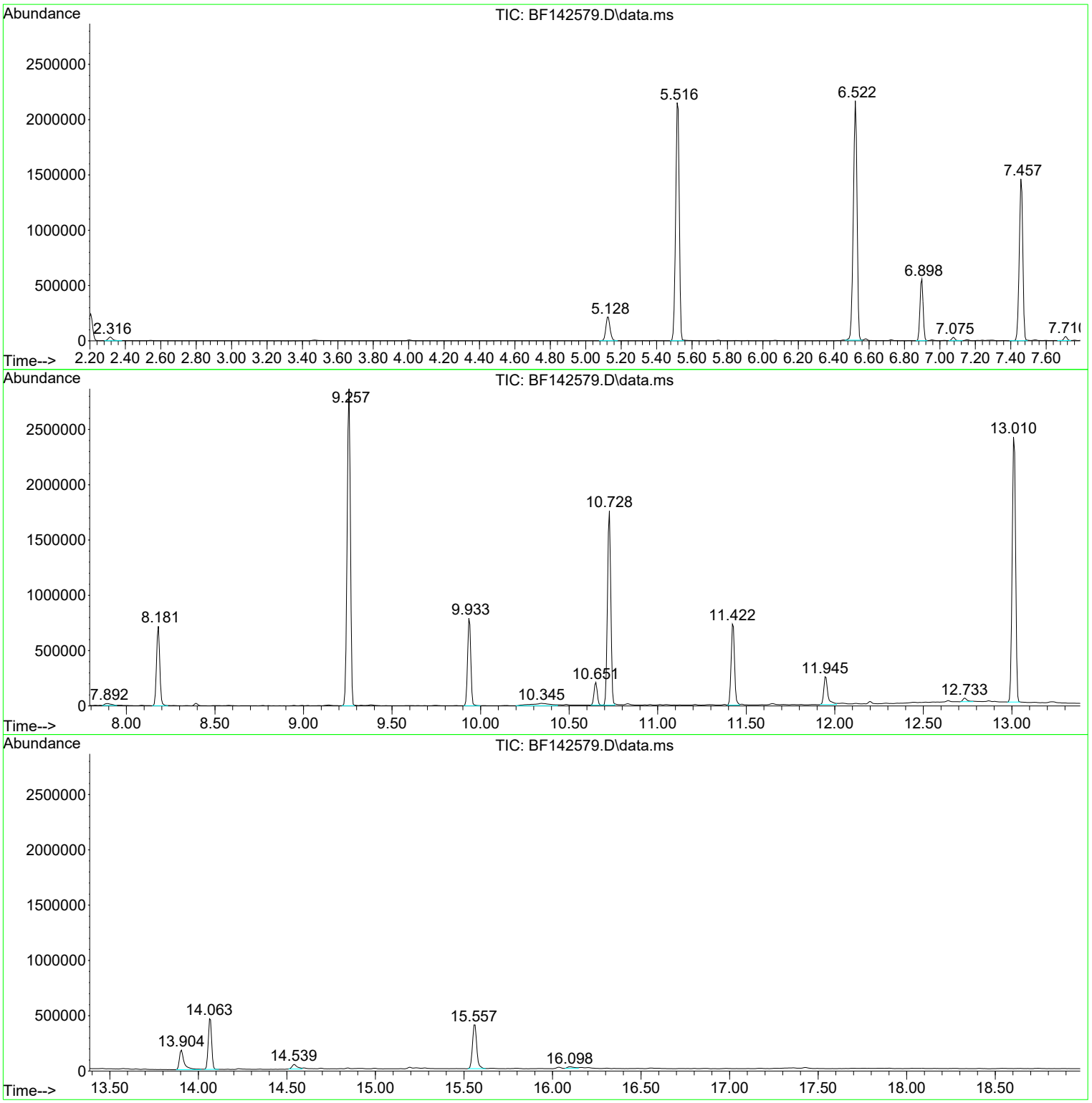
Sample Results: **BF142579.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

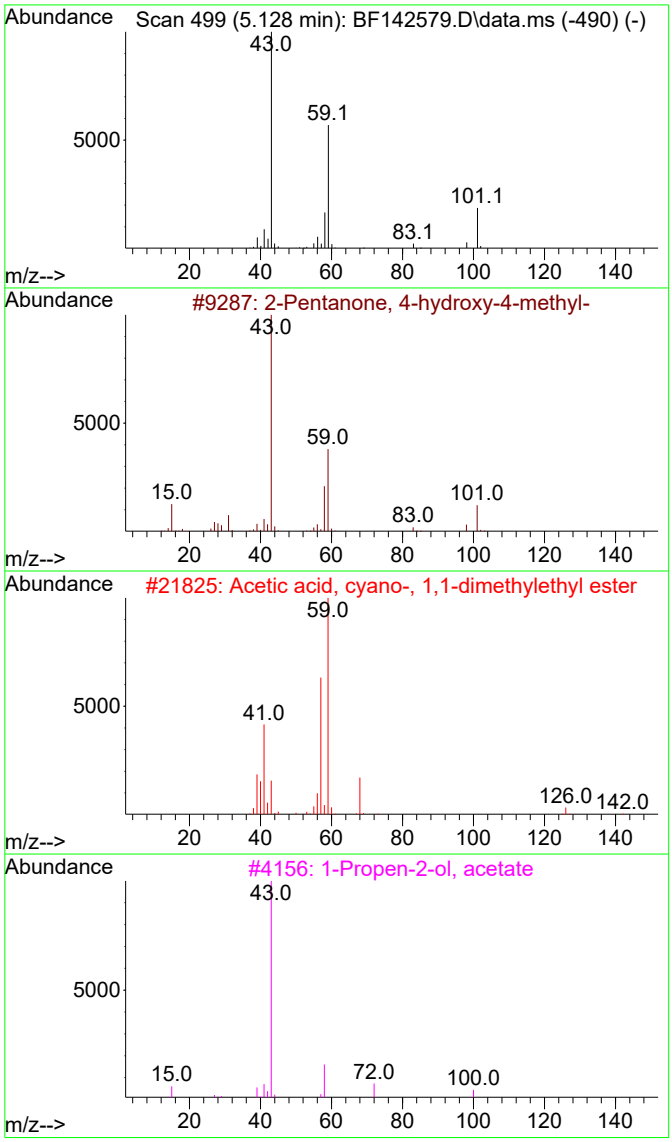
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

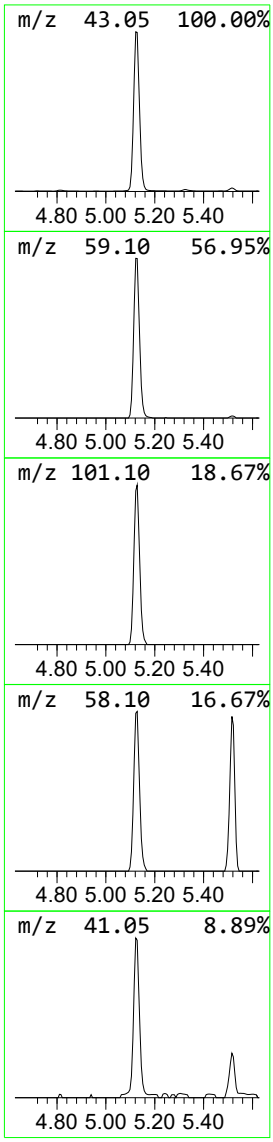
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.128	10.35 ng	358975	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25
3	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	9





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

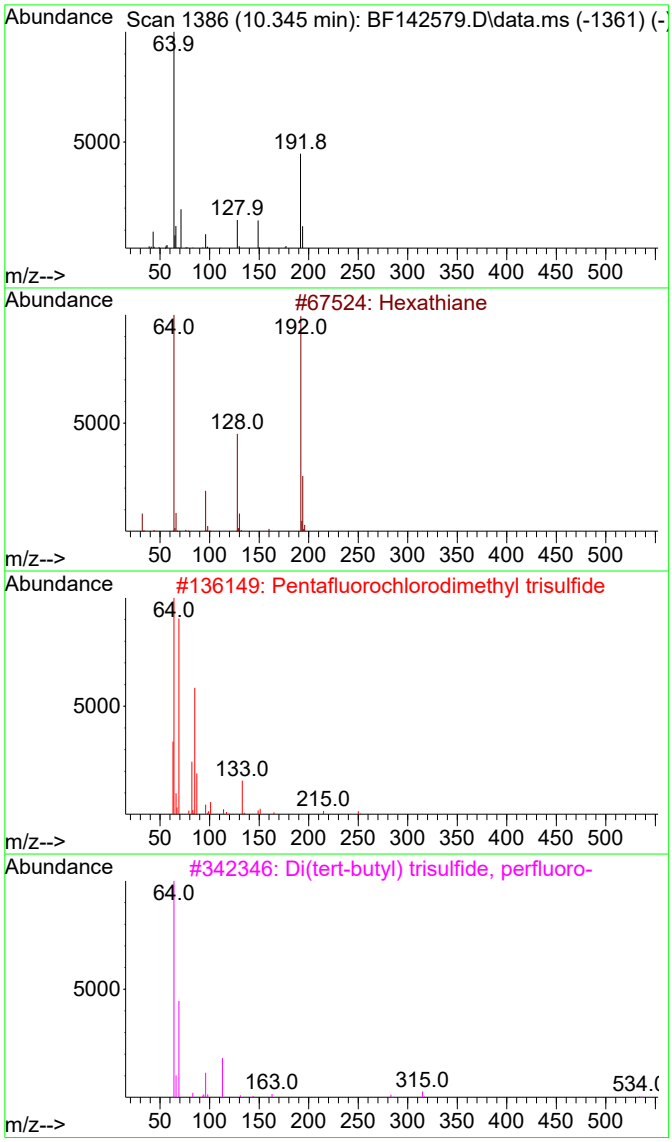
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

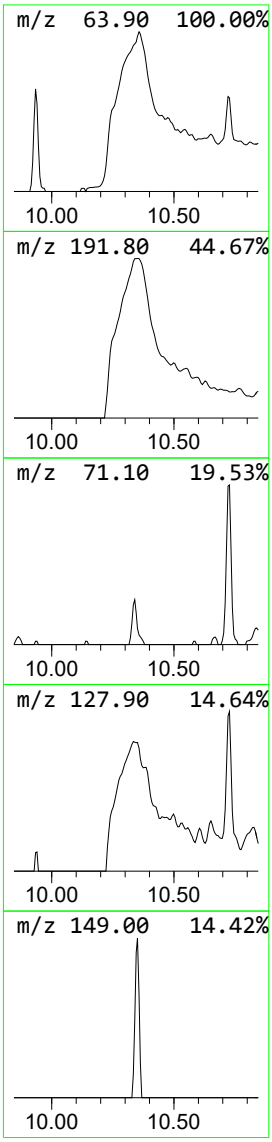
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 unknown10.345 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.345	3.22 ng	161203	Acenaphthene-d10	9.933

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexathiane	192	S6	013798-23-7	10
2	Pentafluorochlorodimethyl trisul...	250	C2ClF5S3	1000226-65-9	9
3	Di(tert-butyl) trisulfide, perfl...	534	C8F18S3	016005-64-4	9
4	Sulfur dioxide	64	O2S	007446-09-5	4
5	Ethyl Chloride	64	C2H5Cl	000075-00-3	4





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

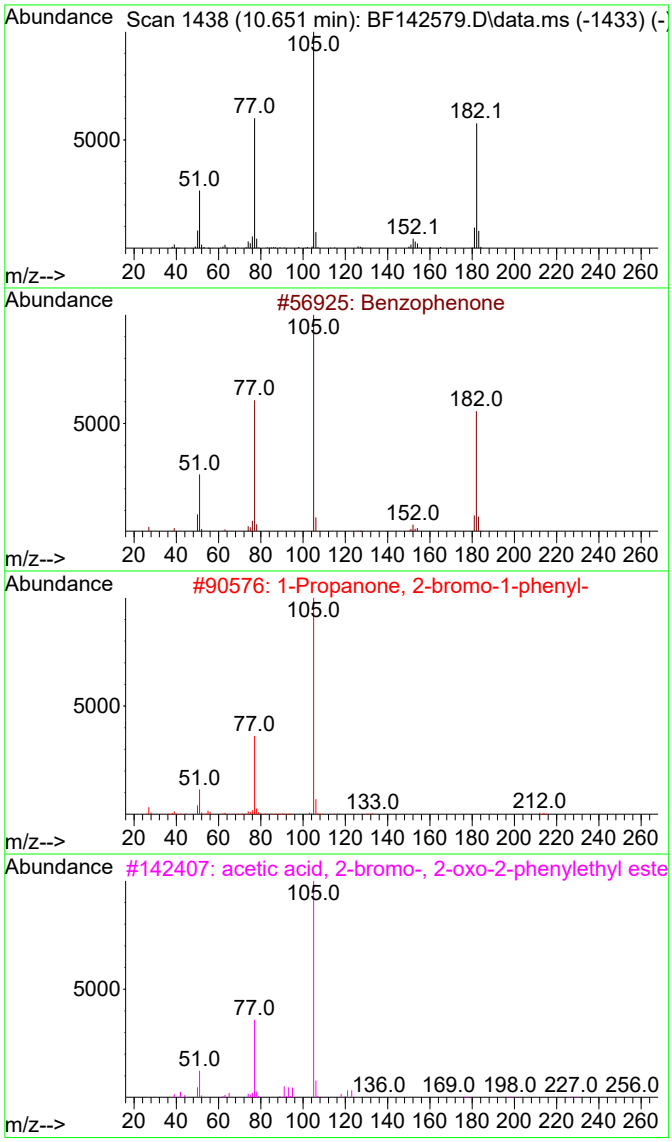
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

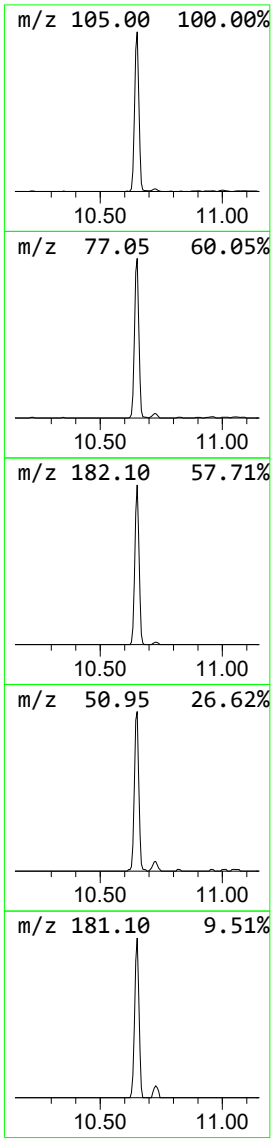
****

Peak Number 3 Benzophenone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.651	5.04 ng	252562	Acenaphthene-d10	9.933

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	1-Propanone, 2-bromo-1-phenyl-	212	C9H9BrO	002114-00-3	47
3	acetic acid, 2-bromo-, 2-oxo-2-p...	256	C10H9BrO3	1000401-50-0	47
4	Pentafluoroethyl phenyl ketone	224	C9H5F5O	000394-52-5	47
5	Benzoic acid, phenyl ester	198	C13H10O2	000093-99-2	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

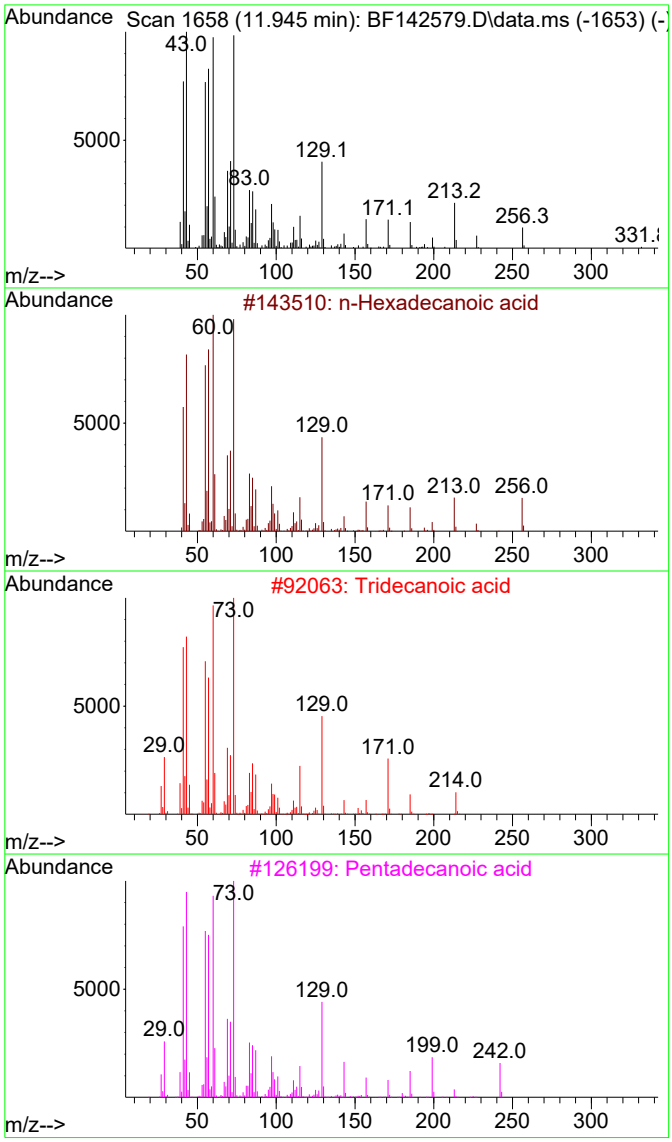
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

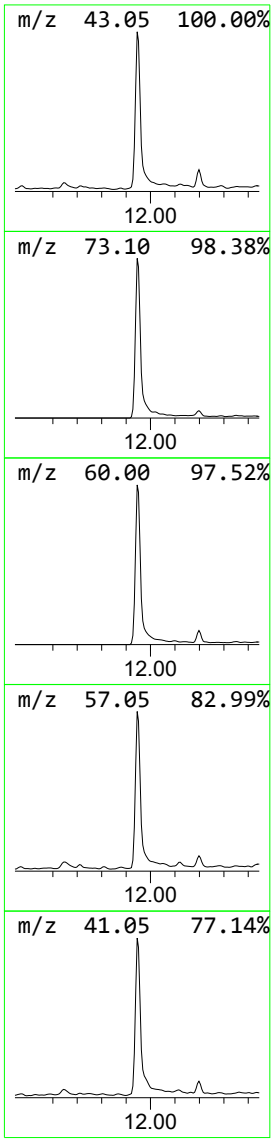
****

Peak Number 4 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.945	8.24 ng	402114	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	91
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	91
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	74
5	8-Methylnonanoic acid	172	C10H20O2	005963-14-4	70





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

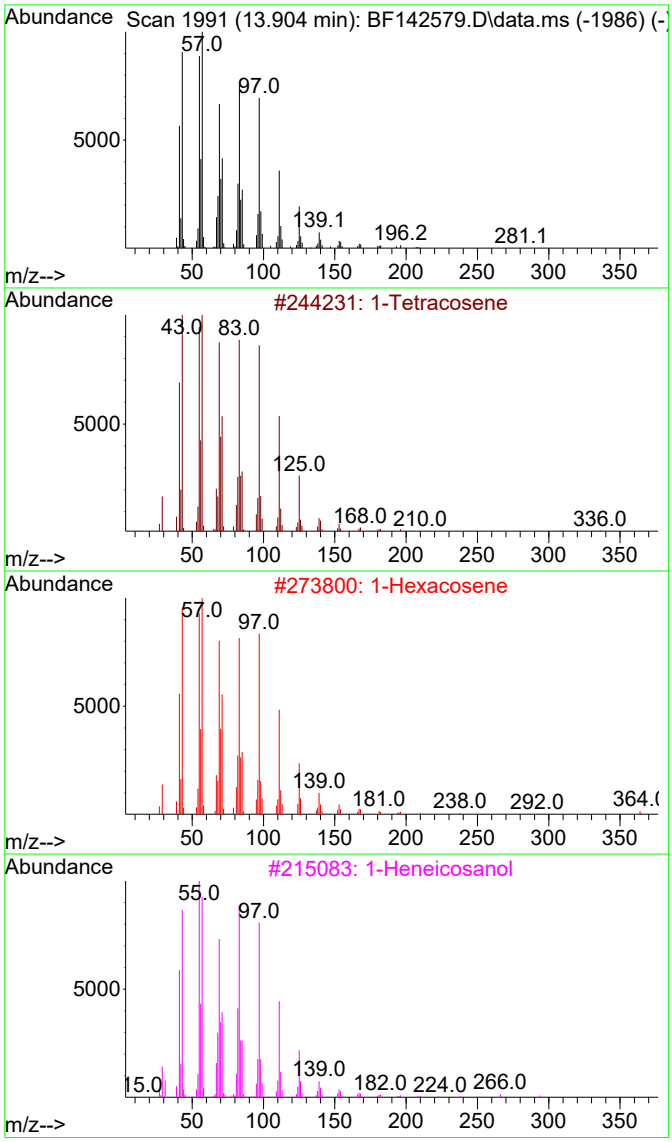
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

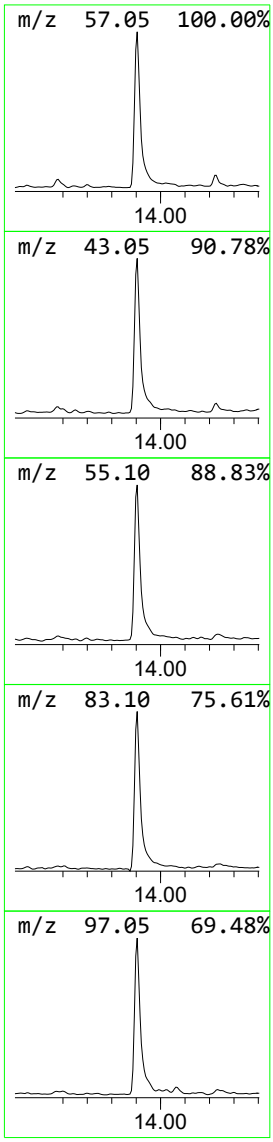
****

Peak Number 5 1-Tetracosene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.904	10.79 ng	330809	Chrysene-d12	14.063

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Tetracosene	336	C24H48	010192-32-2	95
2	1-Hexacosene	364	C26H52	018835-33-1	95
3	1-Heneicosanol	312	C21H44O	015594-90-8	95
4	Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	94
5	Behenic alcohol	326	C22H46O	000661-19-8	93





Sample Results: **BF142579.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

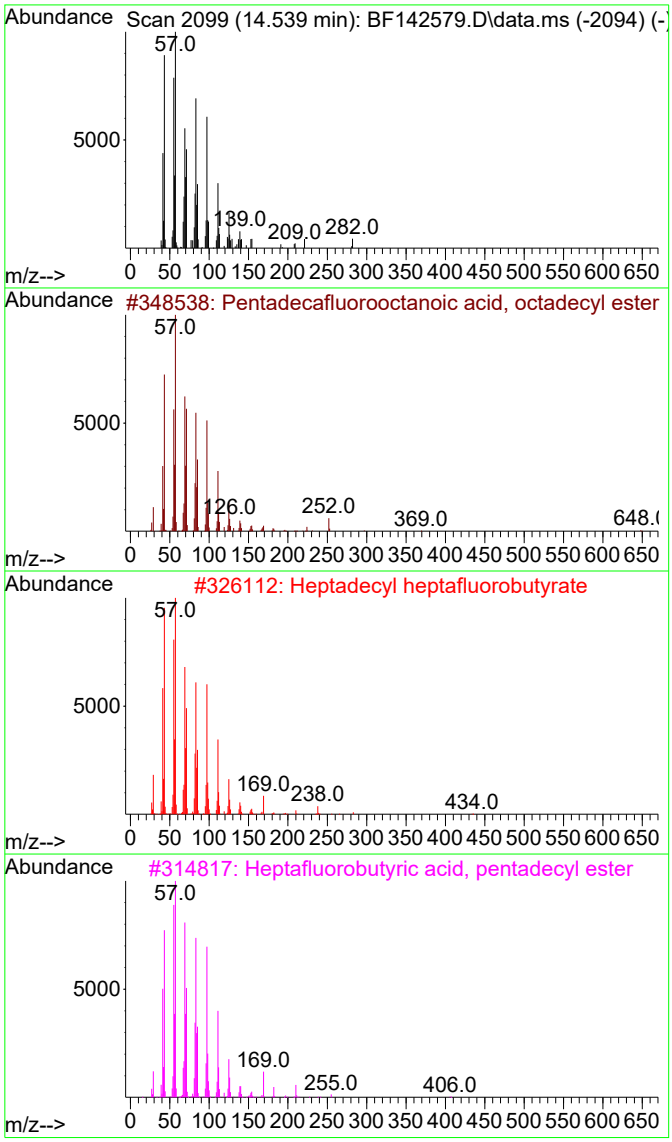
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

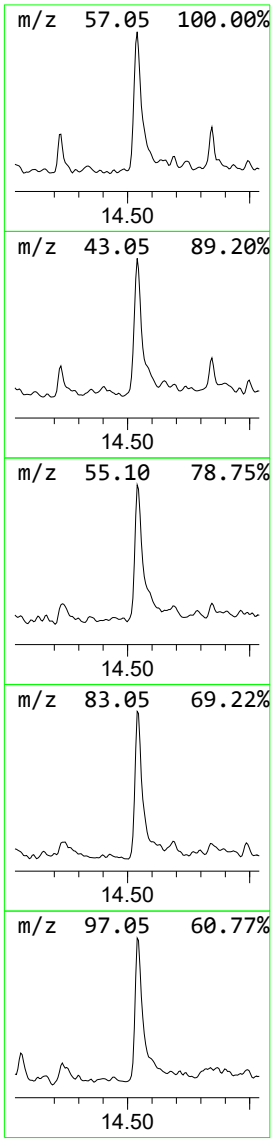
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 6 Pentadecafluorooctanoic aci... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.539	2.86 ng	87826	Chrysene-d12	14.063

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecafluorooctanoic acid, oc...	666	C26H37F15O2	1000406-04-8	94
2	Heptadecyl heptafluorobutyrate	452	C21H35F7O2	959085-66-6	93
3	Heptafluorobutyric acid, pentade...	424	C19H31F7O2	959261-23-5	93
4	1-Hexacosene	364	C26H52	018835-33-1	93
5	Heptadecyl trifluoroacetate	352	C19H35F3O2	1010351-87-0	93





Sample Results: **BF142579.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142579.D
Acq On : 30 May 2025 19:45
Operator : RC/JU
Sample : Q2150-07
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-51

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.128	10.4	ng	358975	1	6.898	693690	20.0
unknown10.345	10.345	3.2	ng	161203	3	9.933	1001490	20.0
Benzophenone	10.651	5.0	ng	252562	3	9.933	1001490	20.0
n-Hexadecanoic ...	11.945	8.2	ng	402114	4	11.422	975449	20.0
1-Tetracosene	13.904	10.8	ng	330809	5	14.063	613277	20.0
Pentadecafluoro...	14.539	2.9	ng	87826	5	14.063	613277	20.0

Raw Data: **BF142585.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-52	SDG No.:	Q2150
Lab Sample ID:	Q2150-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142585.D	1	05/30/25 09:50	05/30/25 22:41	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	180	U	180	380	ug/Kg
108-95-2	Phenol	25.7	U	25.7	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.3	U	28.3	200	ug/Kg
95-57-8	2-Chlorophenol	28.4	U	28.4	200	ug/Kg
95-48-7	2-Methylphenol	34.8	U	34.8	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.7	U	43.7	200	ug/Kg
98-86-2	Acetophenone	34.4	U	34.4	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.9	U	47.9	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	55.2	U	55.2	93.2	ug/Kg
67-72-1	Hexachloroethane	20.5	U	20.5	200	ug/Kg
98-95-3	Nitrobenzene	21.3	U	21.3	200	ug/Kg
78-59-1	Isophorone	38.2	U	38.2	200	ug/Kg
88-75-5	2-Nitrophenol	67.8	U	67.8	200	ug/Kg
105-67-9	2,4-Dimethylphenol	75.5	U	75.5	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.9	U	35.9	200	ug/Kg
120-83-2	2,4-Dichlorophenol	33.0	U	33.0	200	ug/Kg
91-20-3	Naphthalene	26.4	U	26.4	200	ug/Kg
106-47-8	4-Chloroaniline	41.2	U	41.2	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.5	U	29.5	200	ug/Kg
105-60-2	Caprolactam	60.7	U	60.7	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.4	U	33.4	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.8	U	29.8	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.1	U	23.1	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.9	U	33.9	200	ug/Kg
92-52-4	1,1-Biphenyl	25.4	U	25.4	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.2	U	26.2	200	ug/Kg
88-74-4	2-Nitroaniline	56.0	U	56.0	200	ug/Kg
131-11-3	Dimethylphthalate	31.6	U	31.6	200	ug/Kg

Raw Data: **BF142585.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-52	SDG No.:	Q2150
Lab Sample ID:	Q2150-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142585.D	1	05/30/25 09:50	05/30/25 22:41	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	92.6	J	33.7	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	39.1	U	39.1	200	ug/Kg
99-09-2	3-Nitroaniline	53.6	U	53.6	200	ug/Kg
83-32-9	Acenaphthene	24.8	U	24.8	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	380	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	380	ug/Kg
132-64-9	Dibenzofuran	26.4	U	26.4	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.4	U	58.4	200	ug/Kg
84-66-2	Diethylphthalate	33.0	U	33.0	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.1	U	31.1	200	ug/Kg
86-73-7	Fluorene	29.5	U	29.5	200	ug/Kg
100-01-6	4-Nitroaniline	74.8	U	74.8	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.3	U	38.3	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.4	U	32.4	200	ug/Kg
118-74-1	Hexachlorobenzene	29.5	U	29.5	200	ug/Kg
1912-24-9	Atrazine	39.6	U	39.6	200	ug/Kg
87-86-5	Pentachlorophenol	59.8	U	59.8	380	ug/Kg
85-01-8	Phenanthrene	270		24.3	200	ug/Kg
120-12-7	Anthracene	140	J	38.8	200	ug/Kg
86-74-8	Carbazole	36.3	U	36.3	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.8	U	55.8	200	ug/Kg
206-44-0	Fluoranthene	1300		34.9	200	ug/Kg
129-00-0	Pyrene	770		41.9	200	ug/Kg
85-68-7	Butylbenzylphthalate	83.2	U	83.2	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.8	U	42.8	380	ug/Kg
56-55-3	Benzo(a)anthracene	750		26.8	200	ug/Kg
218-01-9	Chrysene	780		23.2	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	69.0	U	69.0	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	1100		22.1	200	ug/Kg

Raw Data: **BF142585.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-52	SDG No.:	Q2150
Lab Sample ID:	Q2150-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142585.D	1	05/30/25 09:50	05/30/25 22:41	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	360		26.1	200	ug/Kg
50-32-8	Benzo(a)pyrene	830		34.4	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	300		33.9	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	93.9	J	31.9	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	350		29.9	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.8	U	29.8	200	ug/Kg
123-91-1	1,4-Dioxane	52.7	U	52.7	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.9	U	31.9	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	89.7		18 - 112	60%	SPK: 150
13127-88-3	Phenol-d6	89.5		15 - 107	60%	SPK: 150
4165-60-0	Nitrobenzene-d5	57.0		18 - 107	57%	SPK: 100
321-60-8	2-Fluorobiphenyl	55.0		20 - 109	55%	SPK: 100
118-79-6	2,4,6-Tribromophenol	75.4		10 - 116	50%	SPK: 150
1718-51-0	Terphenyl-d14	36.4		10 - 105	36%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	134000	6.898			
1146-65-2	Naphthalene-d8	477000	8.181			
15067-26-2	Acenaphthene-d10	214000	9.939			
1517-22-2	Phenanthrene-d10	298000	11.427			
1719-03-5	Chrysene-d12	272000	14.068			
1520-96-3	Perylene-d12	265000	15.568			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	290	AB		5.12	ug/Kg
000111-76-2	Ethanol, 2-butoxy-	79.6	J		5.84	ug/Kg
000119-61-9	Benzophenone	170	J		10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	460	J		12.0	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	220	J		12.0	ug/Kg
003674-66-6	Phenanthrene, 2,5-dimethyl-	100	J		12.5	ug/Kg
000781-17-9	Pyrene, 4,5,9,10-tetrahydro-	83.1	J		12.5	ug/Kg

Raw Data: **BF142585.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-52	SDG No.:	Q2150
Lab Sample ID:	Q2150-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.7
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142585.D	1	05/30/25 09:50	05/30/25 22:41	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000238-84-6	11H-Benzo[a]fluorene	130	J		13.2	ug/Kg
1000406-04-8	Pentadecafluorooctanoic acid, octa	94.4	J		13.9	ug/Kg
000192-97-2	Benzo[e]pyrene	190	J		15.2	ug/Kg
000198-55-0	Perylene	630	J		15.4	ug/Kg

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_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Time: May 31 00:11:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

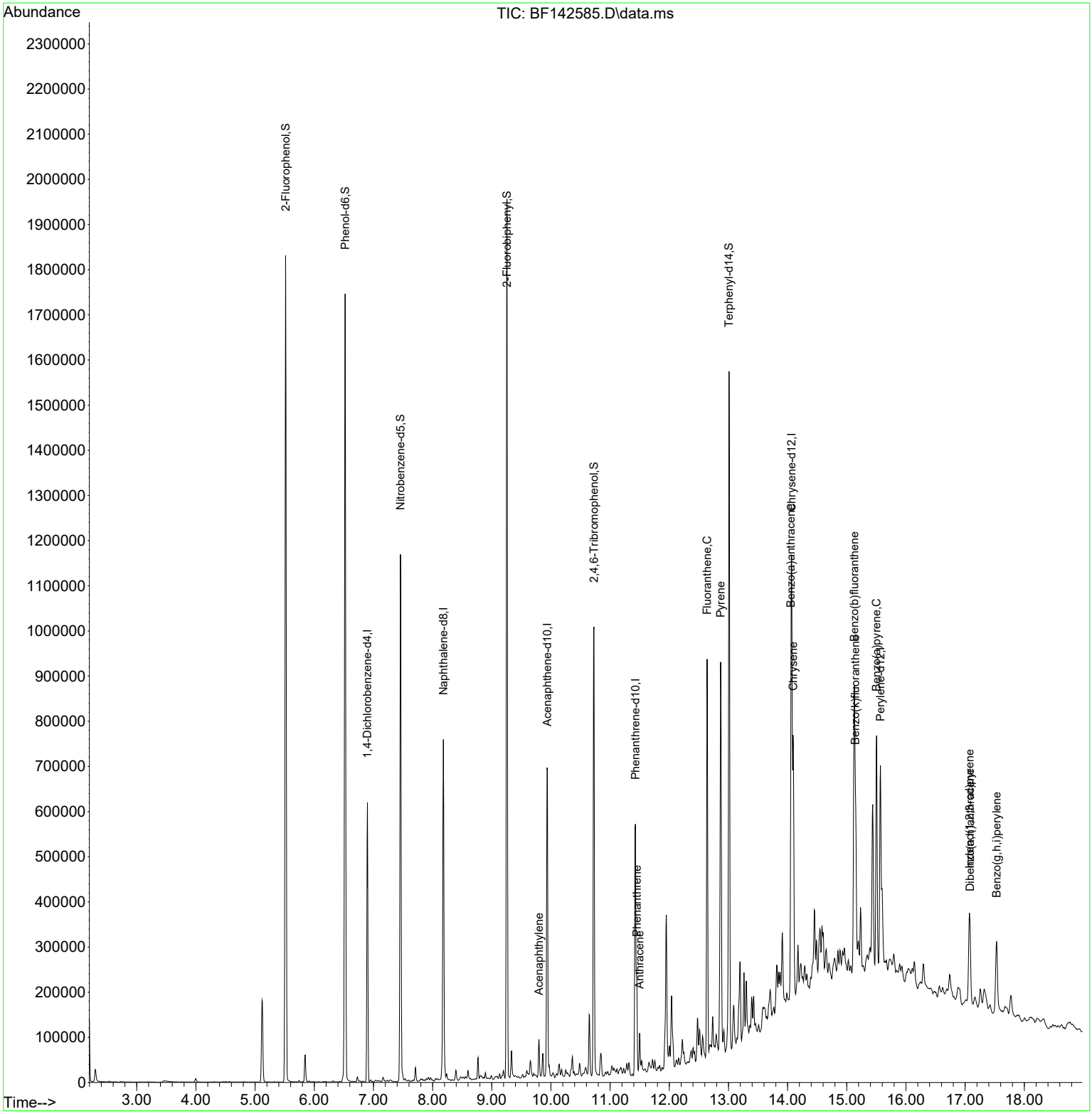
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.898	152	133645	20.000	ng		0.00
21) Naphthalene-d8	8.181	136	476744	20.000	ng		0.00
39) Acenaphthene-d10	9.939	164	213806	20.000	ng		0.00
64) Phenanthrene-d10	11.427	188	298216	20.000	ng		0.00
76) Chrysene-d12	14.068	240	272466	20.000	ng		0.00
86) Perylene-d12	15.568	264	264844	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.516	112	711745	89.724	ng		0.00
7) Phenol-d6	6.522	99	854204	89.455	ng		-0.01
23) Nitrobenzene-d5	7.457	82	498554	57.023	ng		-0.02
42) 2,4,6-Tribromophenol	10.727	330	178930	75.403	ng		-0.01
45) 2-Fluorobiphenyl	9.257	172	877026	55.043	ng		-0.01
79) Terphenyl-d14	13.010	244	725082	36.366	ng		0.00
Target Compounds							Qvalue
49) Acenaphthylene	9.798	152	49367	2.386	ng		100
71) Phenanthrene	11.451	178	112000	7.028	ng		99
72) Anthracene	11.498	178	56976	3.503	ng		99
75) Fluoranthene	12.639	202	497661	33.419	ng		99
78) Pyrene	12.868	202	507160	19.953	ng		98
81) Benzo(a)anthracene	14.057	228	350812	19.282	ng		94
83) Chrysene	14.092	228	326975	20.000	ng		98
87) Indeno(1,2,3-cd)pyrene	17.074	276	152667	7.678	ng		99
88) Benzo(b)fluoranthene	15.127	252	459256m	29.299	ng		
89) Benzo(k)fluoranthene	15.145	252	135303m	9.216	ng		
90) Benzo(a)pyrene	15.504	252	317279	21.474	ng		98
91) Dibenzo(a,h)anthracene	17.086	278	39006	2.419	ng	#	88
92) Benzo(g,h,i)perylene	17.533	276	147088	9.119	ng		98

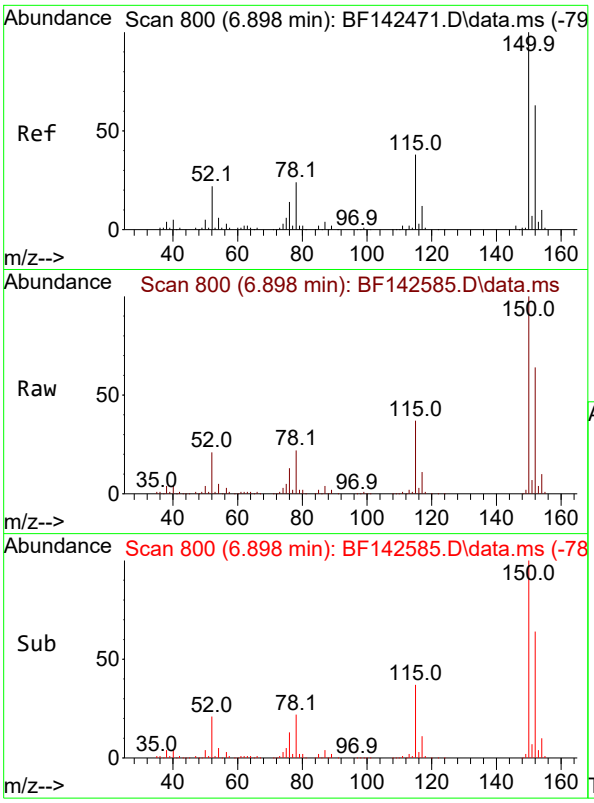
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Time: May 31 00:11:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



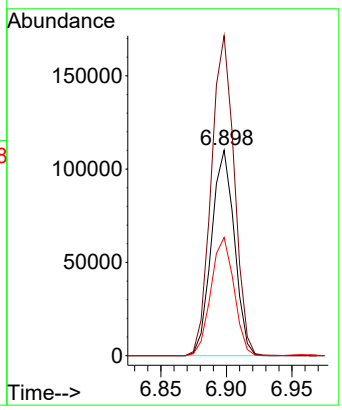


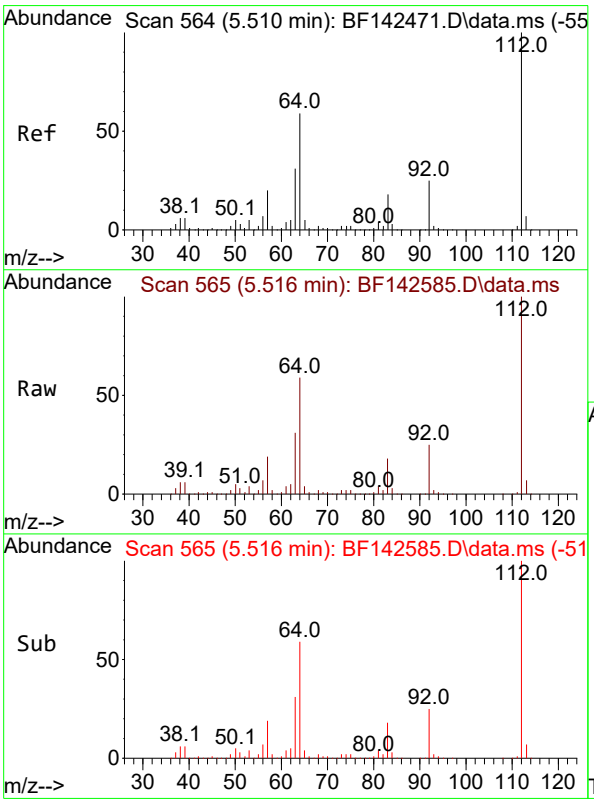
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:152 Resp: 133645

Ion	Ratio	Lower	Upper
152	100		
150	155.7	128.2	192.4
115	57.5	48.3	72.5

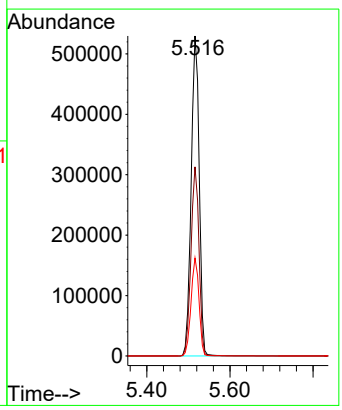


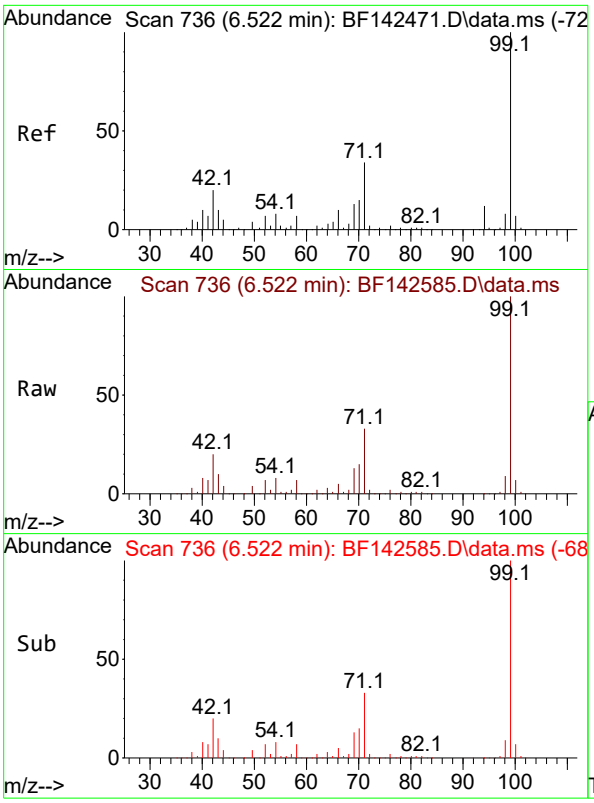


#5
2-Fluorophenol
Concen: 89.724 ng
RT: 5.516 min Scan# 565
Delta R.T. 0.000 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:112 Resp: 711745

Ion	Ratio	Lower	Upper
112	100		
64	59.1	47.5	71.3
63	30.6	24.9	37.3



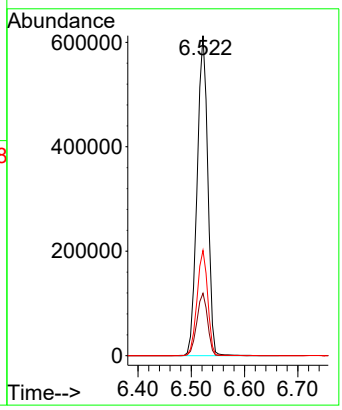


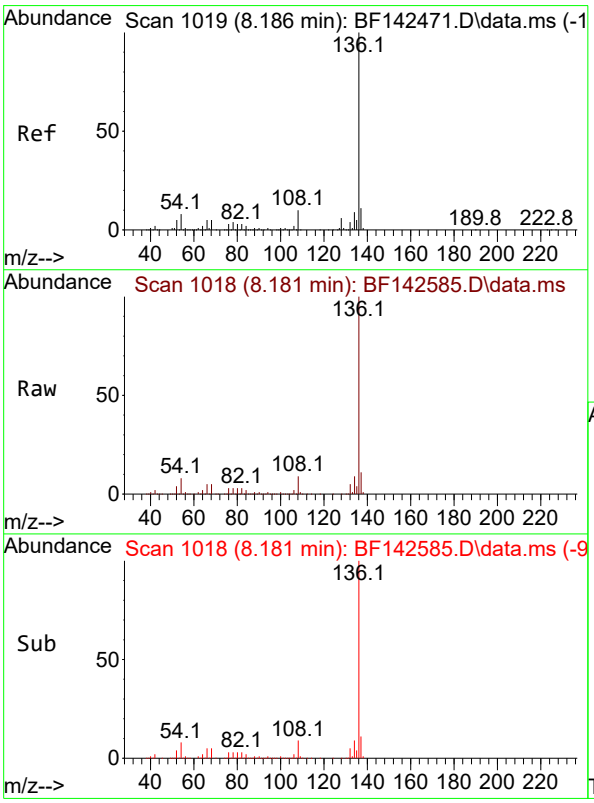
#7
Phenol-d6
Concen: 89.455 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion: 99 Resp: 854204

Ion	Ratio	Lower	Upper
99	100		
42	19.5	16.2	24.2
71	32.9	27.3	40.9

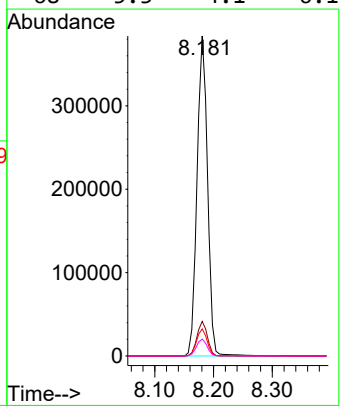


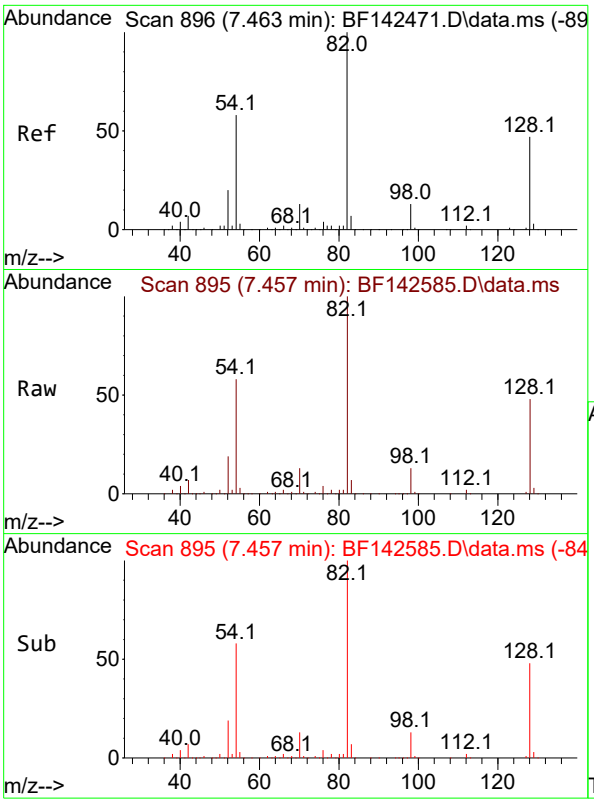


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:136 Resp: 476744

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.6	13.0
54	8.4	6.6	10.0
68	5.3	4.1	6.1



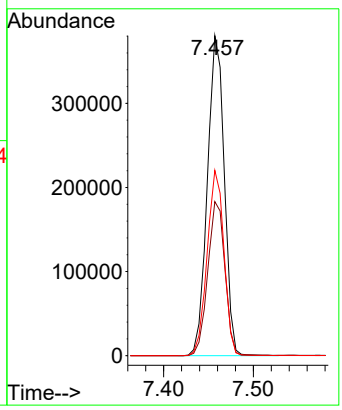


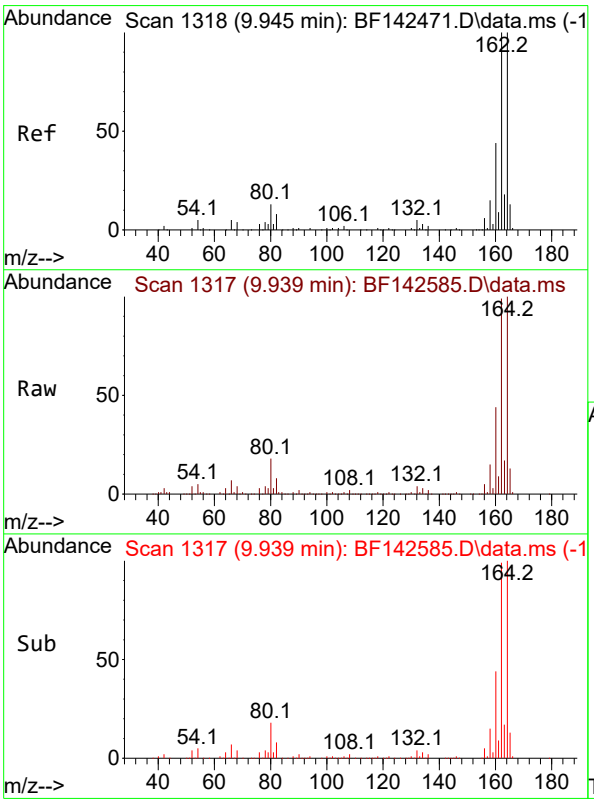
#23
Nitrobenzene-d5
Concen: 57.023 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion: 82 Resp: 498554

Ion	Ratio	Lower	Upper
82	100		
128	48.2	37.4	56.2
54	57.9	46.6	70.0

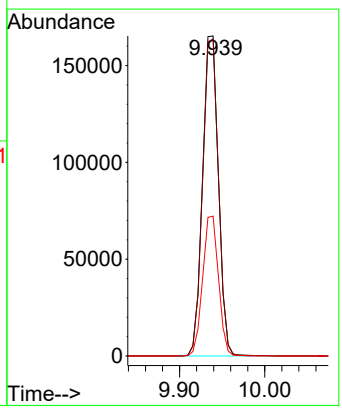


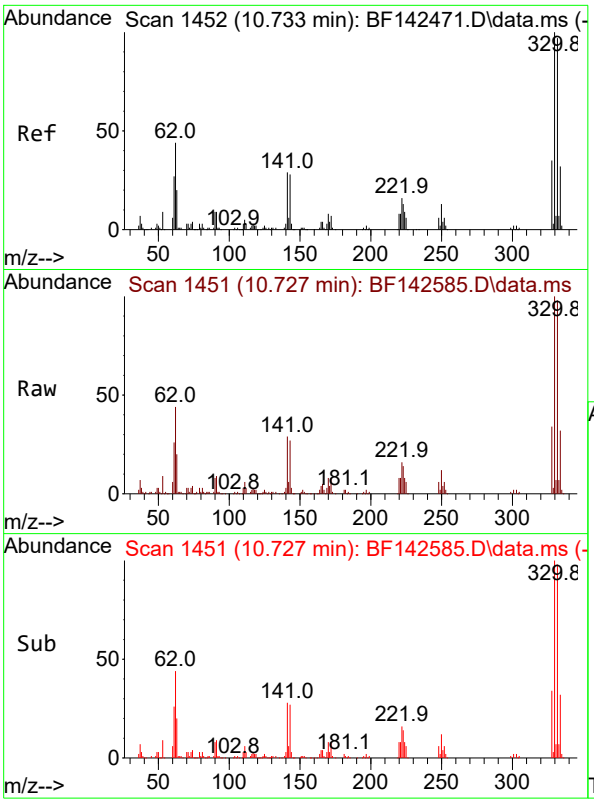


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:164 Resp: 213806

Ion	Ratio	Lower	Upper
164	100		
162	99.1	80.2	120.4
160	43.7	35.6	53.4



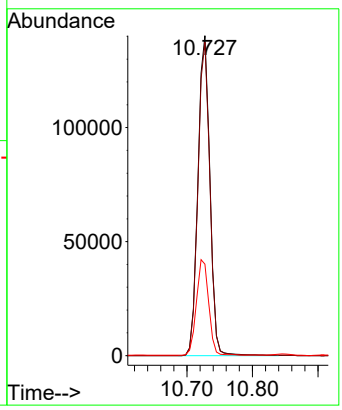


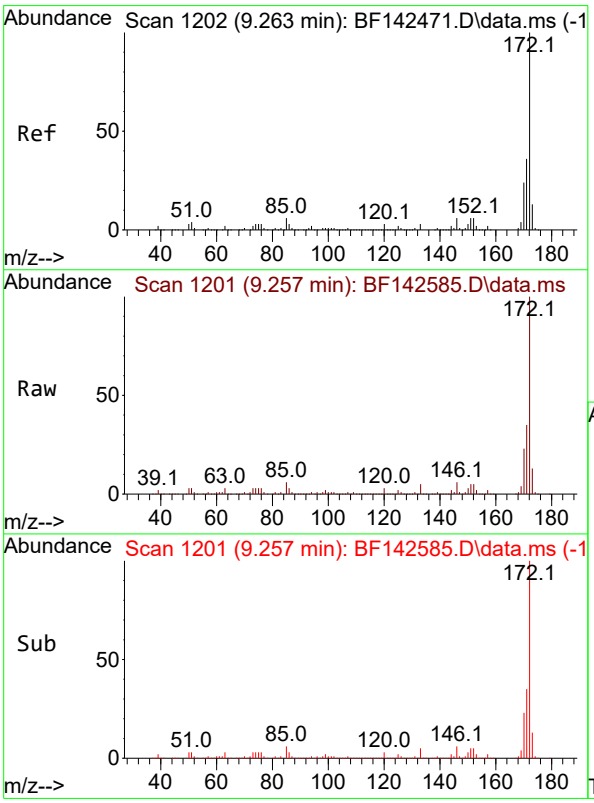
#42
2,4,6-Tribromophenol
Concen: 75.403 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:330 Resp: 178930

Ion	Ratio	Lower	Upper
330	100		
332	97.3	77.6	116.4
141	30.5	24.6	36.8

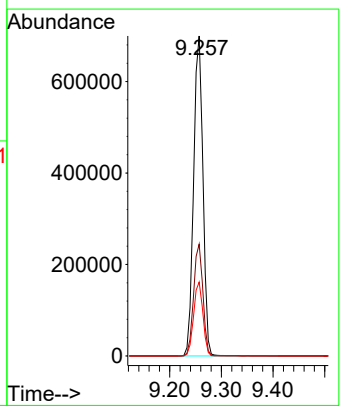


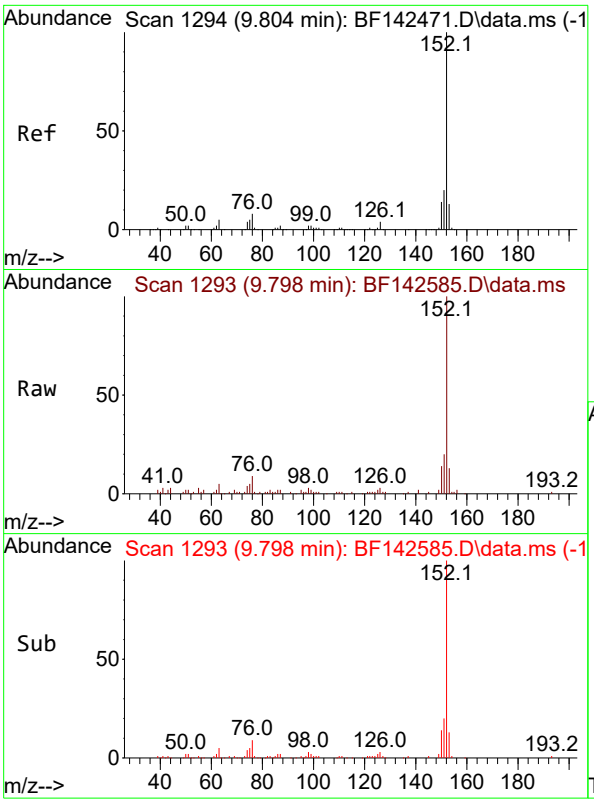


#45
2-Fluorobiphenyl
Concen: 55.043 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:172 Resp: 877026

Ion	Ratio	Lower	Upper
172	100		
171	34.9	28.6	42.8
170	23.1	18.9	28.3



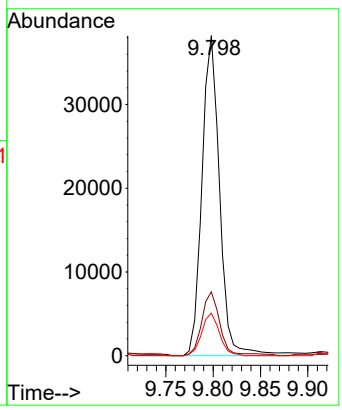


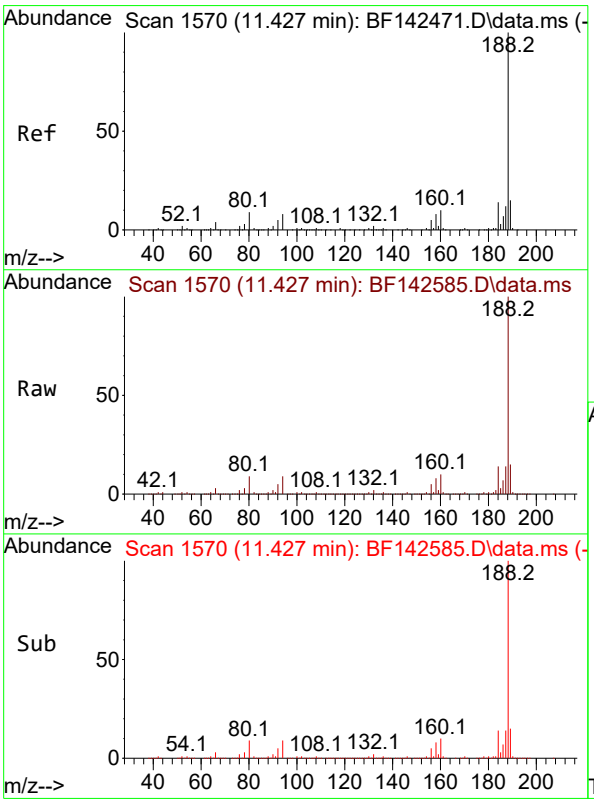
#49
Acenaphthylene
Concen: 2.386 ng
RT: 9.798 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:152 Resp: 49367

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.8
153	13.3	10.6	15.8

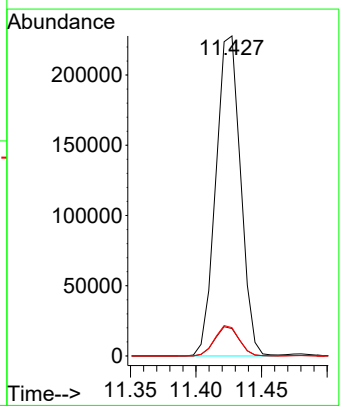


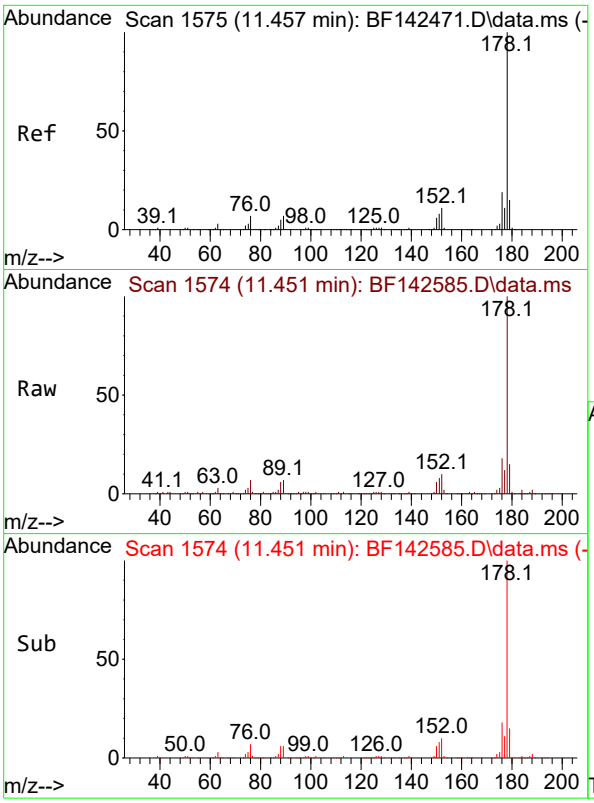


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:188 Resp: 298216

Ion	Ratio	Lower	Upper
188	100		
94	8.6	6.6	10.0
80	8.9	7.4	11.0



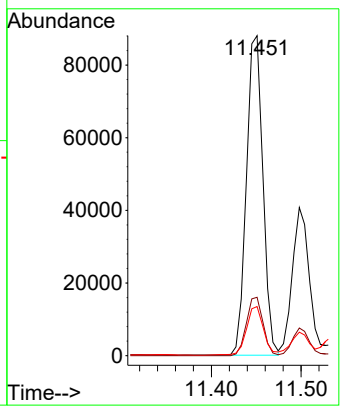


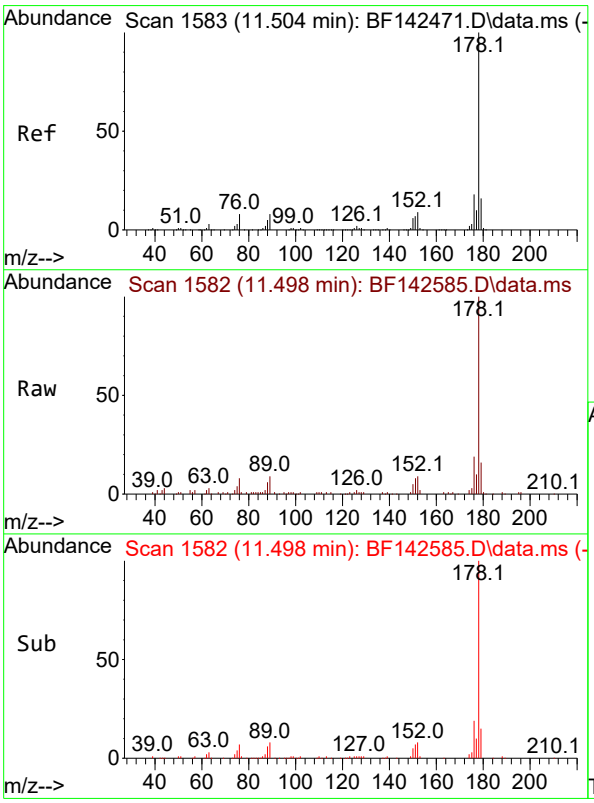
#71
Phenanthrene
Concen: 7.028 ng
RT: 11.451 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:178 Resp: 112000

Ion	Ratio	Lower	Upper
178	100		
176	18.3	15.4	23.0
179	15.4	12.3	18.5

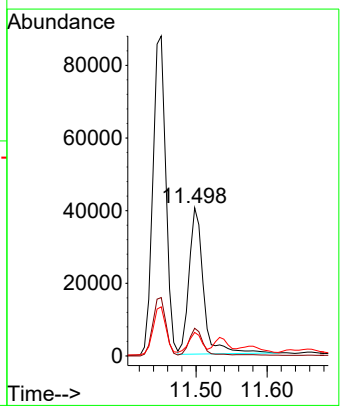


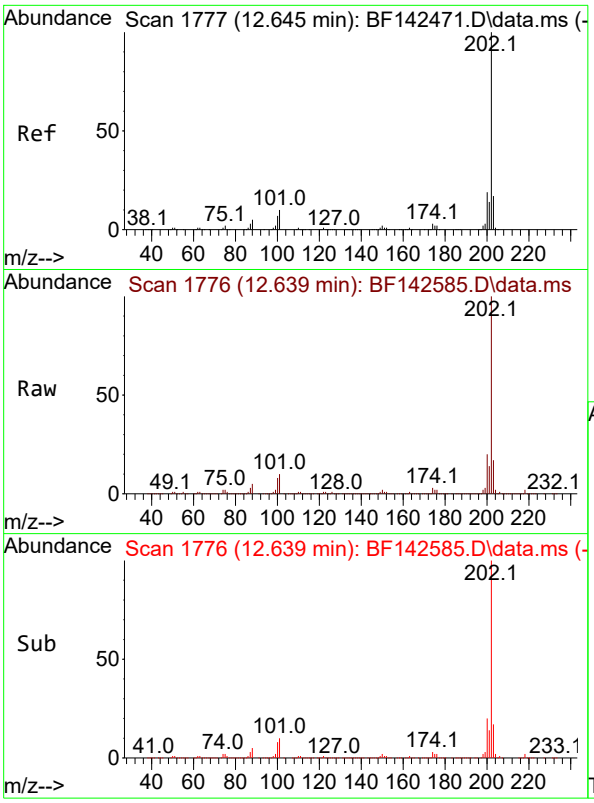


#72
Anthracene
Concen: 3.503 ng
RT: 11.498 min Scan# 1582
Delta R.T. -0.012 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:178 Resp: 56976

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.6	21.8
179	15.9	12.4	18.6



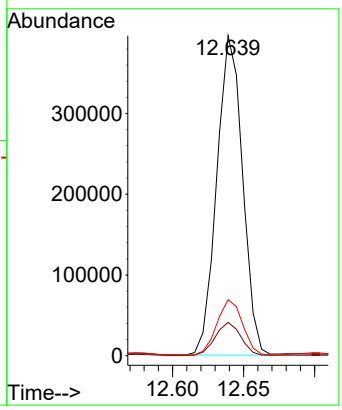


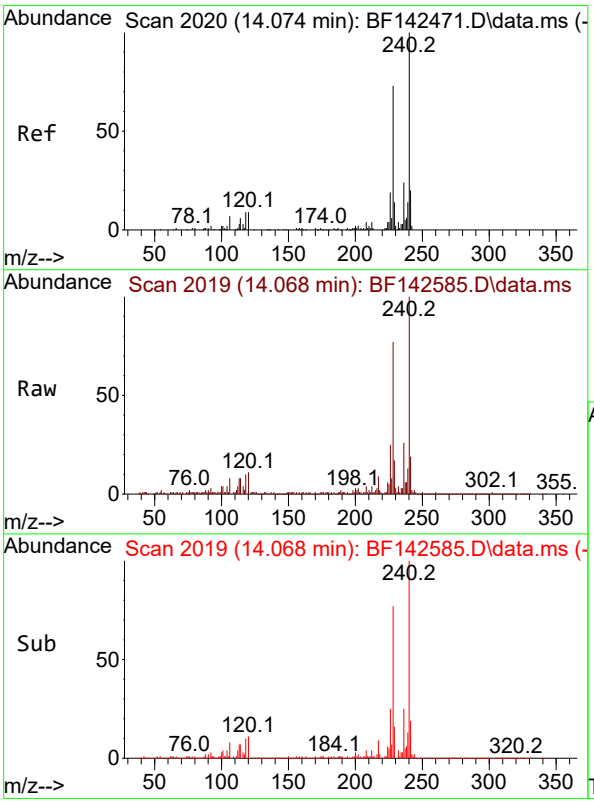
#75
Fluoranthene
Concen: 33.419 ng
RT: 12.639 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:202 Resp: 497661

Ion	Ratio	Lower	Upper
202	100		
101	10.4	0.0	29.6
203	17.5	0.0	37.2

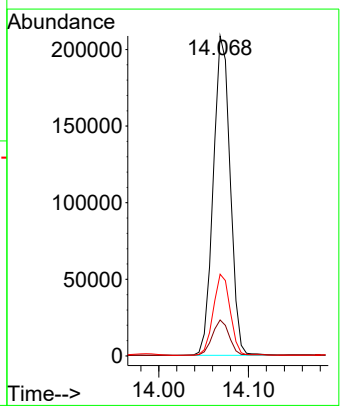


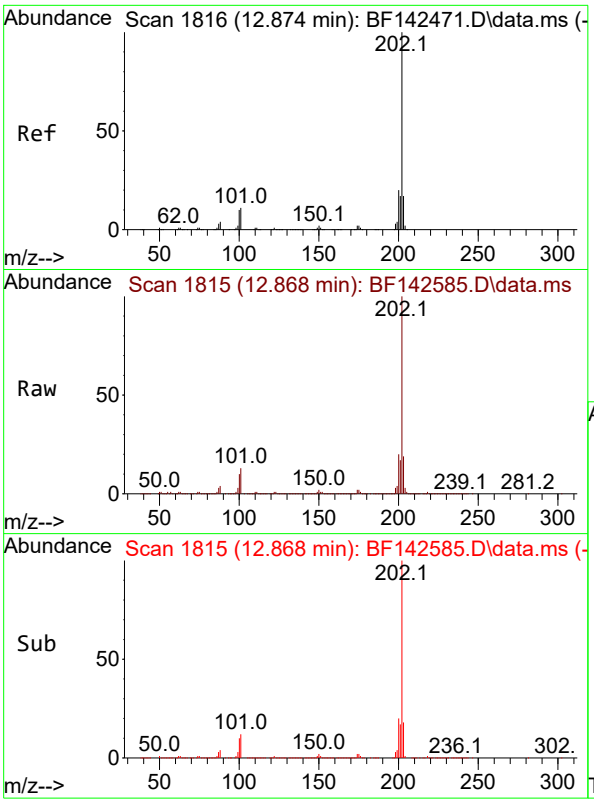


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:240 Resp: 272466

Ion	Ratio	Lower	Upper
240	100		
120	11.3	7.5	11.3
236	25.6	19.6	29.4



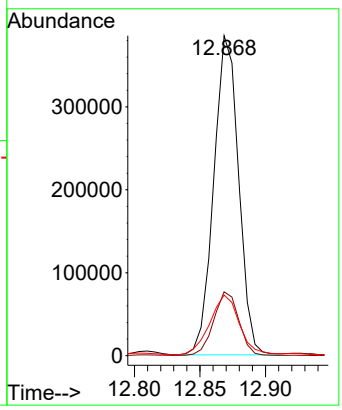


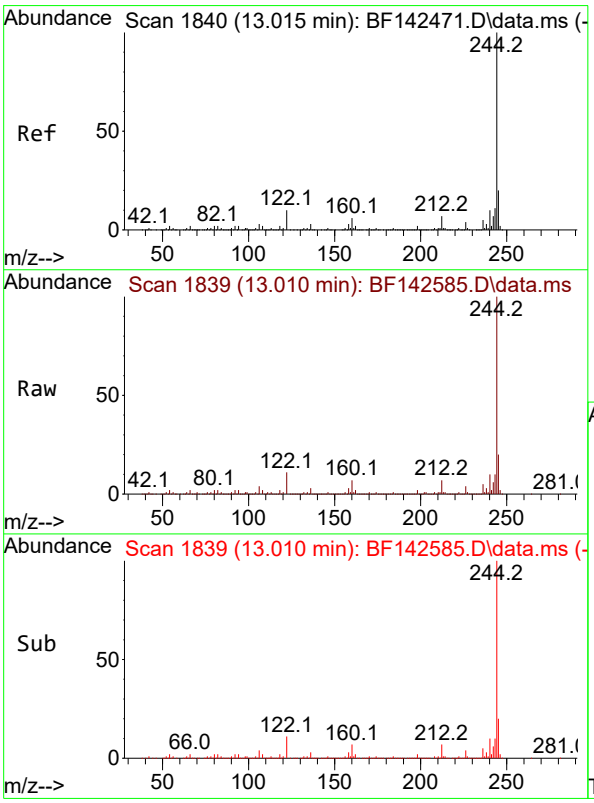
#78
Pyrene
Concen: 19.953 ng
RT: 12.868 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:202 Resp: 507160

Ion	Ratio	Lower	Upper
202	100		
200	20.0	16.1	24.1
203	18.9	13.9	20.9

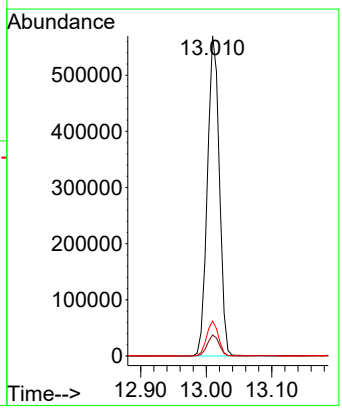


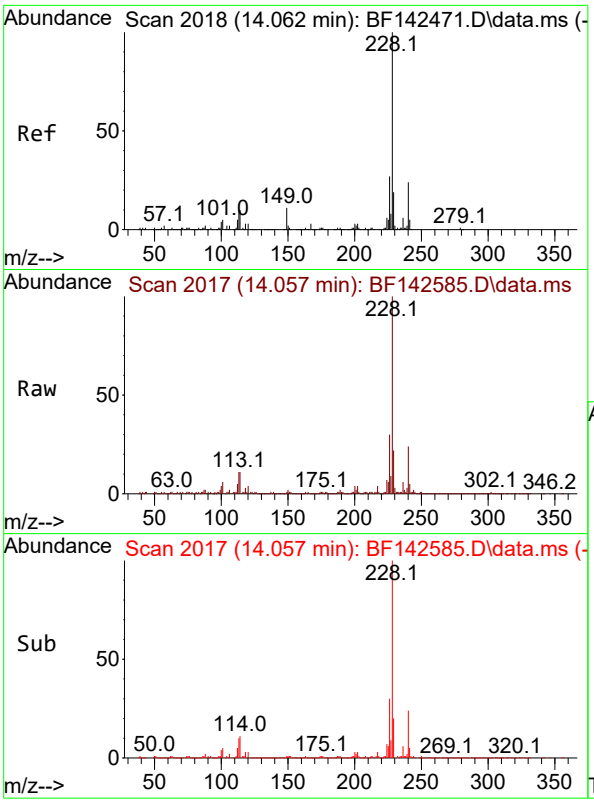


#79
Terphenyl-d14
Concen: 36.366 ng
RT: 13.010 min Scan# 1839
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:244 Resp: 725082

Ion	Ratio	Lower	Upper
244	100		
212	6.6	5.3	7.9
122	10.9	8.2	12.2



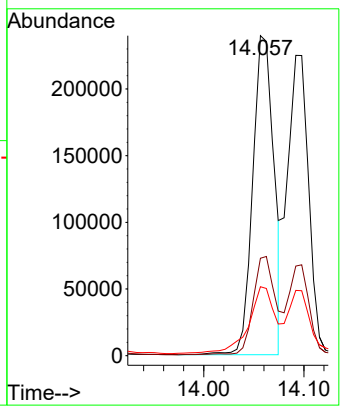


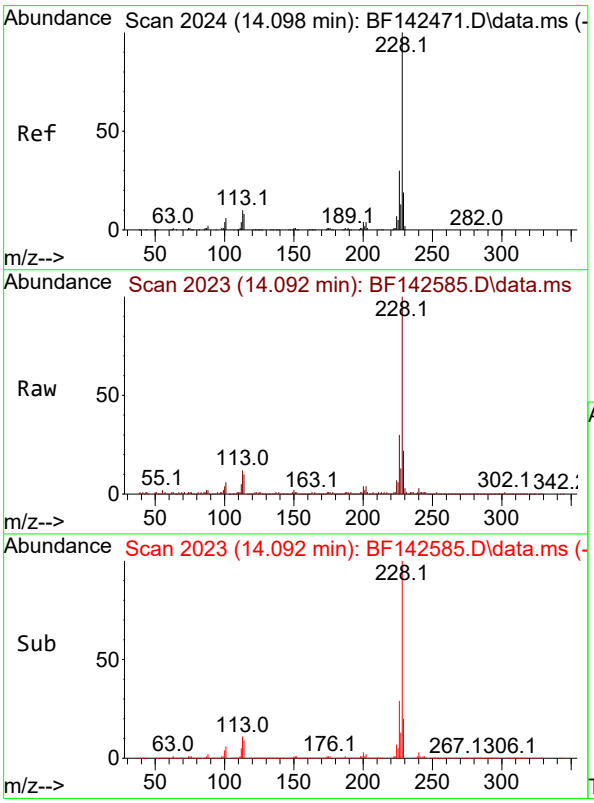
#81
Benzo(a)anthracene
Concen: 19.282 ng
RT: 14.057 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:228 Resp: 350812

Ion	Ratio	Lower	Upper
228	100		
226	30.4	21.2	31.8
229	21.5	15.5	23.3

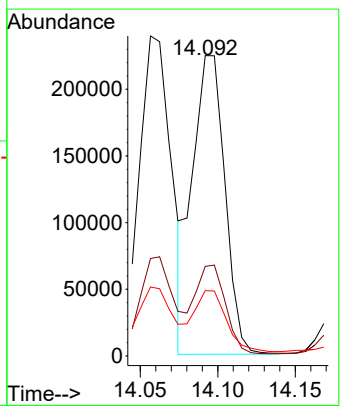


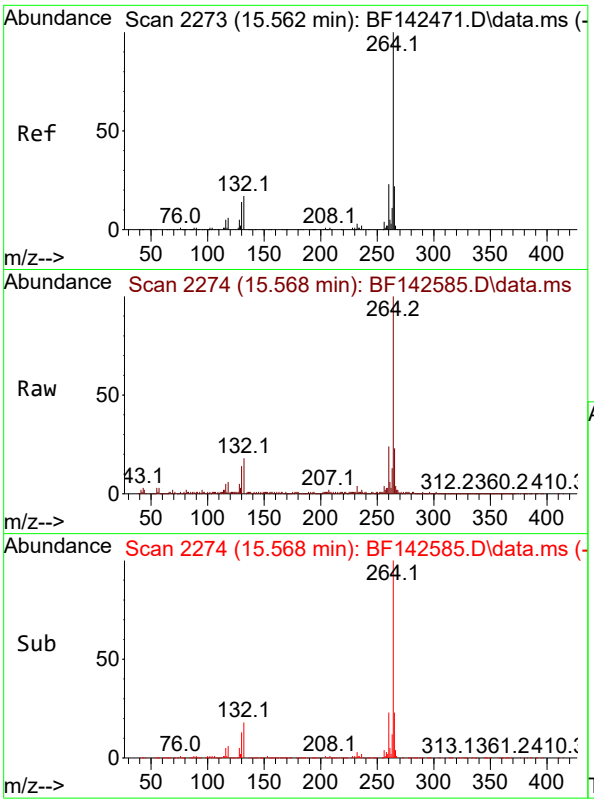


#83
Chrysene
Concen: 20.000 ng
RT: 14.092 min Scan# 2023
Delta R.T. -0.012 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:228 Resp: 326975

Ion	Ratio	Lower	Upper
228	100		
226	29.9	23.8	35.6
229	21.7	15.4	23.2



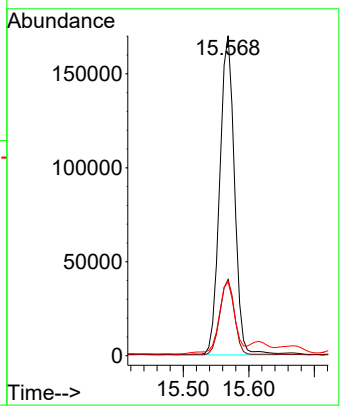


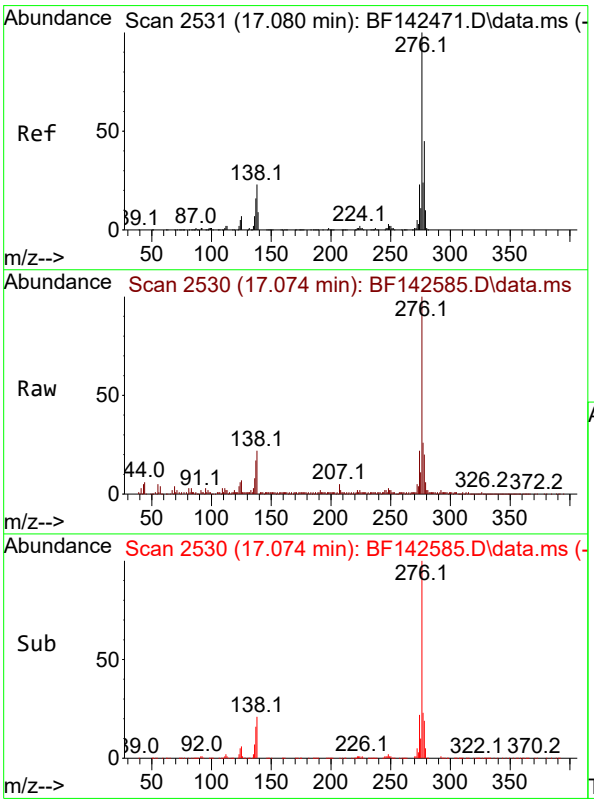
#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:264 Resp: 264844

Ion	Ratio	Lower	Upper
264	100		
260	23.8	18.6	28.0
265	23.1	17.7	26.5

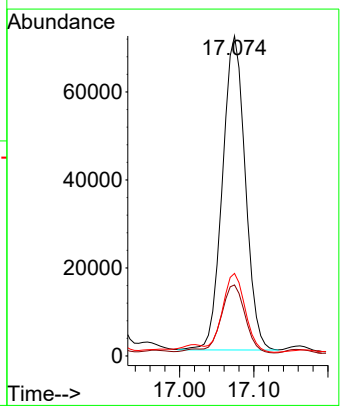


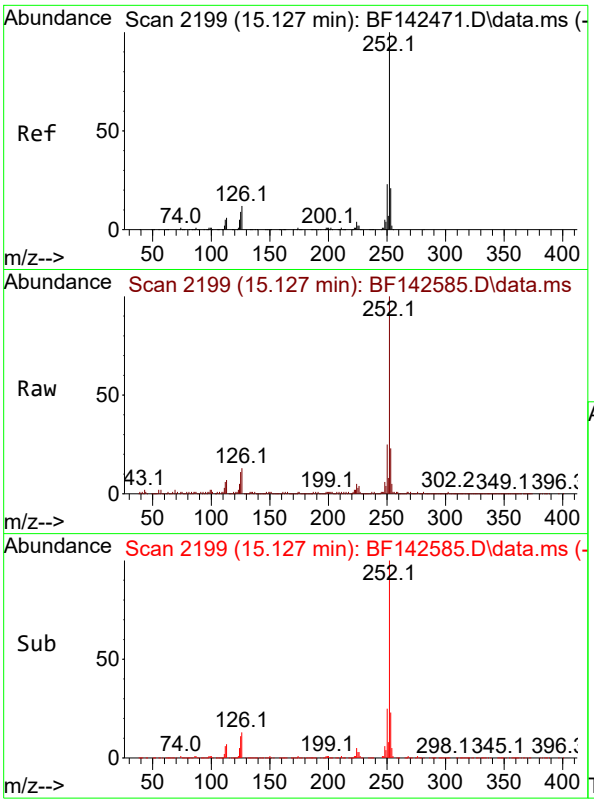


#87
Indeno(1,2,3-cd)pyrene
Concen: 7.678 ng
RT: 17.074 min Scan# 2530
Delta R.T. -0.018 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:276 Resp: 152667

Ion	Ratio	Lower	Upper
276	100		
138	23.6	19.9	29.9
277	25.0	20.2	30.2



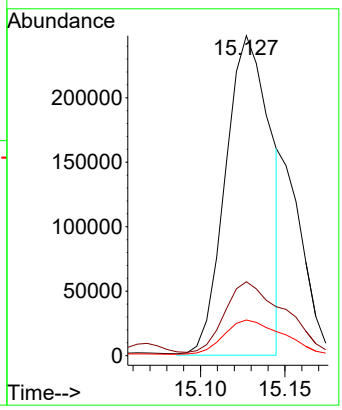


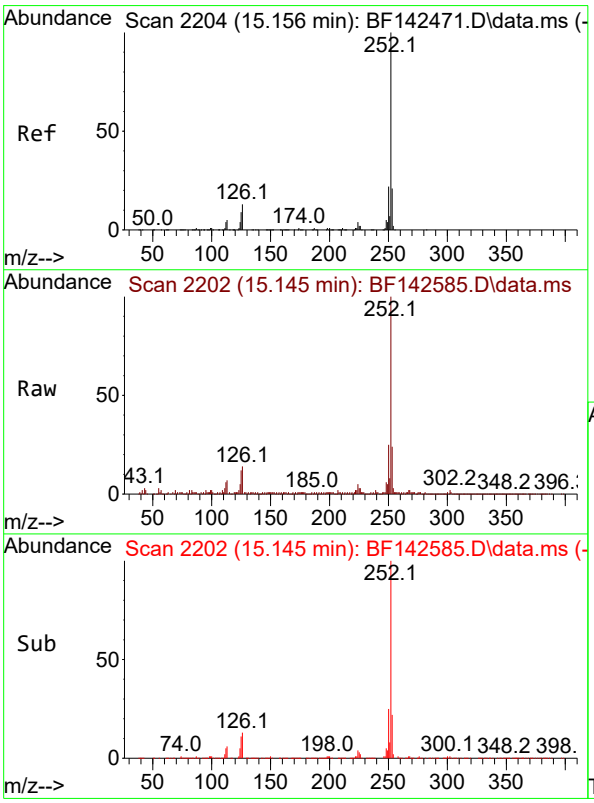
#88
Benzo(b)fluoranthene
Concen: 29.299 ng m
RT: 15.127 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:252 Resp: 459256

Ion	Ratio	Lower	Upper
252	100		
253	23.1	17.0	25.4
125	11.2	7.4	11.0#

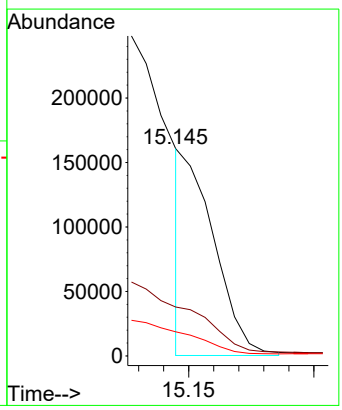


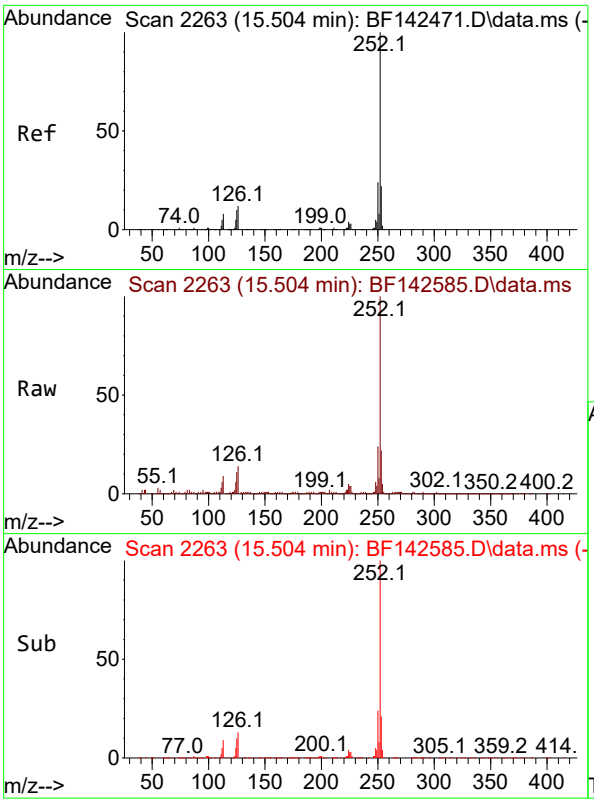


#89
Benzo(k)fluoranthene
Concen: 9.216 ng m
RT: 15.145 min Scan# 2202
Delta R.T. -0.018 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:252 Resp: 135303

Ion	Ratio	Lower	Upper
252	100		
253	23.6	17.0	25.4
125	11.7	7.3	10.9#



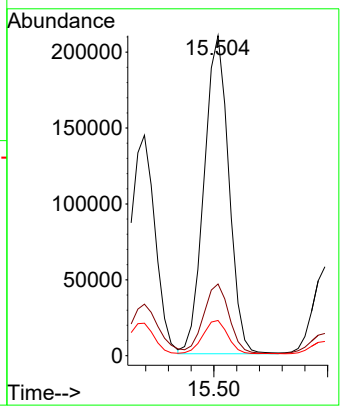


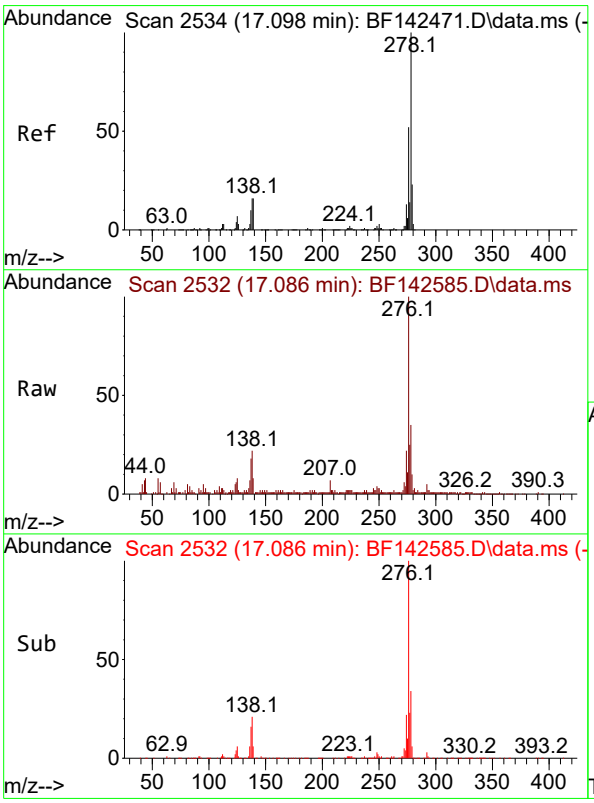
#90
Benzo(a)pyrene
Concen: 21.474 ng
RT: 15.504 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:252 Resp: 317279

Ion	Ratio	Lower	Upper
252	100		
253	22.4	17.4	26.0
125	11.0	7.9	11.9

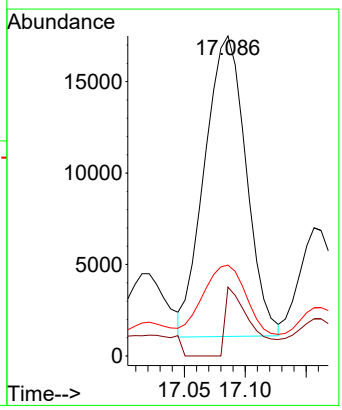


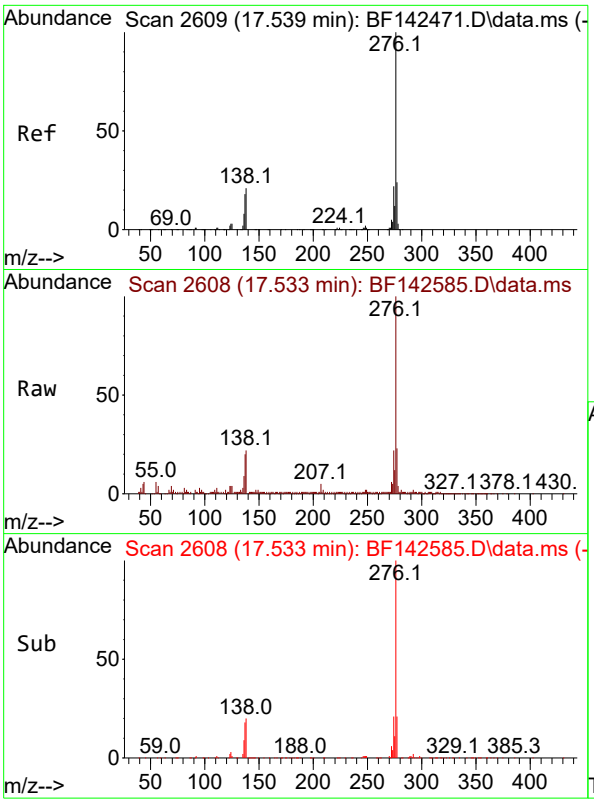


#91
Dibenzo(a,h)anthracene
Concen: 2.419 ng
RT: 17.086 min Scan# 2532
Delta R.T. -0.029 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Tgt Ion:278 Resp: 39006

Ion	Ratio	Lower	Upper
278	100		
139	21.5	12.8	19.2#
279	28.4	18.6	28.0#



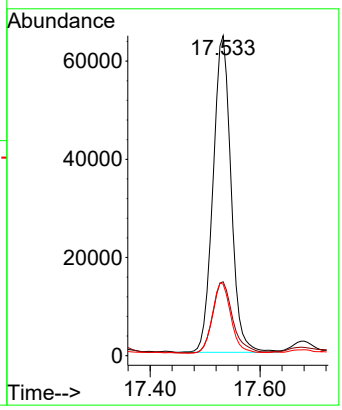


#92
Benzo(g,h,i)perylene
Concen: 9.119 ng
RT: 17.533 min Scan# 2
Delta R.T. -0.023 min
Lab File: BF142585.D
Acq: 30 May 2025 22:41

Instrument :
BNA_F
ClientSampleId :
TP-52

Tgt Ion:276 Resp: 147088

Ion	Ratio	Lower	Upper
276	100		
277	23.1	19.2	28.8
138	22.4	16.8	25.2



Sample Results: **BF142585.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142585.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.299	13	18	30	rVB	26923	48271	1.97%	0.163%
2	5.116	488	497	511	rBV	181854	286965	11.70%	0.967%
3	5.516	559	565	570	rBV	1829344	2435191	99.31%	8.203%
4	5.845	616	621	629	rBV	59485	77449	3.16%	0.261%
5	6.522	725	736	741	rBV	1744939	2450336	99.92%	8.254%
6	6.898	795	800	805	rVB	618469	756248	30.84%	2.547%
7	7.457	884	895	900	rBV	1167788	1545101	63.01%	5.205%
8	7.710	934	938	944	rVB	29908	38949	1.59%	0.131%
9	8.181	1010	1018	1025	rBV	752382	993402	40.51%	3.346%
10	8.392	1049	1054	1061	rVB2	21813	30372	1.24%	0.102%
11	8.769	1113	1118	1121	rBV	47599	56880	2.32%	0.192%
12	9.257	1195	1201	1206	rBV	1947349	2452188	100.00%	8.260%
13	9.333	1209	1214	1222	rBV	59595	84450	3.44%	0.284%
14	9.651	1264	1268	1275	rVB3	34707	60017	2.45%	0.202%
15	9.798	1288	1293	1298	rBV	83747	105670	4.31%	0.356%
16	9.863	1299	1304	1308	rVB	50821	65336	2.66%	0.220%
17	9.933	1311	1316	1321	rBV	681221	892695	36.40%	3.007%
18	10.139	1346	1351	1355	rBV	24313	34283	1.40%	0.115%
19	10.363	1381	1389	1392	rBV2	44212	76550	3.12%	0.258%
20	10.486	1406	1410	1415	rVB	27940	43201	1.76%	0.146%
21	10.586	1422	1427	1432	rVV2	14527	25754	1.05%	0.087%
22	10.645	1432	1437	1444	rVB	135497	190869	7.78%	0.643%
23	10.727	1445	1451	1462	rBV	993381	1335038	54.44%	4.497%
24	10.845	1466	1471	1477	rVB3	50767	89507	3.65%	0.301%
25	11.033	1498	1503	1506	rBV3	18361	32522	1.33%	0.110%
26	11.280	1540	1545	1548	rBV4	21777	36030	1.47%	0.121%
27	11.316	1548	1551	1558	rVB2	28460	45187	1.84%	0.152%
28	11.427	1564	1570	1578	rBV2	557293	1003037	40.90%	3.379%
29	11.498	1578	1582	1586	rVV	86795	117359	4.79%	0.395%
30	11.533	1586	1588	1594	rVB2	21603	28282	1.15%	0.095%
31	11.657	1605	1609	1615	rBV3	18619	38530	1.57%	0.130%
32	11.716	1616	1619	1623	rVV2	24134	35776	1.46%	0.121%
33	11.757	1623	1626	1630	rVB	22058	27961	1.14%	0.094%
34	11.951	1650	1659	1664	rBV3	341234	597240	24.36%	2.012%
35	12.004	1664	1668	1670	rVV	46771	73801	3.01%	0.249%
36	12.039	1670	1674	1683	rVB	157183	285312	11.63%	0.961%

Sample Results: **BF142585.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

37	12.221	1698	1705	1708	rBV	55980	98202	4.00%	0.331%
38	12.368	1725	1730	1733	rBV2	25600	44918	1.83%	0.151%
39	12.404	1733	1736	1738	rBV	21968	25673	1.05%	0.086%
40	12.474	1744	1748	1751	rBV	94828	133878	5.46%	0.451%
41	12.510	1751	1754	1760	rVV2	63777	107570	4.39%	0.362%
42	12.563	1760	1763	1771	rVB3	47496	80789	3.29%	0.272%
43	12.639	1771	1776	1781	rBV	881883	1115306	45.48%	3.757%
44	12.733	1788	1792	1799	rVB	67960	80375	3.28%	0.271%
45	12.792	1799	1802	1808	rVB3	34082	53914	2.20%	0.182%
46	12.868	1808	1815	1821	rBV	859017	1285596	52.43%	4.330%
47	12.921	1821	1824	1828	rVB2	48347	67224	2.74%	0.226%
48	13.010	1832	1839	1846	rVB	1499817	1990263	81.16%	6.704%
49	13.086	1847	1852	1859	rBV3	95839	180214	7.35%	0.607%
50	13.198	1863	1871	1875	rVB	175326	317474	12.95%	1.069%
51	13.263	1878	1882	1885	rVV	136985	168186	6.86%	0.567%
52	13.304	1885	1889	1896	rVB2	114166	172086	7.02%	0.580%
53	13.392	1901	1904	1907	rBV	67437	83895	3.42%	0.283%
54	13.427	1907	1910	1913	rVB	63606	75575	3.08%	0.255%
55	13.580	1933	1936	1938	rBV2	33736	49434	2.02%	0.167%
56	13.815	1972	1976	1979	rBV2	93135	145657	5.94%	0.491%
57	13.910	1988	1992	1998	rVB3	147816	225973	9.22%	0.761%
58	14.062	2012	2018	2022	rBV2	980257	1860542	75.87%	6.267%
59	14.174	2034	2037	2040	rVB	81209	87549	3.57%	0.295%
60	14.451	2081	2084	2088	rVB	109745	138458	5.65%	0.466%
61	14.580	2104	2106	2108	rBV	54384	56867	2.32%	0.192%
62	15.127	2193	2199	2208	rBV	630627	1532319	62.49%	5.162%
63	15.233	2214	2217	2222	rVB	131231	174754	7.13%	0.589%
64	15.439	2247	2252	2258	rVB	354503	576011	23.49%	1.940%
65	15.504	2258	2263	2268	rBV	506601	757564	30.89%	2.552%
66	15.568	2269	2274	2277	rBV	435399	704576	28.73%	2.373%
67	17.074	2524	2530	2540	rVB2	201871	448824	18.30%	1.512%
68	17.533	2602	2608	2621	rVB	153340	351948	14.35%	1.186%

Sum of corrected areas: 29687373

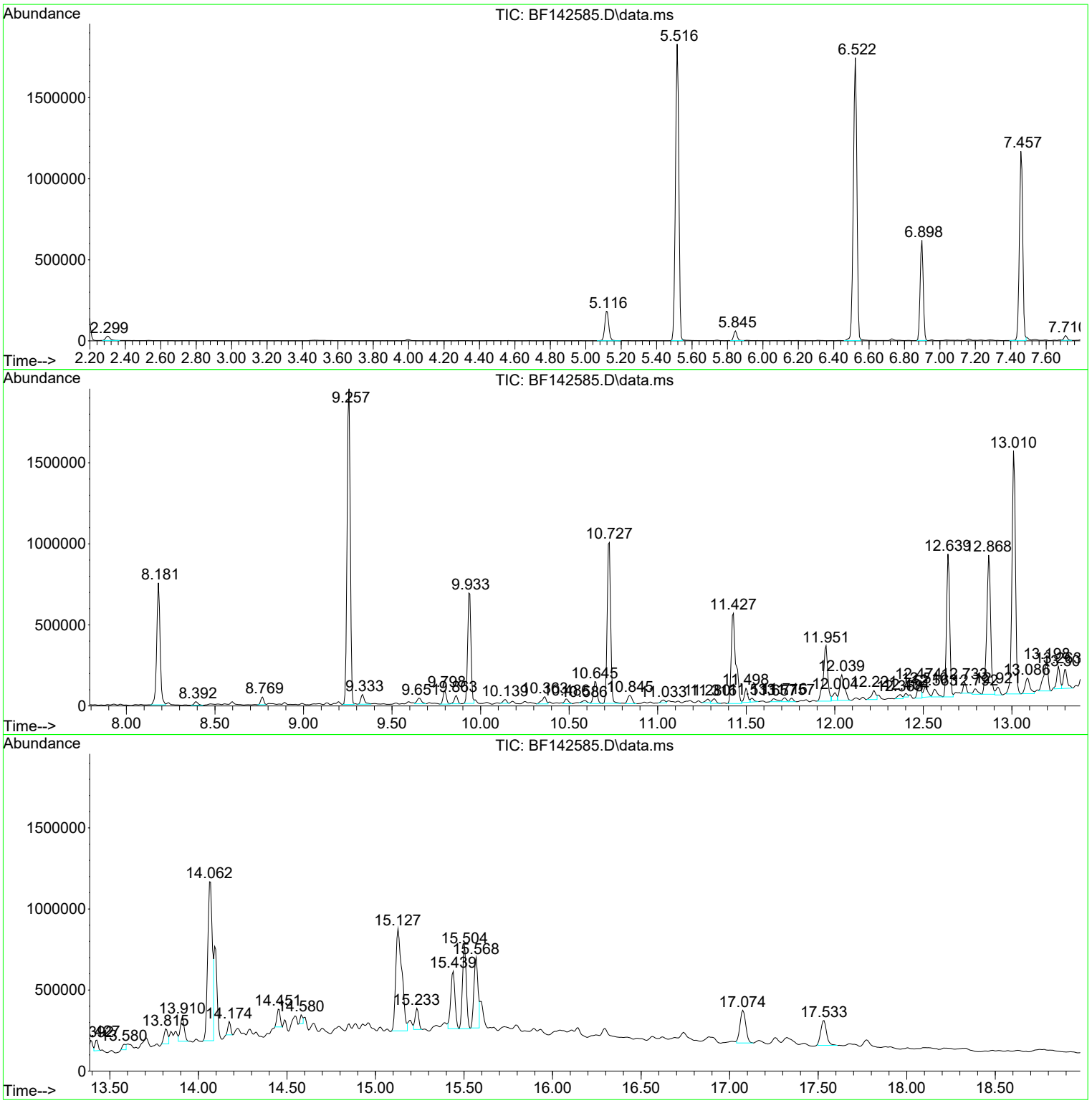
Sample Results: **BF142585.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

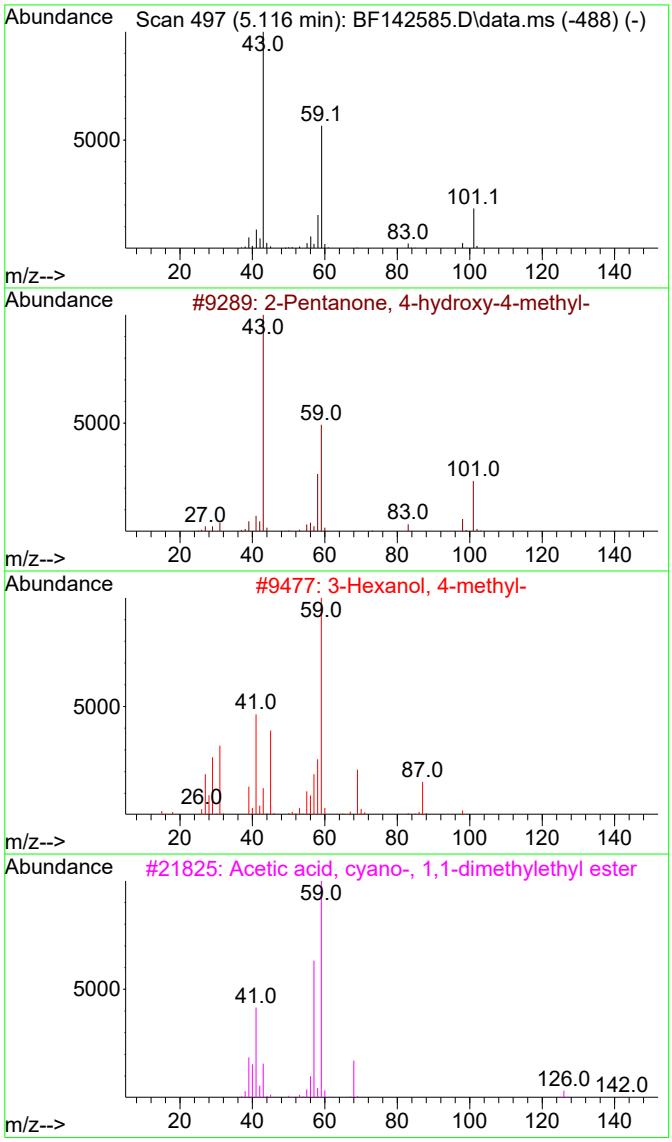
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

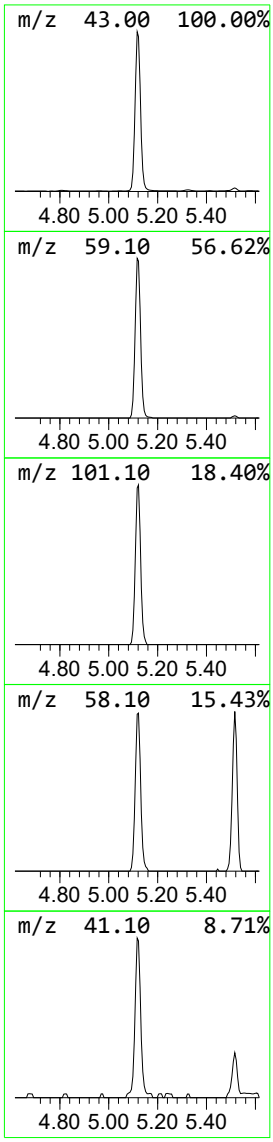
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.116	7.59 ng	286965	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	3-Hexanol, 4-methyl-	116	C7H16O	000615-29-2	33
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25
4	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





Sample Results: **BF142585.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

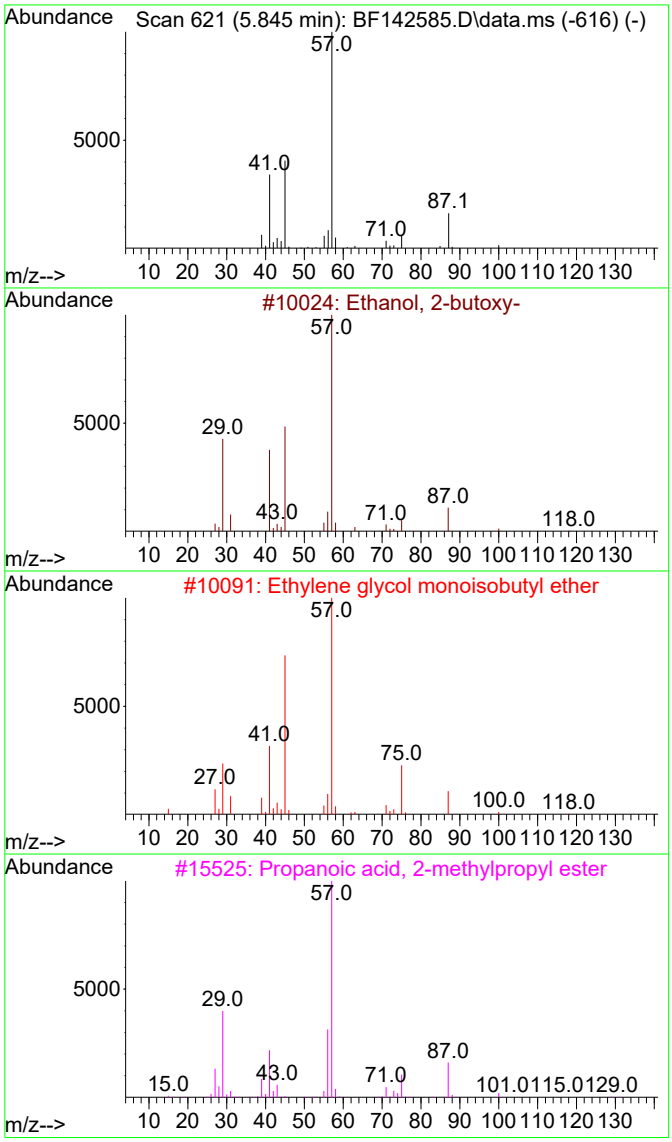
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

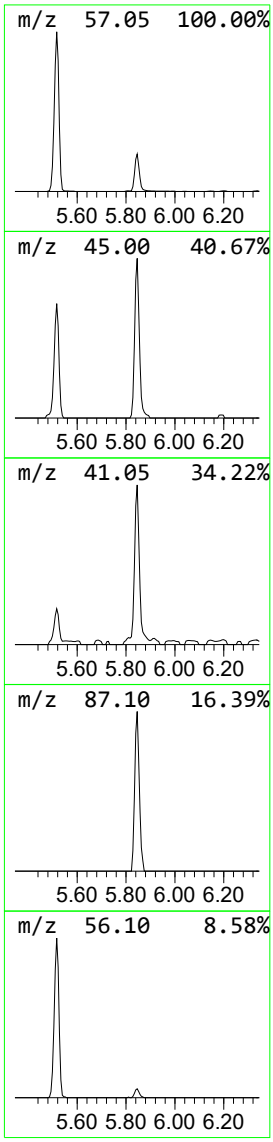
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Ethanol, 2-butoxy- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.845	2.05 ng	77449	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-butoxy-	118	C6H14O2	000111-76-2	74
2	Ethylene glycol monoisobutyl ether	118	C6H14O2	004439-24-1	42
3	Propanoic acid, 2-methylpropyl e...	130	C7H14O2	000540-42-1	17
4	Isobutyl ether	130	C8H18O	000628-55-7	16
5	n-Butyl ether	130	C8H18O	000142-96-1	16





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

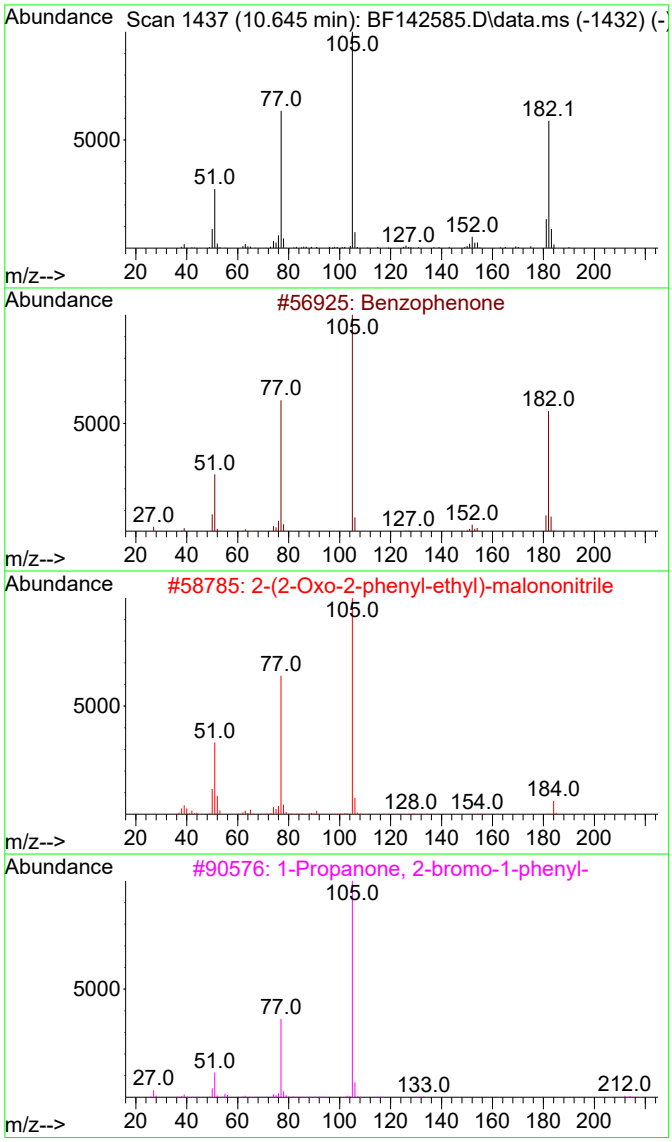
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

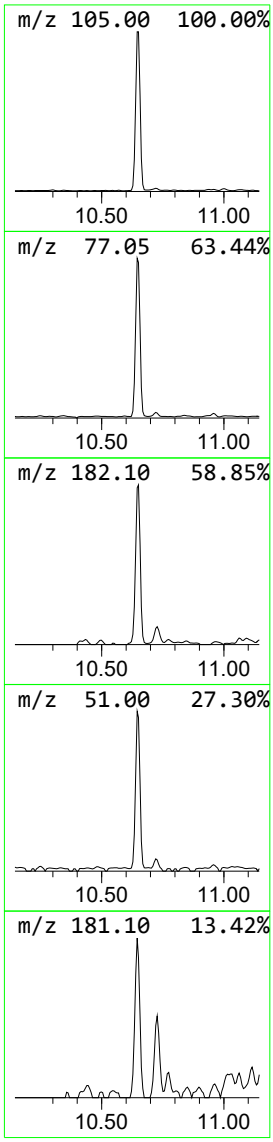
****

Peak Number 3 Benzophenone Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.645	4.28 ng	190869	Acenaphthene-d10	9.939

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	2-(2-Oxo-2-phenyl-ethyl)-malonon...	184	C11H8N2O	1000296-76-9	53
3	1-Propanone, 2-bromo-1-phenyl-	212	C9H9BrO	002114-00-3	47
4	acetic acid, 2-bromo-, 2-oxo-2-p...	256	C10H9BrO3	1000401-50-0	47
5	N-Methylbenzamide, N-chlorodiflu...	247	C10H8ClF2NO2	1000446-98-2	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

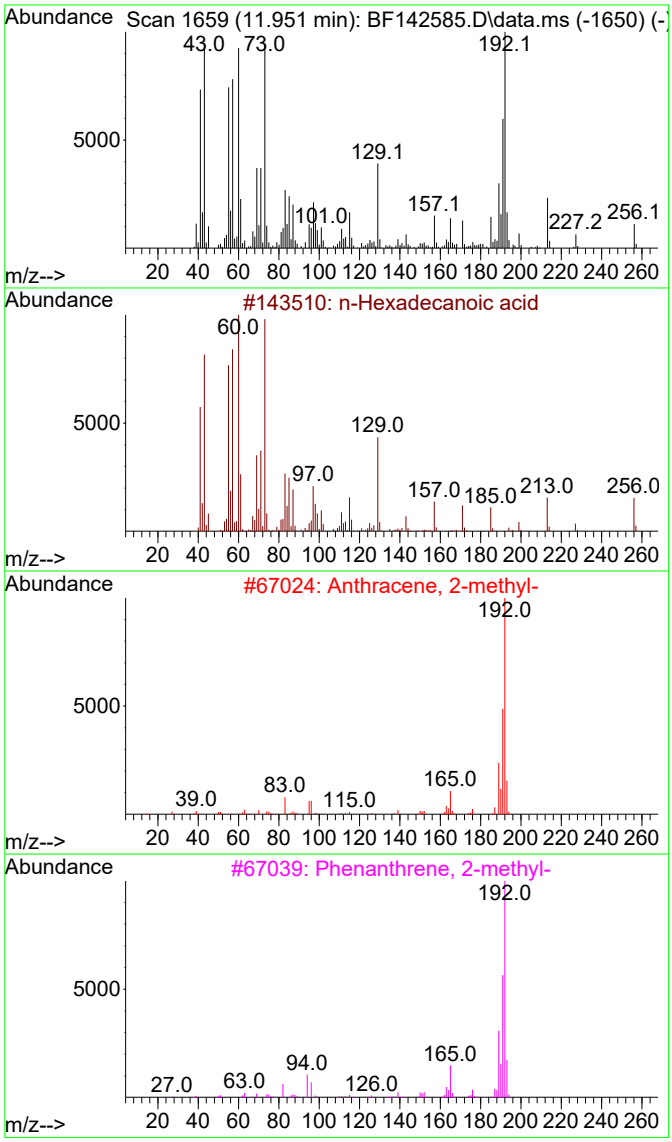
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

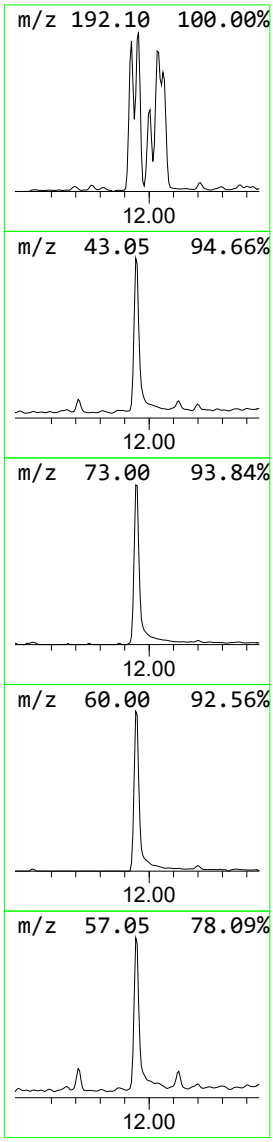
****

Peak Number 4 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.951	11.91 ng	597240	Phenanthrene-d10	11.427

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	91
3	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	91
4	Tridecanoic acid	214	C13H26O2	000638-53-9	87
5	n-Decanoic acid	172	C10H20O2	000334-48-5	83





Sample Results: **BF142585.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

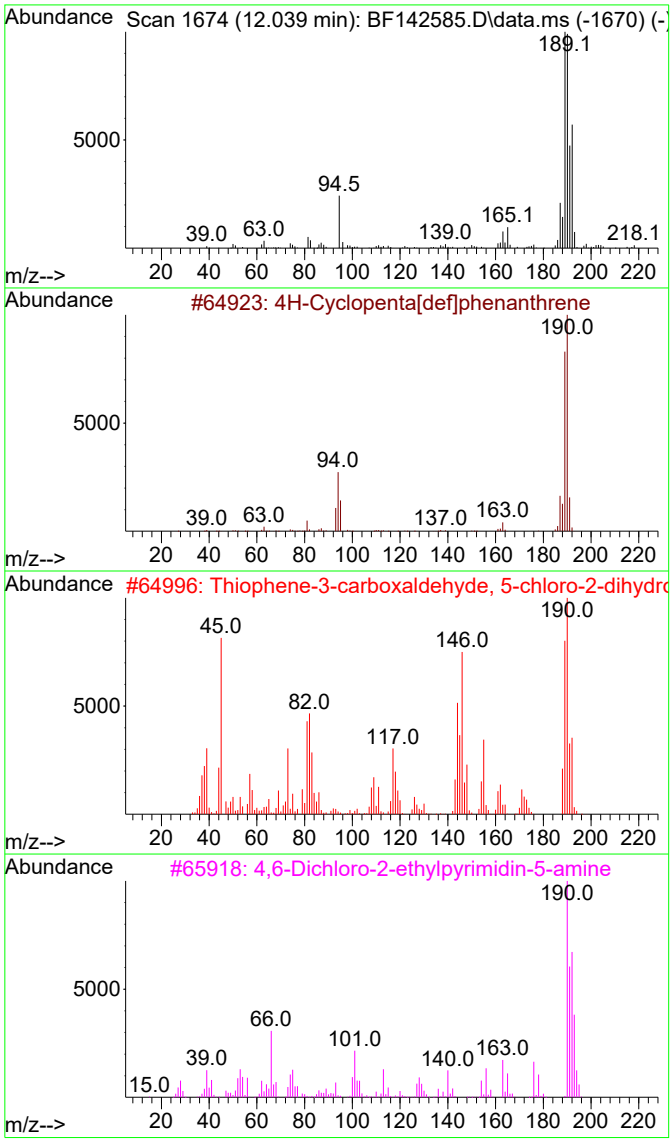
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

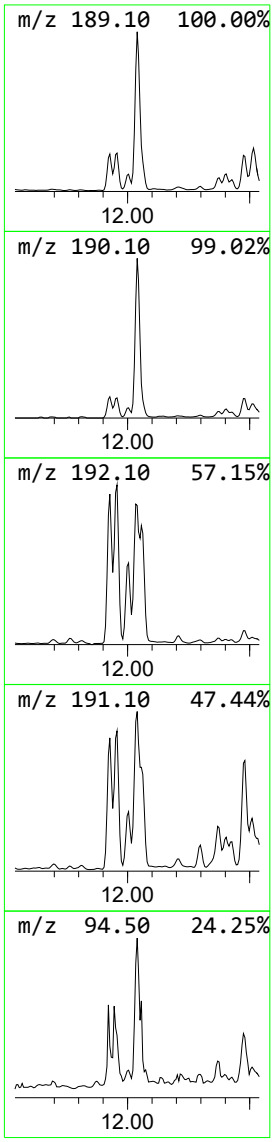
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 4H-Cyclopenta[def]phenanthrene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.039	5.69 ng	285312	Phenanthrene-d10	11.427

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	70
2	Thiophene-3-carboxaldehyde, 5-ch...	190	C5H4BClO3S	036155-87-0	50
3	4,6-Dichloro-2-ethylpyrimidin-5-...	191	C6H7Cl2N3	006237-96-3	43
4	2-Amino-4,6-dichloropyrimidine-5...	191	C5H3Cl2N3O	005604-46-6	43
5	2,3,5,6-Tetramethylterephthalald...	190	C12H14O2	007072-01-7	43





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

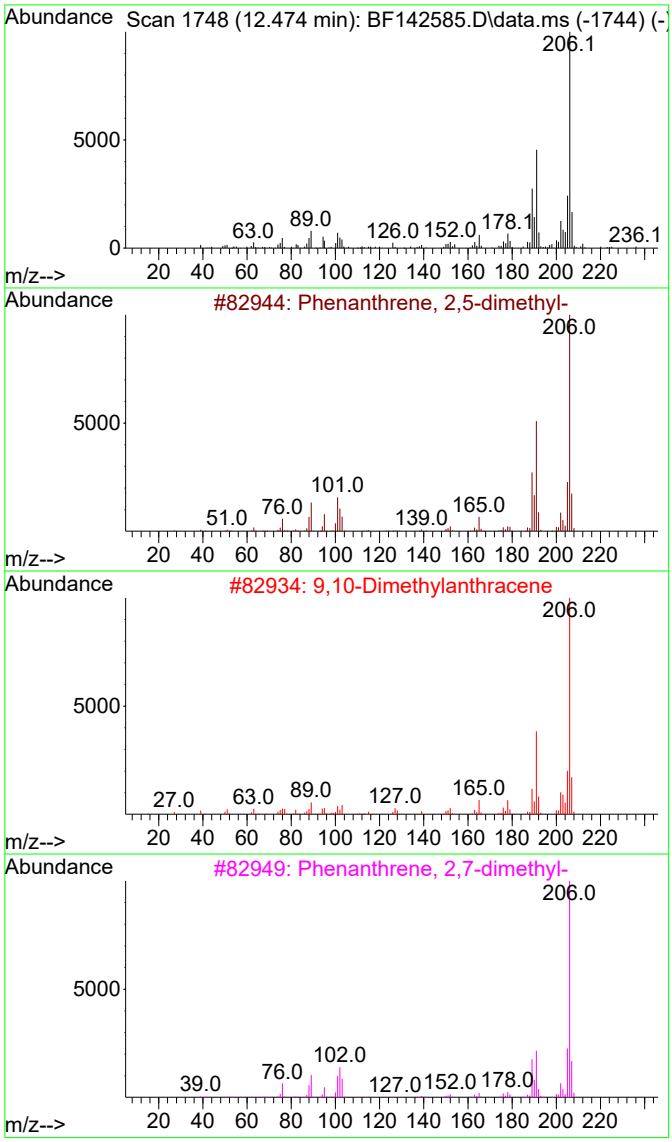
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

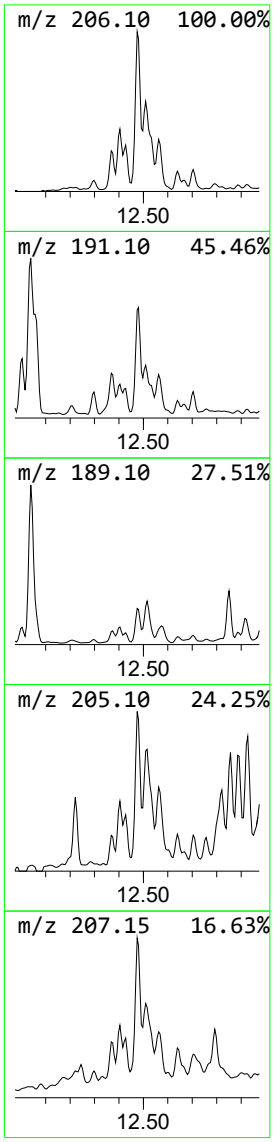
****

Peak Number 6 Phenanthrene, 2,5-dimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.474	2.67 ng	133878	Phenanthrene-d10	11.427

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	97
2	9,10-Dimethylanthracene	206	C16H14	000781-43-1	96
3	Phenanthrene, 2,7-dimethyl-	206	C16H14	001576-69-8	93
4	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	93
5	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	91





Sample Results: **BF142585.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

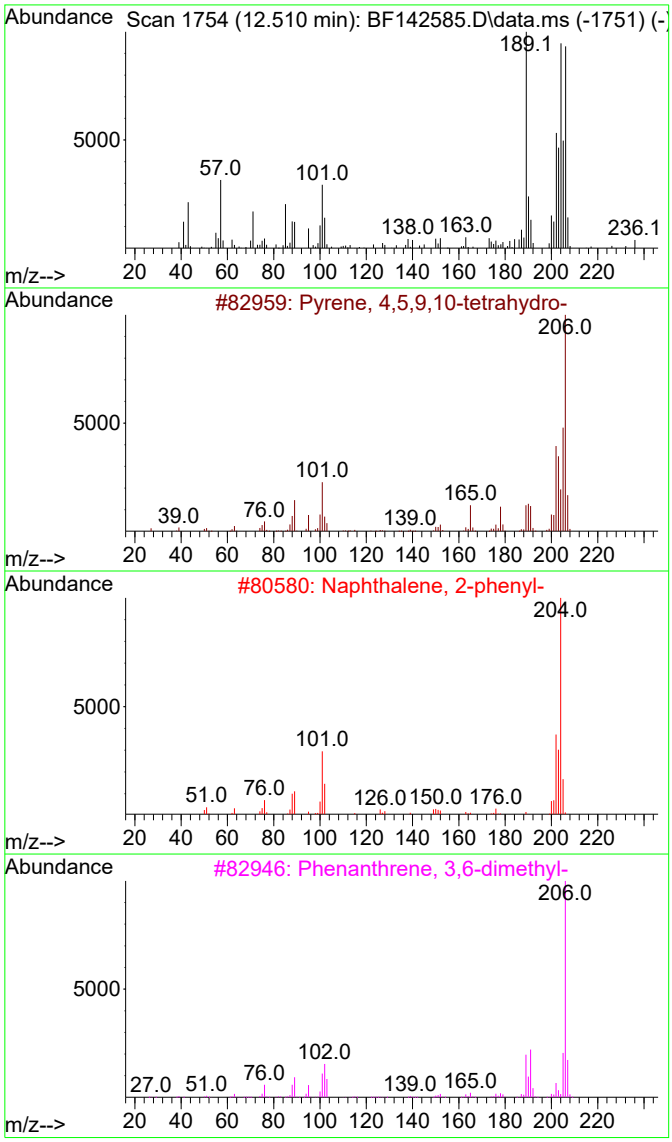
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

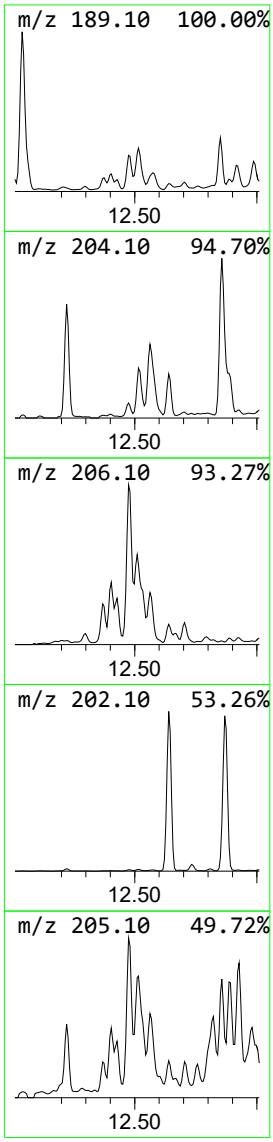
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 7 Pyrene, 4,5,9,10-tetrahydro- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.510	2.14 ng	107570	Phenanthrene-d10	11.427

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	51
2	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	35
3	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	27
4	Isoquinoline, 1,2,3,4-tetrahydro...	205	C12H19NSi	069944-96-3	25
5	4-(Trifluoromethoxy)benzoic acid	206	C8H5F3O3	000330-12-1	22





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

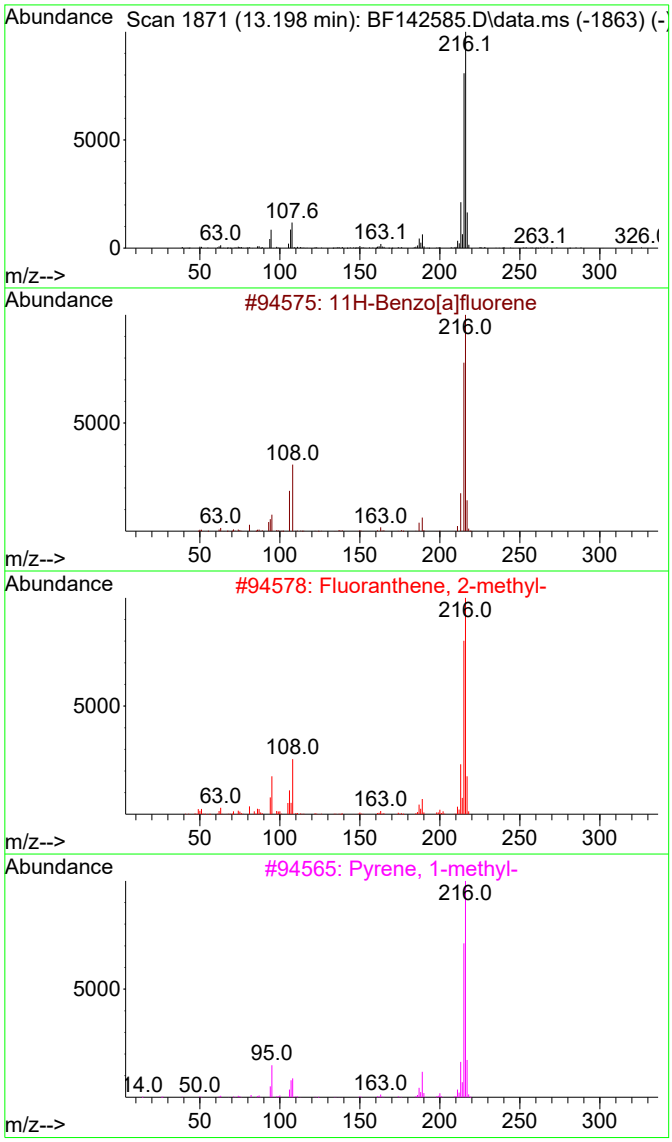
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

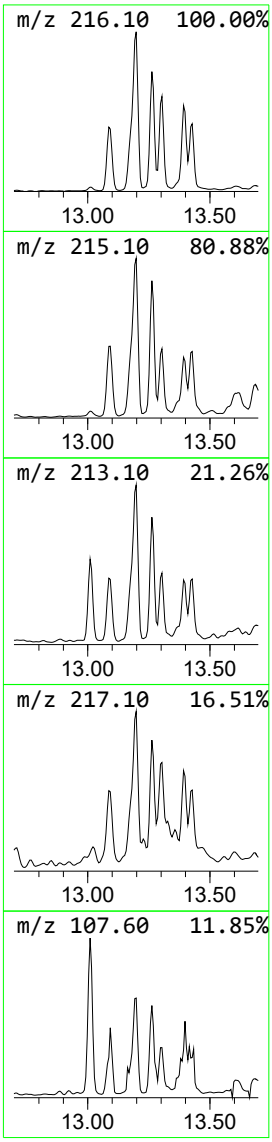
****

Peak Number 8 11H-Benzo[a]fluorene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.198	3.41 ng	317474	Chrysene-d12	14.068

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	93
2	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
3	Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
4	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	90
5	7H-Benzo[c]fluorene	216	C17H12	000205-12-9	87





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

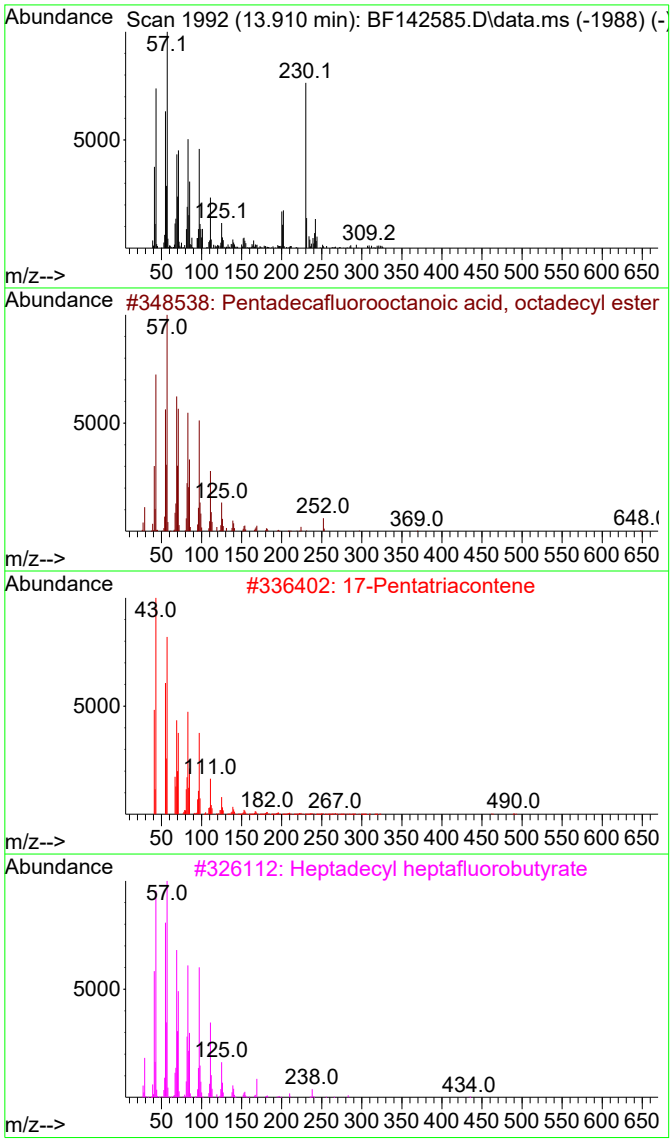
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

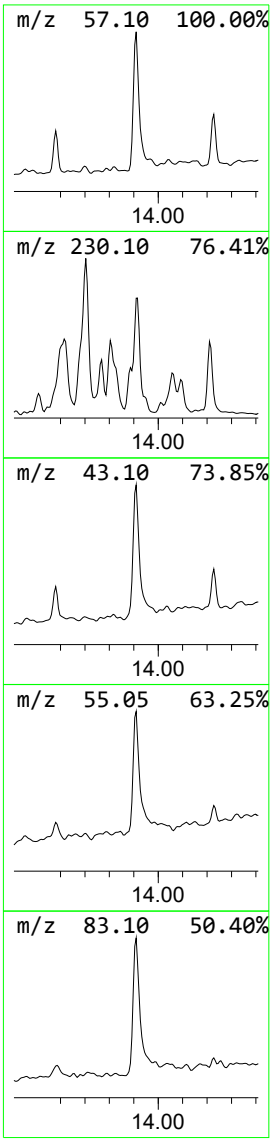
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 9 Pentadecafluorooctanoic aci... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.910	2.43 ng	225973	Chrysene-d12	14.068

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecafluorooctanoic acid, oc...	666	C26H37F15O2	1000406-04-8	78
2	17-Pentatriacontene	491	C35H70	006971-40-0	60
3	Heptadecyl heptafluorobutyrate	452	C21H35F7O2	959085-66-6	60
4	Tricosyl trifluoroacetate	436	C25H47F3O2	1000351-75-1	60
5	Tetracosyl heptafluorobutyrate	550	C28H49F7O2	1000351-83-7	60





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

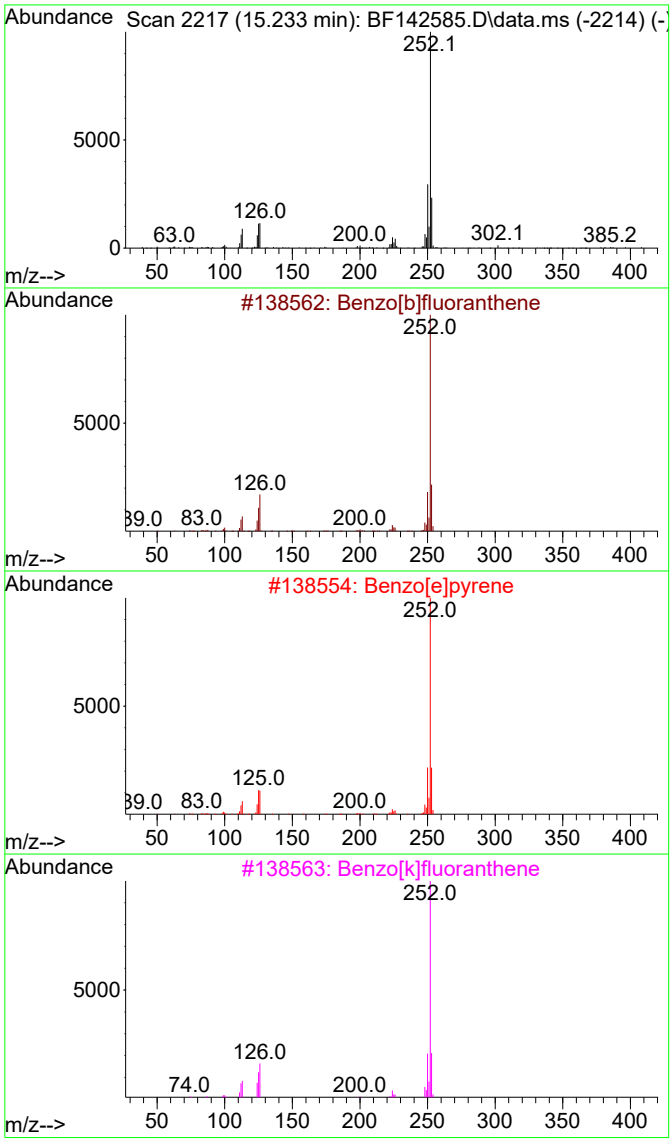
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

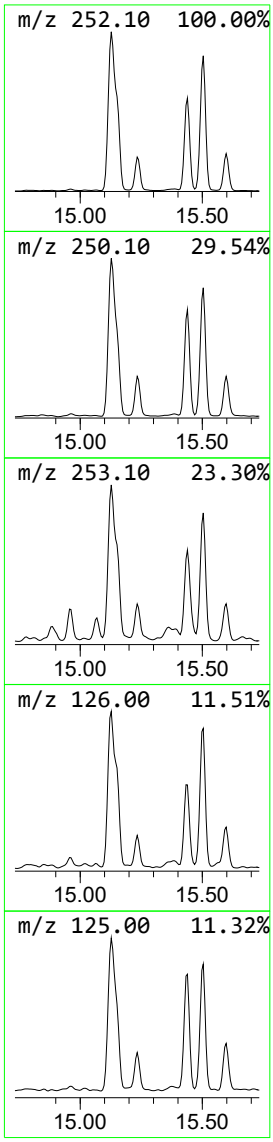
****

Peak Number 10 Benzo[e]pyrene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.233	4.96 ng	174754	Perylene-d12	15.568

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]fluoranthene	252	C20H12	000205-99-2	93
2	Benzo[e]pyrene	252	C20H12	000192-97-2	93
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
4	Benzo[a]pyrene	252	C20H12	000050-32-8	91
5	Perylene	252	C20H12	000198-55-0	81





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

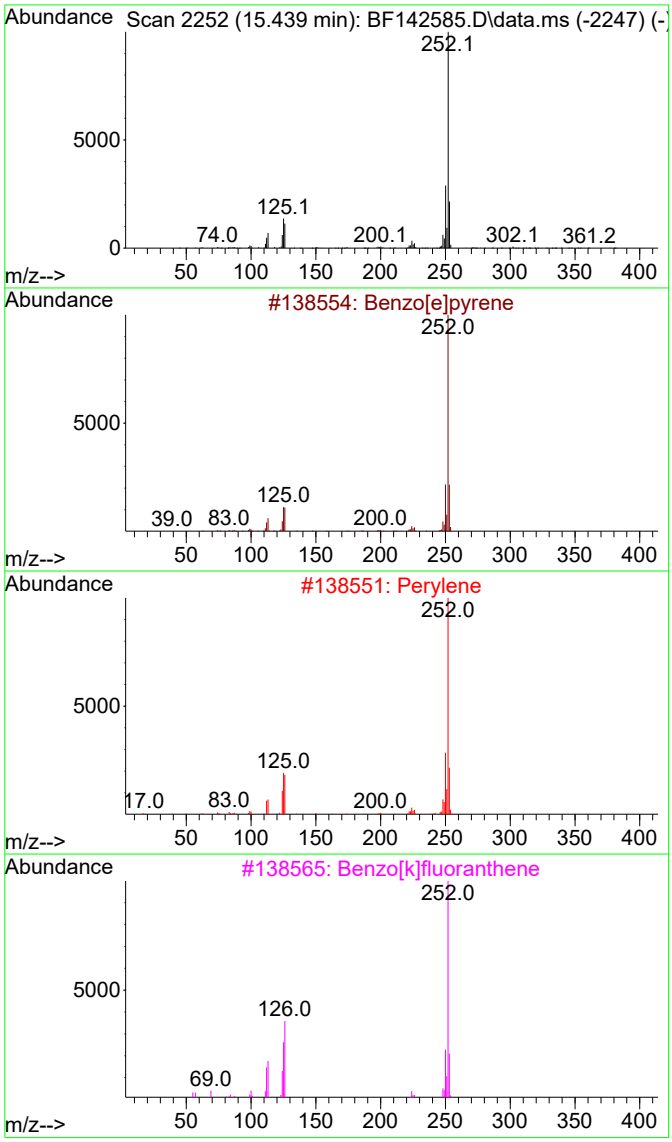
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

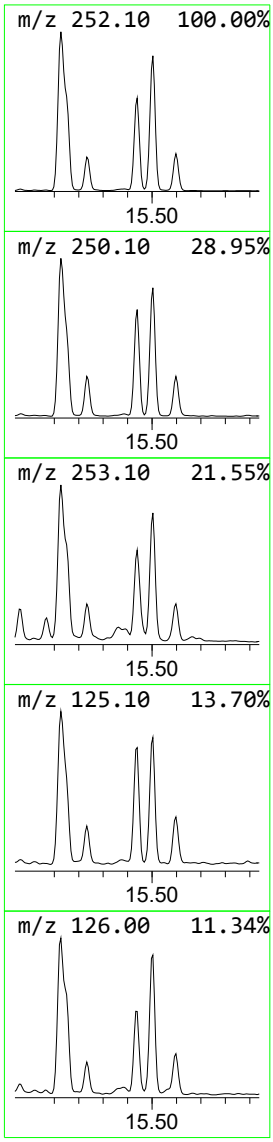
****

Peak Number 11 Perylene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.439	16.35 ng	576011	Perylene-d12	15.568

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	98
2	Perylene	252	C20H12	000198-55-0	97
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	96
4	Benzo[b]fluoranthene	252	C20H12	000205-99-2	94
5	Benzo[a]pyrene	252	C20H12	000050-32-8	93





Sample Results: **BF142585.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142585.D
Acq On : 30 May 2025 22:41
Operator : RC/JU
Sample : Q2150-08
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-52

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.116	7.6	ng	286965	1	6.898	756248	20.0
Ethanol, 2-butoxy-	5.845	2.0	ng	77449	1	6.898	756248	20.0
Benzophenone	10.645	4.3	ng	190869	3	9.939	892695	20.0
n-Hexadecanoic ...	11.951	11.9	ng	597240	4	11.427	1003040	20.0
4H-Cyclopenta[d...	12.039	5.7	ng	285312	4	11.427	1003040	20.0
Phenanthrene, 2...	12.474	2.7	ng	133878	4	11.427	1003040	20.0
Pyrene, 4,5,9,1...	12.510	2.1	ng	107570	4	11.427	1003040	20.0
11H-Benzo[a]flu...	13.198	3.4	ng	317474	5	14.068	1860540	20.0
Pentadecafluoro...	13.910	2.4	ng	225973	5	14.068	1860540	20.0
Benzo[e]pyrene	15.233	5.0	ng	174754	6	15.568	704576	20.0
Perylene	15.439	16.4	ng	576011	6	15.568	704576	20.0

Raw Data: **BF142570.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54	SDG No.:	Q2150
Lab Sample ID:	Q2150-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142570.D	1	05/30/25 09:50	05/30/25 15:21	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	190	U	190	390	ug/Kg
108-95-2	Phenol	26.4	U	26.4	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	29.1	U	29.1	200	ug/Kg
95-57-8	2-Chlorophenol	29.2	U	29.2	200	ug/Kg
95-48-7	2-Methylphenol	35.8	U	35.8	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	44.8	U	44.8	200	ug/Kg
98-86-2	Acetophenone	35.3	U	35.3	200	ug/Kg
65794-96-9	3+4-Methylphenols	49.1	U	49.1	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	56.7	U	56.7	95.7	ug/Kg
67-72-1	Hexachloroethane	21.0	U	21.0	200	ug/Kg
98-95-3	Nitrobenzene	21.9	U	21.9	200	ug/Kg
78-59-1	Isophorone	39.2	U	39.2	200	ug/Kg
88-75-5	2-Nitrophenol	69.6	U	69.6	200	ug/Kg
105-67-9	2,4-Dimethylphenol	77.5	U	77.5	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	36.8	U	36.8	200	ug/Kg
120-83-2	2,4-Dichlorophenol	33.8	U	33.8	200	ug/Kg
91-20-3	Naphthalene	27.1	U	27.1	200	ug/Kg
106-47-8	4-Chloroaniline	42.3	U	42.3	200	ug/Kg
87-68-3	Hexachlorobutadiene	30.3	U	30.3	200	ug/Kg
105-60-2	Caprolactam	62.3	U	62.3	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	34.3	U	34.3	200	ug/Kg
91-57-6	2-Methylnaphthalene	30.6	U	30.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.7	U	23.7	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	34.8	U	34.8	200	ug/Kg
92-52-4	1,1-Biphenyl	26.1	U	26.1	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.9	U	26.9	200	ug/Kg
88-74-4	2-Nitroaniline	57.5	U	57.5	200	ug/Kg
131-11-3	Dimethylphthalate	32.4	U	32.4	200	ug/Kg

Raw Data: **BF142570.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54	SDG No.:	Q2150
Lab Sample ID:	Q2150-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142570.D	1	05/30/25 09:50	05/30/25 15:21	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	34.6	U	34.6	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	40.2	U	40.2	200	ug/Kg
99-09-2	3-Nitroaniline	55.0	U	55.0	200	ug/Kg
83-32-9	Acenaphthene	25.5	U	25.5	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	390	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	390	ug/Kg
132-64-9	Dibenzofuran	27.1	U	27.1	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	59.9	U	59.9	200	ug/Kg
84-66-2	Diethylphthalate	33.8	U	33.8	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.9	U	31.9	200	ug/Kg
86-73-7	Fluorene	30.3	U	30.3	200	ug/Kg
100-01-6	4-Nitroaniline	76.8	U	76.8	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	39.3	U	39.3	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.2	U	33.2	200	ug/Kg
118-74-1	Hexachlorobenzene	30.3	U	30.3	200	ug/Kg
1912-24-9	Atrazine	40.7	U	40.7	200	ug/Kg
87-86-5	Pentachlorophenol	61.3	U	61.3	390	ug/Kg
85-01-8	Phenanthrene	25.0	U	25.0	200	ug/Kg
120-12-7	Anthracene	39.8	U	39.8	200	ug/Kg
86-74-8	Carbazole	37.3	U	37.3	200	ug/Kg
84-74-2	Di-n-butylphthalate	57.3	U	57.3	200	ug/Kg
206-44-0	Fluoranthene	35.9	U	35.9	200	ug/Kg
129-00-0	Pyrene	43.0	U	43.0	200	ug/Kg
85-68-7	Butylbenzylphthalate	85.4	U	85.4	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	43.9	U	43.9	390	ug/Kg
56-55-3	Benzo(a)anthracene	27.5	U	27.5	200	ug/Kg
218-01-9	Chrysene	23.8	U	23.8	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	70.8	U	70.8	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	22.7	U	22.7	200	ug/Kg

Raw Data: **BF142570.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54	SDG No.:	Q2150
Lab Sample ID:	Q2150-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142570.D	1	05/30/25 09:50	05/30/25 15:21	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	26.8	U	26.8	200	ug/Kg
50-32-8	Benzo(a)pyrene	35.3	U	35.3	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	34.8	U	34.8	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	32.8	U	32.8	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	30.7	U	30.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	30.6	U	30.6	200	ug/Kg
123-91-1	1,4-Dioxane	54.0	U	54.0	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	32.8	U	32.8	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	108		18 - 112	72%	SPK: 150
13127-88-3	Phenol-d6	112		15 - 107	75%	SPK: 150
4165-60-0	Nitrobenzene-d5	68.7		18 - 107	69%	SPK: 100
321-60-8	2-Fluorobiphenyl	62.7		20 - 109	63%	SPK: 100
118-79-6	2,4,6-Tribromophenol	118		10 - 116	79%	SPK: 150
1718-51-0	Terphenyl-d14	62.3		10 - 105	62%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	118000	6.898			
1146-65-2	Naphthalene-d8	442000	8.181			
15067-26-2	Acenaphthene-d10	231000	9.933			
1517-22-2	Phenanthrene-d10	379000	11.422			
1719-03-5	Chrysene-d12	216000	14.068			
1520-96-3	Perylene-d12	226000	15.562			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	360	AB		5.12	ug/Kg
000119-61-9	Benzophenone	250	J		10.7	ug/Kg
000057-10-3	n-Hexadecanoic acid	550	J		12.0	ug/Kg
000057-11-4	Octadecanoic acid	110	J		12.7	ug/Kg
079392-43-1	Octadecyl trifluoroacetate	360	J		13.9	ug/Kg
007683-64-9	Supraene	110	J		14.9	ug/Kg

Raw Data: **BF142570.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54	SDG No.:	Q2150
Lab Sample ID:	Q2150-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142570.D	1	05/30/25 09:50	05/30/25 15:21	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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: **BF142570.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Time: May 30 15:43:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

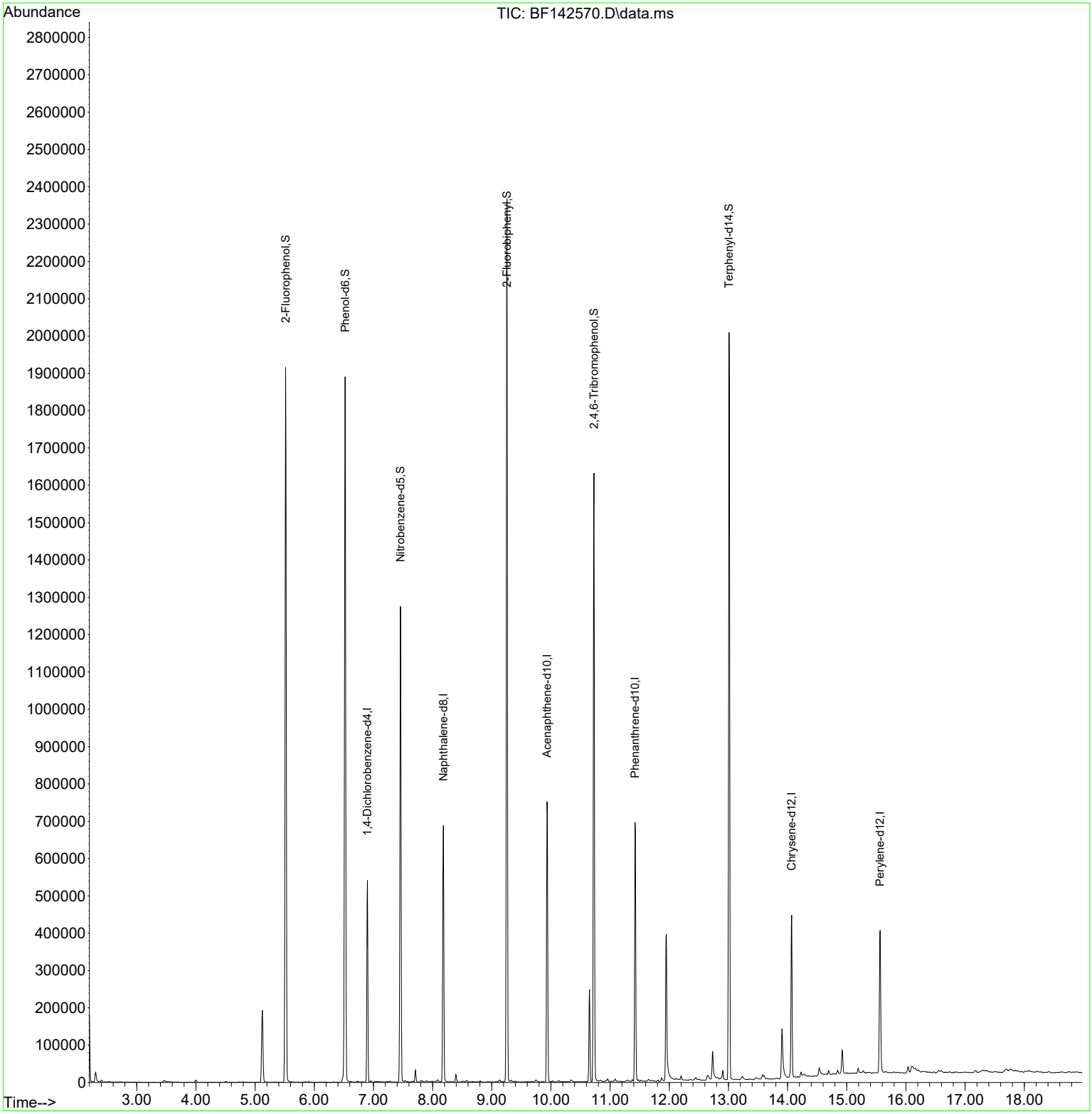
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	118247	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	441924	20.000	ng	0.00
39) Acenaphthene-d10	9.933	164	231484	20.000	ng	-0.01
64) Phenanthrene-d10	11.422	188	379392	20.000	ng	-0.01
76) Chrysene-d12	14.068	240	216438	20.000	ng	0.00
86) Perylene-d12	15.562	264	226398	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.516	112	756406	107.771	ng	0.00
7) Phenol-d6	6.522	99	949761	112.414	ng	-0.01
23) Nitrobenzene-d5	7.457	82	557041	68.733	ng	-0.02
42) 2,4,6-Tribromophenol	10.727	330	303025	117.946	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	1081028	62.665	ng	-0.01
79) Terphenyl-d14	13.010	244	985998	62.254	ng	0.00
Target Compounds						Qvalue

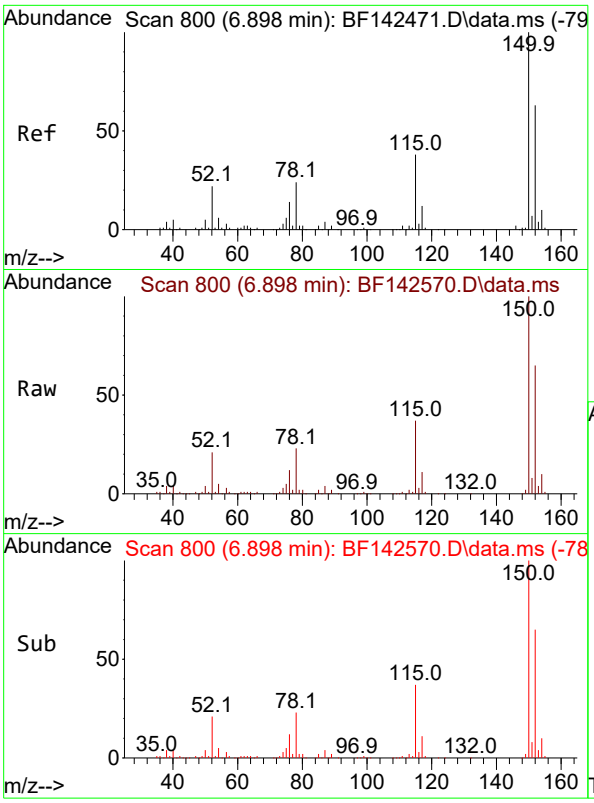
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Time: May 30 15:43:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



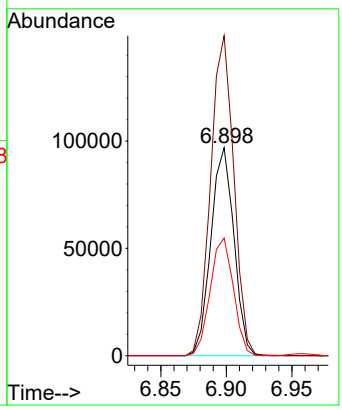


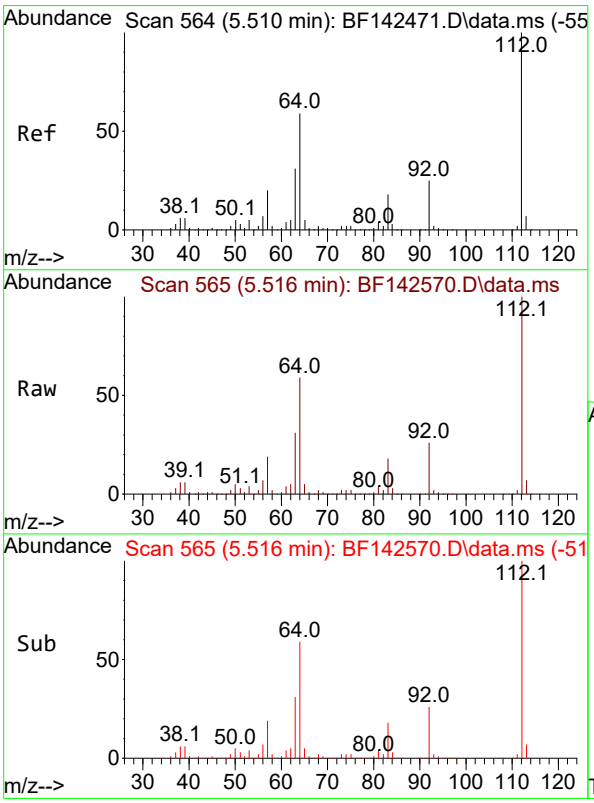
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Instrument :
BNA_F
ClientSampleId :
TP-54

Tgt Ion:152 Resp: 118247

Ion	Ratio	Lower	Upper
152	100		
150	153.9	128.2	192.4
115	56.6	48.3	72.5

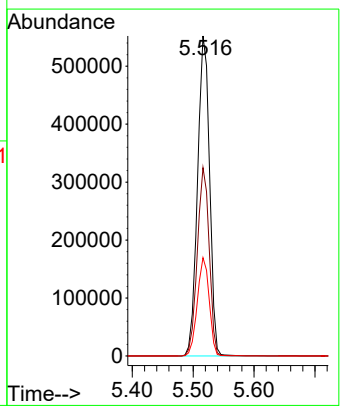


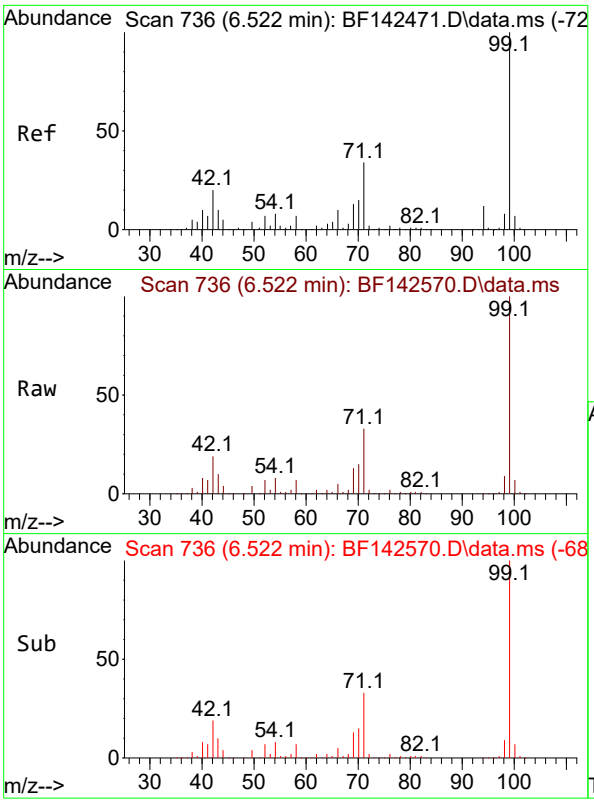


#5
2-Fluorophenol
Concen: 107.771 ng
RT: 5.516 min Scan# 565
Delta R.T. 0.000 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Tgt Ion:112 Resp: 756406

Ion	Ratio	Lower	Upper
112	100		
64	58.8	47.5	71.3
63	30.7	24.9	37.3



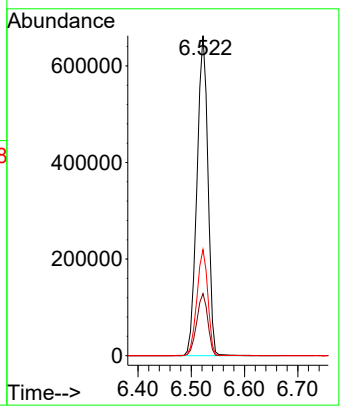


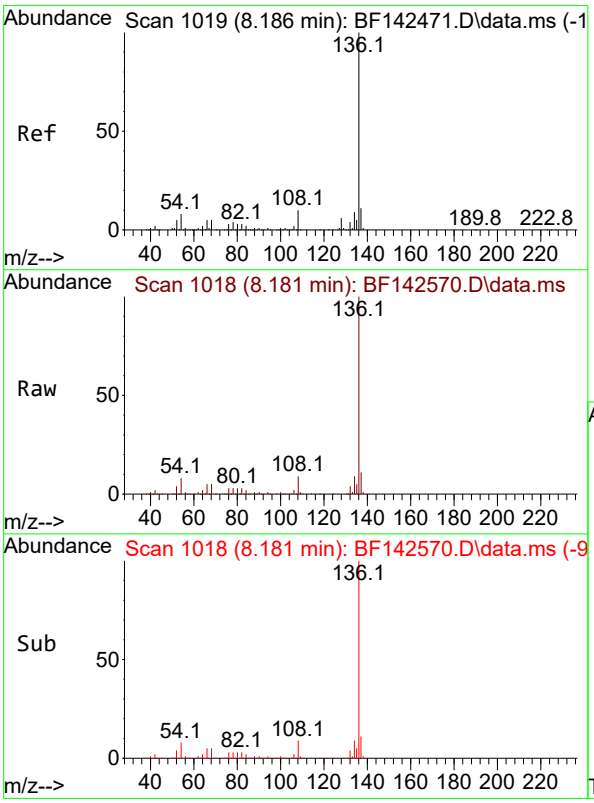
#7
Phenol-d6
Concen: 112.414 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Instrument :
BNA_F
ClientSampleId :
TP-54

Tgt Ion: 99 Resp: 949761

Ion	Ratio	Lower	Upper
99	100		
42	19.4	16.2	24.2
71	33.1	27.3	40.9

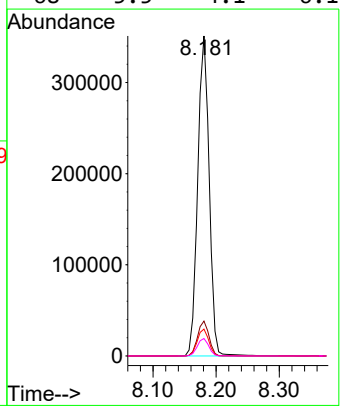


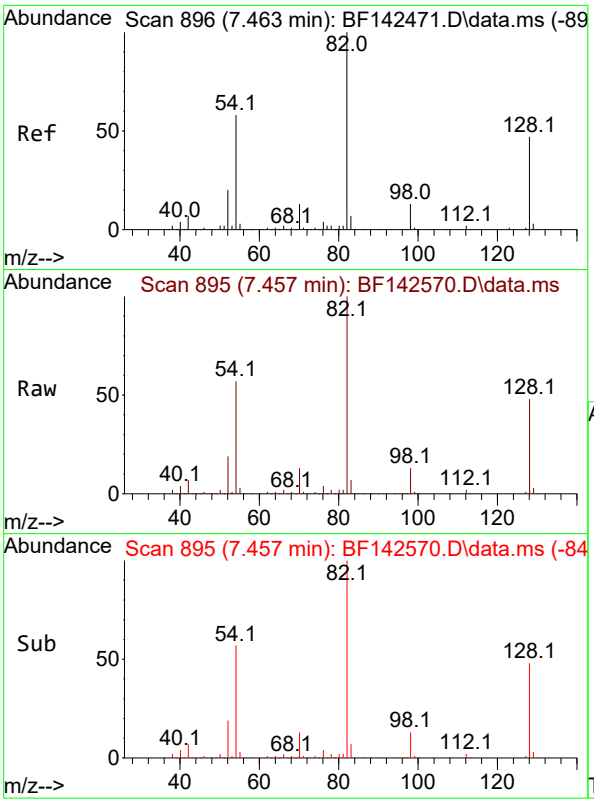


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Tgt Ion:136 Resp: 441924

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	8.4	6.6	10.0
68	5.5	4.1	6.1



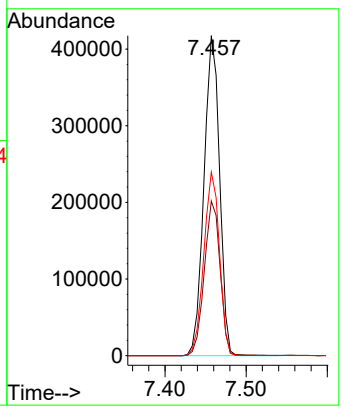


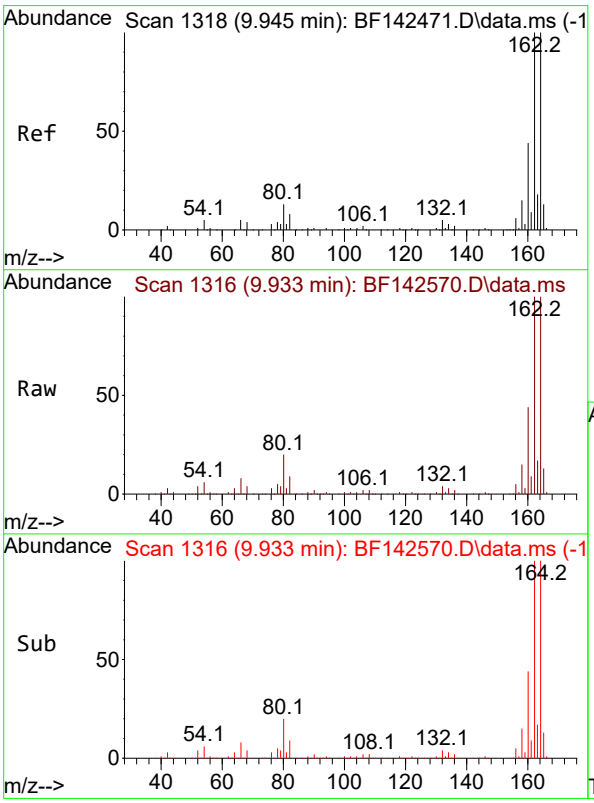
#23
Nitrobenzene-d5
Concen: 68.733 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Instrument :
BNA_F
ClientSampleId :
TP-54

Tgt Ion: 82 Resp: 557041

Ion	Ratio	Lower	Upper
82	100		
128	48.3	37.4	56.2
54	57.4	46.6	70.0

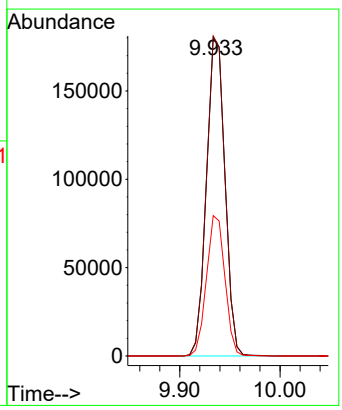


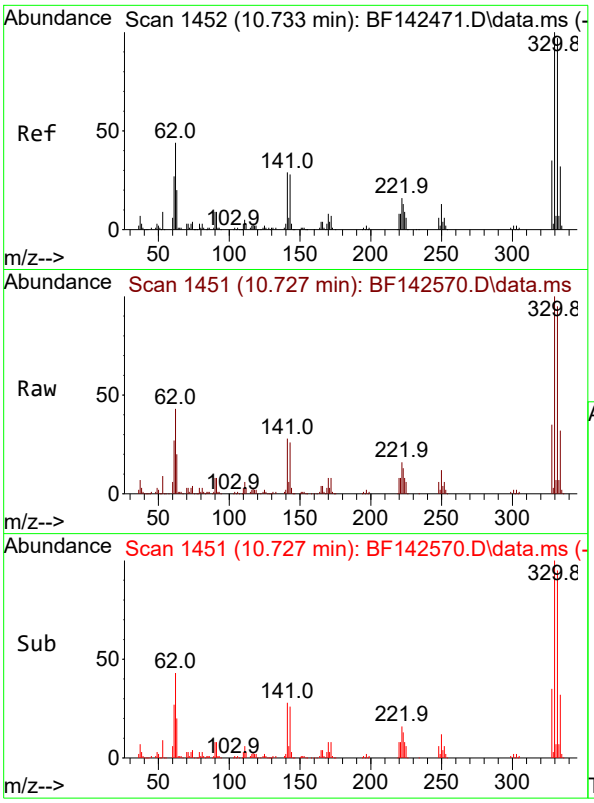


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.933 min Scan# 1316
Delta R.T. -0.012 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Tgt Ion:164 Resp: 231484

Ion	Ratio	Lower	Upper
164	100		
162	100.4	80.2	120.4
160	44.1	35.6	53.4



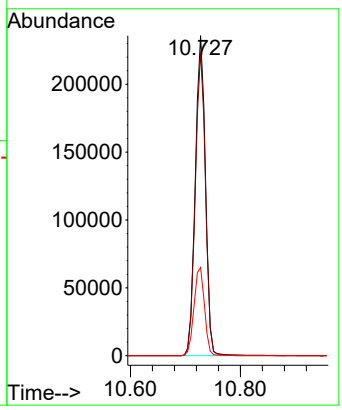


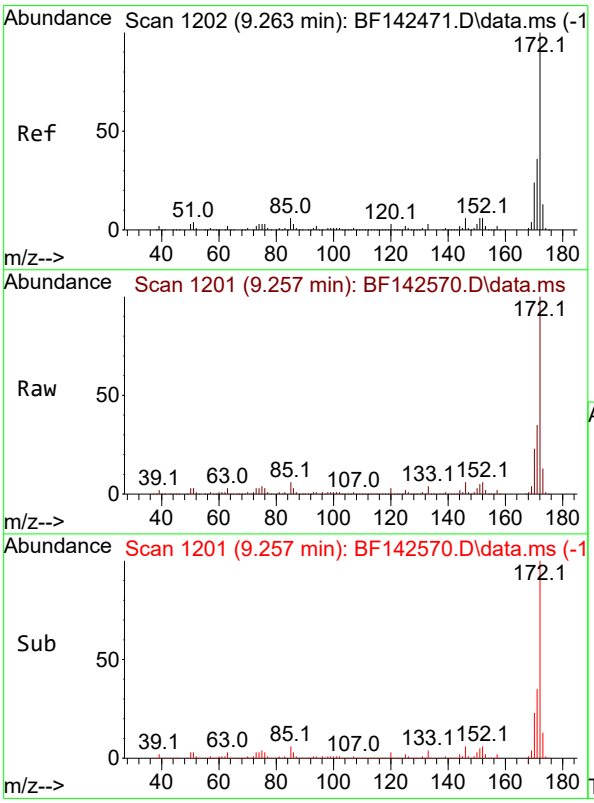
#42
2,4,6-Tribromophenol
Concen: 117.946 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Instrument :
BNA_F
ClientSampleId :
TP-54

Tgt Ion:330 Resp: 303025

Ion	Ratio	Lower	Upper
330	100		
332	94.8	77.6	116.4
141	28.5	24.6	36.8

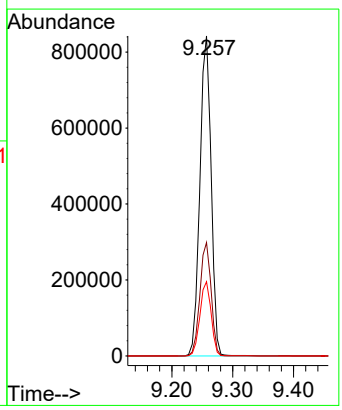


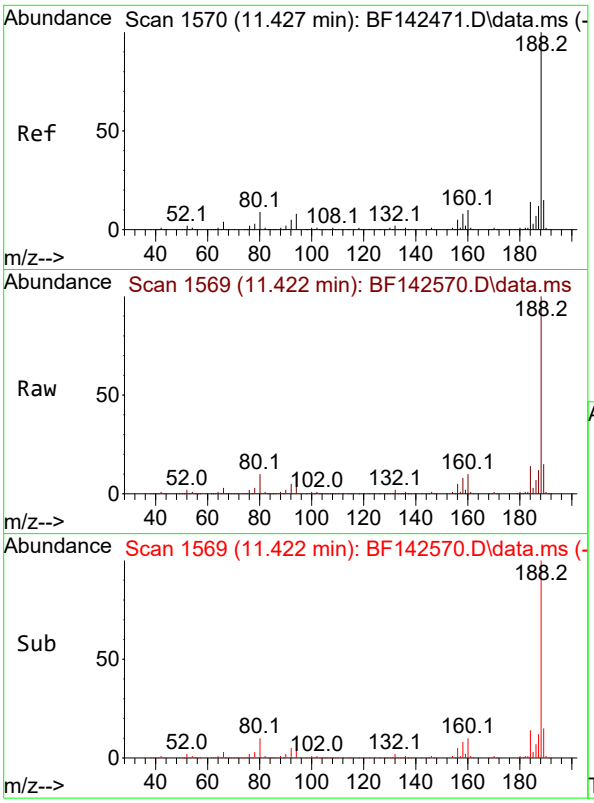


#45
2-Fluorobiphenyl
Concen: 62.665 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Tgt Ion:172 Resp: 1081028

Ion	Ratio	Lower	Upper
172	100		
171	35.5	28.6	42.8
170	23.2	18.9	28.3



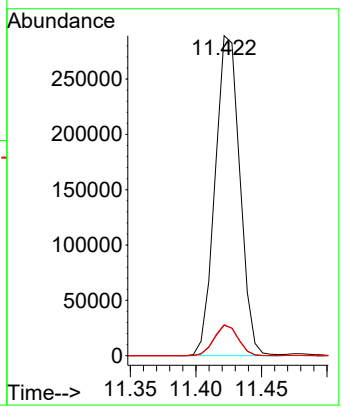


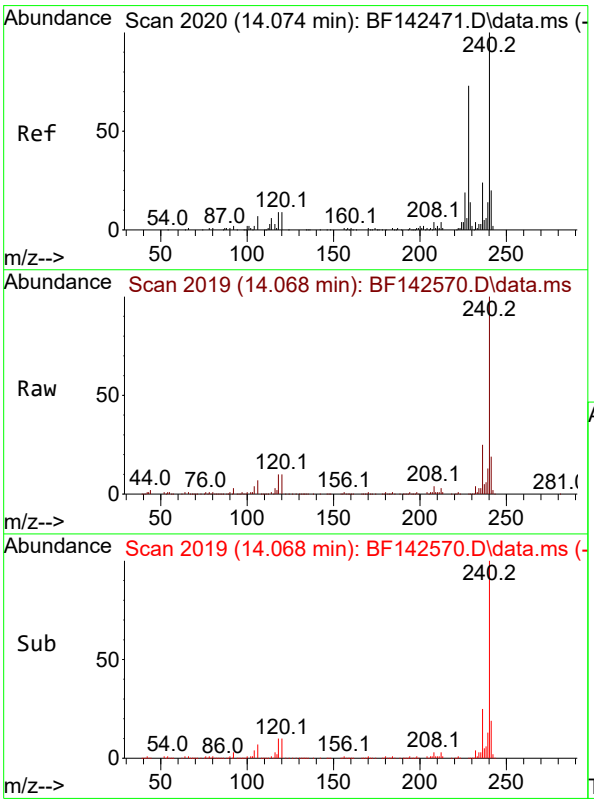
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.422 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Instrument :
BNA_F
ClientSampleId :
TP-54

Tgt Ion:188 Resp: 379392

Ion	Ratio	Lower	Upper
188	100		
94	9.5	6.6	10.0
80	9.7	7.4	11.0

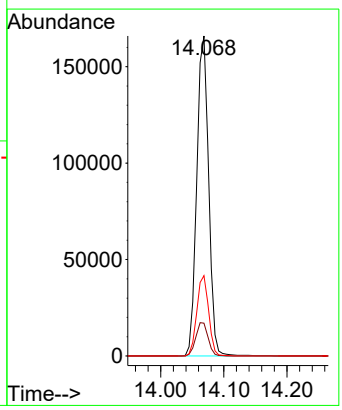


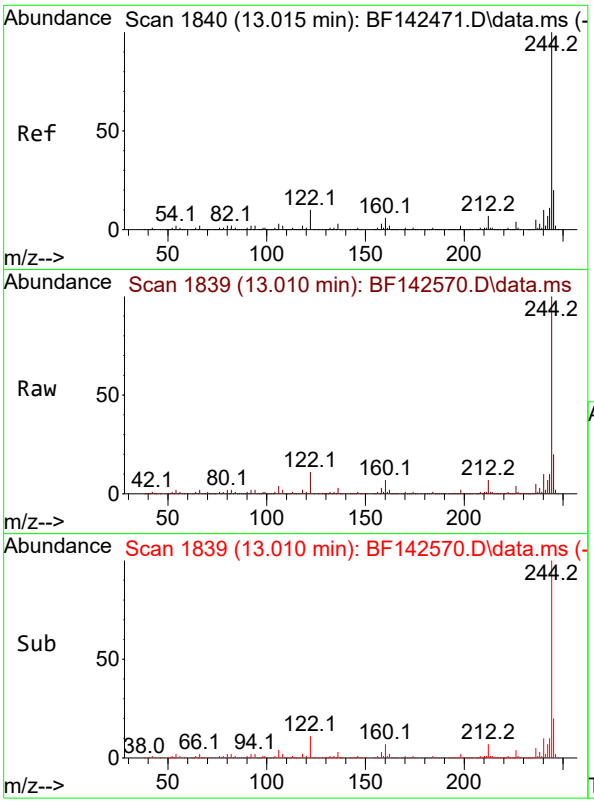


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Tgt Ion:240 Resp: 216438

Ion	Ratio	Lower	Upper
240	100		
120	10.3	7.5	11.3
236	25.1	19.6	29.4



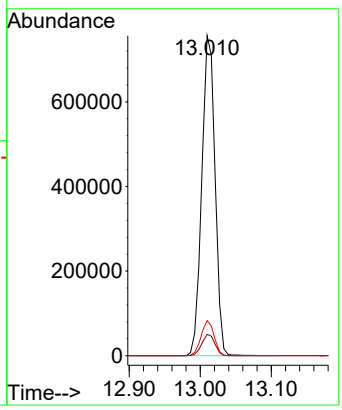


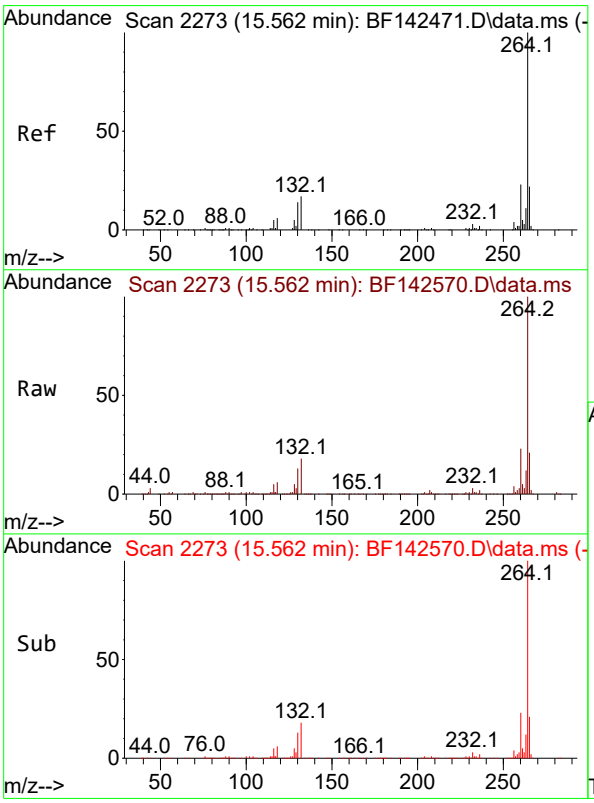
#79
Terphenyl-d14
Concen: 62.254 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Instrument :
BNA_F
ClientSampleId :
TP-54

Tgt Ion:244 Resp: 985998

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.3	7.9
122	11.0	8.2	12.2

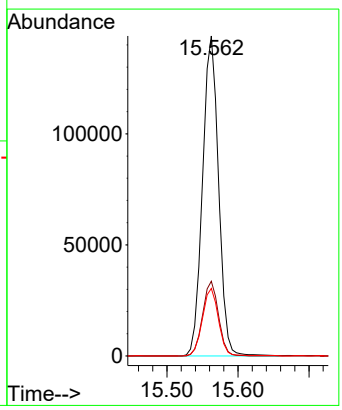




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142570.D
Acq: 30 May 2025 15:21

Tgt Ion:264 Resp: 226398

Ion	Ratio	Lower	Upper
264	100		
260	23.4	18.6	28.0
265	21.1	17.7	26.5



Sample Results: **BF142570.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142570.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.304	13	19	31	rBV2	25126	45043	1.48%	0.212%
2	5.122	489	498	506	rBV	192771	301649	9.94%	1.421%
3	5.516	559	565	570	rBV	1915484	2596113	85.53%	12.233%
4	6.522	729	736	741	rVB	1881074	2685951	88.49%	12.656%
5	6.898	795	800	805	rBV	540480	664947	21.91%	3.133%
6	7.457	889	895	900	rBV	1274566	1700937	56.04%	8.015%
7	7.710	934	938	947	rVB	31521	41540	1.37%	0.196%
8	8.181	1012	1018	1023	rBV	686761	858279	28.28%	4.044%
9	9.257	1195	1201	1206	rBV	2365398	3035149	100.00%	14.301%
10	9.933	1311	1316	1326	rBV	750939	958238	31.57%	4.515%
11	10.651	1433	1438	1445	rBV	246638	303148	9.99%	1.428%
12	10.727	1445	1451	1456	rBV	1630652	2127815	70.11%	10.026%
13	11.422	1564	1569	1575	rBV	693882	905627	29.84%	4.267%
14	11.951	1653	1659	1679	rBV	391813	626761	20.65%	2.953%
15	12.651	1772	1778	1786	rBV6	12813	34081	1.12%	0.161%
16	12.733	1787	1792	1805	rVV	73858	127848	4.21%	0.602%
17	13.010	1834	1839	1844	rBV	2001553	2583432	85.12%	12.173%
18	13.904	1986	1991	2007	rBV	133859	260305	8.58%	1.227%
19	14.068	2011	2019	2028	rVV	434334	580839	19.14%	2.737%
20	14.533	2094	2098	2111	rBV3	20345	48772	1.61%	0.230%
21	14.921	2160	2164	2170	rVB	60418	83775	2.76%	0.395%
22	15.562	2267	2273	2282	rBV	380488	601105	19.80%	2.832%
23	16.098	2359	2364	2372	rBV5	15604	51647	1.70%	0.243%

Sum of corrected areas: 21223001

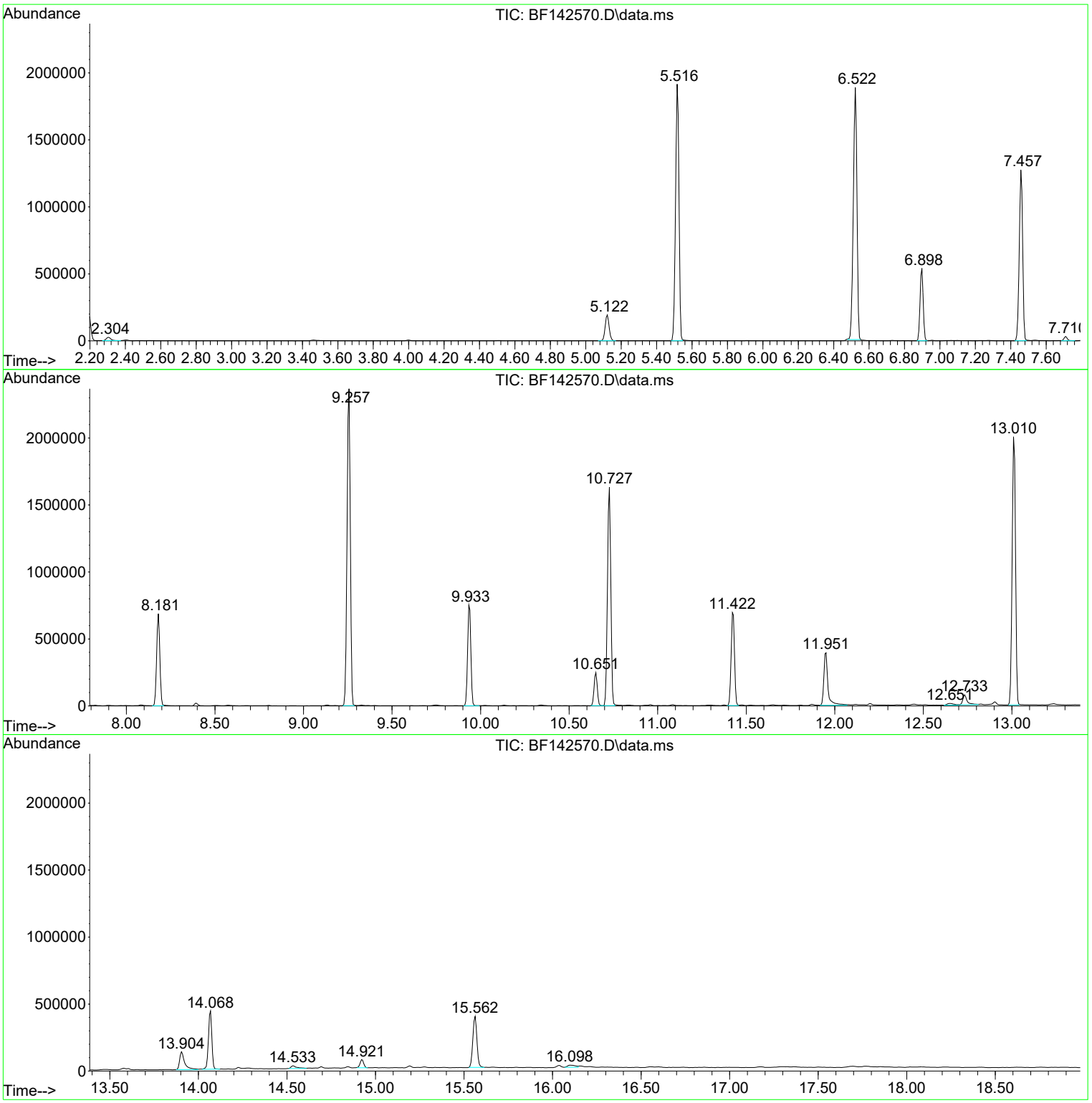
Sample Results: **BF142570.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Sample Results: **BF142570.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

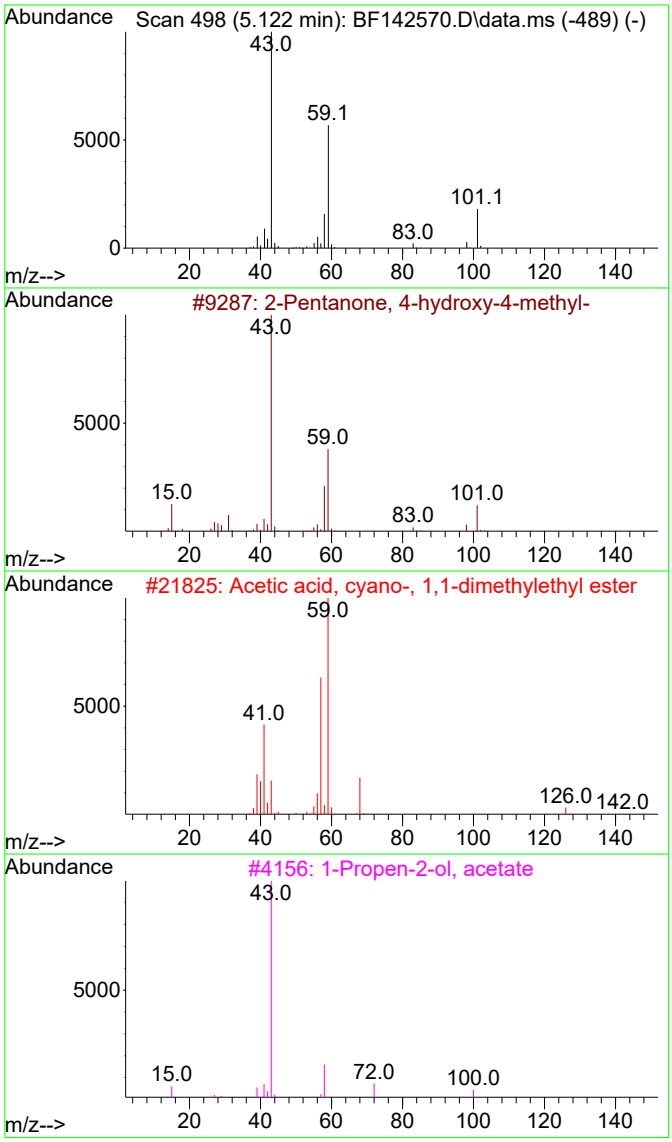
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

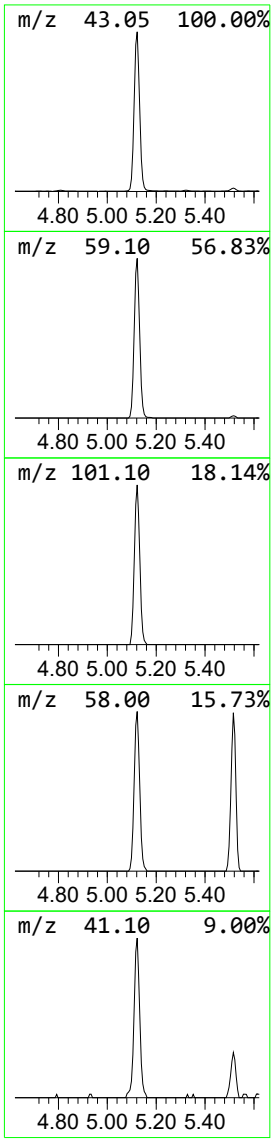
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.122	9.07 ng	301649	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25
3	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
4	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	9
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





Sample Results: **BF142570.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

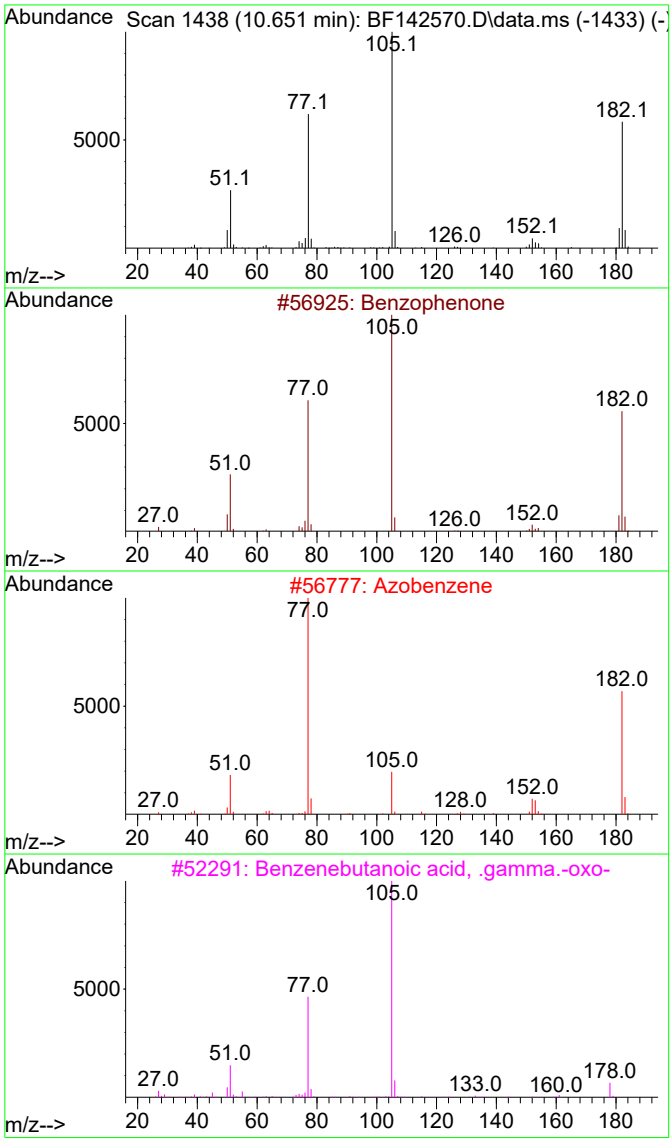
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

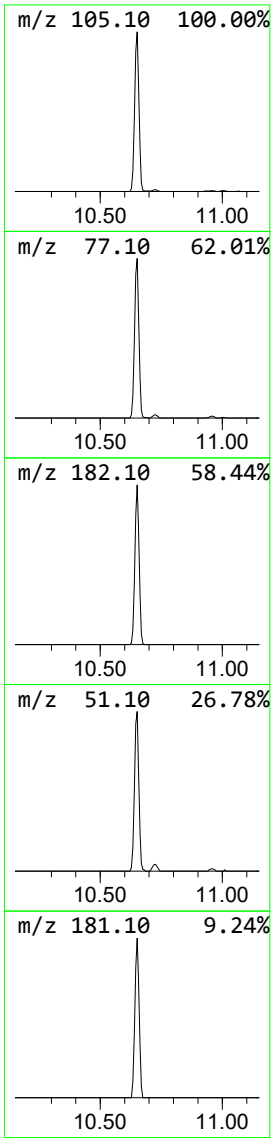
****

Peak Number 2 Benzophenone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.651	6.33 ng	303148	Acenaphthene-d10	9.933

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	Azobenzene	182	C12H10N2	000103-33-3	64
3	Benzenebutanoic acid, .gamma.-oxo-	178	C10H10O3	002051-95-8	47
4	Vinyl benzoate	148	C9H8O2	000769-78-8	47
5	1-Propanone, 3-chloro-1-phenyl-	168	C9H9ClO	000936-59-4	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

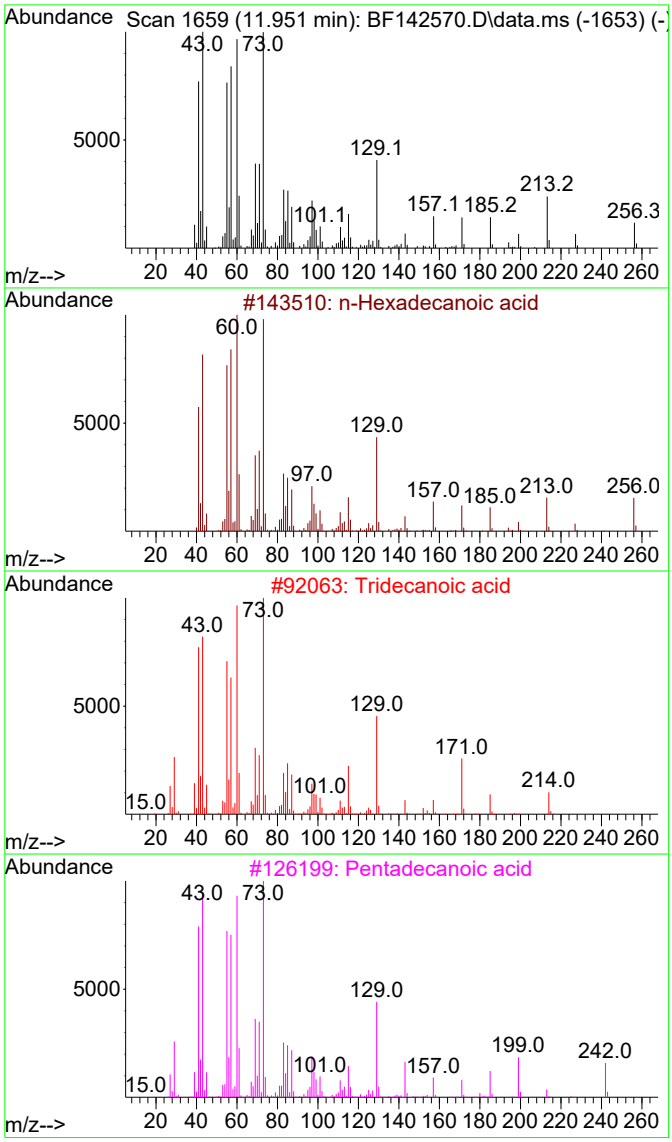
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

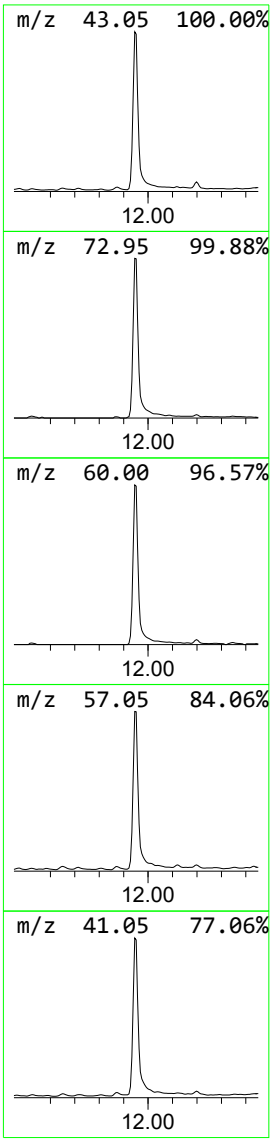
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.951	13.84 ng	626761	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tridecanoic acid	214	C13H26O2	000638-53-9	93
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	93
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	87
5	n-Decanoic acid	172	C10H20O2	000334-48-5	76





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

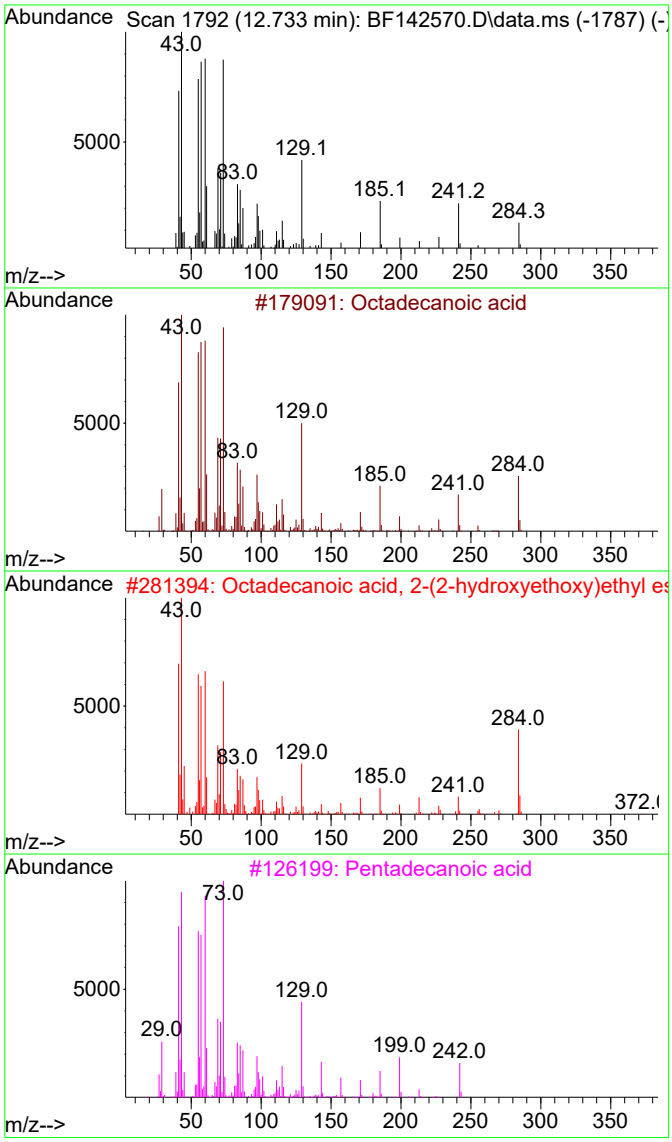
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

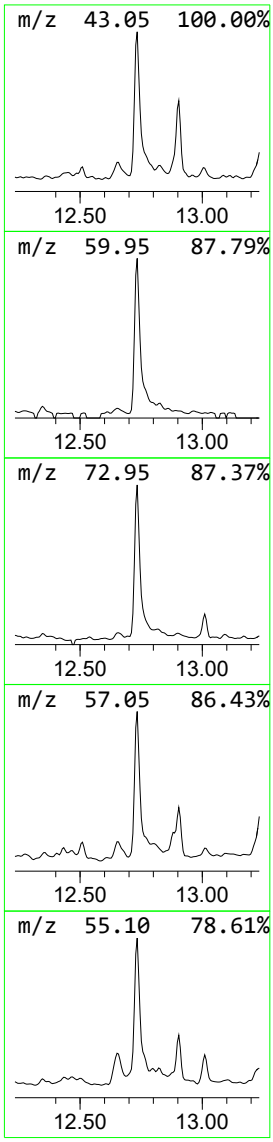
****

Peak Number 4 Octadecanoic acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.733	2.82 ng	127848	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid, 2-(2-hydroxye...	372	C22H44O4	000106-11-6	87
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	83
4	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	74
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	74





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

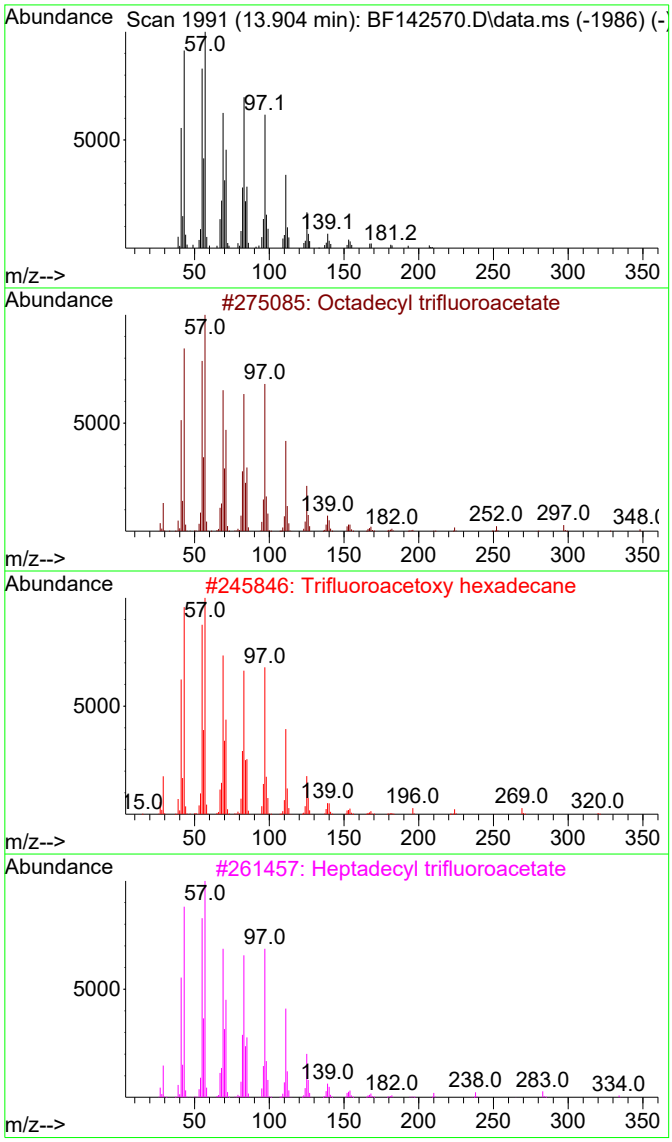
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

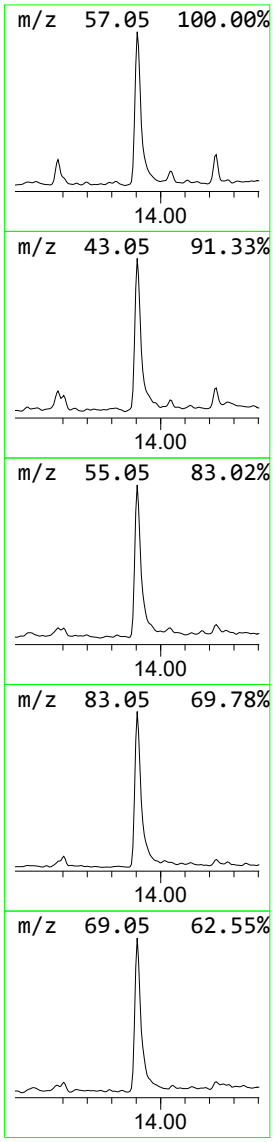
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Octadecyl trifluoroacetate Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.904	8.96 ng	260305	Chrysene-d12	14.068

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecyl trifluoroacetate	366	C20H37F3O2	079392-43-1	94
2	Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	94
3	Heptadecyl trifluoroacetate	352	C19H35F3O2	1010351-87-0	93
4	1-Heneicosanol	312	C21H44O	015594-90-8	93
5	n-Tetracosanol-1	354	C24H50O	000506-51-4	93





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

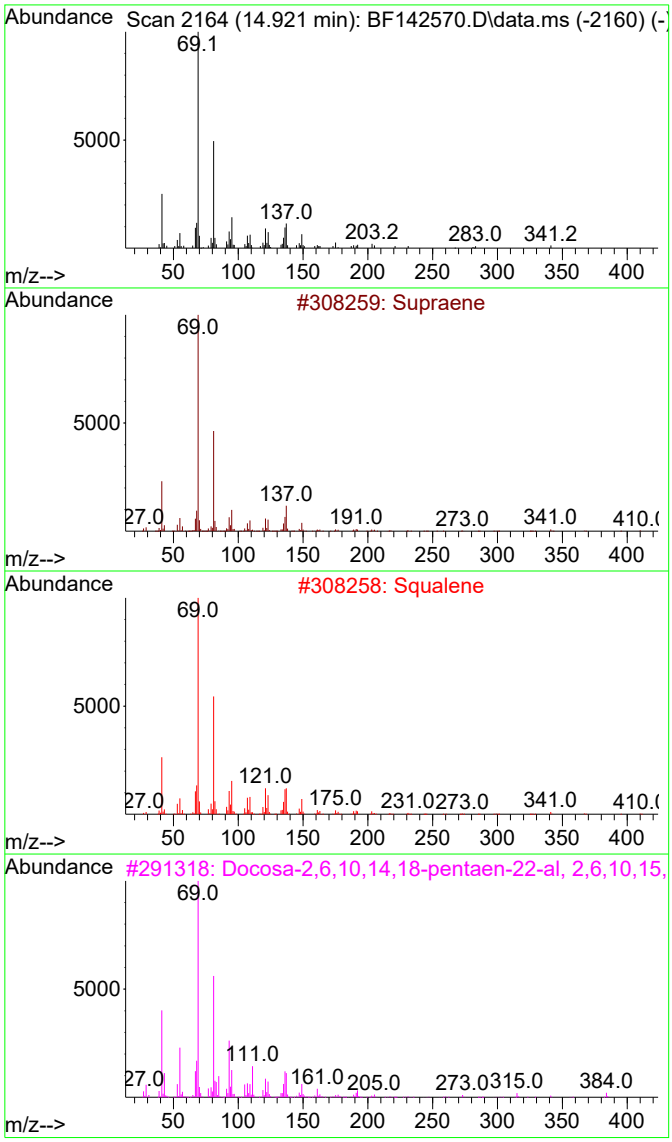
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

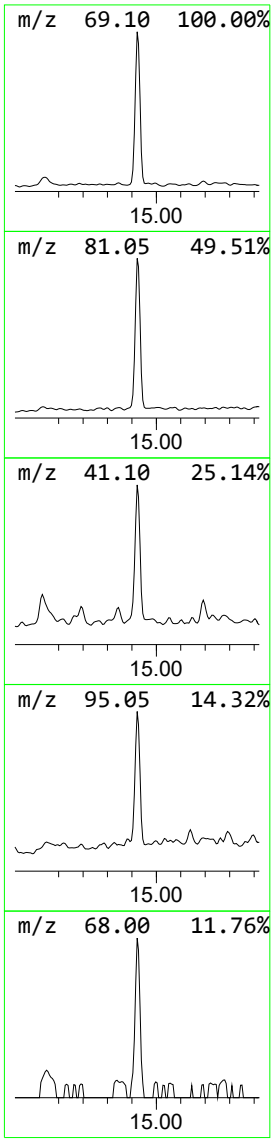
****

Peak Number 6 Supraene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.921	2.79 ng	83775	Perylene-d12	15.563

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Supraene	410	C30H50	007683-64-9	91
2	Squalene	410	C30H50	000111-02-4	91
3	Docosa-2,6,10,14,18-pentaen-22-a...	384	C27H44O	1000163-04-7	90
4	1,5,9-Undecatriene, 2,6,10-trime...	192	C14H24	062951-96-6	87
5	4,9,13,17-Tetramethyl-4,8,12,16-...	316	C22H36O	056882-09-8	83





Sample Results: **BF142570.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142570.D
Acq On : 30 May 2025 15:21
Operator : RC/JU
Sample : Q2150-09
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.122	9.1	ng	301649	1	6.898	664947	20.0
Benzophenone	10.651	6.3	ng	303148	3	9.933	958238	20.0
n-Hexadecanoic ...	11.951	13.8	ng	626761	4	11.422	905627	20.0
Octadecanoic acid	12.733	2.8	ng	127848	4	11.422	905627	20.0
Octadecyl trifl...	13.904	9.0	ng	260305	5	14.068	580839	20.0
Supraene	14.921	2.8	ng	83775	6	15.563	601105	20.0

Raw Data: **BF142582.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-53	SDG No.:	Q2150
Lab Sample ID:	Q2150-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142582.D	1	05/30/25 09:50	05/30/25 21:13	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	180	U	180	390	ug/Kg
108-95-2	Phenol	25.9	U	25.9	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.4	U	28.4	200	ug/Kg
95-57-8	2-Chlorophenol	28.6	U	28.6	200	ug/Kg
95-48-7	2-Methylphenol	35.0	U	35.0	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.9	U	43.9	200	ug/Kg
98-86-2	Acetophenone	34.5	U	34.5	200	ug/Kg
65794-96-9	3+4-Methylphenols	48.1	U	48.1	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	55.5	U	55.5	93.6	ug/Kg
67-72-1	Hexachloroethane	20.6	U	20.6	200	ug/Kg
98-95-3	Nitrobenzene	21.4	U	21.4	200	ug/Kg
78-59-1	Isophorone	38.4	U	38.4	200	ug/Kg
88-75-5	2-Nitrophenol	68.1	U	68.1	200	ug/Kg
105-67-9	2,4-Dimethylphenol	75.8	U	75.8	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	36.0	U	36.0	200	ug/Kg
120-83-2	2,4-Dichlorophenol	33.1	U	33.1	200	ug/Kg
91-20-3	Naphthalene	26.6	U	26.6	200	ug/Kg
106-47-8	4-Chloroaniline	41.4	U	41.4	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.6	U	29.6	200	ug/Kg
105-60-2	Caprolactam	61.0	U	61.0	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.6	U	33.6	200	ug/Kg
91-57-6	2-Methylnaphthalene	30.0	U	30.0	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.2	U	23.2	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	34.1	U	34.1	200	ug/Kg
92-52-4	1,1-Biphenyl	25.5	U	25.5	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.3	U	26.3	200	ug/Kg
88-74-4	2-Nitroaniline	56.3	U	56.3	200	ug/Kg
131-11-3	Dimethylphthalate	31.7	U	31.7	200	ug/Kg

Raw Data: **BF142582.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-53	SDG No.:	Q2150
Lab Sample ID:	Q2150-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142582.D	1	05/30/25 09:50	05/30/25 21:13	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.8	U	33.8	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	39.3	U	39.3	200	ug/Kg
99-09-2	3-Nitroaniline	53.8	U	53.8	200	ug/Kg
83-32-9	Acenaphthene	24.9	U	24.9	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	390	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	390	ug/Kg
132-64-9	Dibenzofuran	26.6	U	26.6	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.6	U	58.6	200	ug/Kg
84-66-2	Diethylphthalate	33.1	U	33.1	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.2	U	31.2	200	ug/Kg
86-73-7	Fluorene	29.6	U	29.6	200	ug/Kg
100-01-6	4-Nitroaniline	75.1	U	75.1	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.5	U	38.5	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.5	U	32.5	200	ug/Kg
118-74-1	Hexachlorobenzene	29.6	U	29.6	200	ug/Kg
1912-24-9	Atrazine	39.8	U	39.8	200	ug/Kg
87-86-5	Pentachlorophenol	60.0	U	60.0	390	ug/Kg
85-01-8	Phenanthrene	24.5	U	24.5	200	ug/Kg
120-12-7	Anthracene	39.0	U	39.0	200	ug/Kg
86-74-8	Carbazole	36.5	U	36.5	200	ug/Kg
84-74-2	Di-n-butylphthalate	56.1	U	56.1	200	ug/Kg
206-44-0	Fluoranthene	35.1	U	35.1	200	ug/Kg
129-00-0	Pyrene	42.1	U	42.1	200	ug/Kg
85-68-7	Butylbenzylphthalate	83.6	U	83.6	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	43.0	U	43.0	390	ug/Kg
56-55-3	Benzo(a)anthracene	26.9	U	26.9	200	ug/Kg
218-01-9	Chrysene	23.3	U	23.3	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	69.3	U	69.3	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	22.2	U	22.2	200	ug/Kg

Raw Data: **BF142582.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-53	SDG No.:	Q2150
Lab Sample ID:	Q2150-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142582.D	1	05/30/25 09:50	05/30/25 21:13	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	26.2	U	26.2	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.5	U	34.5	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	34.1	U	34.1	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	32.1	U	32.1	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	30.1	U	30.1	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	30.0	U	30.0	200	ug/Kg
123-91-1	1,4-Dioxane	52.9	U	52.9	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	32.1	U	32.1	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	82.6		18 - 112	55%	SPK: 150
13127-88-3	Phenol-d6	84.0		15 - 107	56%	SPK: 150
4165-60-0	Nitrobenzene-d5	51.5		18 - 107	52%	SPK: 100
321-60-8	2-Fluorobiphenyl	47.6		20 - 109	48%	SPK: 100
118-79-6	2,4,6-Tribromophenol	73.2		10 - 116	49%	SPK: 150
1718-51-0	Terphenyl-d14	43.9		10 - 105	44%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	130000	6.898			
1146-65-2	Naphthalene-d8	495000	8.181			
15067-26-2	Acenaphthene-d10	255000	9.933			
1517-22-2	Phenanthrene-d10	399000	11.422			
1719-03-5	Chrysene-d12	232000	14.063			
1520-96-3	Perylene-d12	263000	15.562			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	270	AB		5.12	ug/Kg
000119-61-9	Benzophenone	130	J		10.7	ug/Kg
000057-10-3	n-Hexadecanoic acid	150	J		11.9	ug/Kg
074339-54-1	Trichloroacetic acid, hexadecyl es	160	J		13.9	ug/Kg

Raw Data: **BF142582.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-53	SDG No.:	Q2150
Lab Sample ID:	Q2150-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142582.D	1	05/30/25 09:50	05/30/25 21:13	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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: **BF142582.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

Quant Time: May 30 22:29:46 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

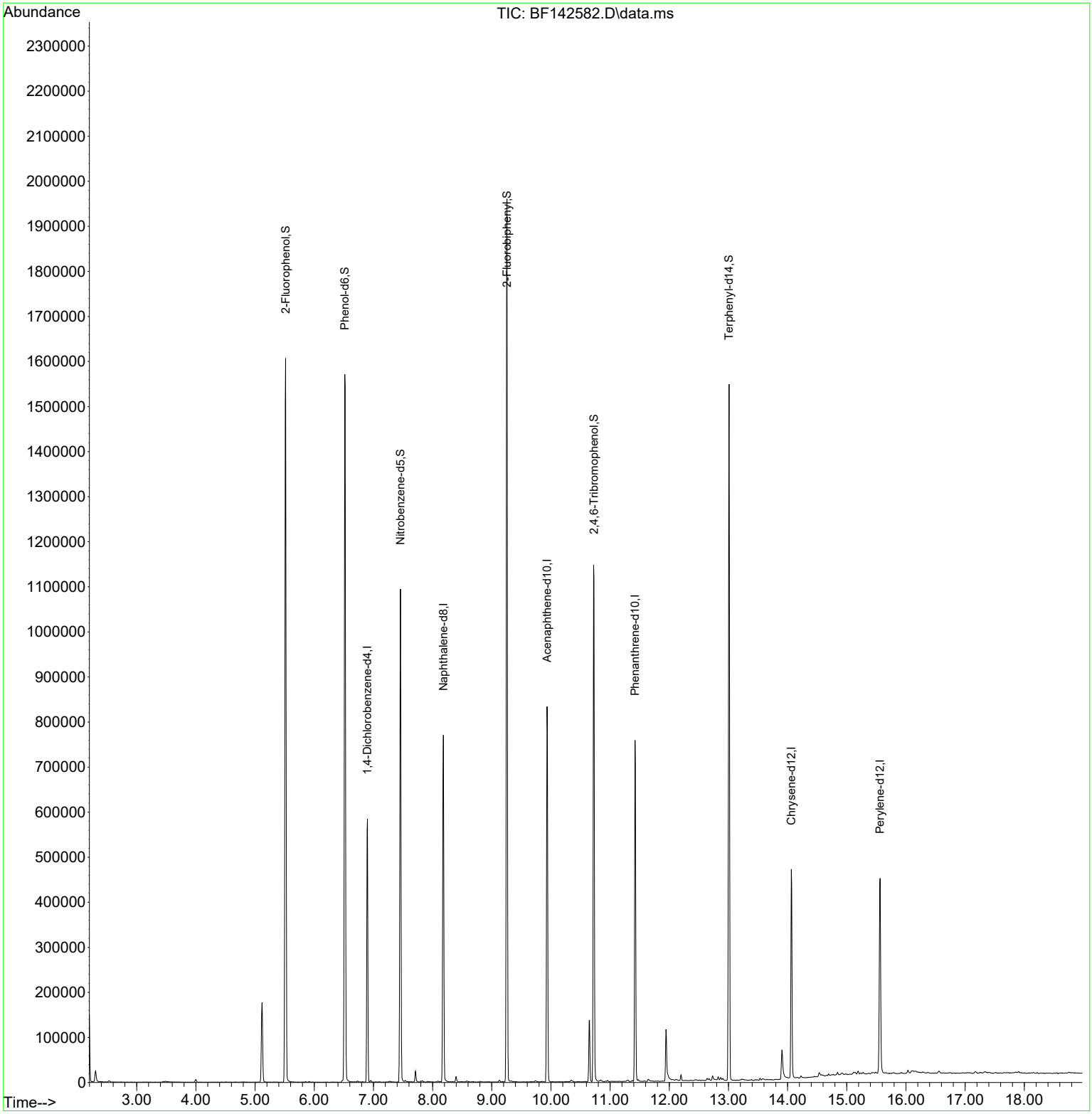
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	130201	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	494621	20.000	ng	0.00
39) Acenaphthene-d10	9.933	164	254536	20.000	ng	-0.01
64) Phenanthrene-d10	11.422	188	398630	20.000	ng	-0.01
76) Chrysene-d12	14.063	240	231944	20.000	ng	#-0.01
86) Perylene-d12	15.562	264	262922	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.516	112	638105	82.569	ng	0.00
7) Phenol-d6	6.516	99	781521	84.008	ng	-0.02
23) Nitrobenzene-d5	7.457	82	467367	51.524	ng	-0.02
42) 2,4,6-Tribromophenol	10.727	330	206735	73.180	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	902888	47.598	ng	-0.01
79) Terphenyl-d14	13.010	244	744692	43.875	ng	0.00
Target Compounds						Qvalue

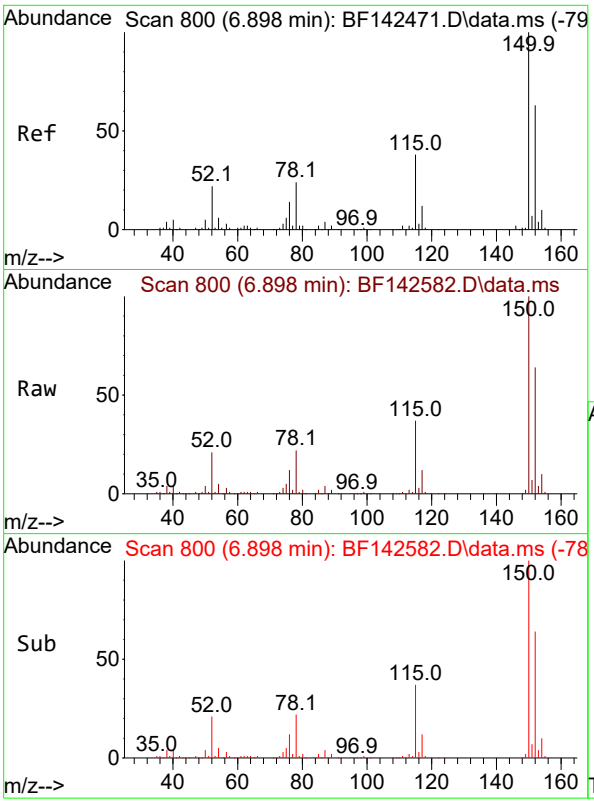
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

Quant Time: May 30 22:29:46 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



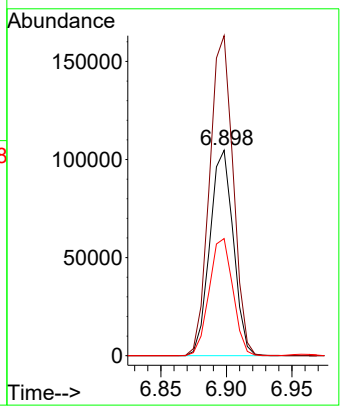


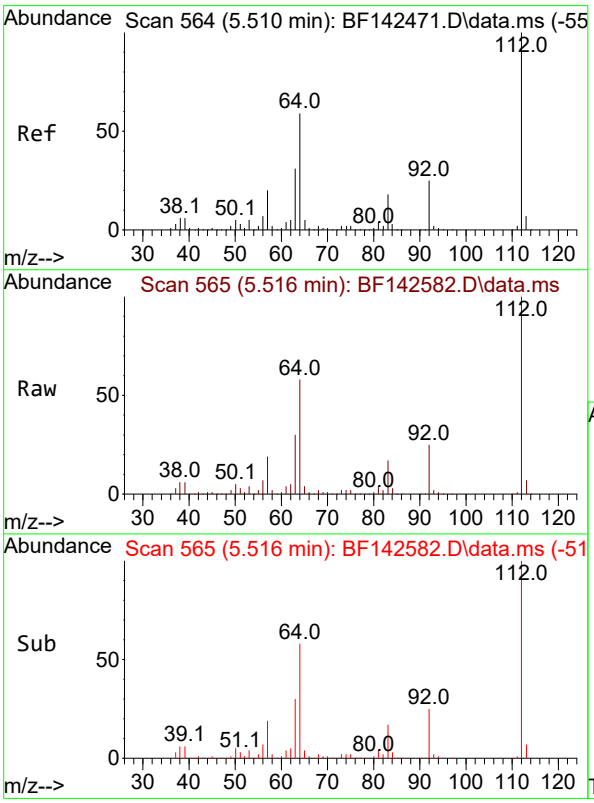
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Instrument :
BNA_F
ClientSampleId :
TP-53

Tgt Ion:152 Resp: 130201

Ion	Ratio	Lower	Upper
152	100		
150	155.7	128.2	192.4
115	57.0	48.3	72.5

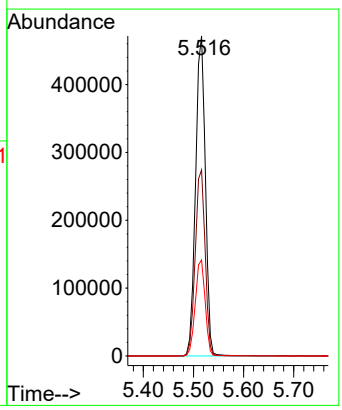


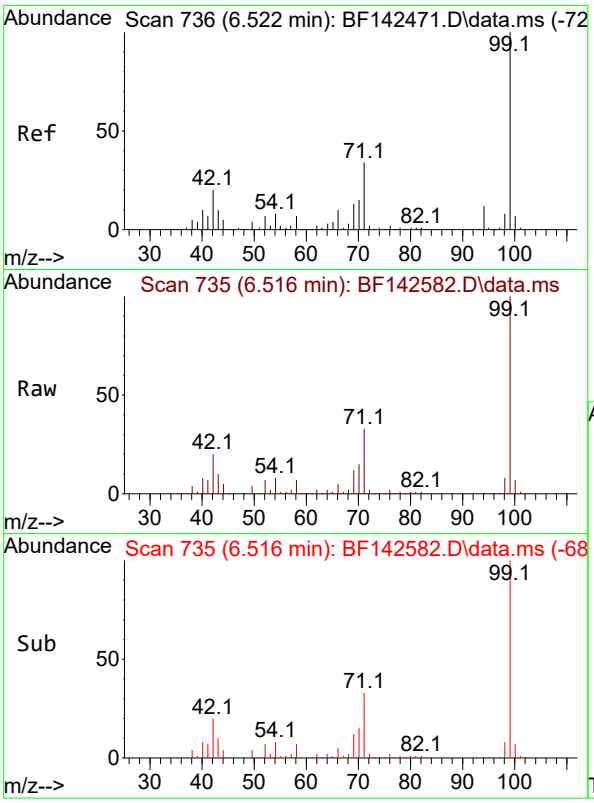


#5
2-Fluorophenol
Concen: 82.569 ng
RT: 5.516 min Scan# 565
Delta R.T. 0.000 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Tgt Ion:112 Resp: 638105

Ion	Ratio	Lower	Upper
112	100		
64	58.1	47.5	71.3
63	30.0	24.9	37.3



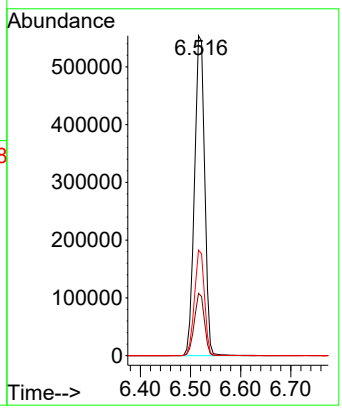


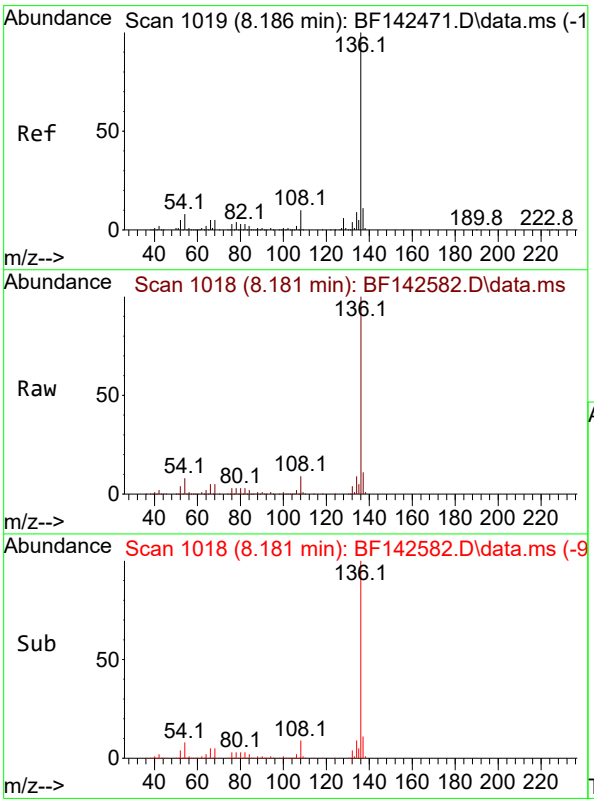
#7
Phenol-d6
Concen: 84.008 ng
RT: 6.516 min Scan# 7
Delta R.T. -0.018 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Instrument :
BNA_F
ClientSampleId :
TP-53

Tgt Ion: 99 Resp: 781521

Ion	Ratio	Lower	Upper
99	100		
42	19.5	16.2	24.2
71	33.0	27.3	40.9

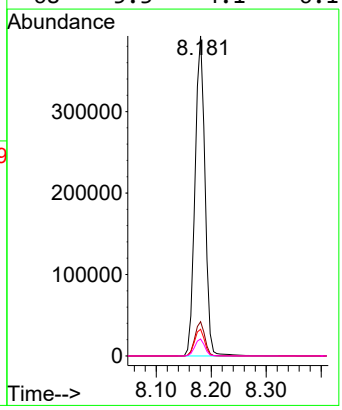


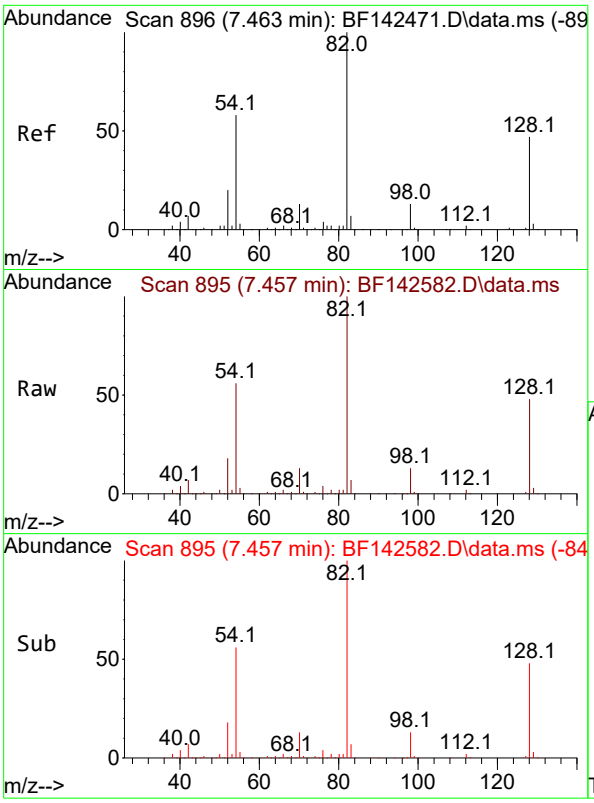


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Tgt Ion:136 Resp: 494621

Ion	Ratio	Lower	Upper
136	100		
137	10.7	8.6	13.0
54	8.4	6.6	10.0
68	5.3	4.1	6.1



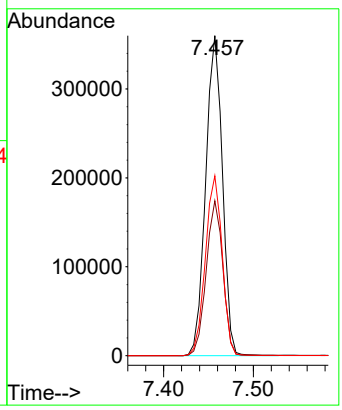


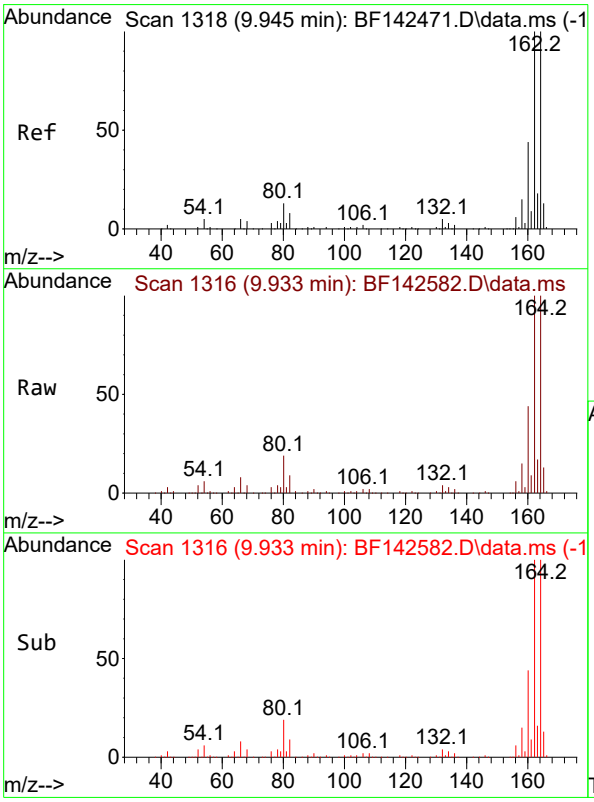
#23
Nitrobenzene-d5
Concen: 51.524 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Instrument :
BNA_F
ClientSampleId :
TP-53

Tgt Ion: 82 Resp: 467367

Ion	Ratio	Lower	Upper
82	100		
128	48.4	37.4	56.2
54	56.2	46.6	70.0

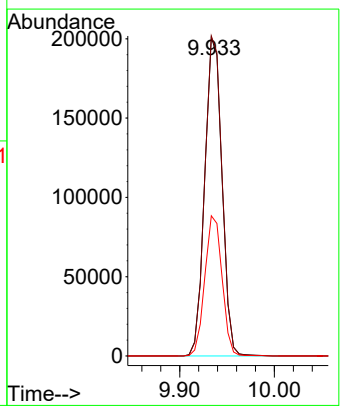


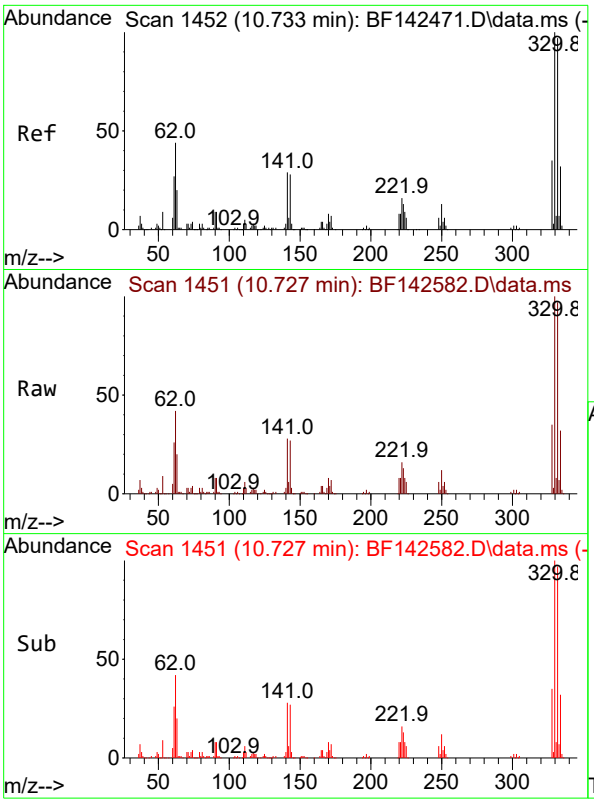


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.933 min Scan# 1316
Delta R.T. -0.012 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Tgt Ion:164 Resp: 254536

Ion	Ratio	Lower	Upper
164	100		
162	100.4	80.2	120.4
160	44.0	35.6	53.4



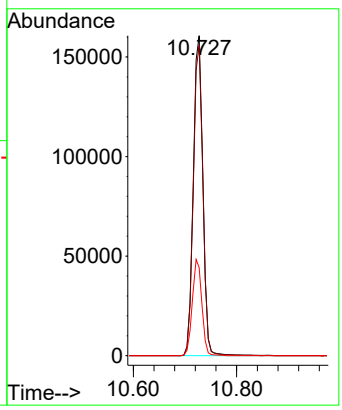


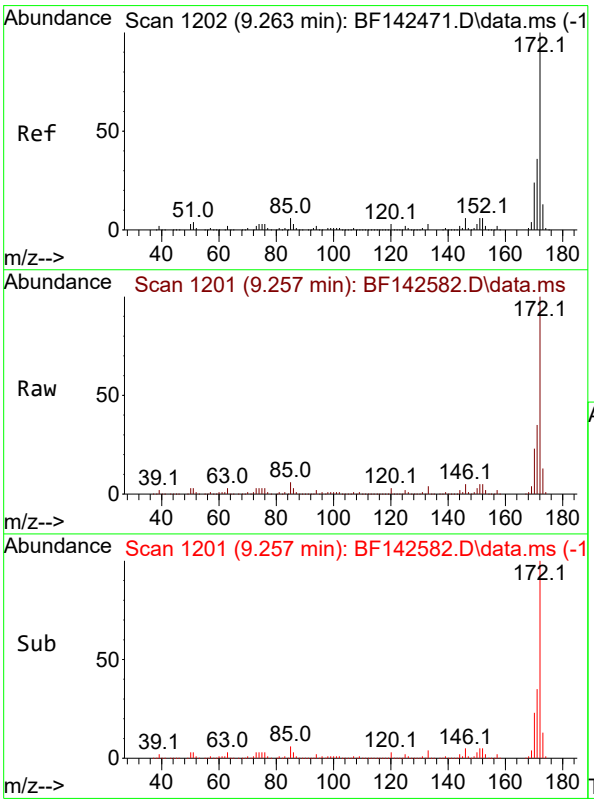
#42
2,4,6-Tribromophenol
Concen: 73.180 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Instrument :
BNA_F
ClientSampleId :
TP-53

Tgt Ion:330 Resp: 206735

Ion	Ratio	Lower	Upper
330	100		
332	96.7	77.6	116.4
141	29.9	24.6	36.8

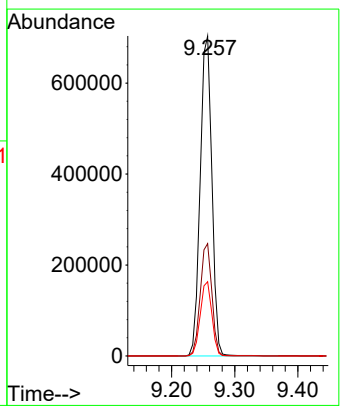


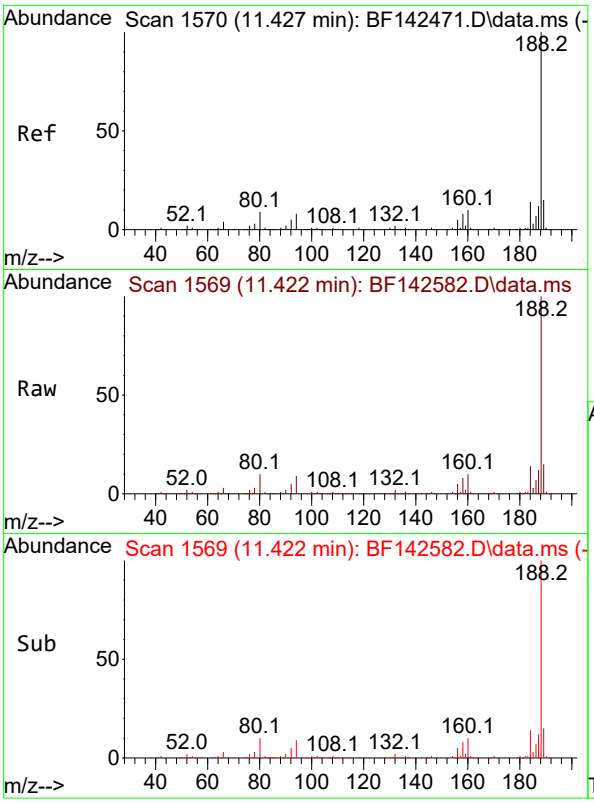


#45
2-Fluorobiphenyl
Concen: 47.598 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Tgt Ion:172 Resp: 902888

Ion	Ratio	Lower	Upper
172	100		
171	35.1	28.6	42.8
170	23.2	18.9	28.3



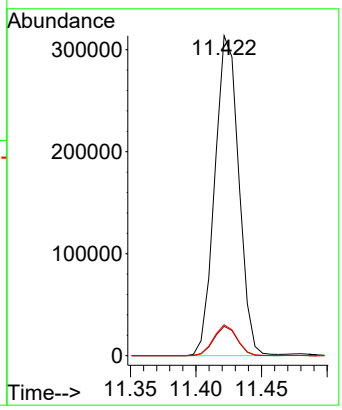


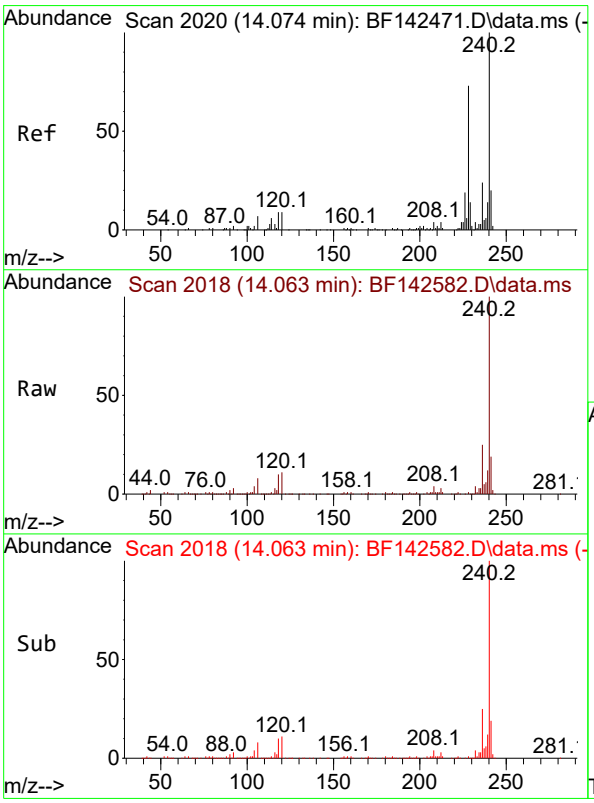
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.422 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Instrument :
BNA_F
ClientSampleId :
TP-53

Tgt Ion:188 Resp: 398630

Ion	Ratio	Lower	Upper
188	100		
94	9.2	6.6	10.0
80	9.6	7.4	11.0

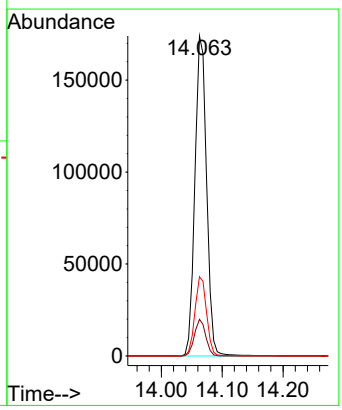


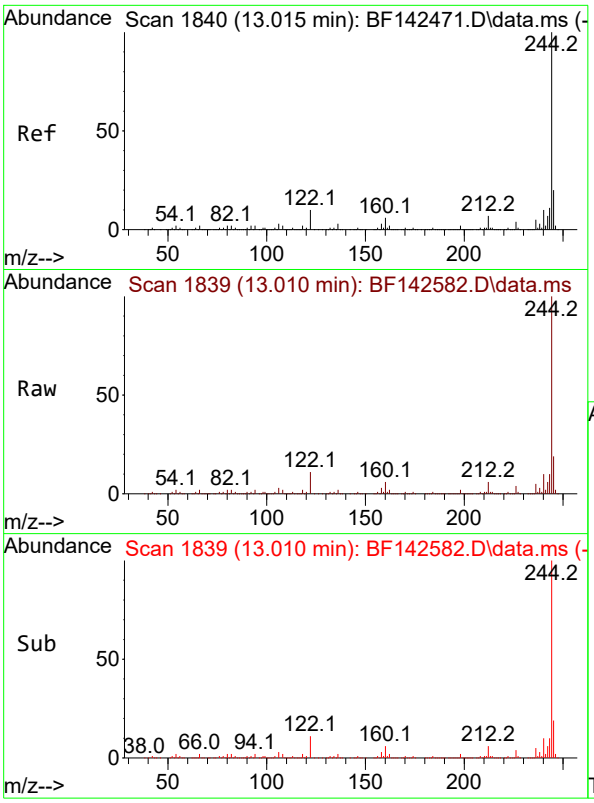


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.063 min Scan# 2018
Delta R.T. -0.012 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Tgt Ion:240 Resp: 231944

Ion	Ratio	Lower	Upper
240	100		
120	11.4	7.5	11.3#
236	24.8	19.6	29.4



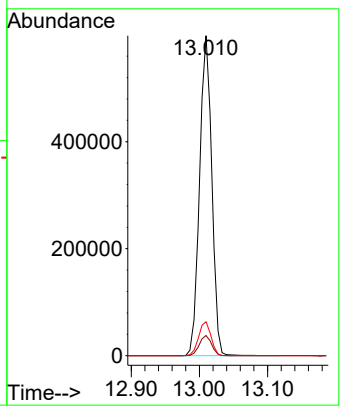


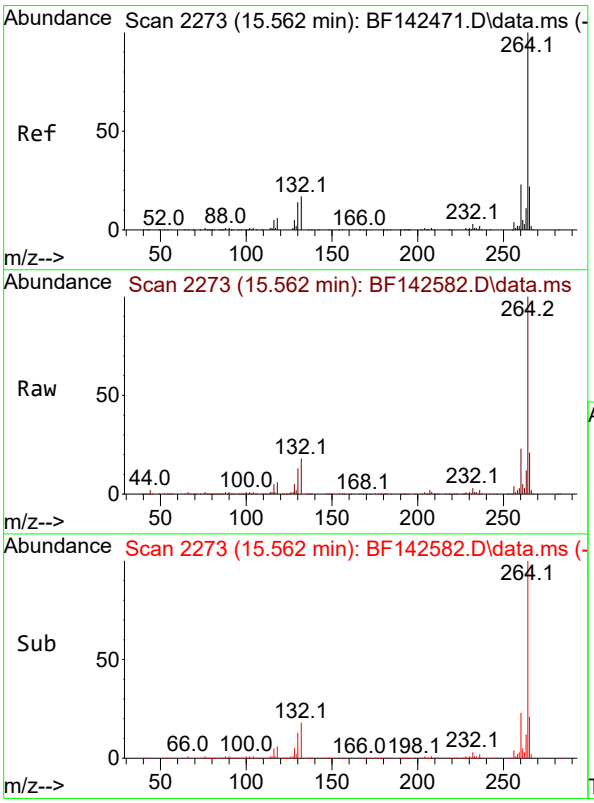
#79
Terphenyl-d14
Concen: 43.875 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Instrument :
BNA_F
ClientSampleId :
TP-53

Tgt Ion:244 Resp: 744692

Ion	Ratio	Lower	Upper
244	100		
212	6.3	5.3	7.9
122	10.6	8.2	12.2

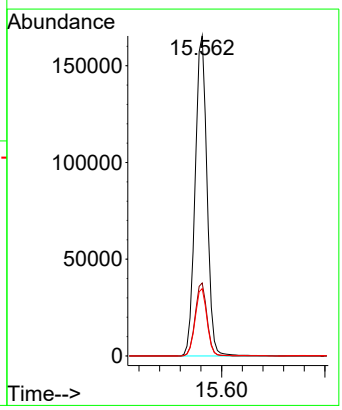




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142582.D
Acq: 30 May 2025 21:13

Tgt Ion:264 Resp: 262922

Ion	Ratio	Lower	Upper
264	100		
260	22.8	18.6	28.0
265	21.1	17.7	26.5



Sample Results: **BF142582.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142582.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.304	13	19	32	rVB2	23795	41387	1.64%	0.235%
2	5.116	490	497	509	rBV	176576	256339	10.17%	1.454%
3	5.516	558	565	570	rBV	1606462	2180198	86.47%	12.369%
4	6.516	729	735	754	rVB	1570508	2226301	88.30%	12.631%
5	6.898	794	800	805	rBV	583375	734666	29.14%	4.168%
6	7.457	889	895	900	rBV	1094436	1417903	56.24%	8.044%
7	7.710	930	938	950	rBV	23993	34102	1.35%	0.193%
8	8.181	1012	1018	1031	rBV	769427	965546	38.30%	5.478%
9	9.257	1195	1201	1206	rBV	1959377	2521311	100.00%	14.304%
10	9.933	1311	1316	1327	rVB	833050	1051238	41.69%	5.964%
11	10.651	1432	1438	1445	rBV	136361	179070	7.10%	1.016%
12	10.722	1445	1450	1464	rBV	1146853	1509951	59.89%	8.566%
13	11.422	1564	1569	1576	rBV	757058	959464	38.05%	5.443%
14	11.945	1653	1658	1674	rBV2	114711	187369	7.43%	1.063%
15	13.010	1833	1839	1844	rBV	1545181	1926148	76.39%	10.928%
16	13.904	1986	1991	2004	rBV	65597	128012	5.08%	0.726%
17	14.063	2013	2018	2027	rVB	462499	613506	24.33%	3.481%
18	15.562	2266	2273	2284	rBV	432508	693756	27.52%	3.936%

Sum of corrected areas: 17626267

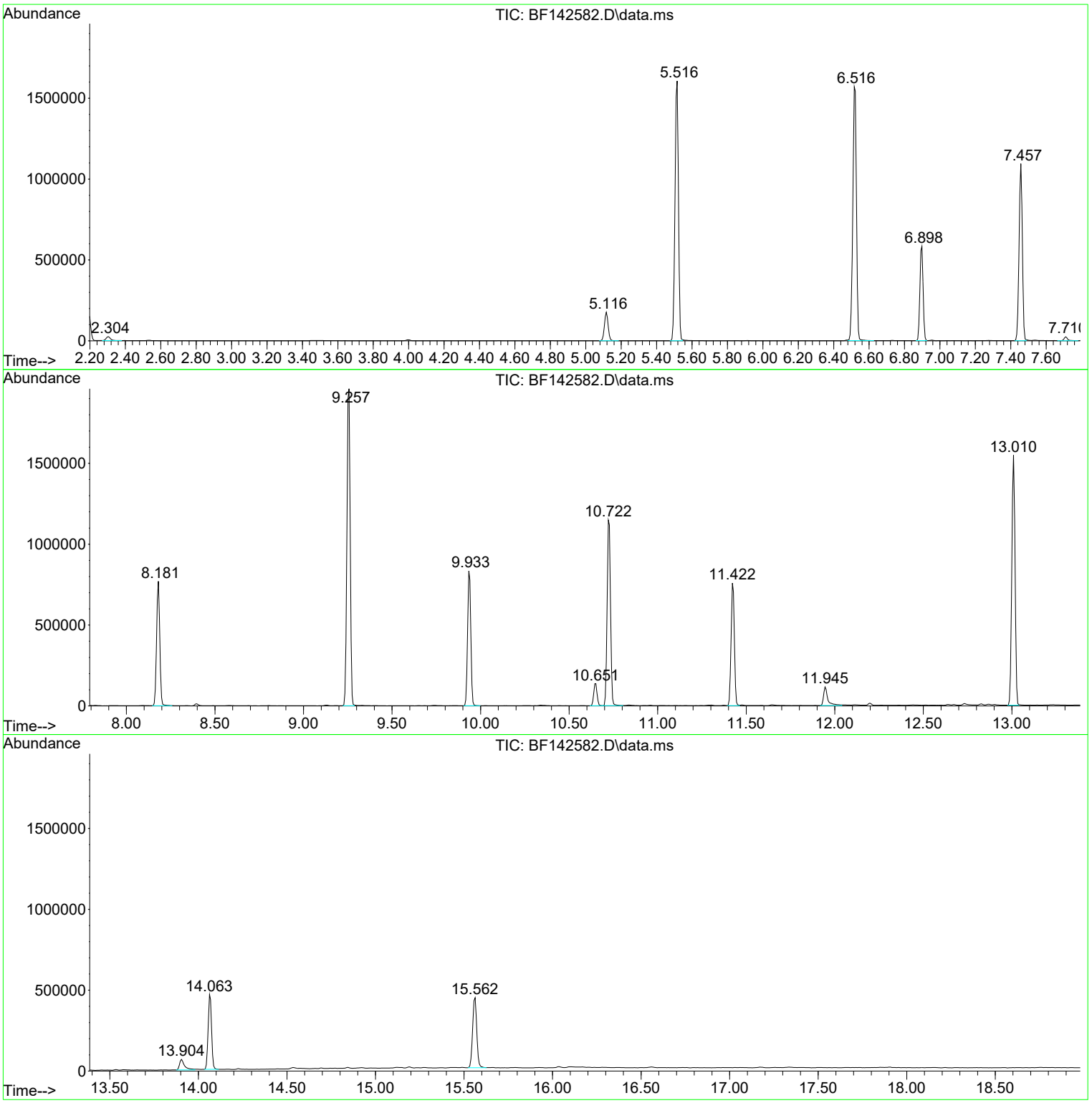
Sample Results: **BF142582.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Sample Results: **BF142582.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

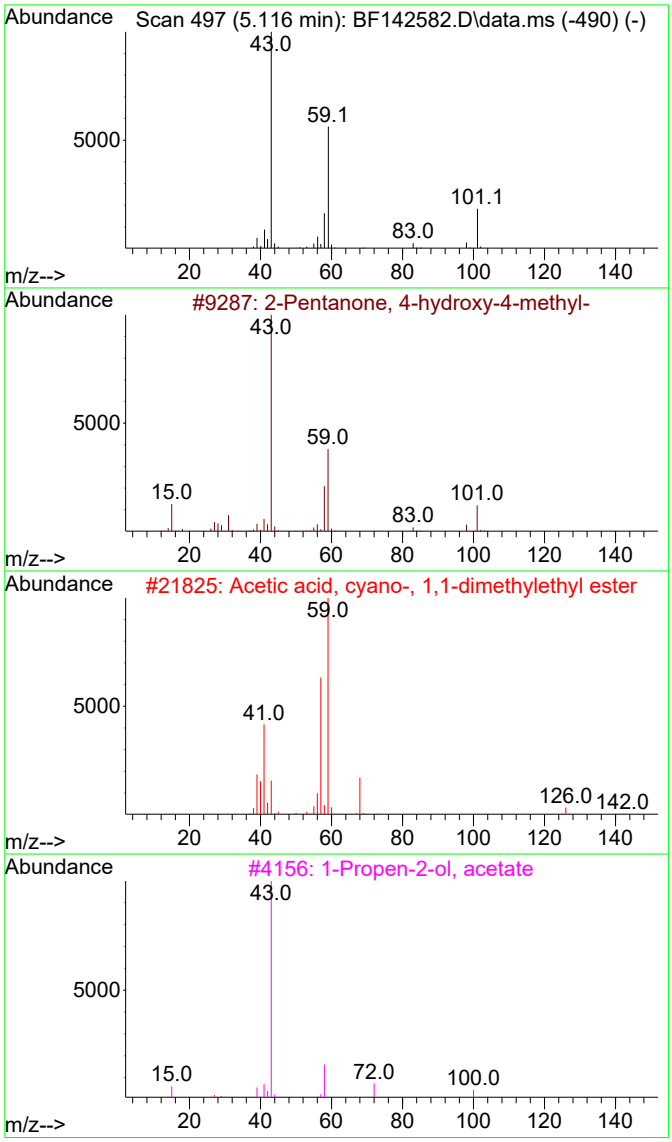
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

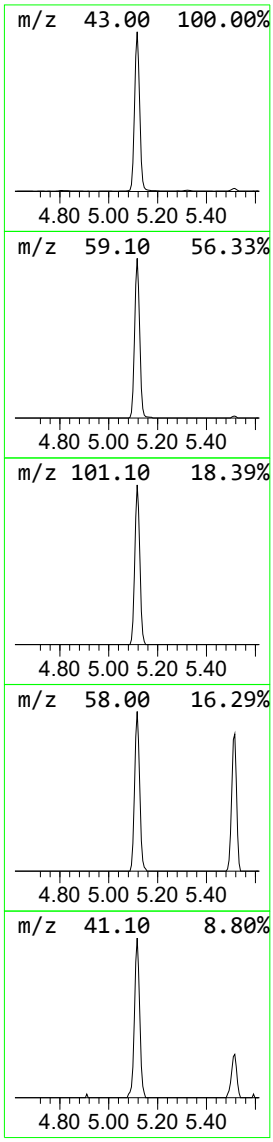
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.116	6.98 ng	256339	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	25
3	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12
4	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	9
5	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	9





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

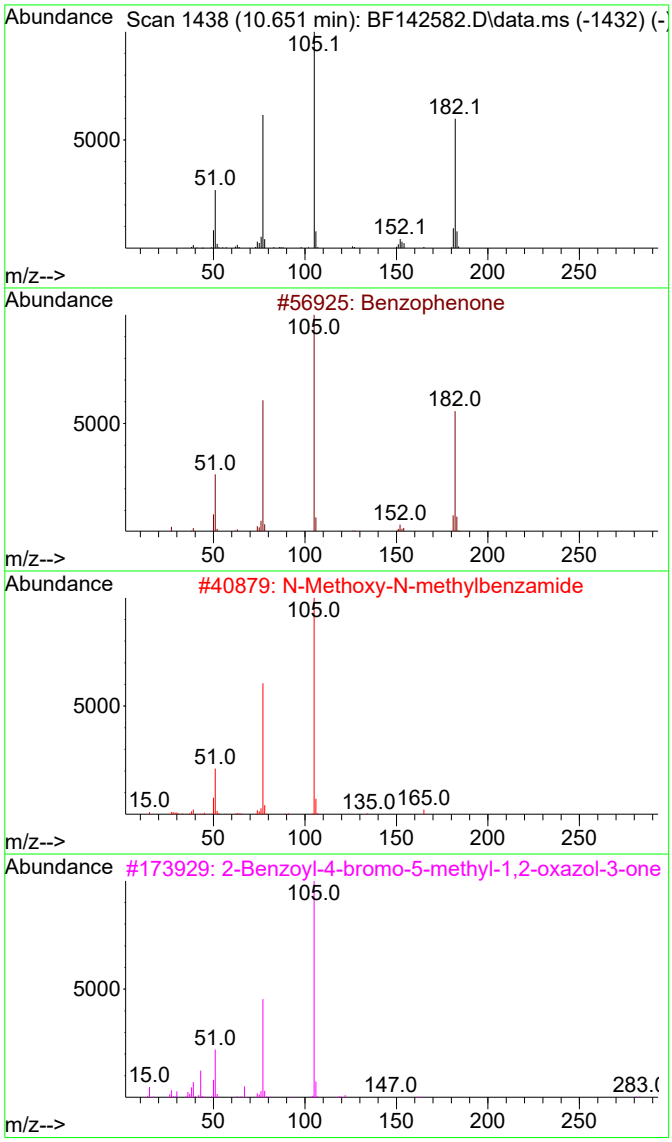
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

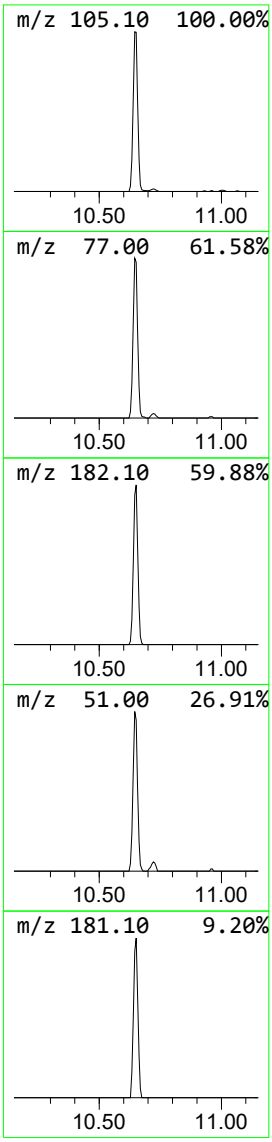
****

Peak Number 2 Benzophenone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.651	3.41 ng	179070	Acenaphthene-d10	9.933

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	N-Methoxy-N-methylbenzamide	165	C9H11NO2	006919-61-5	47
3	2-Benzoyl-4-bromo-5-methyl-1,2-o...	281	C11H8BrNO3	1000444-92-3	47
4	Benzoyl bromide	184	C7H5BrO	000618-32-6	47
5	1-Propanone, 2-bromo-1-phenyl-	212	C9H9BrO	002114-00-3	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

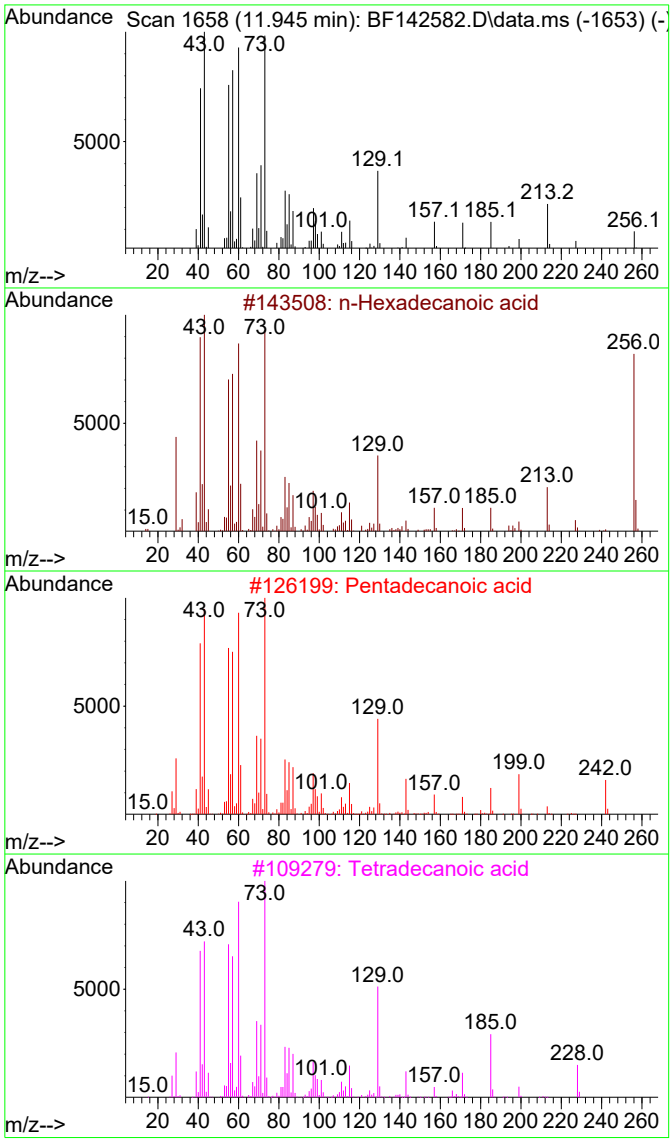
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

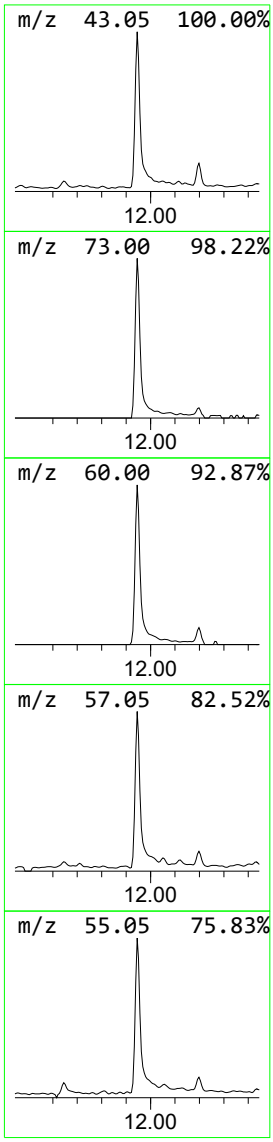
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.945	3.91 ng	187369	Phenanthrene-d10	11.422

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	91
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	83
4	8-Methylnonanoic acid	172	C10H20O2	005963-14-4	78
5	Tridecanoic acid	214	C13H26O2	000638-53-9	76





Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

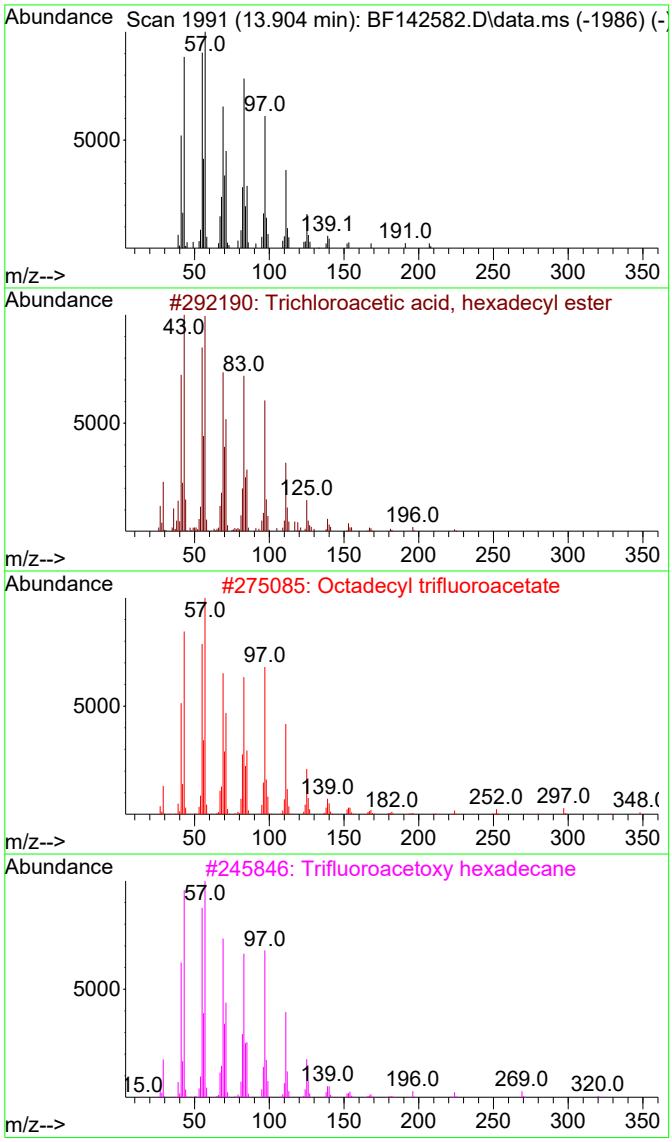
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

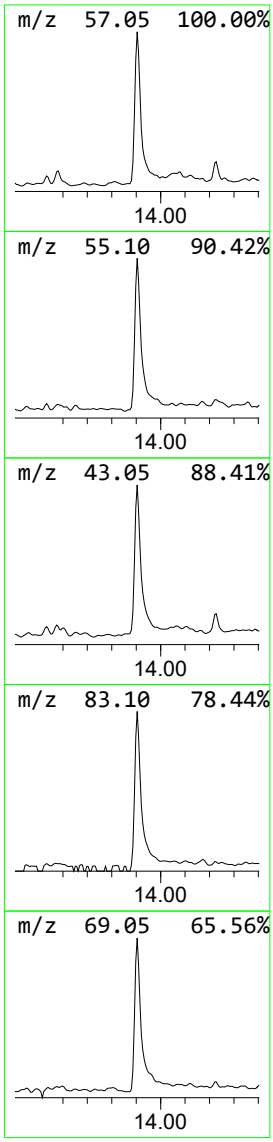
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Trichloroacetic acid, hexad... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.904	4.17 ng	128012	Chrysene-d12	14.063

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	95
2	Octadecyl trifluoroacetate	366	C20H37F3O2	079392-43-1	94
3	Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	93
4	Heptadecyl trifluoroacetate	352	C19H35F3O2	1010351-87-0	93
5	1-Heneicosanol	312	C21H44O	015594-90-8	93





Sample Results: **BF142582.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142582.D
Acq On : 30 May 2025 21:13
Operator : RC/JU
Sample : Q2150-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-53

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.116	7.0	ng	256339	1	6.898	734666	20.0
Benzophenone	10.651	3.4	ng	179070	3	9.933	1051240	20.0
n-Hexadecanoic ...	11.945	3.9	ng	187369	4	11.422	959464	20.0
Trichloroacetic...	13.904	4.2	ng	128012	5	14.063	613506	20.0

CALIBRATION SUMMARY

Raw Data

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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG No.: Q2150

Instrument ID: BNA_F Calibration Date(s): 05/20/2025 05/20/2025

Calibration Time(s): 12:10 15:31

LAB FILE ID: RRF2.5 = BF142467.D RRF005 = BF142468.D RRF010 = BF142469.D
RRF020 = BF142470.D RRF040 = BF142471.D RRF050 = BF142472.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2-Fluorophenol		1.264	1.214	1.225	1.125	1.220	1.187	5.0
Benzaldehyde		1.035	0.975	0.969	0.817	0.872	0.859	17.8
Phenol-d6		1.530	1.449	1.459	1.367	1.467	1.429	4.8
Phenol		1.716	1.621	1.646	1.530	1.657	1.608	4.8
bis(2-Chloroethyl)ether		1.202	1.155	1.168	1.108	1.209	1.157	3.5
2-Chlorophenol		1.345	1.293	1.315	1.252	1.338	1.293	3.4
2-Methylphenol		1.040	0.992	1.026	0.976	1.053	1.010	3.3
2,2-oxybis(1-Chloropropane)		2.082	1.978	1.983	1.868	2.011	1.944	5.1
Acetophenone		0.480	0.453	0.459	0.429	0.452	0.443	6.0
3+4-Methylphenols		1.412	1.319	1.337	1.246	1.337	1.293	6.6
n-Nitroso-di-n-propylamine	0.923	0.941	0.880	0.900	0.843	0.912	0.886	4.7
Nitrobenzene-d5		0.376	0.365	0.379	0.356	0.382	0.367	3.5
Hexachloroethane		0.533	0.503	0.523	0.489	0.529	0.507	4.2
Nitrobenzene		0.338	0.328	0.338	0.323	0.343	0.331	2.9
Isophorone		0.636	0.615	0.620	0.593	0.638	0.613	3.3
2-Nitrophenol		0.167	0.170	0.180	0.175	0.190	0.177	4.4
2,4-Dimethylphenol		0.315	0.315	0.318	0.303	0.325	0.312	3.2
bis(2-Chloroethoxy)methane		0.406	0.394	0.394	0.364	0.391	0.383	4.6
2,4-Dichlorophenol		0.288	0.282	0.290	0.276	0.300	0.283	3.7
Naphthalene		1.061	1.021	1.020	0.941	1.007	0.985	5.9
4-Chloroaniline		0.424	0.409	0.416	0.389	0.415	0.399	6.9
Hexachlorobutadiene		0.203	0.192	0.197	0.187	0.198	0.192	4.5
Caprolactam		0.081	0.076	0.083	0.079	0.085	0.080	4.3
4-Chloro-3-methylphenol		0.304	0.290	0.299	0.282	0.301	0.291	4.0
2-Methylnaphthalene		0.679	0.638	0.646	0.590	0.631	0.620	6.6
Hexachlorocyclopentadiene		0.318	0.350	0.383	0.393	0.430	0.387	10.6
2,4,6-Trichlorophenol		0.387	0.373	0.406	0.371	0.406	0.387	3.7
2-Fluorobiphenyl		1.726	1.619	1.558	1.387	1.480	1.490	10.5
2,4,5-Trichlorophenol		0.410	0.411	0.416	0.395	0.437	0.408	4.3
1,1-Biphenyl		1.672	1.605	1.595	1.480	1.595	1.552	5.8
2-Chloronaphthalene		1.218	1.170	1.177	1.094	1.183	1.146	4.8
2-Nitroaniline		0.333	0.318	0.338	0.324	0.354	0.331	3.7
Dimethylphthalate		1.441	1.340	1.367	1.255	1.366	1.320	6.2
Acenaphthylene		2.064	1.982	2.027	1.851	1.998	1.936	5.8

All other compounds must meet a minimum RRF of 0.010.

Raw Data

Alliance TECHNICAL GROUP

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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG No.: Q2150

Instrument ID: BNA_F Calibration Date(s): 05/20/2025 05/20/2025

Calibration Time(s): 12:10 15:31

LAB FILE ID: RRF2.5 = BF142467.D RRF005 = BF142468.D RRF010 = BF142469.D
RRF020 = BF142470.D RRF040 = BF142471.D RRF050 = BF142472.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2,6-Dinitrotoluene		0.290	0.283	0.289	0.280	0.302	0.285	3.7
3-Nitroaniline		0.320	0.309	0.328	0.299	0.330	0.311	5.0
Acenaphthene		1.259	1.222	1.227	1.120	1.223	1.182	5.7
2,4-Dinitrophenol			0.110	0.137	0.149	0.169	0.147	14.4
4-Nitrophenol		0.221	0.217	0.242	0.227	0.252	0.230	5.6
Dibenzofuran		1.886	1.766	1.768	1.606	1.736	1.701	7.4
2,4-Dinitrotoluene		0.372	0.367	0.387	0.364	0.398	0.372	4.6
Diethylphthalate		1.422	1.310	1.359	1.231	1.343	1.289	7.5
4-Chlorophenyl-phenylether		0.724	0.678	0.676	0.609	0.653	0.646	8.3
Fluorene		1.477	1.399	1.372	1.231	1.343	1.314	8.9
4-Nitroaniline		0.303	0.283	0.303	0.277	0.294	0.282	7.0
4,6-Dinitro-2-methylphenol		0.086	0.094	0.110	0.115	0.129	0.112	14.7
n-Nitrosodiphenylamine		0.712	0.682	0.696	0.649	0.697	0.684	3.3
2,4,6-Tribromophenol		0.230	0.225	0.234	0.211	0.233	0.222	5.4
4-Bromophenyl-phenylether		0.240	0.235	0.239	0.222	0.246	0.236	3.5
Hexachlorobenzene		0.265	0.267	0.263	0.251	0.273	0.262	3.2
Atrazine		0.184	0.174	0.186	0.178	0.196	0.182	4.3
Pentachlorophenol		0.130	0.135	0.149	0.147	0.162	0.148	7.9
Phenanthrene		1.196	1.094	1.100	1.012	1.085	1.069	7.0
Anthracene		1.191	1.132	1.124	1.036	1.110	1.091	6.1
Carbazole		1.030	0.968	0.982	0.889	0.950	0.933	7.4
Di-n-butylphthalate		1.108	1.039	1.083	0.976	1.059	1.021	7.0
Fluoranthene		1.177	1.081	1.052	0.938	0.997	0.999	11.4
Pyrene		1.929	1.967	2.066	1.859	1.959	1.866	9.8
Terphenyl-d14		1.624	1.582	1.660	1.423	1.492	1.464	12.8
Butylbenzylphthalate		0.462	0.453	0.525	0.526	0.575	0.516	8.5
3,3-Dichlorobenzidine		0.360	0.364	0.402	0.407	0.444	0.405	8.3
Benzo(a)anthracene		1.424	1.287	1.403	1.278	1.391	1.336	5.4
Chrysene		1.222	1.204	1.193	1.145	1.255	1.200	3.2
Bis(2-ethylhexyl)phthalate		0.510	0.548	0.618	0.673	0.765	0.660	15.9
Di-n-octyl phthalate			0.958	1.108	1.266	1.432	1.290	17.3
Benzo(b)fluoranthene		1.317	1.105	1.293	1.126	1.209	1.184	7.6
Benzo(k)fluoranthene		1.191	1.166	1.032	1.042	1.178	1.109	6.7
Benzo(a)pyrene		1.154	1.081	1.114	1.081	1.185	1.116	4.0
Indeno(1,2,3-cd)pyrene		1.421	1.495	1.583	1.448	1.583	1.501	4.6

All other compounds must meet a minimum RRF of 0.010.

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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG No.: Q2150

Instrument ID: BNA_F Calibration Date(s): 05/20/2025 05/20/2025

Calibration Time(s): 12:10 15:31

LAB FILE ID: RRF2.5 = BF142467.D RRF005 = BF142468.D RRF010 = BF142469.D
RRF020 = BF142470.D RRF040 = BF142471.D RRF050 = BF142472.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
Dibenzo(a,h)anthracene		1.152	1.228	1.275	1.184	1.290	1.218	4.7
Benzo(g,h,i)perylene		1.154	1.220	1.270	1.180	1.299	1.218	4.6
1,2,4,5-Tetrachlorobenzene		0.592	0.580	0.588	0.552	0.592	0.574	3.4
1,4-Dioxane		0.493	0.460	0.474	0.458	0.500	0.475	3.8
2,3,4,6-Tetrachlorophenol		0.347	0.336	0.360	0.333	0.361	0.341	4.7

All other compounds must meet a minimum RRF of 0.010.

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue May 20 16:26:47 2025
Response Via : Initial Calibration

Calibration Files
2.5 =BF142467.D 5 =BF142468.D 10 =BF142469.D 20 =BF142470.D 40 =BF142471.D 50 =BF142472.D 60 =BF142473.D 80 =BF1424
74.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------							
2)		1,4-Dioxane		0.493	0.460	0.474	0.458	0.500	0.486	0.456	0.475	3.79
3)		Pyridine		1.237	1.150	1.212	1.170	1.273	1.234	1.190	1.210	3.52
4)		n-Nitrosodimet...		0.612	0.593	0.627	0.619	0.673	0.652	0.621	0.628	4.21
5)	S	2-Fluorophenol		1.264	1.214	1.225	1.125	1.220	1.164	1.098	1.187	5.03
6)		Aniline		2.044	1.889	1.963	1.844	1.993	1.910	1.808	1.921	4.35
7)	S	Phenol-d6		1.530	1.449	1.459	1.367	1.467	1.403	1.328	1.429	4.77
8)		2-Chlorophenol		1.345	1.293	1.315	1.252	1.338	1.285	1.223	1.293	3.44
9)		Benzaldehyde		1.035	0.975	0.969	0.817	0.872	0.758	0.591	0.859	17.81
10)	C	Phenol		1.716	1.621	1.646	1.530	1.657	1.597	1.487	1.608	4.85
11)		bis(2-Chloroet...		1.202	1.155	1.168	1.108	1.209	1.156	1.105	1.157	3.52
12)		1,3-Dichlorobe...		1.562	1.470	1.473	1.389	1.482	1.407	1.317	1.443	5.48
13)	C	1,4-Dichlorobe...		1.540	1.476	1.491	1.407	1.495	1.430	1.335	1.453	4.70
14)		1,2-Dichlorobe...		1.495	1.405	1.436	1.327	1.432	1.357	1.284	1.391	5.20
15)		Benzyl Alcohol		1.059	1.024	1.058	1.021	1.131	1.073	1.026	1.056	3.69
16)		2,2'-oxybis(1-...		2.082	1.978	1.983	1.868	2.011	1.898	1.786	1.944	5.11
17)		2-Methylphenol		1.040	0.992	1.026	0.976	1.053	1.015	0.965	1.010	3.27
18)		Hexachloroethane		0.533	0.503	0.523	0.489	0.529	0.497	0.477	0.507	4.23
19)	P	n-Nitroso-di-n...	0.923	0.941	0.880	0.900	0.843	0.912	0.866	0.819	0.886	4.69
20)		3+4-Methylphenols		1.412	1.319	1.337	1.246	1.337	1.250	1.149	1.293	6.59
21)	I	Naphthalene-d8	----------	ISTD	----------							
22)		Acetophenone		0.480	0.453	0.459	0.429	0.452	0.428	0.399	0.443	5.98
23)	S	Nitrobenzene-d5		0.376	0.365	0.379	0.356	0.382	0.363	0.347	0.367	3.51
24)		Nitrobenzene		0.338	0.328	0.338	0.323	0.343	0.331	0.316	0.331	2.94
25)		Isophorone		0.636	0.615	0.620	0.593	0.638	0.607	0.585	0.613	3.26
26)	C	2-Nitrophenol		0.167	0.170	0.180	0.175	0.190	0.182	0.173	0.177	4.44
27)		2,4-Dimethylph...		0.315	0.315	0.318	0.303	0.325	0.312	0.295	0.312	3.22
28)		bis(2-Chloroet...		0.406	0.394	0.394	0.364	0.391	0.375	0.358	0.383	4.63
29)	C	2,4-Dichloroph...		0.288	0.282	0.290	0.276	0.300	0.283	0.266	0.283	3.74
30)		1,2,4-Trichlor...		0.325	0.313	0.317	0.295	0.320	0.300	0.284	0.308	4.89
31)		Naphthalene		1.061	1.021	1.020	0.941	1.007	0.953	0.891	0.985	5.94
32)		Benzoic acid			0.153	0.176	0.188	0.211	0.209	0.201	0.190	11.73
33)		4-Chloroaniline		0.424	0.409	0.416	0.389	0.415	0.397	0.343	0.399	6.87
34)	C	Hexachlorobuta...		0.203	0.192	0.197	0.187	0.198	0.192	0.176	0.192	4.52
35)		Caprolactam		0.081	0.076	0.083	0.079	0.085	0.078	0.076	0.080	4.29
36)	C	4-Chloro-3-met...		0.304	0.290	0.299	0.282	0.301	0.287	0.271	0.291	4.02
37)		2-Methylnaphth...		0.679	0.638	0.646	0.590	0.631	0.598	0.556	0.620	6.62
38)		1-Methylnaphth...		0.703	0.668	0.672	0.615	0.650	0.611	0.566	0.641	7.19

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF052025.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.592	0.580	0.588	0.552	0.592	0.573	0.544	0.574	3.39
41)	P	Hexachlorocycl...	0.318	0.350	0.383	0.393	0.430	0.425	0.411	0.387	10.57
42)	S	2,4,6-Tribromo...	0.230	0.225	0.234	0.211	0.233	0.218	0.202	0.222	5.39
43)	C	2,4,6-Trichlor...	0.387	0.373	0.406	0.371	0.406	0.388	0.379	0.387	3.69
44)		2,4,5-Trichlor...	0.410	0.411	0.416	0.395	0.437	0.408	0.381	0.408	4.27
45)	S	2-Fluorobiphenyl	1.726	1.619	1.558	1.387	1.480	1.396	1.268	1.490	10.46
46)		1,1'-Biphenyl	1.672	1.605	1.595	1.480	1.595	1.507	1.408	1.552	5.82
47)		2-Chloronaphth...	1.218	1.170	1.177	1.094	1.183	1.122	1.061	1.146	4.84
48)		2-Nitroaniline	0.333	0.318	0.338	0.324	0.354	0.332	0.320	0.331	3.72
49)		Acenaphthylene	2.064	1.982	2.027	1.851	1.998	1.885	1.745	1.936	5.85
50)		Dimethylphthalate	1.441	1.340	1.367	1.255	1.366	1.256	1.211	1.320	6.16
51)		2,6-Dinitrotol...	0.290	0.283	0.289	0.280	0.302	0.281	0.268	0.285	3.74
52)	C	Acenaphthene	1.259	1.222	1.227	1.120	1.223	1.146	1.077	1.182	5.72
53)		3-Nitroaniline	0.320	0.309	0.327	0.299	0.330	0.305	0.287	0.311	5.02
54)	P	2,4-Dinitrophenol		0.110	0.137	0.149	0.169	0.160	0.158	0.147	14.36
55)		Dibenzofuran	1.886	1.766	1.768	1.606	1.736	1.635	1.509	1.701	7.38
56)	P	4-Nitrophenol	0.221	0.217	0.242	0.227	0.252	0.229	0.220	0.230	5.57
57)		2,4-Dinitrotol...	0.372	0.367	0.387	0.364	0.398	0.372	0.344	0.372	4.62
58)		Fluorene	1.477	1.399	1.372	1.231	1.343	1.238	1.140	1.314	8.85
59)		2,3,4,6-Tetrac...	0.347	0.336	0.360	0.333	0.361	0.333	0.317	0.341	4.71
60)		Diethylphthalate	1.422	1.310	1.359	1.231	1.343	1.218	1.140	1.289	7.51
61)		4-Chlorophenyl...	0.724	0.678	0.676	0.609	0.653	0.612	0.566	0.646	8.25
62)		4-Nitroaniline	0.303	0.283	0.303	0.277	0.294	0.265	0.251	0.282	6.95
63)		Azobenzene	1.239	1.194	1.188	1.107	1.197	1.123	1.055	1.158	5.55
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...	0.086	0.094	0.110	0.115	0.129	0.125	0.123	0.112	14.72
66)	c	n-Nitrosodiphe...	0.712	0.682	0.696	0.649	0.697	0.694	0.660	0.684	3.30
67)		4-Bromophenyl-...	0.240	0.235	0.239	0.222	0.246	0.243	0.230	0.236	3.45
68)		Hexachlorobenzene	0.265	0.267	0.263	0.251	0.273	0.262	0.250	0.262	3.19
69)		Atrazine	0.184	0.174	0.186	0.178	0.196	0.181	0.174	0.182	4.29
70)	C	Pentachlorophenol	0.130	0.135	0.149	0.147	0.162	0.157	0.154	0.148	7.88
71)		Phenanthrene	1.196	1.094	1.100	1.012	1.085	1.033	0.964	1.069	7.00
72)		Anthracene	1.191	1.132	1.124	1.036	1.110	1.048	0.996	1.091	6.15
73)		Carbazole	1.030	0.968	0.982	0.889	0.950	0.877	0.832	0.933	7.39
74)		Di-n-butylphth...	1.108	1.039	1.083	0.976	1.059	0.974	0.908	1.021	6.95
75)	C	Fluoranthene	1.177	1.081	1.052	0.938	0.997	0.901	0.846	0.999	11.41
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine	0.670	0.782	0.903	0.797	0.805	0.698	0.556	0.744	15.12
78)		Pyrene	1.929	1.967	2.066	1.859	1.959	1.773	1.507	1.866	9.79
79)	S	Terphenyl-d14	1.624	1.582	1.660	1.423	1.492	1.337	1.126	1.464	12.80
80)		Butylbenzylpht...	0.462	0.453	0.525	0.526	0.575	0.550	0.517	0.516	8.54
81)		Benzo(a)anthra...	1.424	1.287	1.403	1.278	1.391	1.327	1.238	1.336	5.36
82)		3,3'-Dichlorob...	0.360	0.364	0.402	0.407	0.444	0.442	0.417	0.405	8.30
83)		Chrysene	1.222	1.204	1.193	1.145	1.255	1.223	1.158	1.200	3.20
84)		Bis(2-ethylhex...	0.510	0.548	0.618	0.673	0.765	0.778	0.727	0.660	15.91
85)	c	Di-n-octyl pht...		0.958	1.108	1.266	1.432	1.542	1.437	1.290	17.30

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF052025.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.421	1.495	1.583	1.448	1.583	1.546	1.434	1.501	4.64
88)		Benzo(b)fluora...	1.317	1.105	1.293	1.126	1.209	1.122	1.114	1.184	7.62
89)		Benzo(k)fluora...	1.191	1.166	1.032	1.042	1.178	1.128	1.023	1.109	6.68
90)	C	Benzo(a)pyrene	1.154	1.081	1.114	1.081	1.185	1.133	1.062	1.116	4.00
91)		Dibenzo(a,h)an...	1.152	1.228	1.275	1.184	1.290	1.245	1.149	1.218	4.67
92)		Benzo(g,h,i)pe...	1.154	1.220	1.270	1.180	1.299	1.245	1.158	1.218	4.64

(#) = Out of Range

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142467.D
Acq On : 20 May 2025 12:10
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Quant Time: May 20 16:54:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

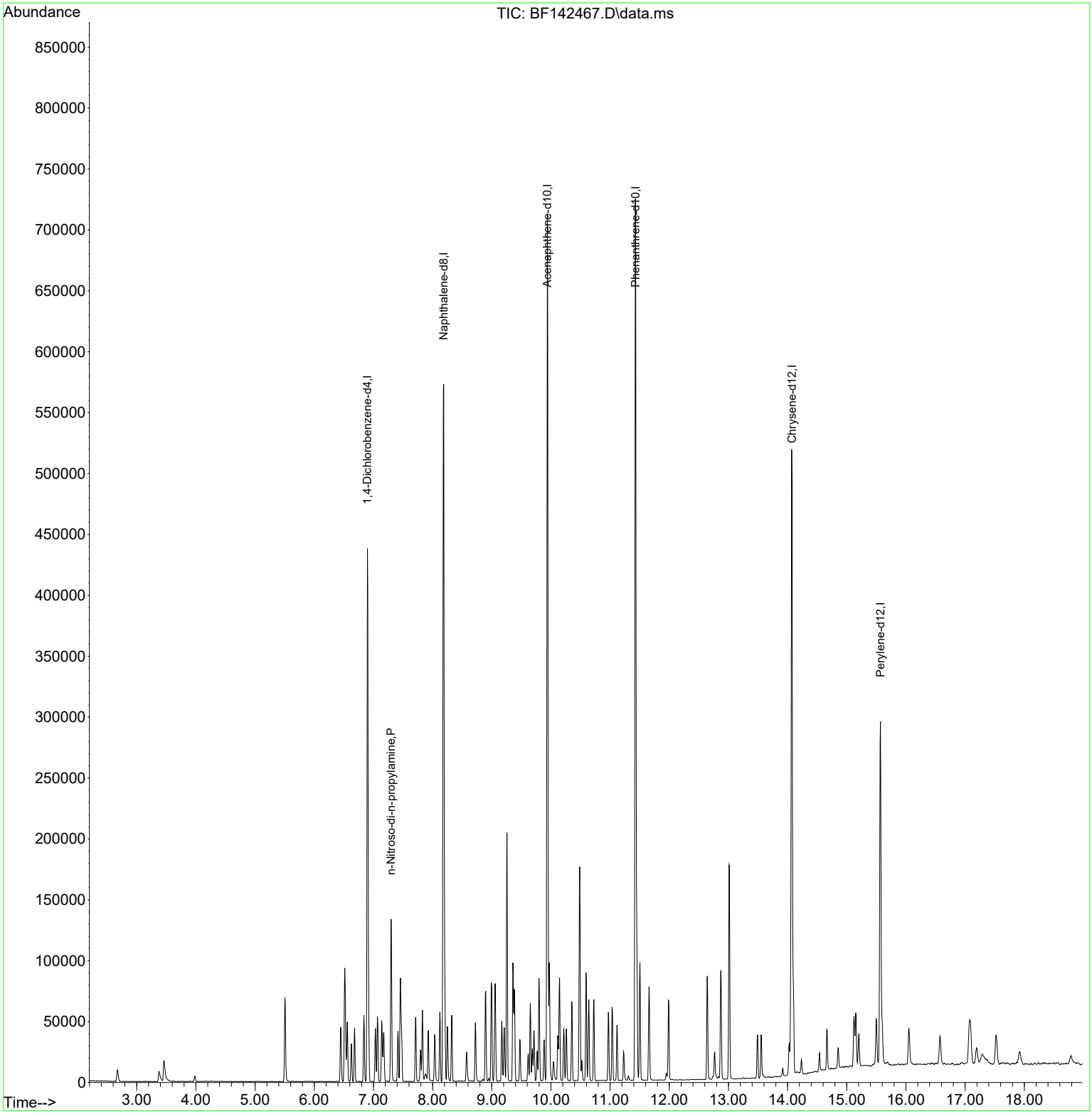
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	93808	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	371457	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	211662	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	381744	20.000	ng	0.00
76) Chrysene-d12	14.074	240	236443	20.000	ng	0.00
86) Perylene-d12	15.568	264	169046	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.000	ng	
7) Phenol-d6	0.000	99	0d	0.000	ng	
23) Nitrobenzene-d5	0.000	82	0d	0.000	ng	
42) 2,4,6-Tribromophenol	0.000	330	0d	0.000	ng	
45) 2-Fluorobiphenyl	0.000	172	0d	0.000	ng	
79) Terphenyl-d14	0.000	244	0d	0.000	ng	
Target Compounds						Qvalue
19) n-Nitroso-di-n-propyla...	7.298	70	10828	2.607	ng	97

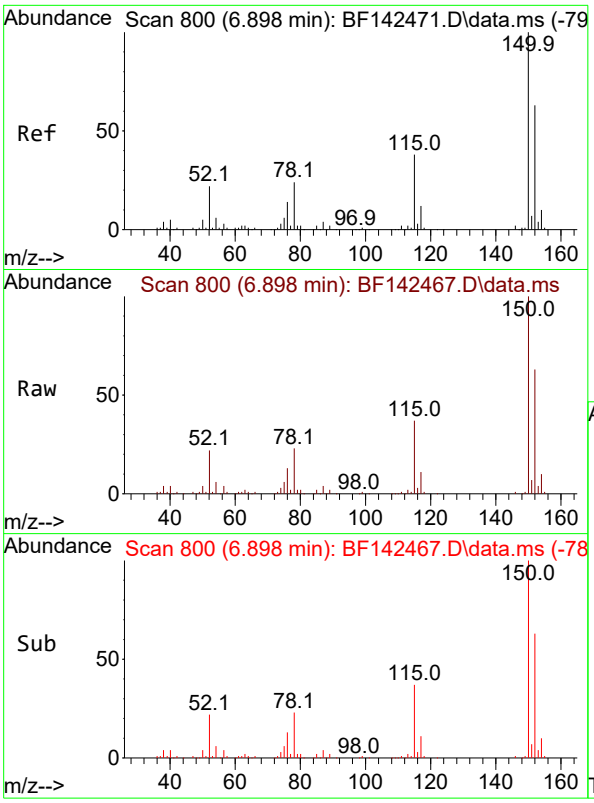
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142467.D
Acq On : 20 May 2025 12:10
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Quant Time: May 20 16:54:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



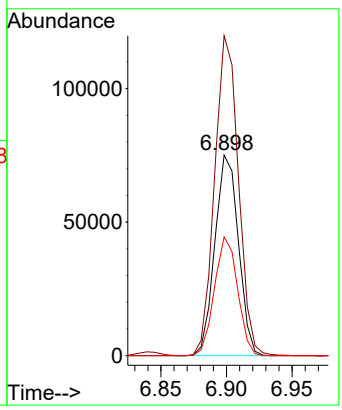


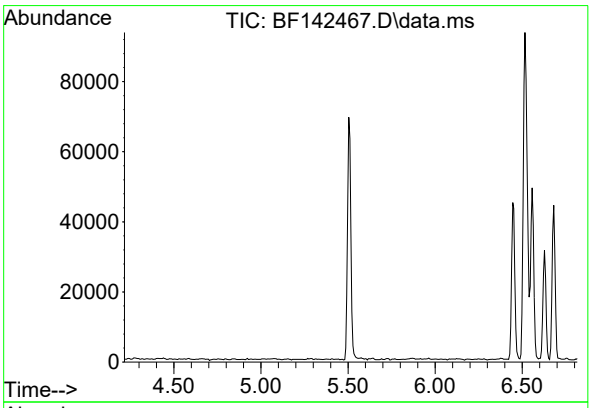
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142467.D
Acq: 20 May 2025 12:10

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Tgt Ion:152 Resp: 93808

Ion	Ratio	Lower	Upper
152	100		
150	159.5	128.2	192.4
115	59.2	48.3	72.5



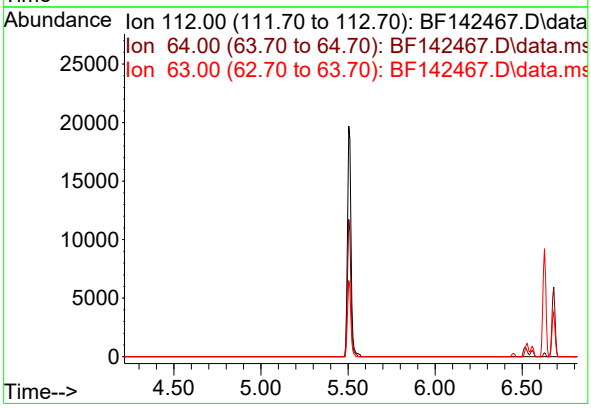


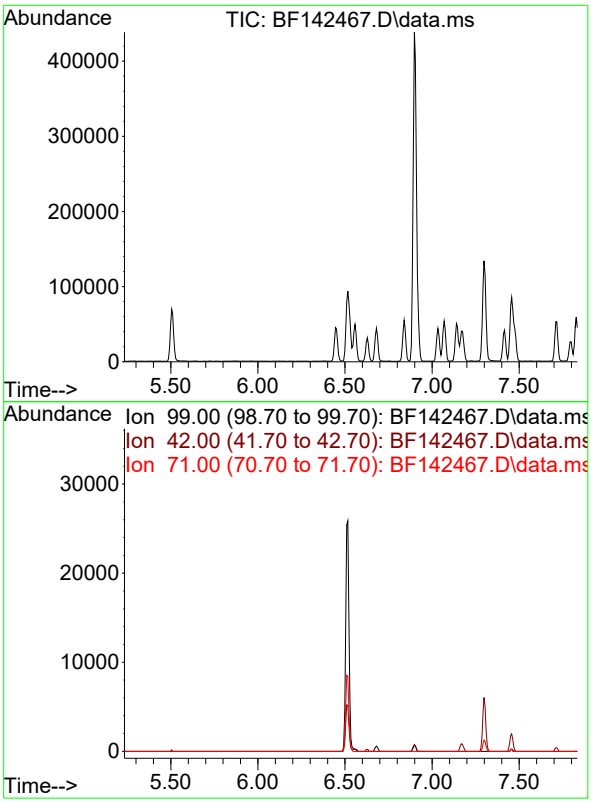
#5
2-Fluorophenol
Concen: 0.000 ng
Expected RT: 5.52 min

Lab File: BF142467.D
Acq: 20 May 2025 12:10

Tgt Ion: 112

Sig	Exp Ratio
112	100
64	59.4
63	31.1





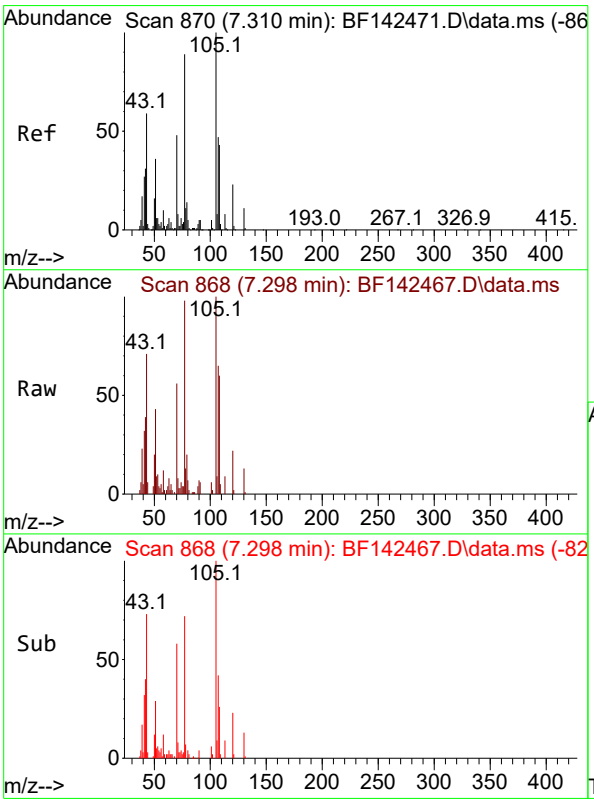
#7
Phenol-d6
Concen: 0.000 ng
Expected RT: 6.53 min

Lab File: BF142467.D
Acq: 20 May 2025 12:10

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Tgt Ion: 99

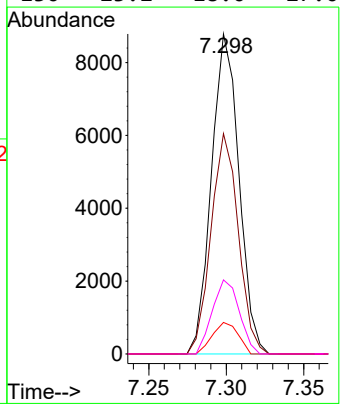
Sig	Exp Ratio
99	100
42	20.2
71	34.1

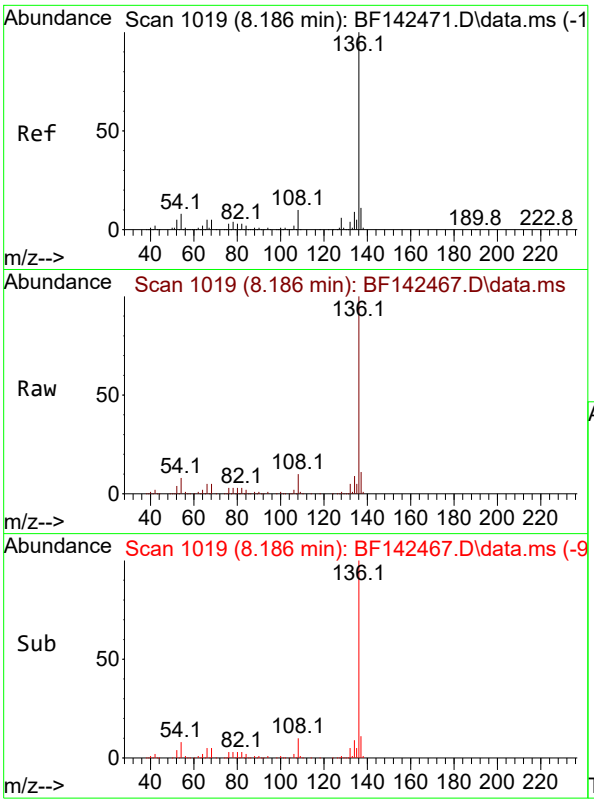


#19
n-Nitroso-di-n-propylamine
Concen: 2.607 ng
RT: 7.298 min Scan# 868
Delta R.T. -0.029 min
Lab File: BF142467.D
Acq: 20 May 2025 12:10

Tgt Ion: 70 Resp: 10828

Ion	Ratio	Lower	Upper
70	100		
42	68.8	52.4	78.6
101	9.9	7.8	11.8
130	23.2	18.0	27.0



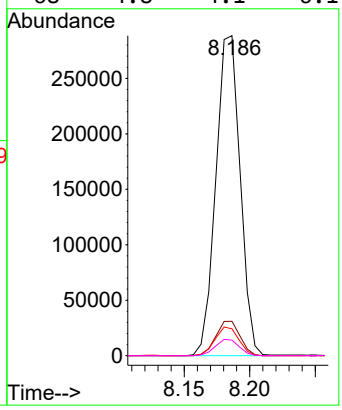


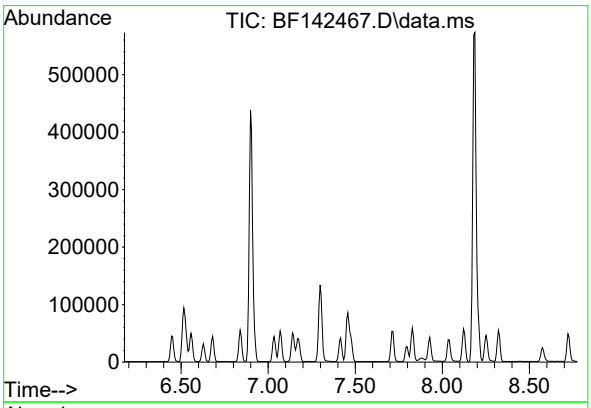
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142467.D
Acq: 20 May 2025 12:10

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Tgt Ion:136 Resp: 371457

Ion	Ratio	Lower	Upper
136	100		
137	10.7	8.6	13.0
54	8.4	6.6	10.0
68	4.8	4.1	6.1



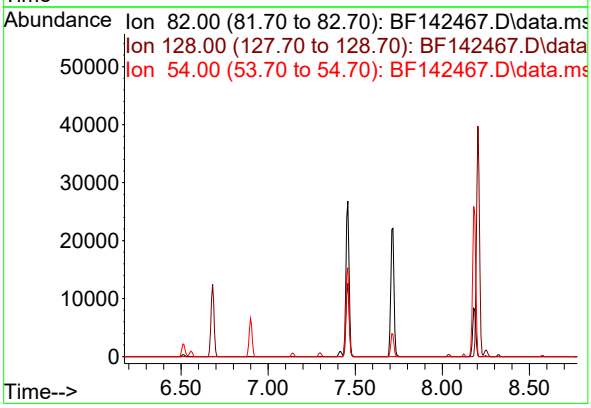


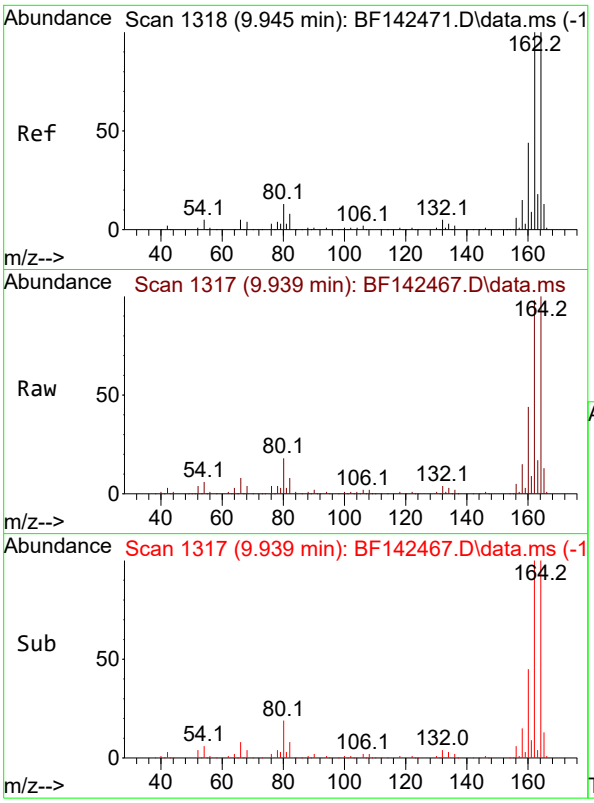
#23
Nitrobenzene-d5
Concen: 0.000 ng
Expected RT: 7.47 min

Lab File: BF142467.D
Acq: 20 May 2025 12:10

Tgt Ion: 82

Sig	Exp Ratio
82	100
128	46.8
54	58.3



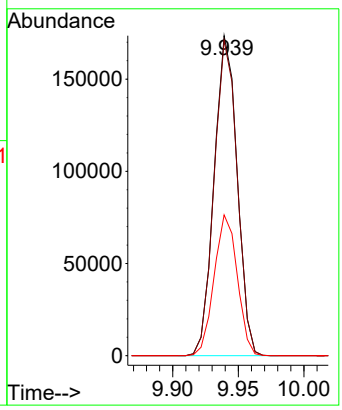


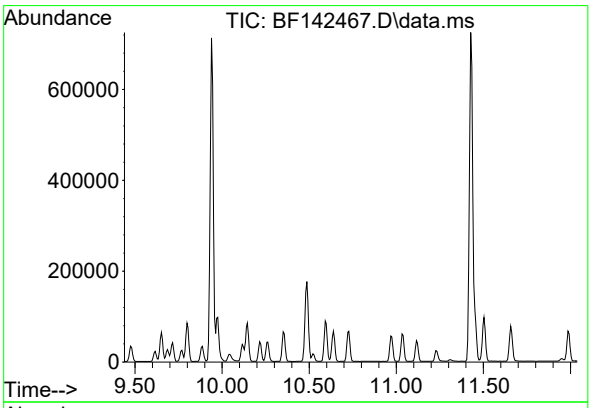
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142467.D
Acq: 20 May 2025 12:10

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Tgt Ion:164 Resp: 211662

Ion	Ratio	Lower	Upper
164	100		
162	98.5	80.2	120.4
160	44.0	35.6	53.4



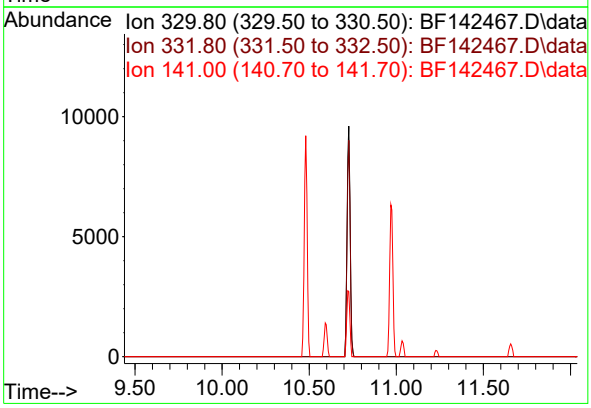


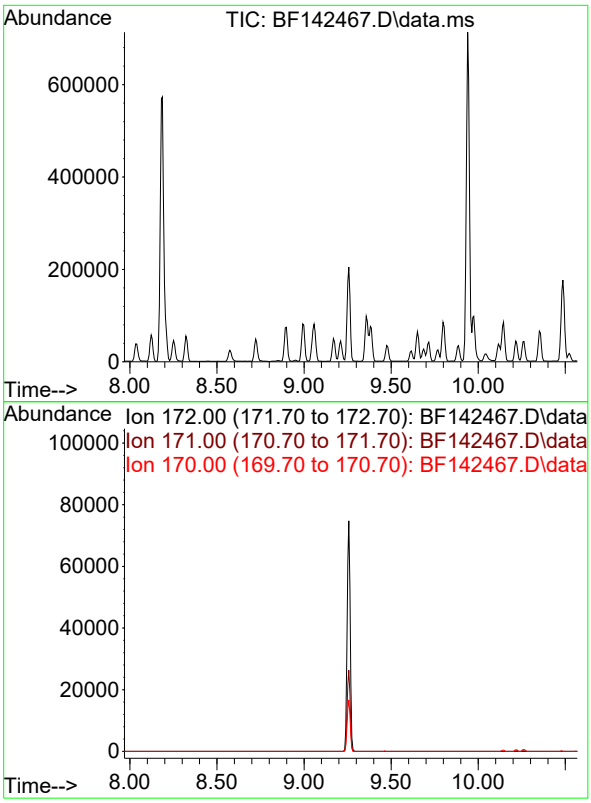
#42
2,4,6-Tribromophenol
Concen: 0.000 ng
Expected RT: 10.74 min

Lab File: BF142467.D
Acq: 20 May 2025 12:10

Tgt Ion: 330

Sig	Exp Ratio
330	100
332	97.0
141	30.7





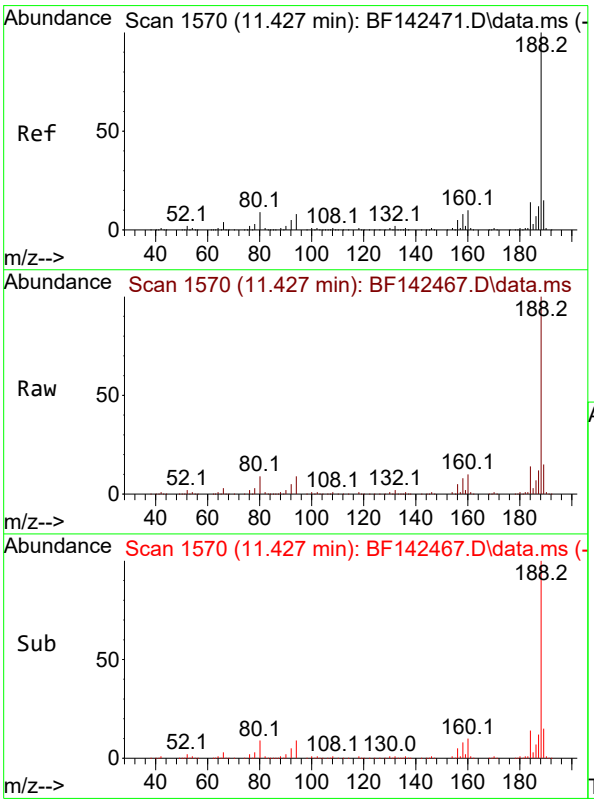
#45
2-Fluorobiphenyl
Concen: 0.000 ng
Expected RT: 9.27 min

Lab File: BF142467.D
Acq: 20 May 2025 12:10

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Tgt Ion: 172

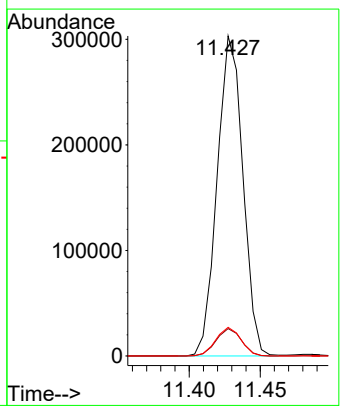
Sig	Exp Ratio
172	100
171	35.7
170	23.6

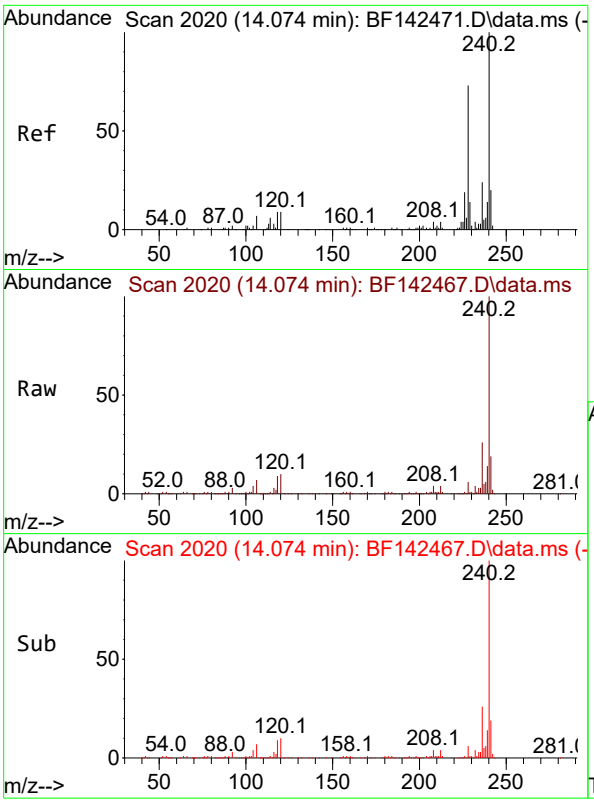


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142467.D
Acq: 20 May 2025 12:10

Tgt Ion:188 Resp: 381744

Ion	Ratio	Lower	Upper
188	100		
94	8.5	6.6	10.0
80	9.0	7.4	11.0



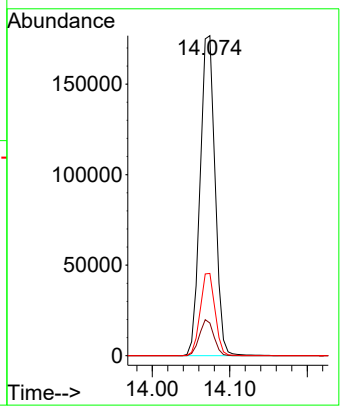


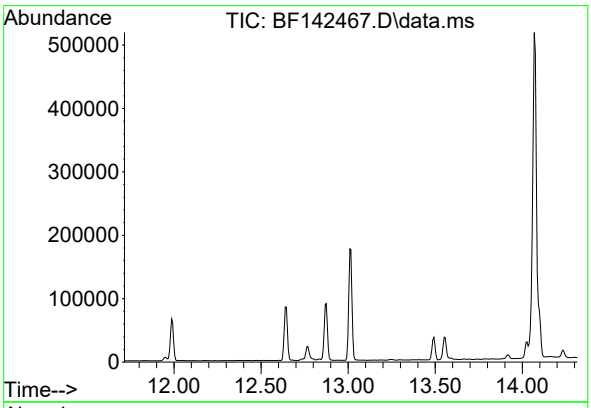
#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2
Delta R.T. -0.000 min
Lab File: BF142467.D
Acq: 20 May 2025 12:10

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Tgt Ion:240 Resp: 236443

Ion	Ratio	Lower	Upper
240	100		
120	10.2	7.5	11.3
236	25.7	19.6	29.4



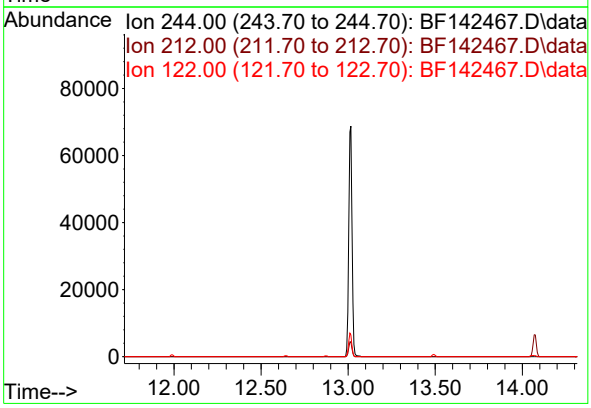


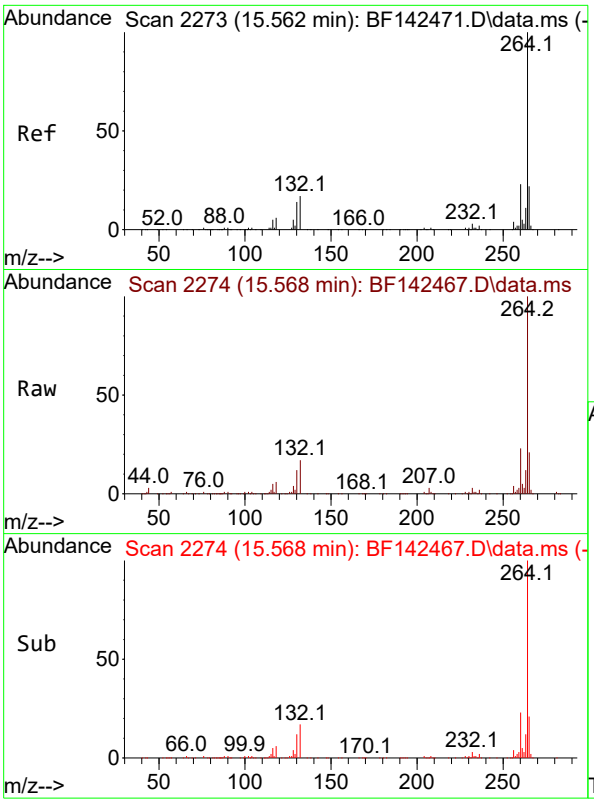
#79
Terphenyl-d14
Concen: 0.000 ng
Expected RT: 13.02 min

Lab File: BF142467.D
Acq: 20 May 2025 12:10

Tgt Ion: 244

Sig	Exp Ratio
244	100
212	6.6
122	10.2



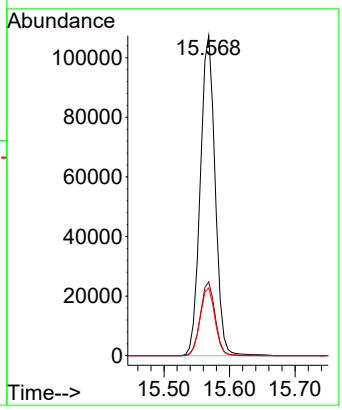


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2
Delta R.T. -0.000 min
Lab File: BF142467.D
Acq: 20 May 2025 12:10

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Tgt Ion:264 Resp: 169046

Ion	Ratio	Lower	Upper
264	100		
260	23.1	18.6	28.0
265	21.2	17.7	26.5



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142468.D
Acq On : 20 May 2025 12:38
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Quant Time: May 20 16:54:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.898	152	87254	20.000	ng		0.00
21) Naphthalene-d8	8.181	136	345154	20.000	ng		0.00
39) Acenaphthene-d10	9.939	164	197100	20.000	ng		0.00
64) Phenanthrene-d10	11.427	188	349474	20.000	ng		0.00
76) Chrysene-d12	14.074	240	218524	20.000	ng		0.00
86) Perylene-d12	15.568	264	154887	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.504	112	55140	10.647	ng		-0.01
7) Phenol-d6	6.516	99	66768	10.710	ng		-0.02
23) Nitrobenzene-d5	7.457	82	64876	10.249	ng		-0.02
42) 2,4,6-Tribromophenol	10.727	330	22702	10.378	ng		-0.01
45) 2-Fluorobiphenyl	9.257	172	170142	11.583	ng		-0.01
79) Terphenyl-d14	13.016	244	177430	11.096	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.669	88	10748	5.186	ng		97
3) Pyridine	3.451	79	26993	5.115	ng		98
4) n-Nitrosodimethylamine	3.369	42	13346	4.870	ng	#	97
6) Aniline	6.557	93	44576	5.318	ng		98
8) 2-Chlorophenol	6.681	128	29341	5.201	ng		98
9) Benzaldehyde	6.445	77	22572	6.020	ng		98
10) Phenol	6.528	94	37431	5.336	ng		97
11) bis(2-Chloroethyl)ether	6.628	93	26215	5.192	ng		98
12) 1,3-Dichlorobenzene	6.839	146	34073	5.413	ng		97
13) 1,4-Dichlorobenzene	6.916	146	33593	5.298	ng		99
14) 1,2-Dichlorobenzene	7.069	146	32604	5.374	ng		99
15) Benzyl Alcohol	7.034	79	23103	5.015	ng		97
16) 2,2'-oxybis(1-Chloropr...	7.169	45	45414	5.355	ng		99
17) 2-Methylphenol	7.139	107	22693	5.153	ng		98
18) Hexachloroethane	7.416	117	11635	5.255	ng		99
19) n-Nitroso-di-n-propyla...	7.298	70	20527	5.313	ng		96
20) 3+4-Methylphenols	7.292	107	30797	5.460	ng	#	88
22) Acetophenone	7.304	105	41438	5.423	ng		99
24) Nitrobenzene	7.475	77	29193	5.114	ng		96
25) Isophorone	7.716	82	54838	5.182	ng		98
26) 2-Nitrophenol	7.798	139	14387	4.716	ng		99
27) 2,4-Dimethylphenol	7.828	122	27170	5.051	ng		99
28) bis(2-Chloroethoxy)met...	7.928	93	35010	5.296	ng		97
29) 2,4-Dichlorophenol	8.034	162	24812	5.072	ng		98
30) 1,2,4-Trichlorobenzene	8.122	180	28037	5.281	ng		97
31) Naphthalene	8.204	128	91563	5.388	ng		100
33) 4-Chloroaniline	8.251	127	36597	5.314	ng		98
34) Hexachlorobutadiene	8.322	225	17505	5.280	ng		99
35) Caprolactam	8.581	113	7020	5.109	ng		97
36) 4-Chloro-3-methylphenol	8.722	107	26197	5.225	ng		97
37) 2-Methylnaphthalene	8.898	142	58574	5.478	ng		99
38) 1-Methylnaphthalene	8.992	142	60674	5.486	ng		100
40) 1,2,4,5-Tetrachloroben...	9.063	216	29150	5.152	ng		99
41) Hexachlorocyclopentadiene	9.051	237	15667	4.105	ng		99
43) 2,4,6-Trichlorophenol	9.169	196	19079	5.001	ng		99
44) 2,4,5-Trichlorophenol	9.210	196	20200	5.020	ng		98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142468.D
Acq On : 20 May 2025 12:38
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Quant Time: May 20 16:54:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

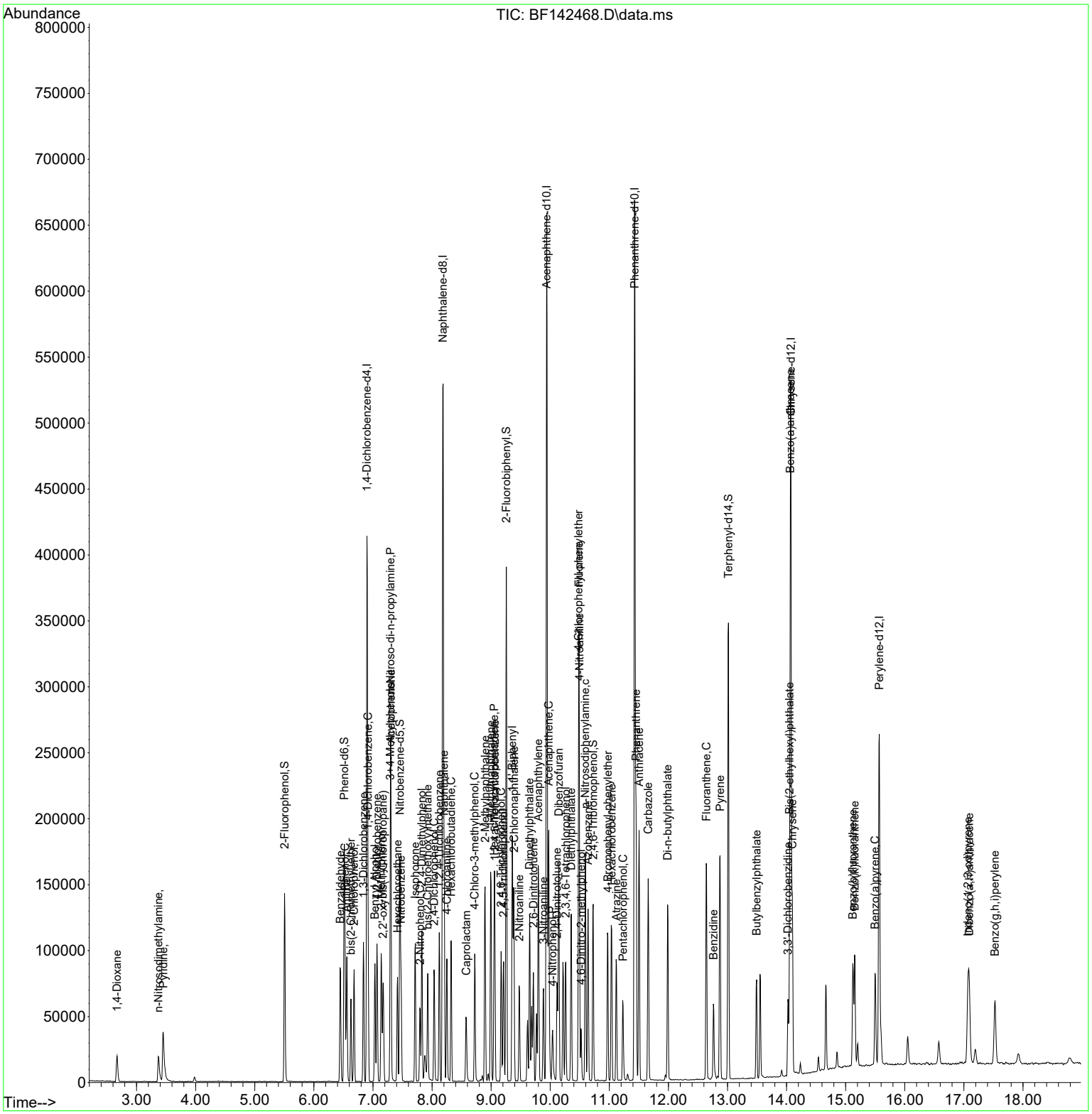
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) 1,1'-Biphenyl	9.357	154	82376	5.387	ng	99
47) 2-Chloronaphthalene	9.386	162	60002	5.311	ng	97
48) 2-Nitroaniline	9.475	65	16399	5.022	ng	95
49) Acenaphthylene	9.798	152	101686	5.330	ng	99
50) Dimethylphthalate	9.651	163	71020	5.461	ng	99
51) 2,6-Dinitrotoluene	9.716	165	14295	5.093	ng	97
52) Acenaphthene	9.975	154	62026	5.325	ng	99
53) 3-Nitroaniline	9.886	138	15749	5.137	ng	99
55) Dibenzofuran	10.145	168	92955	5.545	ng	98
56) 4-Nitrophenol	10.039	139	10876	4.808	ng	93
57) 2,4-Dinitrotoluene	10.116	165	18322	4.998	ng	91
58) Fluorene	10.486	166	72775	5.620	ng	99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	17096	5.090	ng	98
60) Diethylphthalate	10.357	149	70046	5.515	ng	99
61) 4-Chlorophenyl-phenyle...	10.480	204	35694	5.611	ng	97
62) 4-Nitroaniline	10.492	138	14920	5.366	ng	95
63) Azobenzene	10.639	77	61041	5.351	ng	99
65) 4,6-Dinitro-2-methylph...	10.522	198	7475	3.833	ng	90
66) n-Nitrosodiphenylamine	10.592	169	62215	5.204	ng	98
67) 4-Bromophenyl-phenylether	10.975	248	20974	5.076	ng	98
68) Hexachlorobenzene	11.039	284	23159	5.067	ng	100
69) Atrazine	11.122	200	16045	5.053	ng	98
70) Pentachlorophenol	11.233	266	11357	4.401	ng	96
71) Phenanthrene	11.451	178	104484	5.594	ng	100
72) Anthracene	11.504	178	104017	5.457	ng	100
73) Carbazole	11.657	167	89967	5.521	ng	99
74) Di-n-butylphthalate	11.986	149	96777	5.426	ng	99
75) Fluoranthene	12.645	202	102797	5.890	ng	99
77) Benzidine	12.763	184	36585	4.499	ng	98
78) Pyrene	12.874	202	105394	5.170	ng	99
80) Butylbenzylphthalate	13.492	149	25251	4.483	ng	96
81) Benzo(a)anthracene	14.063	228	77800	5.332	ng	100
82) 3,3'-Dichlorobenzidine	14.021	252	19673	4.445	ng	98
83) Chrysene	14.098	228	66761	5.092	ng	99
84) Bis(2-ethylhexyl)phtha...	14.051	149	27864	3.864	ng	98
87) Indeno(1,2,3-cd)pyrene	17.068	276	55034	4.733	ng	99
88) Benzo(b)fluoranthene	15.121	252	51014	5.565	ng	98
89) Benzo(k)fluoranthene	15.151	252	46114	5.371	ng	98
90) Benzo(a)pyrene	15.498	252	44694	5.172	ng	99
91) Dibenzo(a,h)anthracene	17.092	278	44618	4.731	ng	98
92) Benzo(g,h,i)perylene	17.527	276	44684	4.737	ng	97

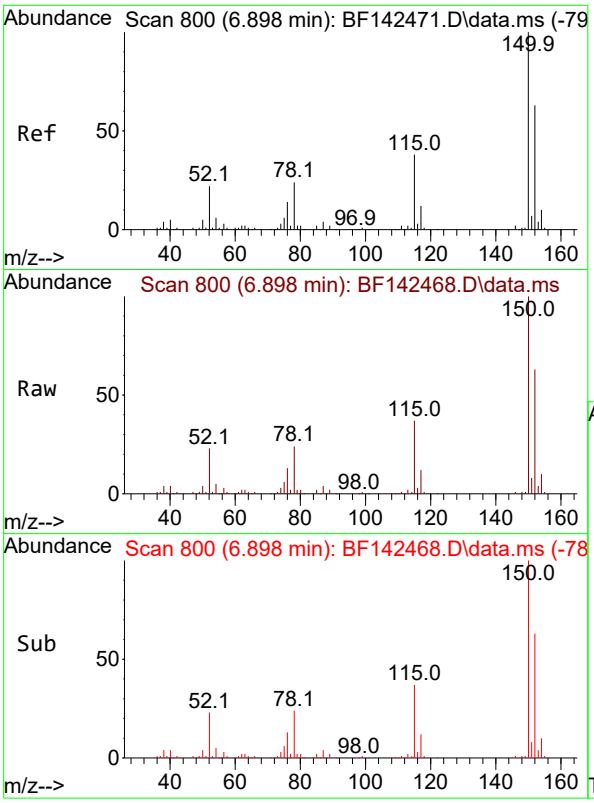
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142468.D
Acq On : 20 May 2025 12:38
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Quant Time: May 20 16:54:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



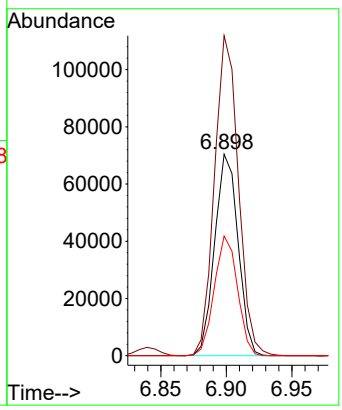


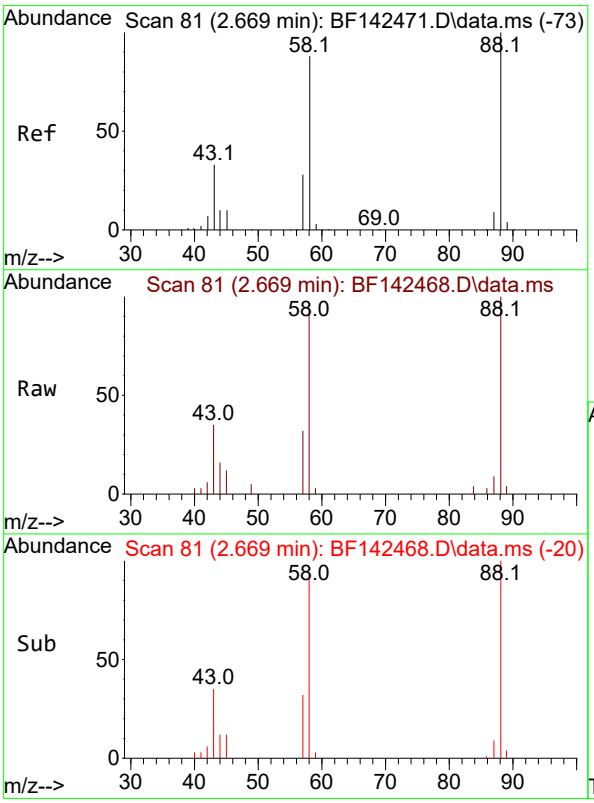
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:152 Resp: 87254

Ion	Ratio	Lower	Upper
152	100		
150	158.8	128.2	192.4
115	59.4	48.3	72.5

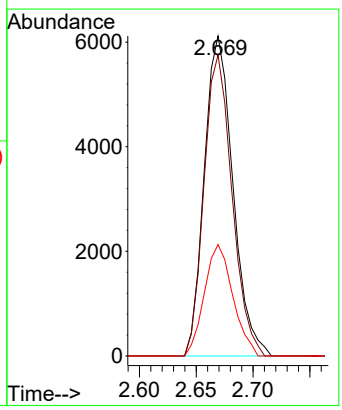


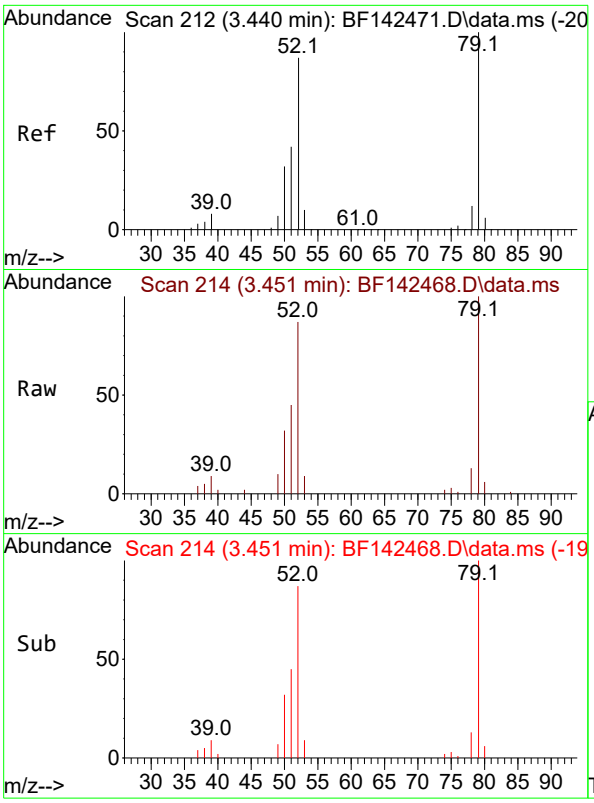


#2
1,4-Dioxane
Concen: 5.186 ng
RT: 2.669 min Scan# 81
Delta R.T. 0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion: 88 Resp: 10748

Ion	Ratio	Lower	Upper
88	100		
58	91.6	70.8	106.2
43	34.5	26.6	40.0



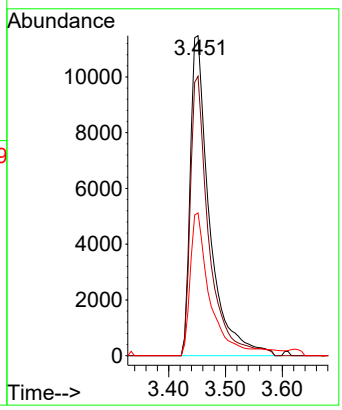


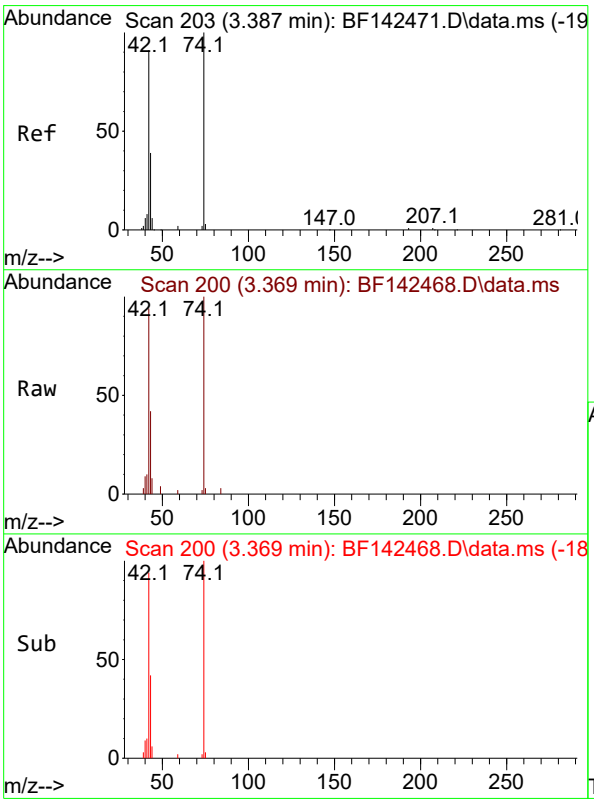
#3
Pyridine
Concen: 5.115 ng
RT: 3.451 min Scan# 21
Delta R.T. 0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 79 Resp: 26993

Ion	Ratio	Lower	Upper
79	100		
52	87.3	69.2	103.8
51	44.6	33.3	49.9

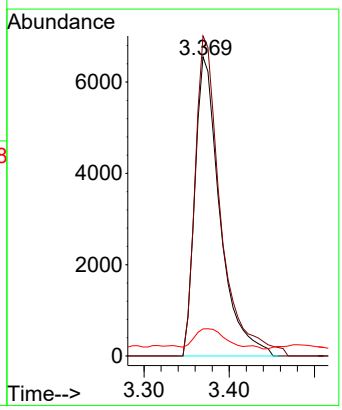


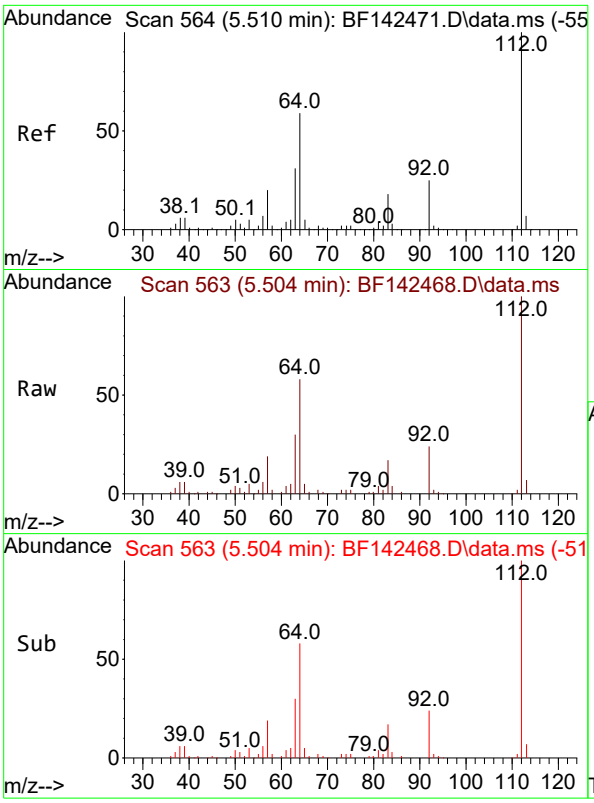


#4
n-Nitrosodimethylamine
Concen: 4.870 ng
RT: 3.369 min Scan# 200
Delta R.T. -0.035 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion: 42 Resp: 13346

Ion	Ratio	Lower	Upper
42	100		
74	106.9	88.2	132.4
44	9.1	5.4	8.2#



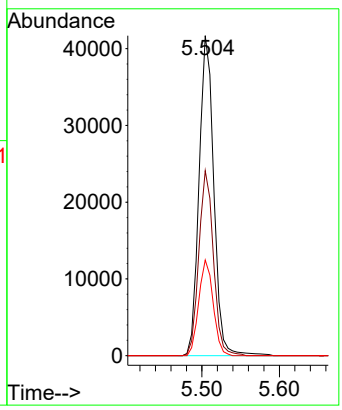


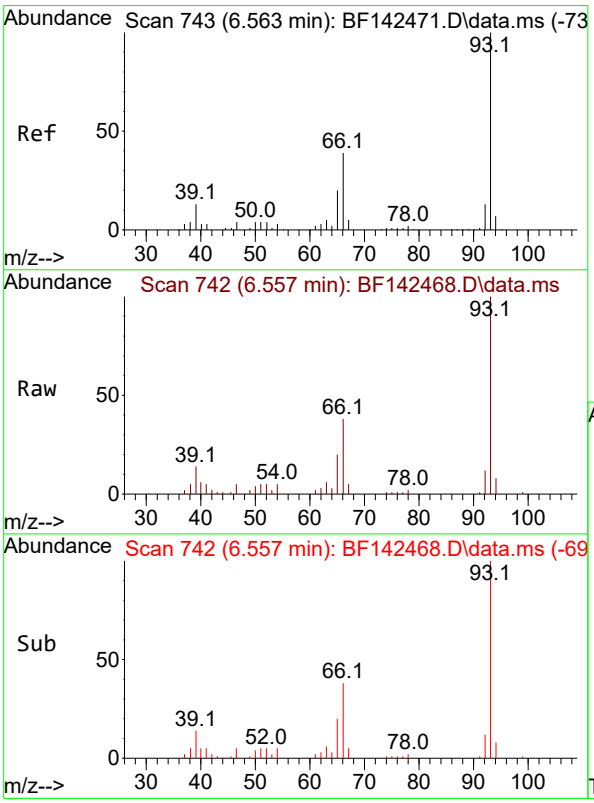
#5
2-Fluorophenol
Concen: 10.647 ng
RT: 5.504 min Scan# 5
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:112 Resp: 55140

Ion	Ratio	Lower	Upper
112	100		
64	57.8	47.5	71.3
63	29.9	24.9	37.3

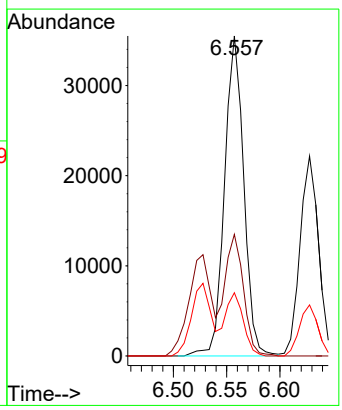


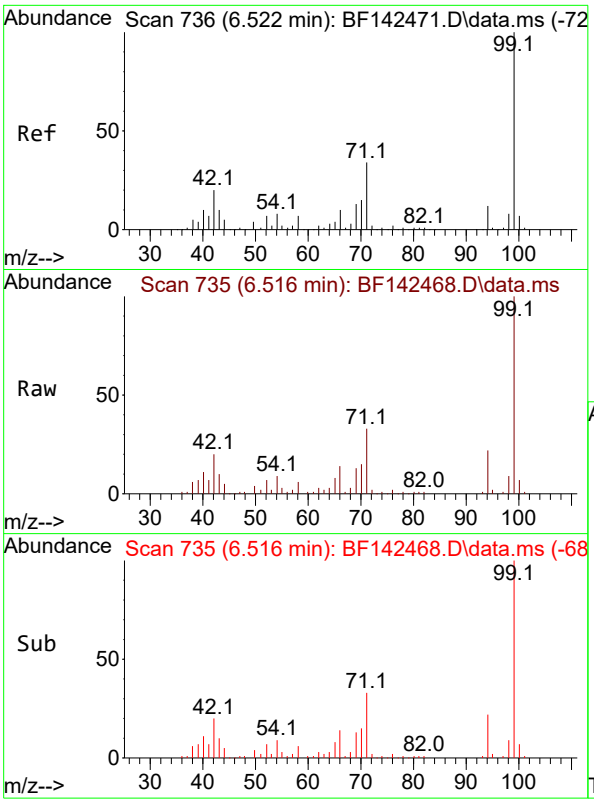


#6
Aniline
Concen: 5.318 ng
RT: 6.557 min Scan# 742
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion: 93 Resp: 44576

Ion	Ratio	Lower	Upper
93	100		
66	38.0	32.0	48.0
65	19.7	16.1	24.1



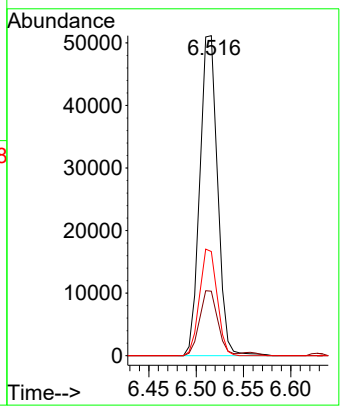


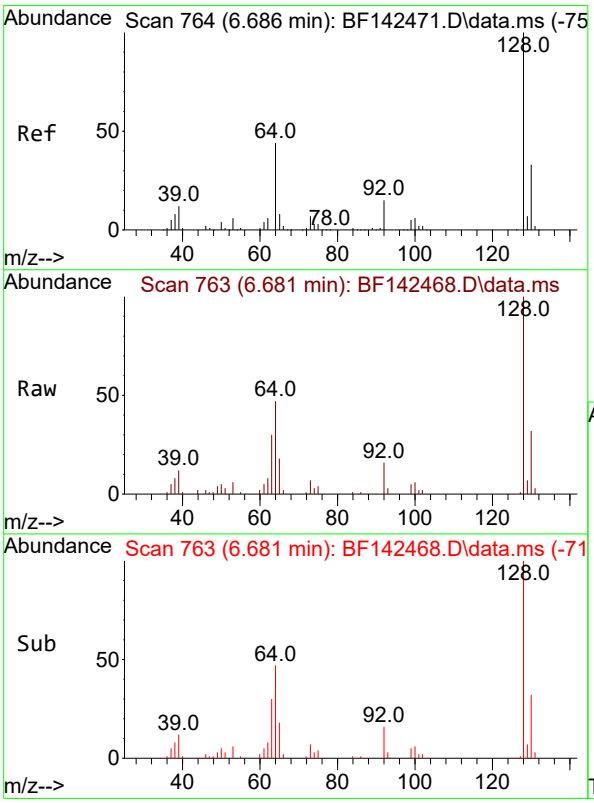
#7
Phenol-d6
Concen: 10.710 ng
RT: 6.516 min Scan# 7
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 99 Resp: 66768

Ion	Ratio	Lower	Upper
99	100		
42	20.2	16.2	24.2
71	32.6	27.3	40.9

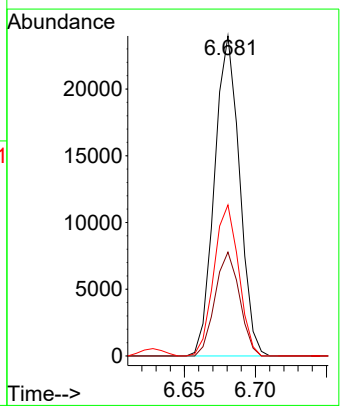


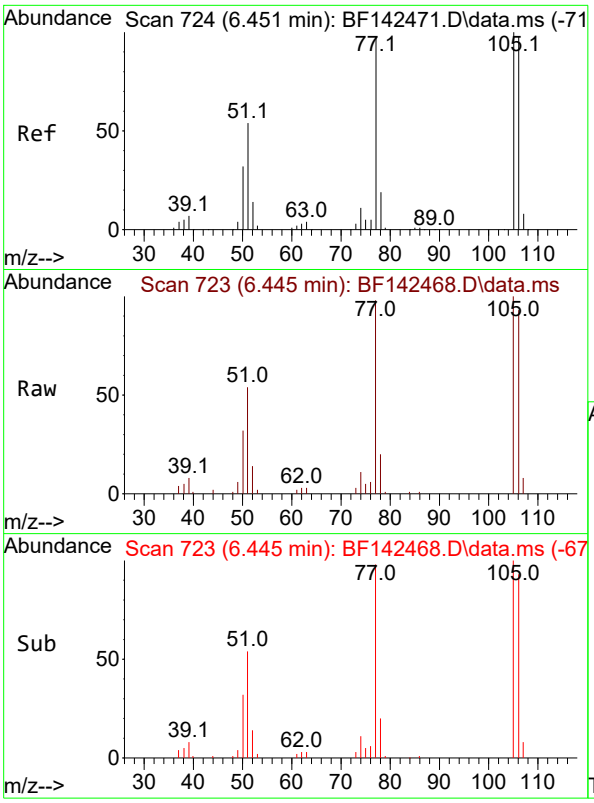


#8
2-Chlorophenol
Concen: 5.201 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:128 Resp: 29341

Ion	Ratio	Lower	Upper
128	100		
130	32.4	12.6	52.6
64	47.2	25.1	65.1



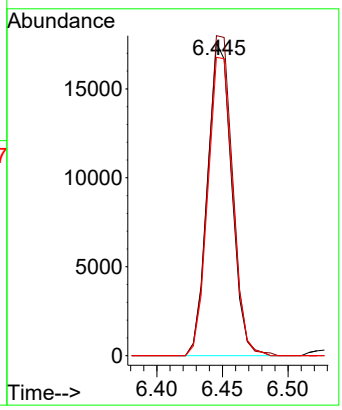


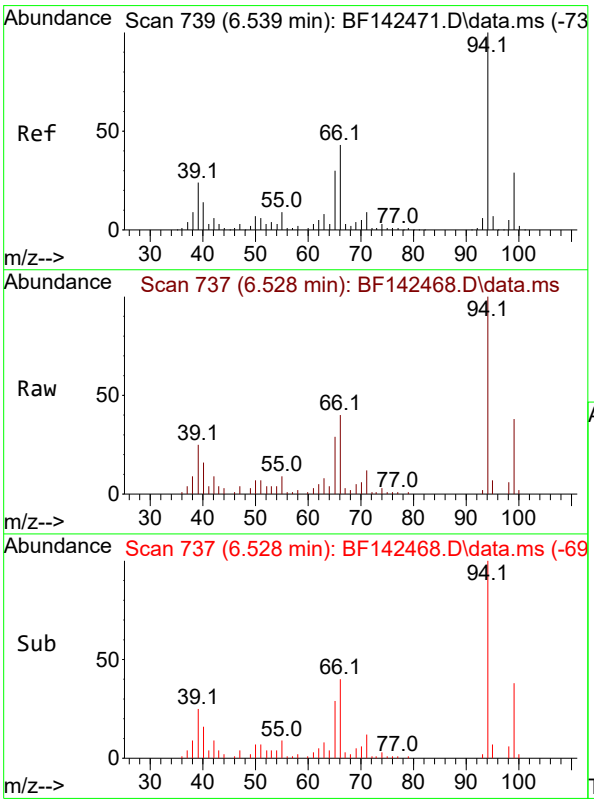
#9
Benzaldehyde
Concen: 6.020 ng
RT: 6.445 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 77 Resp: 22572

Ion	Ratio	Lower	Upper
77	100		
105	102.2	82.5	122.5
106	95.3	80.0	120.0

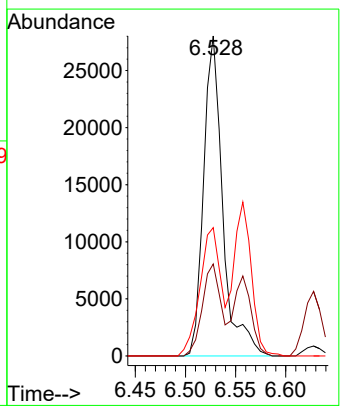


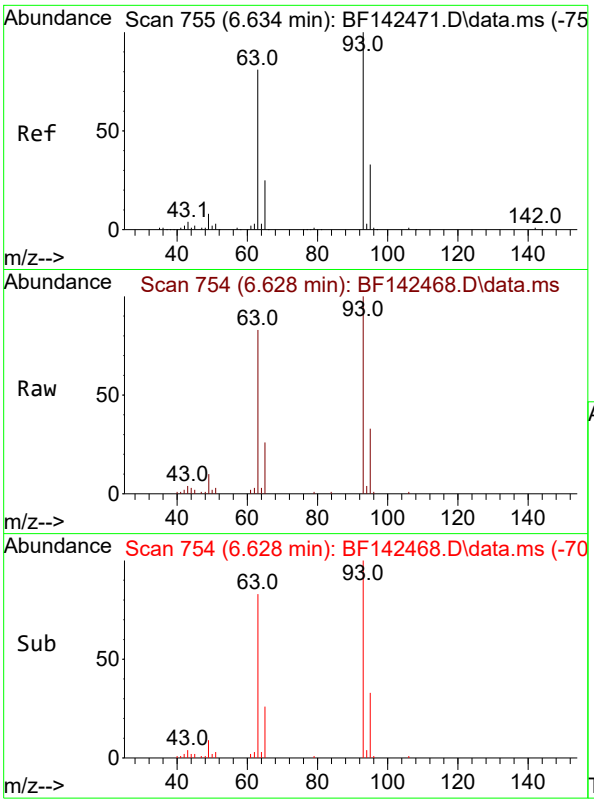


#10
Phenol
Concen: 5.336 ng
RT: 6.528 min Scan# 737
Delta R.T. -0.023 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion: 94 Resp: 37431

Ion	Ratio	Lower	Upper
94	100		
65	28.8	10.3	50.3
66	40.1	22.6	62.6



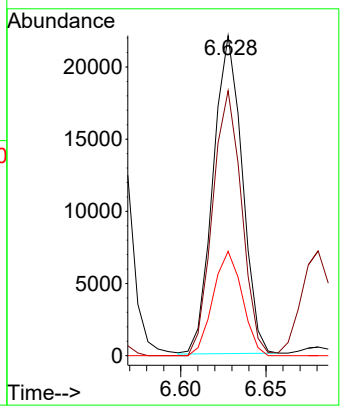


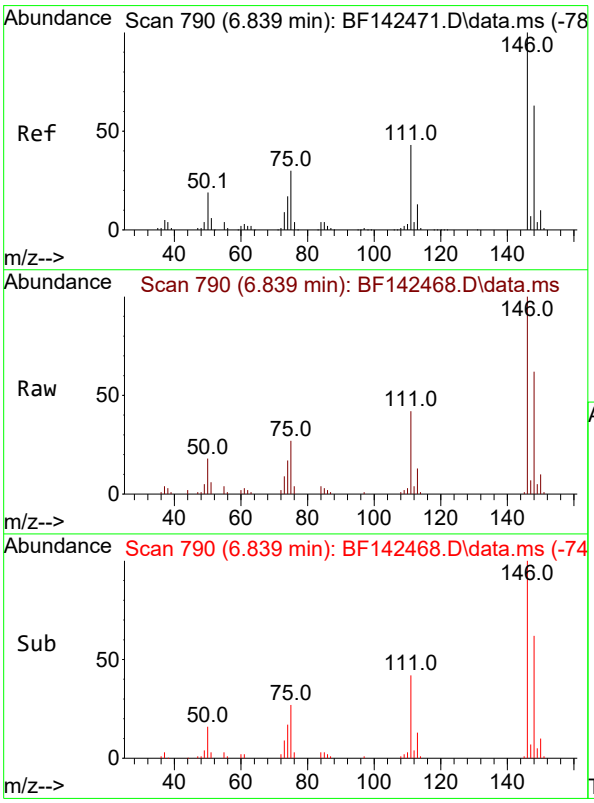
#11
bis(2-Chloroethyl)ether
Concen: 5.192 ng
RT: 6.628 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 93 Resp: 26215

Ion	Ratio	Lower	Upper
93	100		
63	82.8	60.2	100.2
95	32.6	12.3	52.3

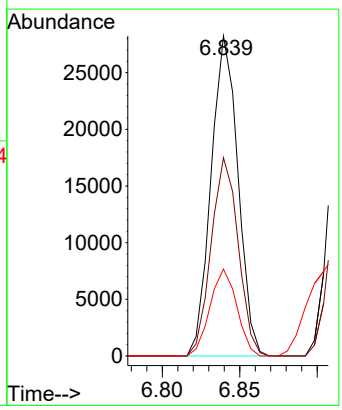


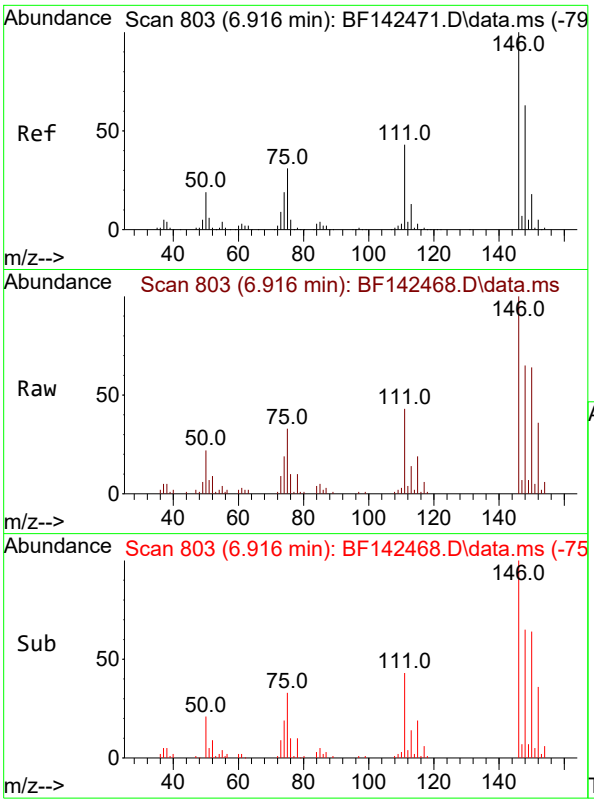


#12
1,3-Dichlorobenzene
Concen: 5.413 ng
RT: 6.839 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:146 Resp: 34073

Ion	Ratio	Lower	Upper
146	100		
148	62.0	50.6	75.8
75	27.1	23.8	35.6



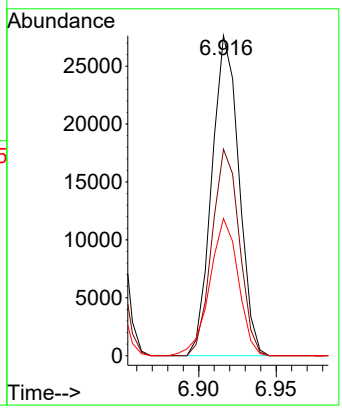


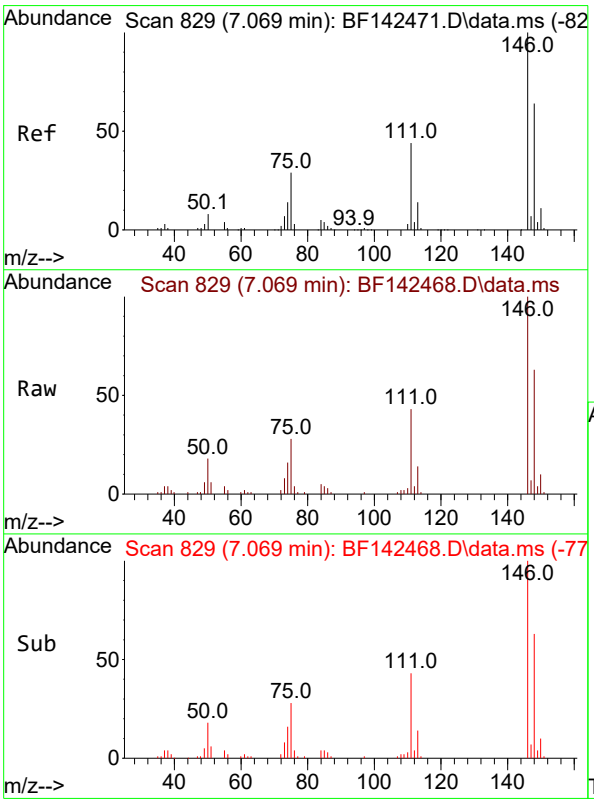
#13
1,4-Dichlorobenzene
Concen: 5.298 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:146 Resp: 33593

Ion	Ratio	Lower	Upper
146	100		
148	64.6	50.4	75.6
111	42.9	34.1	51.1

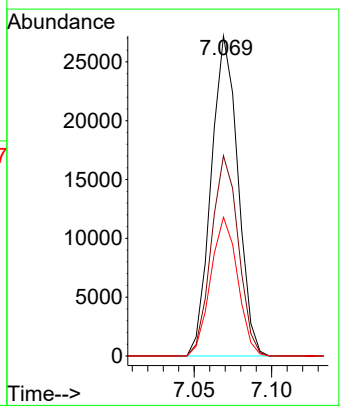


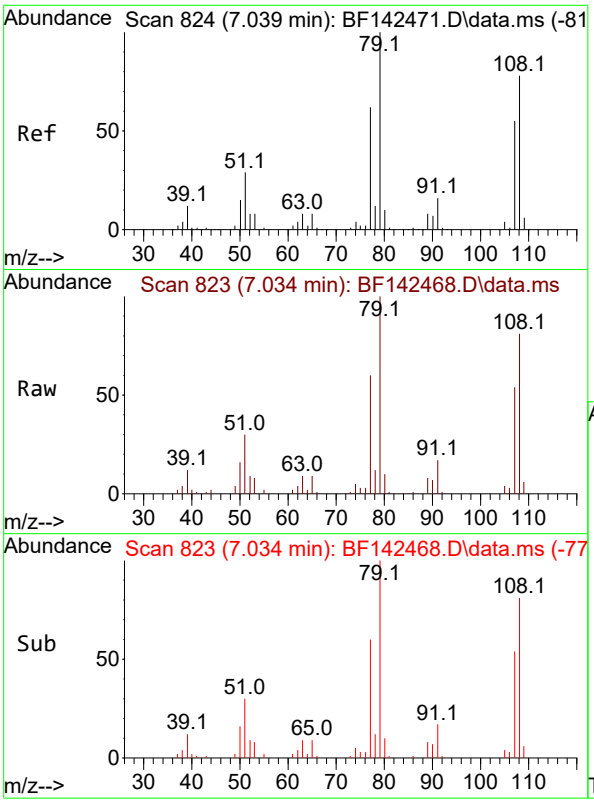


#14
1,2-Dichlorobenzene
Concen: 5.374 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:146 Resp: 32604

Ion	Ratio	Lower	Upper
146	100		
148	62.6	51.0	76.4
111	43.4	35.0	52.6



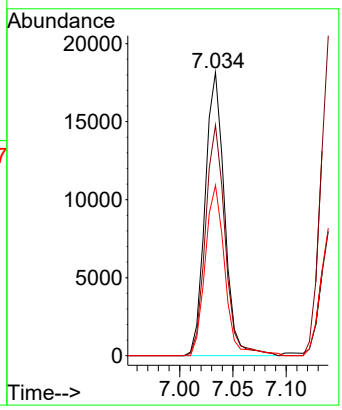


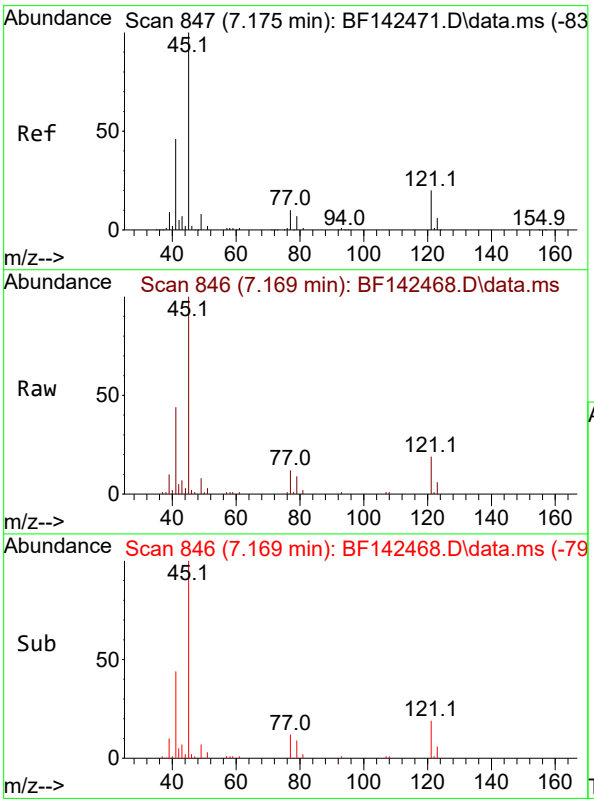
#15
Benzyl Alcohol
Concen: 5.015 ng
RT: 7.034 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 79 Resp: 23103

Ion	Ratio	Lower	Upper
79	100		
108	81.4	62.1	93.1
77	60.2	49.5	74.3

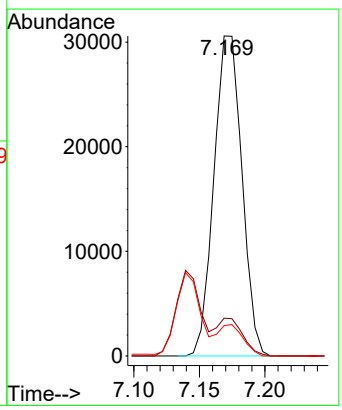


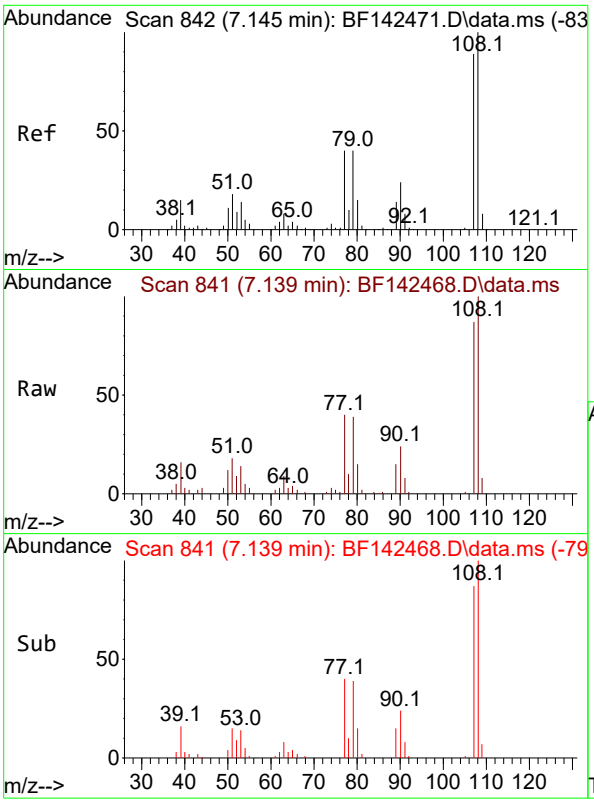


#16
2,2'-oxybis(1-Chloropropane)
Concen: 5.355 ng
RT: 7.169 min Scan# 846
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion: 45 Resp: 45414

Ion	Ratio	Lower	Upper
45	100		
77	11.8	0.0	32.0
79	9.5	0.0	29.2



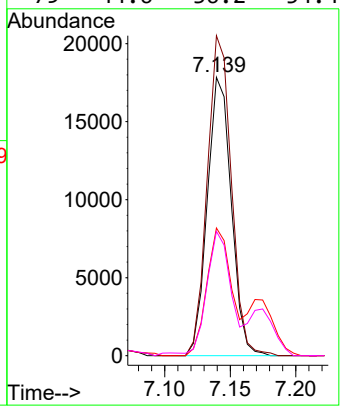


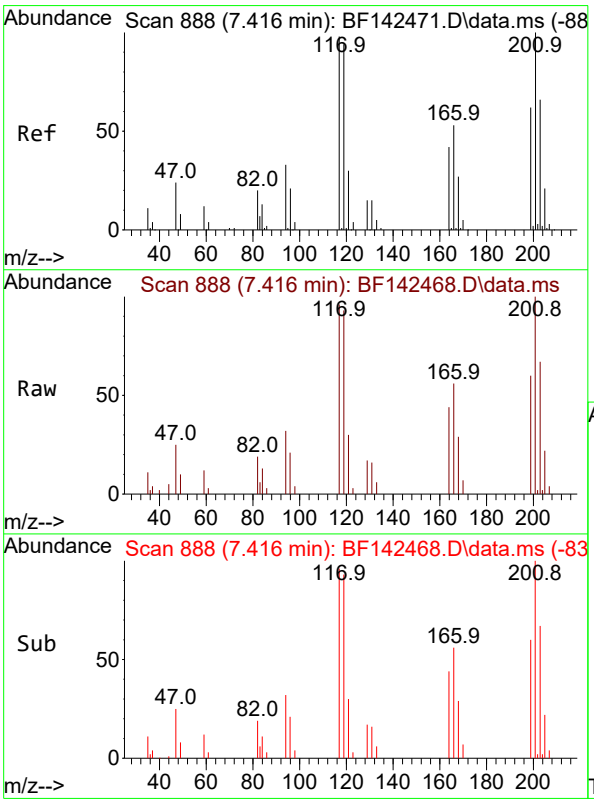
#17
2-Methylphenol
Concen: 5.153 ng
RT: 7.139 min Scan# 84
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:107 Resp: 22693

Ion	Ratio	Lower	Upper
107	100		
108	114.9	90.2	135.2
77	45.9	36.1	54.1
79	44.6	36.2	54.4

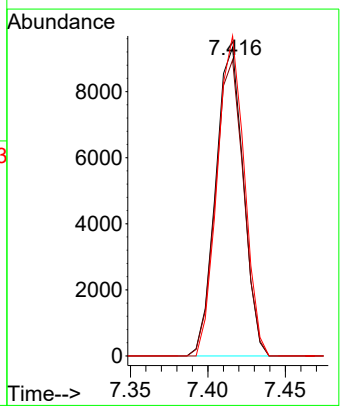


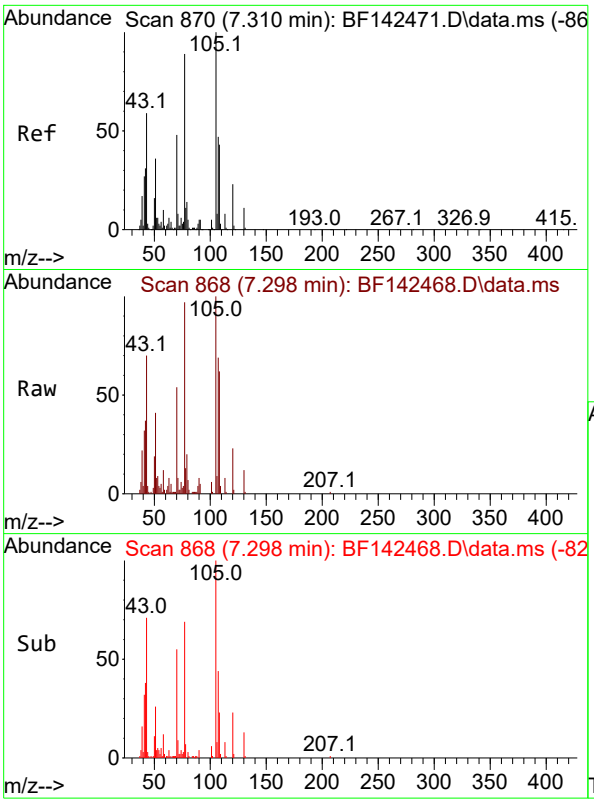


#18
Hexachloroethane
Concen: 5.255 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:117 Resp: 11635

Ion	Ratio	Lower	Upper
117	100		
119	96.0	76.6	114.8
201	103.7	81.3	121.9



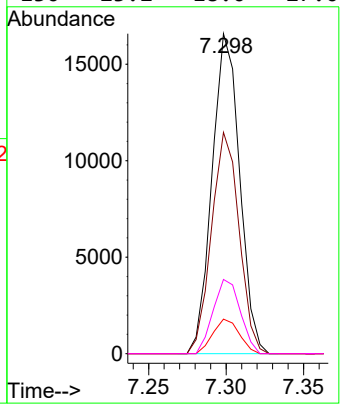


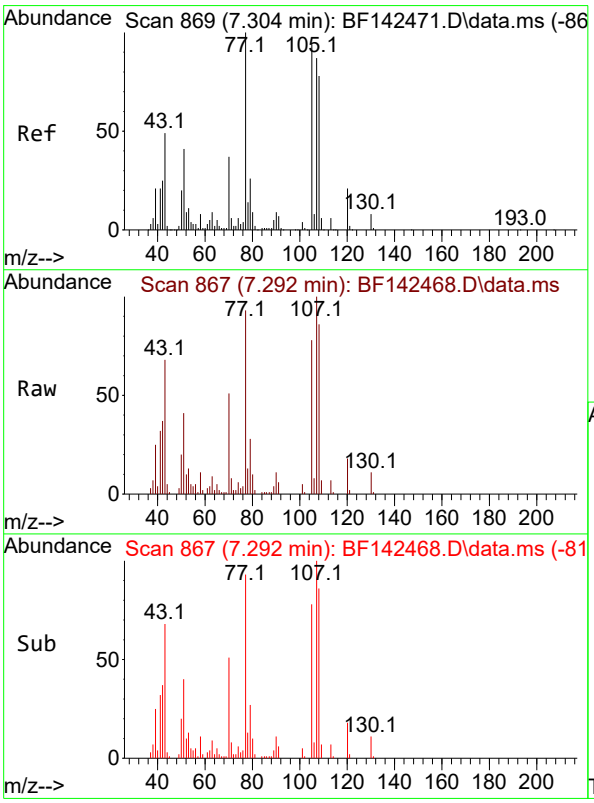
#19
n-Nitroso-di-n-propylamine
Concen: 5.313 ng
RT: 7.298 min Scan# 8
Delta R.T. -0.029 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 70 Resp: 20527

Ion	Ratio	Lower	Upper
70	100		
42	69.1	52.4	78.6
101	10.8	7.8	11.8
130	23.2	18.0	27.0

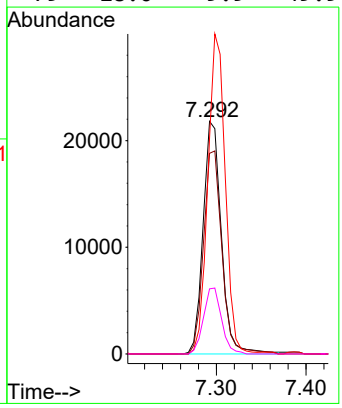


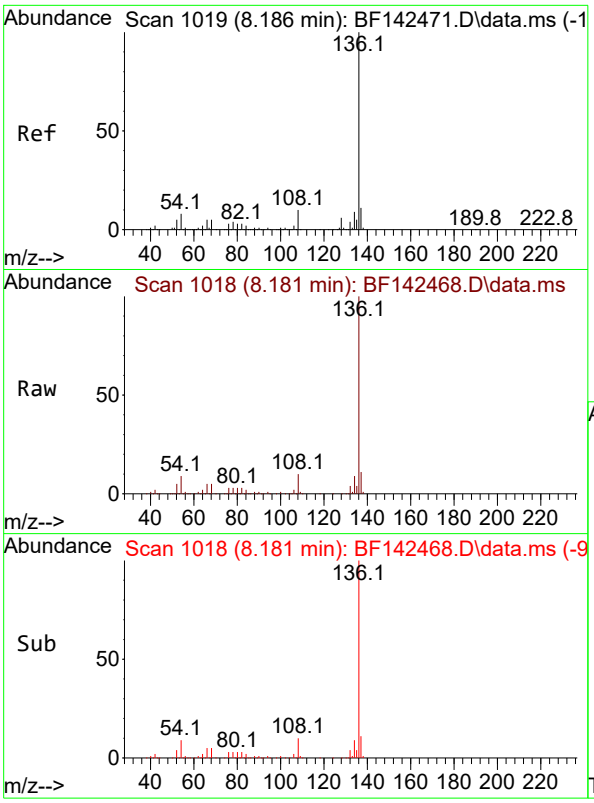


#20
3+4-Methylphenols
Concen: 5.460 ng
RT: 7.292 min Scan# 867
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:107 Resp: 30797

Ion	Ratio	Lower	Upper
107	100		
108	86.3	70.4	110.4
77	92.8	95.4	135.4#
79	28.0	9.9	49.9



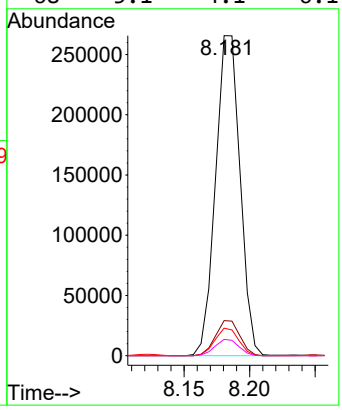


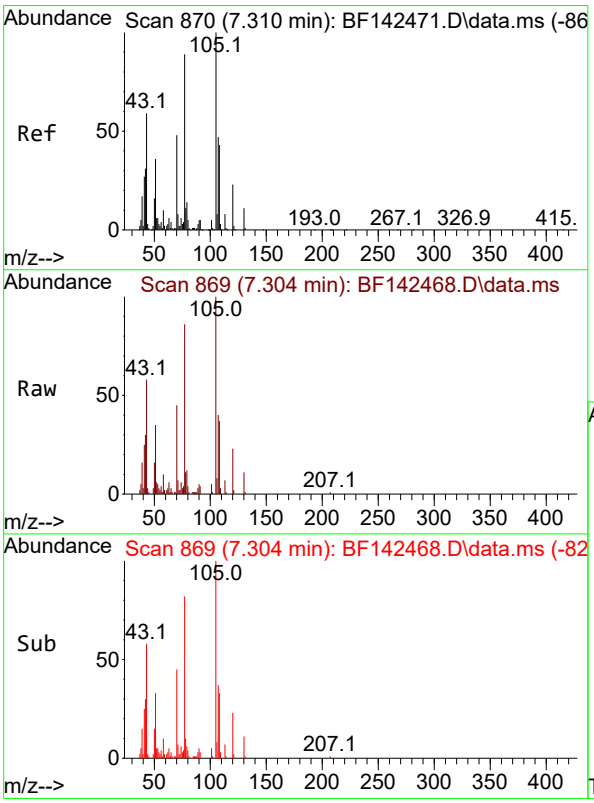
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:136 Resp: 345154

Ion	Ratio	Lower	Upper
136	100		
137	11.0	8.6	13.0
54	8.6	6.6	10.0
68	5.1	4.1	6.1

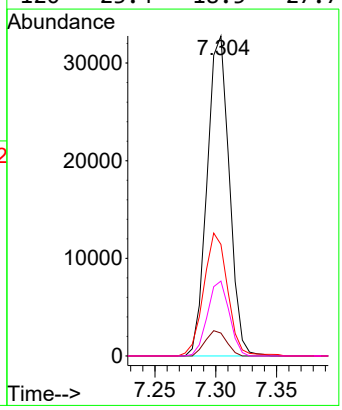


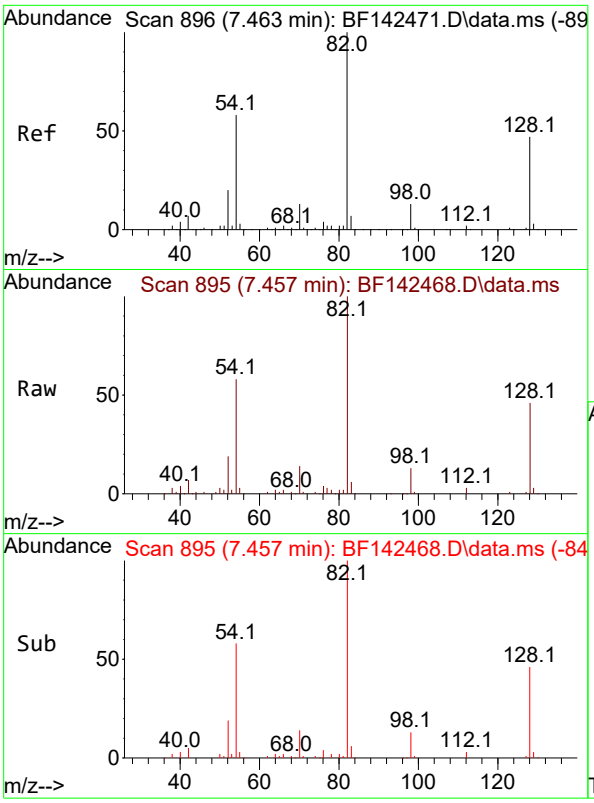


#22
Acetophenone
Concen: 5.423 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:105 Resp: 41438

Ion	Ratio	Lower	Upper
105	100		
71	7.2	6.4	9.6
51	34.9	28.6	42.8
120	23.4	18.5	27.7



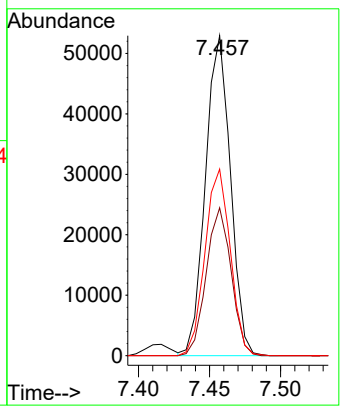


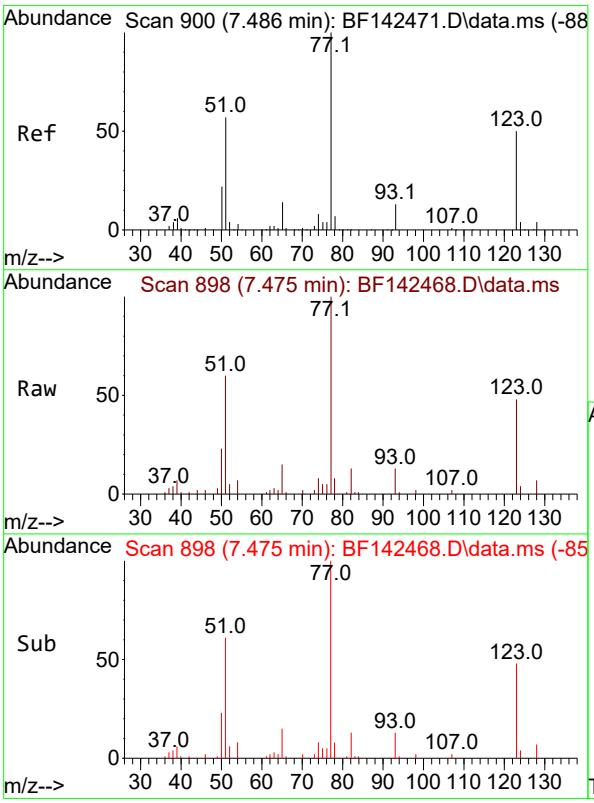
#23
Nitrobenzene-d5
Concen: 10.249 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 82 Resp: 64876

Ion	Ratio	Lower	Upper
82	100		
128	46.2	37.4	56.2
54	58.3	46.6	70.0

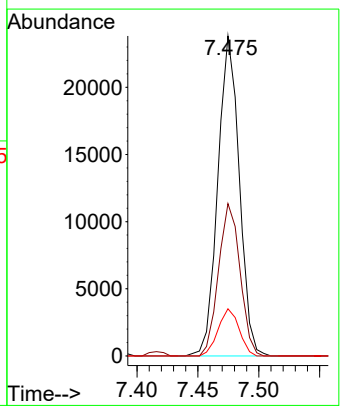


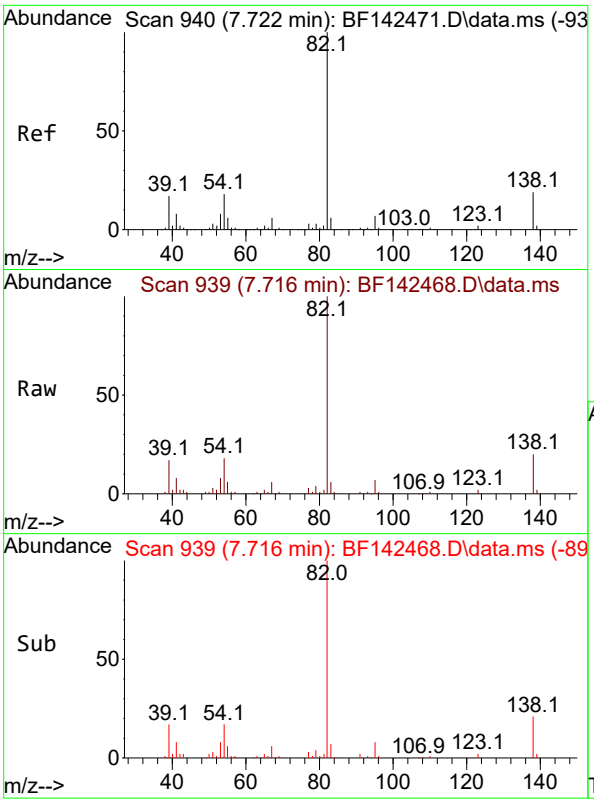


#24
Nitrobenzene
Concen: 5.114 ng
RT: 7.475 min Scan# 898
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion: 77 Resp: 29193

Ion	Ratio	Lower	Upper
77	100		
123	47.6	40.6	61.0
65	14.7	11.4	17.2



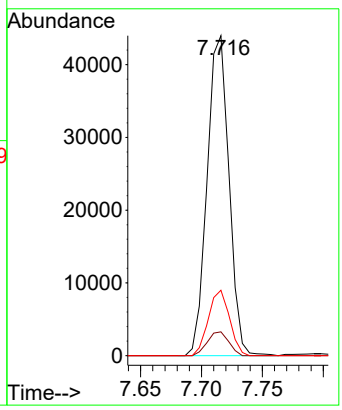


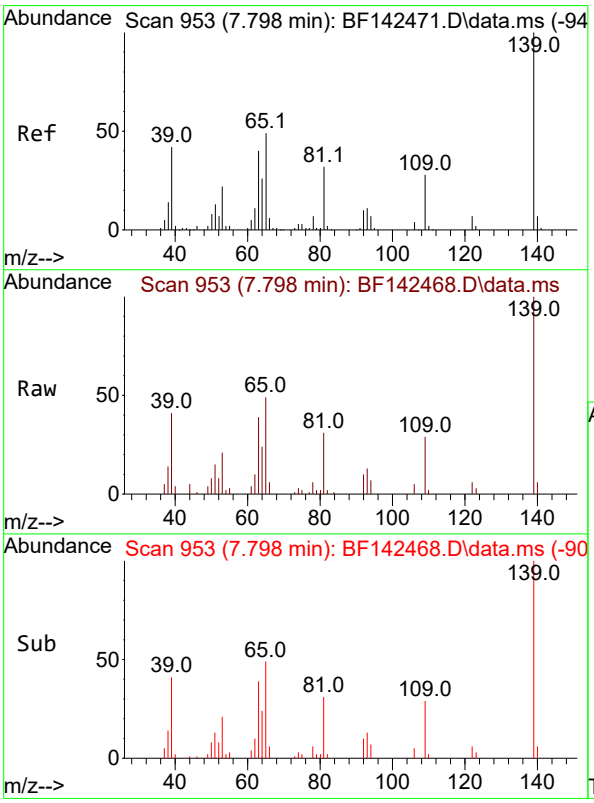
#25
Isophorone
Concen: 5.182 ng
RT: 7.716 min Scan# 9
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 82 Resp: 54838

Ion	Ratio	Lower	Upper
82	100		
95	7.4	6.0	9.0
138	20.4	15.5	23.3

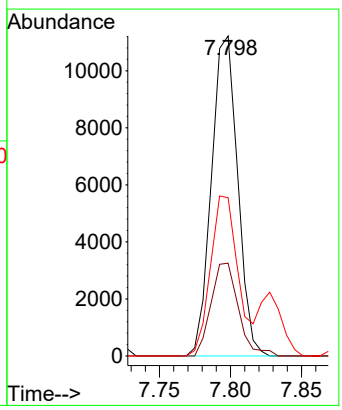


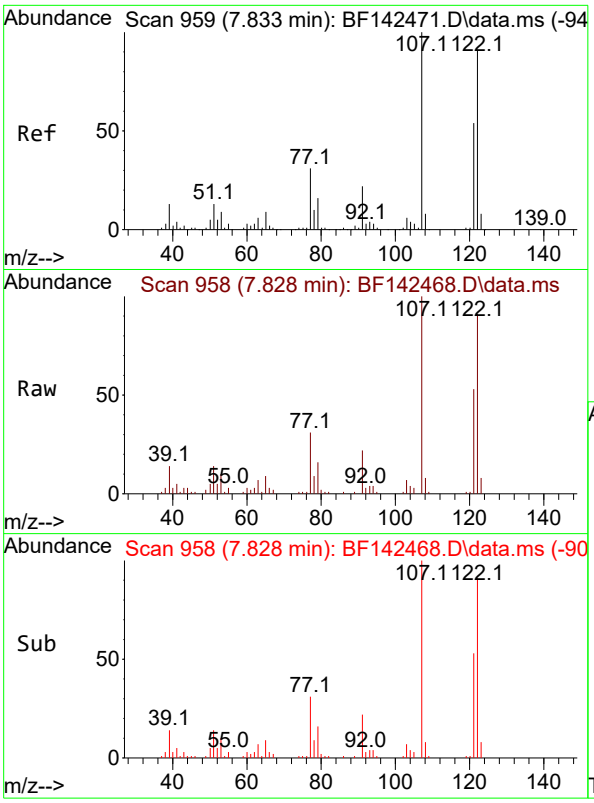


#26
2-Nitrophenol
Concen: 4.716 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:139 Resp: 14387

Ion	Ratio	Lower	Upper
139	100		
109	29.0	22.6	33.8
65	49.4	39.4	59.0



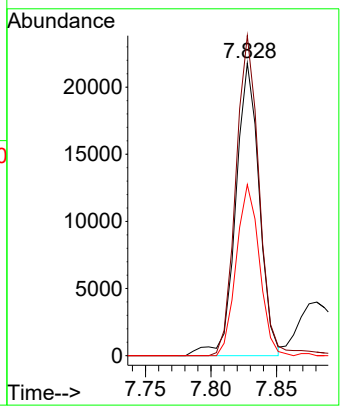


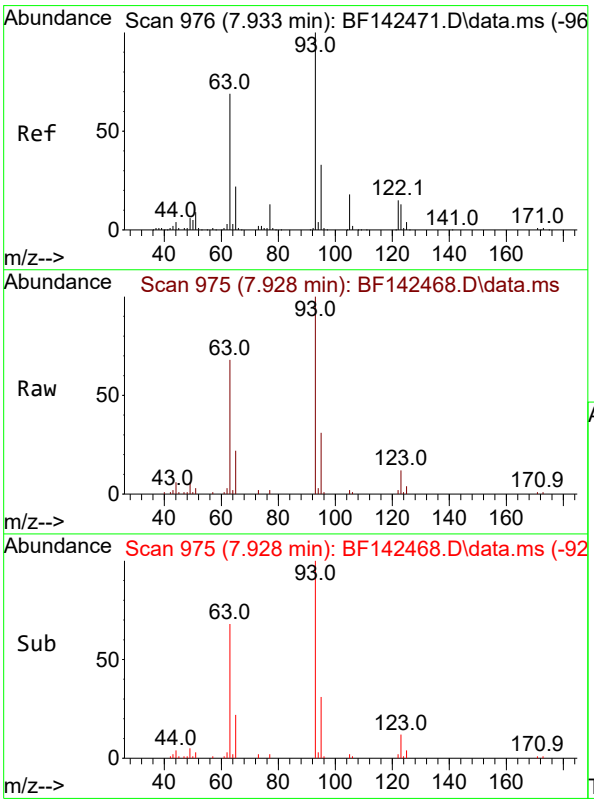
#27
2,4-Dimethylphenol
Concen: 5.051 ng
RT: 7.828 min Scan# 9
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:122 Resp: 27170

Ion	Ratio	Lower	Upper
122	100		
107	109.4	88.1	132.1
121	58.4	47.3	70.9

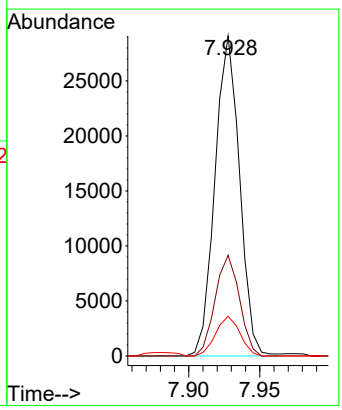


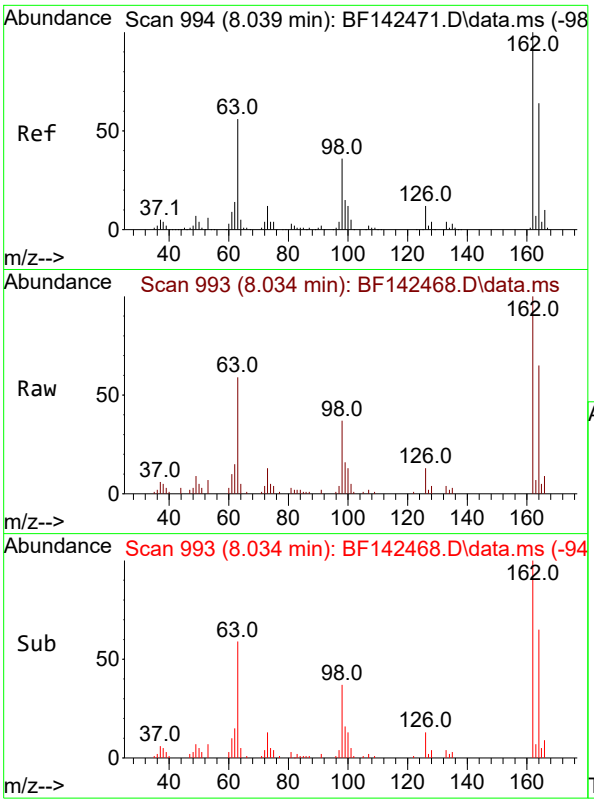


#28
bis(2-Chloroethoxy)methane
Concen: 5.296 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion: 93 Resp: 35010

Ion	Ratio	Lower	Upper
93	100		
95	31.4	26.4	39.6
123	12.4	10.6	15.8



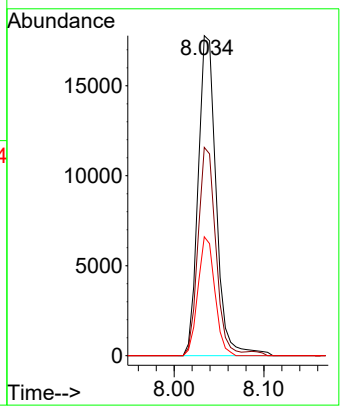


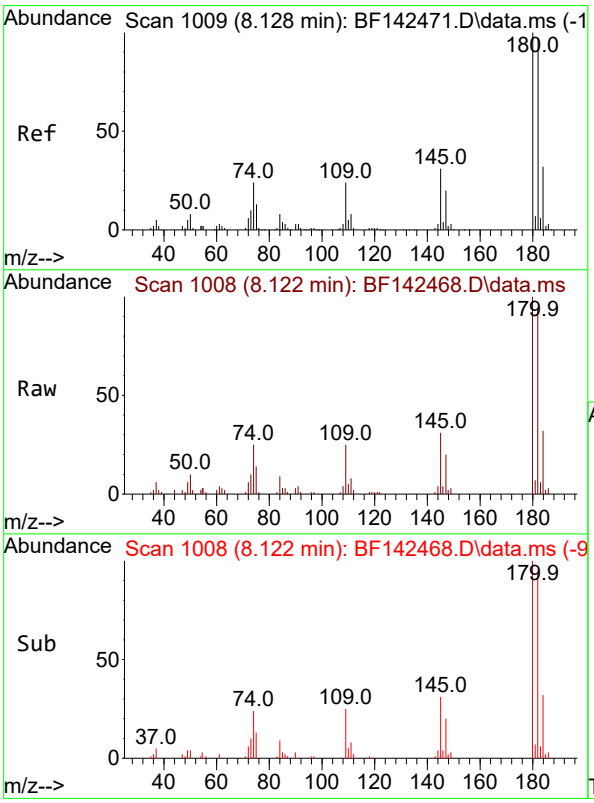
#29
2,4-Dichlorophenol
Concen: 5.072 ng
RT: 8.034 min Scan# 9
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:162 Resp: 24812

Ion	Ratio	Lower	Upper
162	100		
164	65.1	43.7	83.7
98	37.2	15.5	55.5

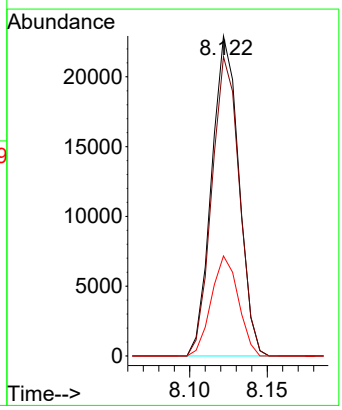


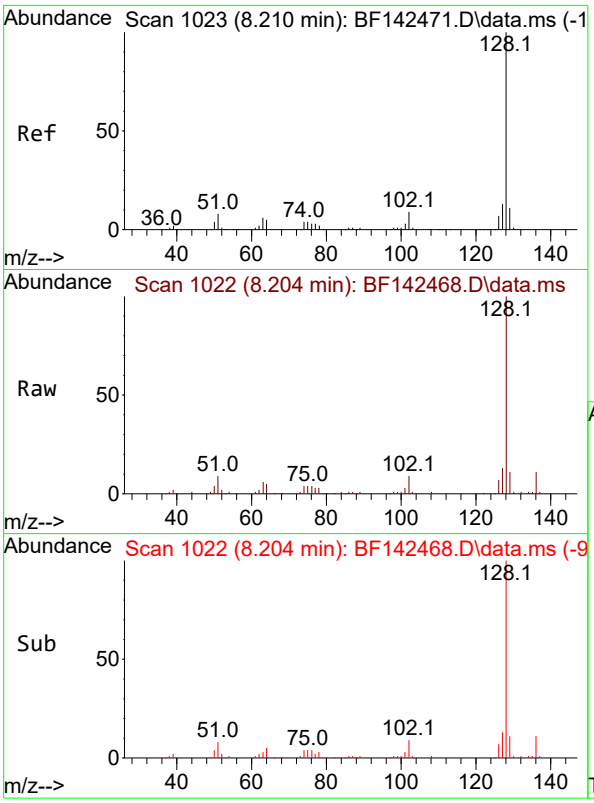


#30
1,2,4-Trichlorobenzene
Concen: 5.281 ng
RT: 8.122 min Scan# 1008
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:180 Resp: 28037

Ion	Ratio	Lower	Upper
180	100		
182	93.5	78.0	117.0
145	31.3	25.0	37.6



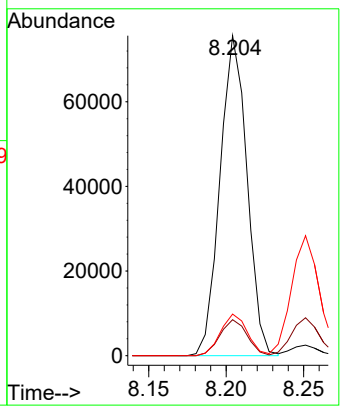


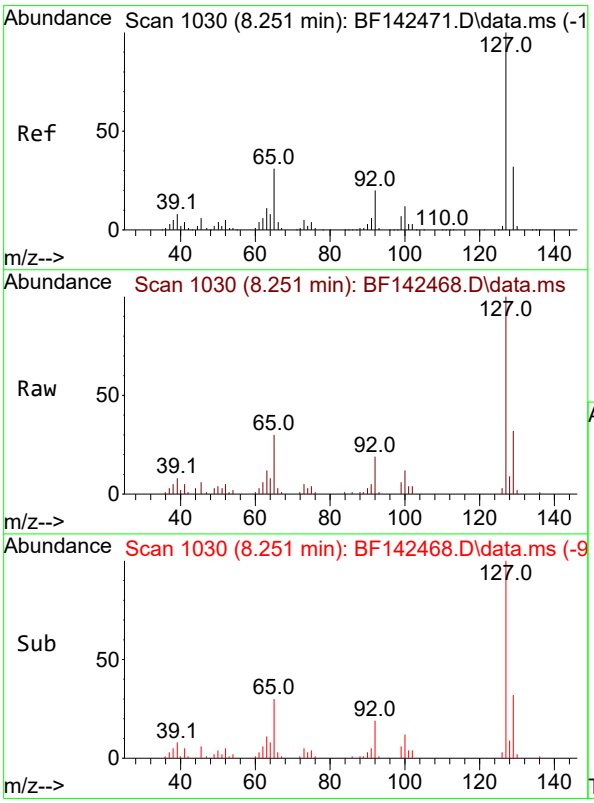
#31
Naphthalene
Concen: 5.388 ng
RT: 8.204 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:128 Resp: 91563

Ion	Ratio	Lower	Upper
128	100		
129	11.3	8.9	13.3
127	13.0	10.5	15.7

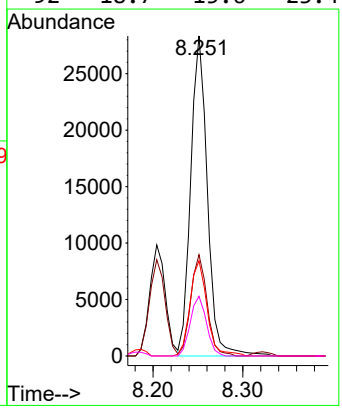


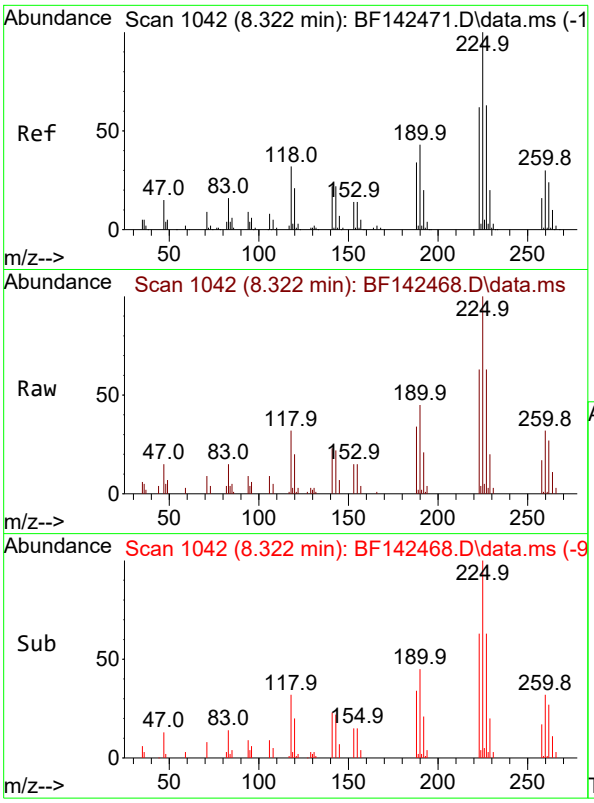


#33
4-Chloroaniline
Concen: 5.314 ng
RT: 8.251 min Scan# 1030
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:127 Resp: 36597

Ion	Ratio	Lower	Upper
127	100		
129	31.6	26.1	39.1
65	29.7	24.9	37.3
92	18.7	15.6	23.4



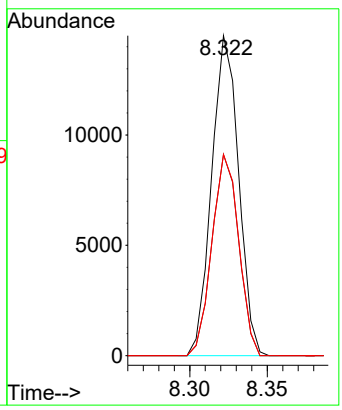


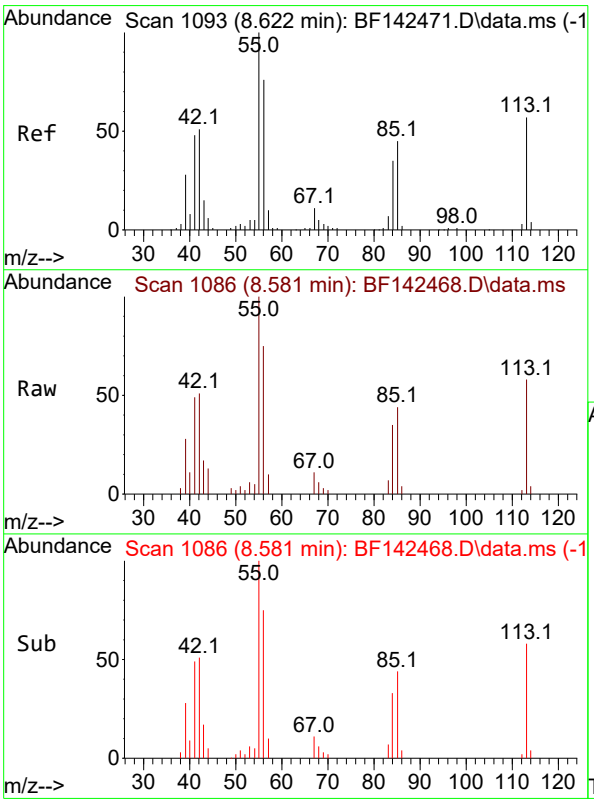
#34
Hexachlorobutadiene
Concen: 5.280 ng
RT: 8.322 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:225 Resp: 17505

Ion	Ratio	Lower	Upper
225	100		
223	62.9	49.7	74.5
227	62.8	50.3	75.5

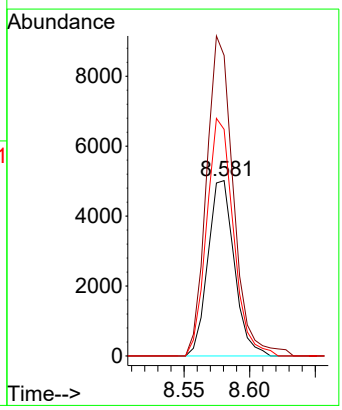


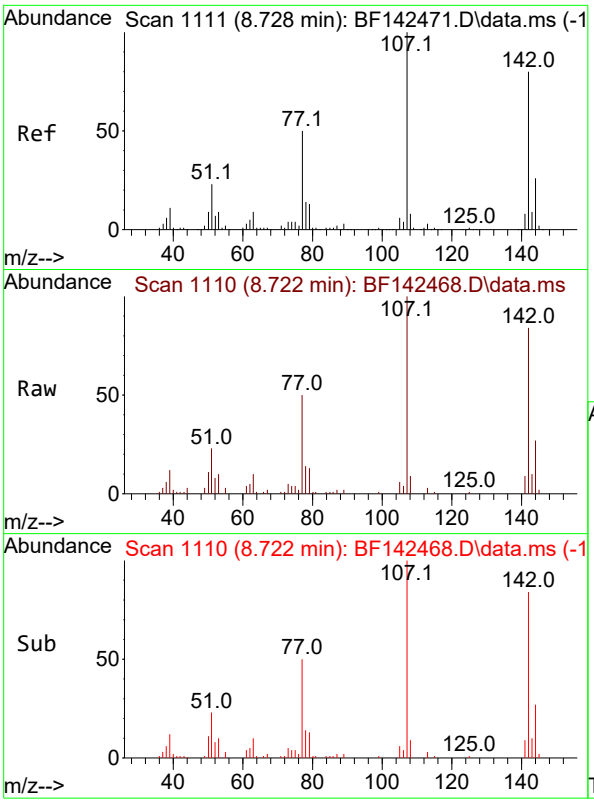


#35
Caprolactam
Concen: 5.109 ng
RT: 8.581 min Scan# 1086
Delta R.T. -0.065 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:113 Resp: 7020

Ion	Ratio	Lower	Upper
113	100		
55	171.4	154.7	194.7
56	129.2	113.2	153.2



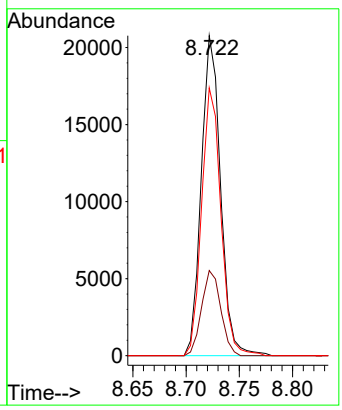


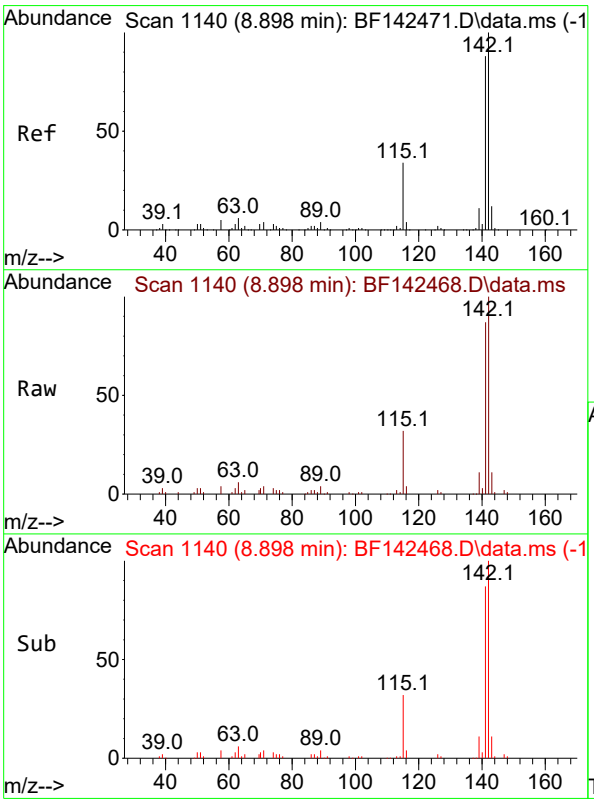
#36
4-Chloro-3-methylphenol
Concen: 5.225 ng
RT: 8.722 min Scan# 11
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:107 Resp: 26197

Ion	Ratio	Lower	Upper
107	100		
144	26.6	20.9	31.3
142	83.7	64.2	96.2

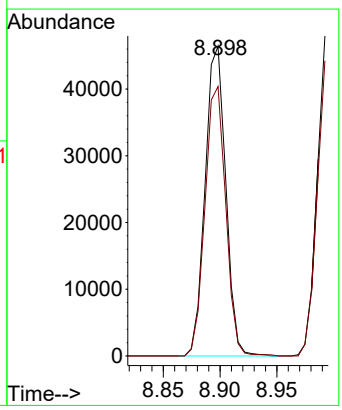


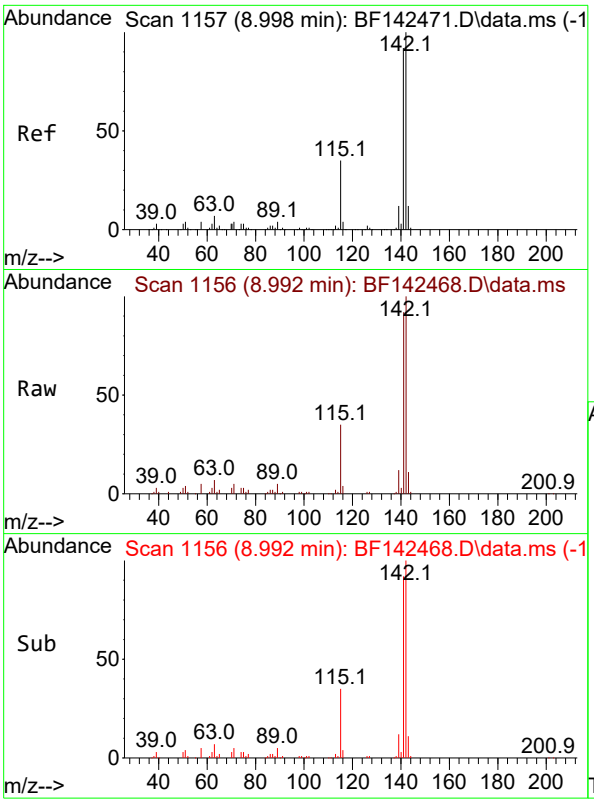


#37
2-Methylnaphthalene
Concen: 5.478 ng
RT: 8.898 min Scan# 1140
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:142 Resp: 58574

Ion	Ratio	Lower	Upper
142	100		
141	87.0	70.7	106.1



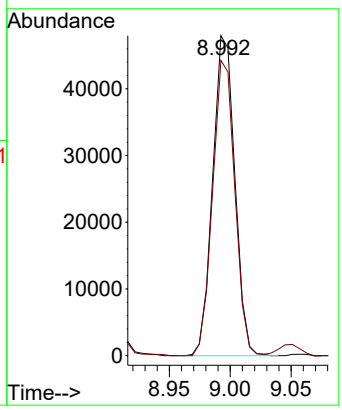


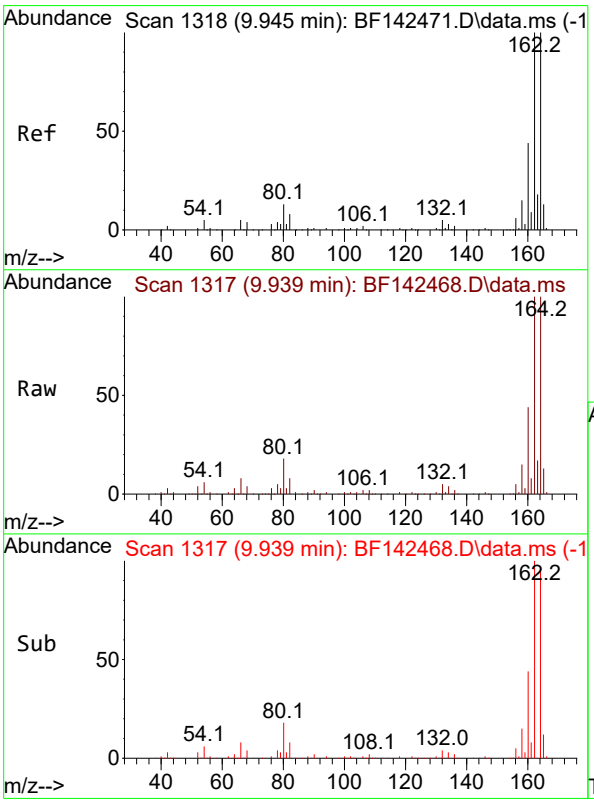
#38
1-Methylnaphthalene
Concen: 5.486 ng
RT: 8.992 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:142 Resp: 60674

Ion	Ratio	Lower	Upper
142	100		
141	92.3	73.4	110.2

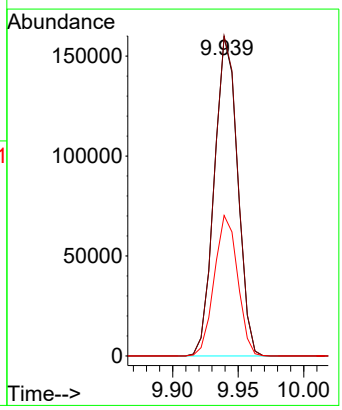


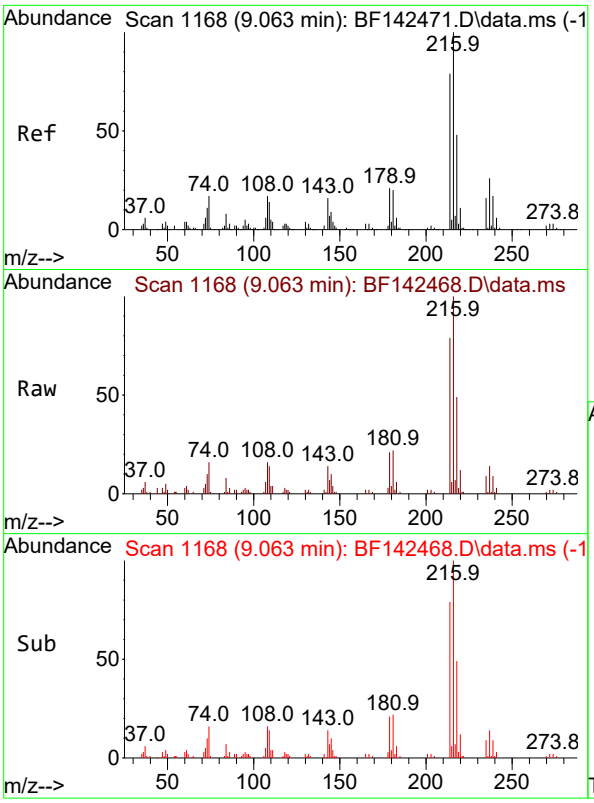


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:164 Resp: 197100

Ion	Ratio	Lower	Upper
164	100		
162	100.4	80.2	120.4
160	44.1	35.6	53.4



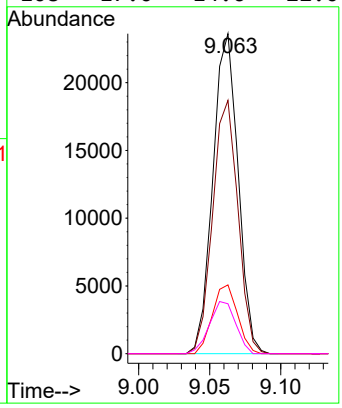


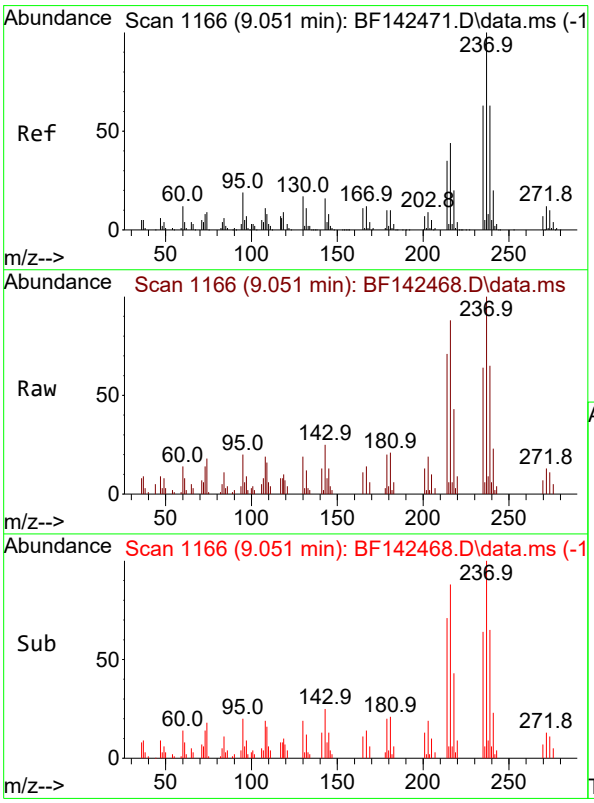
#40
1,2,4,5-Tetrachlorobenzene
Concen: 5.152 ng
RT: 9.063 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:216 Resp: 29150

Ion	Ratio	Lower	Upper
216	100		
214	79.4	62.9	94.3
179	21.5	16.9	25.3
108	17.0	14.6	22.0

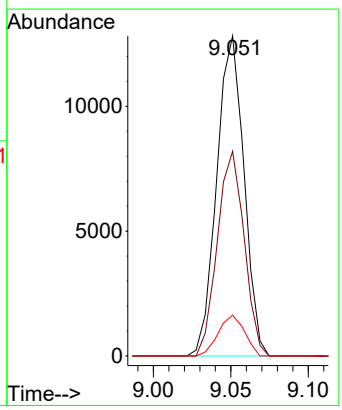


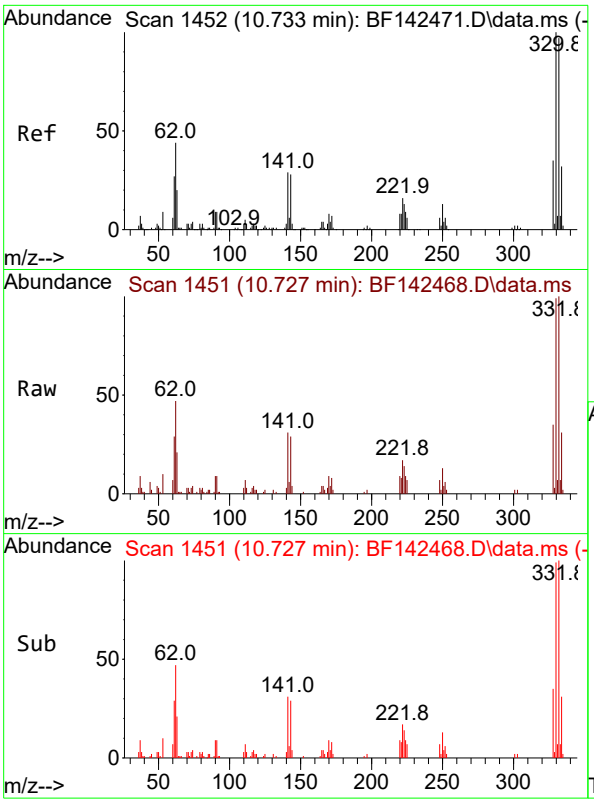


#41
Hexachlorocyclopentadiene
Concen: 4.105 ng
RT: 9.051 min Scan# 1166
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:237 Resp: 15667

Ion	Ratio	Lower	Upper
237	100		
235	64.0	43.3	83.3
272	12.7	0.0	32.4



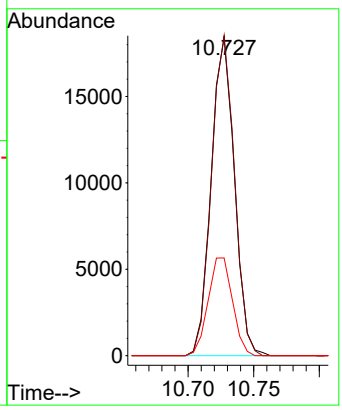


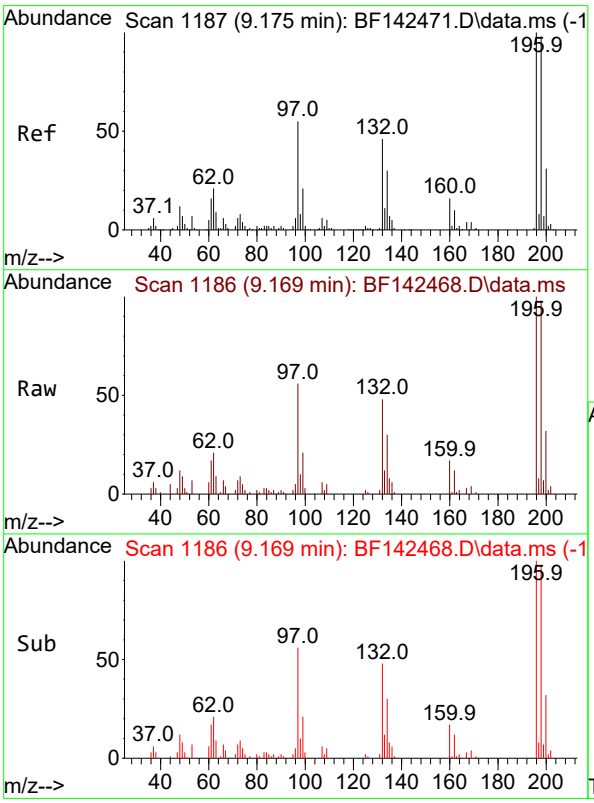
#42
2,4,6-Tribromophenol
Concen: 10.378 ng
RT: 10.727 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:330 Resp: 22702

Ion	Ratio	Lower	Upper
330	100		
332	99.5	77.6	116.4
141	32.2	24.6	36.8

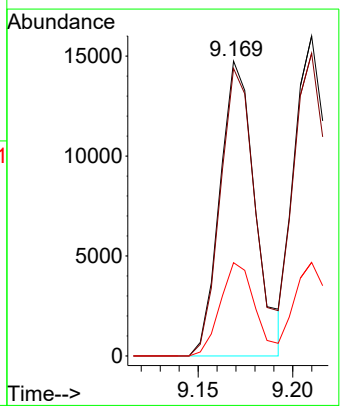


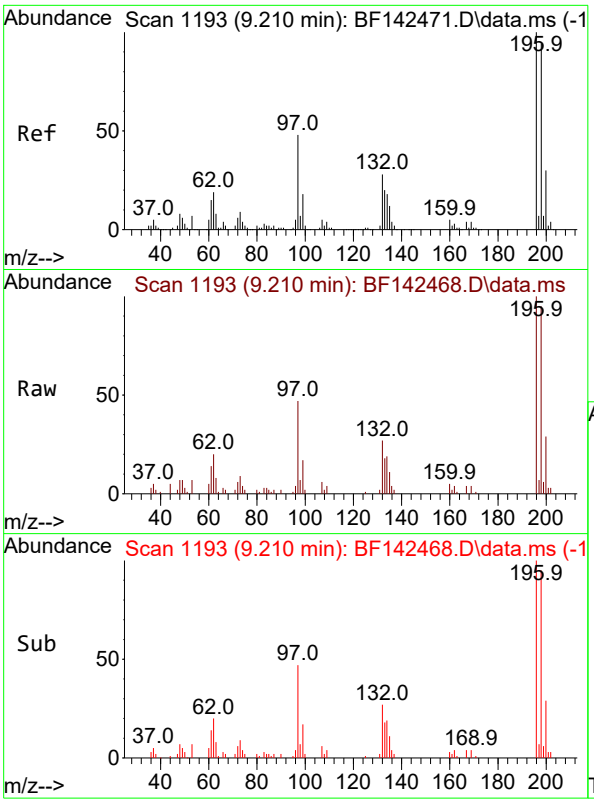


#43
2,4,6-Trichlorophenol
Concen: 5.001 ng
RT: 9.169 min Scan# 1186
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:196 Resp: 19079

Ion	Ratio	Lower	Upper
196	100		
198	97.5	78.8	118.2
200	31.6	24.9	37.3



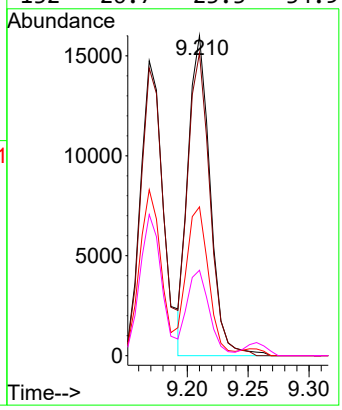


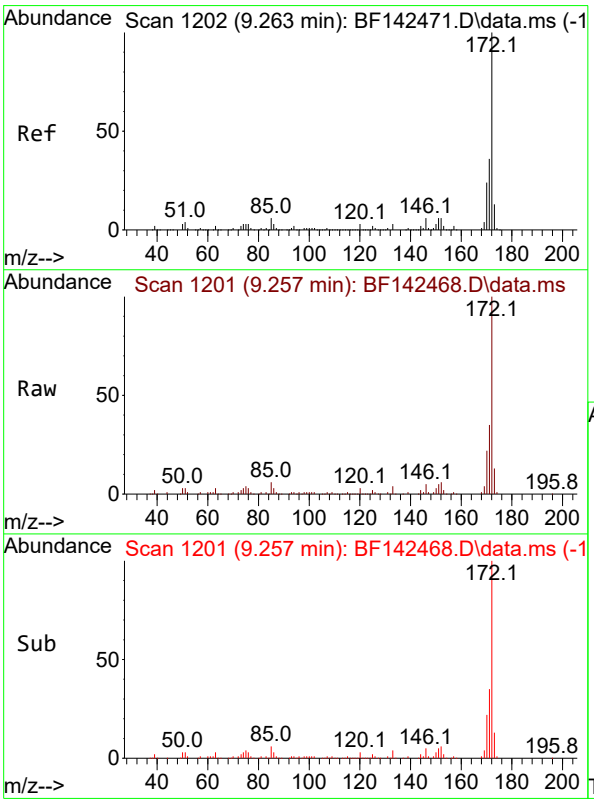
#44
2,4,5-Trichlorophenol
Concen: 5.020 ng
RT: 9.210 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:196 Resp: 20200

Ion	Ratio	Lower	Upper
196	100		
198	94.6	75.5	113.3
97	46.5	39.3	58.9
132	26.7	23.3	34.9

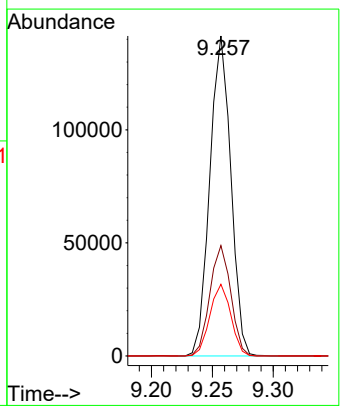


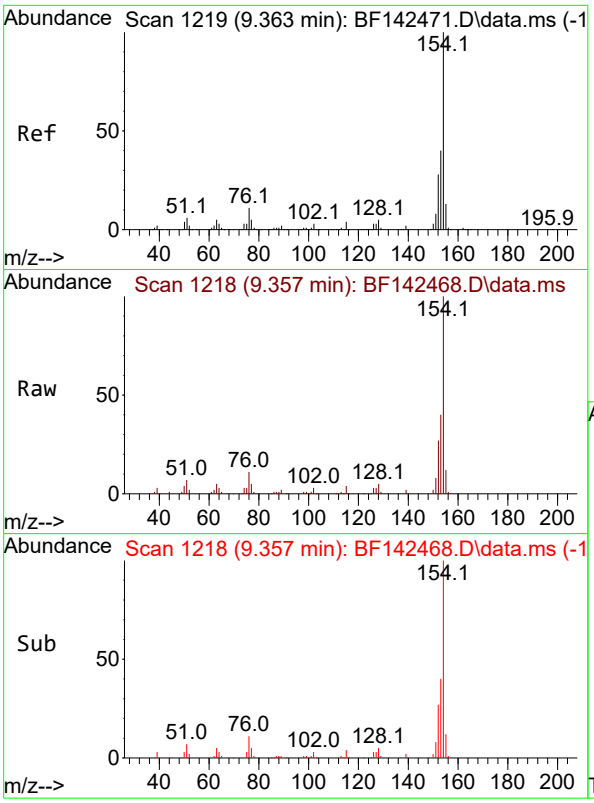


#45
2-Fluorobiphenyl
Concen: 11.583 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:172 Resp: 170142

Ion	Ratio	Lower	Upper
172	100		
171	34.5	28.6	42.8
170	22.4	18.9	28.3



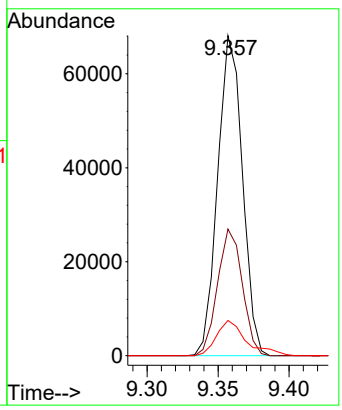


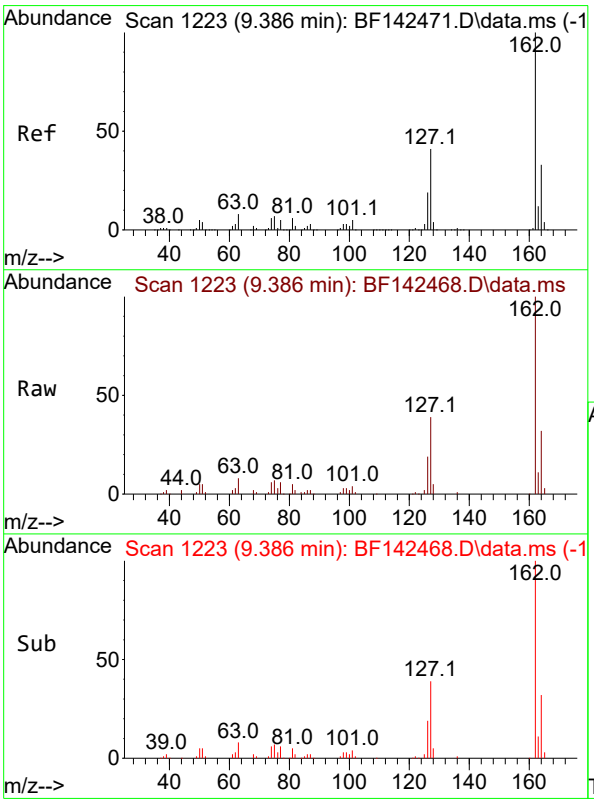
#46
1,1'-Biphenyl
Concen: 5.387 ng
RT: 9.357 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:154 Resp: 82376

Ion	Ratio	Lower	Upper
154	100		
153	39.5	20.4	60.4
76	11.0	0.0	30.8

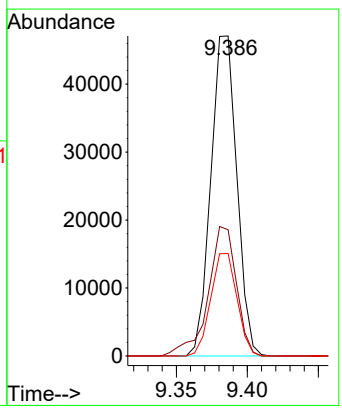


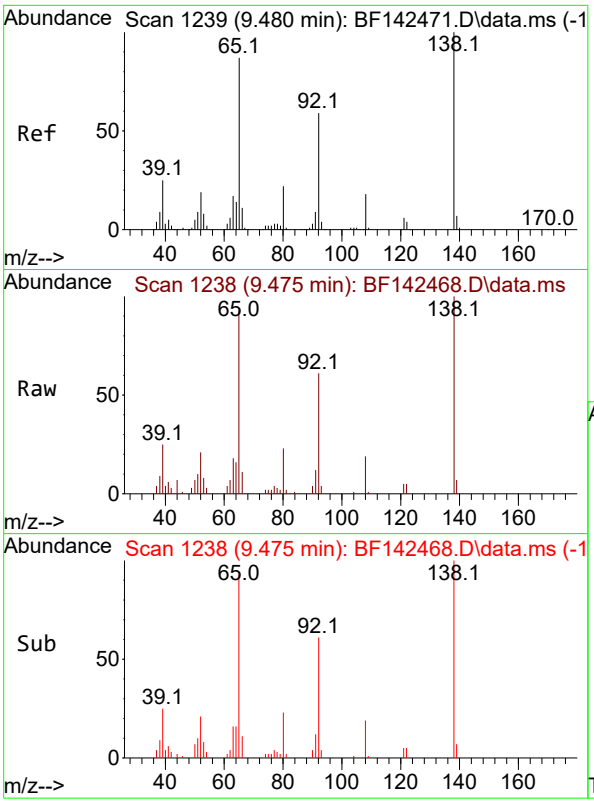


#47
2-Chloronaphthalene
Concen: 5.311 ng
RT: 9.386 min Scan# 1223
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:162 Resp: 60002

Ion	Ratio	Lower	Upper
162	100		
127	39.4	33.5	50.3
164	32.0	26.1	39.1



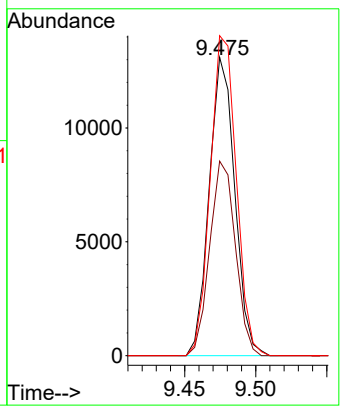


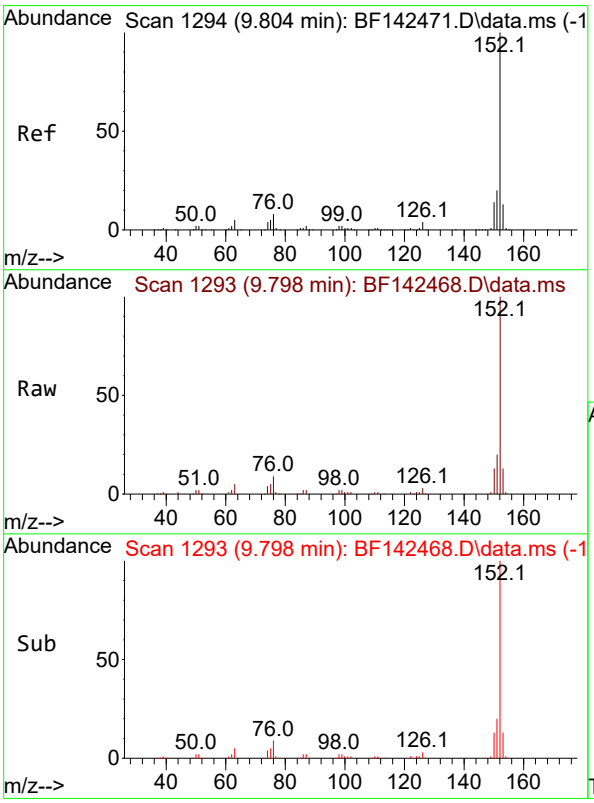
#48
2-Nitroaniline
Concen: 5.022 ng
RT: 9.475 min Scan# 1
Delta R.T. -0.011 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 65 Resp: 16399

Ion	Ratio	Lower	Upper
65	100		
92	65.2	54.4	81.6
138	107.2	91.4	137.2

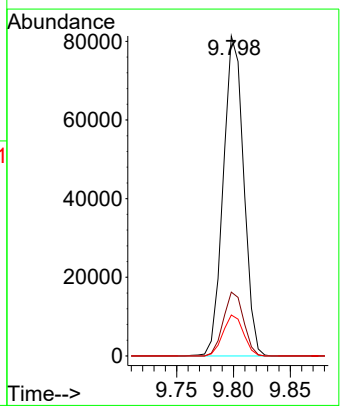


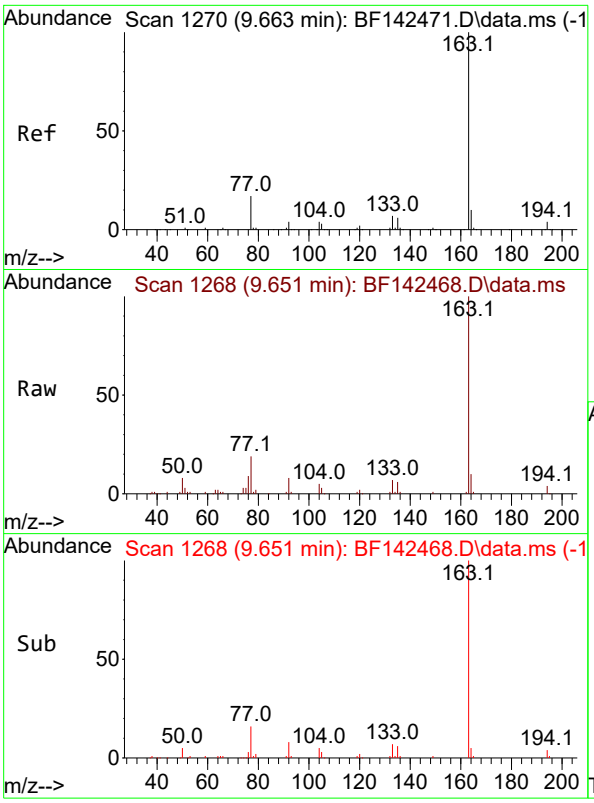


#49
Acenaphthylene
Concen: 5.330 ng
RT: 9.798 min Scan# 1293
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:152 Resp: 101686

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.8
153	12.8	10.6	15.8



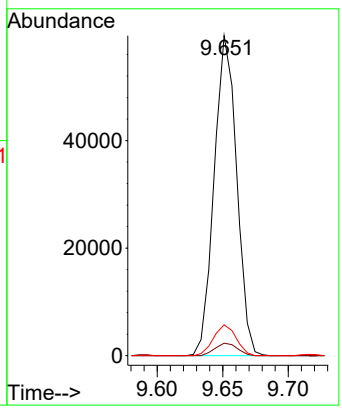


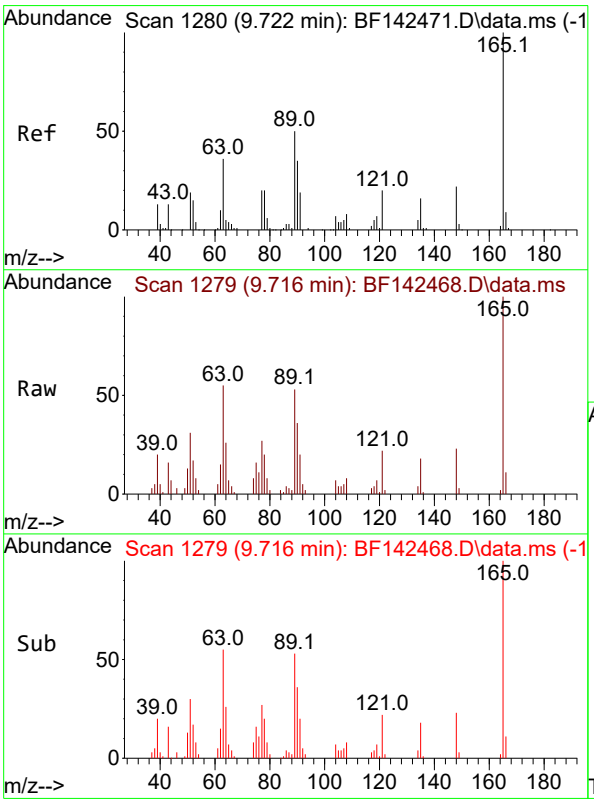
#50
Dimethylphthalate
Concen: 5.461 ng
RT: 9.651 min Scan# 1
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:163 Resp: 71020

Ion	Ratio	Lower	Upper
163	100		
194	3.9	3.3	4.9
164	9.7	8.2	12.4

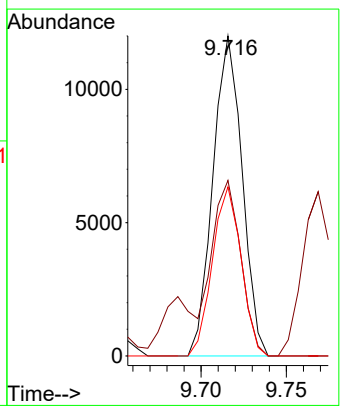


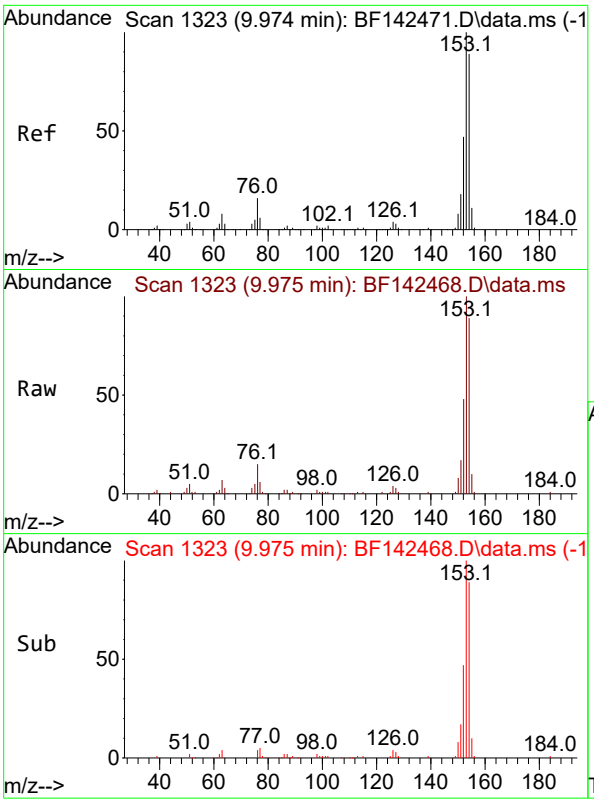


#51
2,6-Dinitrotoluene
Concen: 5.093 ng
RT: 9.716 min Scan# 1279
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:165 Resp: 14295

Ion	Ratio	Lower	Upper
165	100		
63	54.8	42.9	64.3
89	52.9	40.2	60.4



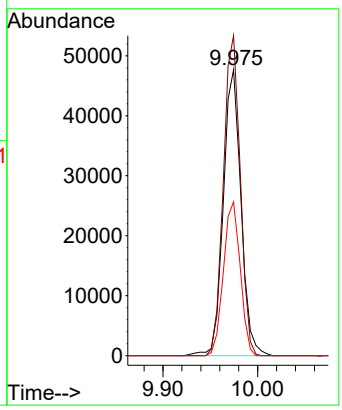


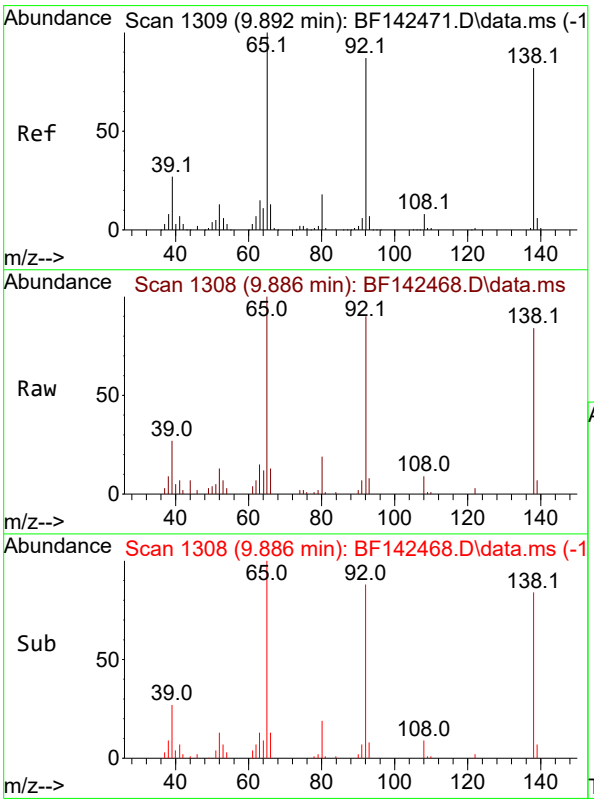
#52
Acenaphthene
Concen: 5.325 ng
RT: 9.975 min Scan# 1
Delta R.T. -0.005 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:154 Resp: 62026

Ion	Ratio	Lower	Upper
154	100		
153	111.9	90.0	135.0
152	53.8	42.6	64.0

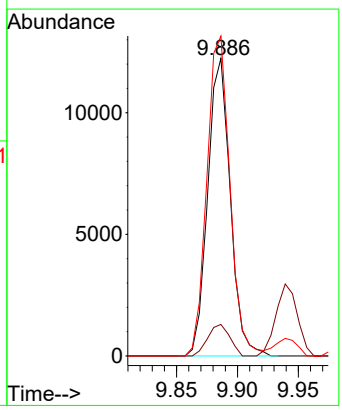


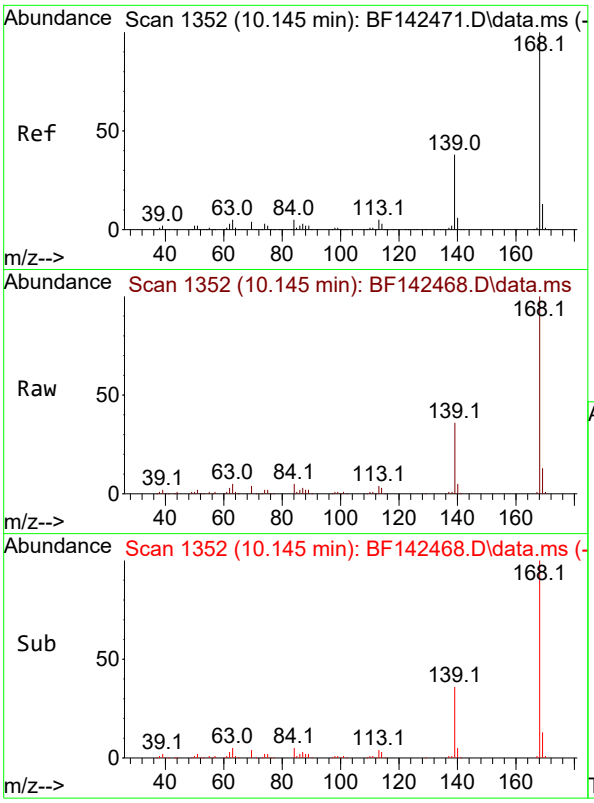


#53
3-Nitroaniline
Concen: 5.137 ng
RT: 9.886 min Scan# 1308
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:138 Resp: 15749

Ion	Ratio	Lower	Upper
138	100		
108	10.6	8.1	12.1
92	107.5	85.2	127.8



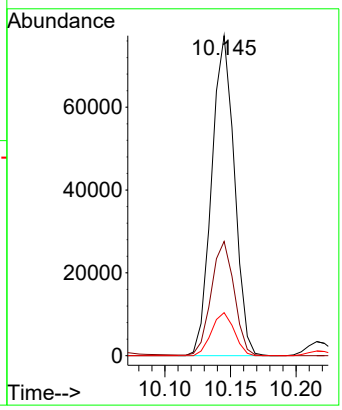


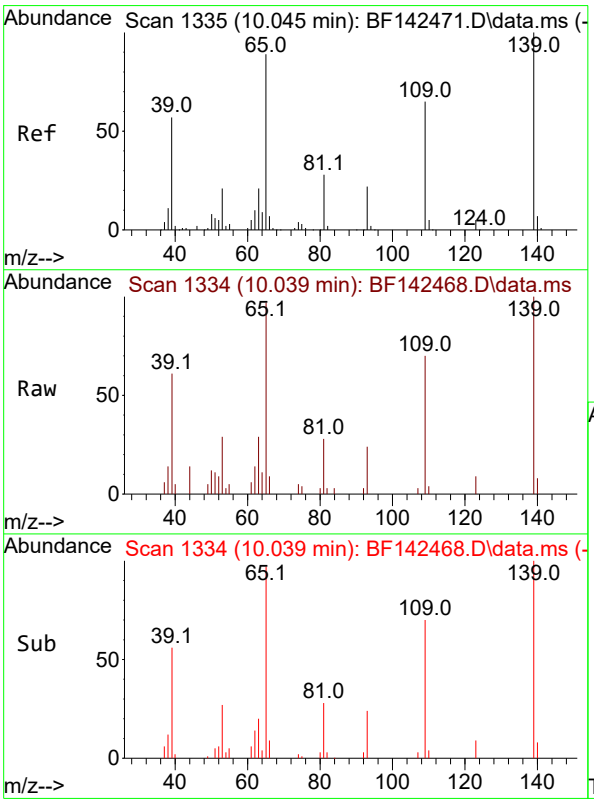
#55
Dibenzofuran
Concen: 5.545 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:168 Resp: 92955

Ion	Ratio	Lower	Upper
168	100		
139	35.7	30.2	45.2
169	13.5	10.7	16.1

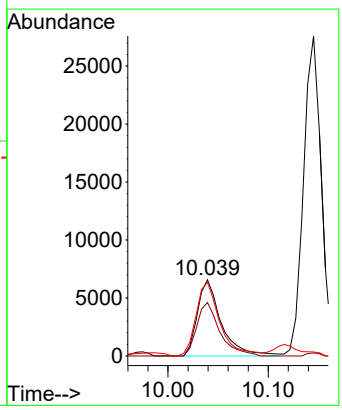


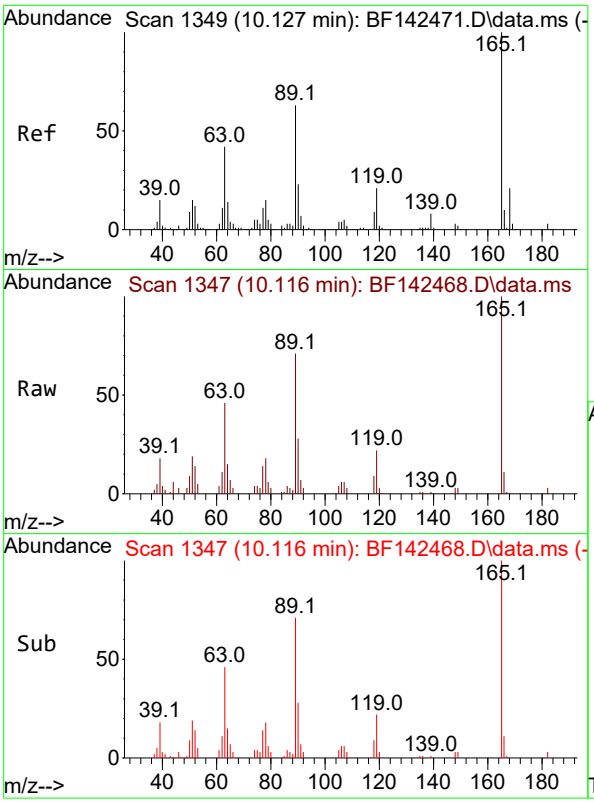


#56
4-Nitrophenol
Concen: 4.808 ng
RT: 10.039 min Scan# 1334
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:139 Resp: 10876

Ion	Ratio	Lower	Upper
139	100		
109	70.0	45.1	85.1
65	96.7	69.7	109.7



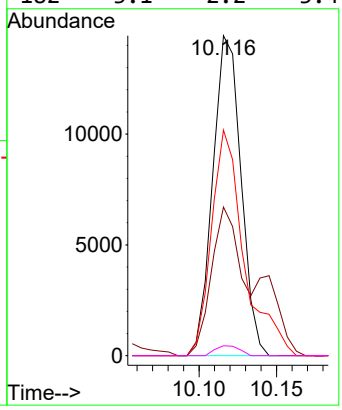


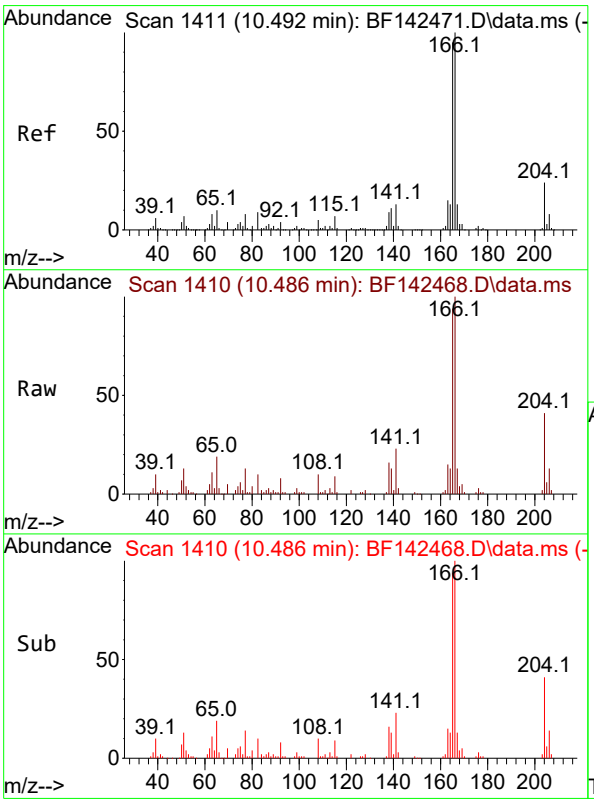
#57
2,4-Dinitrotoluene
Concen: 4.998 ng
RT: 10.116 min Scan# 1
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:165 Resp: 18322

Ion	Ratio	Lower	Upper
165	100		
63	46.5	33.6	50.4
89	70.5	50.2	75.4
182	3.1	2.2	3.4

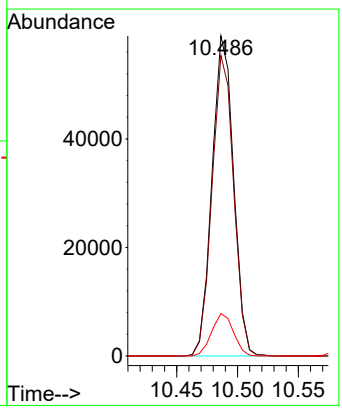


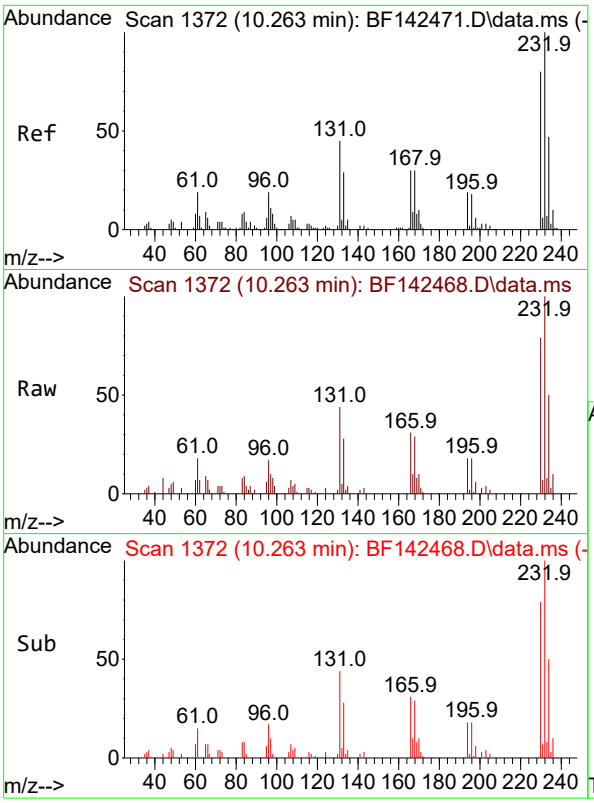


#58
Fluorene
Concen: 5.620 ng
RT: 10.486 min Scan# 1410
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:166 Resp: 72775

Ion	Ratio	Lower	Upper
166	100		
165	93.9	75.8	113.8
167	13.2	10.6	16.0



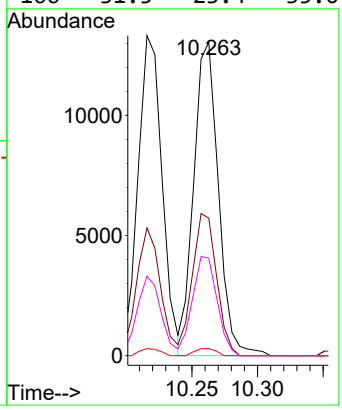


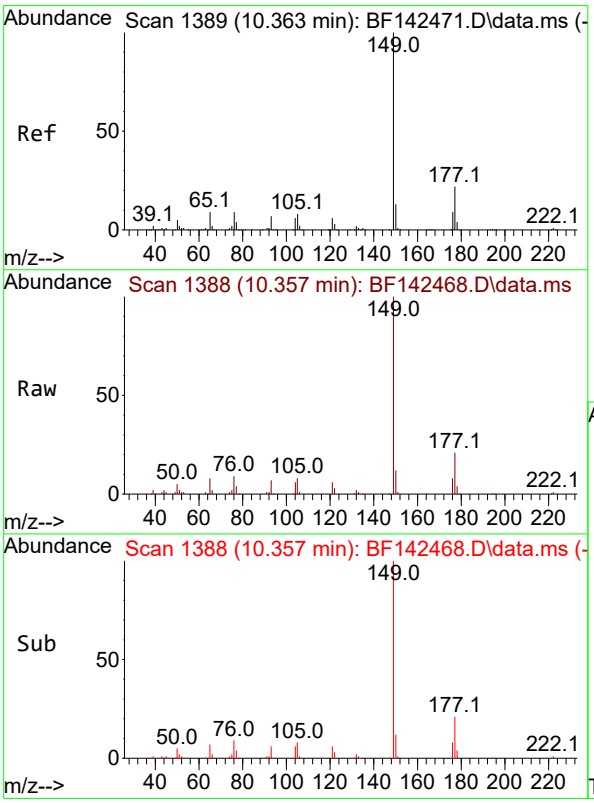
#59
2,3,4,6-Tetrachlorophenol
Concen: 5.090 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:232 Resp: 17096

Ion	Ratio	Lower	Upper
232	100		
131	44.4	35.2	52.8
130	1.9	1.7	2.5
166	31.5	23.4	35.0

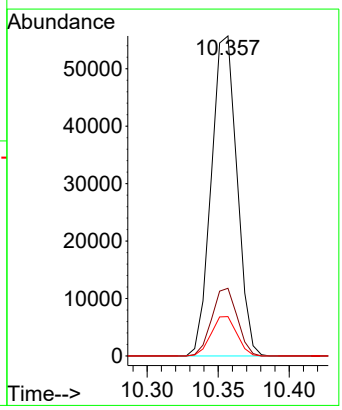


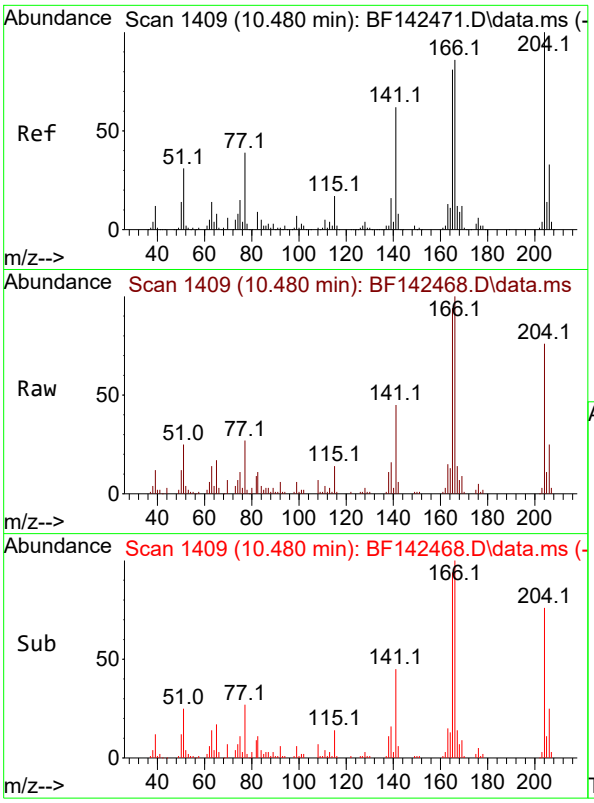


#60
Diethylphthalate
Concen: 5.515 ng
RT: 10.357 min Scan# 1388
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:149 Resp: 70046

Ion	Ratio	Lower	Upper
149	100		
177	21.2	17.6	26.4
150	12.3	10.1	15.1



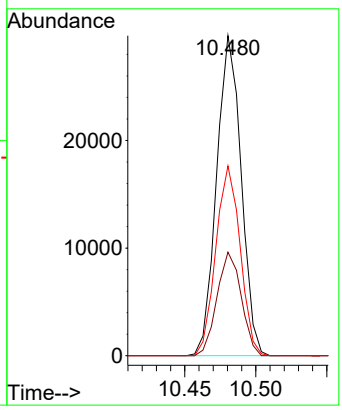


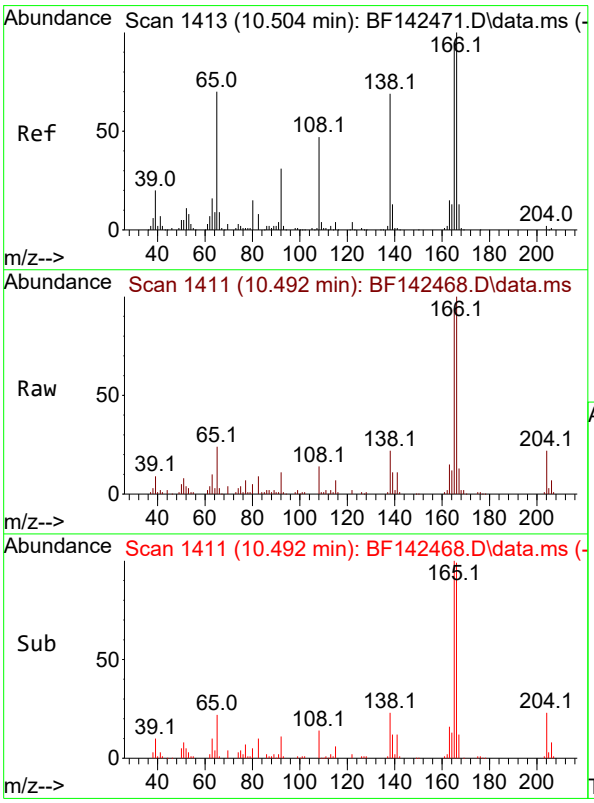
#61
4-Chlorophenyl-phenylether
Concen: 5.611 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:204 Resp: 35694

Ion	Ratio	Lower	Upper
204	100		
206	32.3	26.3	39.5
141	59.3	49.5	74.3

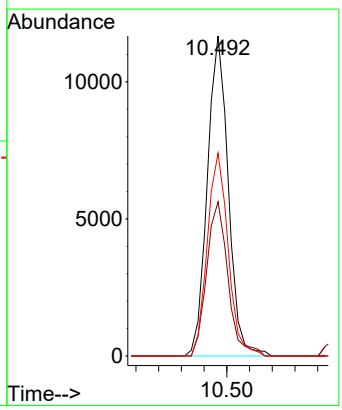


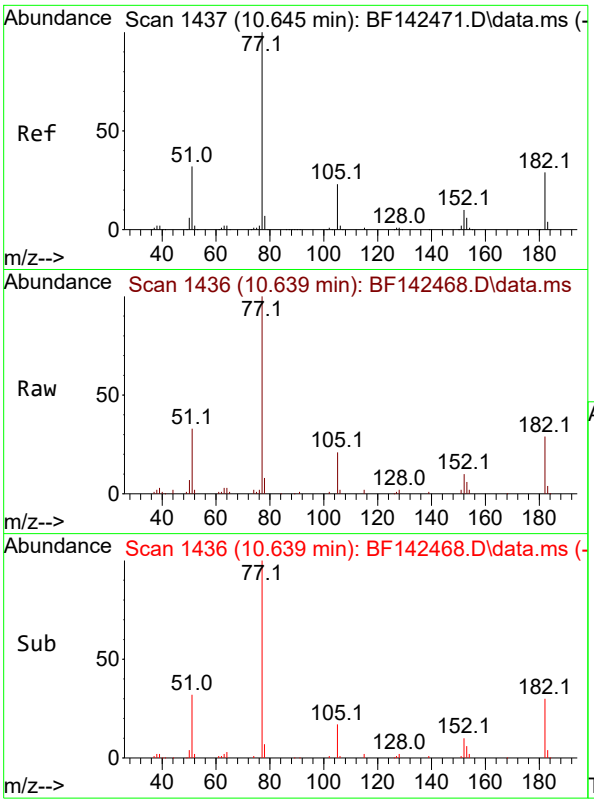


#62
4-Nitroaniline
Concen: 5.366 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.023 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:138 Resp: 14920

Ion	Ratio	Lower	Upper
138	100		
92	48.2	26.0	66.0
108	63.4	48.4	88.4



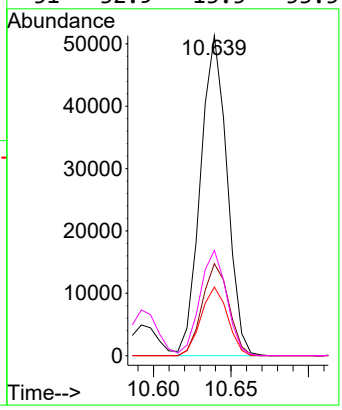


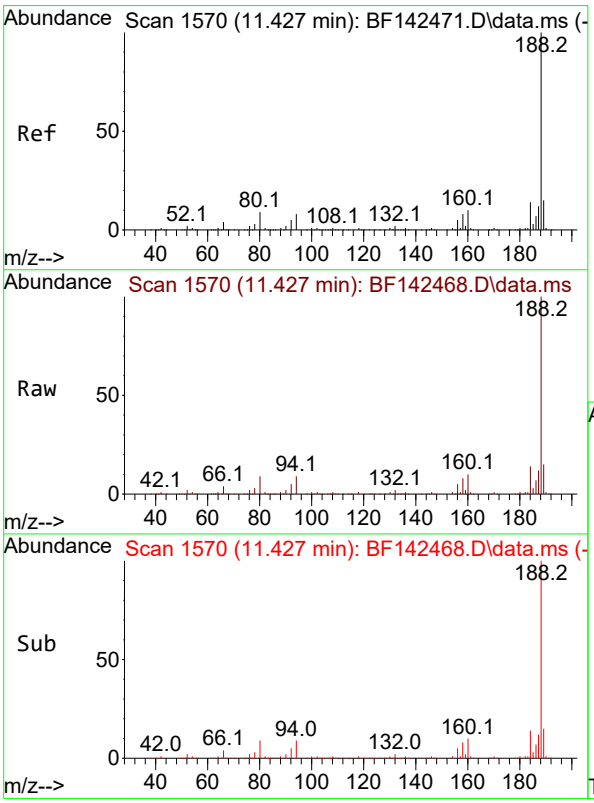
#63
Azobenzene
Concen: 5.351 ng
RT: 10.639 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion: 77 Resp: 61041

Ion	Ratio	Lower	Upper
77	100		
182	28.8	9.0	49.0
105	21.4	2.4	42.4
51	32.9	13.5	53.5

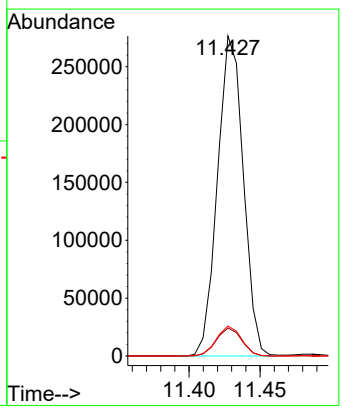


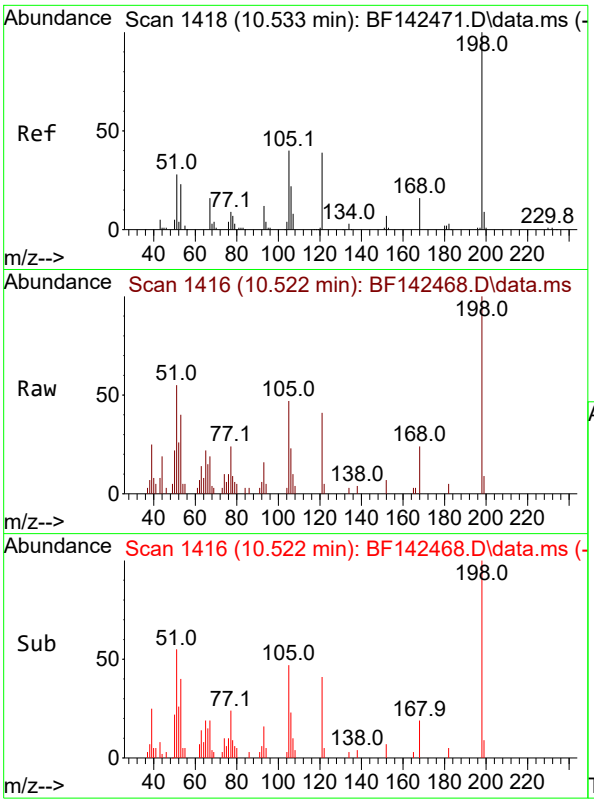


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:188 Resp: 349474

Ion	Ratio	Lower	Upper
188	100		
94	8.8	6.6	10.0
80	9.3	7.4	11.0



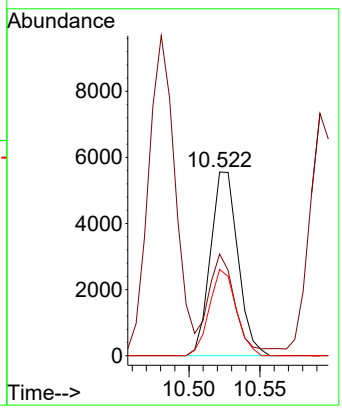


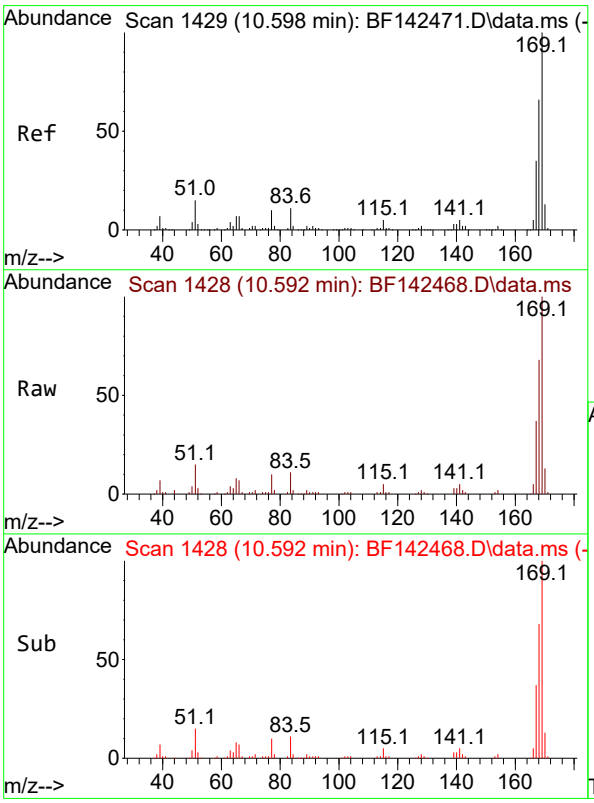
#65
4,6-Dinitro-2-methylphenol
Concen: 3.833 ng
RT: 10.522 min Scan# 14
Delta R.T. -0.018 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:198 Resp: 7475

Ion	Ratio	Lower	Upper
198	100		
51	55.3	28.3	68.3
105	46.9	21.3	61.3

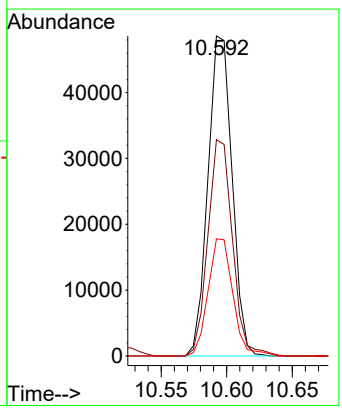


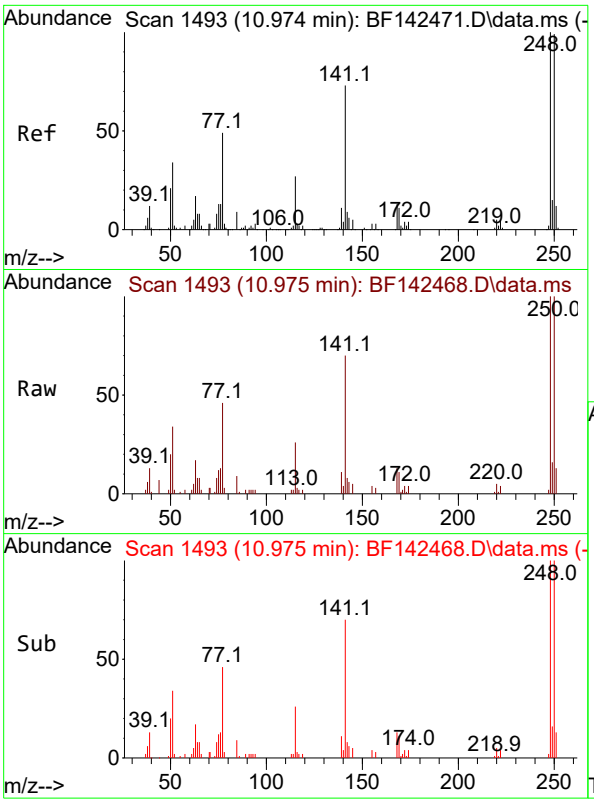


#66
n-Nitrosodiphenylamine
Concen: 5.204 ng
RT: 10.592 min Scan# 1428
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:169 Resp: 62215

Ion	Ratio	Lower	Upper
169	100		
168	67.6	52.7	79.1
167	36.6	28.3	42.5



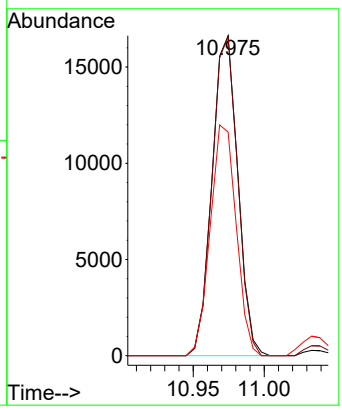


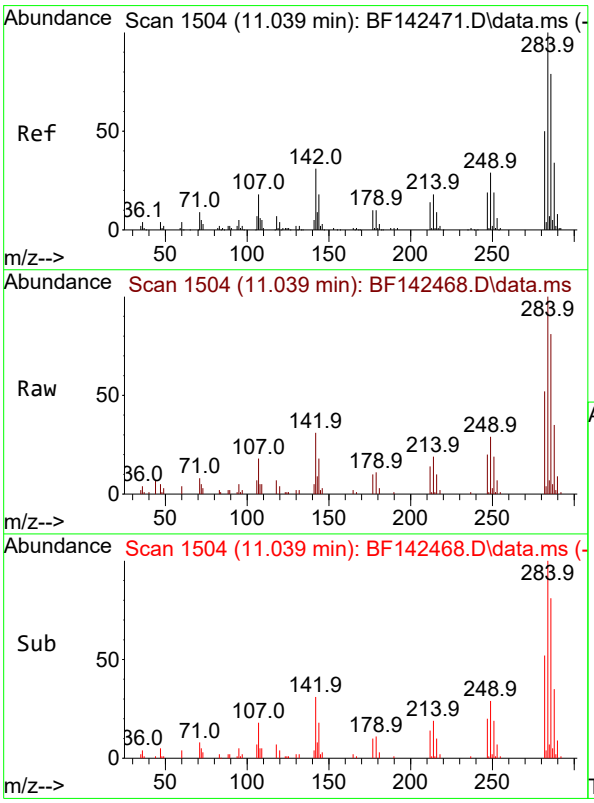
#67
4-Bromophenyl-phenylether
Concen: 5.076 ng
RT: 10.975 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:248 Resp: 20974

Ion	Ratio	Lower	Upper
248	100		
250	99.7	79.0	118.4
141	69.9	58.4	87.6

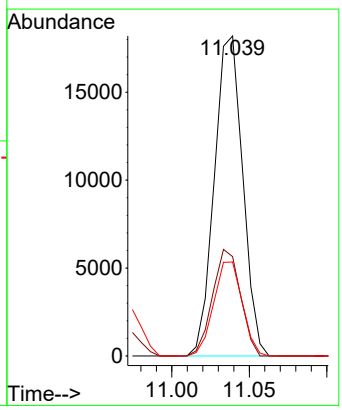


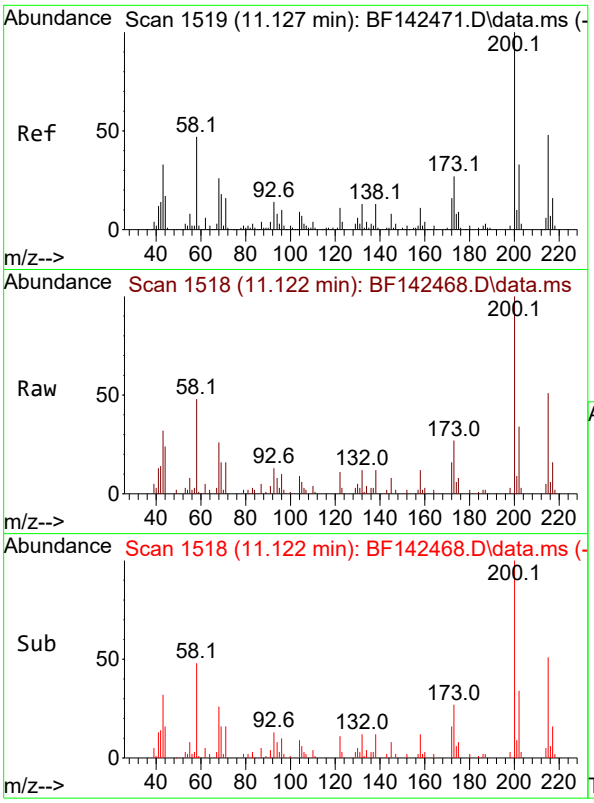


#68
Hexachlorobenzene
Concen: 5.067 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:284 Resp: 23159

Ion	Ratio	Lower	Upper
284	100		
142	31.1	24.8	37.2
249	29.4	23.6	35.4



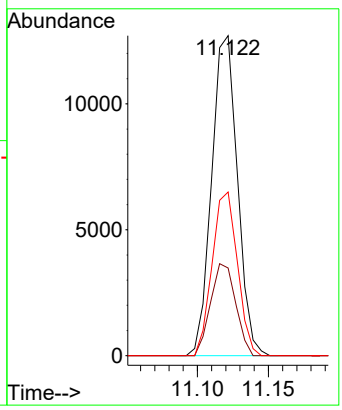


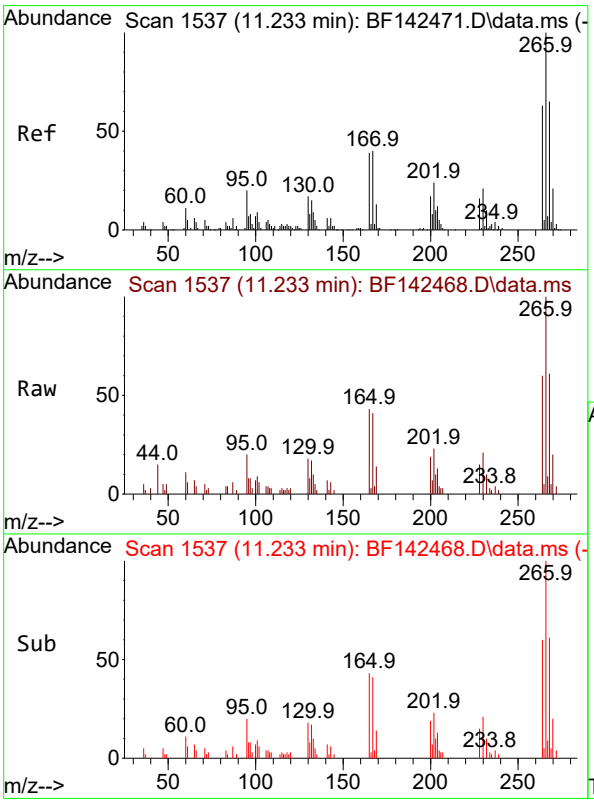
#69
Atrazine
Concen: 5.053 ng
RT: 11.122 min Scan# 1
Delta R.T. -0.005 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:200 Resp: 16045

Ion	Ratio	Lower	Upper
200	100		
173	27.4	7.4	47.4
215	51.1	28.5	68.5

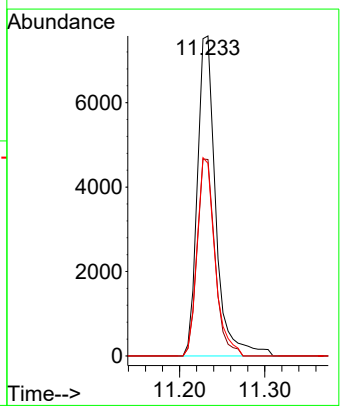


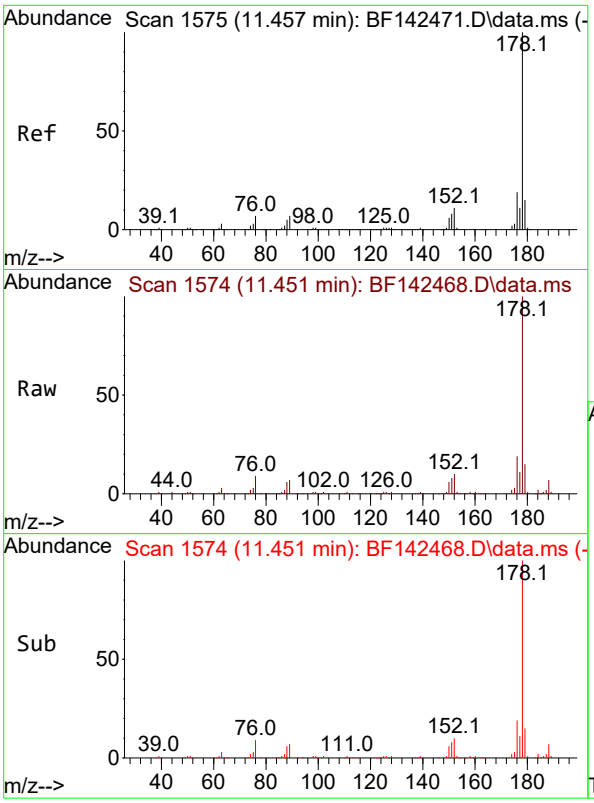


#70
Pentachlorophenol
Concen: 4.401 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:266 Resp: 11357

Ion	Ratio	Lower	Upper
266	100		
268	61.4	51.7	77.5
264	60.2	50.4	75.6



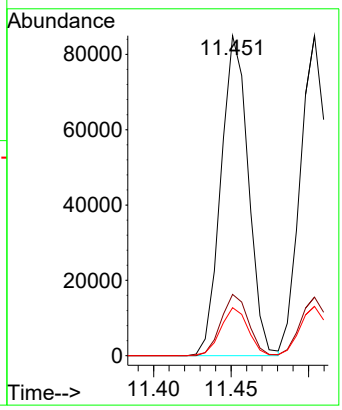


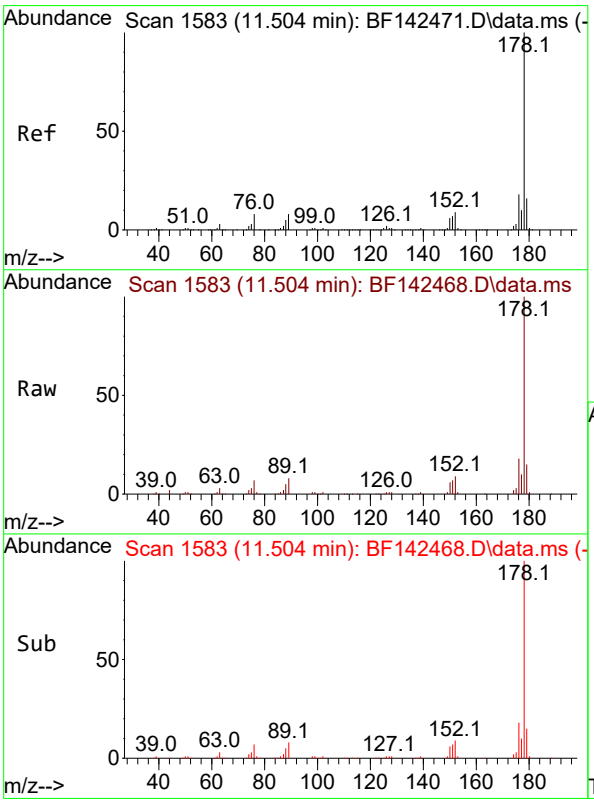
#71
Phenanthrene
Concen: 5.594 ng
RT: 11.451 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:178 Resp: 104484

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.0
179	15.0	12.3	18.5

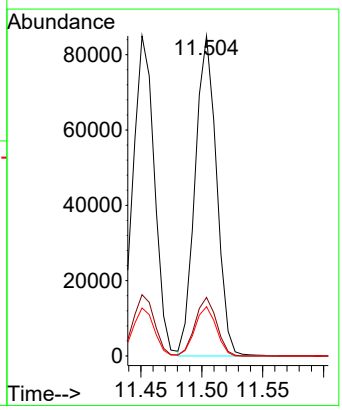


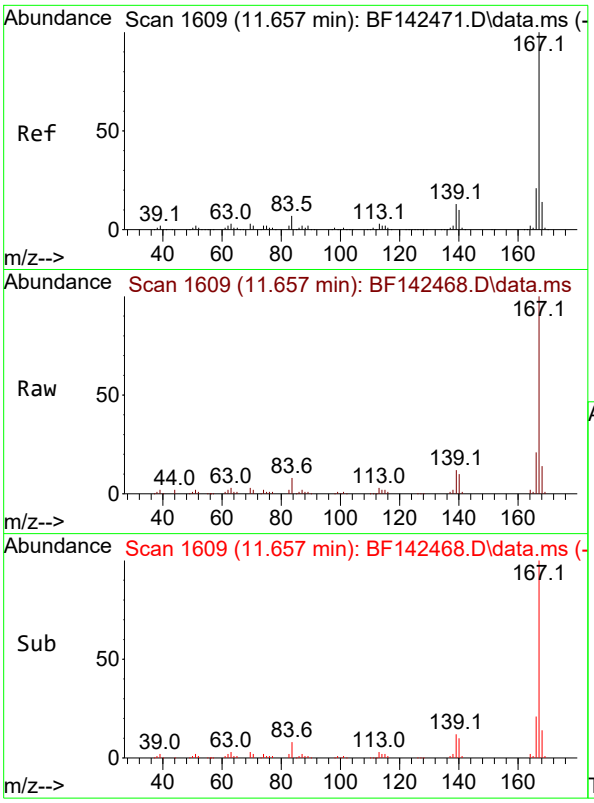


#72
Anthracene
Concen: 5.457 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:178 Resp: 104017

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.6	21.8
179	15.4	12.4	18.6



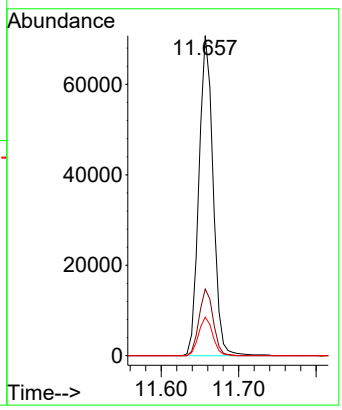


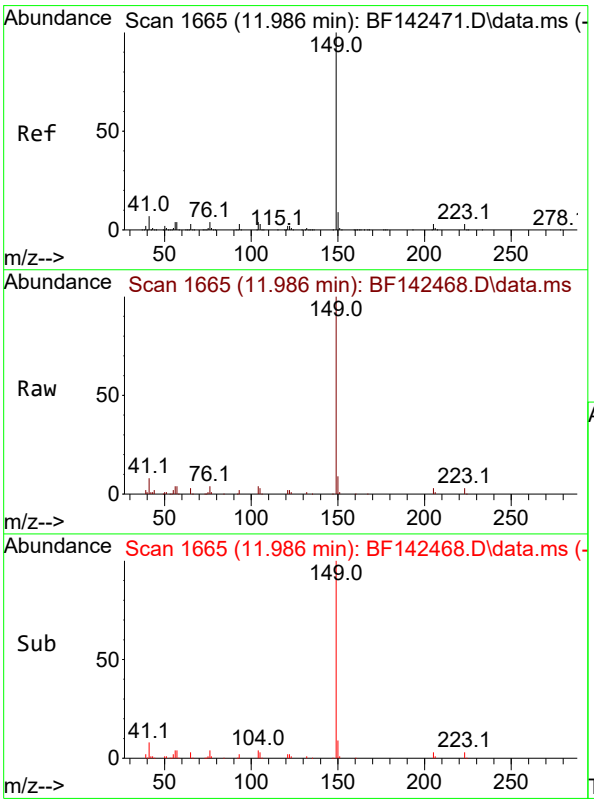
#73
Carbazole
Concen: 5.521 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:167 Resp: 89967

Ion	Ratio	Lower	Upper
167	100		
166	20.8	16.9	25.3
139	12.1	10.2	15.4

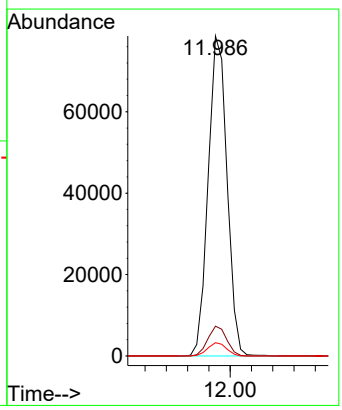


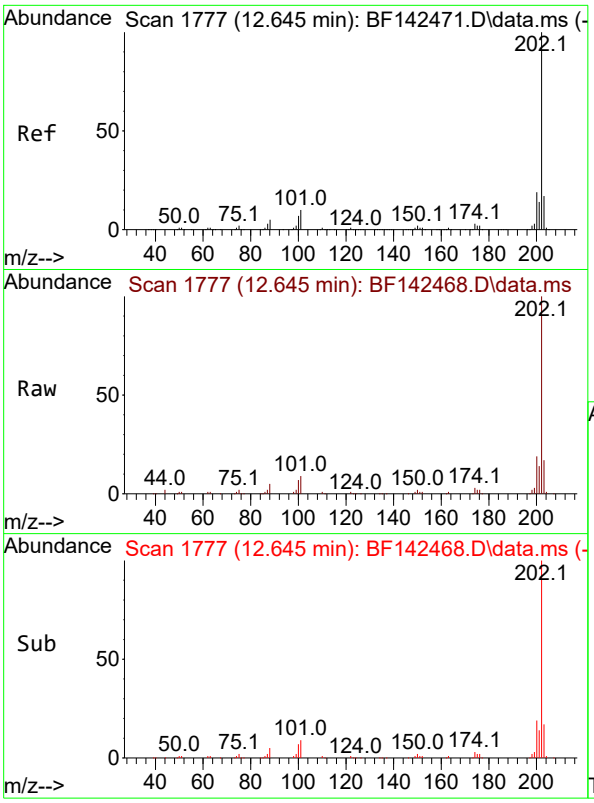


#74
Di-n-butylphthalate
Concen: 5.426 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:149 Resp: 96777

Ion	Ratio	Lower	Upper
149	100		
150	9.3	7.3	10.9
104	4.1	3.6	5.4



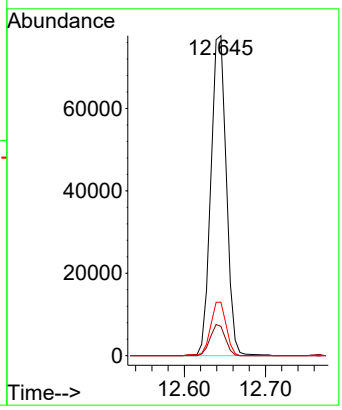


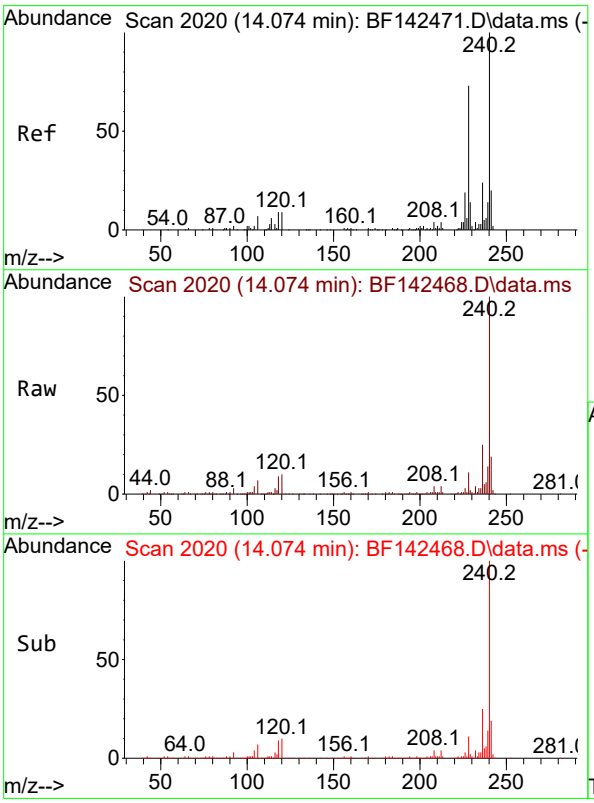
#75
Fluoranthene
Concen: 5.890 ng
RT: 12.645 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:202 Resp: 102797

Ion	Ratio	Lower	Upper
202	100		
101	9.2	0.0	29.6
203	16.7	0.0	37.2

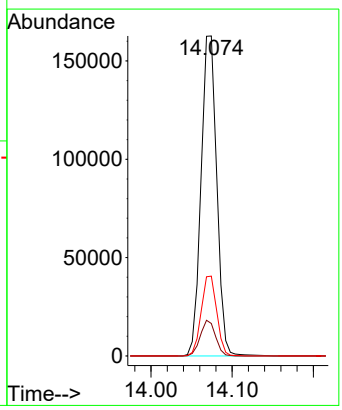


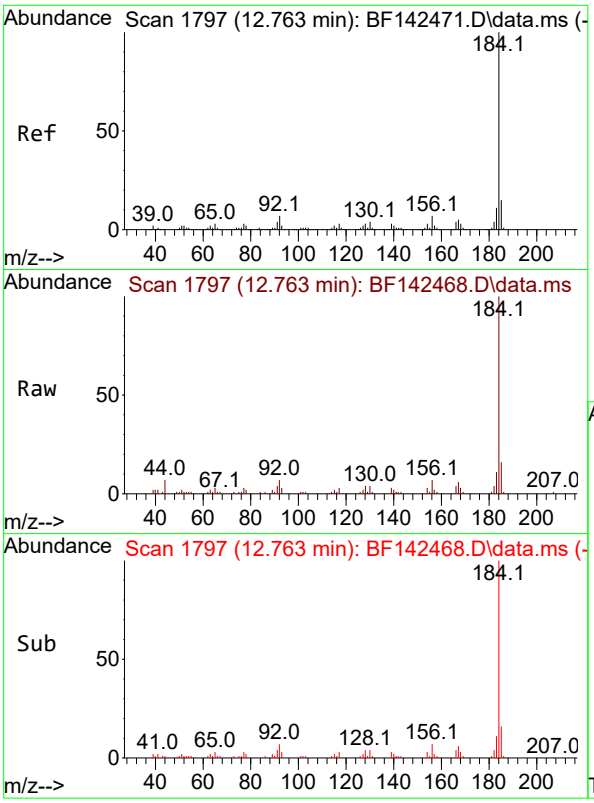


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:240 Resp: 218524

Ion	Ratio	Lower	Upper
240	100		
120	10.1	7.5	11.3
236	25.0	19.6	29.4



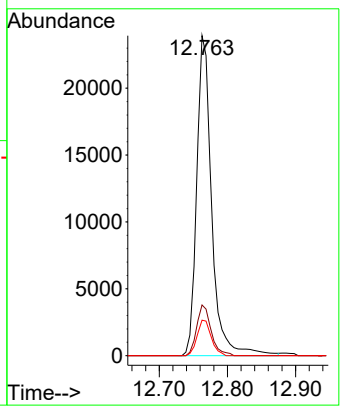


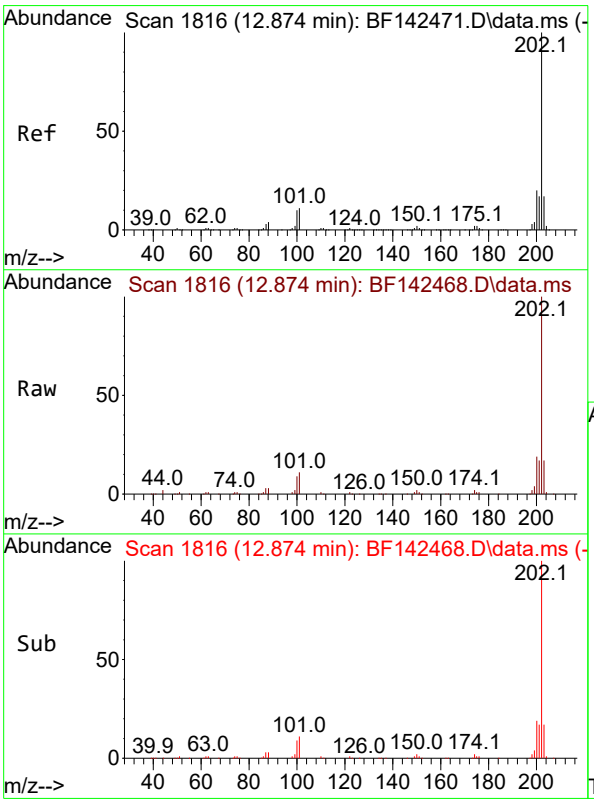
#77
Benzidine
Concen: 4.499 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:184 Resp: 36585

Ion	Ratio	Lower	Upper
184	100		
185	15.9	11.6	17.4
183	11.1	9.0	13.4

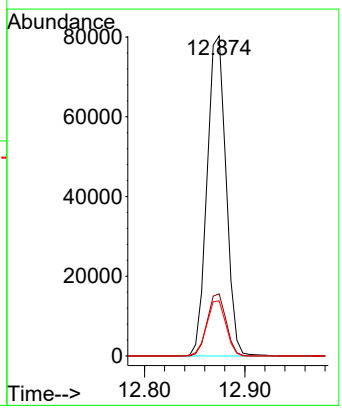


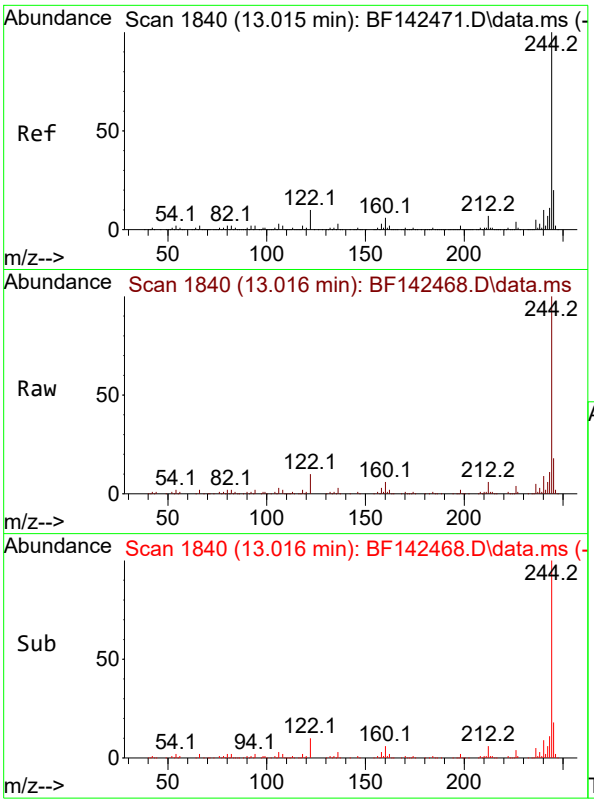


#78
Pyrene
Concen: 5.170 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:202 Resp: 105394

Ion	Ratio	Lower	Upper
202	100		
200	19.4	16.1	24.1
203	17.2	13.9	20.9



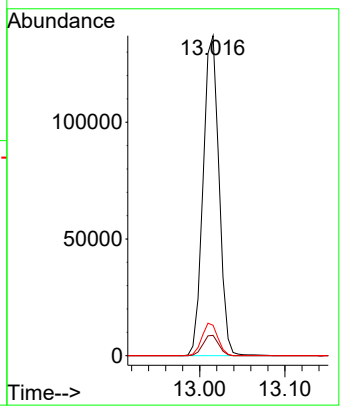


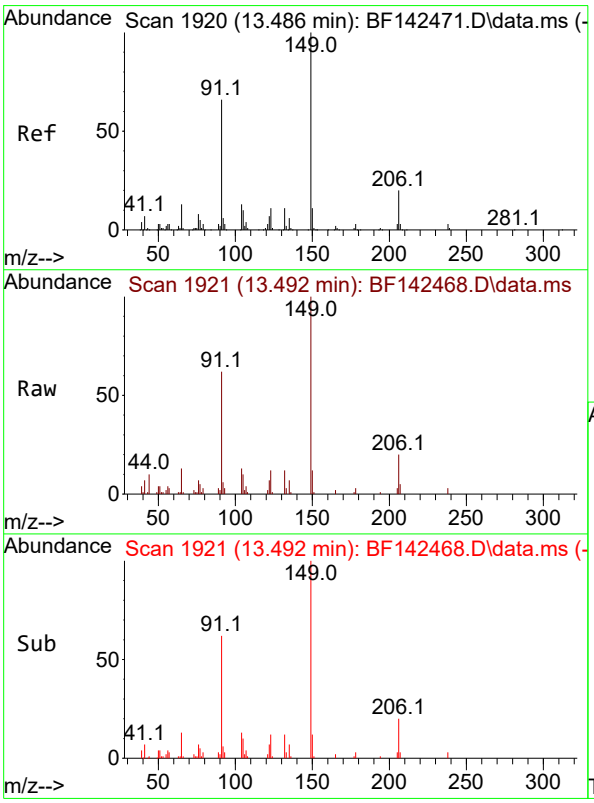
#79
Terphenyl-d14
Concen: 11.096 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:244 Resp: 177430

Ion	Ratio	Lower	Upper
244	100		
212	6.3	5.3	7.9
122	9.5	8.2	12.2

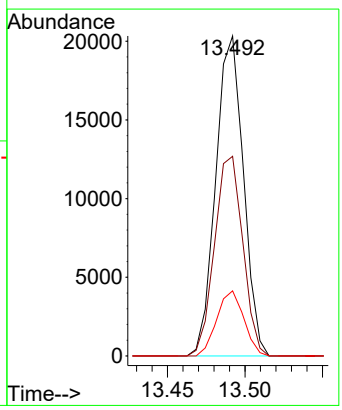


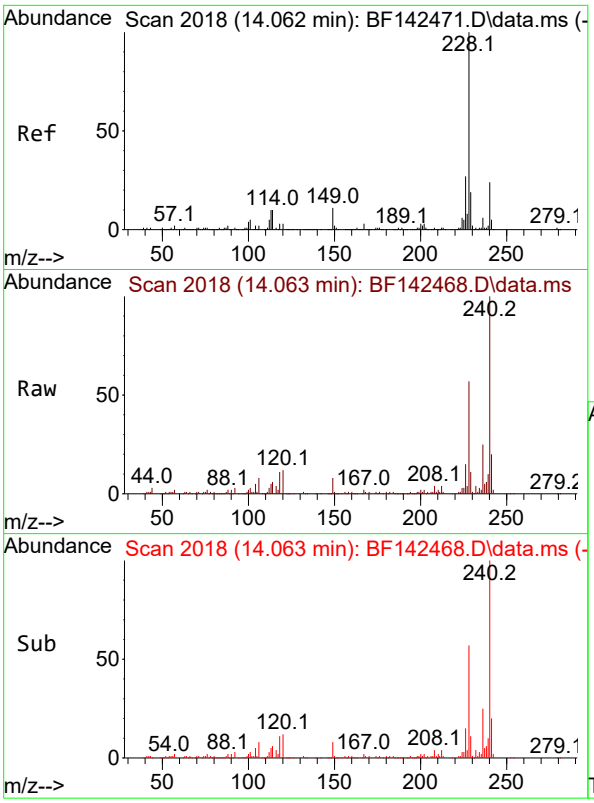


#80
Butylbenzylphthalate
Concen: 4.483 ng
RT: 13.492 min Scan# 1921
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:149 Resp: 25251

Ion	Ratio	Lower	Upper
149	100		
91	62.4	52.9	79.3
206	20.3	16.2	24.2



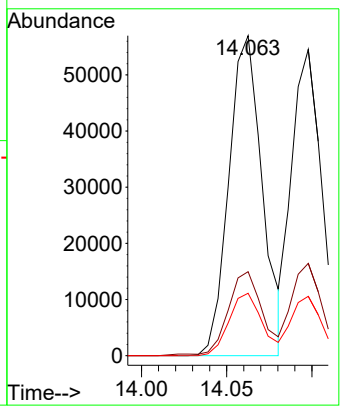


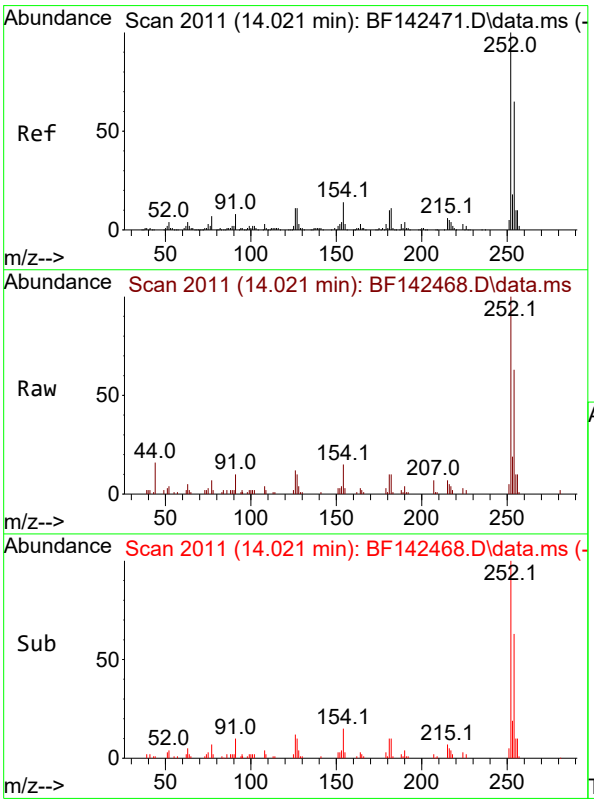
#81
Benzo(a)anthracene
Concen: 5.332 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:228 Resp: 77800

Ion	Ratio	Lower	Upper
228	100		
226	26.2	21.2	31.8
229	19.5	15.5	23.3

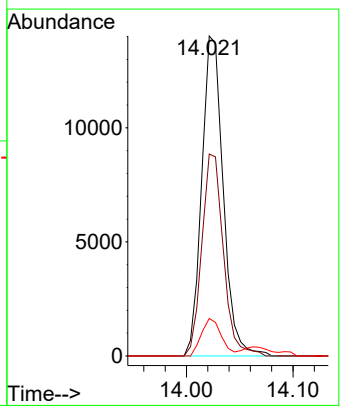


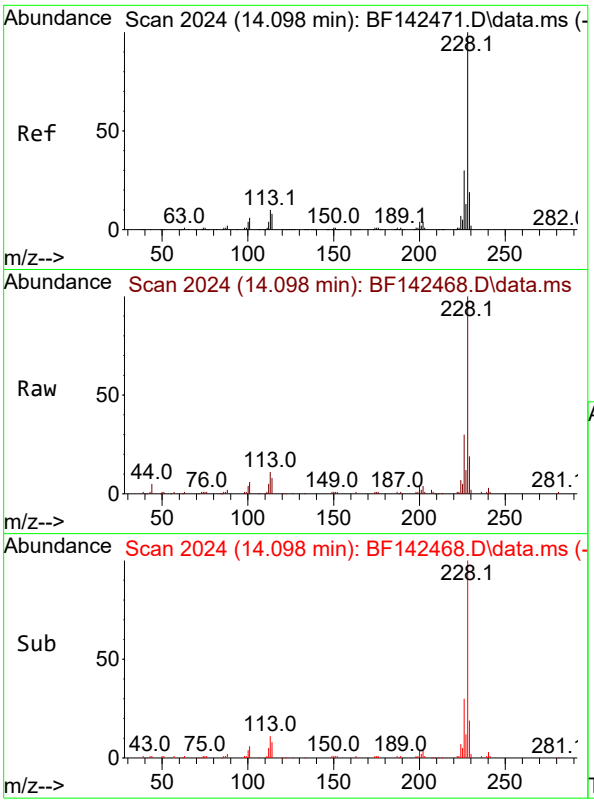


#82
3,3'-Dichlorobenzidine
Concen: 4.445 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:252 Resp: 19673

Ion	Ratio	Lower	Upper
252	100		
254	63.1	52.0	78.0
126	11.7	8.9	13.3



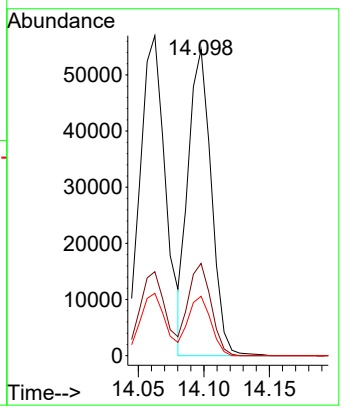


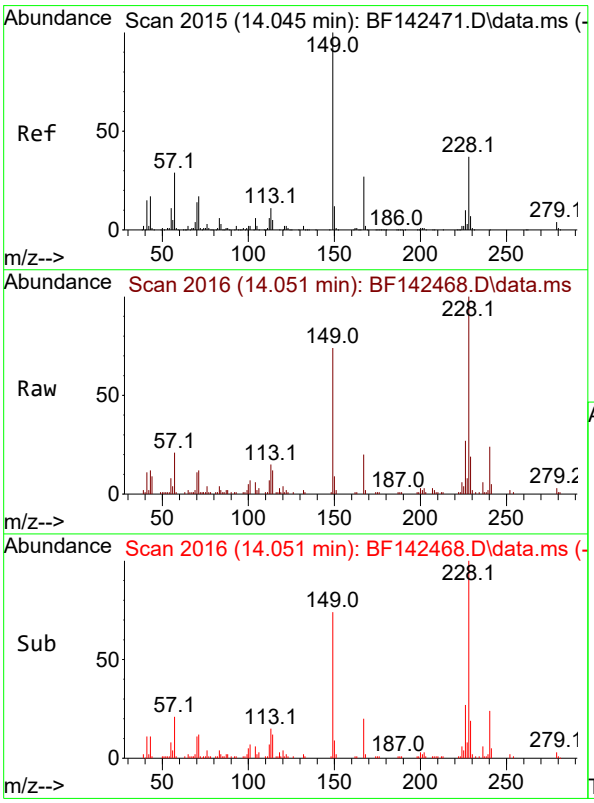
#83
Chrysene
Concen: 5.092 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:228 Resp: 66761

Ion	Ratio	Lower	Upper
228	100		
226	30.2	23.8	35.6
229	19.4	15.4	23.2

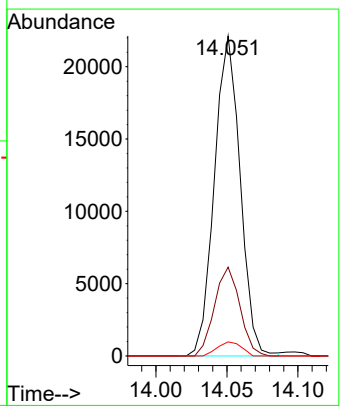


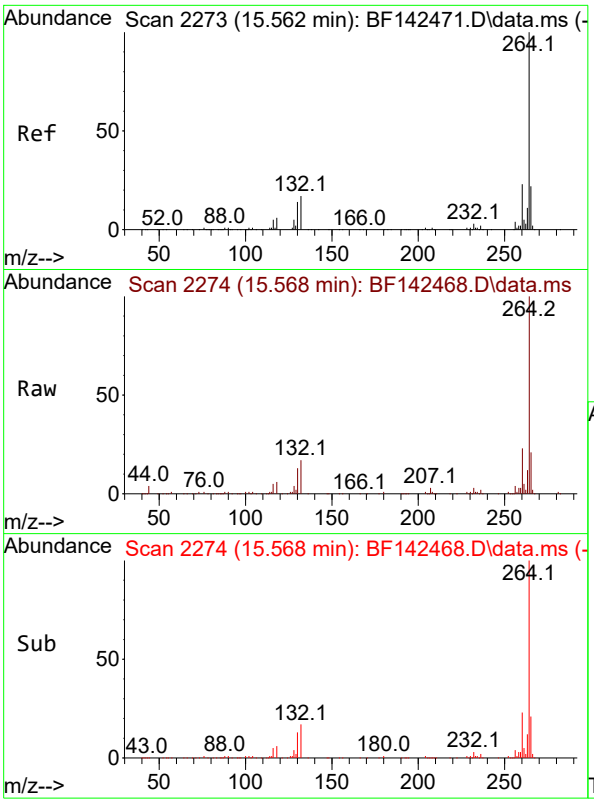


#84
Bis(2-ethylhexyl)phthalate
Concen: 3.864 ng
RT: 14.051 min Scan# 2016
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:149 Resp: 27864

Ion	Ratio	Lower	Upper
149	100		
167	27.8	21.5	32.3
279	4.4	3.2	4.8



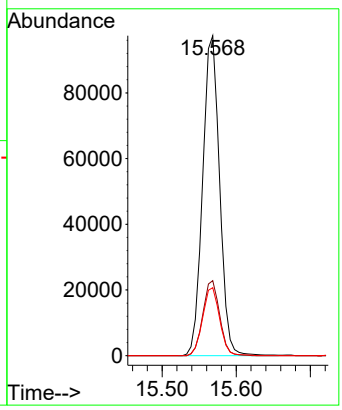


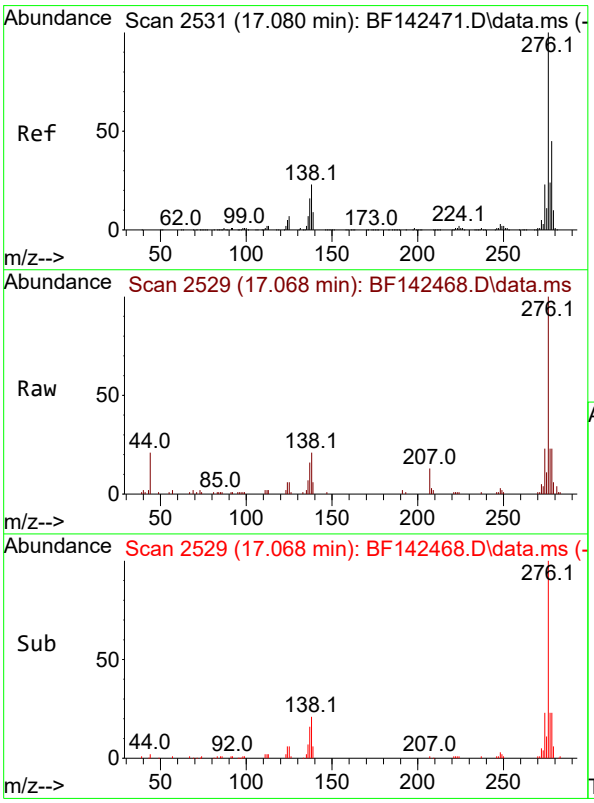
#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:264 Resp: 154887

Ion	Ratio	Lower	Upper
264	100		
260	23.5	18.6	28.0
265	21.3	17.7	26.5

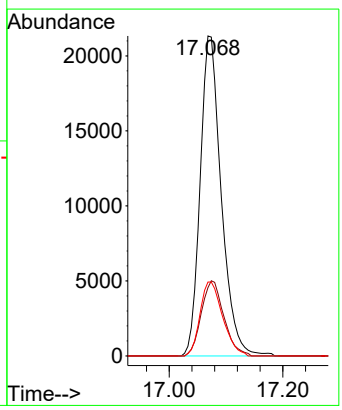


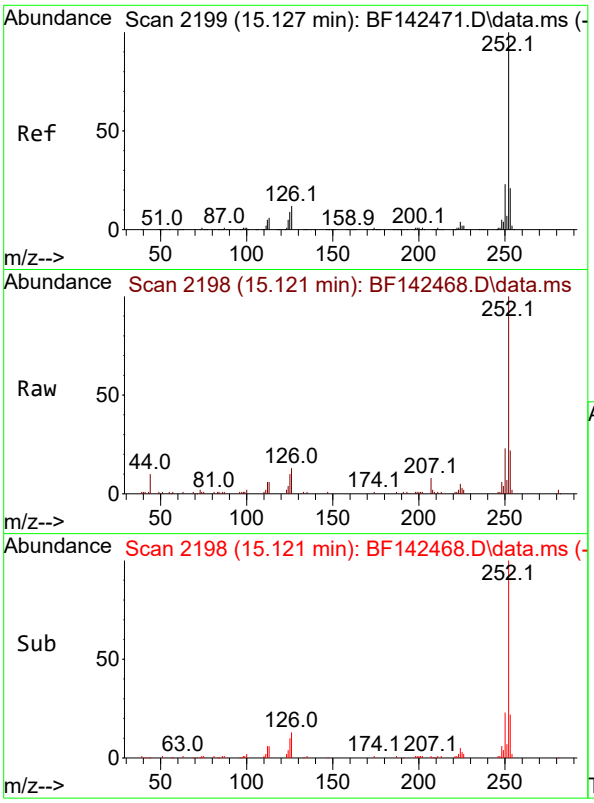


#87
Indeno(1,2,3-cd)pyrene
Concen: 4.733 ng
RT: 17.068 min Scan# 2529
Delta R.T. -0.023 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:276 Resp: 55034

Ion	Ratio	Lower	Upper
276	100		
138	25.1	19.9	29.9
277	24.8	20.2	30.2



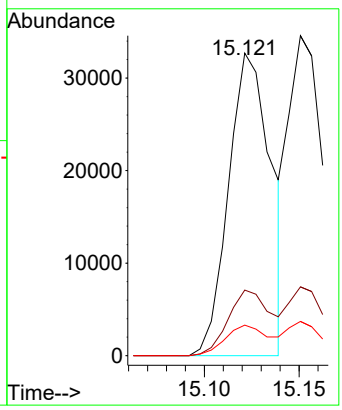


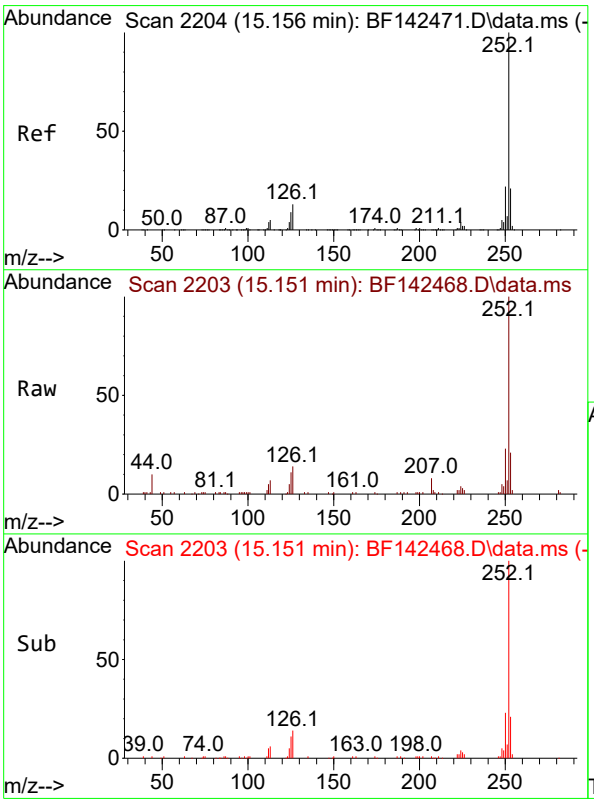
#88
Benzo(b)fluoranthene
Concen: 5.565 ng
RT: 15.121 min Scan# 21
Delta R.T. -0.006 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:252 Resp: 51014

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.0	25.4
125	10.1	7.4	11.0

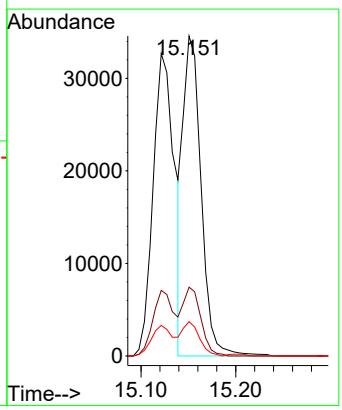


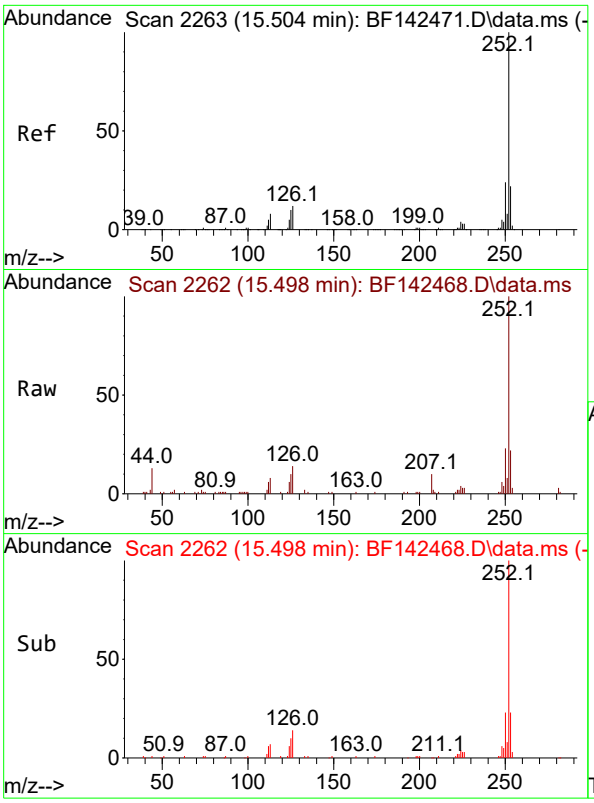


#89
Benzo(k)fluoranthene
Concen: 5.371 ng
RT: 15.151 min Scan# 2203
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:252 Resp: 46114

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.0	25.4
125	10.7	7.3	10.9



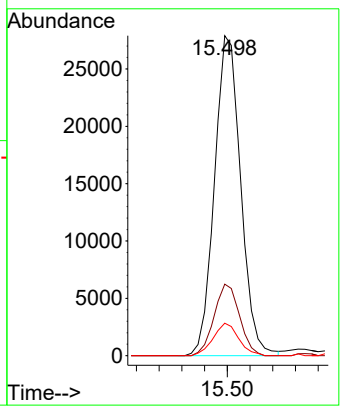


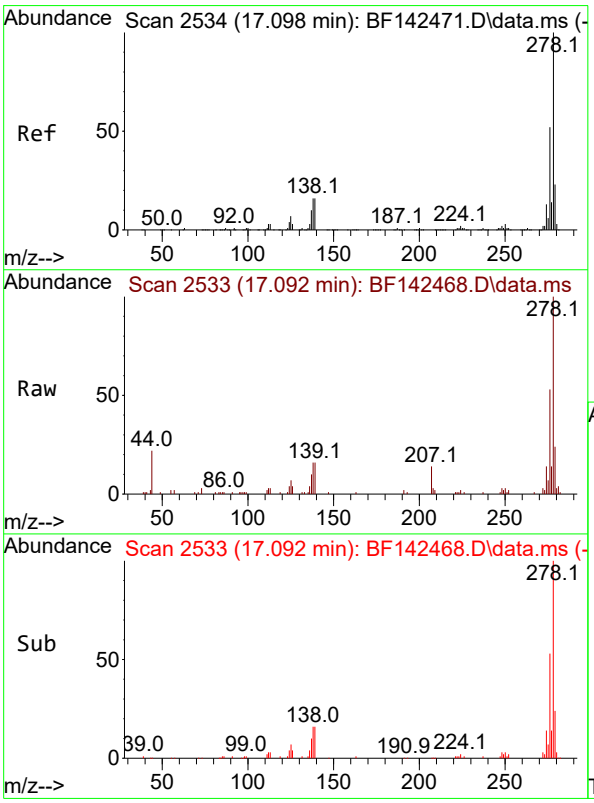
#90
Benzo(a)pyrene
Concen: 5.172 ng
RT: 15.498 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:252 Resp: 44694

Ion	Ratio	Lower	Upper
252	100		
253	22.4	17.4	26.0
125	10.1	7.9	11.9

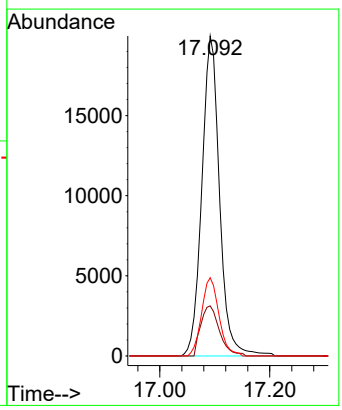


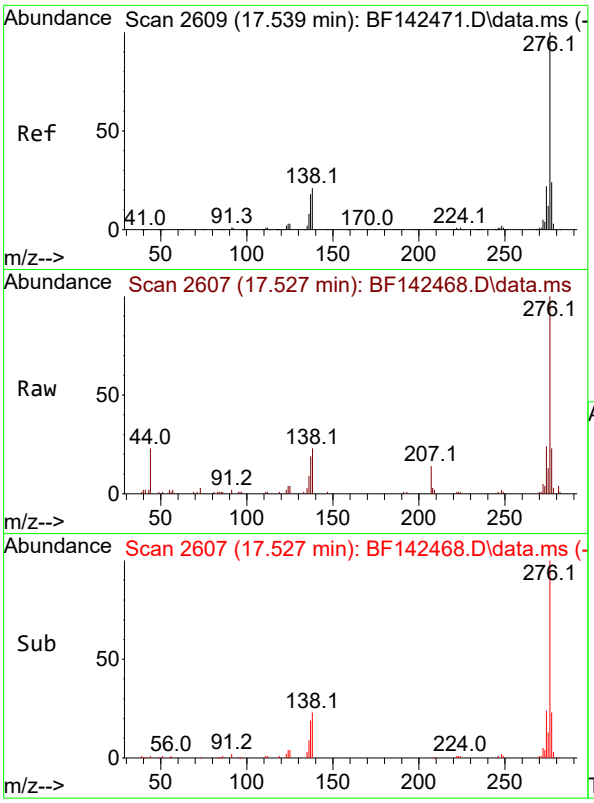


#91
Dibenzo(a,h)anthracene
Concen: 4.731 ng
RT: 17.092 min Scan# 2533
Delta R.T. -0.023 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Tgt Ion:278 Resp: 44618

Ion	Ratio	Lower	Upper
278	100		
139	15.6	12.8	19.2
279	24.4	18.6	28.0



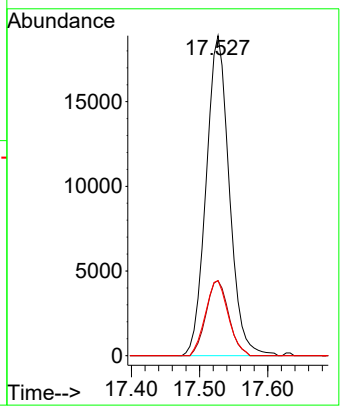


#92
Benzo(g,h,i)perylene
Concen: 4.737 ng
RT: 17.527 min Scan# 2
Delta R.T. -0.029 min
Lab File: BF142468.D
Acq: 20 May 2025 12:38

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Tgt Ion:276 Resp: 44684

Ion	Ratio	Lower	Upper
276	100		
277	23.5	19.2	28.8
138	23.5	16.8	25.2



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142469.D
Acq On : 20 May 2025 13:07
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Quant Time: May 20 16:55:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.898	152	93167	20.000	ng		0.00
21) Naphthalene-d8	8.187	136	365488	20.000	ng		0.00
39) Acenaphthene-d10	9.939	164	205654	20.000	ng		0.00
64) Phenanthrene-d10	11.428	188	357871	20.000	ng		0.00
76) Chrysene-d12	14.069	240	197144	20.000	ng		0.00
86) Perylene-d12	15.563	264	160066	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.504	112	113098	20.452	ng		-0.01
7) Phenol-d6	6.516	99	134953	20.273	ng		-0.02
23) Nitrobenzene-d5	7.457	82	133256	19.881	ng		-0.02
42) 2,4,6-Tribromophenol	10.728	330	46280	20.276	ng		-0.01
45) 2-Fluorobiphenyl	9.257	172	332871	21.719	ng		-0.01
79) Terphenyl-d14	13.010	244	311785	21.612	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.669	88	21412	9.676	ng		99
3) Pyridine	3.440	79	53586	9.509	ng		97
4) n-Nitrosodimethylamine	3.369	42	27624	9.441	ng	#	97
6) Aniline	6.557	93	87993	9.831	ng		99
8) 2-Chlorophenol	6.681	128	60216	9.997	ng		100
9) Benzaldehyde	6.446	77	45431	11.347	ng		98
10) Phenol	6.528	94	75527	10.083	ng		97
11) bis(2-Chloroethyl)ether	6.628	93	53797	9.978	ng		99
12) 1,3-Dichlorobenzene	6.840	146	68483	10.189	ng		98
13) 1,4-Dichlorobenzene	6.916	146	68774	10.158	ng		98
14) 1,2-Dichlorobenzene	7.069	146	65441	10.102	ng		99
15) Benzyl Alcohol	7.034	79	47712	9.699	ng		97
16) 2,2'-oxybis(1-Chloropr...	7.175	45	92128	10.175	ng		100
17) 2-Methylphenol	7.140	107	46205	9.825	ng		98
18) Hexachloroethane	7.416	117	23425	9.909	ng		98
19) n-Nitroso-di-n-propyla...	7.298	70	40995	9.937	ng		96
20) 3+4-Methylphenols	7.293	107	61444	10.203	ng	#	86
22) Acetophenone	7.304	105	82804	10.234	ng		98
24) Nitrobenzene	7.475	77	59873	9.904	ng		98
25) Isophorone	7.716	82	112365	10.027	ng		98
26) 2-Nitrophenol	7.798	139	31085	9.623	ng		96
27) 2,4-Dimethylphenol	7.828	122	57543	10.102	ng		99
28) bis(2-Chloroethoxy)met...	7.928	93	71943	10.277	ng		97
29) 2,4-Dichlorophenol	8.034	162	51500	9.941	ng		99
30) 1,2,4-Trichlorobenzene	8.122	180	57228	10.179	ng		97
31) Naphthalene	8.204	128	186515	10.364	ng		100
32) Benzoic acid	7.893	122	27956m	8.062	ng		
33) 4-Chloroaniline	8.251	127	74805	10.258	ng		98
34) Hexachlorobutadiene	8.322	225	35161	10.016	ng		99
35) Caprolactam	8.587	113	13862	9.527	ng		99
36) 4-Chloro-3-methylphenol	8.722	107	52919	9.968	ng		98
37) 2-Methylnaphthalene	8.892	142	116592	10.298	ng		98
38) 1-Methylnaphthalene	8.992	142	122130	10.429	ng		99
40) 1,2,4,5-Tetrachloroben...	9.063	216	59609	10.097	ng		99
41) Hexachlorocyclopentadiene	9.051	237	36016	9.044	ng		97
43) 2,4,6-Trichlorophenol	9.169	196	38354	9.635	ng		97

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142469.D
Acq On : 20 May 2025 13:07
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Quant Time: May 20 16:55:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	42272	10.069	ng		96
46) 1,1'-Biphenyl	9.357	154	165063	10.346	ng		99
47) 2-Chloronaphthalene	9.387	162	120339	10.208	ng		96
48) 2-Nitroaniline	9.475	65	32722	9.604	ng		98
49) Acenaphthylene	9.798	152	203767	10.237	ng		99
50) Dimethylphthalate	9.651	163	137804	10.155	ng		100
51) 2,6-Dinitrotoluene	9.716	165	29112	9.940	ng		98
52) Acenaphthene	9.975	154	125669	10.339	ng		96
53) 3-Nitroaniline	9.887	138	31820	9.947	ng		99
54) 2,4-Dinitrophenol	9.992	184	11352	7.502	ng	#	82
55) Dibenzofuran	10.145	168	181558	10.380	ng		98
56) 4-Nitrophenol	10.034	139	22320	9.456	ng		92
57) 2,4-Dinitrotoluene	10.116	165	37749	9.869	ng		97
58) Fluorene	10.486	166	143883	10.648	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.257	232	34548	9.857	ng		99
60) Diethylphthalate	10.357	149	134662	10.161	ng		99
61) 4-Chlorophenyl-phenyle...	10.481	204	69739	10.506	ng		97
62) 4-Nitroaniline	10.492	138	29122	10.038	ng		98
63) Azobenzene	10.639	77	122806	10.317	ng		99
65) 4,6-Dinitro-2-methylph...	10.522	198	16782	8.403	ng		94
66) n-Nitrosodiphenylamine	10.592	169	121959	9.961	ng		100
67) 4-Bromophenyl-phenylether	10.969	248	42057	9.939	ng		96
68) Hexachlorobenzene	11.034	284	47773	10.207	ng		98
69) Atrazine	11.116	200	31184	9.591	ng		98
70) Pentachlorophenol	11.228	266	24115	9.126	ng		99
71) Phenanthrene	11.451	178	195667	10.231	ng		100
72) Anthracene	11.504	178	202509	10.375	ng		99
73) Carbazole	11.657	167	173217	10.381	ng		100
74) Di-n-butylphthalate	11.986	149	185880	10.177	ng		100
75) Fluoranthene	12.639	202	193456	10.825	ng		99
77) Benzidine	12.763	184	77091	10.508	ng		99
78) Pyrene	12.869	202	193842	10.540	ng		100
80) Butylbenzylphthalate	13.486	149	44682	8.793	ng		97
81) Benzo(a)anthracene	14.057	228	126886	9.639	ng		99
82) 3,3'-Dichlorobenzidine	14.022	252	35845	8.977	ng		99
83) Chrysene	14.092	228	118674	10.032	ng		99
84) Bis(2-ethylhexyl)phtha...	14.045	149	54056	8.310	ng		98
85) Di-n-octyl phthalate	14.663	149	94445	7.425	ng		100
87) Indeno(1,2,3-cd)pyrene	17.068	276	119642	9.956	ng		99
88) Benzo(b)fluoranthene	15.121	252	88432	9.335	ng		98
89) Benzo(k)fluoranthene	15.151	252	93315	10.517	ng		99
90) Benzo(a)pyrene	15.498	252	86477	9.684	ng		100
91) Dibenzo(a,h)anthracene	17.086	278	98308	10.087	ng		98
92) Benzo(g,h,i)perylene	17.521	276	97640	10.016	ng		99

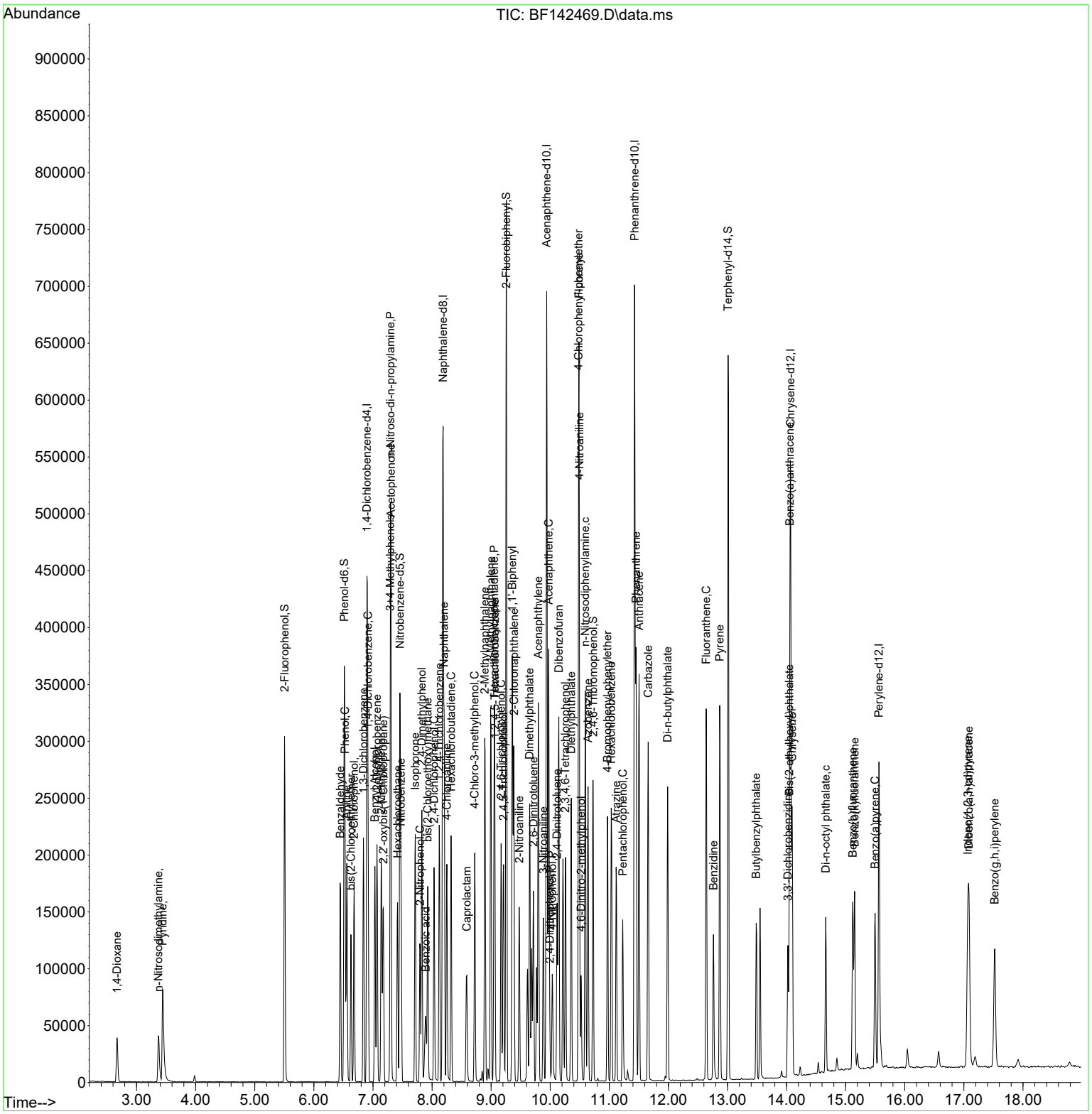
(#) = qualifier out of range (m) = manual integration (+) = signals summed

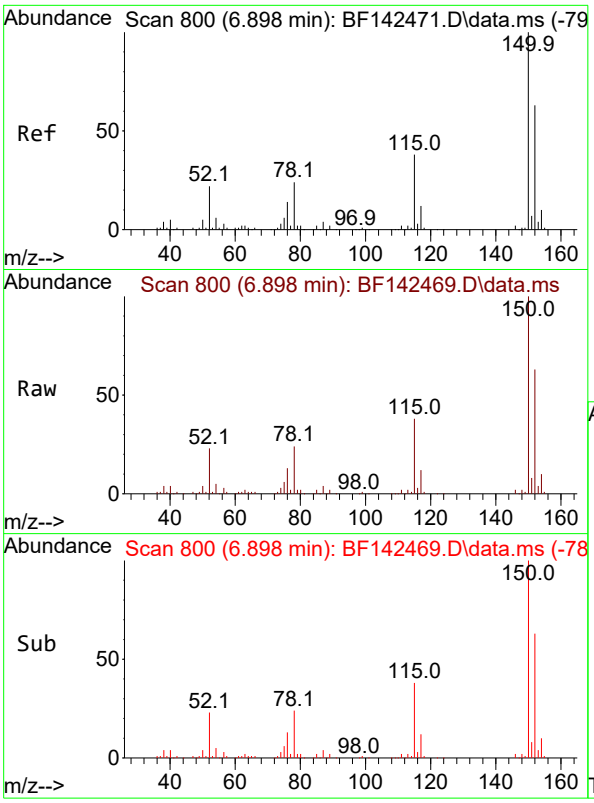
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142469.D
Acq On : 20 May 2025 13:07
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Quant Time: May 20 16:55:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



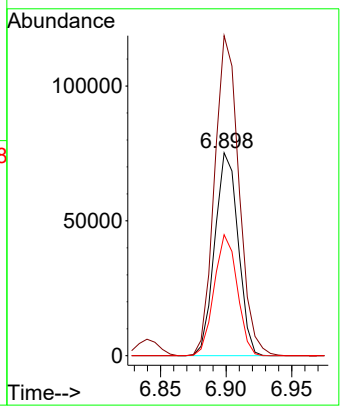


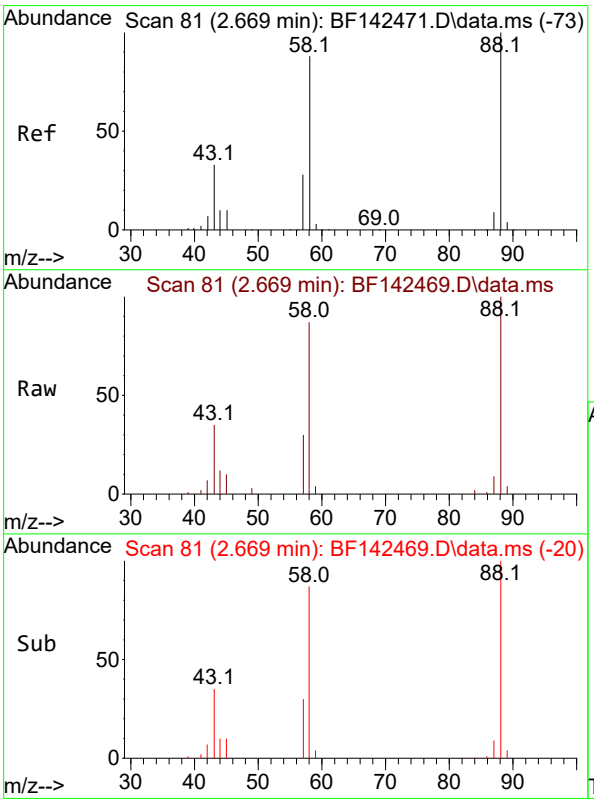
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:152 Resp: 93167

Ion	Ratio	Lower	Upper
152	100		
150	157.7	128.2	192.4
115	59.6	48.3	72.5

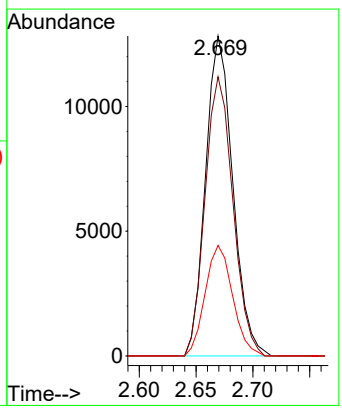


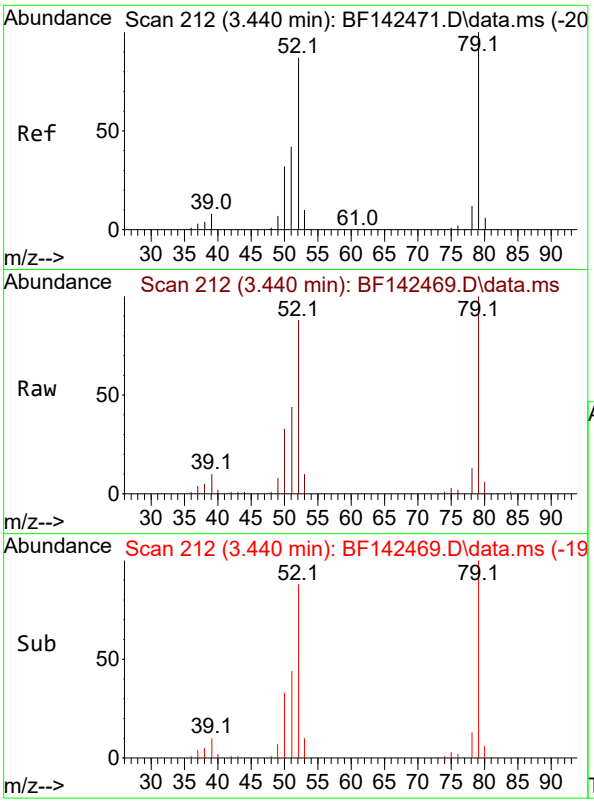


#2
1,4-Dioxane
Concen: 9.676 ng
RT: 2.669 min Scan# 81
Delta R.T. 0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 88 Resp: 21412

Ion	Ratio	Lower	Upper
88	100		
58	89.3	70.8	106.2
43	34.8	26.6	40.0



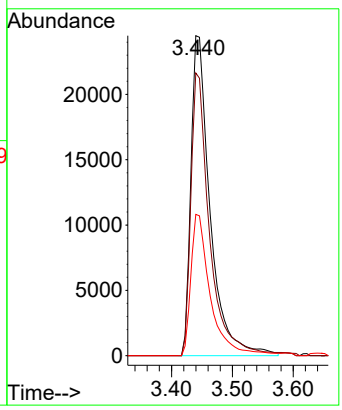


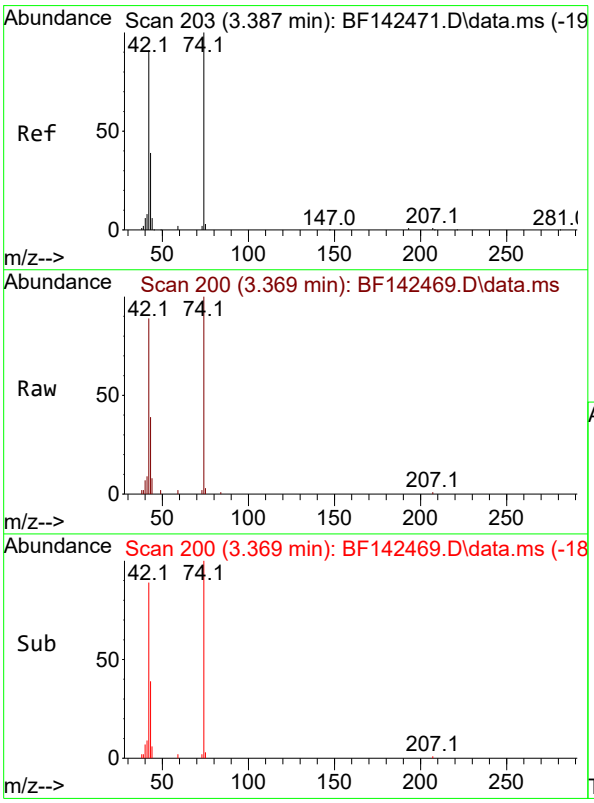
#3
Pyridine
Concen: 9.509 ng
RT: 3.440 min Scan# 21
Delta R.T. 0.000 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 79 Resp: 53586

Ion	Ratio	Lower	Upper
79	100		
52	88.4	69.2	103.8
51	44.2	33.3	49.9

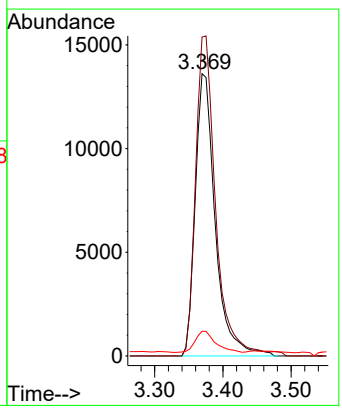


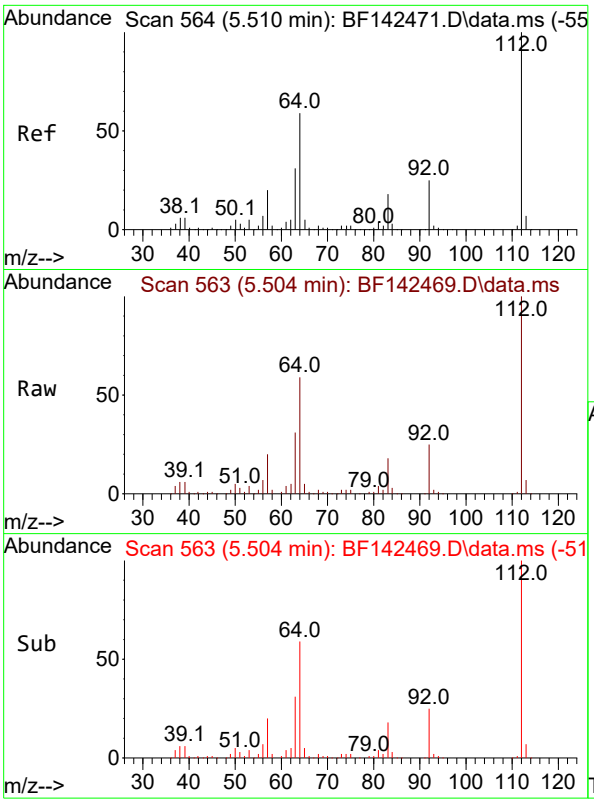


#4
n-Nitrosodimethylamine
Concen: 9.441 ng
RT: 3.369 min Scan# 200
Delta R.T. -0.035 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 42 Resp: 27624

Ion	Ratio	Lower	Upper
42	100		
74	113.0	88.2	132.4
44	8.8	5.4	8.2#



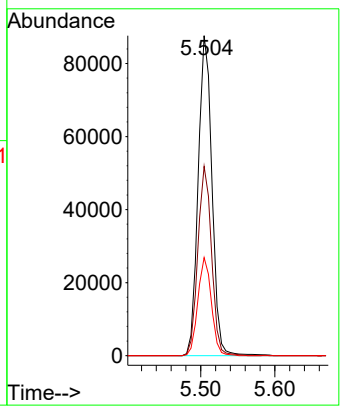


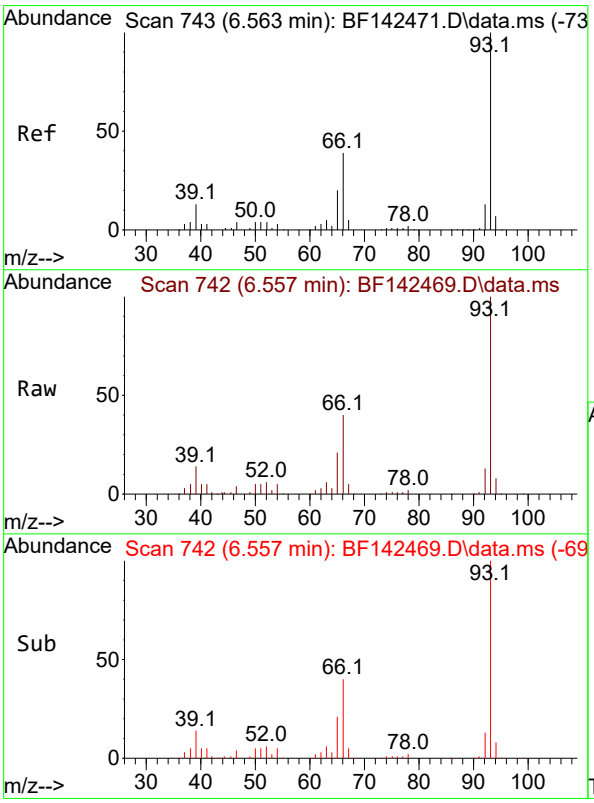
#5
2-Fluorophenol
Concen: 20.452 ng
RT: 5.504 min Scan# 5
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:112 Resp: 113098

Ion	Ratio	Lower	Upper
112	100		
64	59.1	47.5	71.3
63	30.7	24.9	37.3

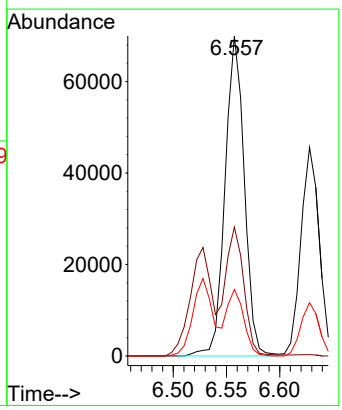


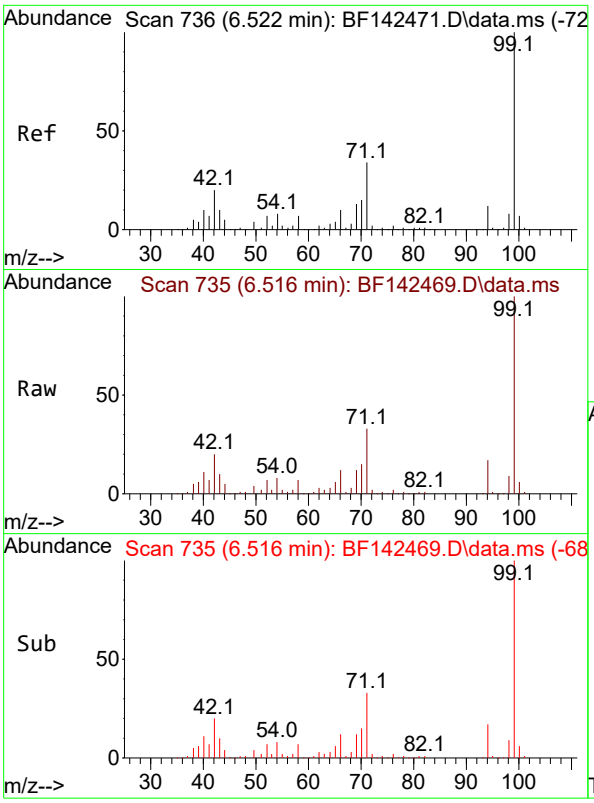


#6
Aniline
Concen: 9.831 ng
RT: 6.557 min Scan# 742
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 93 Resp: 87993

Ion	Ratio	Lower	Upper
93	100		
66	40.3	32.0	48.0
65	20.8	16.1	24.1



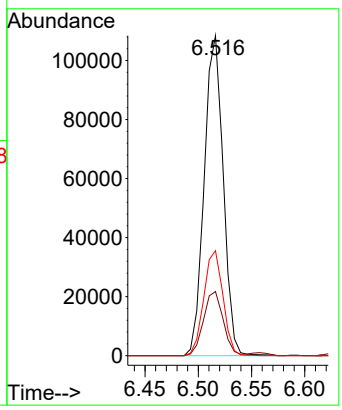


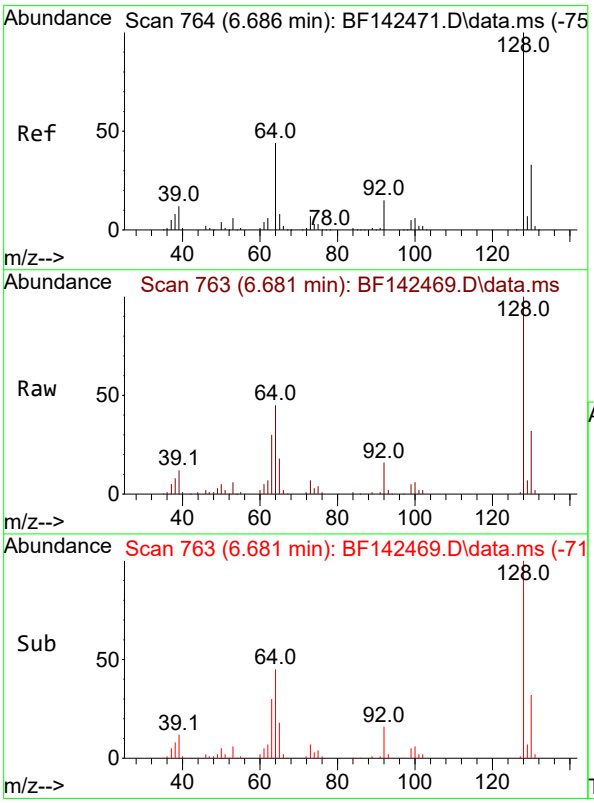
#7
Phenol-d6
Concen: 20.273 ng
RT: 6.516 min Scan# 7
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 99 Resp: 134953

Ion	Ratio	Lower	Upper
99	100		
42	20.0	16.2	24.2
71	32.8	27.3	40.9

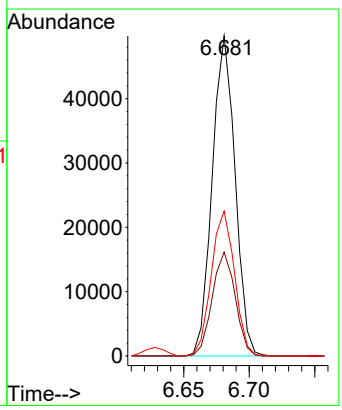


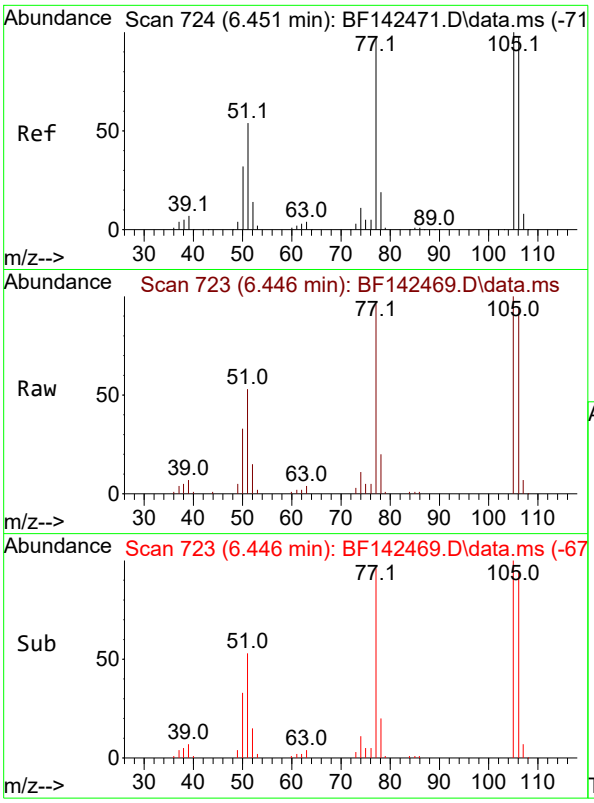


#8
2-Chlorophenol
Concen: 9.997 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:128 Resp: 60216

Ion	Ratio	Lower	Upper
128	100		
130	32.4	12.6	52.6
64	45.3	25.1	65.1



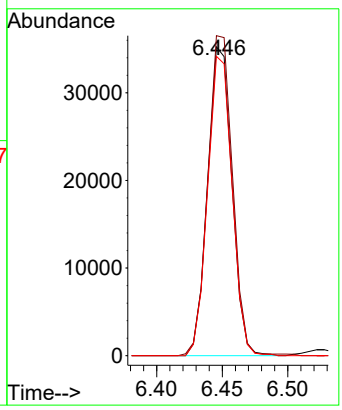


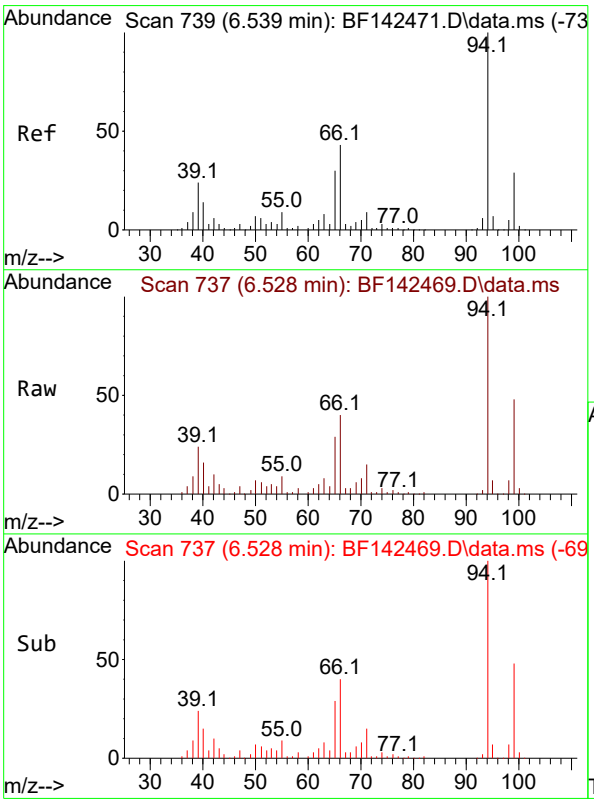
#9
Benzaldehyde
Concen: 11.347 ng
RT: 6.446 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 77 Resp: 45431

Ion	Ratio	Lower	Upper
77	100		
105	103.6	82.5	122.5
106	97.0	80.0	120.0

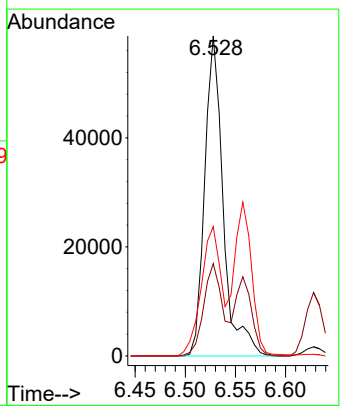


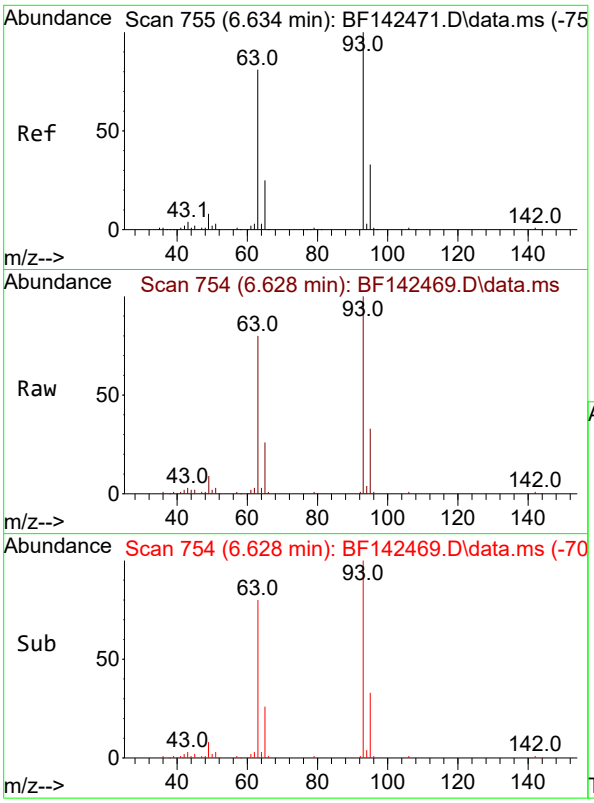


#10
Phenol
Concen: 10.083 ng
RT: 6.528 min Scan# 737
Delta R.T. -0.023 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 94 Resp: 75527

Ion	Ratio	Lower	Upper
94	100		
65	28.8	10.3	50.3
66	40.4	22.6	62.6



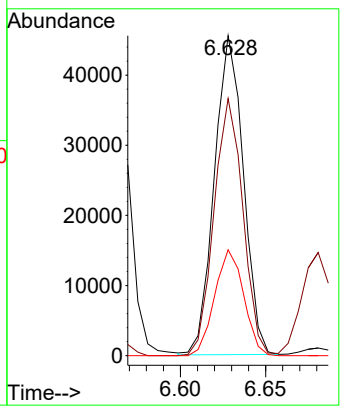


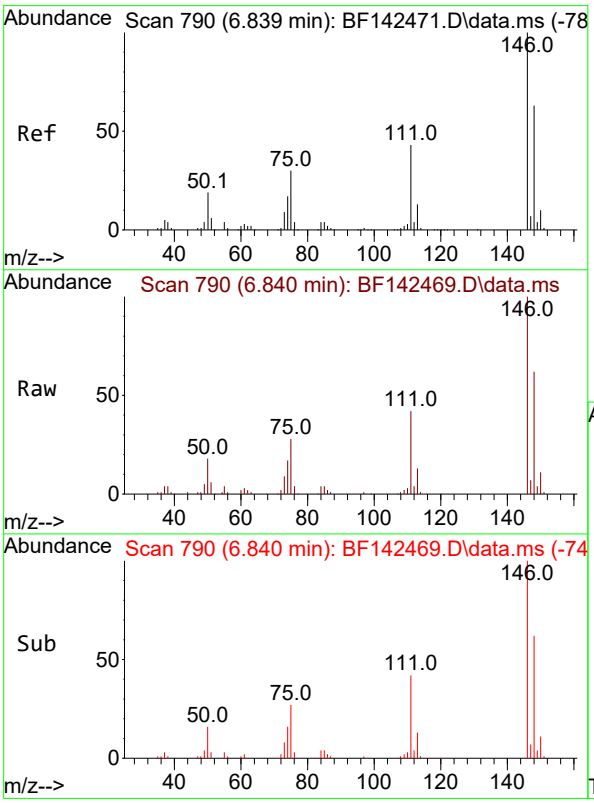
#11
bis(2-Chloroethyl)ether
Concen: 9.978 ng
RT: 6.628 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 93 Resp: 53797

Ion	Ratio	Lower	Upper
93	100		
63	80.3	60.2	100.2
95	33.1	12.3	52.3

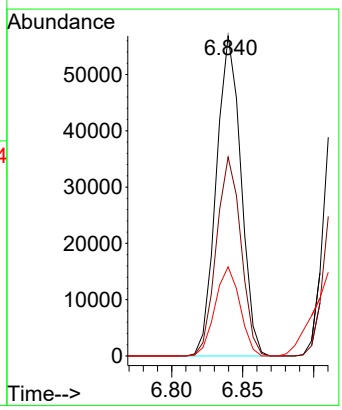


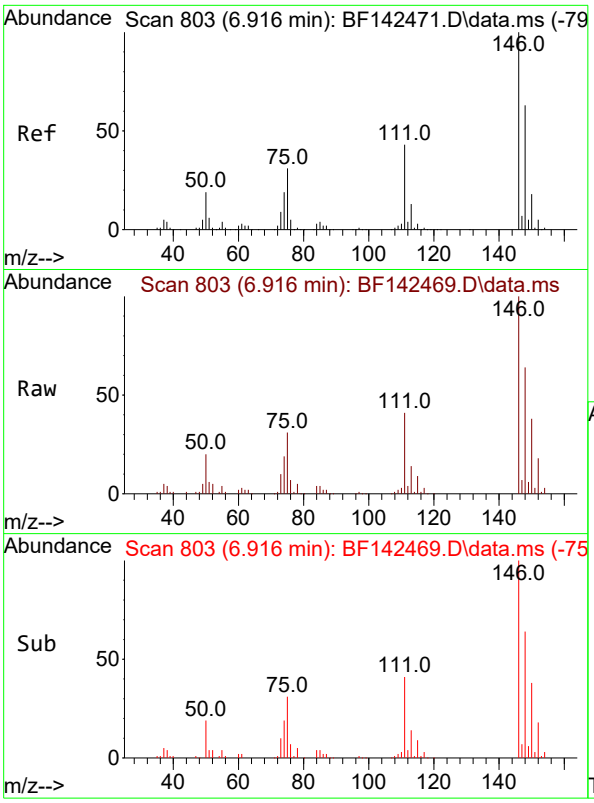


#12
1,3-Dichlorobenzene
Concen: 10.189 ng
RT: 6.840 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:146 Resp: 68483

Ion	Ratio	Lower	Upper
146	100		
148	62.2	50.6	75.8
75	27.9	23.8	35.6



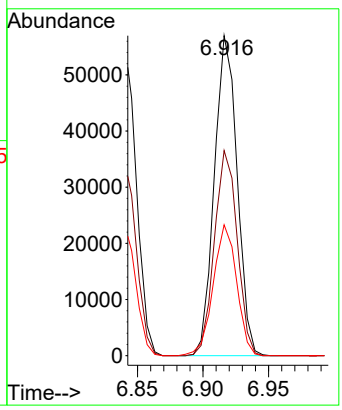


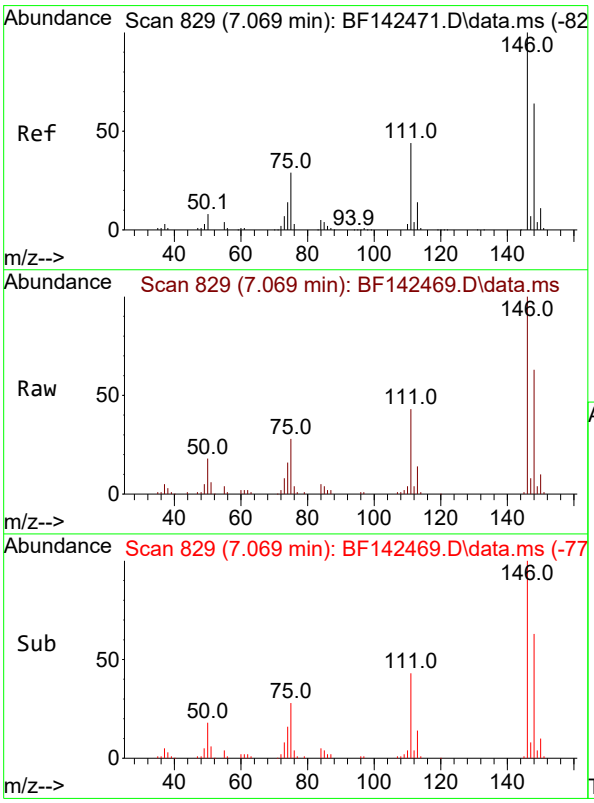
#13
1,4-Dichlorobenzene
Concen: 10.158 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:146 Resp: 68774

Ion	Ratio	Lower	Upper
146	100		
148	64.1	50.4	75.6
111	40.9	34.1	51.1

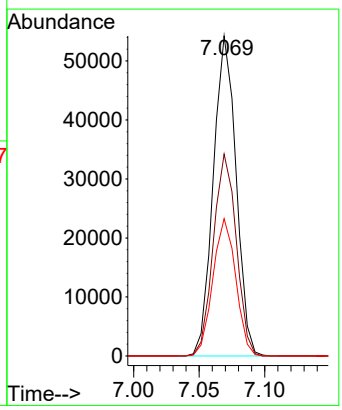


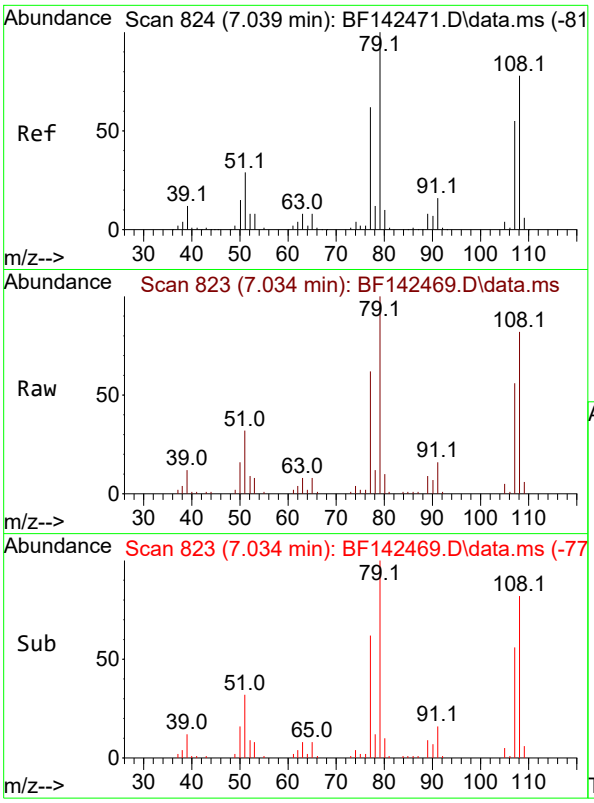


#14
1,2-Dichlorobenzene
Concen: 10.102 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:146 Resp: 65441

Ion	Ratio	Lower	Upper
146	100		
148	63.1	51.0	76.4
111	42.9	35.0	52.6



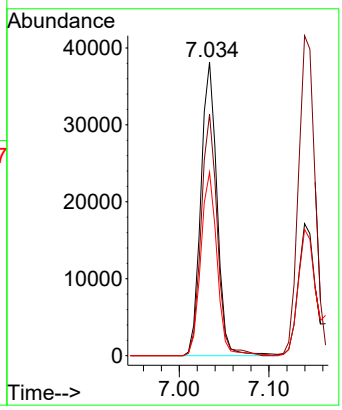


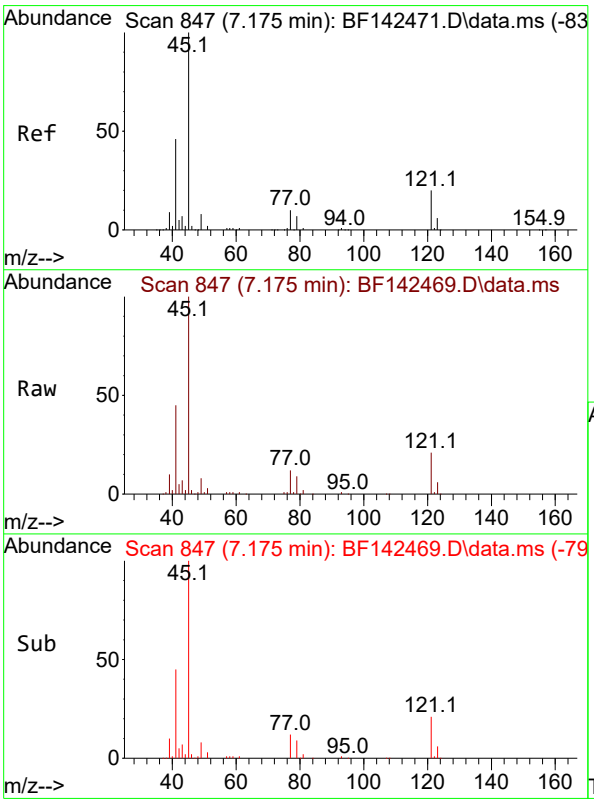
#15
Benzyl Alcohol
Concen: 9.699 ng
RT: 7.034 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 79 Resp: 47712

Ion	Ratio	Lower	Upper
79	100		
108	82.2	62.1	93.1
77	62.4	49.5	74.3

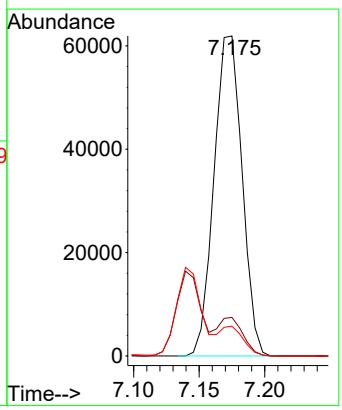


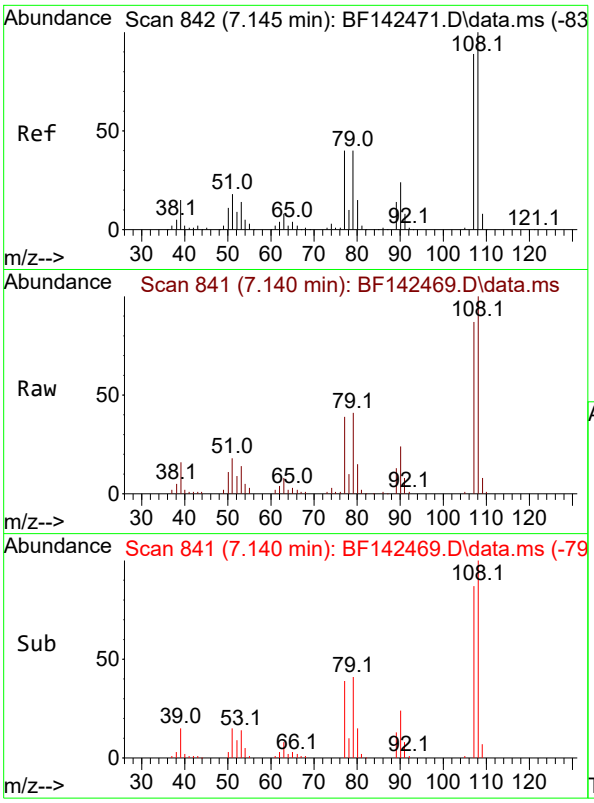


#16
2,2'-oxybis(1-Chloropropane)
Concen: 10.175 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 45 Resp: 92128

Ion	Ratio	Lower	Upper
45	100		
77	12.1	0.0	32.0
79	9.3	0.0	29.2



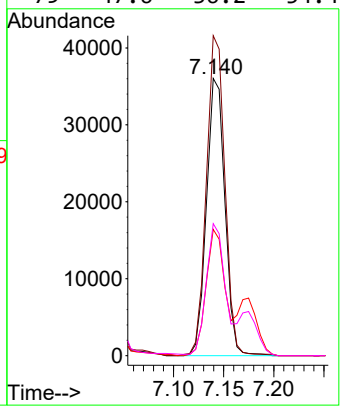


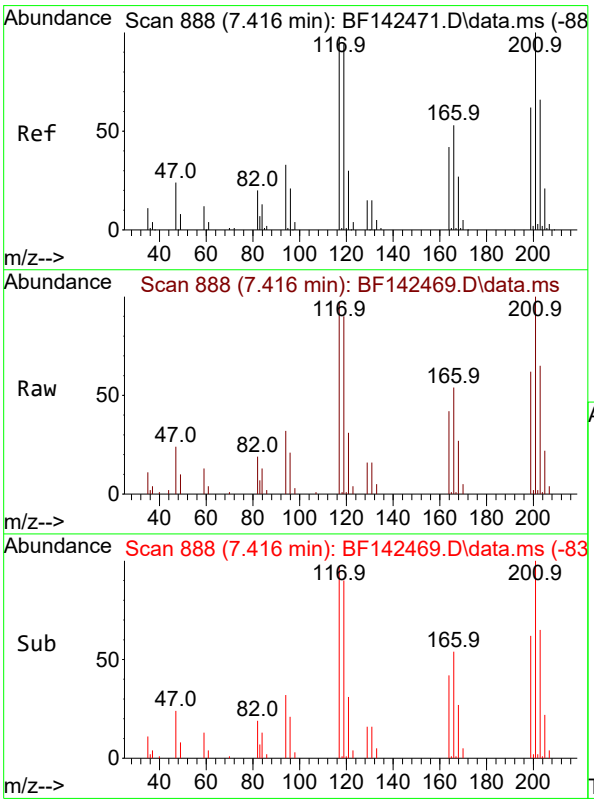
#17
2-Methylphenol
Concen: 9.825 ng
RT: 7.140 min Scan# 84
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:107 Resp: 46205

Ion	Ratio	Lower	Upper
107	100		
108	115.4	90.2	135.2
77	45.6	36.1	54.1
79	47.6	36.2	54.4

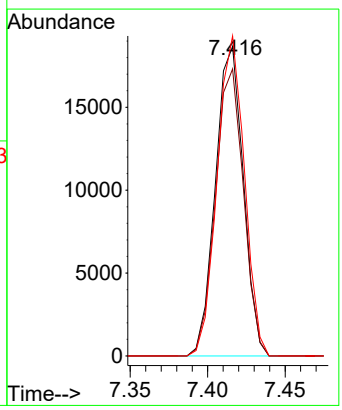


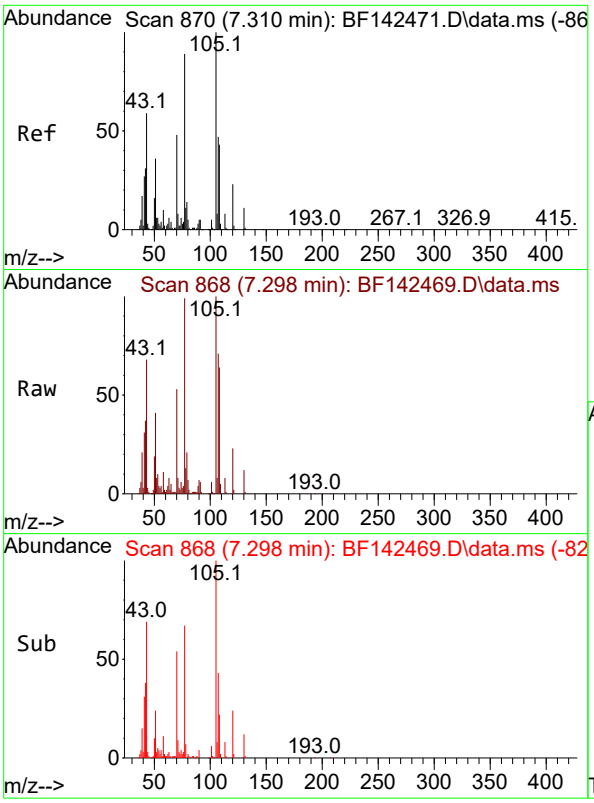


#18
Hexachloroethane
Concen: 9.909 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:117 Resp: 23425

Ion	Ratio	Lower	Upper
117	100		
119	92.7	76.6	114.8
201	103.3	81.3	121.9



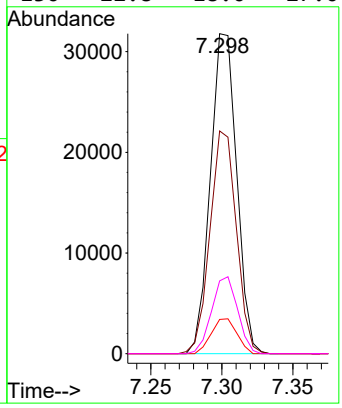


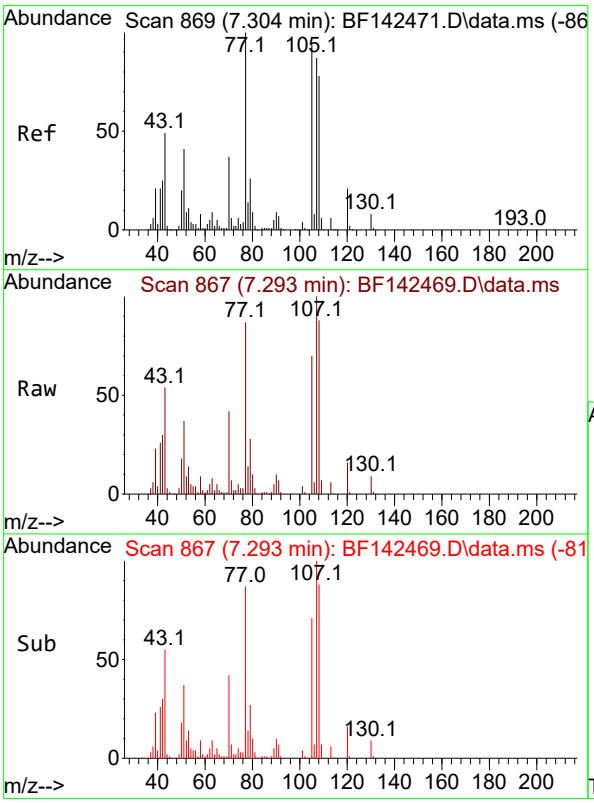
#19
n-Nitroso-di-n-propylamine
Concen: 9.937 ng
RT: 7.298 min Scan# 8
Delta R.T. -0.029 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 70 Resp: 40995

Ion	Ratio	Lower	Upper
70	100		
42	69.6	52.4	78.6
101	10.7	7.8	11.8
130	22.8	18.0	27.0

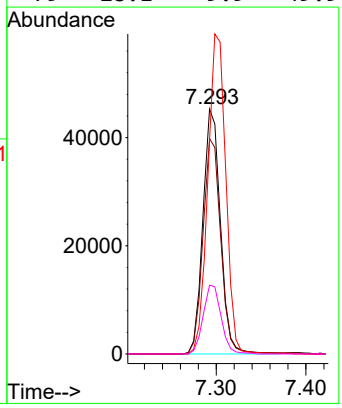


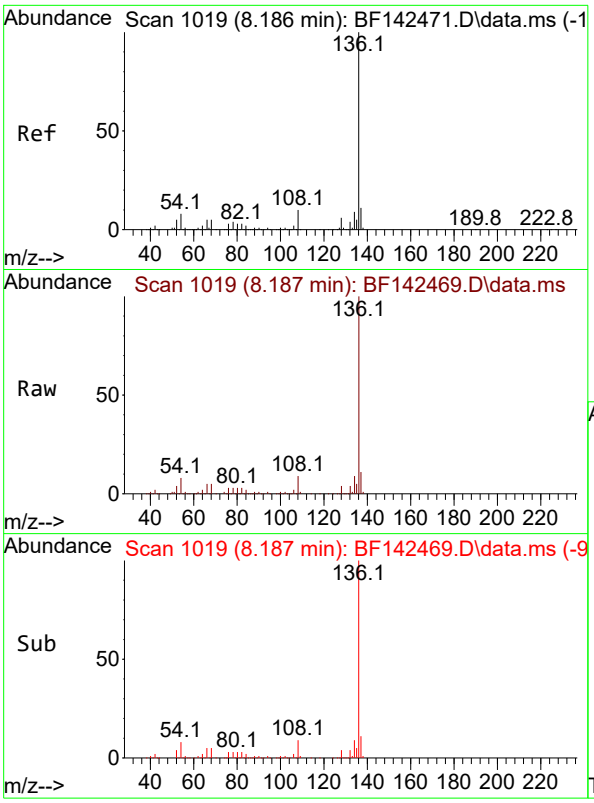


#20
3+4-Methylphenols
Concen: 10.203 ng
RT: 7.293 min Scan# 867
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:107 Resp: 61444

Ion	Ratio	Lower	Upper
107	100		
108	87.9	70.4	110.4
77	87.2	95.4	135.4#
79	28.1	9.9	49.9



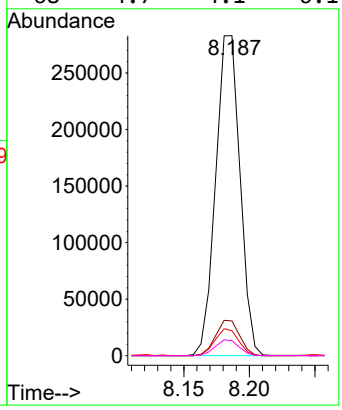


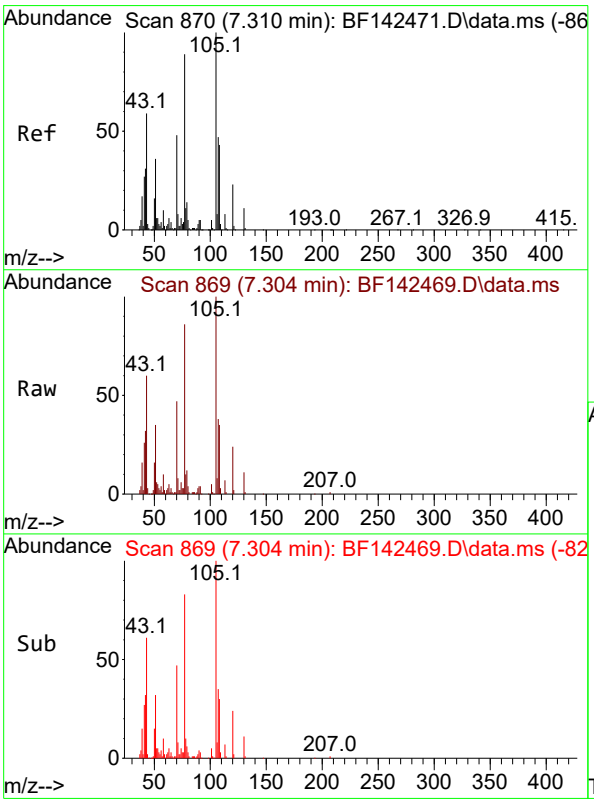
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.187 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:136 Resp: 365488

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	7.8	6.6	10.0
68	4.7	4.1	6.1

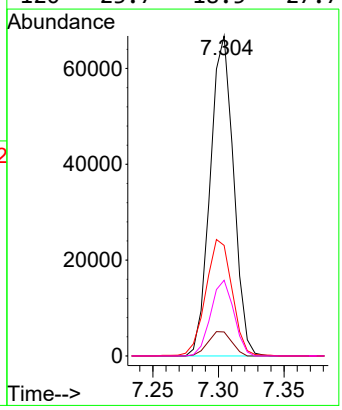


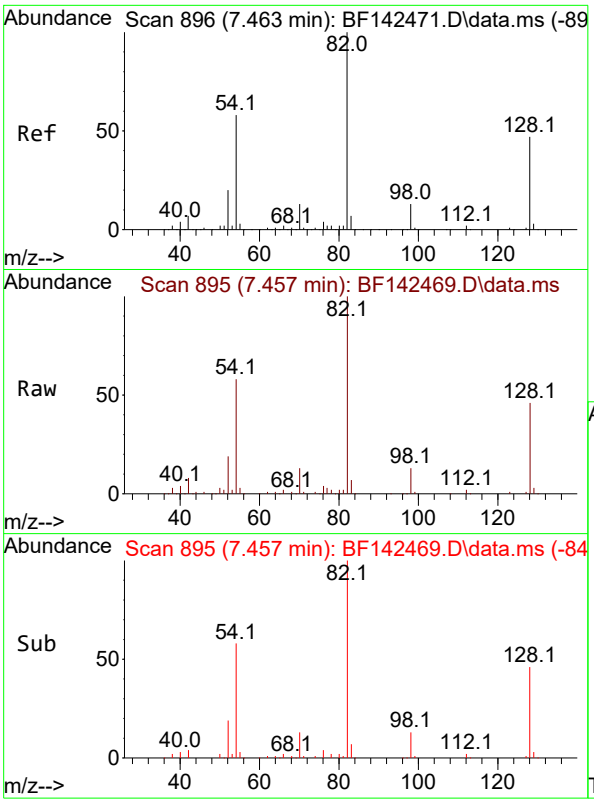


#22
Acetophenone
Concen: 10.234 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:105 Resp: 82804

Ion	Ratio	Lower	Upper
105	100		
71	7.5	6.4	9.6
51	34.5	28.6	42.8
120	23.7	18.5	27.7



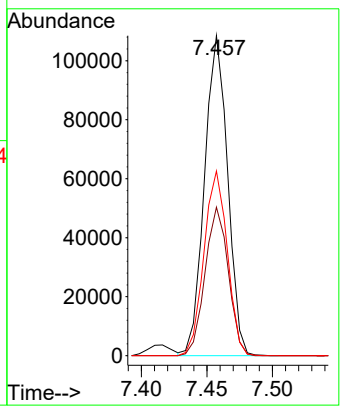


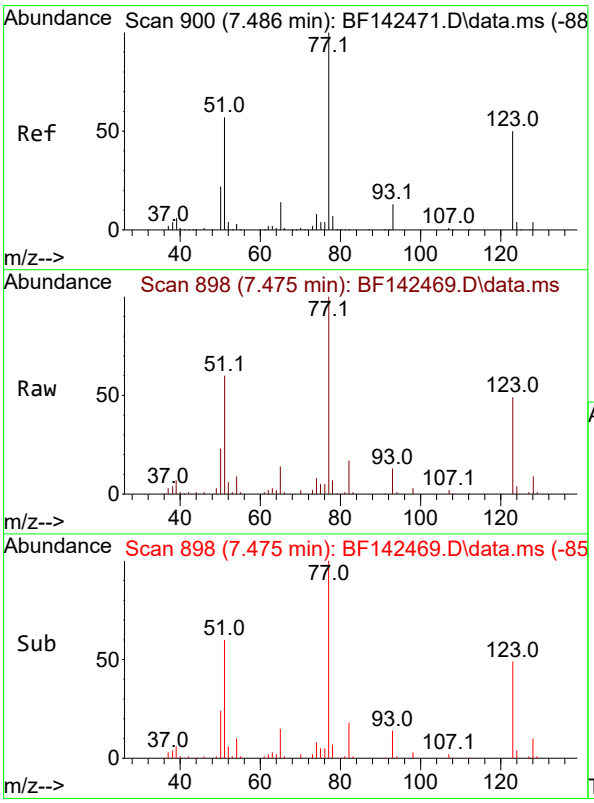
#23
Nitrobenzene-d5
Concen: 19.881 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 82 Resp: 133256

Ion	Ratio	Lower	Upper
82	100		
128	46.4	37.4	56.2
54	57.7	46.6	70.0

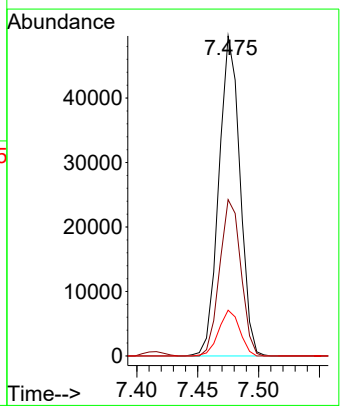


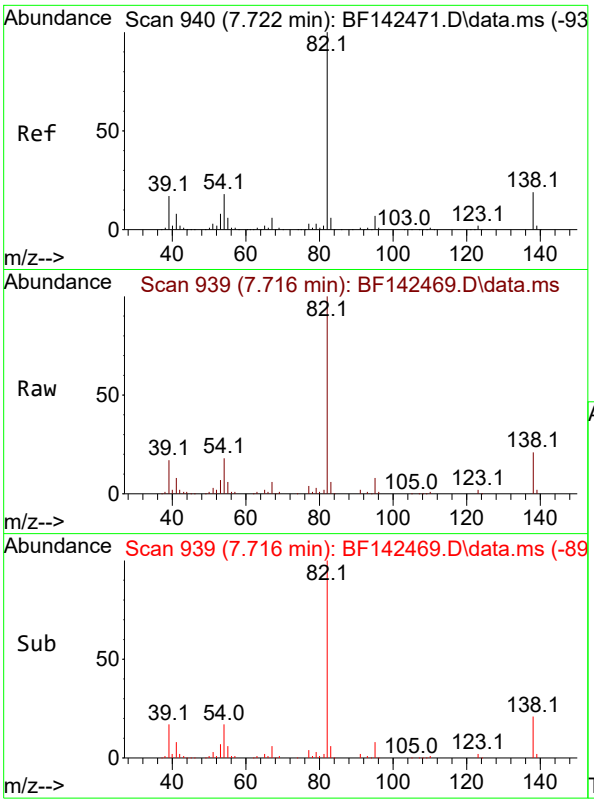


#24
Nitrobenzene
Concen: 9.904 ng
RT: 7.475 min Scan# 898
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 77 Resp: 59873

Ion	Ratio	Lower	Upper
77	100		
123	48.8	40.6	61.0
65	14.3	11.4	17.2



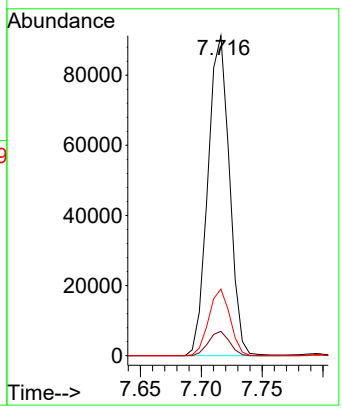


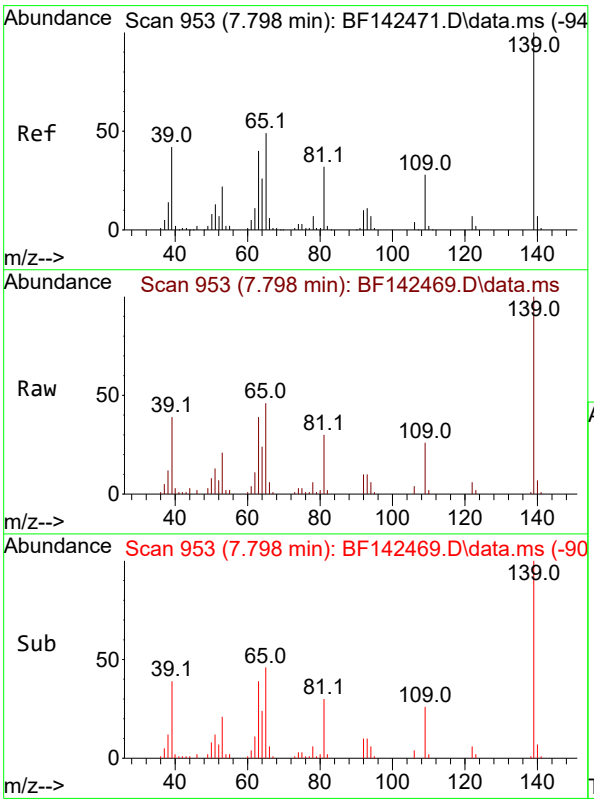
#25
Isophorone
Concen: 10.027 ng
RT: 7.716 min Scan# 9
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 82 Resp: 112365

Ion	Ratio	Lower	Upper
82	100		
95	7.6	6.0	9.0
138	20.8	15.5	23.3

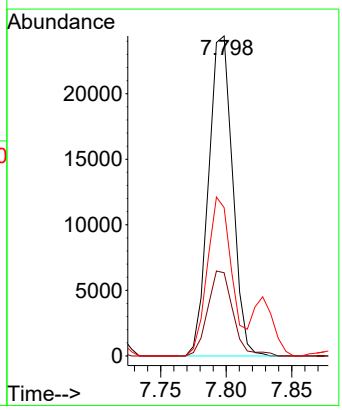


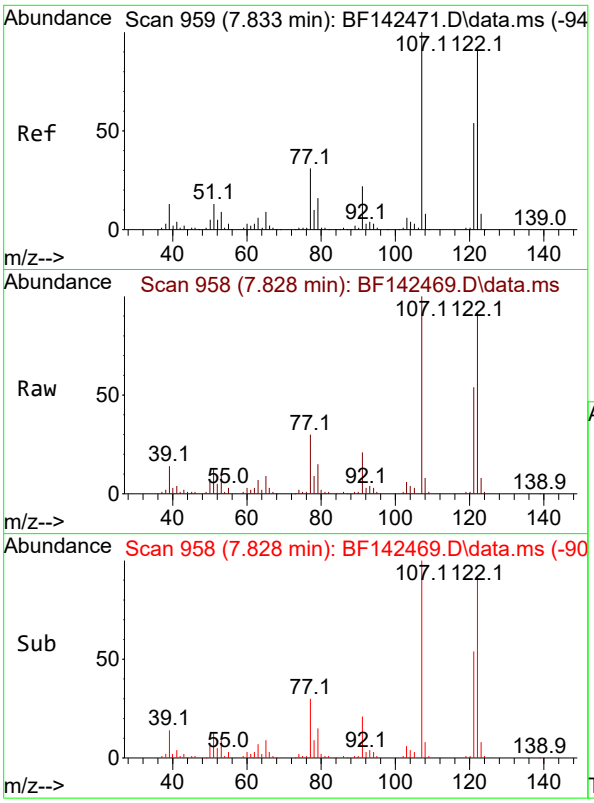


#26
2-Nitrophenol
Concen: 9.623 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:139 Resp: 31085

Ion	Ratio	Lower	Upper
139	100		
109	26.0	22.6	33.8
65	46.4	39.4	59.0



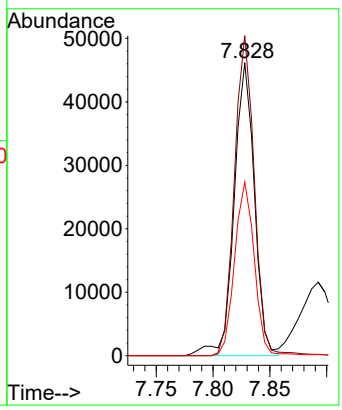


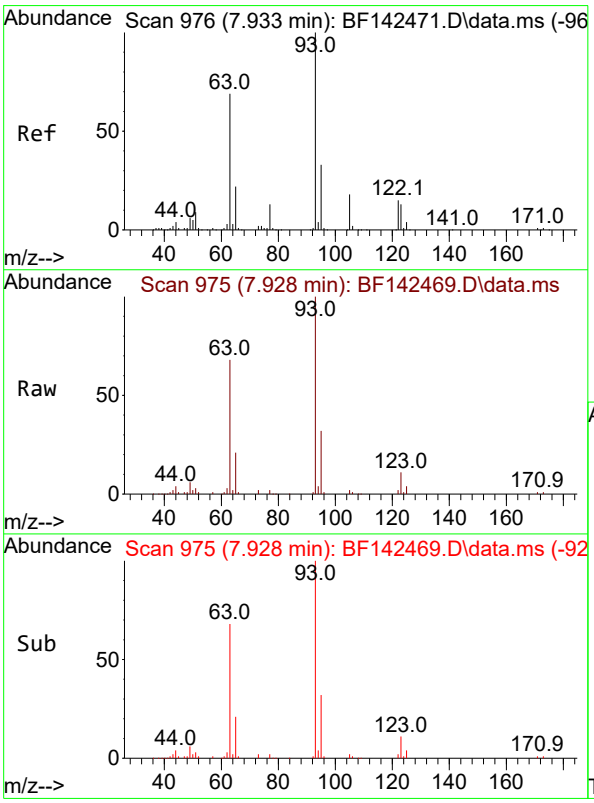
#27
2,4-Dimethylphenol
Concen: 10.102 ng
RT: 7.828 min Scan# 9
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:122 Resp: 57543

Ion	Ratio	Lower	Upper
122	100		
107	109.2	88.1	132.1
121	59.3	47.3	70.9

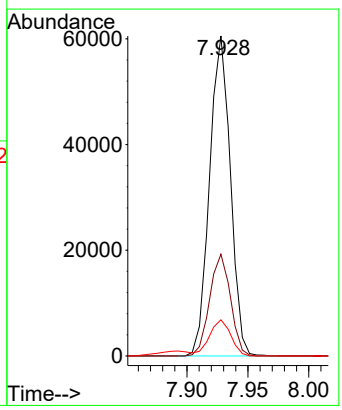


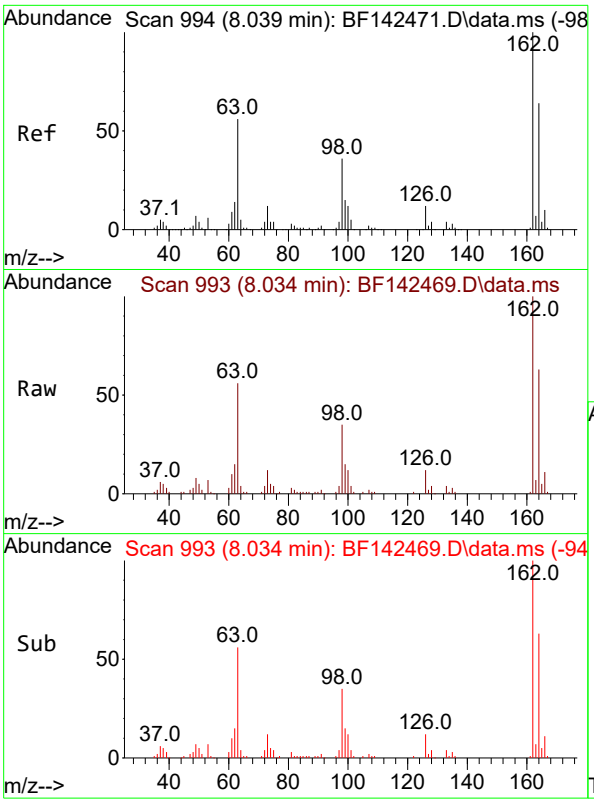


#28
bis(2-Chloroethoxy)methane
Concen: 10.277 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 93 Resp: 71943

Ion	Ratio	Lower	Upper
93	100		
95	31.8	26.4	39.6
123	11.3	10.6	15.8



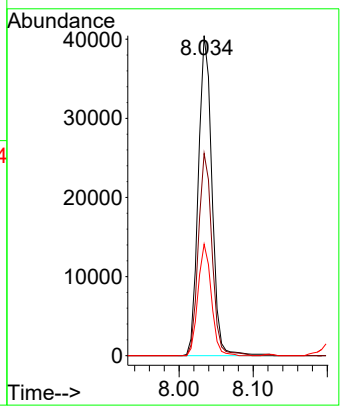


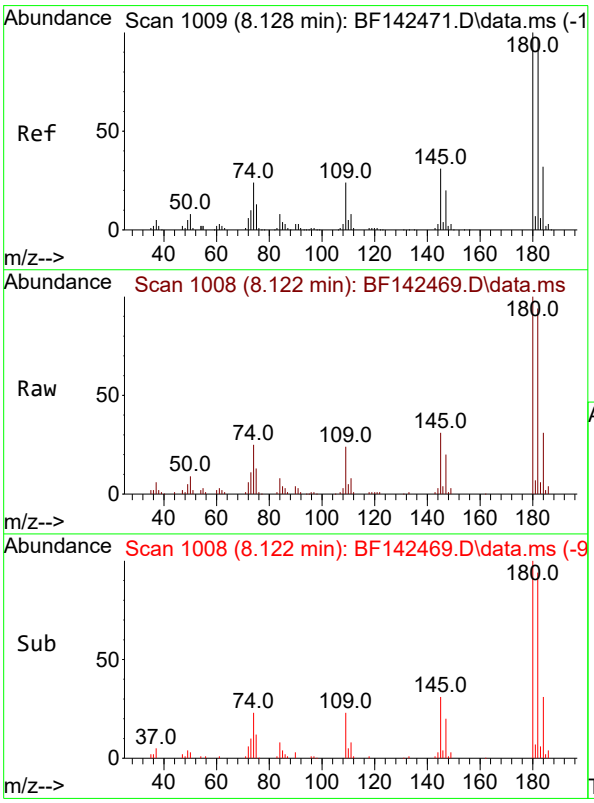
#29
2,4-Dichlorophenol
Concen: 9.941 ng
RT: 8.034 min Scan# 9
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:162 Resp: 51500

Ion	Ratio	Lower	Upper
162	100		
164	63.2	43.7	83.7
98	34.8	15.5	55.5

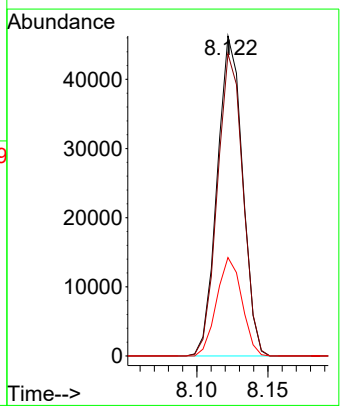


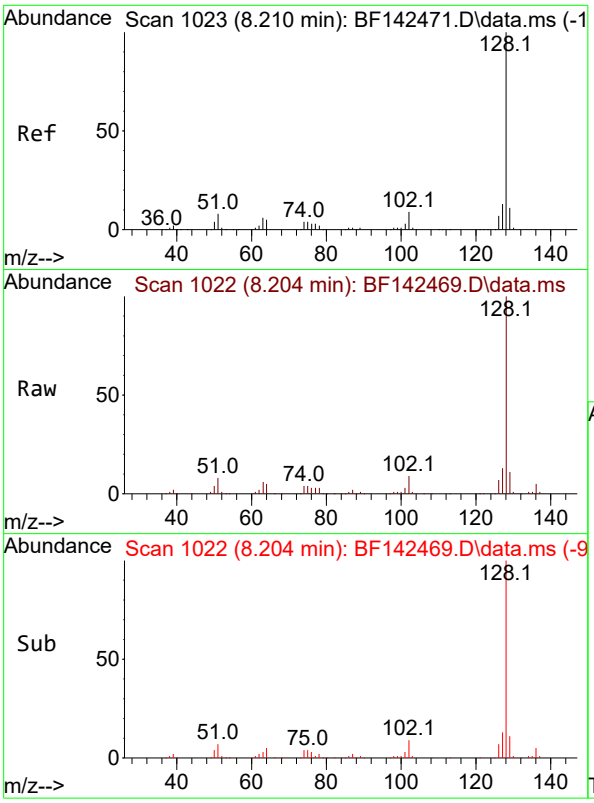


#30
1,2,4-Trichlorobenzene
Concen: 10.179 ng
RT: 8.122 min Scan# 1008
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:180 Resp: 57228

Ion	Ratio	Lower	Upper
180	100		
182	94.4	78.0	117.0
145	30.8	25.0	37.6



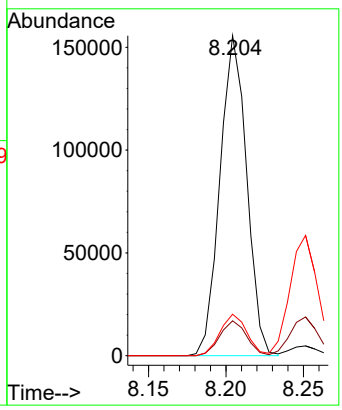


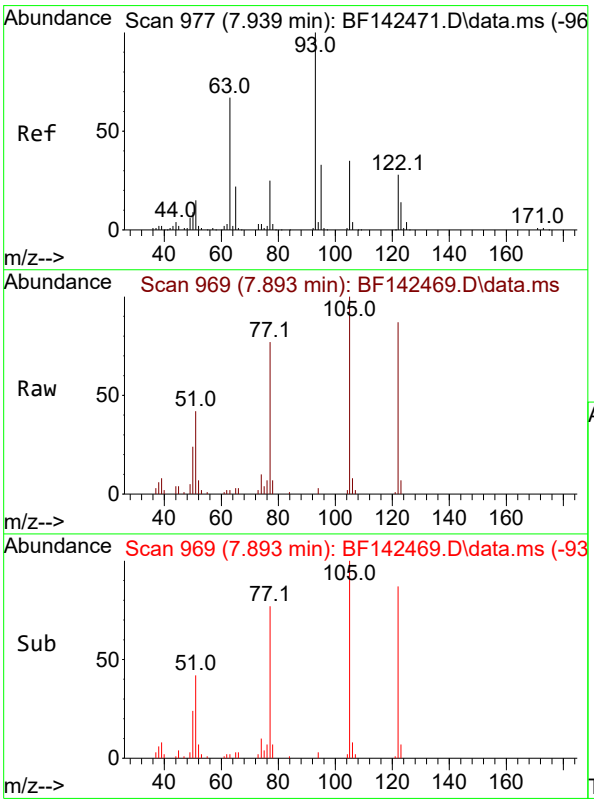
#31
Naphthalene
Concen: 10.364 ng
RT: 8.204 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:128 Resp: 186515

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.9	13.3
127	13.0	10.5	15.7

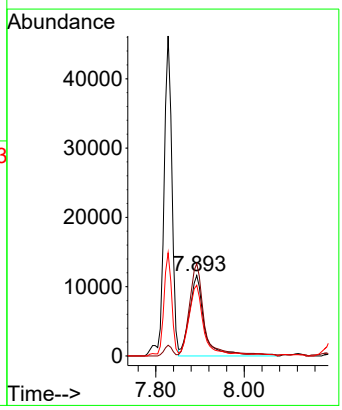


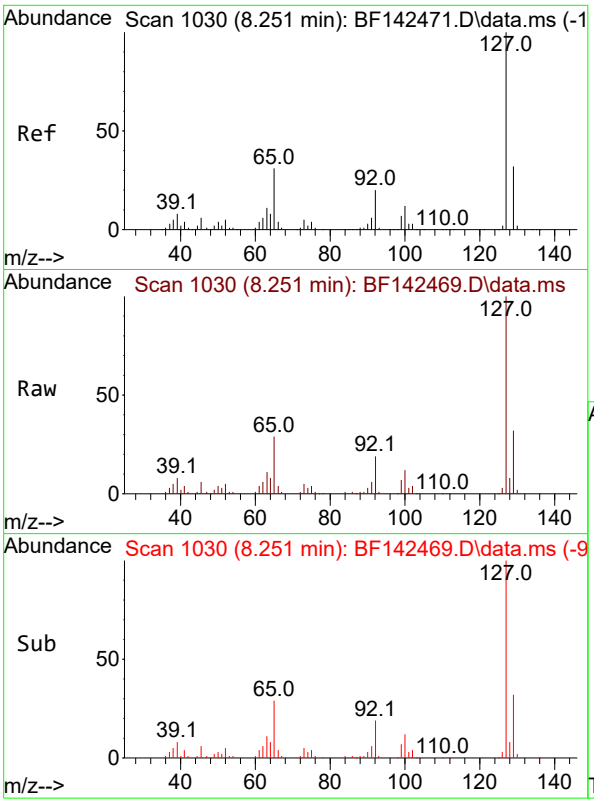


#32
Benzoic acid
Concen: 8.062 ng m
RT: 7.893 min Scan# 969
Delta R.T. -0.082 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:122 Resp: 27956

Ion	Ratio	Lower	Upper
122	100		
105	114.9	101.7	141.7
77	87.9	69.5	109.5



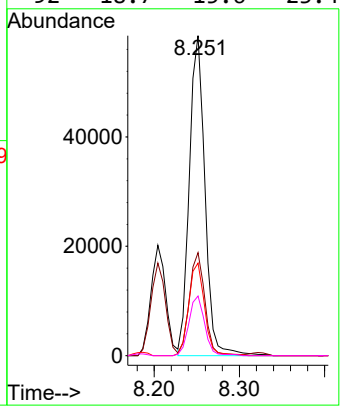


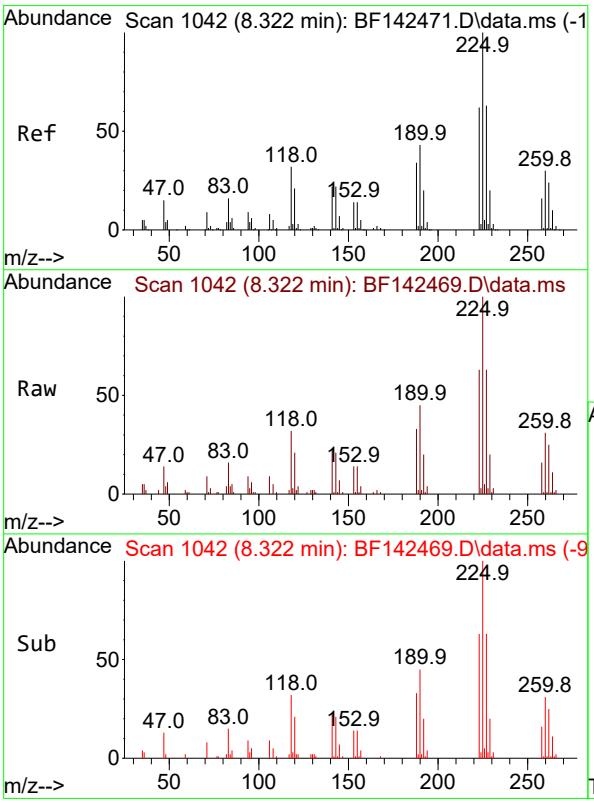
#33
4-Chloroaniline
Concen: 10.258 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:127 Resp: 74805

Ion	Ratio	Lower	Upper
127	100		
129	32.2	26.1	39.1
65	29.0	24.9	37.3
92	18.7	15.6	23.4

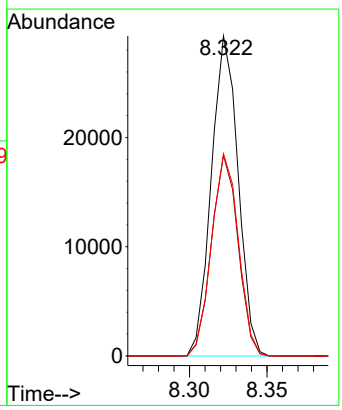


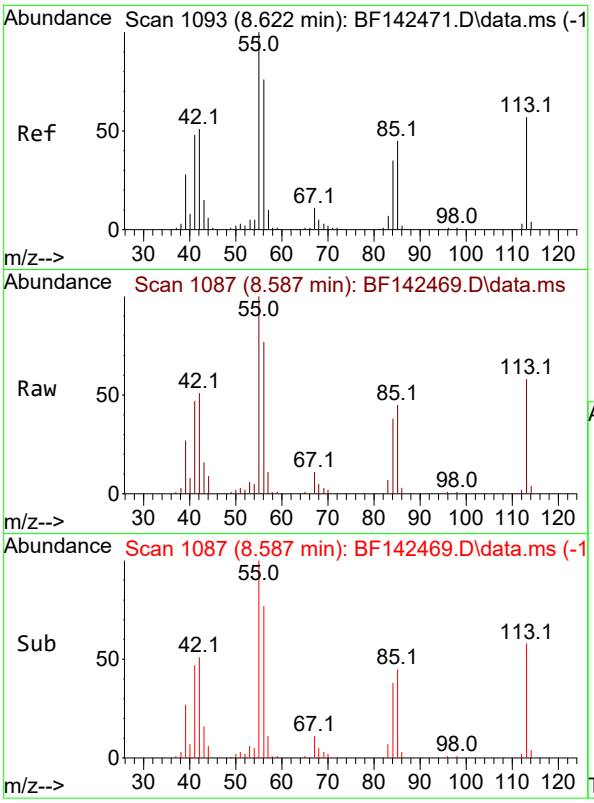


#34
Hexachlorobutadiene
Concen: 10.016 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:225 Resp: 35161

Ion	Ratio	Lower	Upper
225	100		
223	62.7	49.7	74.5
227	63.2	50.3	75.5



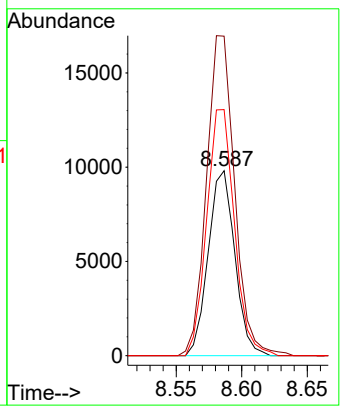


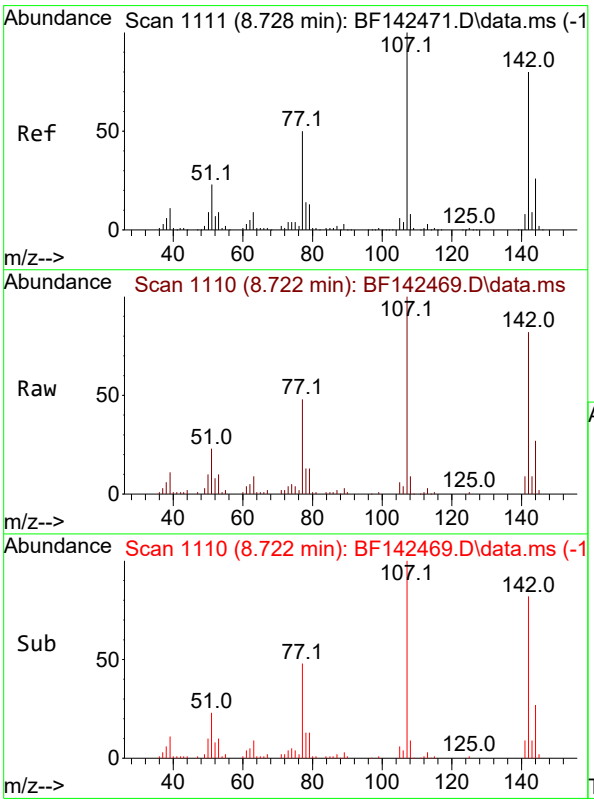
#35
Caprolactam
Concen: 9.527 ng
RT: 8.587 min Scan# 1
Delta R.T. -0.059 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:113 Resp: 13862

Ion	Ratio	Lower	Upper
113	100		
55	172.8	154.7	194.7
56	133.0	113.2	153.2

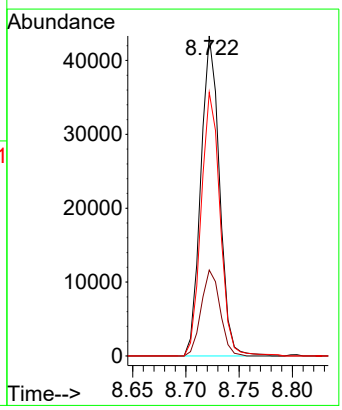


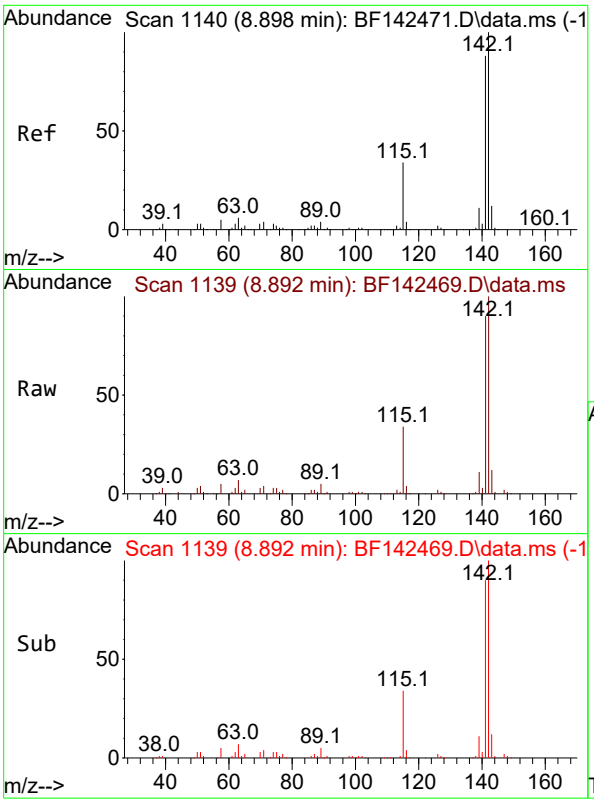


#36
4-Chloro-3-methylphenol
Concen: 9.968 ng
RT: 8.722 min Scan# 1110
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:107 Resp: 52919

Ion	Ratio	Lower	Upper
107	100		
144	26.9	20.9	31.3
142	82.4	64.2	96.2



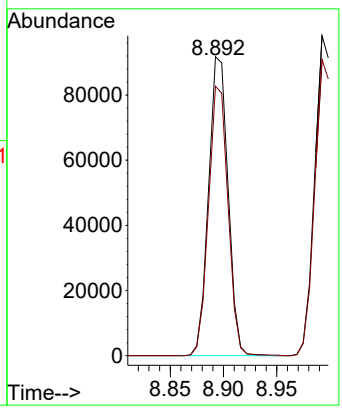


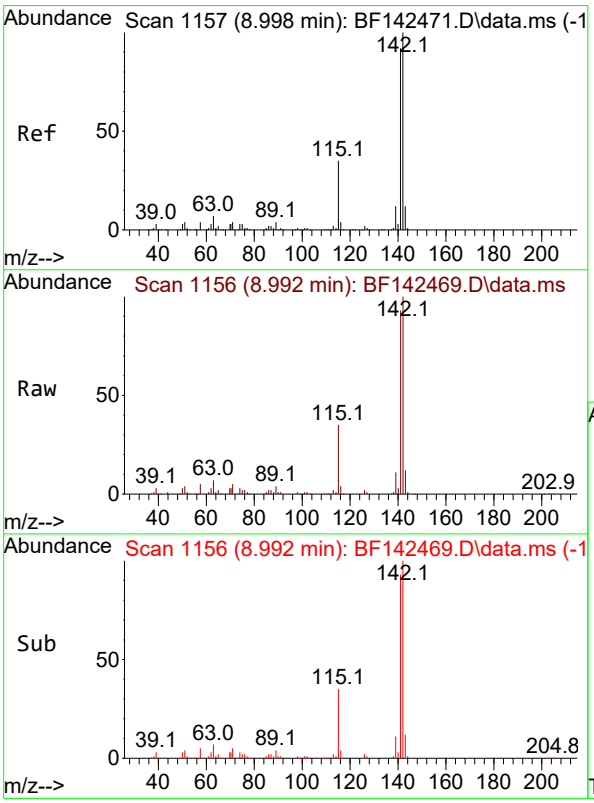
#37
2-Methylnaphthalene
Concen: 10.298 ng
RT: 8.892 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:142 Resp: 116592

Ion	Ratio	Lower	Upper
142	100		
141	90.2	70.7	106.1

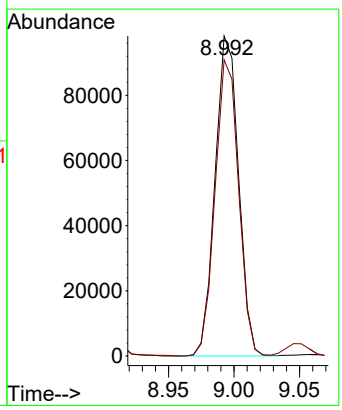


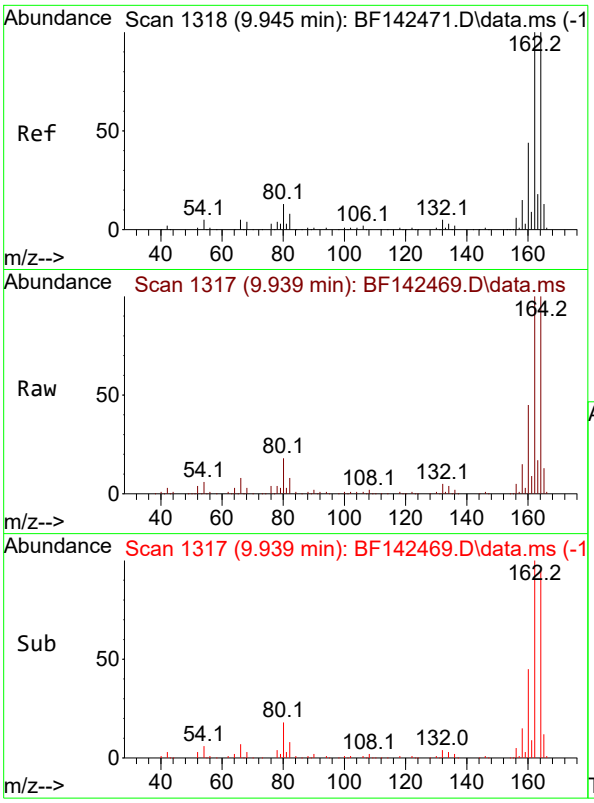


#38
1-Methylnaphthalene
Concen: 10.429 ng
RT: 8.992 min Scan# 1156
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:142 Resp: 122130

Ion	Ratio	Lower	Upper
142	100		
141	92.6	73.4	110.2



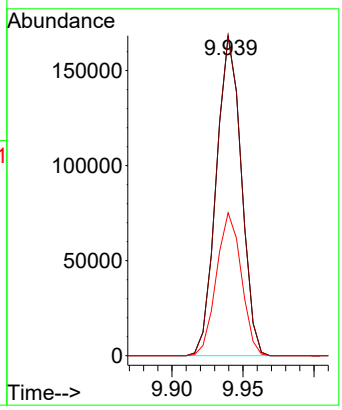


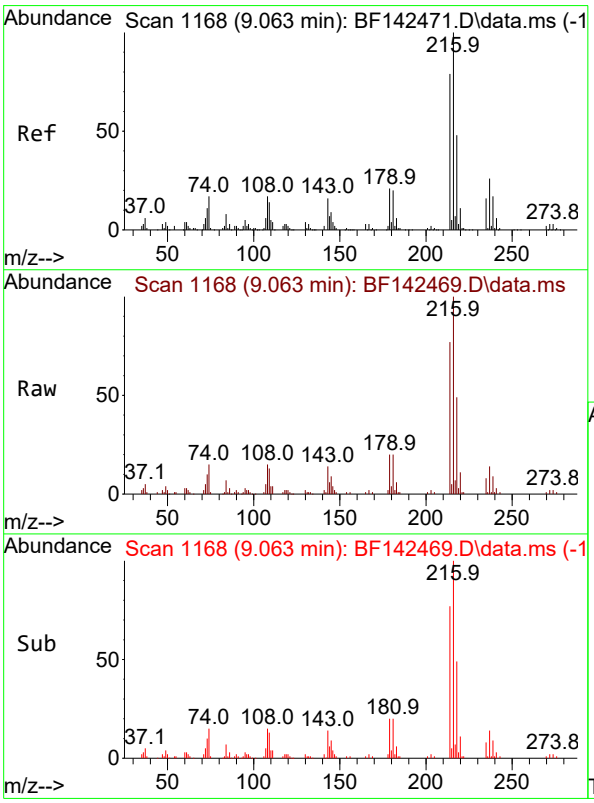
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:164 Resp: 205654

Ion	Ratio	Lower	Upper
164	100		
162	100.2	80.2	120.4
160	44.7	35.6	53.4

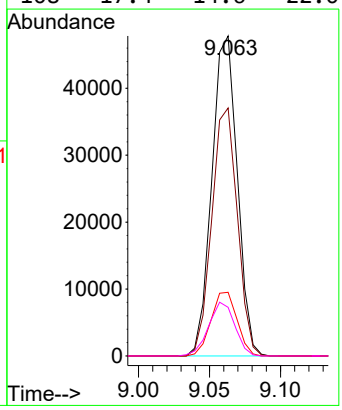


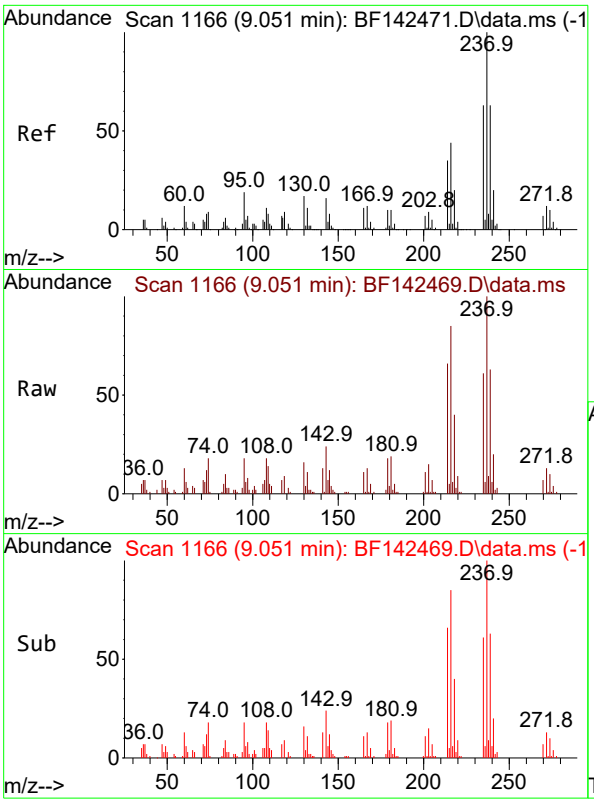


#40
1,2,4,5-Tetrachlorobenzene
Concen: 10.097 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:216 Resp: 59609

Ion	Ratio	Lower	Upper
216	100		
214	77.8	62.9	94.3
179	20.4	16.9	25.3
108	17.4	14.6	22.0



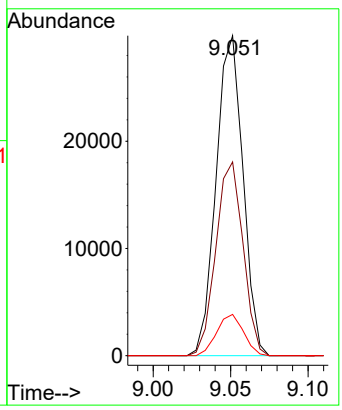


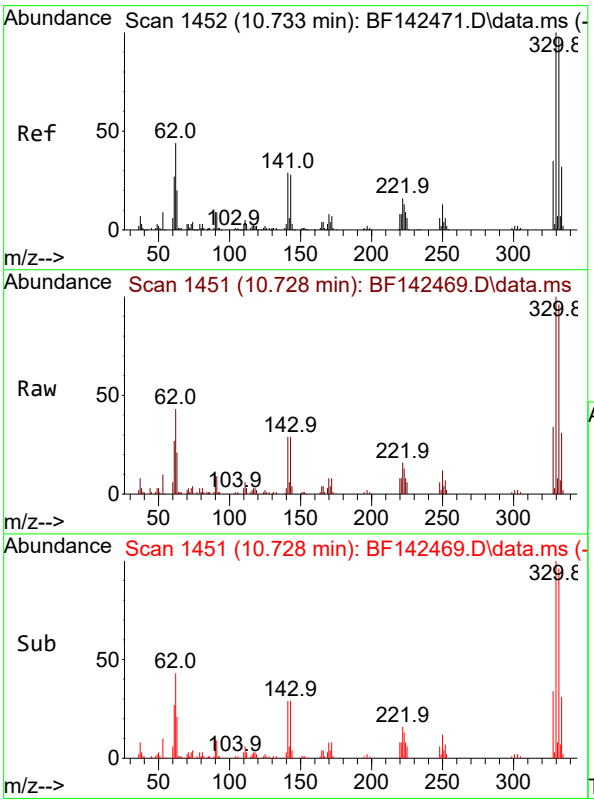
#41
Hexachlorocyclopentadiene
Concen: 9.044 ng
RT: 9.051 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:237 Resp: 36016

Ion	Ratio	Lower	Upper
237	100		
235	60.5	43.3	83.3
272	12.9	0.0	32.4

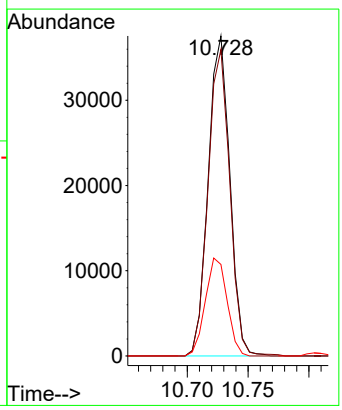


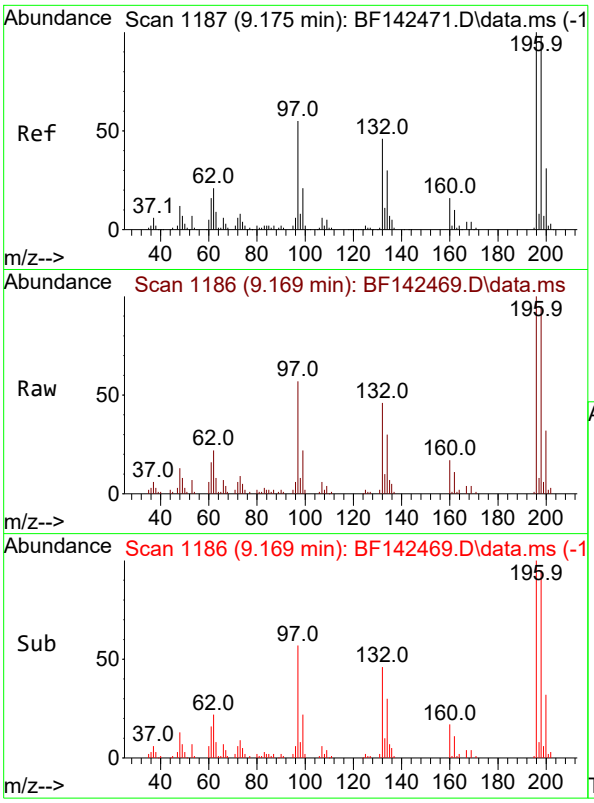


#42
2,4,6-Tribromophenol
Concen: 20.276 ng
RT: 10.728 min Scan# 1451
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:330 Resp: 46280

Ion	Ratio	Lower	Upper
330	100		
332	96.3	77.6	116.4
141	30.8	24.6	36.8



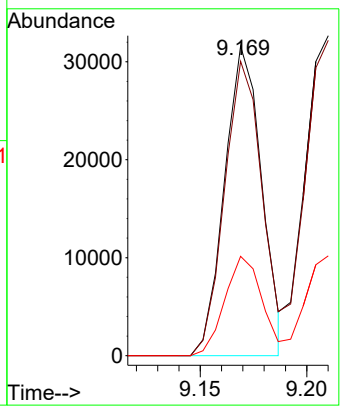


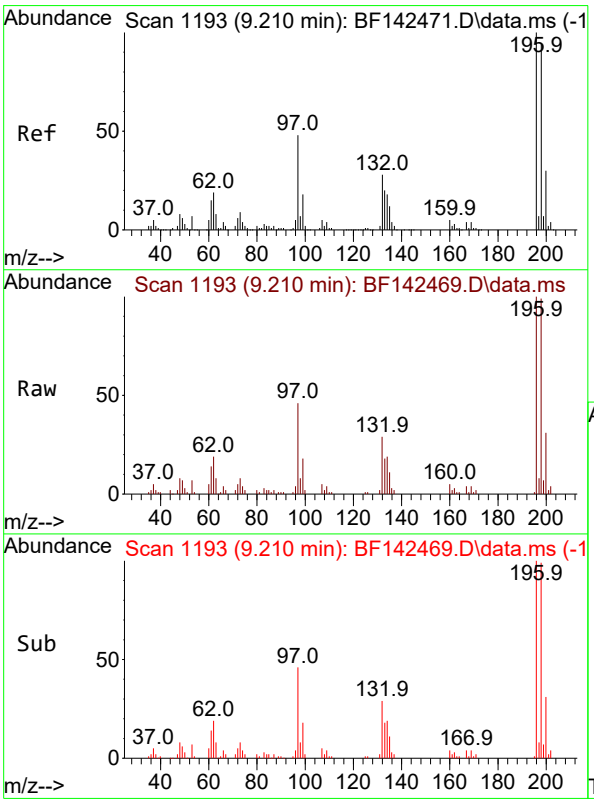
#43
2,4,6-Trichlorophenol
Concen: 9.635 ng
RT: 9.169 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:196 Resp: 38354

Ion	Ratio	Lower	Upper
196	100		
198	95.1	78.8	118.2
200	32.1	24.9	37.3

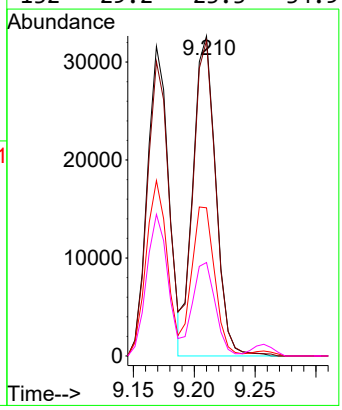


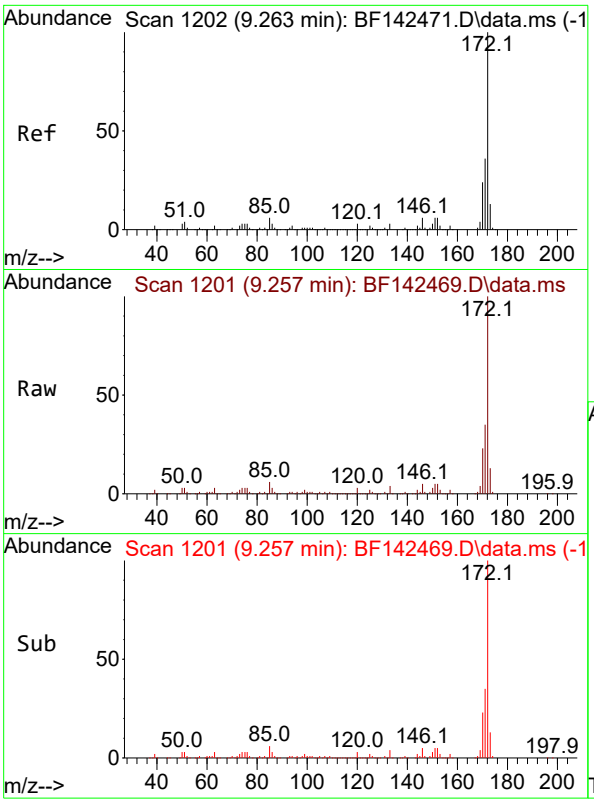


#44
2,4,5-Trichlorophenol
Concen: 10.069 ng
RT: 9.210 min Scan# 1193
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:196 Resp: 42272

Ion	Ratio	Lower	Upper
196	100		
198	98.5	75.5	113.3
97	46.3	39.3	58.9
132	29.2	23.3	34.9



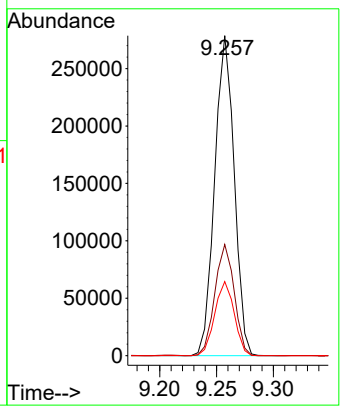


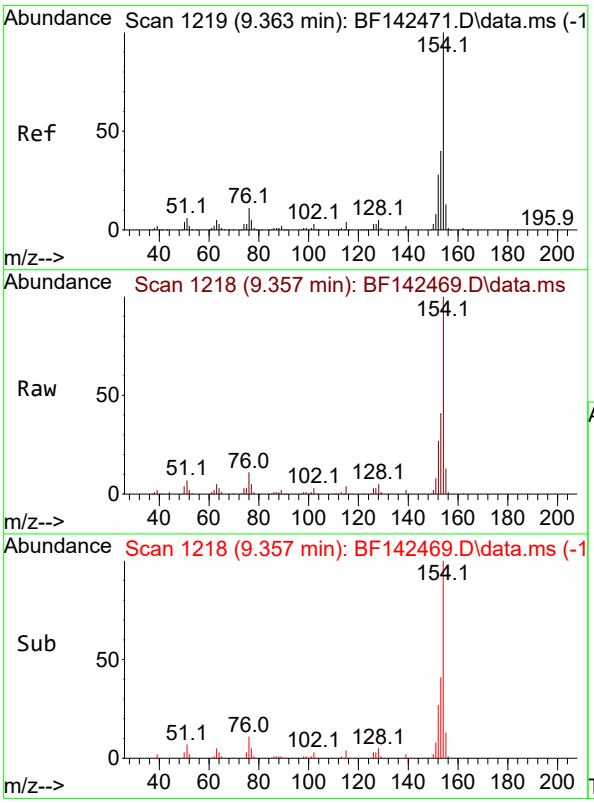
#45
2-Fluorobiphenyl
Concen: 21.719 ng
RT: 9.257 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:172 Resp: 332871

Ion	Ratio	Lower	Upper
172	100		
171	34.7	28.6	42.8
170	23.2	18.9	28.3

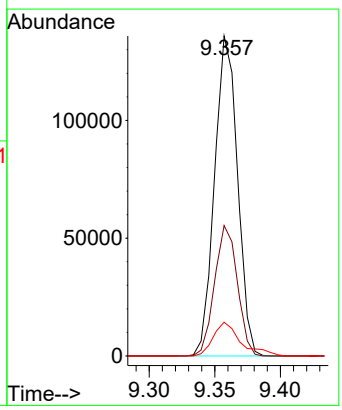


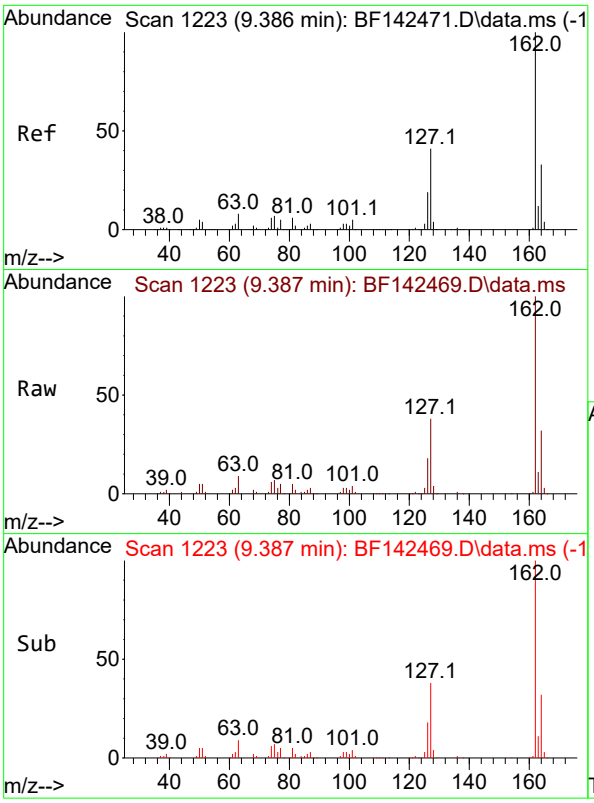


#46
1,1'-Biphenyl
Concen: 10.346 ng
RT: 9.357 min Scan# 1218
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:154 Resp: 165063

Ion	Ratio	Lower	Upper
154	100		
153	40.8	20.4	60.4
76	10.6	0.0	30.8



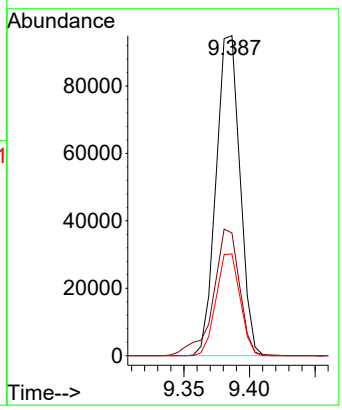


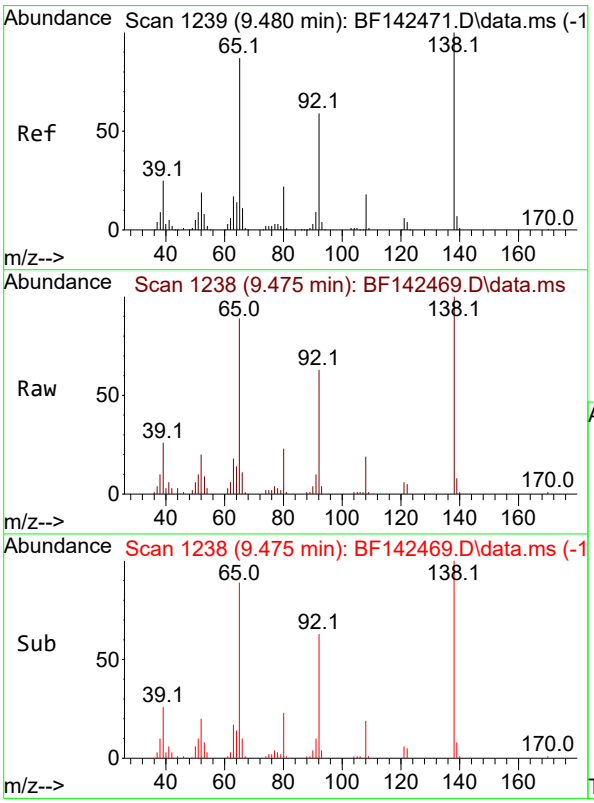
#47
2-Chloronaphthalene
Concen: 10.208 ng
RT: 9.387 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:162 Resp: 120339

Ion	Ratio	Lower	Upper
162	100		
127	38.3	33.5	50.3
164	31.8	26.1	39.1

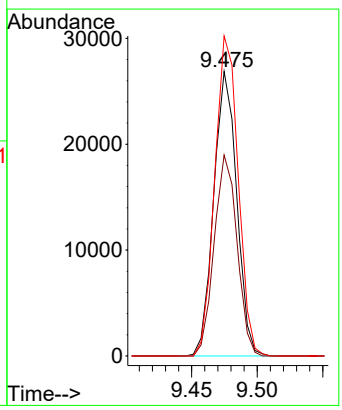


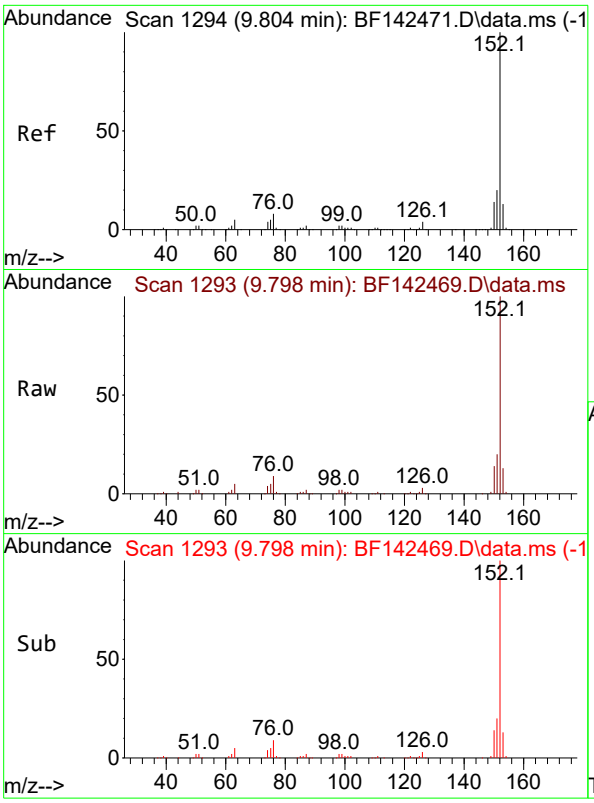


#48
2-Nitroaniline
Concen: 9.604 ng
RT: 9.475 min Scan# 1238
Delta R.T. -0.011 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion: 65 Resp: 32722

Ion	Ratio	Lower	Upper
65	100		
92	70.6	54.4	81.6
138	112.5	91.4	137.2



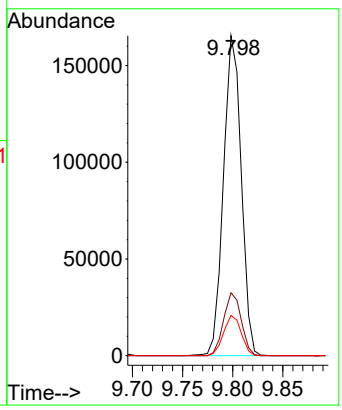


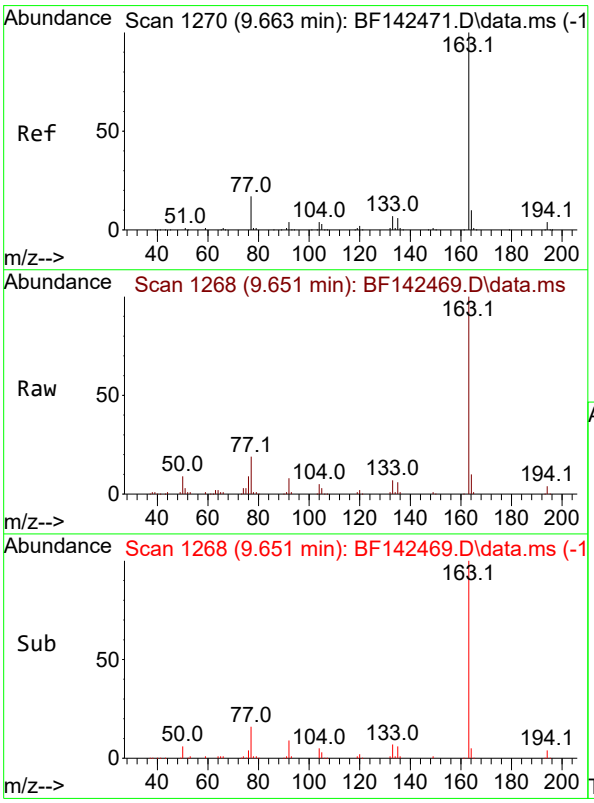
#49
Acenaphthylene
Concen: 10.237 ng
RT: 9.798 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:152 Resp: 203767

Ion	Ratio	Lower	Upper
152	100		
151	19.7	15.8	23.8
153	12.6	10.6	15.8

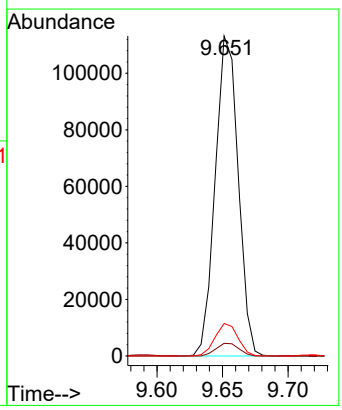


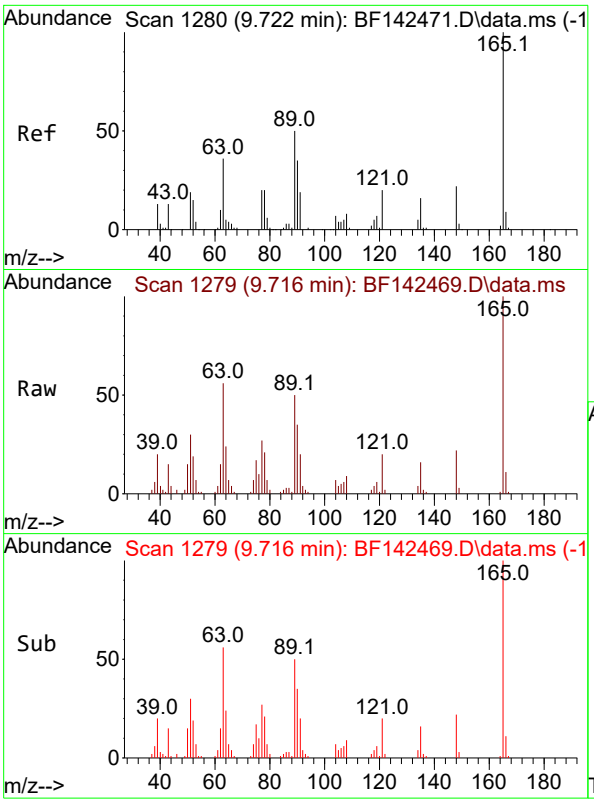


#50
Dimethylphthalate
Concen: 10.155 ng
RT: 9.651 min Scan# 1268
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:163 Resp: 137804

Ion	Ratio	Lower	Upper
163	100		
194	3.9	3.3	4.9
164	10.2	8.2	12.4



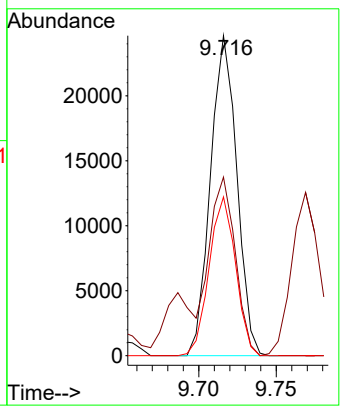


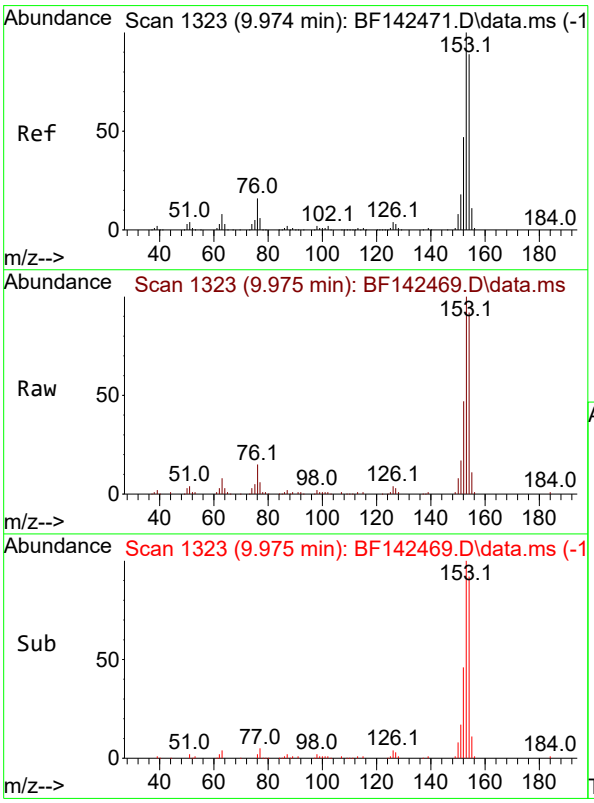
#51
2,6-Dinitrotoluene
Concen: 9.940 ng
RT: 9.716 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:165 Resp: 29112

Ion	Ratio	Lower	Upper
165	100		
63	55.8	42.9	64.3
89	49.6	40.2	60.4

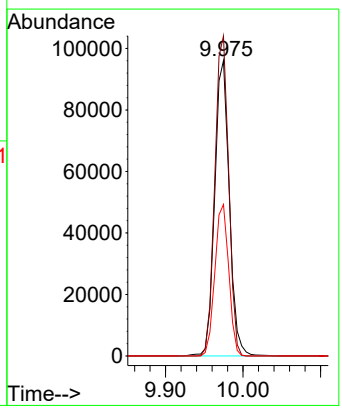


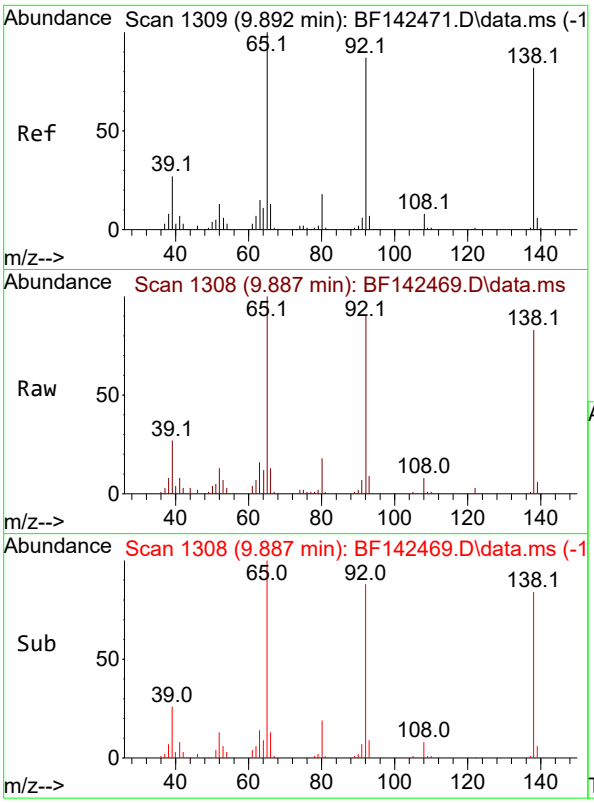


#52
Acenaphthene
Concen: 10.339 ng
RT: 9.975 min Scan# 1323
Delta R.T. -0.005 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:154 Resp: 125669

Ion	Ratio	Lower	Upper
154	100		
153	108.4	90.0	135.0
152	51.3	42.6	64.0



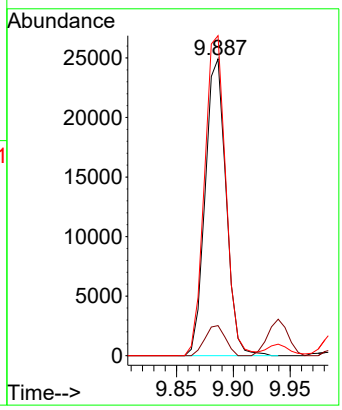


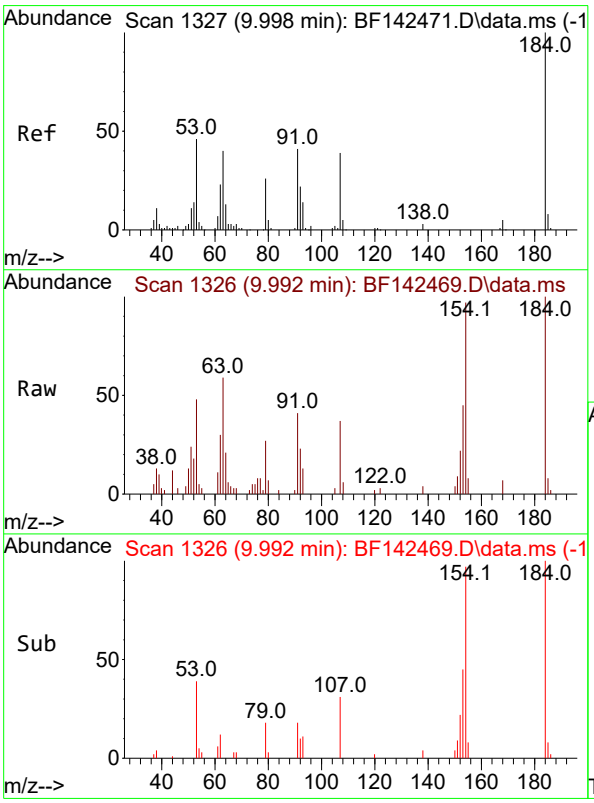
#53
3-Nitroaniline
Concen: 9.947 ng
RT: 9.887 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:138 Resp: 31820

Ion	Ratio	Lower	Upper
138	100		
108	10.1	8.1	12.1
92	107.8	85.2	127.8

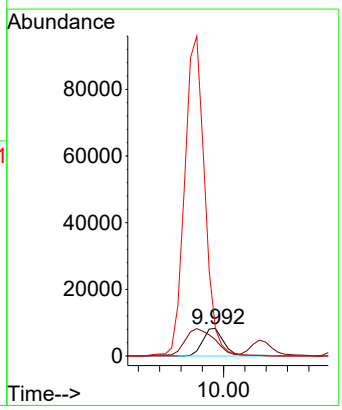


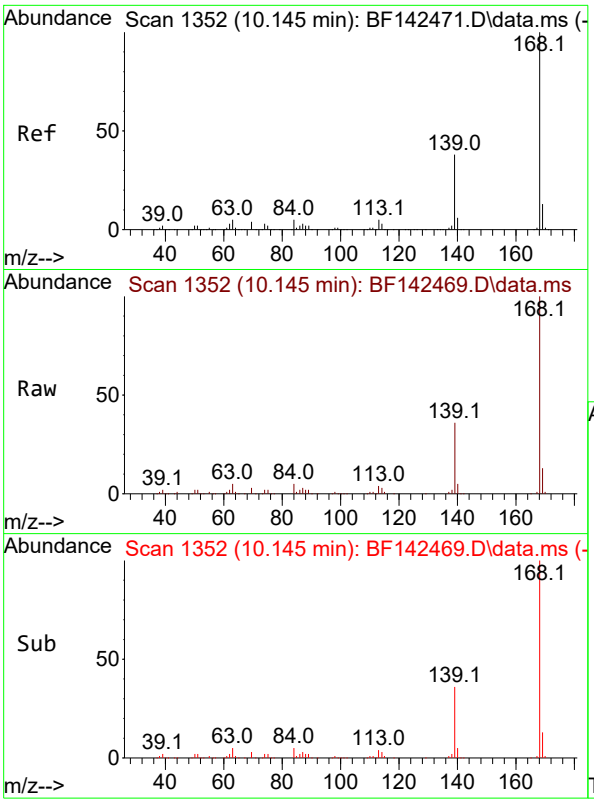


#54
2,4-Dinitrophenol
Concen: 7.502 ng
RT: 9.992 min Scan# 1326
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:184 Resp: 11352

Ion	Ratio	Lower	Upper
184	100		
63	58.7	46.3	69.5
154	97.5	56.8	85.2#



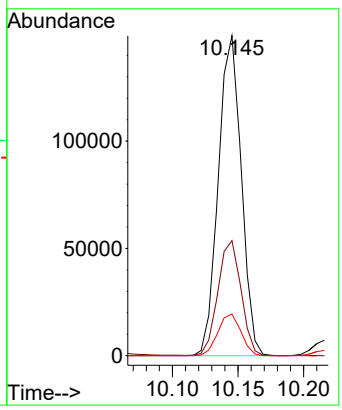


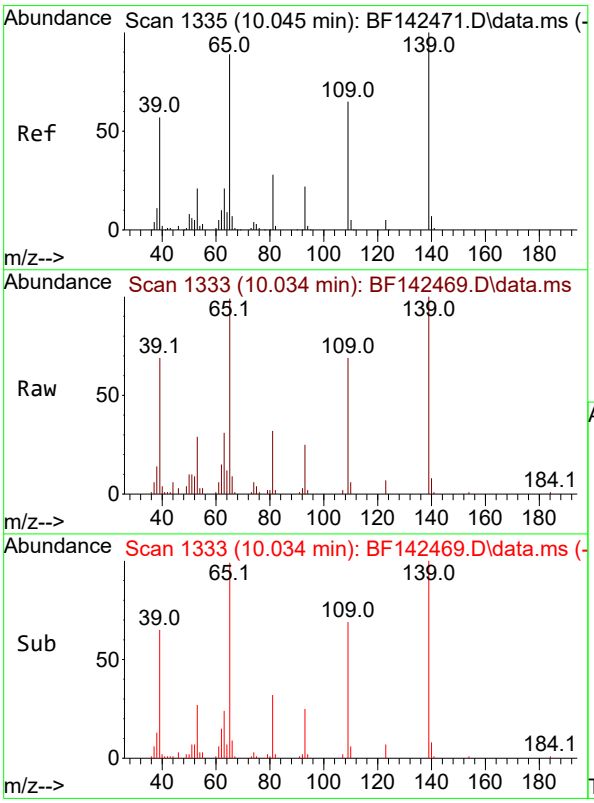
#55
Dibenzofuran
Concen: 10.380 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:168 Resp: 181558

Ion	Ratio	Lower	Upper
168	100		
139	36.0	30.2	45.2
169	13.0	10.7	16.1

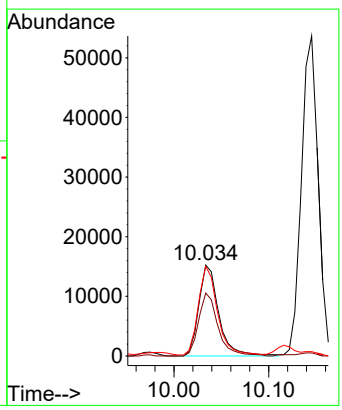


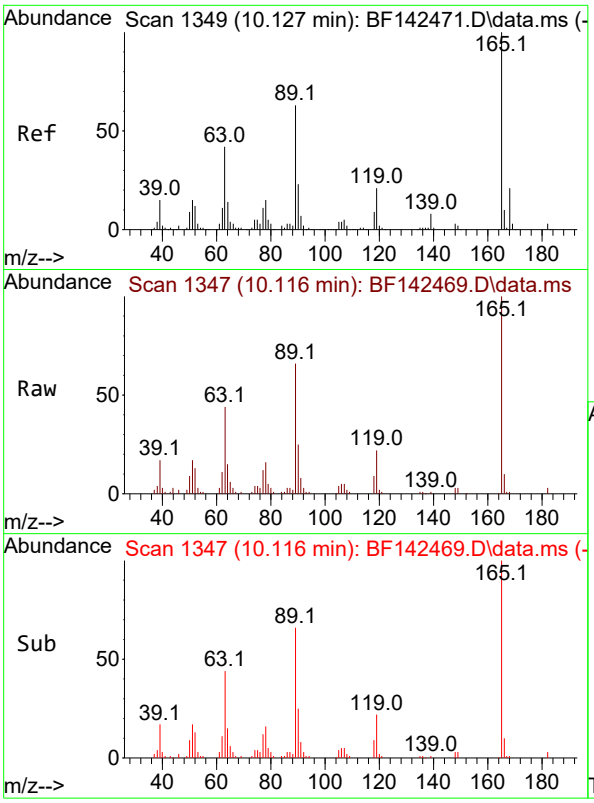


#56
4-Nitrophenol
Concen: 9.456 ng
RT: 10.034 min Scan# 1333
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:139 Resp: 22320

Ion	Ratio	Lower	Upper
139	100		
109	69.1	45.1	85.1
65	98.8	69.7	109.7



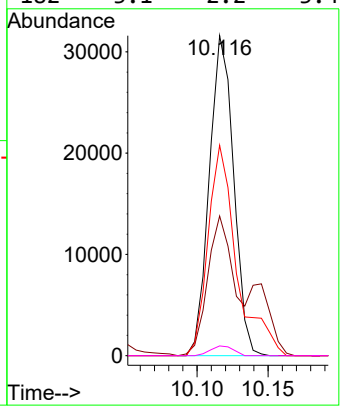


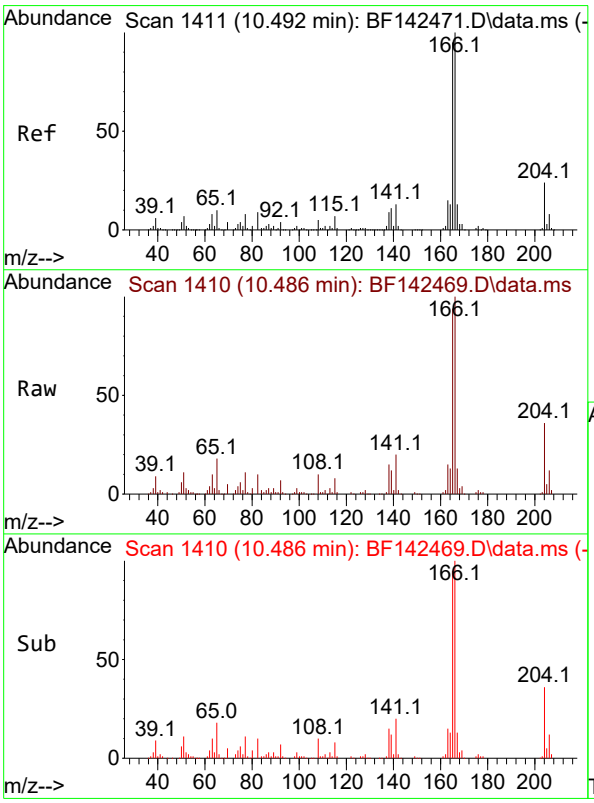
#57
2,4-Dinitrotoluene
Concen: 9.869 ng
RT: 10.116 min Scan# 1
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:165 Resp: 37749

Ion	Ratio	Lower	Upper
165	100		
63	43.7	33.6	50.4
89	65.7	50.2	75.4
182	3.1	2.2	3.4

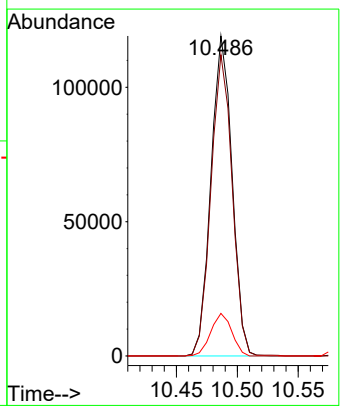


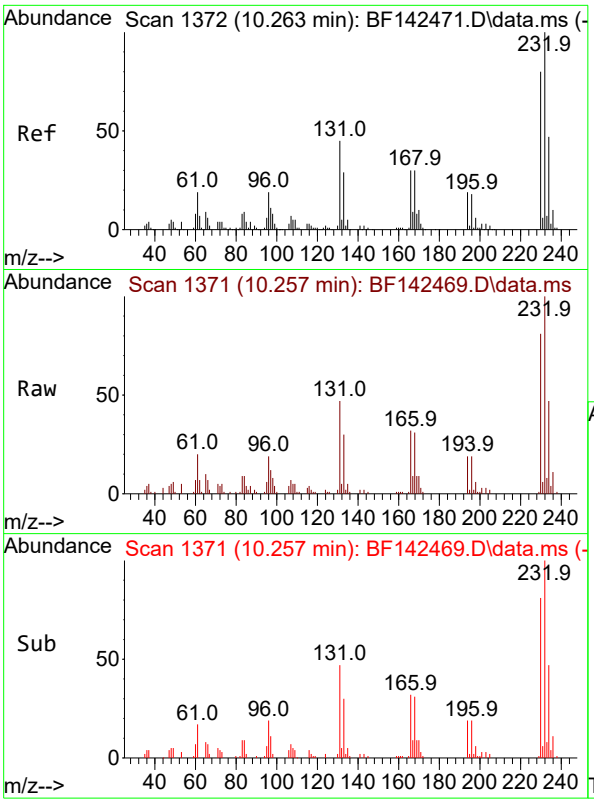


#58
Fluorene
Concen: 10.648 ng
RT: 10.486 min Scan# 1410
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:166 Resp: 143883

Ion	Ratio	Lower	Upper
166	100		
165	94.2	75.8	113.8
167	13.3	10.6	16.0



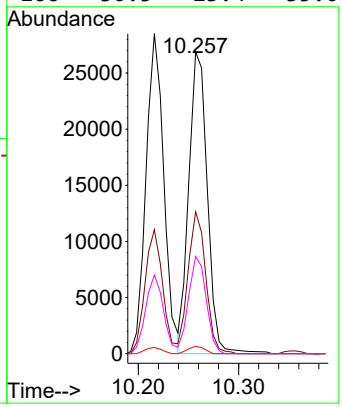


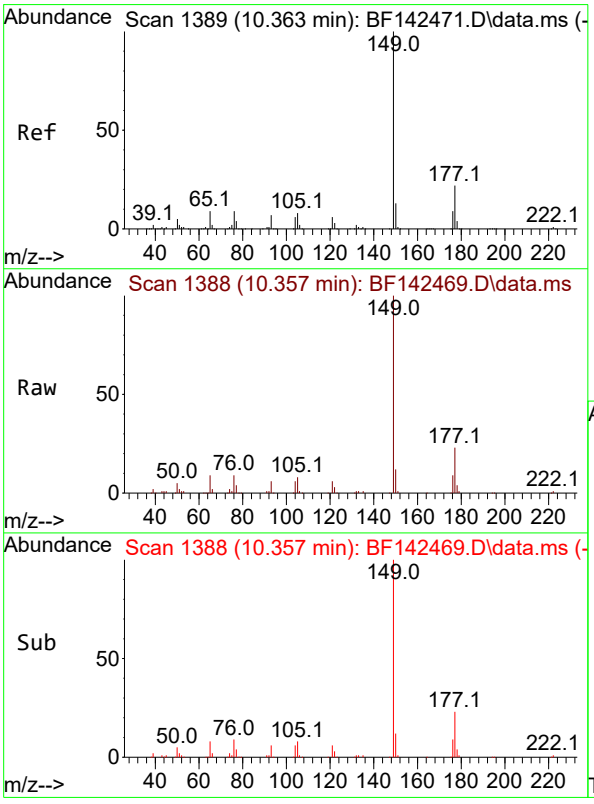
#59
2,3,4,6-Tetrachlorophenol
Concen: 9.857 ng
RT: 10.257 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:232 Resp: 34548

Ion	Ratio	Lower	Upper
232	100		
131	44.5	35.2	52.8
130	2.2	1.7	2.5
166	30.5	23.4	35.0

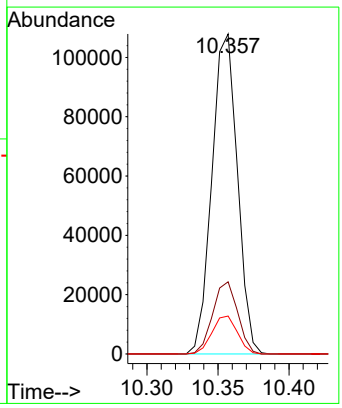


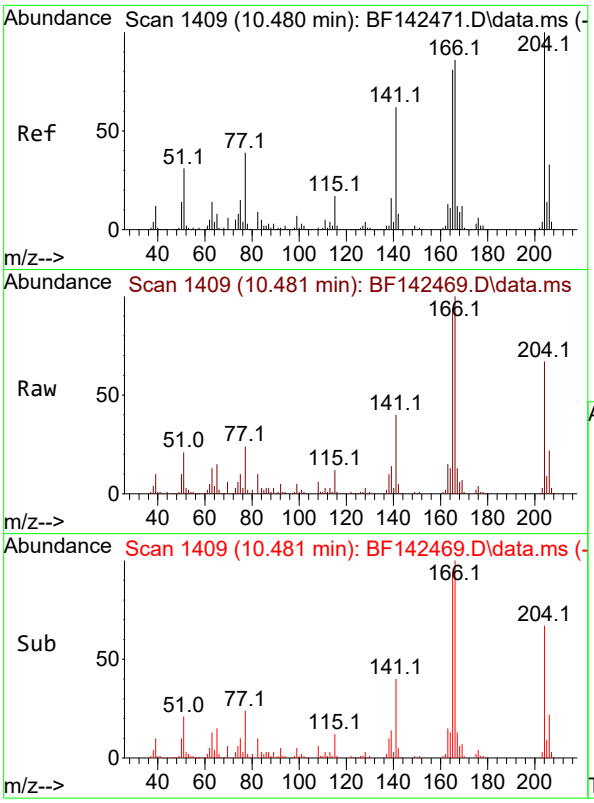


#60
Diethylphthalate
Concen: 10.161 ng
RT: 10.357 min Scan# 1388
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:149 Resp: 134662

Ion	Ratio	Lower	Upper
149	100		
177	22.5	17.6	26.4
150	11.8	10.1	15.1



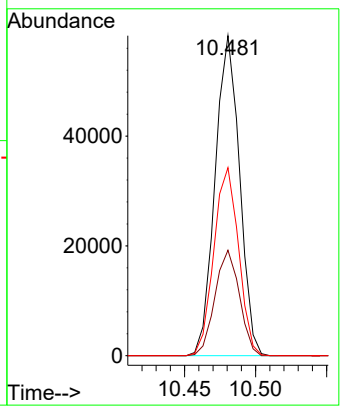


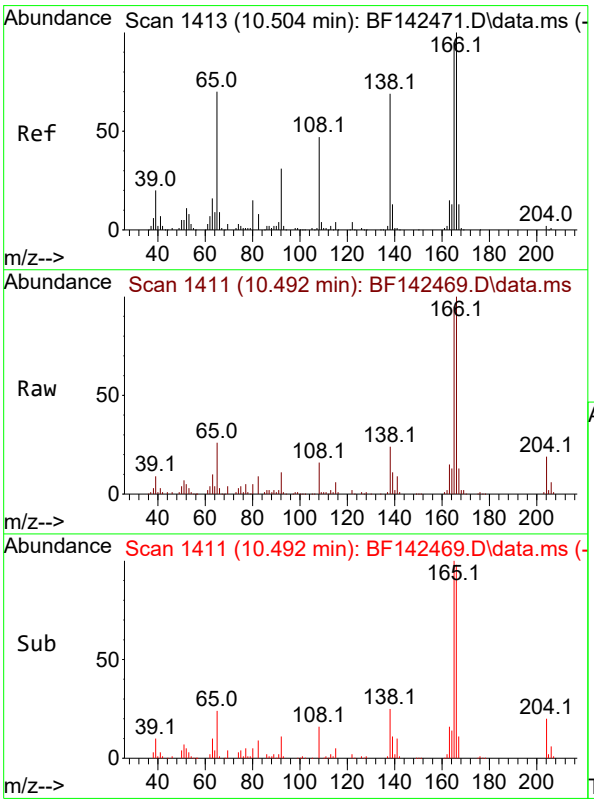
#61
4-Chlorophenyl-phenylether
Concen: 10.506 ng
RT: 10.481 min Scan# 14
Delta R.T. -0.005 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:204 Resp: 69739

Ion	Ratio	Lower	Upper
204	100		
206	33.0	26.3	39.5
141	58.7	49.5	74.3

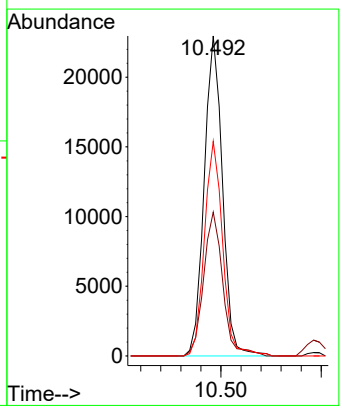


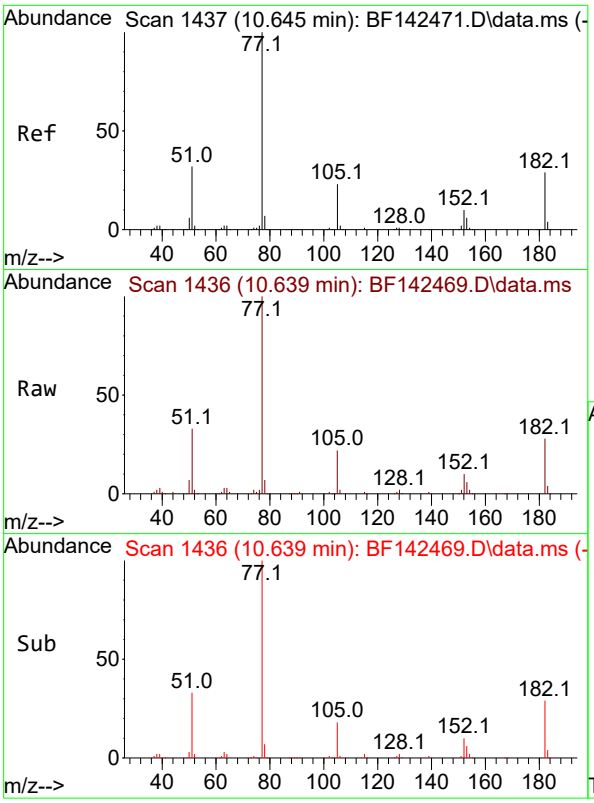


#62
4-Nitroaniline
Concen: 10.038 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.023 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:138 Resp: 29122

Ion	Ratio	Lower	Upper
138	100		
92	45.0	26.0	66.0
108	67.1	48.4	88.4



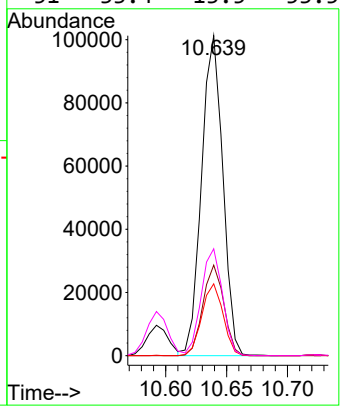


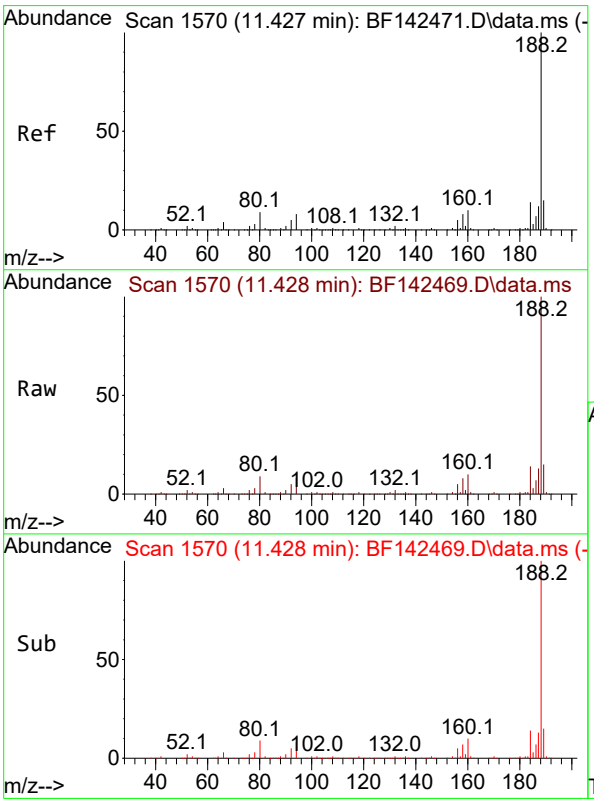
#63
Azobenzene
Concen: 10.317 ng
RT: 10.639 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion: 77 Resp: 122806

Ion	Ratio	Lower	Upper
77	100		
182	28.3	9.0	49.0
105	22.5	2.4	42.4
51	33.4	13.5	53.5

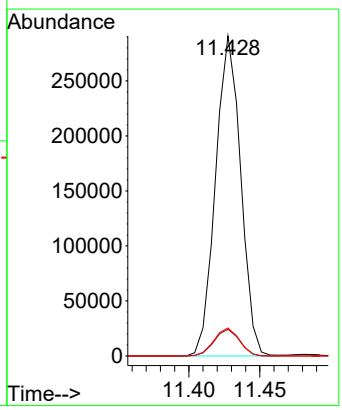


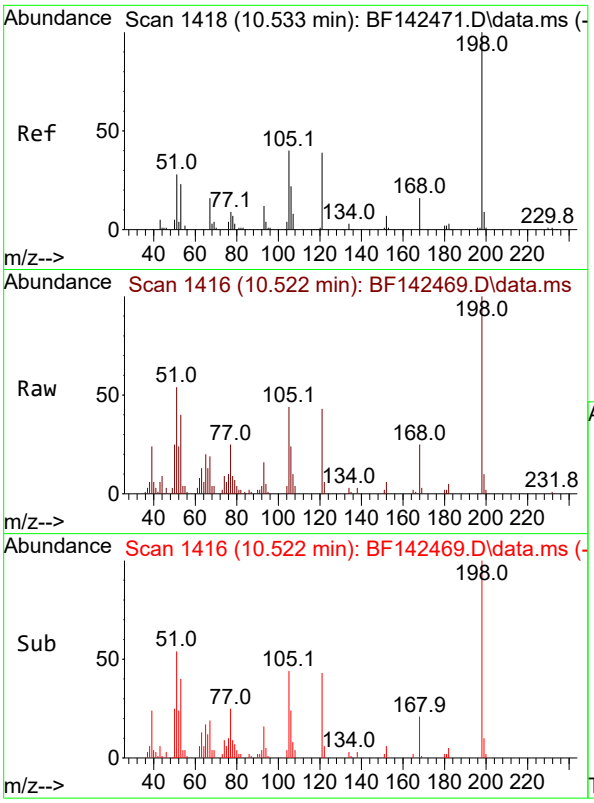


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.428 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:188 Resp: 357871

Ion	Ratio	Lower	Upper
188	100		
94	8.3	6.6	10.0
80	8.7	7.4	11.0



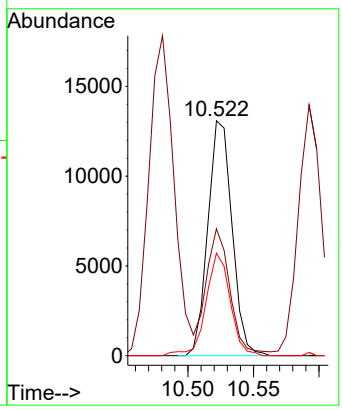


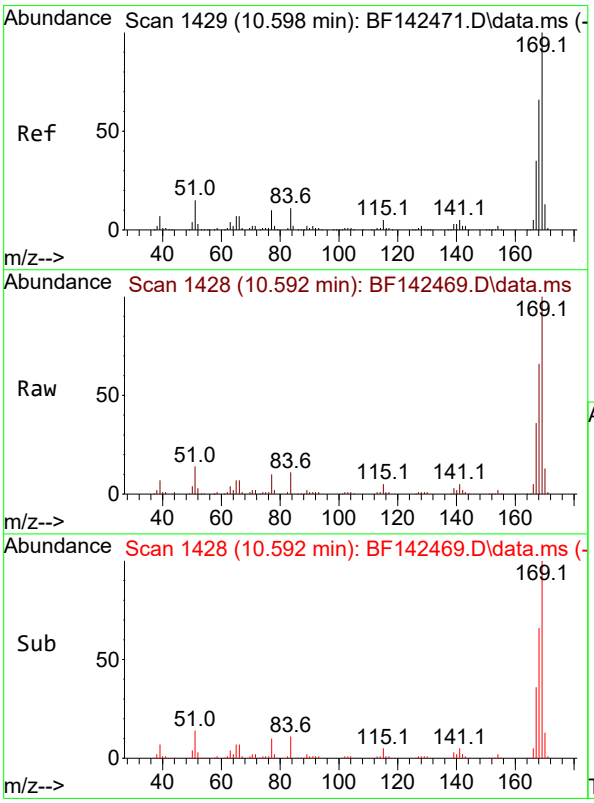
#65
4,6-Dinitro-2-methylphenol
Concen: 8.403 ng
RT: 10.522 min Scan# 14
Delta R.T. -0.017 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:198 Resp: 16782

Ion	Ratio	Lower	Upper
198	100		
51	54.0	28.3	68.3
105	43.7	21.3	61.3

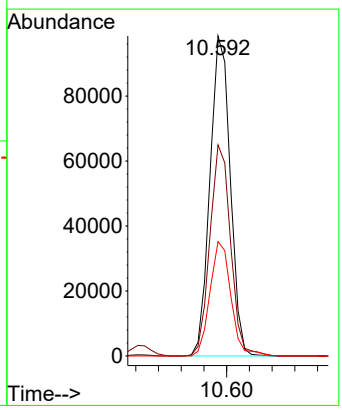


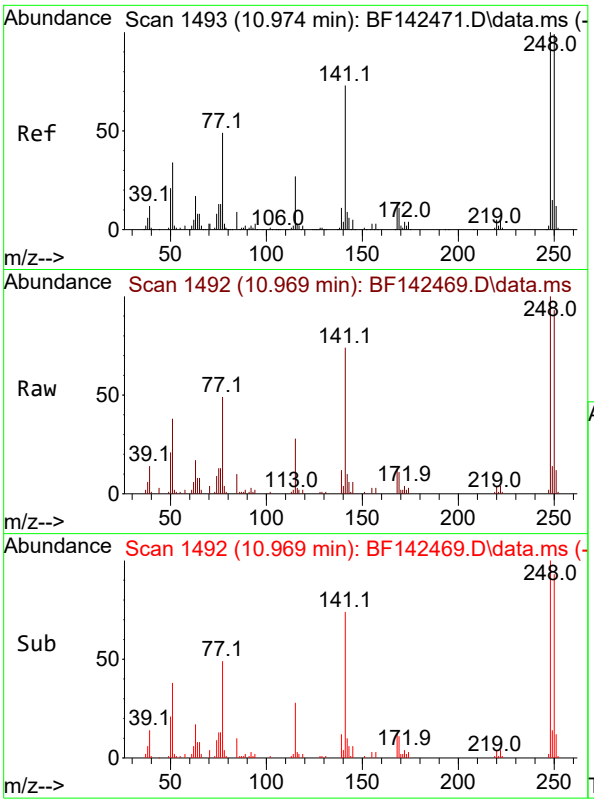


#66
n-Nitrosodiphenylamine
Concen: 9.961 ng
RT: 10.592 min Scan# 1428
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:169 Resp: 121959

Ion	Ratio	Lower	Upper
169	100		
168	66.0	52.7	79.1
167	35.8	28.3	42.5



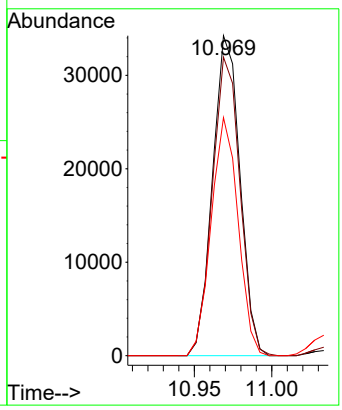


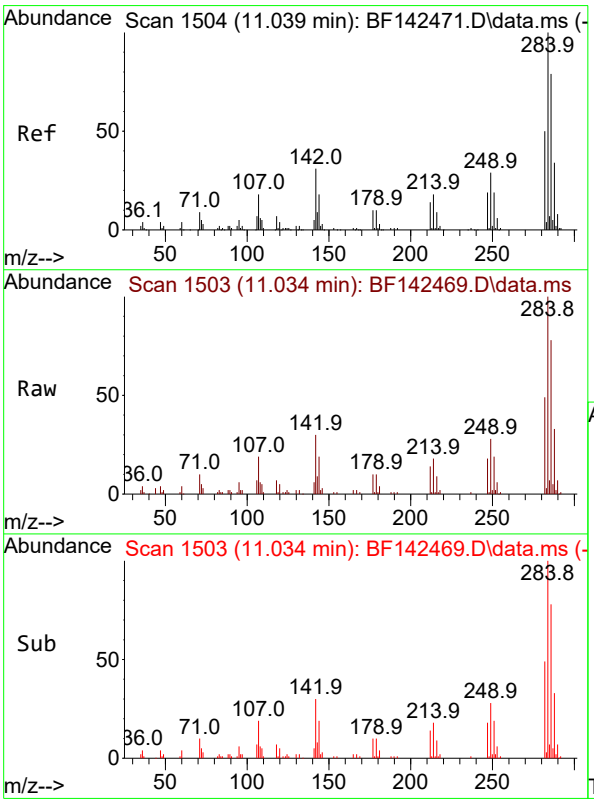
#67
4-Bromophenyl-phenylether
Concen: 9.939 ng
RT: 10.969 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:248 Resp: 42057

Ion	Ratio	Lower	Upper
248	100		
250	93.3	79.0	118.4
141	74.4	58.4	87.6

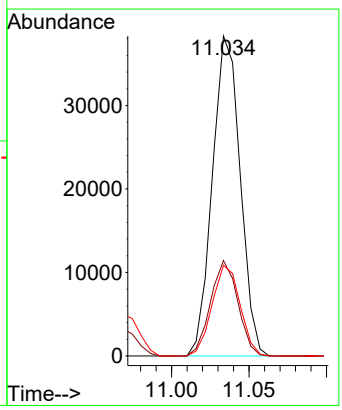


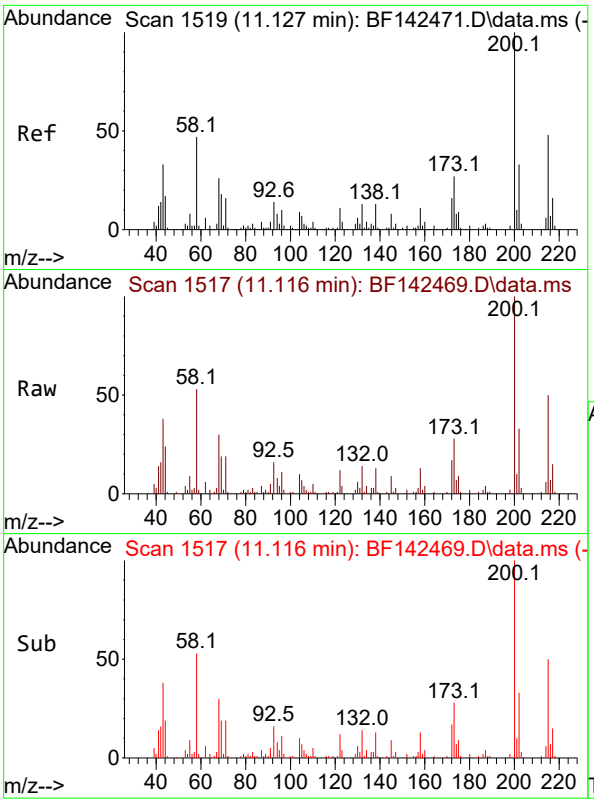


#68
Hexachlorobenzene
Concen: 10.207 ng
RT: 11.034 min Scan# 1503
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:284 Resp: 47773

Ion	Ratio	Lower	Upper
284	100		
142	29.8	24.8	37.2
249	28.4	23.6	35.4



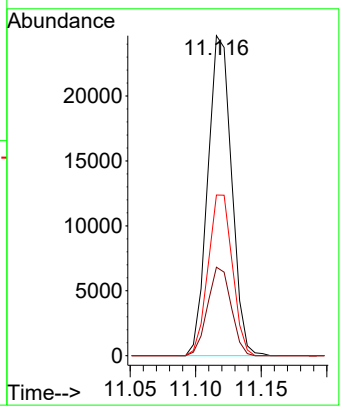


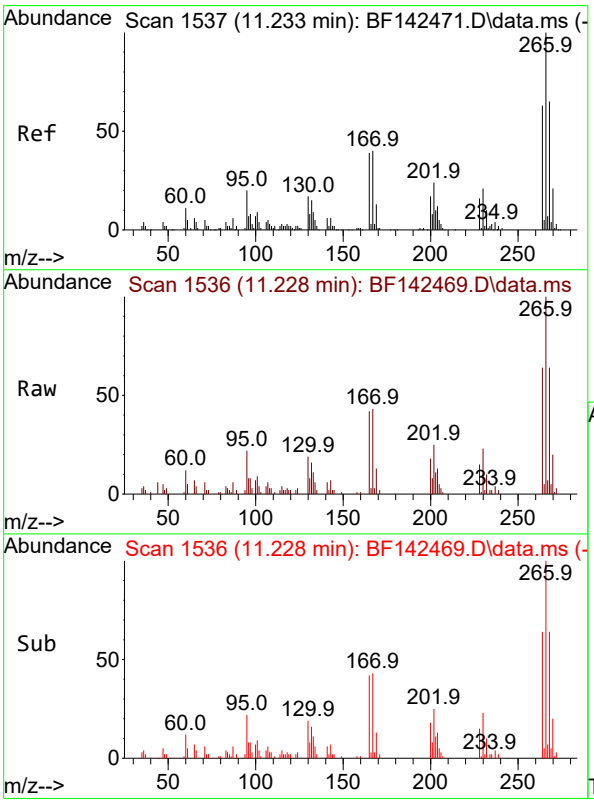
#69
Atrazine
Concen: 9.591 ng
RT: 11.116 min Scan# 1
Delta R.T. -0.011 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:200 Resp: 31184

Ion	Ratio	Lower	Upper
200	100		
173	27.7	7.4	47.4
215	50.2	28.5	68.5

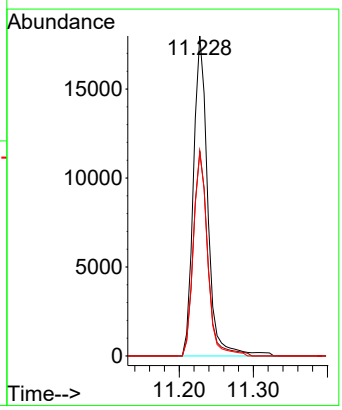


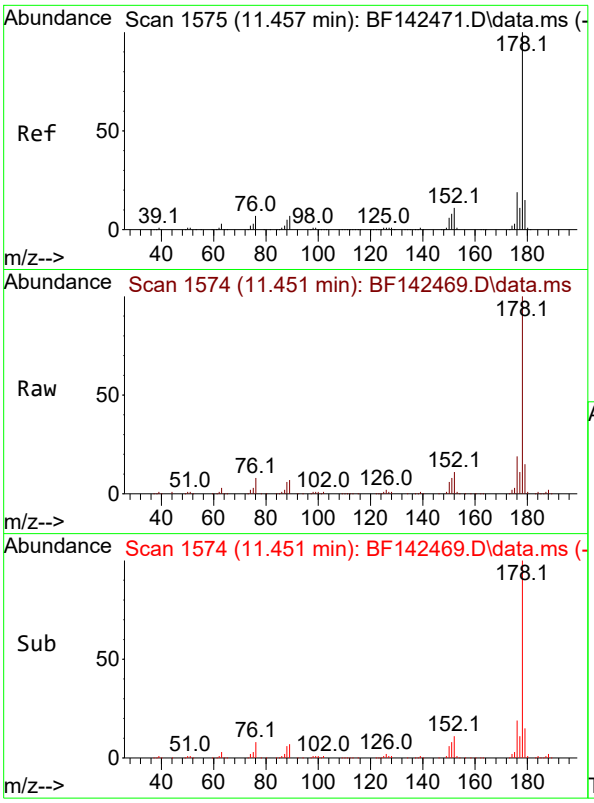


#70
Pentachlorophenol
Concen: 9.126 ng
RT: 11.228 min Scan# 1536
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:266 Resp: 24115

Ion	Ratio	Lower	Upper
266	100		
268	63.9	51.7	77.5
264	63.7	50.4	75.6



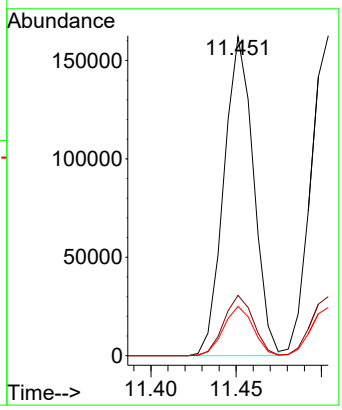


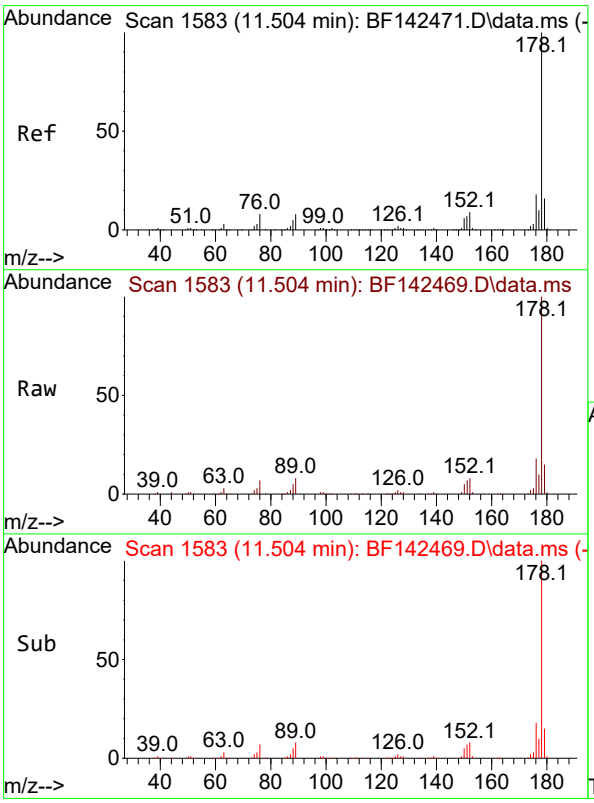
#71
Phenanthrene
Concen: 10.231 ng
RT: 11.451 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:178 Resp: 195667

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.4	23.0
179	15.5	12.3	18.5

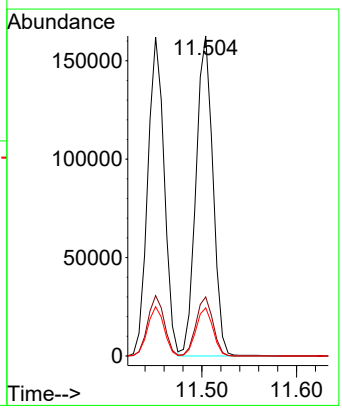


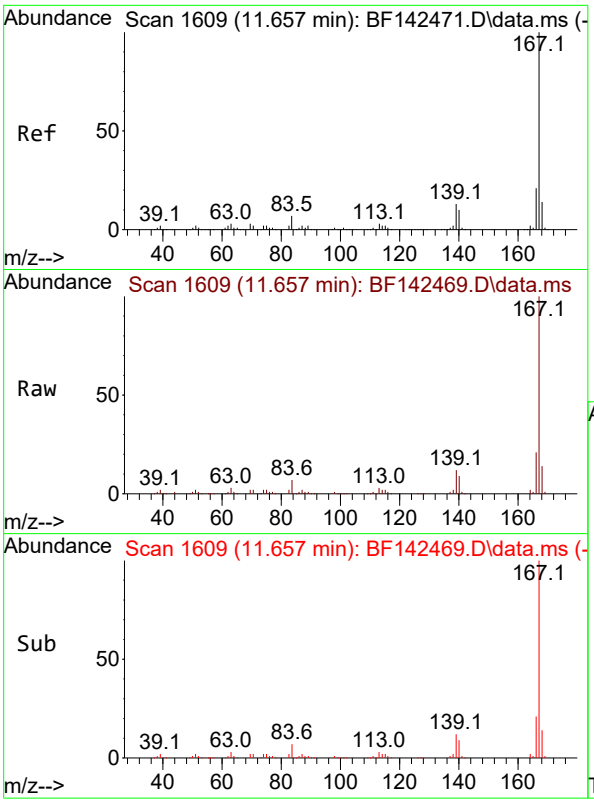


#72
Anthracene
Concen: 10.375 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:178 Resp: 202509

Ion	Ratio	Lower	Upper
178	100		
176	18.4	14.6	21.8
179	15.0	12.4	18.6



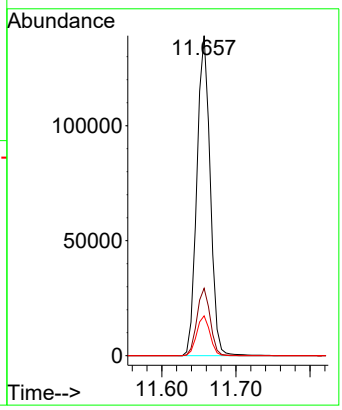


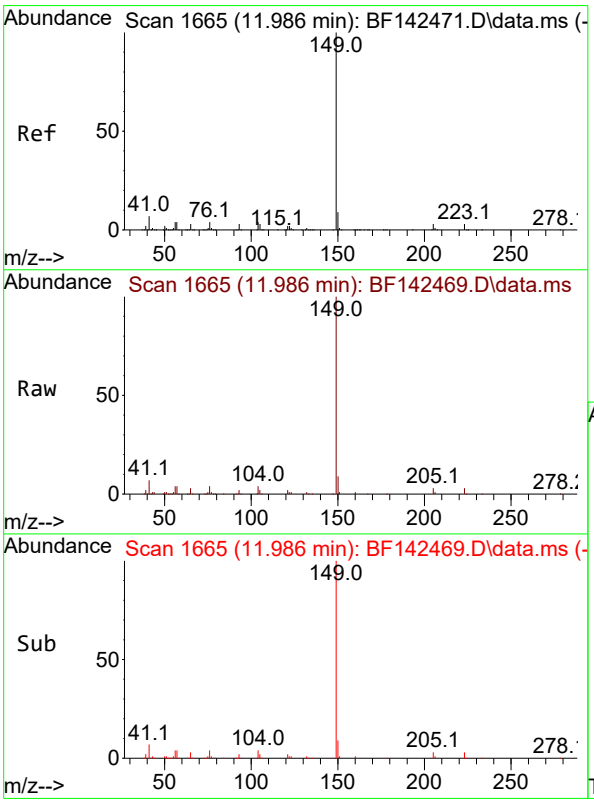
#73
Carbazole
Concen: 10.381 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:167 Resp: 173217

Ion	Ratio	Lower	Upper
167	100		
166	21.0	16.9	25.3
139	12.5	10.2	15.4

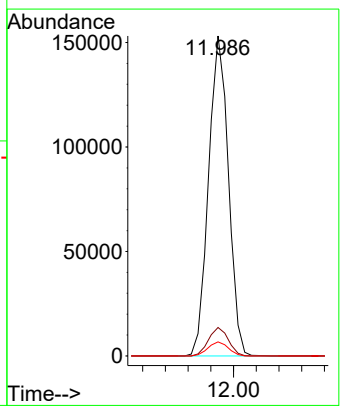


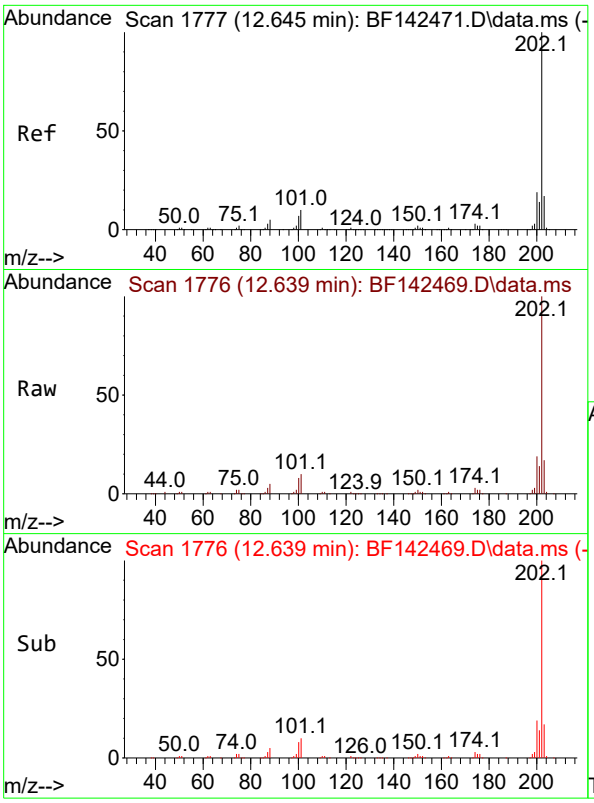


#74
Di-n-butylphthalate
Concen: 10.177 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:149 Resp: 185880

Ion	Ratio	Lower	Upper
149	100		
150	8.9	7.3	10.9
104	4.4	3.6	5.4



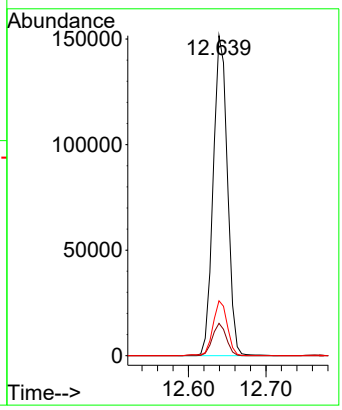


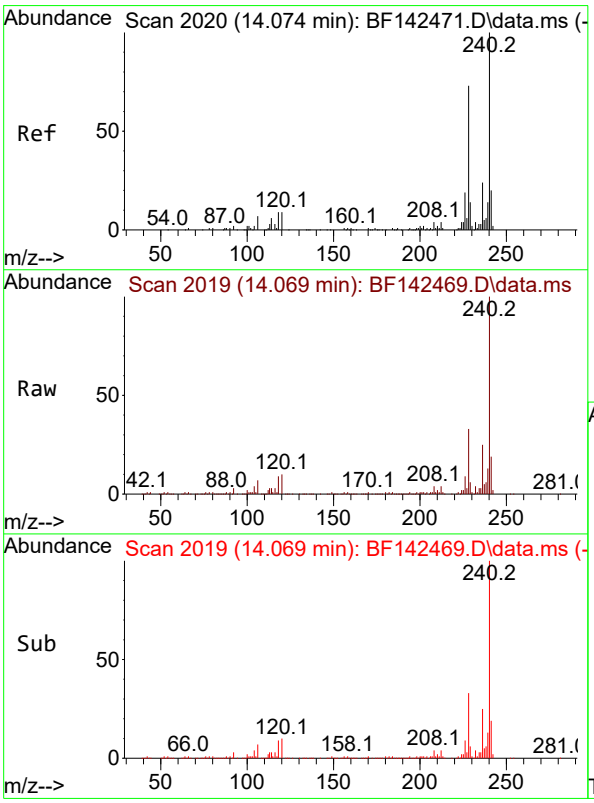
#75
Fluoranthene
Concen: 10.825 ng
RT: 12.639 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:202 Resp: 193456

Ion	Ratio	Lower	Upper
202	100		
101	10.1	0.0	29.6
203	17.2	0.0	37.2

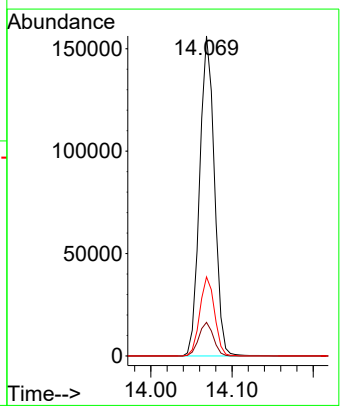


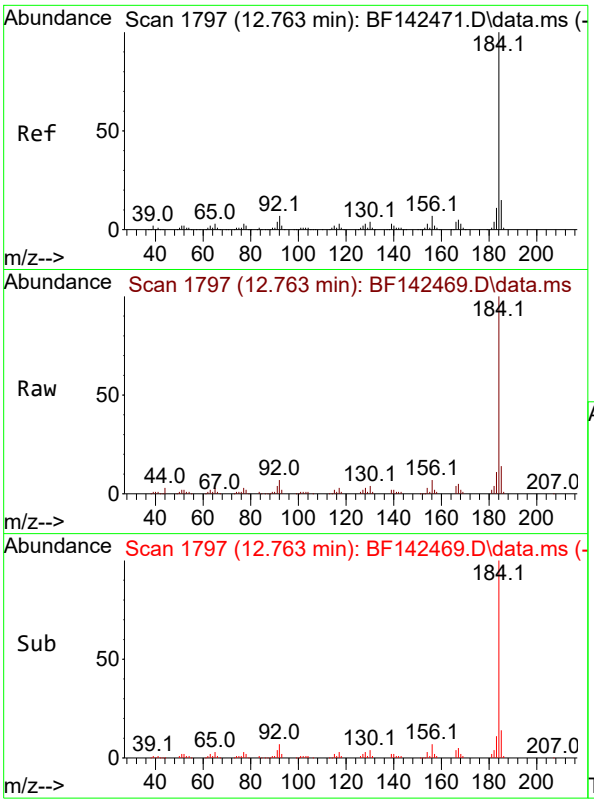


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.069 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:240 Resp: 197144

Ion	Ratio	Lower	Upper
240	100		
120	10.5	7.5	11.3
236	24.7	19.6	29.4



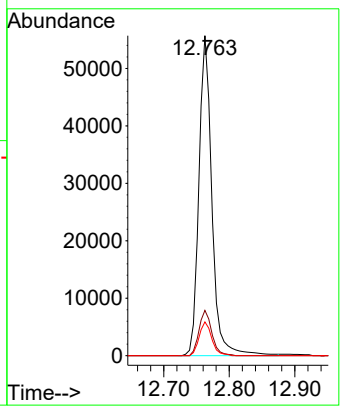


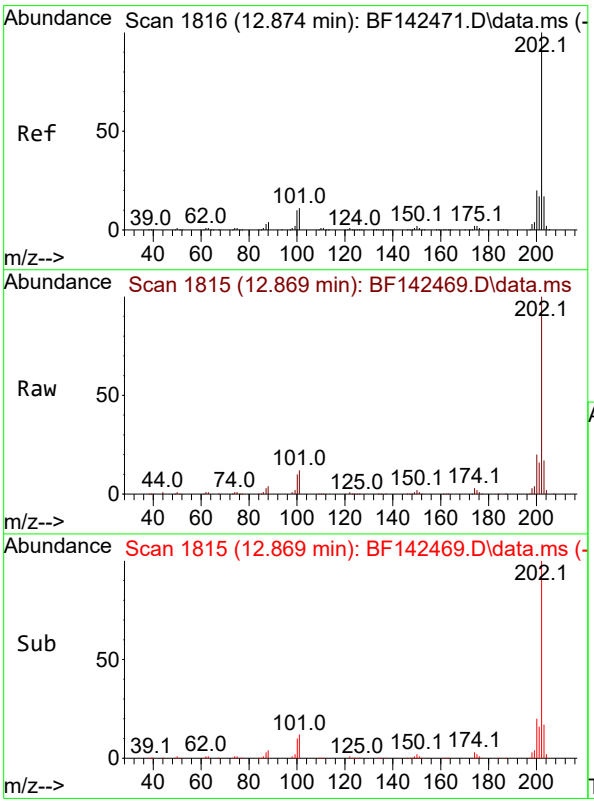
#77
Benzidine
Concen: 10.508 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:184 Resp: 77091

Ion	Ratio	Lower	Upper
184	100		
185	14.2	11.6	17.4
183	10.6	9.0	13.4

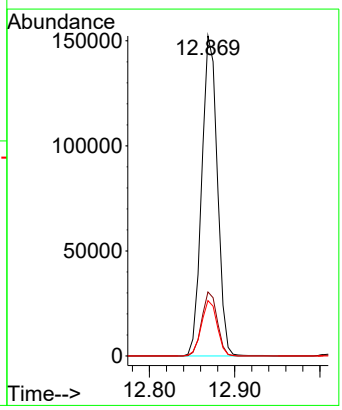


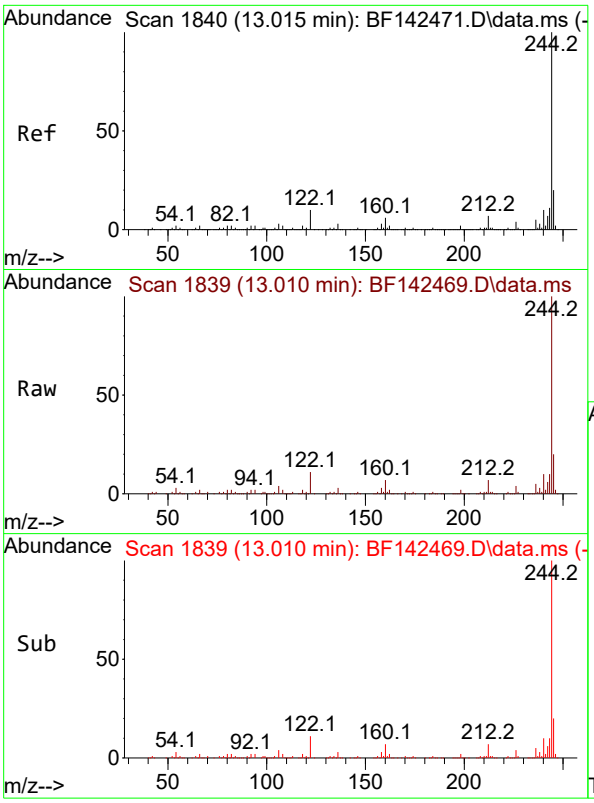


#78
Pyrene
Concen: 10.540 ng
RT: 12.869 min Scan# 1815
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:202 Resp: 193842

Ion	Ratio	Lower	Upper
202	100		
200	20.0	16.1	24.1
203	17.3	13.9	20.9



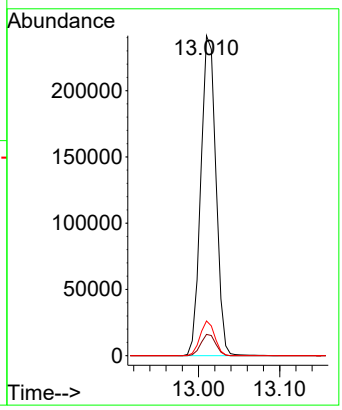


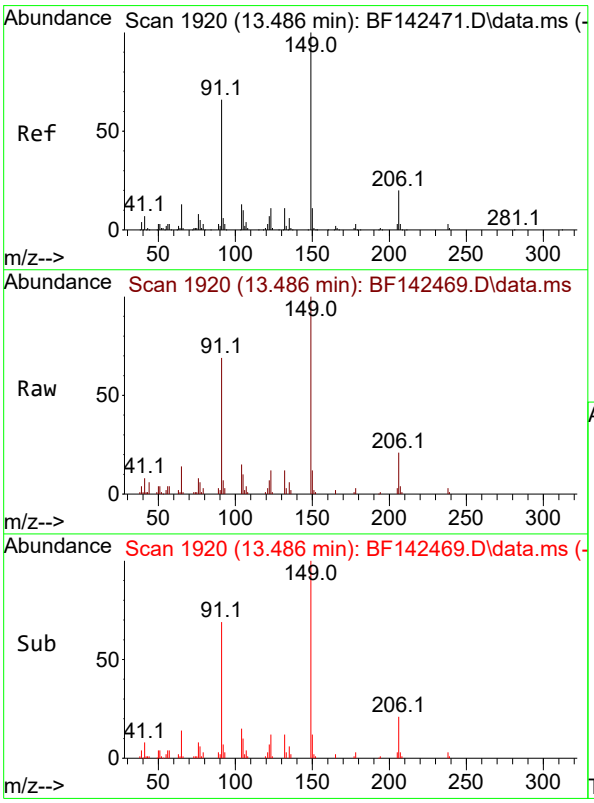
#79
Terphenyl-d14
Concen: 21.612 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:244 Resp: 311785

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.3	7.9
122	10.9	8.2	12.2

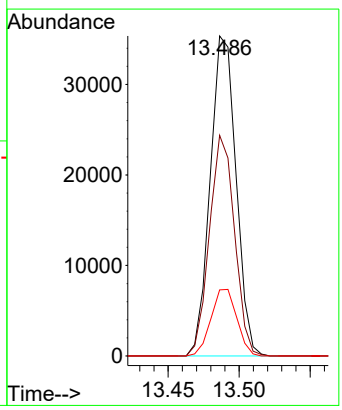


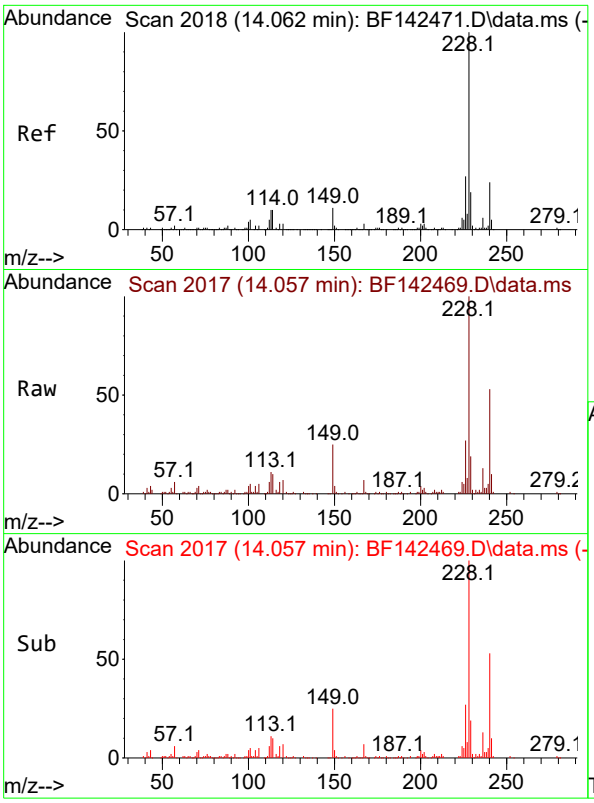


#80
Butylbenzylphthalate
Concen: 8.793 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:149 Resp: 44682

Ion	Ratio	Lower	Upper
149	100		
91	69.0	52.9	79.3
206	20.6	16.2	24.2



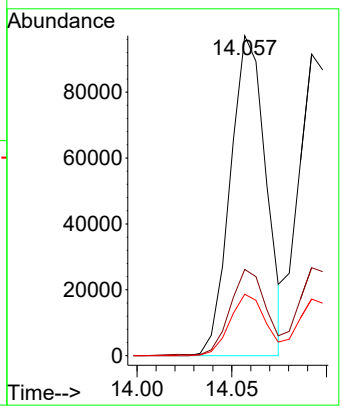


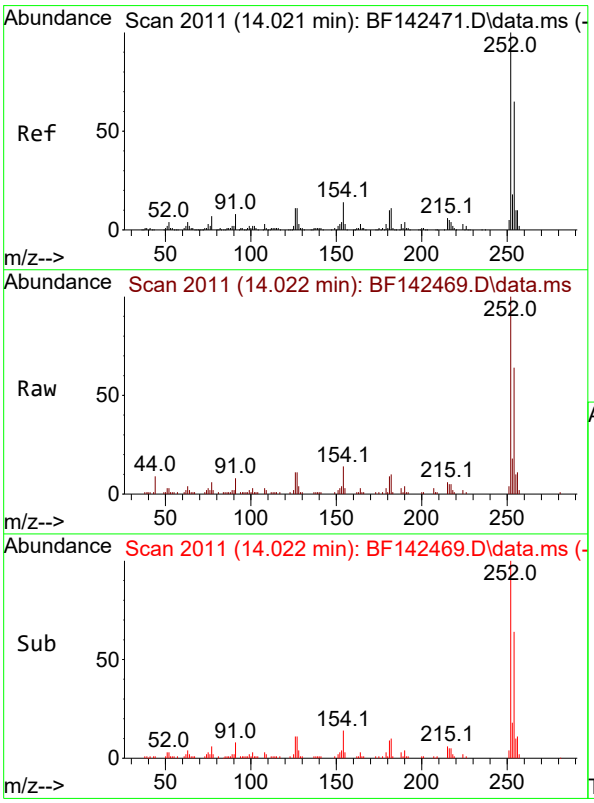
#81
Benzo(a)anthracene
Concen: 9.639 ng
RT: 14.057 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:228 Resp: 126886

Ion	Ratio	Lower	Upper
228	100		
226	26.9	21.2	31.8
229	19.2	15.5	23.3

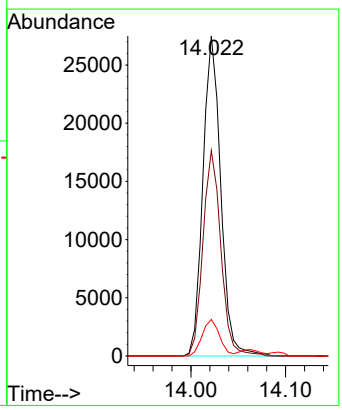


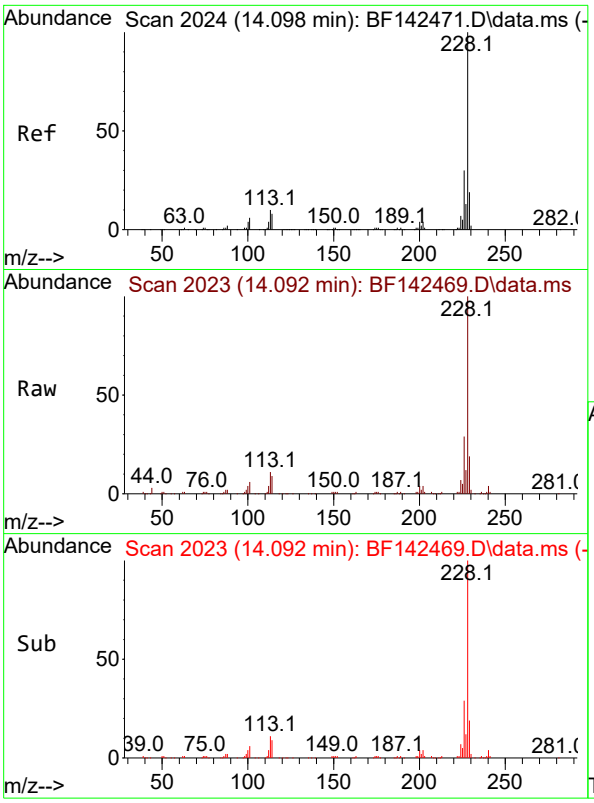


#82
3,3'-Dichlorobenzidine
Concen: 8.977 ng
RT: 14.022 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:252 Resp: 35845

Ion	Ratio	Lower	Upper
252	100		
254	64.2	52.0	78.0
126	11.4	8.9	13.3



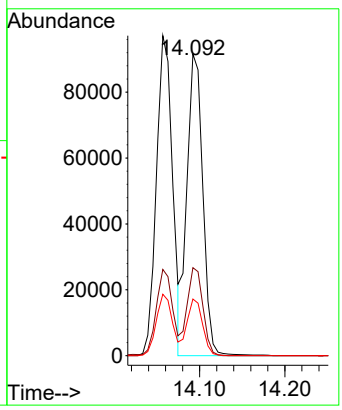


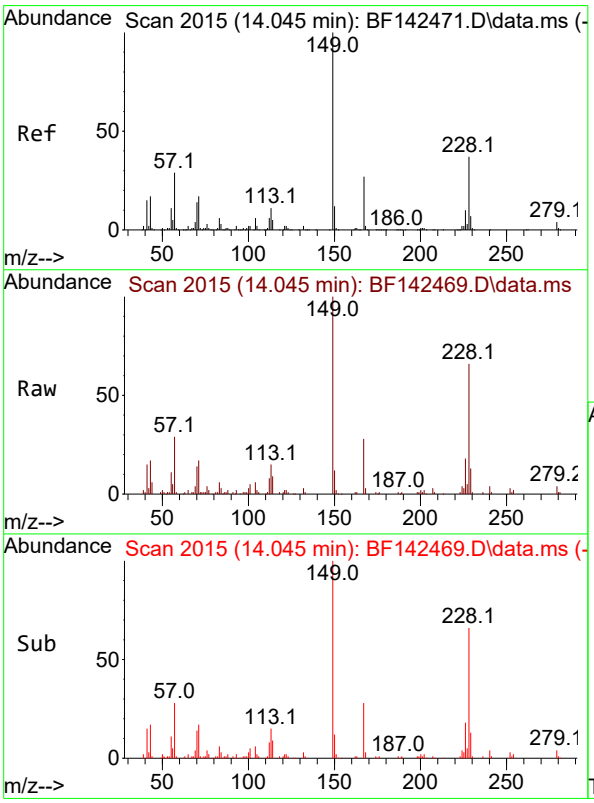
#83
Chrysene
Concen: 10.032 ng
RT: 14.092 min Scan# 2(
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:228 Resp: 118674

Ion	Ratio	Lower	Upper
228	100		
226	29.2	23.8	35.6
229	18.8	15.4	23.2

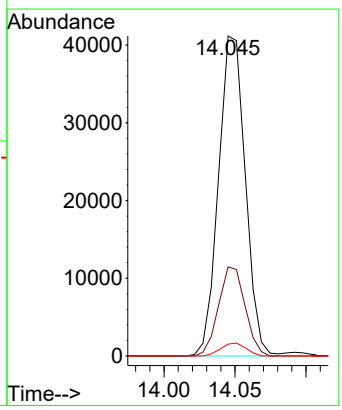


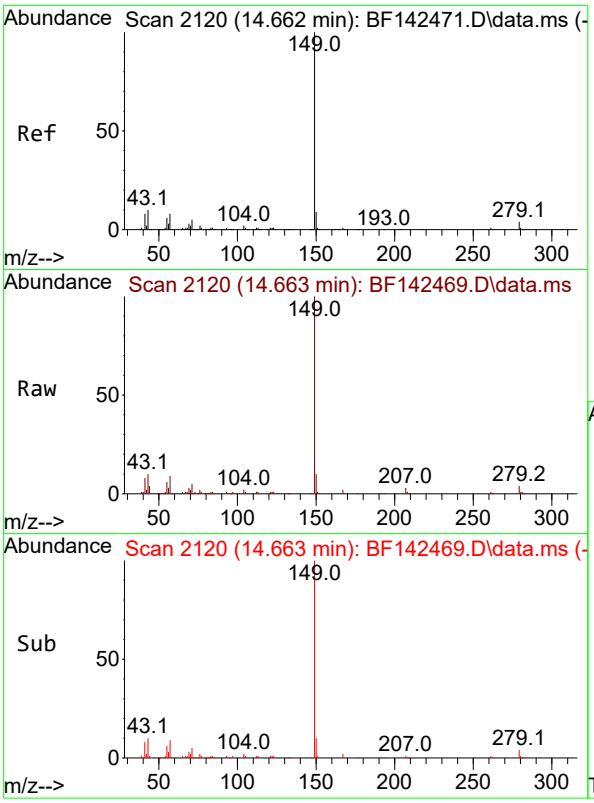


#84
Bis(2-ethylhexyl)phthalate
Concen: 8.310 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:149 Resp: 54056

Ion	Ratio	Lower	Upper
149	100		
167	27.8	21.5	32.3
279	3.7	3.2	4.8



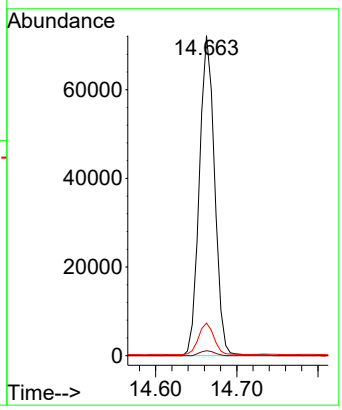


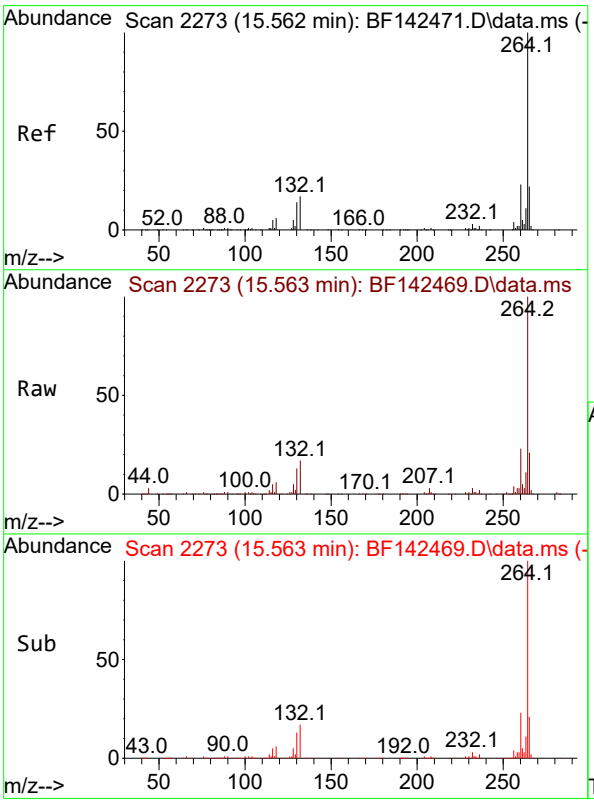
#85
Di-n-octyl phthalate
Concen: 7.425 ng
RT: 14.663 min Scan# 21
Delta R.T. -0.005 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:149 Resp: 94445

Ion	Ratio	Lower	Upper
149	100		
167	1.5	1.2	1.8
43	9.8	7.9	11.9

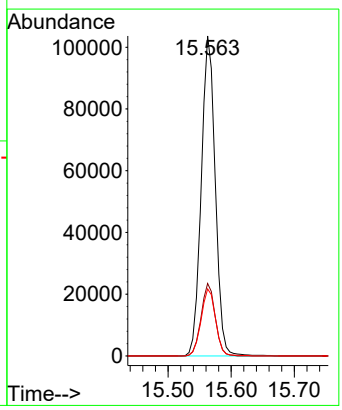


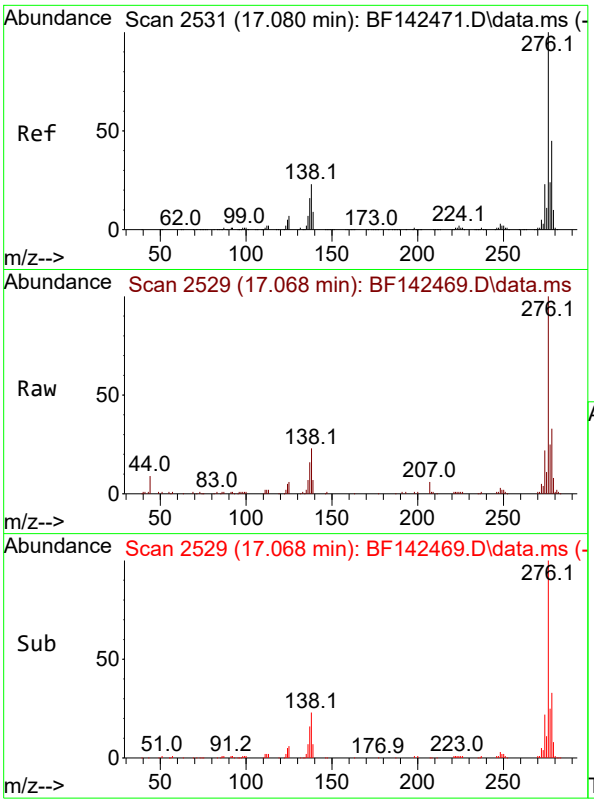


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.563 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:264 Resp: 160066

Ion	Ratio	Lower	Upper
264	100		
260	22.6	18.6	28.0
265	20.9	17.7	26.5



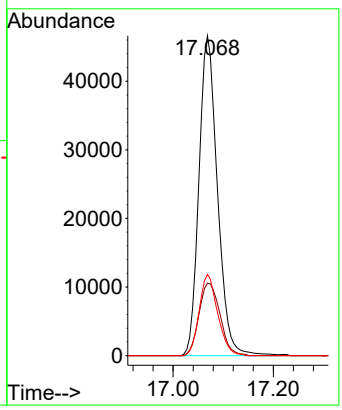


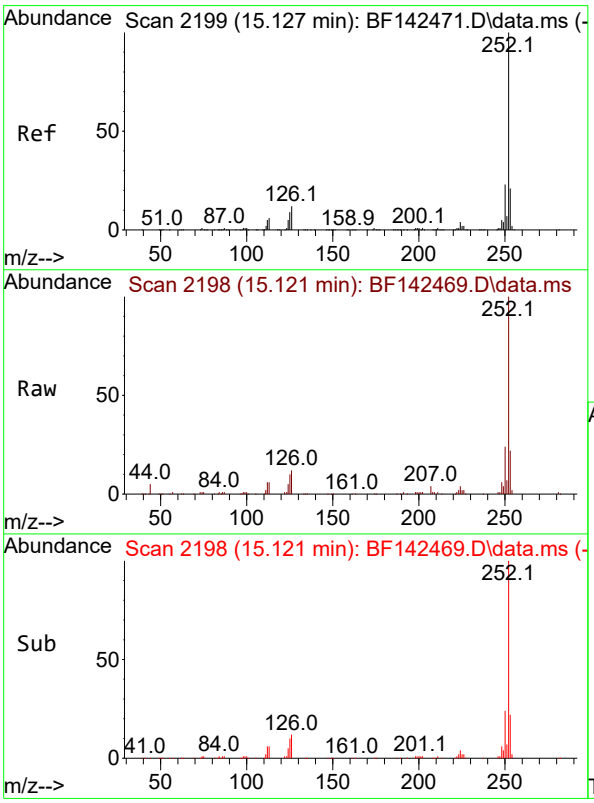
#87
Indeno(1,2,3-cd)pyrene
Concen: 9.956 ng
RT: 17.068 min Scan# 2
Delta R.T. -0.023 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:276 Resp: 119642

Ion	Ratio	Lower	Upper
276	100		
138	25.8	19.9	29.9
277	25.3	20.2	30.2

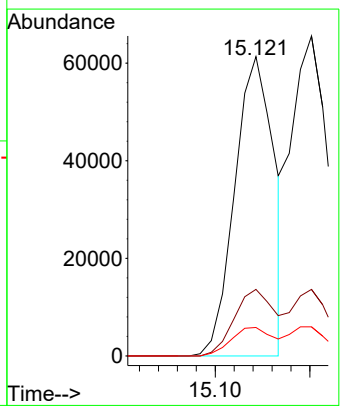


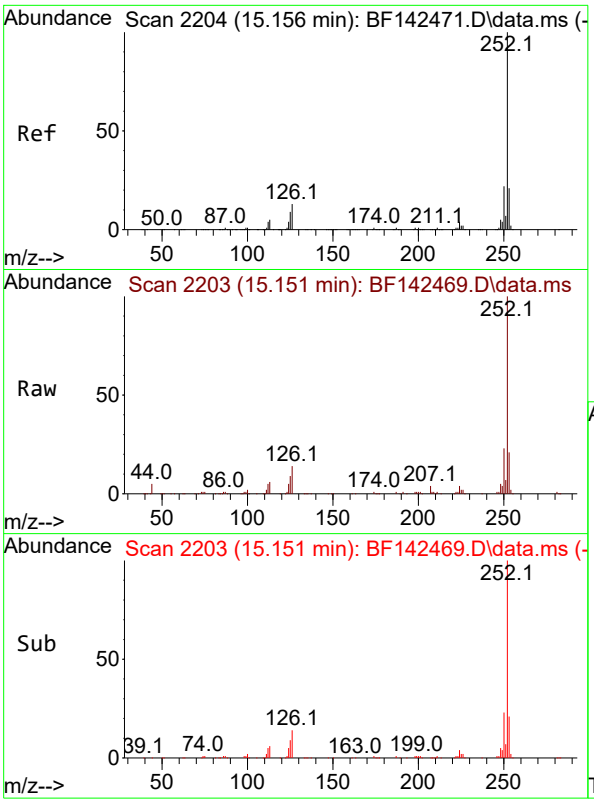


#88
Benzo(b)fluoranthene
Concen: 9.335 ng
RT: 15.121 min Scan# 2198
Delta R.T. -0.006 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:252 Resp: 88432

Ion	Ratio	Lower	Upper
252	100		
253	22.2	17.0	25.4
125	9.5	7.4	11.0



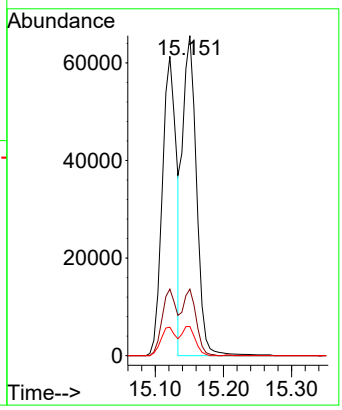


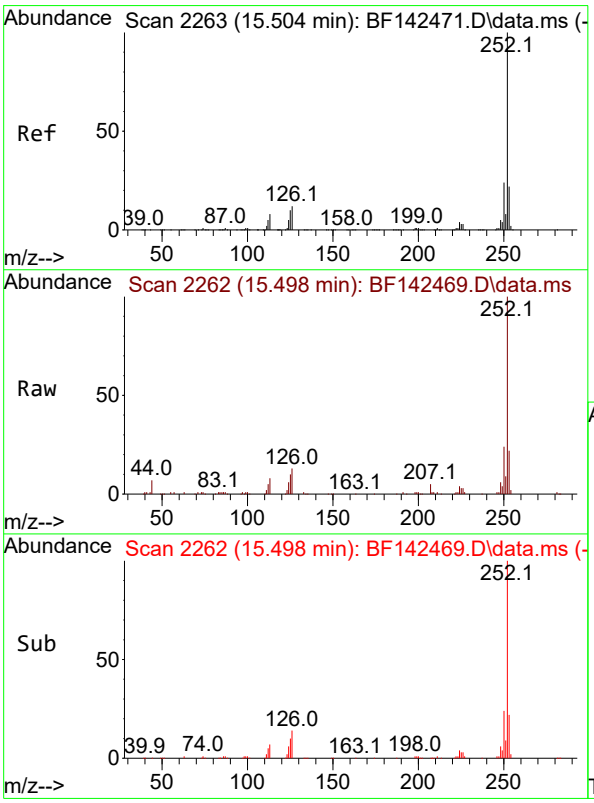
#89
Benzo(k)fluoranthene
Concen: 10.517 ng
RT: 15.151 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:252 Resp: 93315

Ion	Ratio	Lower	Upper
252	100		
253	20.8	17.0	25.4
125	9.1	7.3	10.9

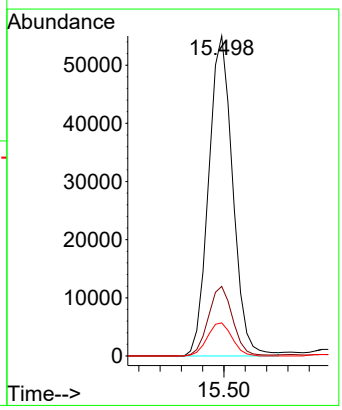


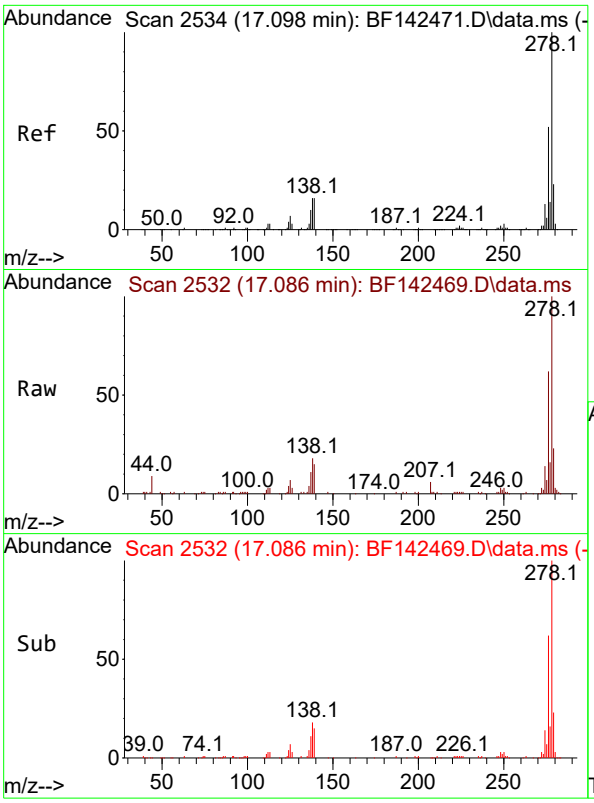


#90
Benzo(a)pyrene
Concen: 9.684 ng
RT: 15.498 min Scan# 2262
Delta R.T. -0.012 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:252 Resp: 86477

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.4	26.0
125	10.4	7.9	11.9



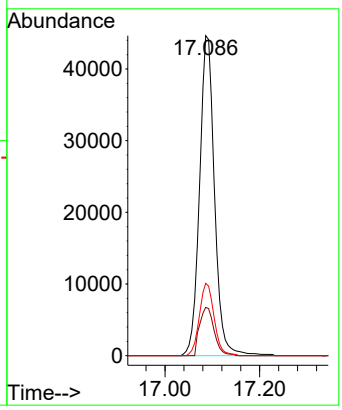


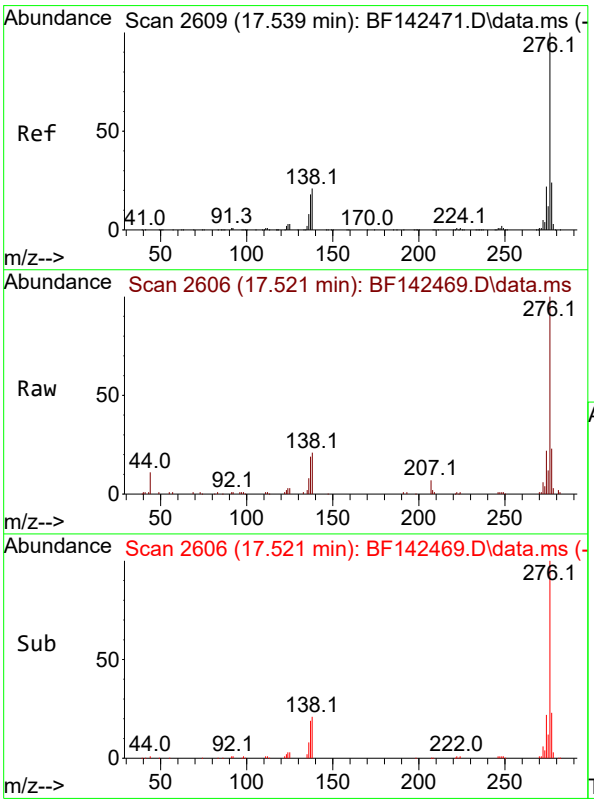
#91
Dibenzo(a,h)anthracene
Concen: 10.087 ng
RT: 17.086 min Scan# 2
Delta R.T. -0.029 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Tgt Ion:278 Resp: 98308

Ion	Ratio	Lower	Upper
278	100		
139	15.1	12.8	19.2
279	22.6	18.6	28.0

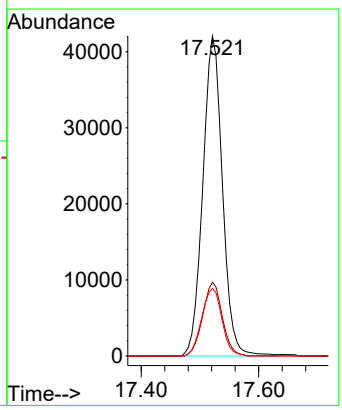




#92
Benzo(g,h,i)perylene
Concen: 10.016 ng
RT: 17.521 min Scan# 2606
Delta R.T. -0.035 min
Lab File: BF142469.D
Acq: 20 May 2025 13:07

Tgt Ion:276 Resp: 97640

Ion	Ratio	Lower	Upper
276	100		
277	23.0	19.2	28.8
138	21.1	16.8	25.2



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142470.D
Acq On : 20 May 2025 13:36
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Quant Time: May 20 16:55:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	94619	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	367495	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	204113	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	353003	20.000	ng	0.00
76) Chrysene-d12	14.068	240	179495	20.000	ng	0.00
86) Perylene-d12	15.563	264	165092	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.504	112	231731	41.261	ng	-0.01
7) Phenol-d6	6.516	99	276122	40.843	ng	-0.02
23) Nitrobenzene-d5	7.463	82	278514	41.326	ng	-0.01
42) 2,4,6-Tribromophenol	10.728	330	95535	42.171	ng	-0.01
45) 2-Fluorobiphenyl	9.257	172	635813	41.799	ng	-0.01
79) Terphenyl-d14	13.016	244	596097	45.382	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.669	88	44822	19.944	ng	99
3) Pyridine	3.440	79	114685	20.039	ng	99
4) n-Nitrosodimethylamine	3.375	42	59347	19.972	ng	99
6) Aniline	6.557	93	185773	20.437	ng	99
8) 2-Chlorophenol	6.681	128	124465	20.347	ng	99
9) Benzaldehyde	6.451	77	91686	22.548	ng	99
10) Phenol	6.534	94	155782	20.479	ng	98
11) bis(2-Chloroethyl)ether	6.634	93	110538	20.187	ng	99
12) 1,3-Dichlorobenzene	6.840	146	139347	20.414	ng	100
13) 1,4-Dichlorobenzene	6.916	146	141061	20.515	ng	99
14) 1,2-Dichlorobenzene	7.069	146	135845	20.647	ng	99
15) Benzyl Alcohol	7.034	79	100072	20.030	ng	100
16) 2,2'-oxybis(1-Chloropr...	7.175	45	187668	20.408	ng	100
17) 2-Methylphenol	7.145	107	97077	20.326	ng	99
18) Hexachloroethane	7.416	117	49500	20.617	ng	98
19) n-Nitroso-di-n-propyla...	7.304	70	85172	20.328	ng	99
20) 3+4-Methylphenols	7.298	107	126511	20.685	ng	95
22) Acetophenone	7.304	105	168730	20.741	ng	99
24) Nitrobenzene	7.481	77	124202	20.433	ng	99
25) Isophorone	7.716	82	227891	20.225	ng	100
26) 2-Nitrophenol	7.798	139	66130	20.361	ng	100
27) 2,4-Dimethylphenol	7.828	122	116913	20.412	ng	98
28) bis(2-Chloroethoxy)met...	7.928	93	144952	20.593	ng	98
29) 2,4-Dichlorophenol	8.034	162	106584	20.462	ng	99
30) 1,2,4-Trichlorobenzene	8.122	180	116666	20.638	ng	97
31) Naphthalene	8.204	128	374799	20.713	ng	100
32) Benzoic acid	7.910	122	64801	18.586	ng	99
33) 4-Chloroaniline	8.251	127	152901	20.853	ng	99
34) Hexachlorobutadiene	8.322	225	72441	20.523	ng	99
35) Caprolactam	8.598	113	30374	20.762	ng	98
36) 4-Chloro-3-methylphenol	8.728	107	109793	20.567	ng	97
37) 2-Methylnaphthalene	8.898	142	237350	20.849	ng	98
38) 1-Methylnaphthalene	8.998	142	246831	20.961	ng	99
40) 1,2,4,5-Tetrachloroben...	9.063	216	119980	20.477	ng	100
41) Hexachlorocyclopentadiene	9.051	237	78243	19.796	ng	99
43) 2,4,6-Trichlorophenol	9.169	196	82857	20.971	ng	96

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142470.D
Acq On : 20 May 2025 13:36
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Quant Time: May 20 16:55:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	84935	20.383	ng		98
46) 1,1'-Biphenyl	9.363	154	325474	20.553	ng		99
47) 2-Chloronaphthalene	9.386	162	240148	20.526	ng		98
48) 2-Nitroaniline	9.475	65	69068	20.424	ng		97
49) Acenaphthylene	9.804	152	413782	20.945	ng		100
50) Dimethylphthalate	9.657	163	279113	20.724	ng		100
51) 2,6-Dinitrotoluene	9.716	165	59031	20.308	ng		97
52) Acenaphthene	9.975	154	250487	20.764	ng		98
53) 3-Nitroaniline	9.886	138	66847	21.055	ng		99
54) 2,4-Dinitrophenol	9.992	184	27863	18.553	ng	#	70
55) Dibenzofuran	10.145	168	360936	20.792	ng		99
56) 4-Nitrophenol	10.039	139	49352	21.067	ng		99
57) 2,4-Dinitrotoluene	10.122	165	79063	20.827	ng		99
58) Fluorene	10.486	166	279994	20.878	ng		100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	73538	21.140	ng		99
60) Diethylphthalate	10.357	149	277325	21.084	ng		99
61) 4-Chlorophenyl-phenyle...	10.480	204	137985	20.944	ng		99
62) 4-Nitroaniline	10.498	138	61856	21.481	ng		98
63) Azobenzene	10.639	77	242545	20.530	ng		99
65) 4,6-Dinitro-2-methylph...	10.528	198	38757	19.673	ng		97
66) n-Nitrosodiphenylamine	10.598	169	245739	20.348	ng		98
67) 4-Bromophenyl-phenylether	10.975	248	84406	20.222	ng		96
68) Hexachlorobenzene	11.039	284	92803	20.102	ng		98
69) Atrazine	11.122	200	65656	20.471	ng		99
70) Pentachlorophenol	11.227	266	52525	20.152	ng		99
71) Phenanthrene	11.451	178	388317	20.584	ng		100
72) Anthracene	11.504	178	396704	20.604	ng		99
73) Carbazole	11.657	167	346558	21.055	ng		99
74) Di-n-butylphthalate	11.986	149	382324	21.221	ng		100
75) Fluoranthene	12.639	202	371226	21.059	ng		99
77) Benzidine	12.763	184	162031	24.258	ng		99
78) Pyrene	12.869	202	370789	22.144	ng		99
80) Butylbenzylphthalate	13.486	149	94290	20.379	ng		99
81) Benzo(a)anthracene	14.057	228	251858	21.013	ng		100
82) 3,3'-Dichlorobenzidine	14.021	252	72218	19.865	ng		99
83) Chrysene	14.098	228	214213	19.890	ng		99
84) Bis(2-ethylhexyl)phtha...	14.045	149	111015	18.743	ng		100
85) Di-n-octyl phthalate	14.663	149	198800	17.166	ng		100
87) Indeno(1,2,3-cd)pyrene	17.074	276	261271	21.080	ng		99
88) Benzo(b)fluoranthene	15.121	252	213487	21.849	ng		99
89) Benzo(k)fluoranthene	15.151	252	170316	18.611	ng		100
90) Benzo(a)pyrene	15.498	252	183983	19.976	ng		99
91) Dibenzo(a,h)anthracene	17.092	278	210557	20.946	ng		99
92) Benzo(g,h,i)perylene	17.527	276	209719	20.859	ng		98

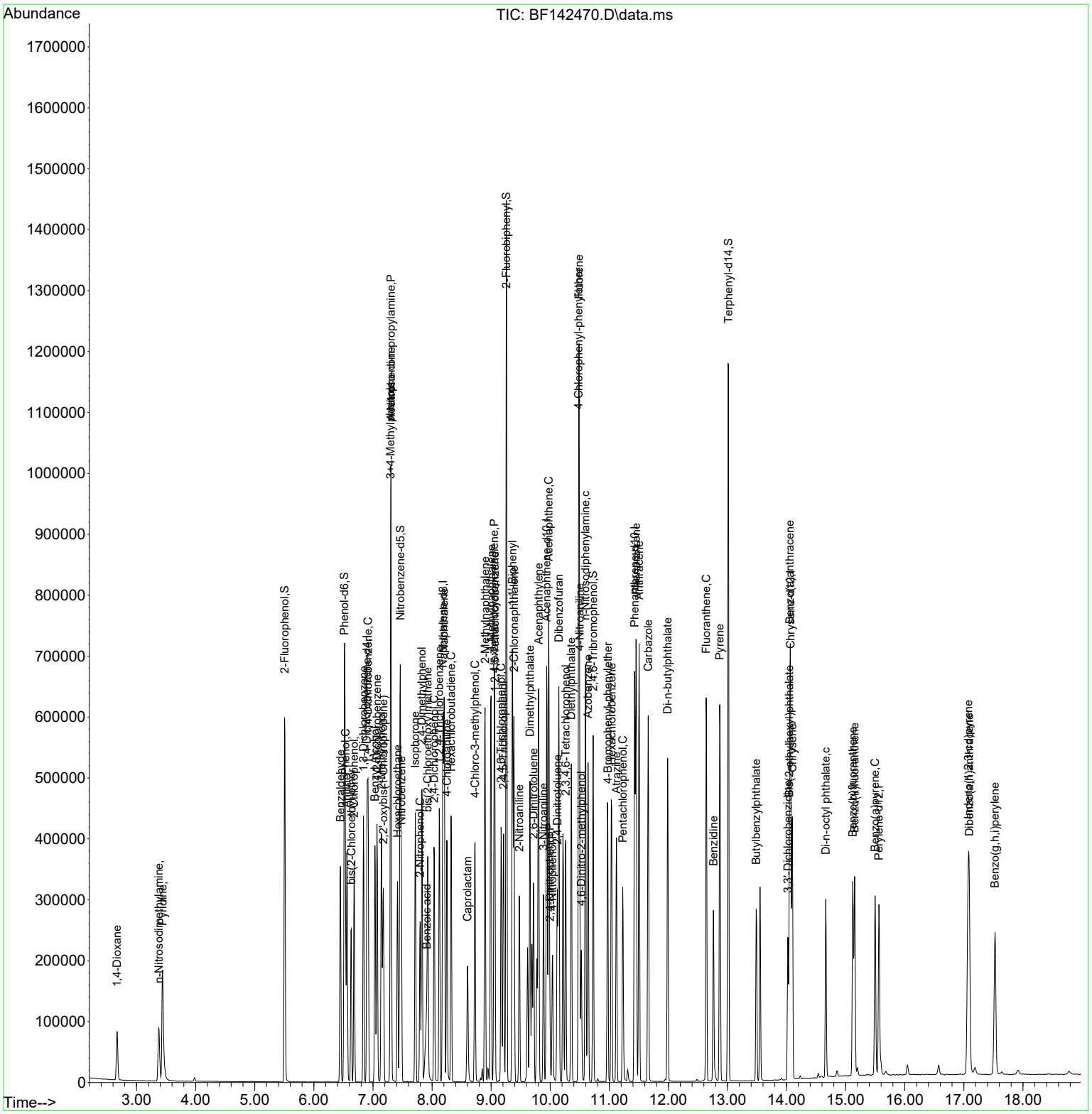
(#) = qualifier out of range (m) = manual integration (+) = signals summed

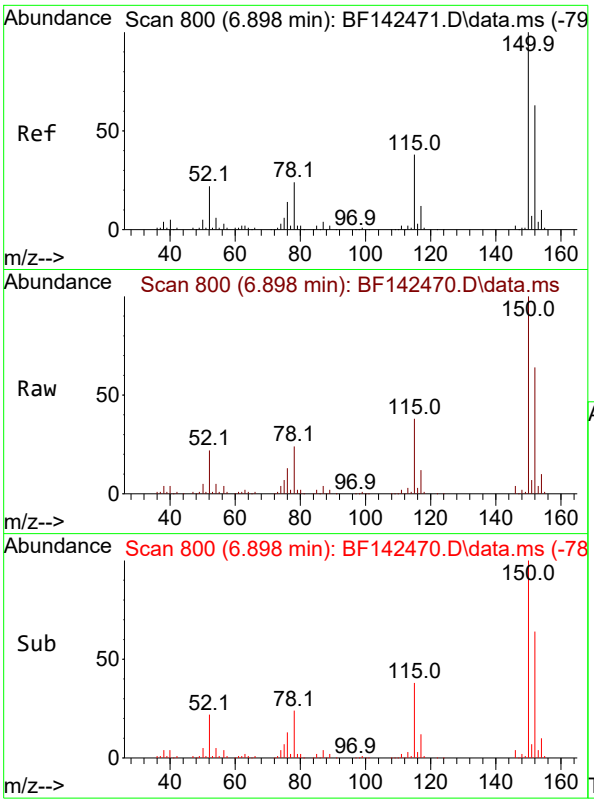
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142470.D
Acq On : 20 May 2025 13:36
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Quant Time: May 20 16:55:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



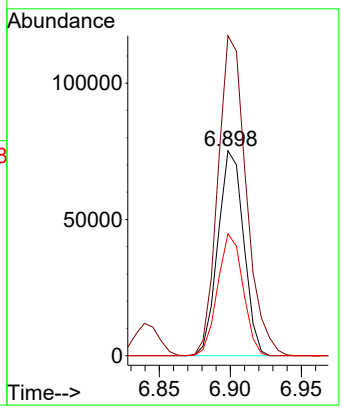


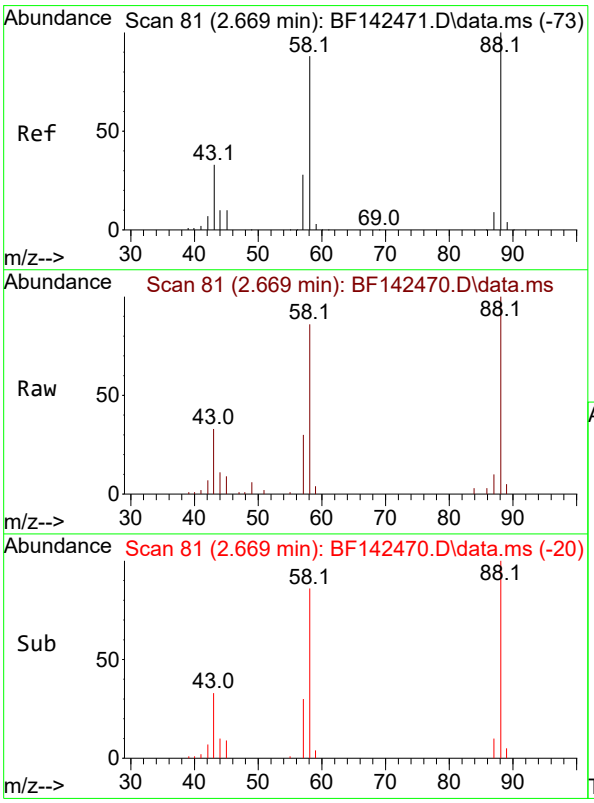
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:152 Resp: 94619

Ion	Ratio	Lower	Upper
152	100		
150	156.2	128.2	192.4
115	59.5	48.3	72.5

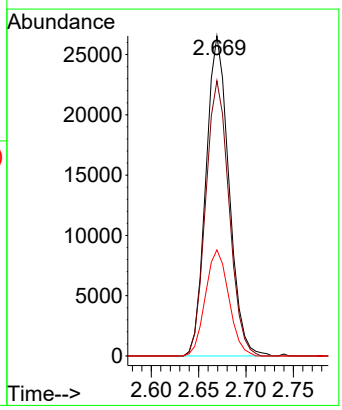


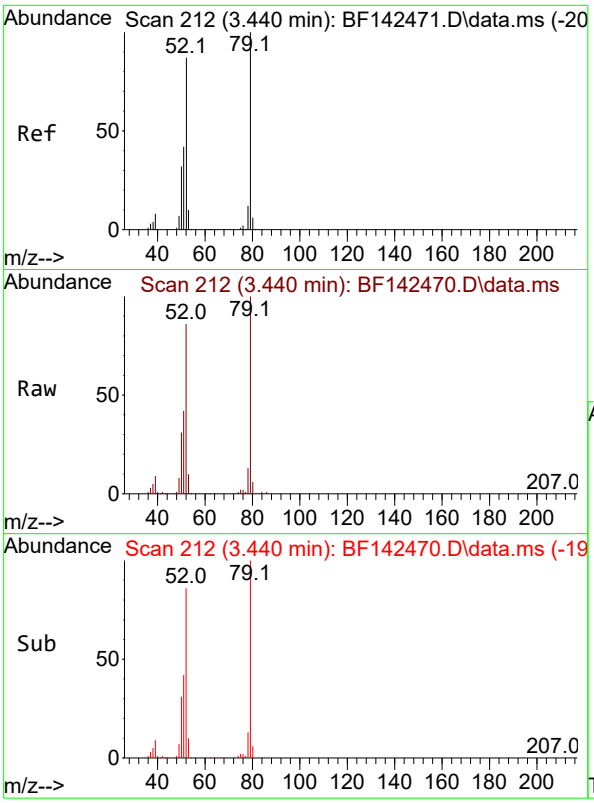


#2
1,4-Dioxane
Concen: 19.944 ng
RT: 2.669 min Scan# 81
Delta R.T. 0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 88 Resp: 44822

Ion	Ratio	Lower	Upper
88	100		
58	87.2	70.8	106.2
43	33.7	26.6	40.0



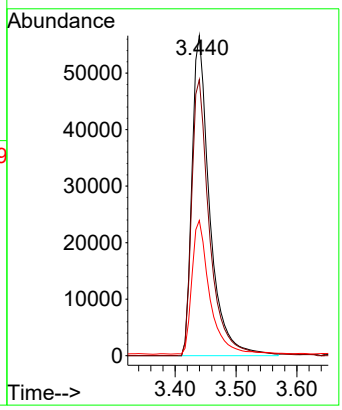


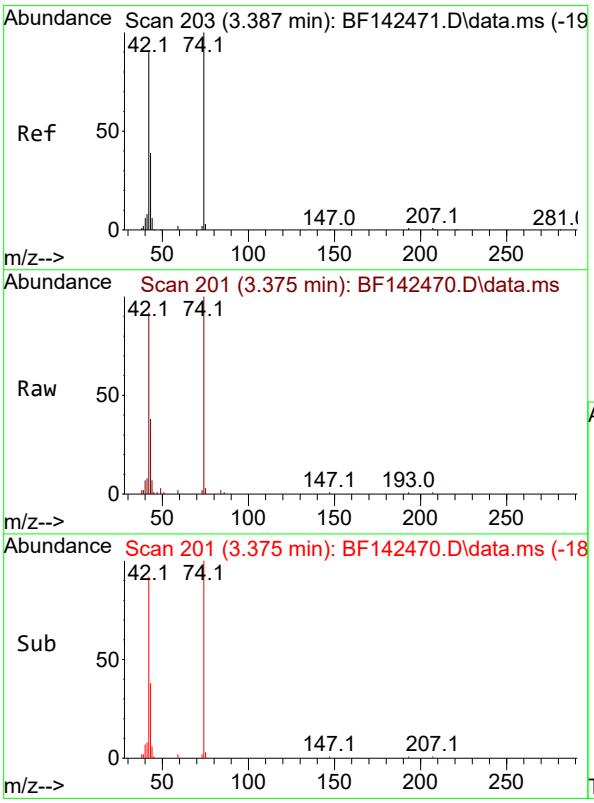
#3
Pyridine
Concen: 20.039 ng
RT: 3.440 min Scan# 21
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 79 Resp: 114685

Ion	Ratio	Lower	Upper
79	100		
52	86.3	69.2	103.8
51	42.3	33.3	49.9

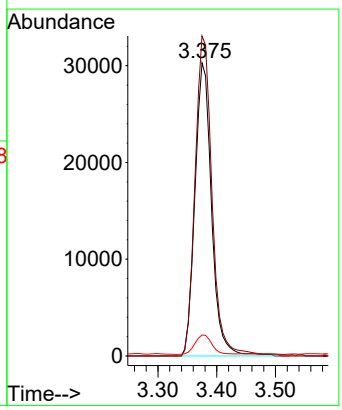


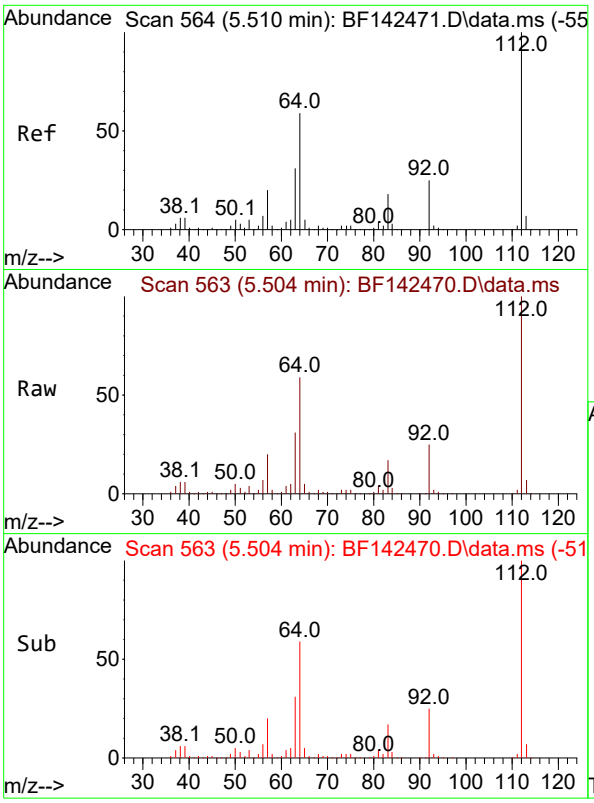


#4
n-Nitrosodimethylamine
Concen: 19.972 ng
RT: 3.375 min Scan# 201
Delta R.T. -0.029 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 42 Resp: 59347

Ion	Ratio	Lower	Upper
42	100		
74	109.2	88.2	132.4
44	7.2	5.4	8.2



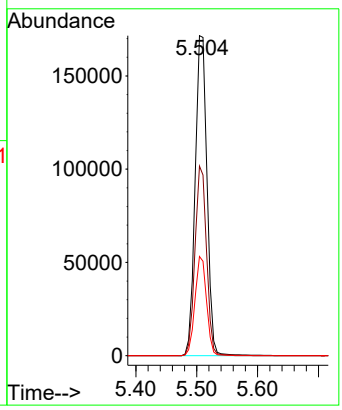


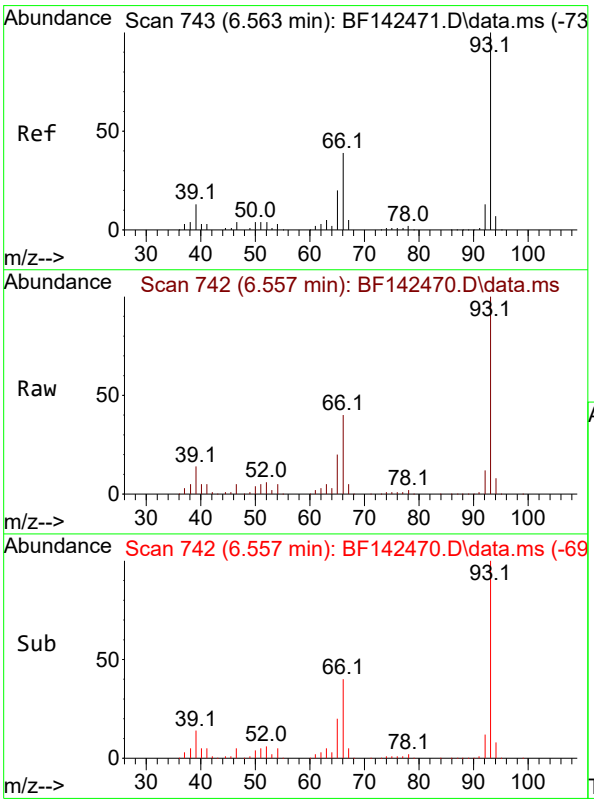
#5
2-Fluorophenol
Concen: 41.261 ng
RT: 5.504 min Scan# 5
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:112 Resp: 231731

Ion	Ratio	Lower	Upper
112	100		
64	59.3	47.5	71.3
63	31.0	24.9	37.3

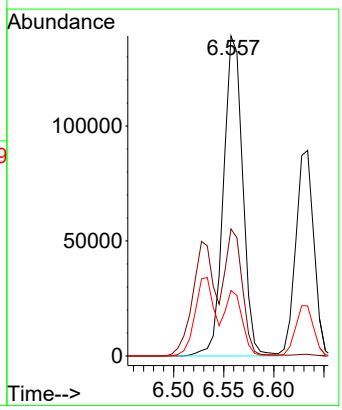


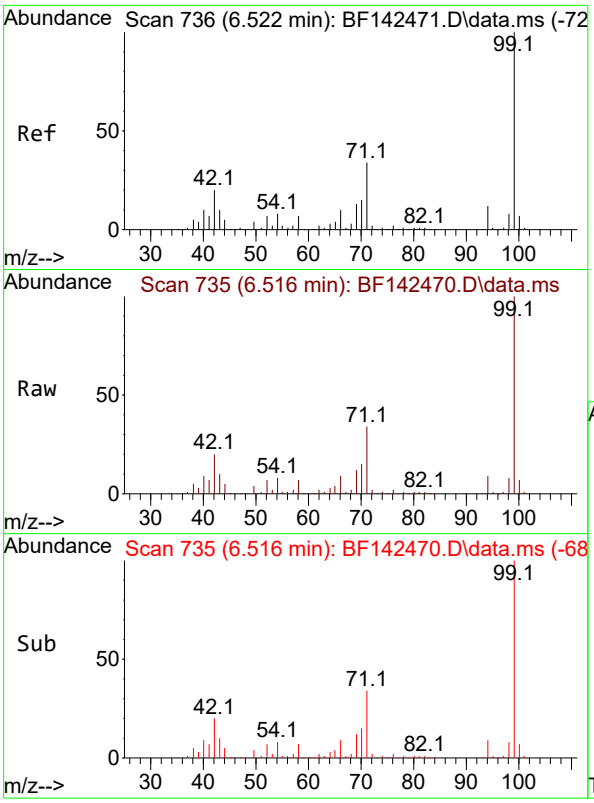


#6
Aniline
Concen: 20.437 ng
RT: 6.557 min Scan# 742
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 93 Resp: 185773

Ion	Ratio	Lower	Upper
93	100		
66	39.7	32.0	48.0
65	20.5	16.1	24.1



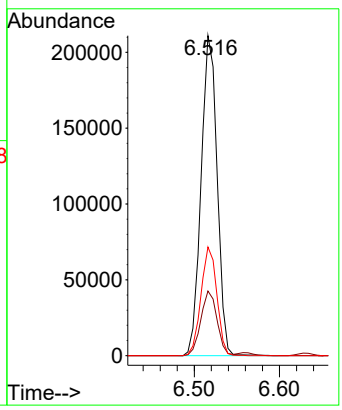


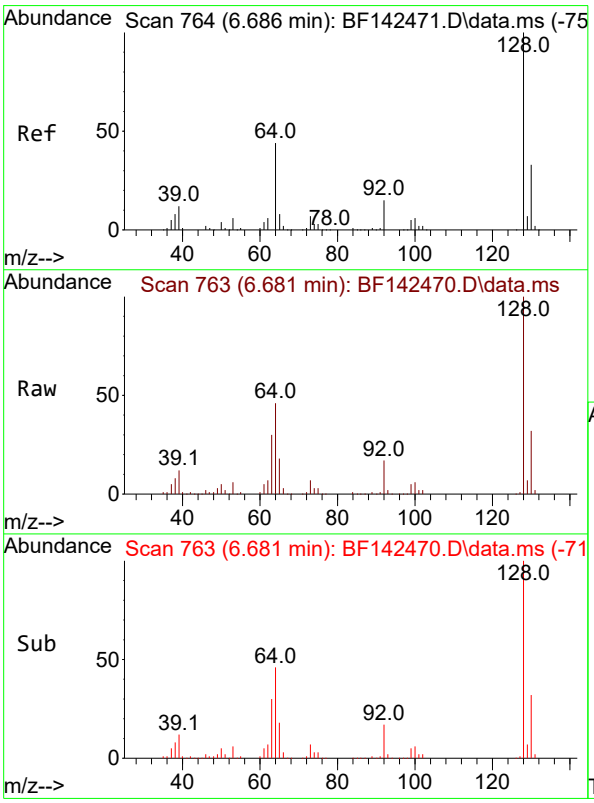
#7
Phenol-d6
Concen: 40.843 ng
RT: 6.516 min Scan# 7
Delta R.T. -0.018 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 99 Resp: 276122

Ion	Ratio	Lower	Upper
99	100		
42	20.2	16.2	24.2
71	34.0	27.3	40.9

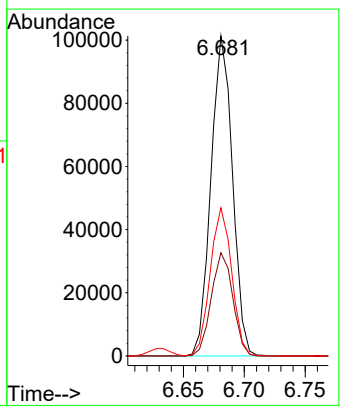


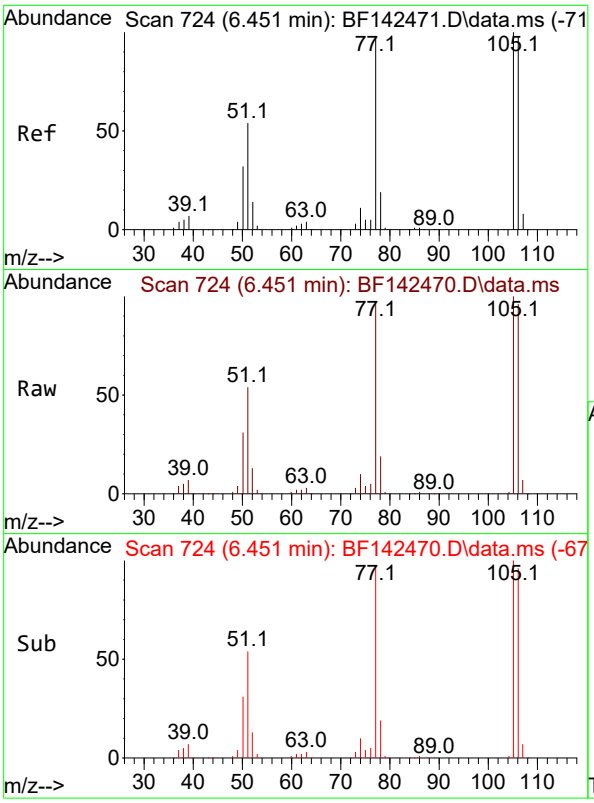


#8
2-Chlorophenol
Concen: 20.347 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:128 Resp: 124465

Ion	Ratio	Lower	Upper
128	100		
130	32.3	12.6	52.6
64	46.3	25.1	65.1



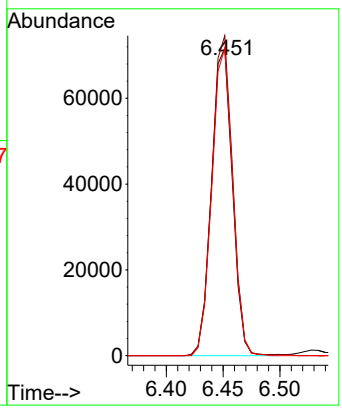


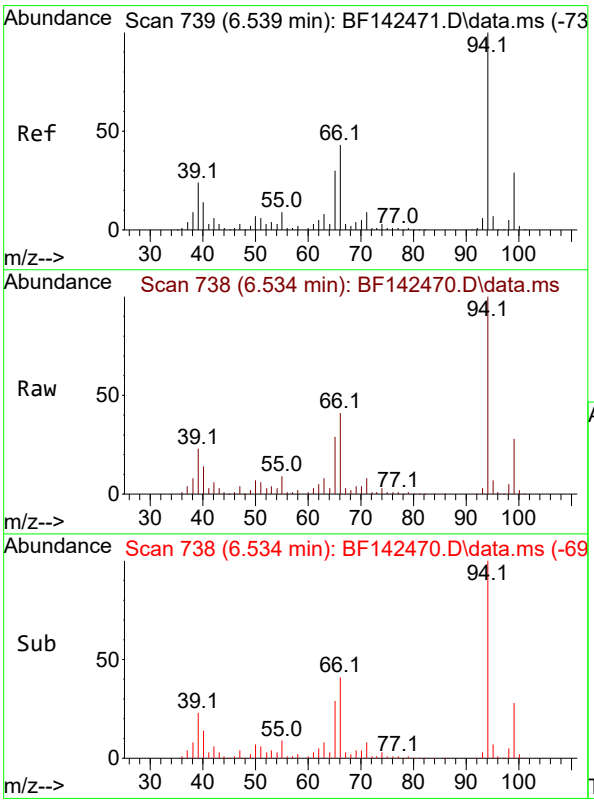
#9
Benzaldehyde
Concen: 22.548 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 77 Resp: 91686

Ion	Ratio	Lower	Upper
77	100		
105	104.1	82.5	122.5
106	100.0	80.0	120.0

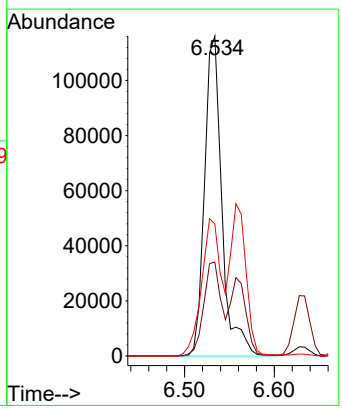


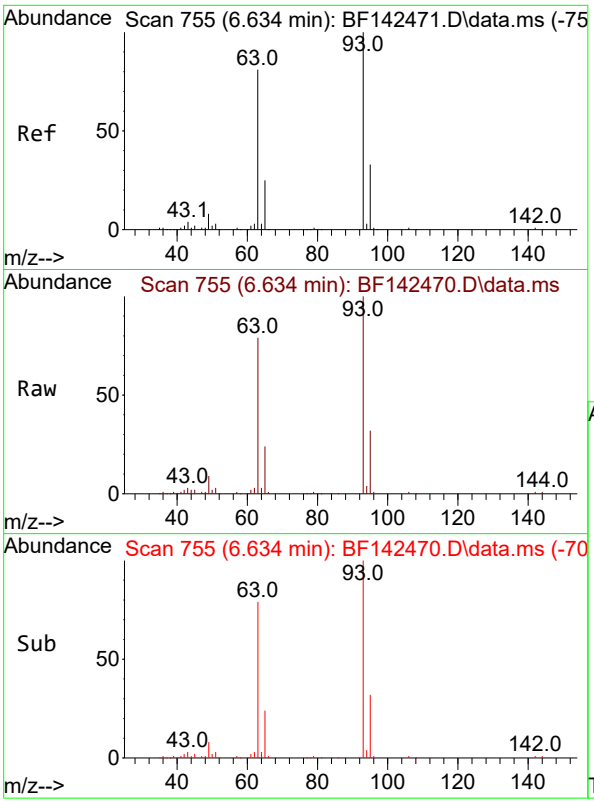


#10
Phenol
Concen: 20.479 ng
RT: 6.534 min Scan# 738
Delta R.T. -0.018 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 94 Resp: 155782

Ion	Ratio	Lower	Upper
94	100		
65	29.3	10.3	50.3
66	41.2	22.6	62.6



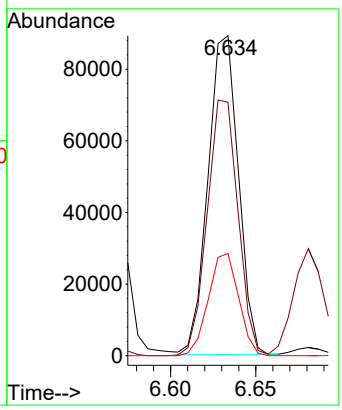


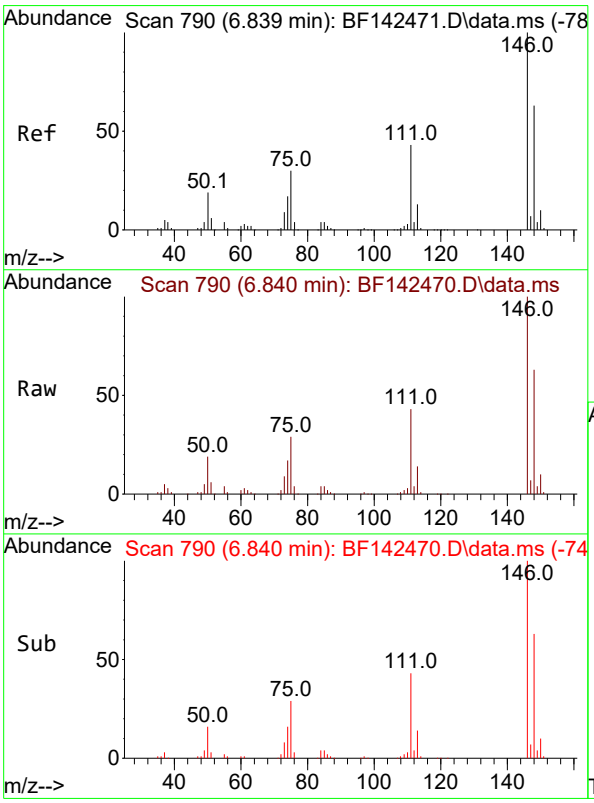
#11
bis(2-Chloroethyl)ether
Concen: 20.187 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 93 Resp: 110538

Ion	Ratio	Lower	Upper
93	100		
63	79.2	60.2	100.2
95	32.0	12.3	52.3

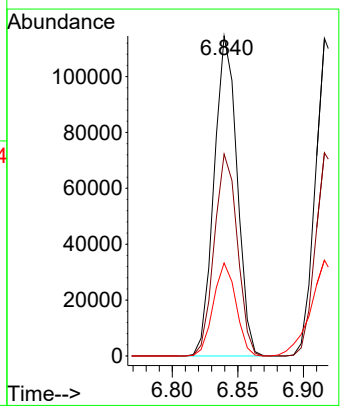


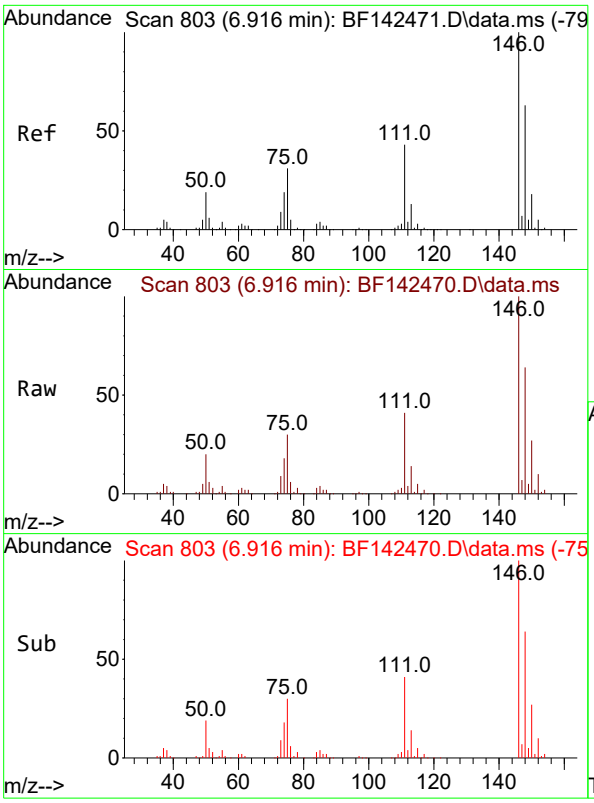


#12
1,3-Dichlorobenzene
Concen: 20.414 ng
RT: 6.840 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:146 Resp: 139347

Ion	Ratio	Lower	Upper
146	100		
148	63.1	50.6	75.8
75	29.0	23.8	35.6



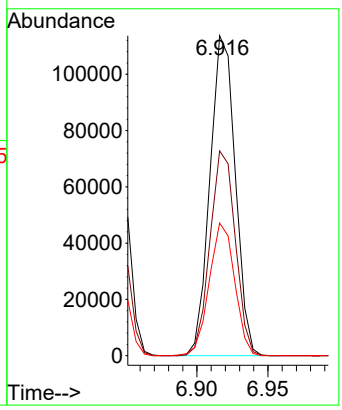


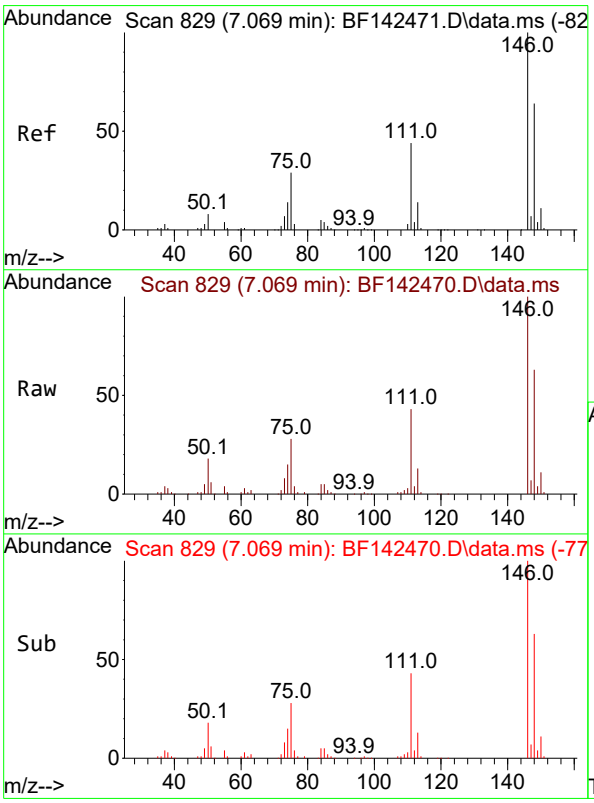
#13
1,4-Dichlorobenzene
Concen: 20.515 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:146 Resp: 141061

Ion	Ratio	Lower	Upper
146	100		
148	64.0	50.4	75.6
111	41.4	34.1	51.1

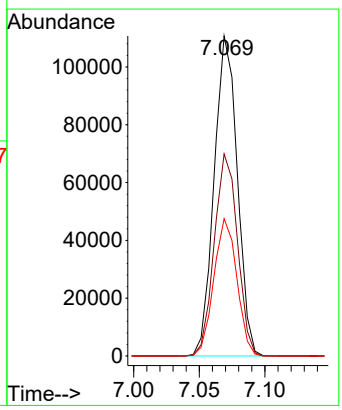


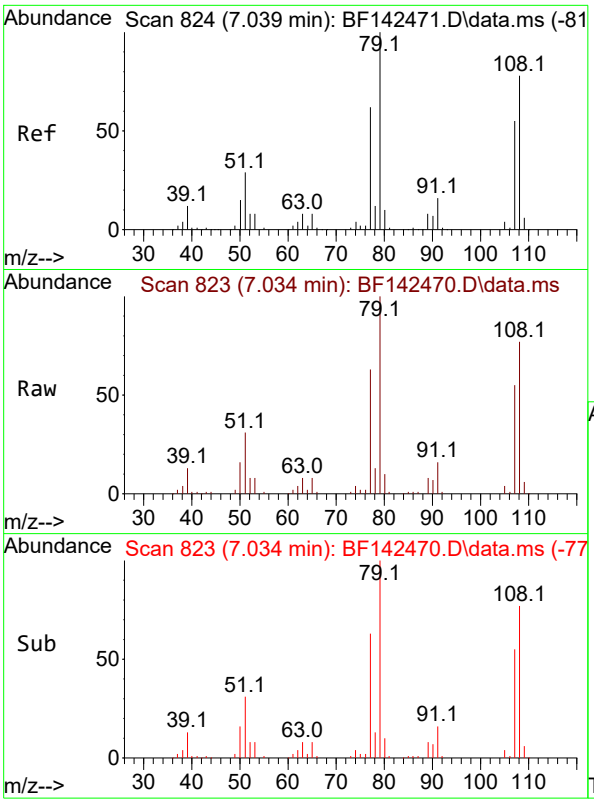


#14
1,2-Dichlorobenzene
Concen: 20.647 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:146 Resp: 135845

Ion	Ratio	Lower	Upper
146	100		
148	63.1	51.0	76.4
111	42.9	35.0	52.6



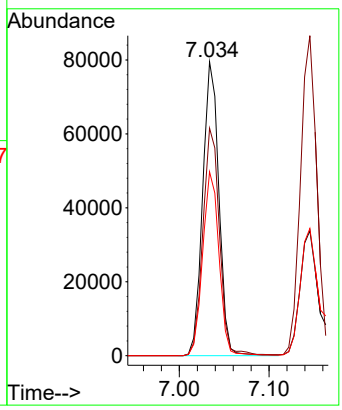


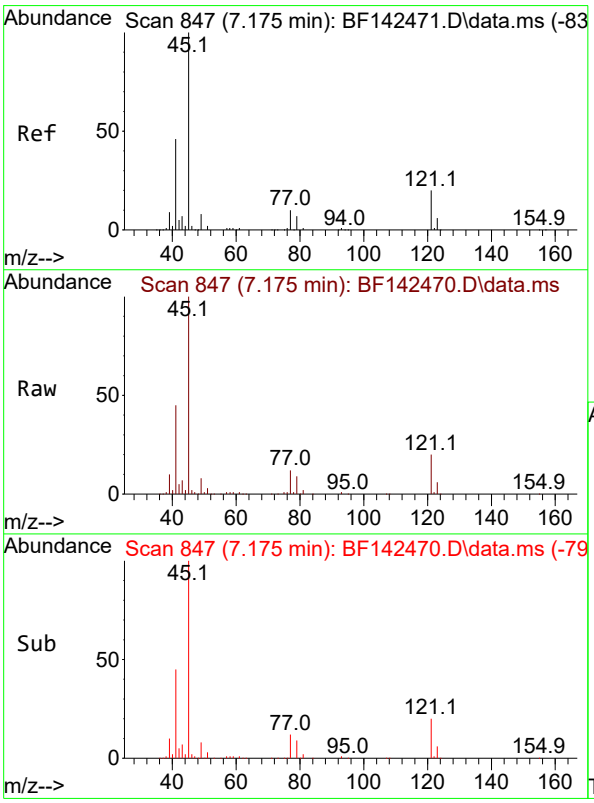
#15
Benzyl Alcohol
Concen: 20.030 ng
RT: 7.034 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 79 Resp: 100072

Ion	Ratio	Lower	Upper
79	100		
108	77.4	62.1	93.1
77	62.5	49.5	74.3

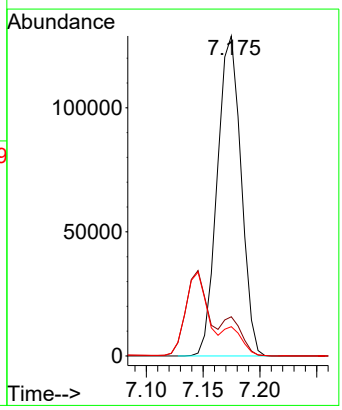


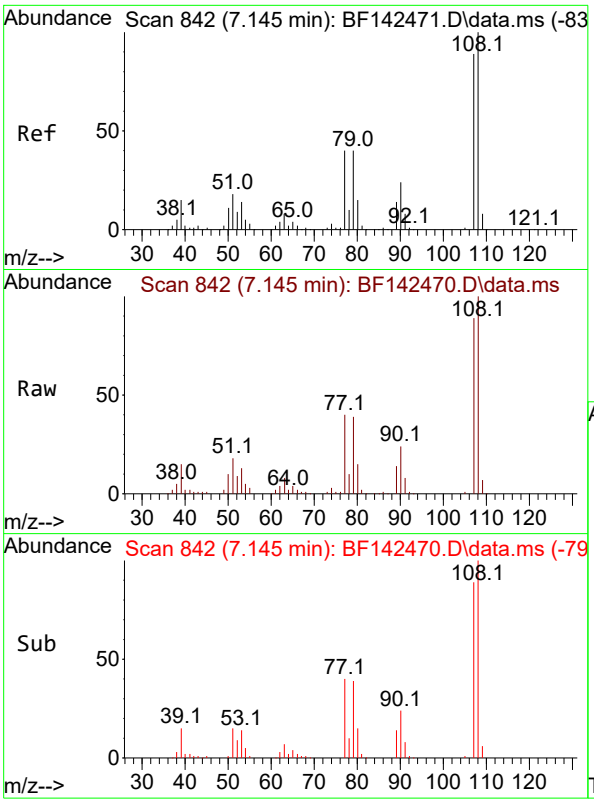


#16
2,2'-oxybis(1-Chloropropane)
Concen: 20.408 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 45 Resp: 187668

Ion	Ratio	Lower	Upper
45	100		
77	12.3	0.0	32.0
79	9.2	0.0	29.2



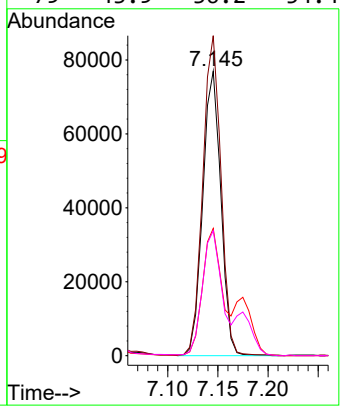


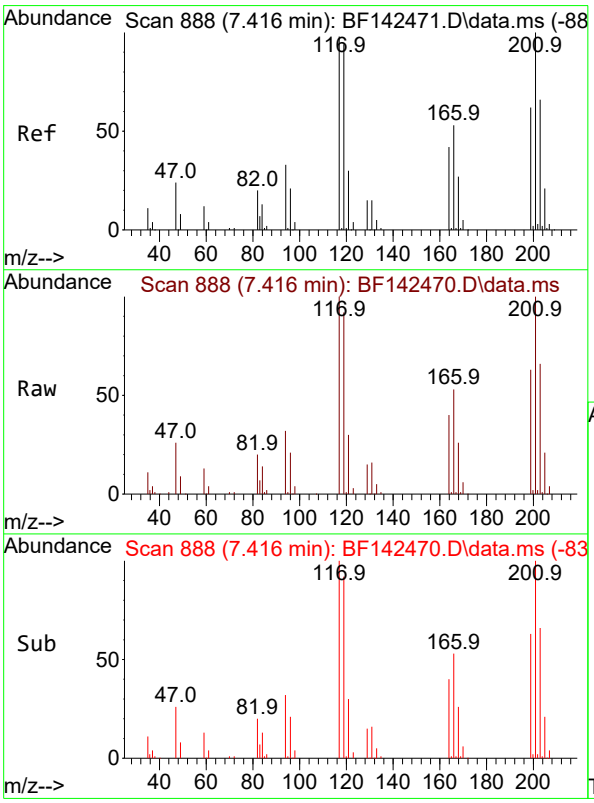
#17
2-Methylphenol
Concen: 20.326 ng
RT: 7.145 min Scan# 84
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:107 Resp: 97077

Ion	Ratio	Lower	Upper
107	100		
108	112.5	90.2	135.2
77	44.7	36.1	54.1
79	43.9	36.2	54.4

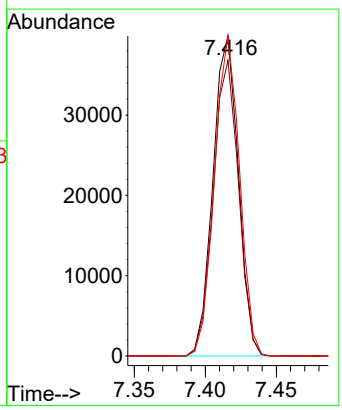


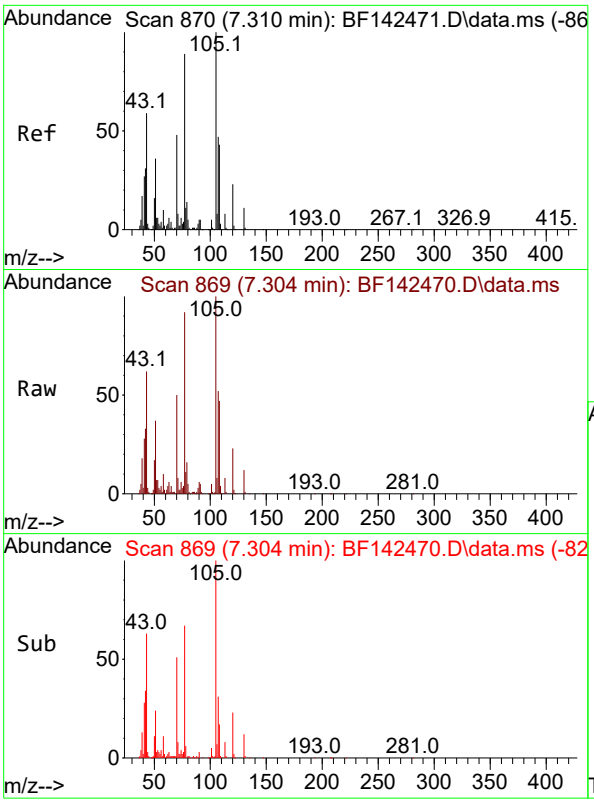


#18
Hexachloroethane
Concen: 20.617 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:117 Resp: 49500

Ion	Ratio	Lower	Upper
117	100		
119	92.4	76.6	114.8
201	99.9	81.3	121.9



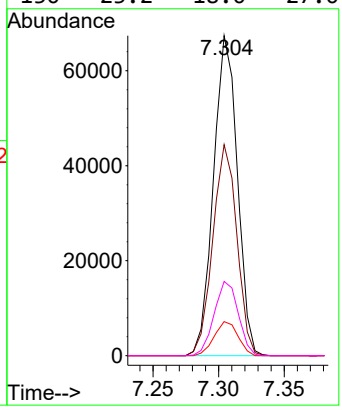


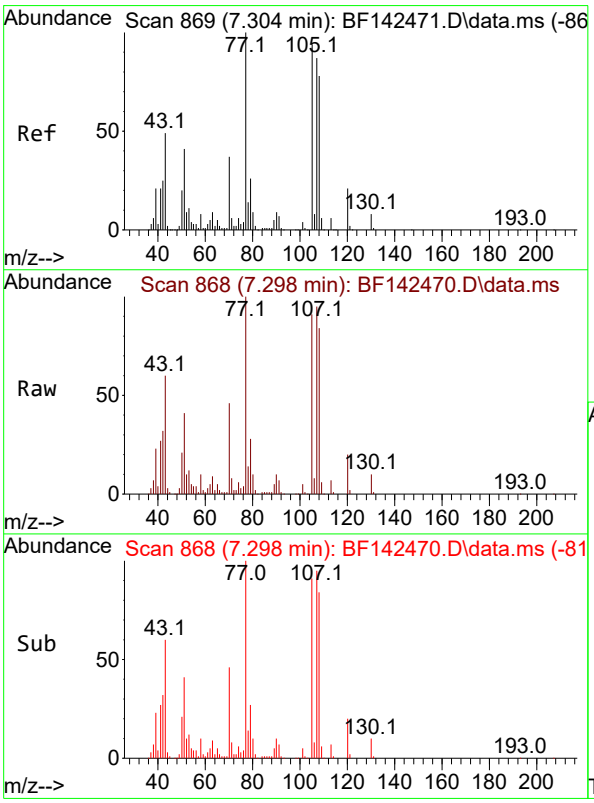
#19
n-Nitroso-di-n-propylamine
Concen: 20.328 ng
RT: 7.304 min Scan# 8
Delta R.T. -0.023 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 70 Resp: 85172

Ion	Ratio	Lower	Upper
70	100		
42	66.0	52.4	78.6
101	10.7	7.8	11.8
130	23.2	18.0	27.0

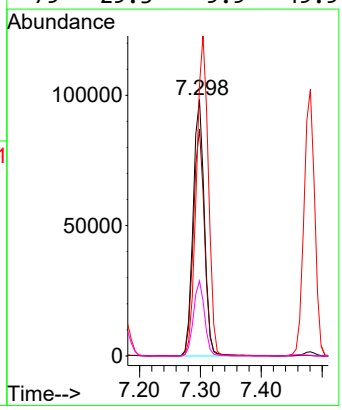


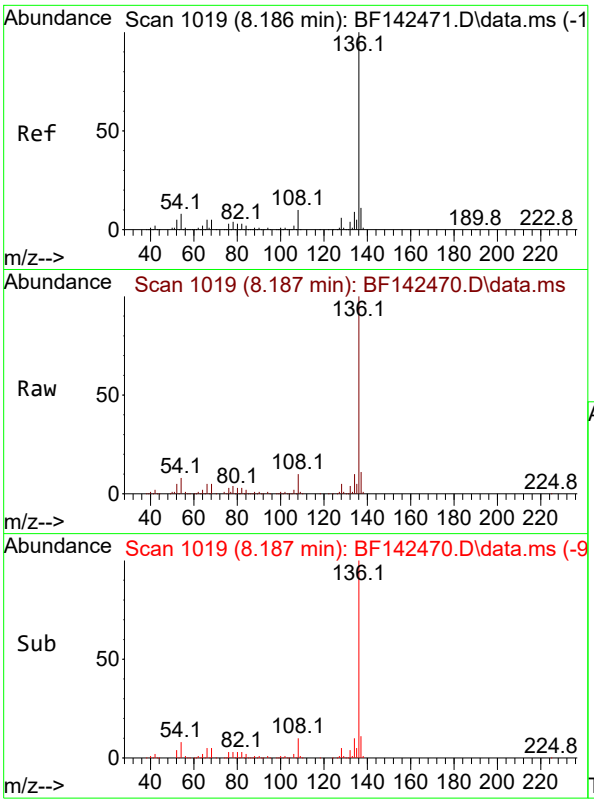


#20
3+4-Methylphenols
Concen: 20.685 ng
RT: 7.298 min Scan# 868
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:107 Resp: 126511

Ion	Ratio	Lower	Upper
107	100		
108	88.5	70.4	110.4
77	105.7	95.4	135.4
79	29.3	9.9	49.9



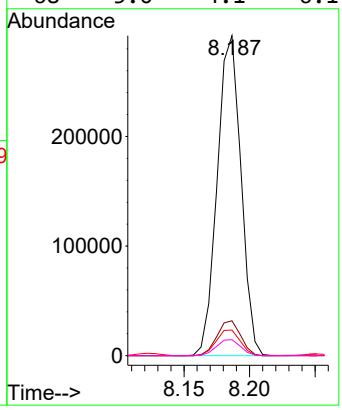


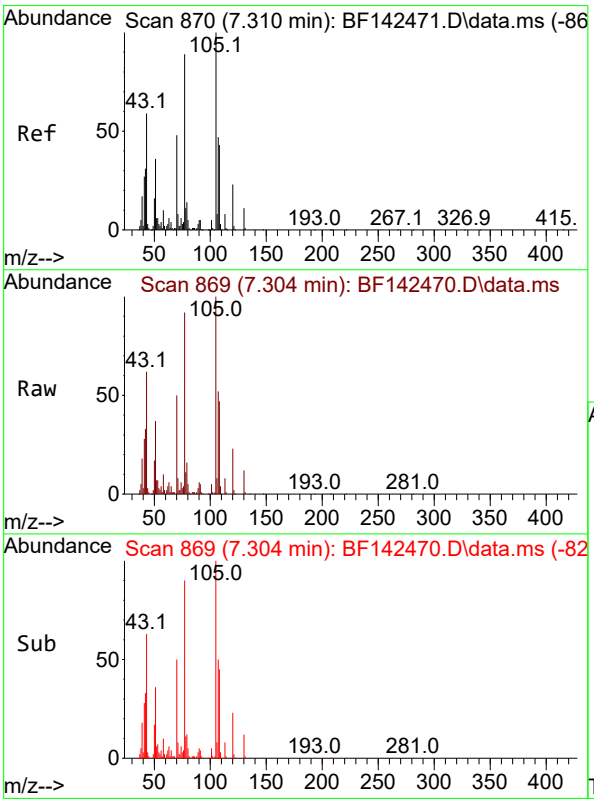
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.187 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:136 Resp: 367495

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	8.0	6.6	10.0
68	5.0	4.1	6.1

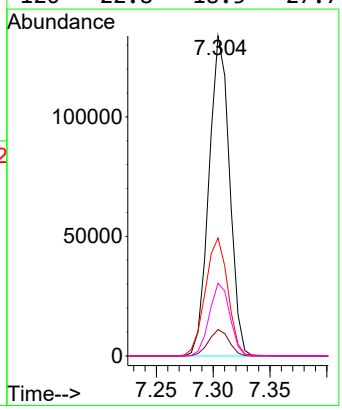


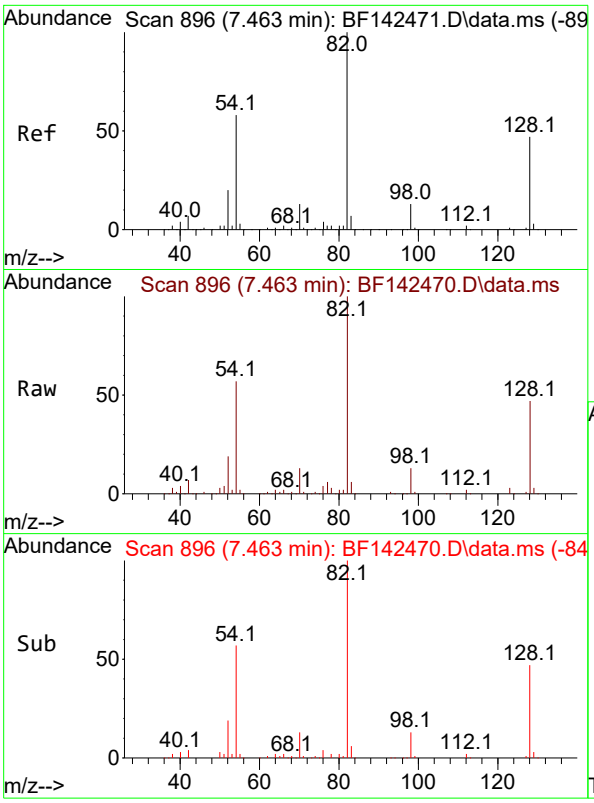


#22
Acetophenone
Concen: 20.741 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:105 Resp: 168730

Ion	Ratio	Lower	Upper
105	100		
71	8.2	6.4	9.6
51	36.9	28.6	42.8
120	22.8	18.5	27.7



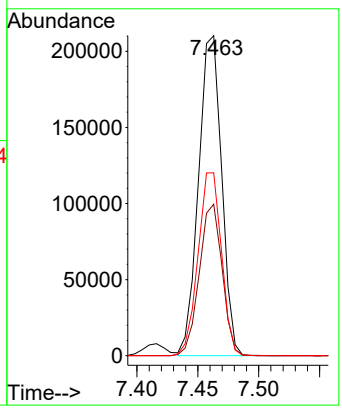


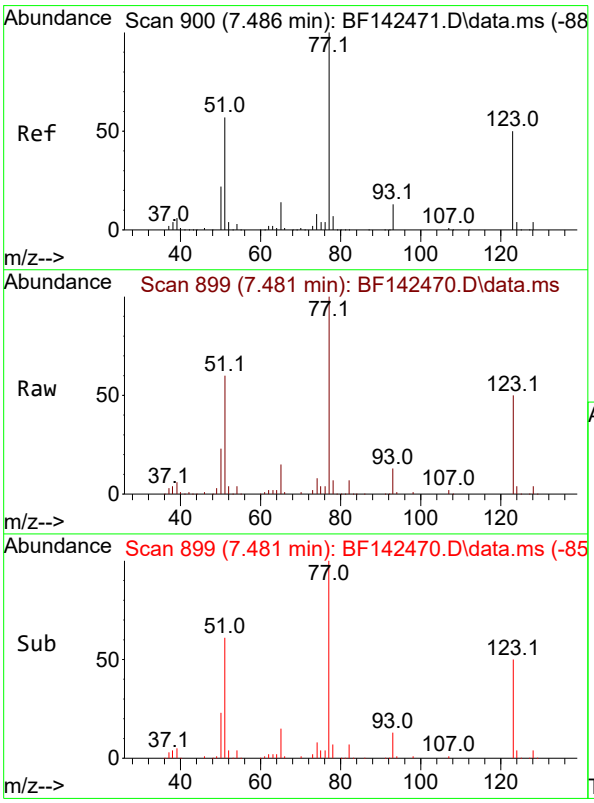
#23
Nitrobenzene-d5
Concen: 41.326 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 82 Resp: 278514

Ion	Ratio	Lower	Upper
82	100		
128	47.3	37.4	56.2
54	57.2	46.6	70.0

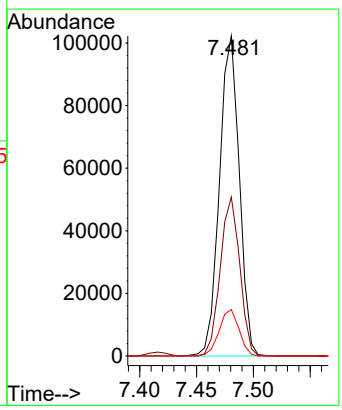


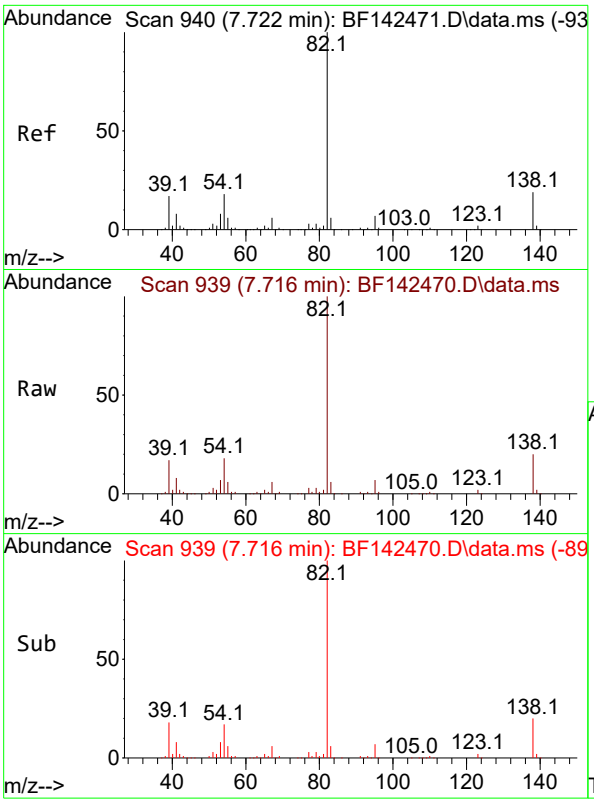


#24
Nitrobenzene
Concen: 20.433 ng
RT: 7.481 min Scan# 899
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 77 Resp: 124202

Ion	Ratio	Lower	Upper
77	100		
123	49.6	40.6	61.0
65	14.5	11.4	17.2



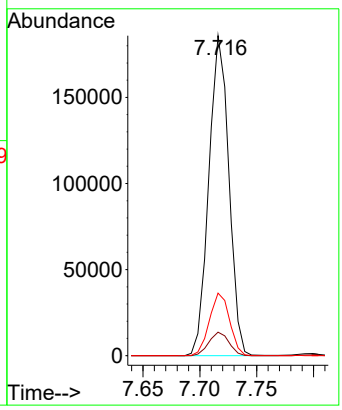


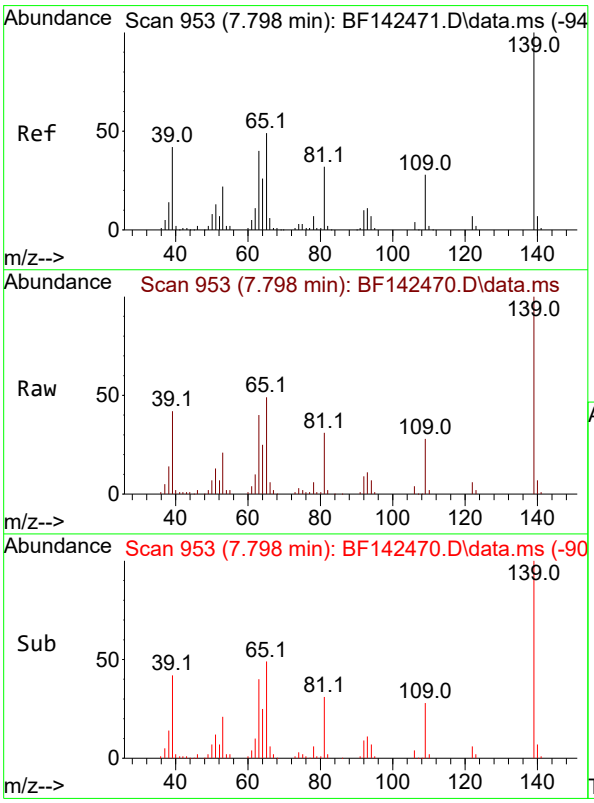
#25
Isophorone
Concen: 20.225 ng
RT: 7.716 min Scan# 9
Delta R.T. -0.018 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 82 Resp: 227891

Ion	Ratio	Lower	Upper
82	100		
95	7.4	6.0	9.0
138	19.6	15.5	23.3

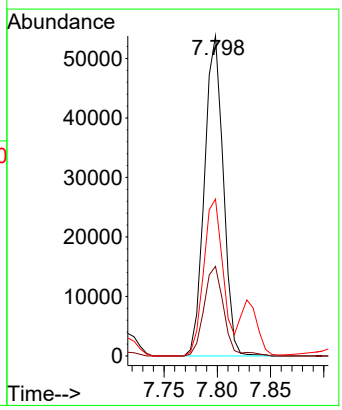


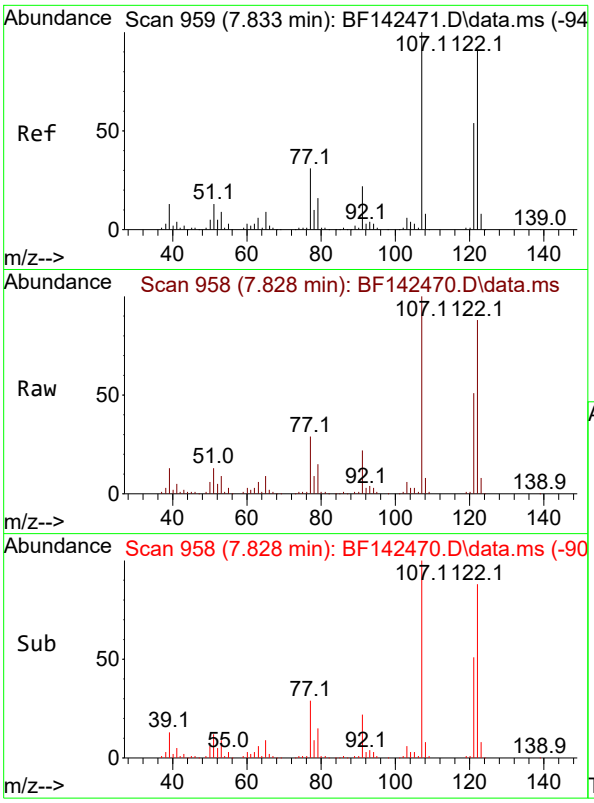


#26
2-Nitrophenol
Concen: 20.361 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:139 Resp: 66130

Ion	Ratio	Lower	Upper
139	100		
109	28.0	22.6	33.8
65	49.1	39.4	59.0



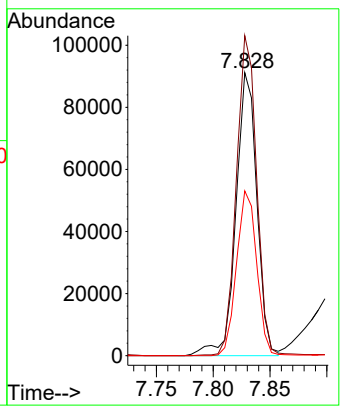


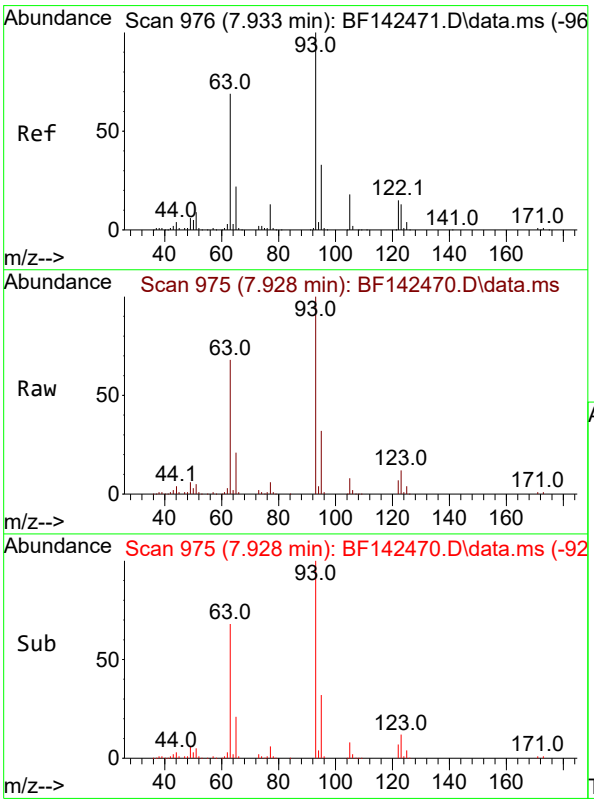
#27
2,4-Dimethylphenol
Concen: 20.412 ng
RT: 7.828 min Scan# 9
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:122 Resp: 116913

Ion	Ratio	Lower	Upper
122	100		
107	113.0	88.1	132.1
121	58.2	47.3	70.9

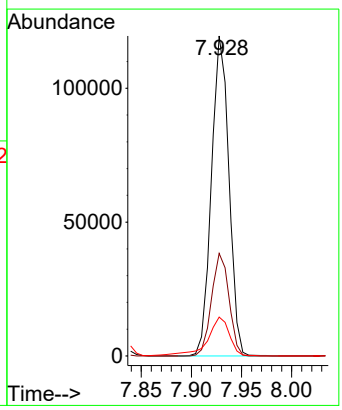


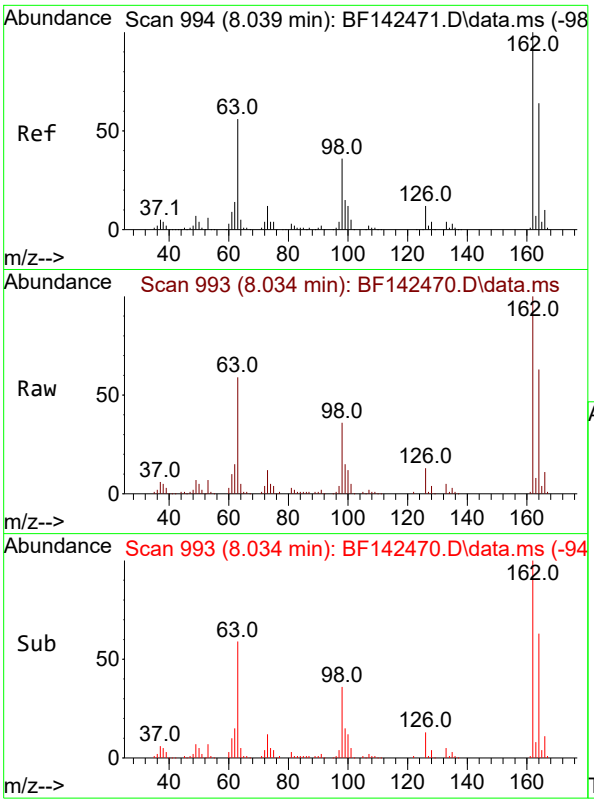


#28
bis(2-Chloroethoxy)methane
Concen: 20.593 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 93 Resp: 144952

Ion	Ratio	Lower	Upper
93	100		
95	32.0	26.4	39.6
123	12.2	10.6	15.8



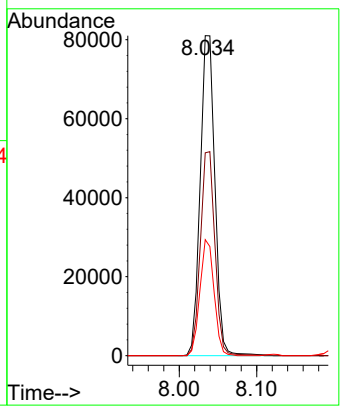


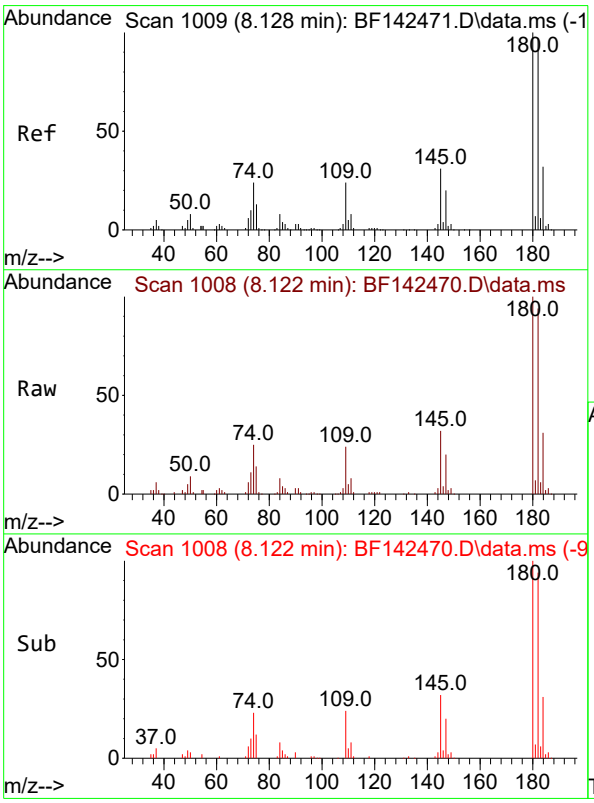
#29
2,4-Dichlorophenol
Concen: 20.462 ng
RT: 8.034 min Scan# 9
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:162 Resp: 106584

Ion	Ratio	Lower	Upper
162	100		
164	63.4	43.7	83.7
98	36.3	15.5	55.5

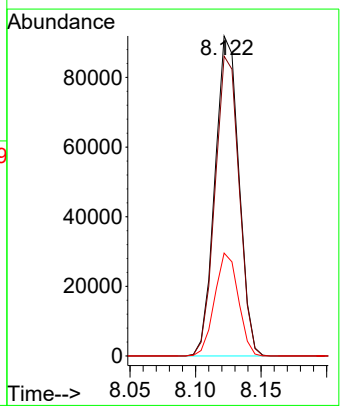


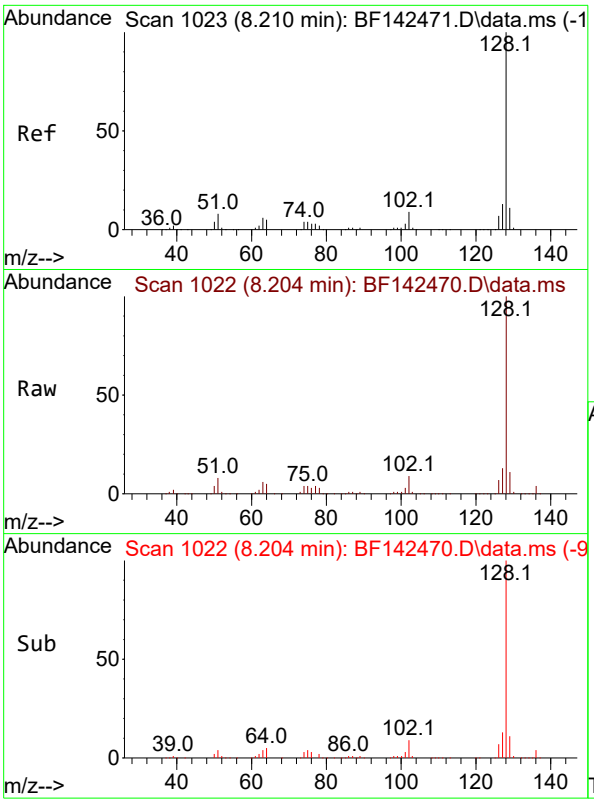


#30
1,2,4-Trichlorobenzene
Concen: 20.638 ng
RT: 8.122 min Scan# 1008
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:180 Resp: 116666

Ion	Ratio	Lower	Upper
180	100		
182	93.7	78.0	117.0
145	32.2	25.0	37.6



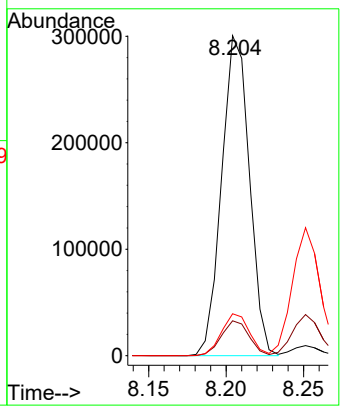


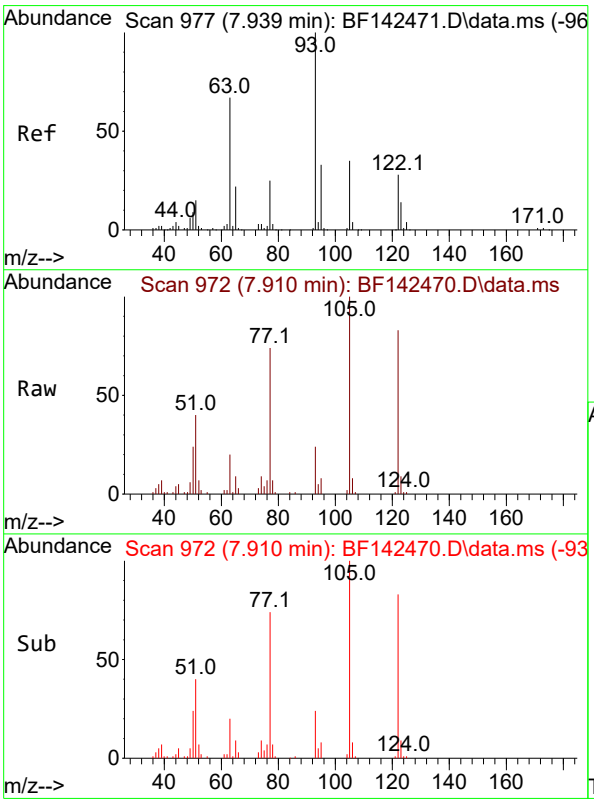
#31
Naphthalene
Concen: 20.713 ng
RT: 8.204 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:128 Resp: 374799

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.9	13.3
127	13.1	10.5	15.7

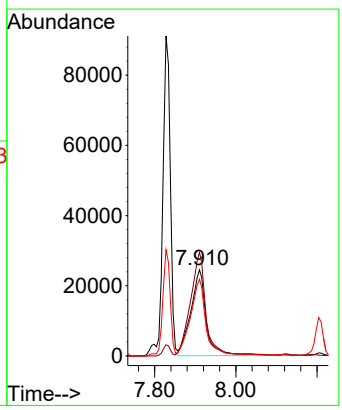


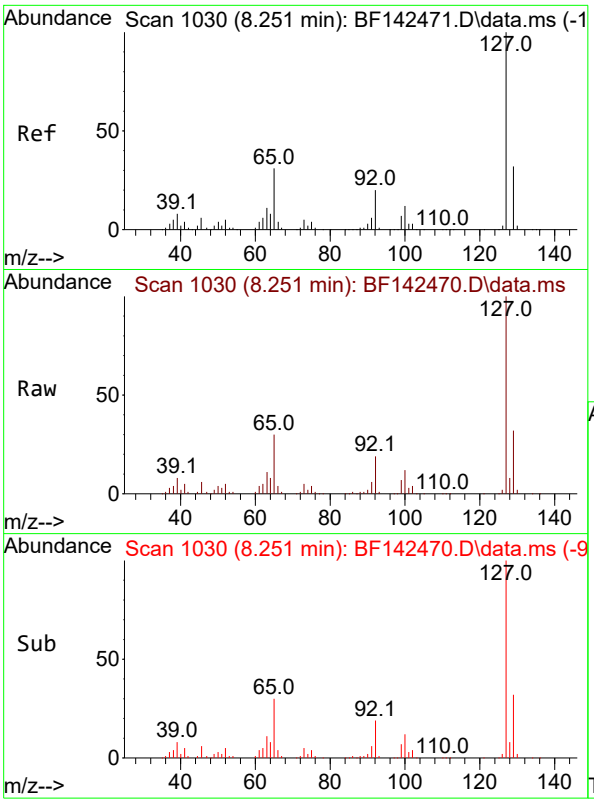


#32
Benzoic acid
Concen: 18.586 ng
RT: 7.910 min Scan# 972
Delta R.T. -0.065 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:122 Resp: 64801

Ion	Ratio	Lower	Upper
122	100		
105	120.5	101.7	141.7
77	89.3	69.5	109.5



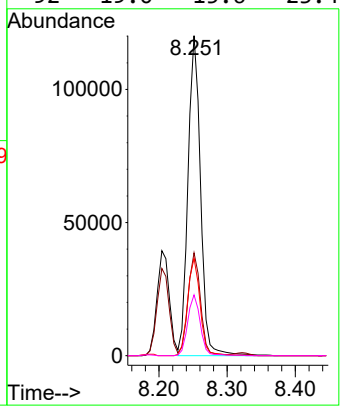


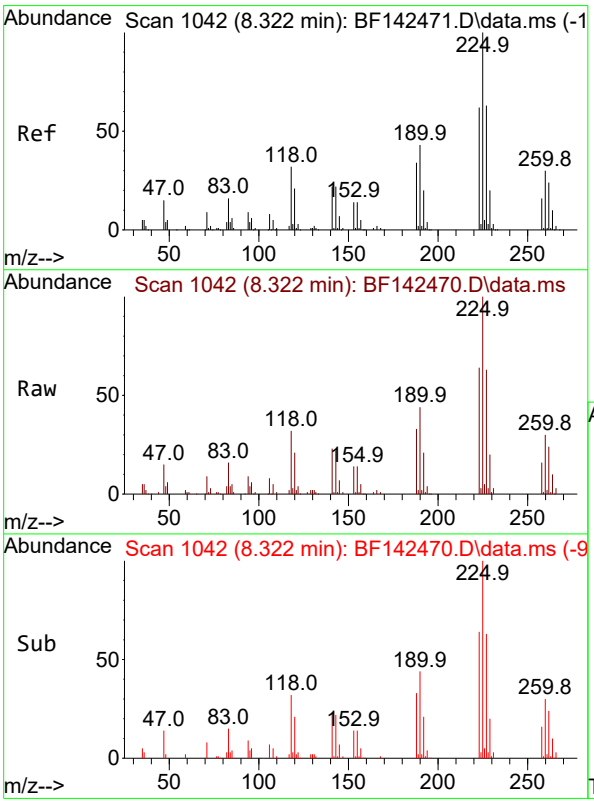
#33
4-Chloroaniline
Concen: 20.853 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:127 Resp: 152901

Ion	Ratio	Lower	Upper
127	100		
129	32.2	26.1	39.1
65	30.4	24.9	37.3
92	19.0	15.6	23.4

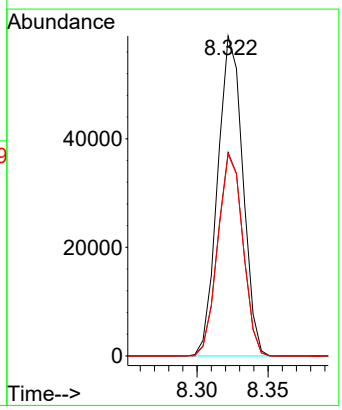


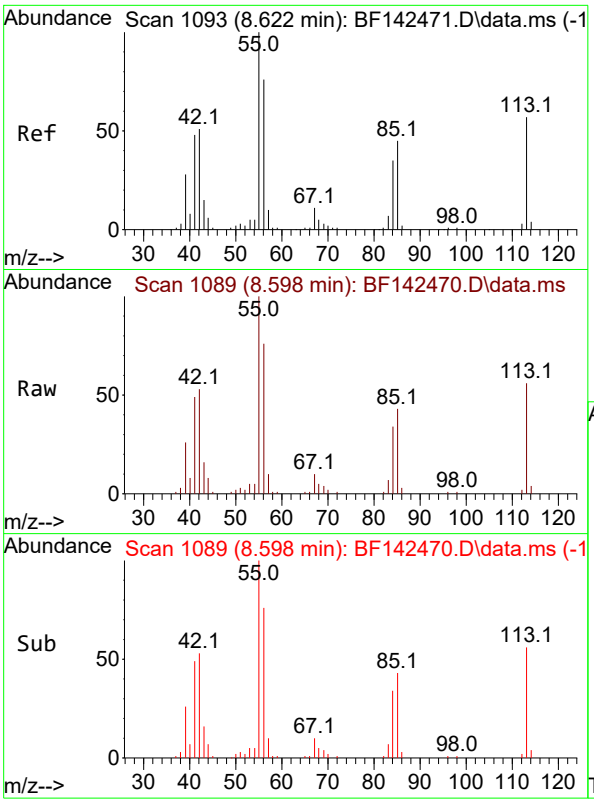


#34
Hexachlorobutadiene
Concen: 20.523 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:225 Resp: 72441

Ion	Ratio	Lower	Upper
225	100		
223	63.6	49.7	74.5
227	63.0	50.3	75.5



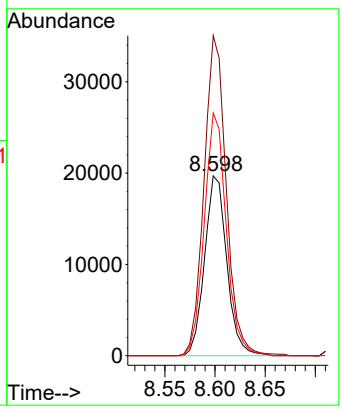


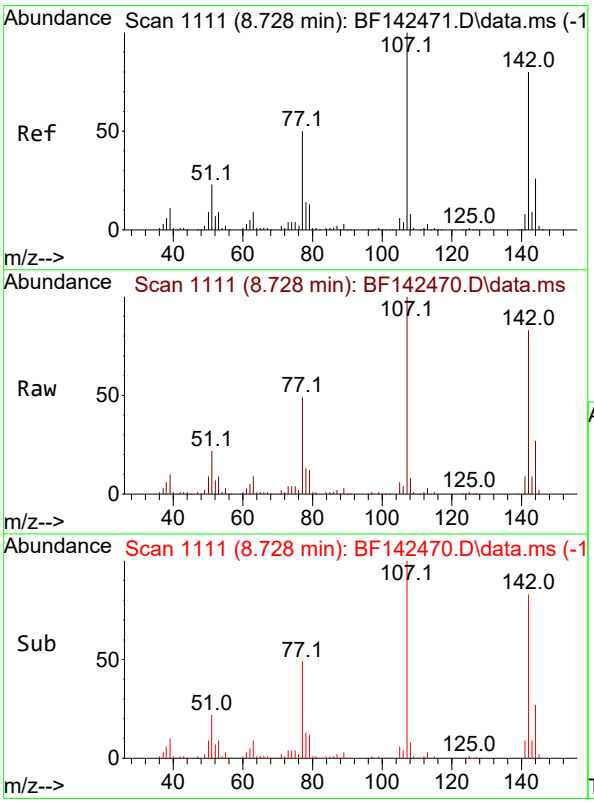
#35
Caprolactam
Concen: 20.762 ng
RT: 8.598 min Scan# 1
Delta R.T. -0.047 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:113 Resp: 30374

Ion	Ratio	Lower	Upper
113	100		
55	178.0	154.7	194.7
56	135.0	113.2	153.2

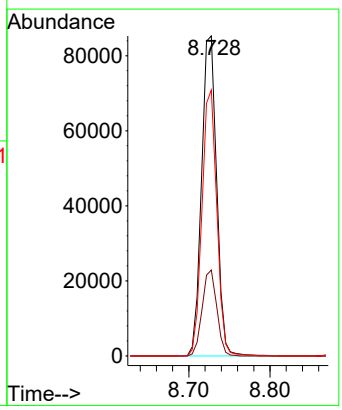


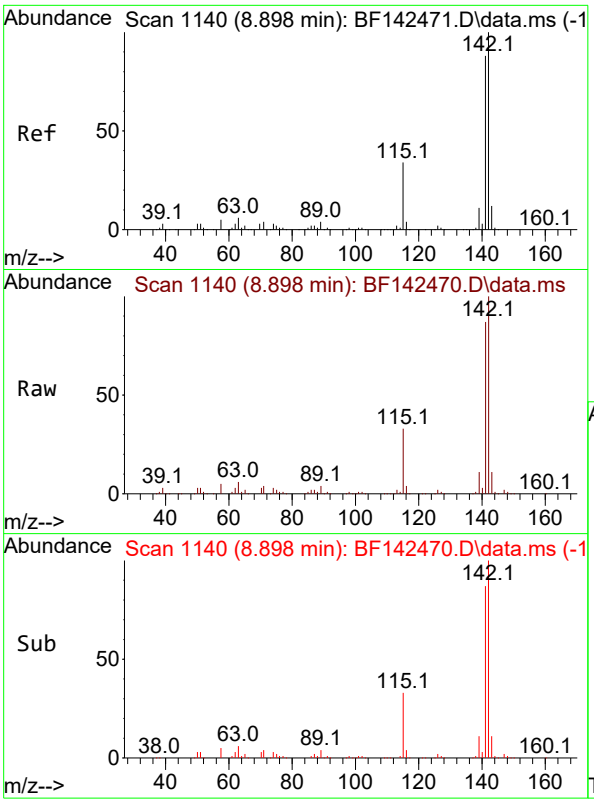


#36
4-Chloro-3-methylphenol
Concen: 20.567 ng
RT: 8.728 min Scan# 1111
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:107 Resp: 109793

Ion	Ratio	Lower	Upper
107	100		
144	26.9	20.9	31.3
142	83.1	64.2	96.2



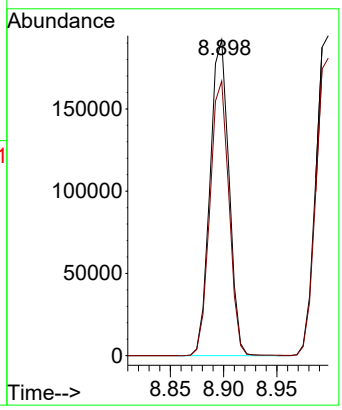


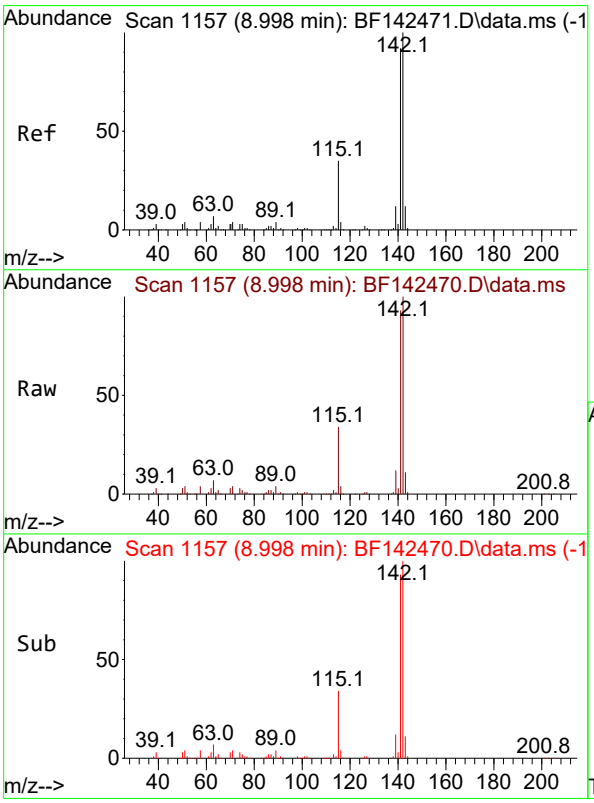
#37
2-Methylnaphthalene
Concen: 20.849 ng
RT: 8.898 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:142 Resp: 237350

Ion	Ratio	Lower	Upper
142	100		
141	86.9	70.7	106.1

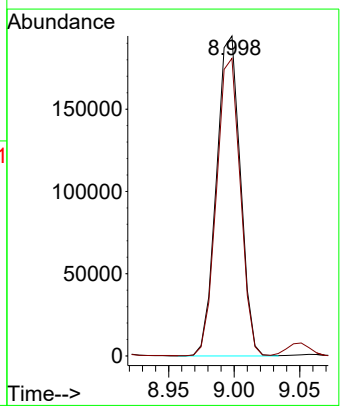


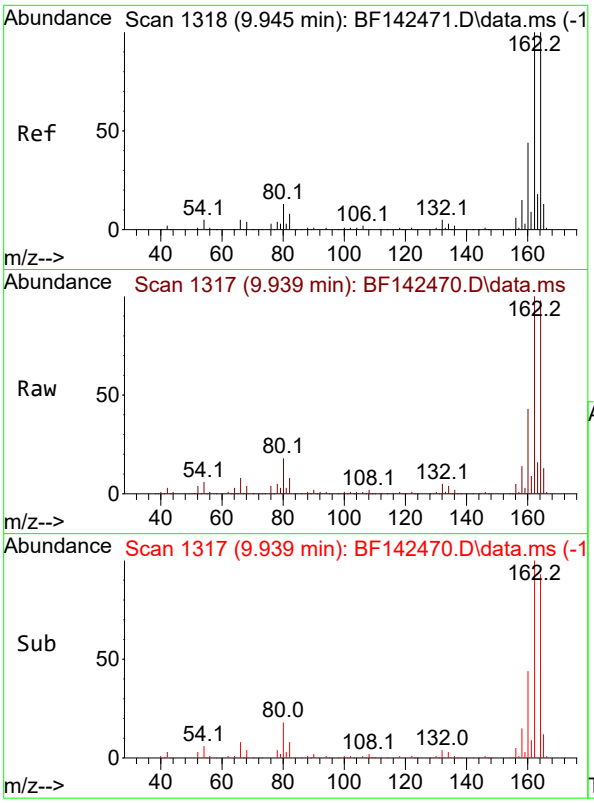


#38
1-Methylnaphthalene
Concen: 20.961 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:142 Resp: 246831

Ion	Ratio	Lower	Upper
142	100		
141	93.0	73.4	110.2



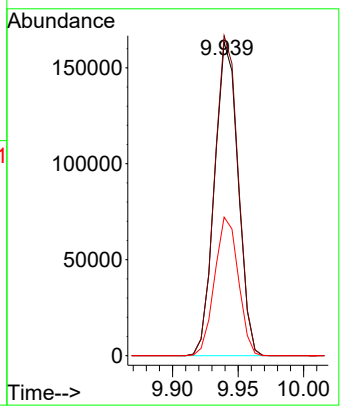


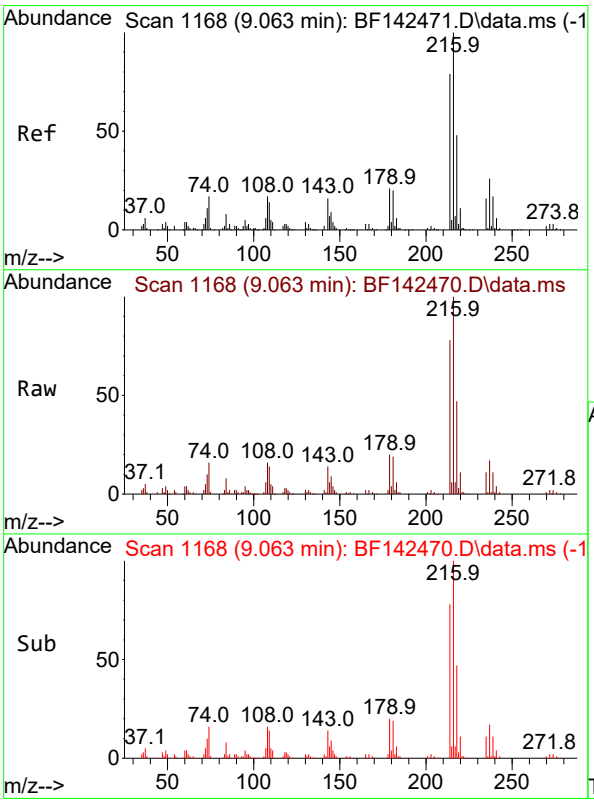
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:164 Resp: 204113

Ion	Ratio	Lower	Upper
164	100		
162	102.1	80.2	120.4
160	44.2	35.6	53.4

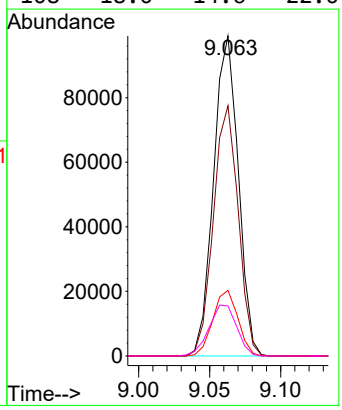


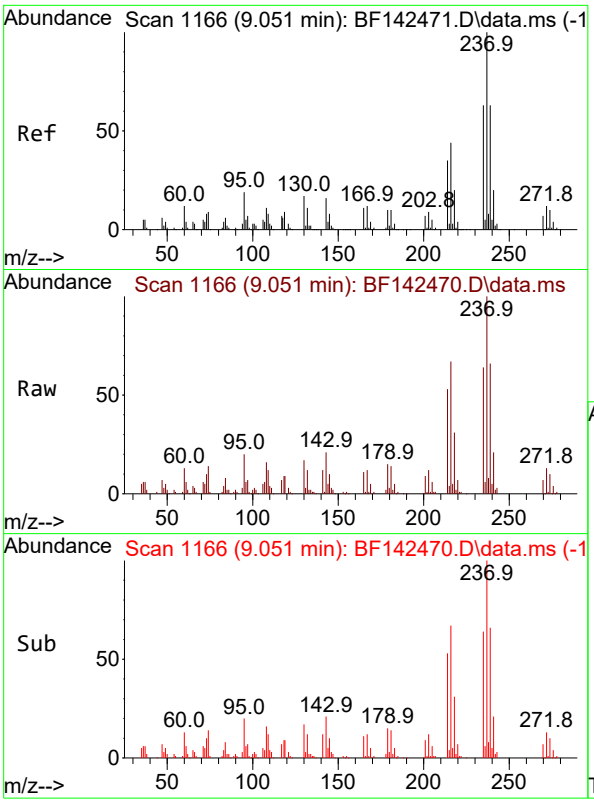


#40
1,2,4,5-Tetrachlorobenzene
Concen: 20.477 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:216 Resp: 119980

Ion	Ratio	Lower	Upper
216	100		
214	78.4	62.9	94.3
179	20.7	16.9	25.3
108	18.0	14.6	22.0



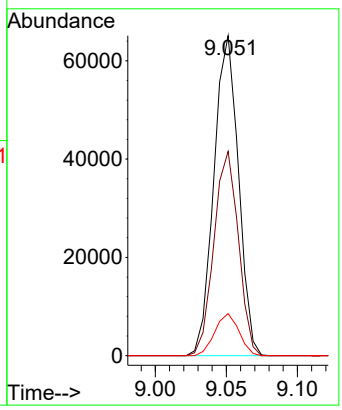


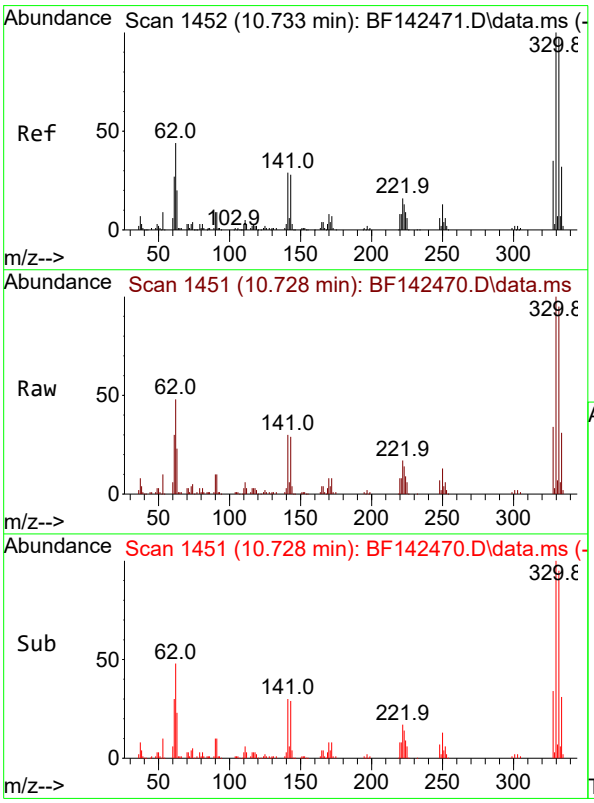
#41
Hexachlorocyclopentadiene
Concen: 19.796 ng
RT: 9.051 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:237 Resp: 78243

Ion	Ratio	Lower	Upper
237	100		
235	63.8	43.3	83.3
272	13.2	0.0	32.4

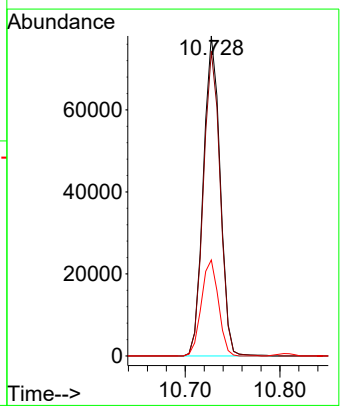


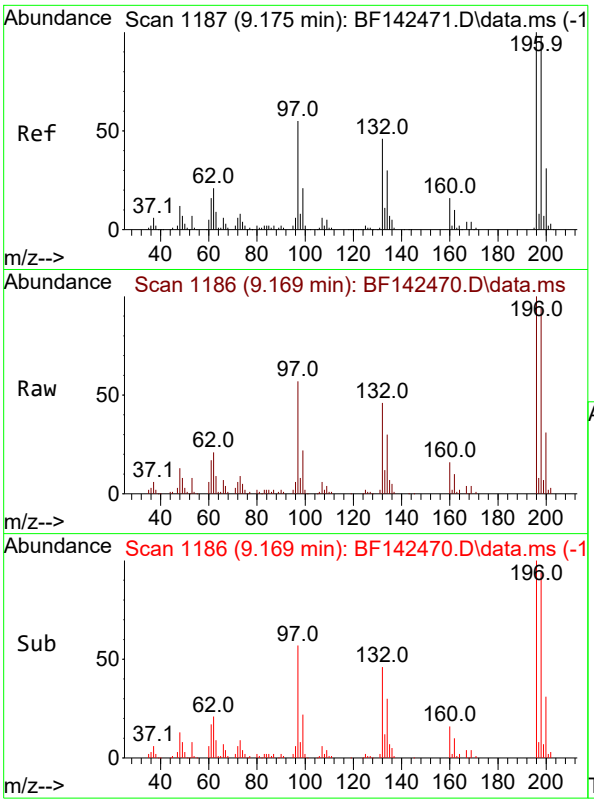


#42
2,4,6-Tribromophenol
Concen: 42.171 ng
RT: 10.728 min Scan# 1451
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:330 Resp: 95535

Ion	Ratio	Lower	Upper
330	100		
332	95.2	77.6	116.4
141	30.4	24.6	36.8



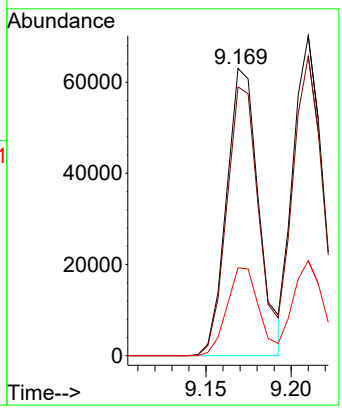


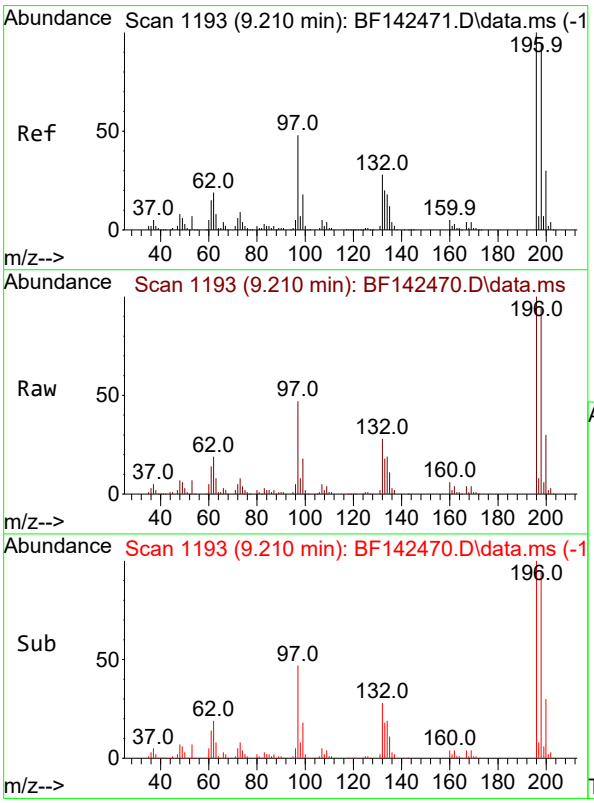
#43
2,4,6-Trichlorophenol
Concen: 20.971 ng
RT: 9.169 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:196 Resp: 82857

Ion	Ratio	Lower	Upper
196	100		
198	93.6	78.8	118.2
200	30.6	24.9	37.3

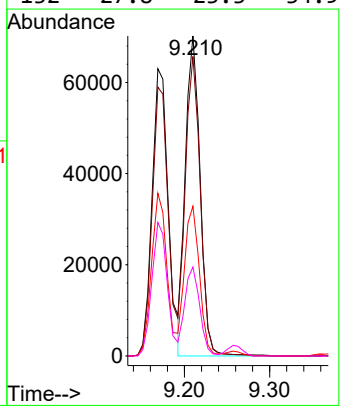


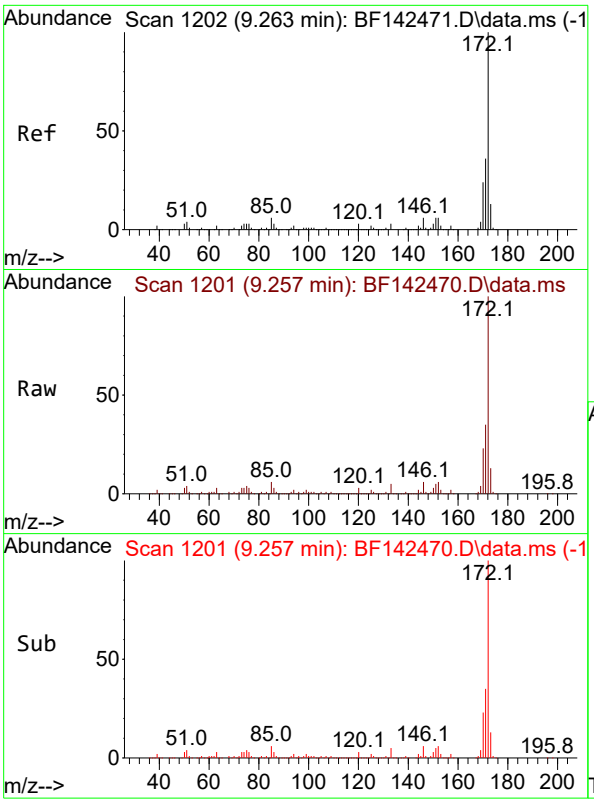


#44
2,4,5-Trichlorophenol
Concen: 20.383 ng
RT: 9.210 min Scan# 1193
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:196 Resp: 84935

Ion	Ratio	Lower	Upper
196	100		
198	93.6	75.5	113.3
97	46.8	39.3	58.9
132	27.8	23.3	34.9



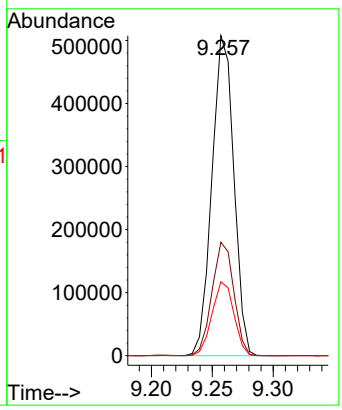


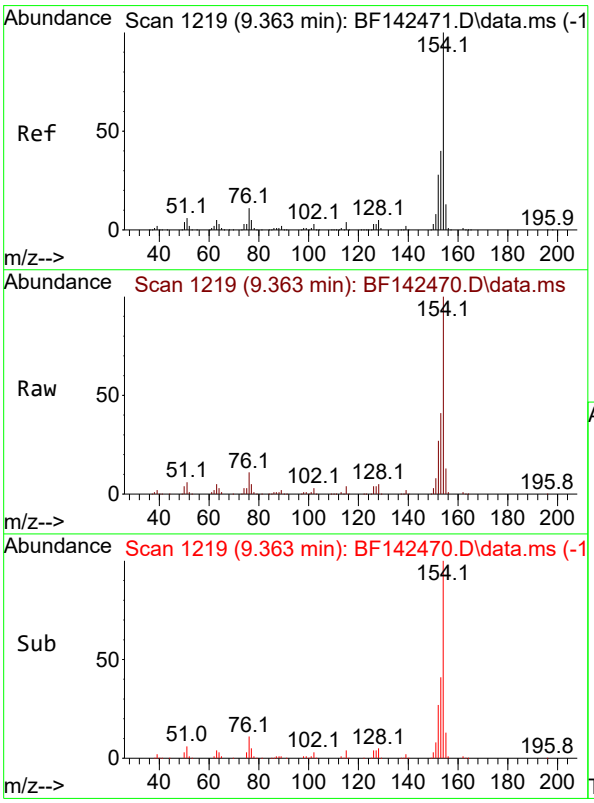
#45
2-Fluorobiphenyl
Concen: 41.799 ng
RT: 9.257 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:172 Resp: 635813

Ion	Ratio	Lower	Upper
172	100		
171	35.4	28.6	42.8
170	23.1	18.9	28.3

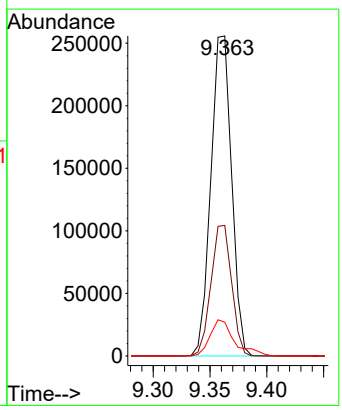


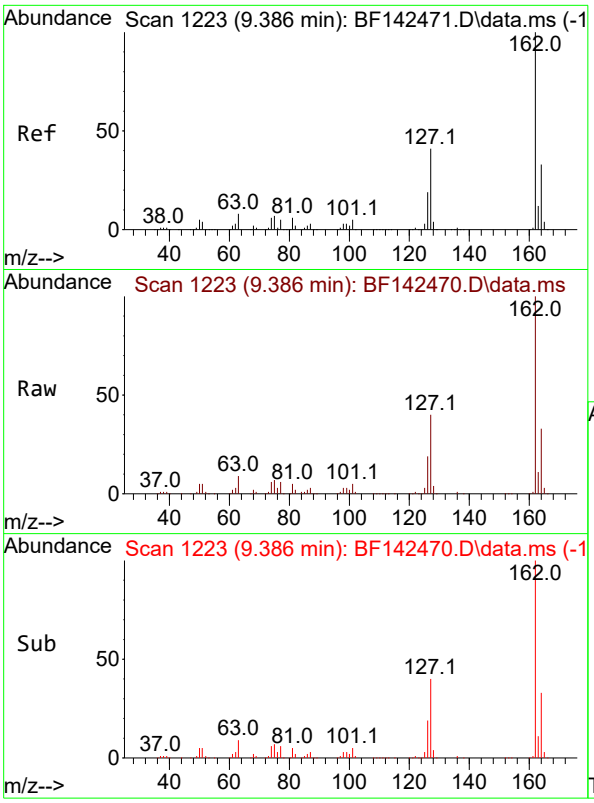


#46
1,1'-Biphenyl
Concen: 20.553 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:154 Resp: 325474

Ion	Ratio	Lower	Upper
154	100		
153	40.8	20.4	60.4
76	10.6	0.0	30.8



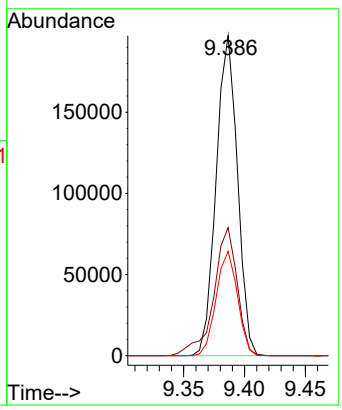


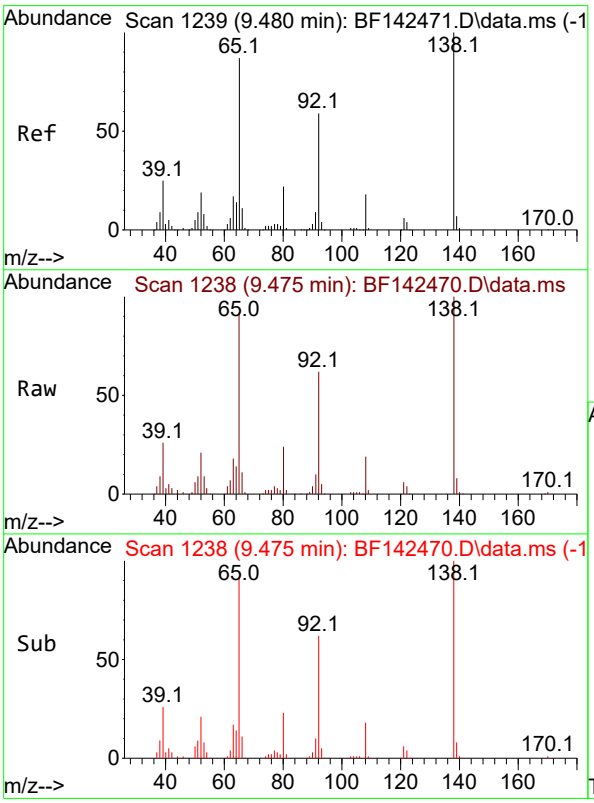
#47
2-Chloronaphthalene
Concen: 20.526 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:162 Resp: 240148

Ion	Ratio	Lower	Upper
162	100		
127	40.0	33.5	50.3
164	32.6	26.1	39.1

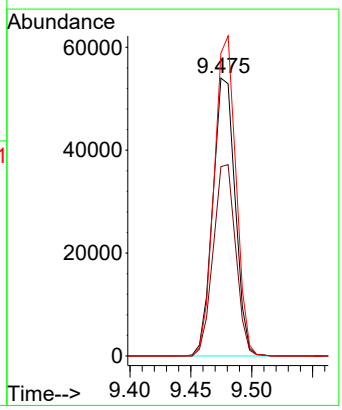


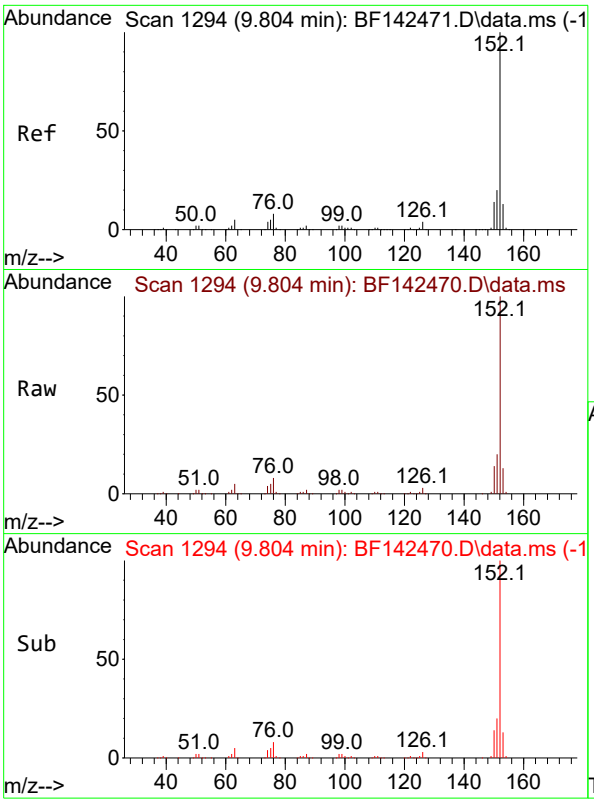


#48
2-Nitroaniline
Concen: 20.424 ng
RT: 9.475 min Scan# 1238
Delta R.T. -0.011 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion: 65 Resp: 69068

Ion	Ratio	Lower	Upper
65	100		
92	68.1	54.4	81.6
138	109.0	91.4	137.2



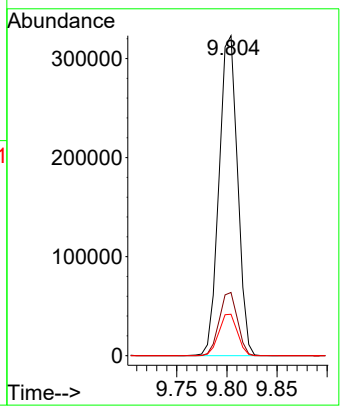


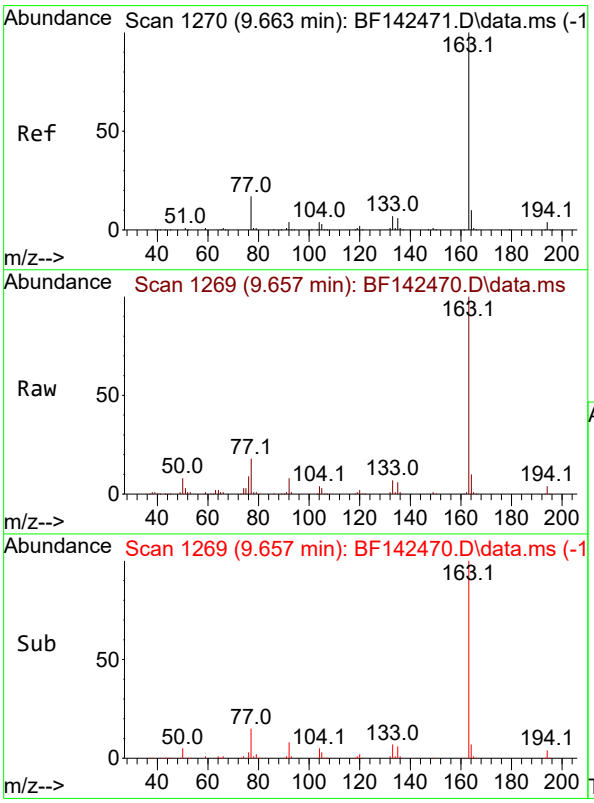
#49
Acenaphthylene
Concen: 20.945 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:152 Resp: 413782

Ion	Ratio	Lower	Upper
152	100		
151	19.7	15.8	23.8
153	13.0	10.6	15.8

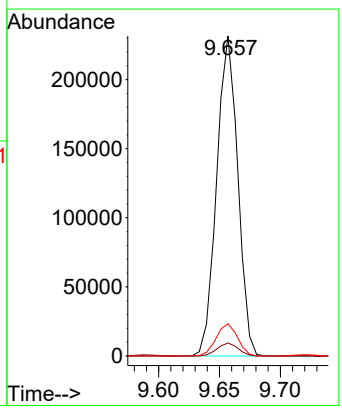


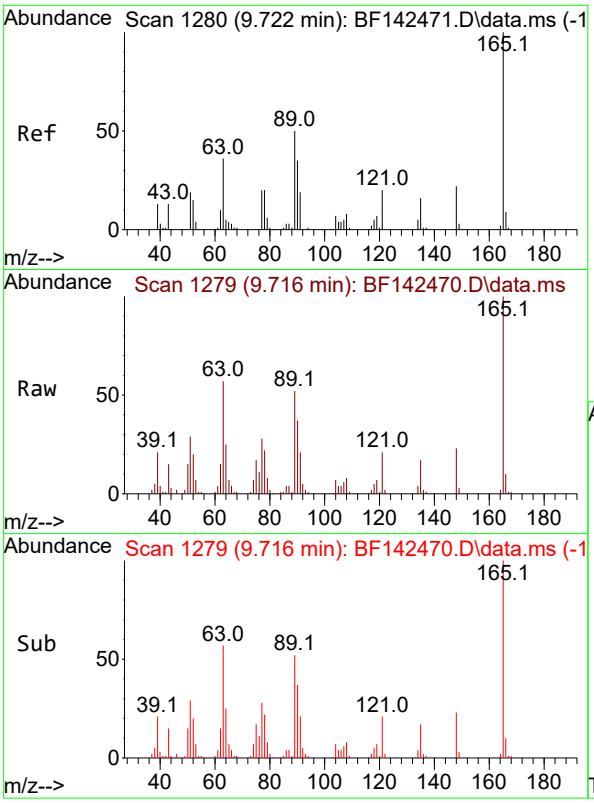


#50
Dimethylphthalate
Concen: 20.724 ng
RT: 9.657 min Scan# 1269
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:163 Resp: 279113

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.3	4.9
164	10.1	8.2	12.4



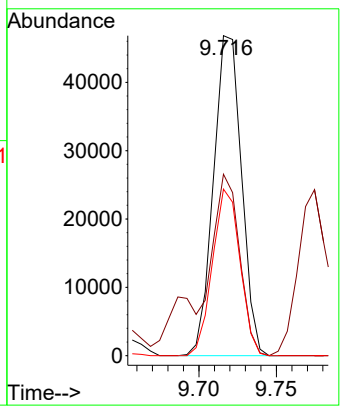


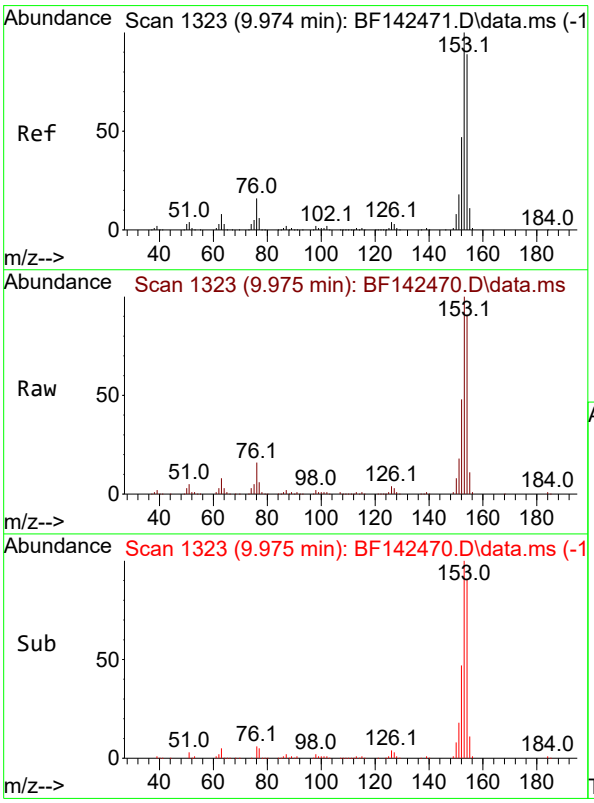
#51
2,6-Dinitrotoluene
Concen: 20.308 ng
RT: 9.716 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:165 Resp: 59031

Ion	Ratio	Lower	Upper
165	100		
63	56.7	42.9	64.3
89	52.1	40.2	60.4

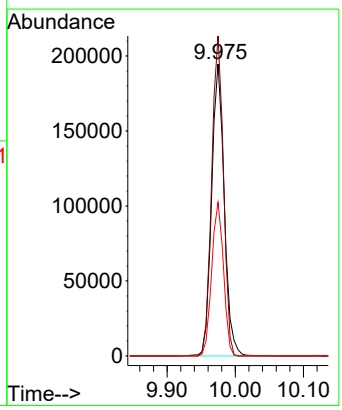


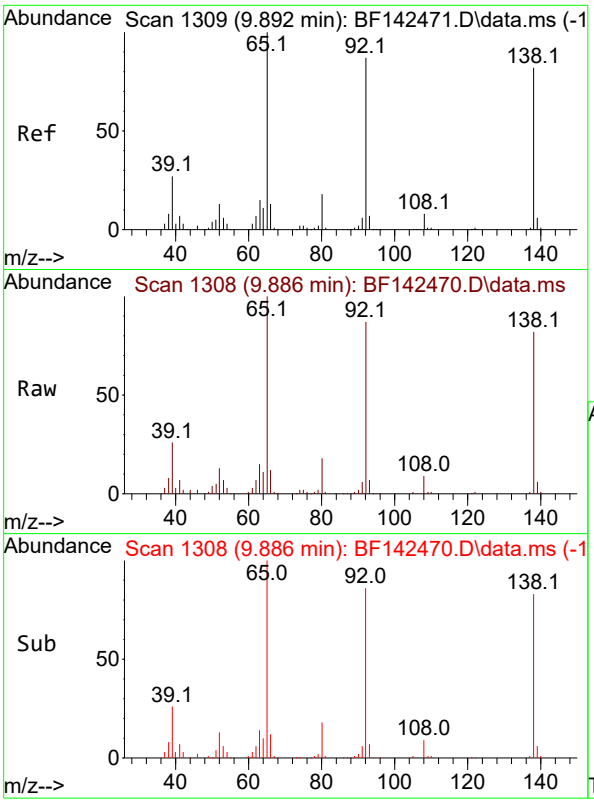


#52
Acenaphthene
Concen: 20.764 ng
RT: 9.975 min Scan# 1323
Delta R.T. -0.005 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:154 Resp: 250487

Ion	Ratio	Lower	Upper
154	100		
153	109.6	90.0	135.0
152	52.6	42.6	64.0



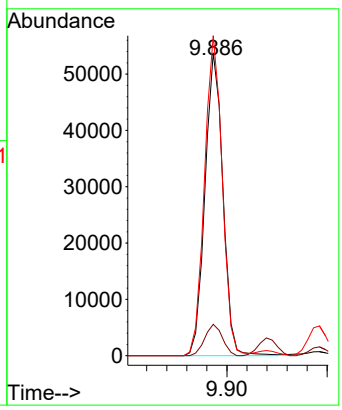


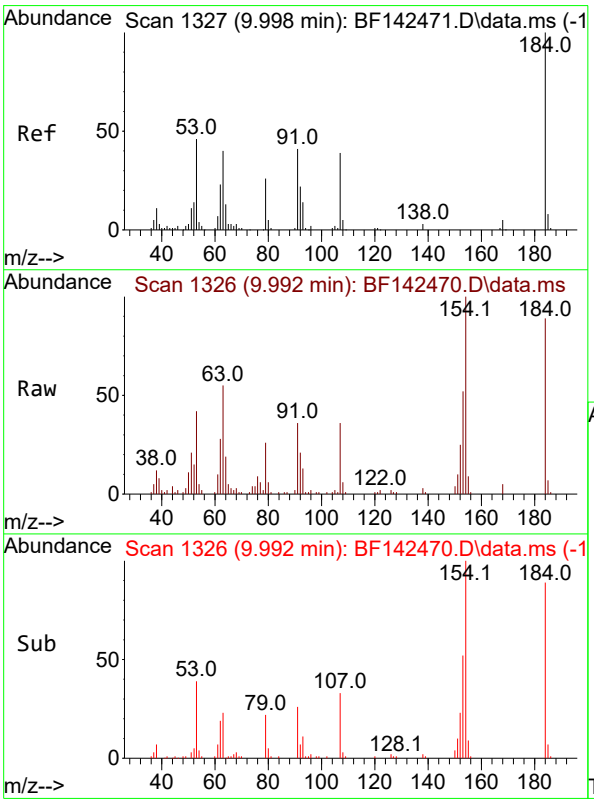
#53
3-Nitroaniline
Concen: 21.055 ng
RT: 9.886 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:138 Resp: 66847

Ion	Ratio	Lower	Upper
138	100		
108	10.4	8.1	12.1
92	105.6	85.2	127.8

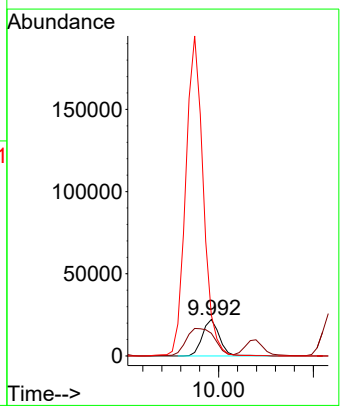


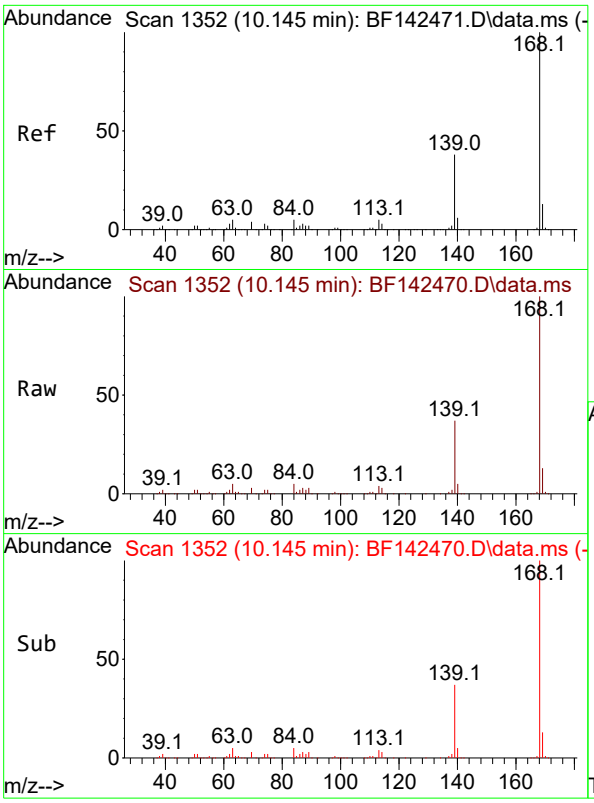


#54
2,4-Dinitrophenol
Concen: 18.553 ng
RT: 9.992 min Scan# 1326
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:184 Resp: 27863

Ion	Ratio	Lower	Upper
184	100		
63	62.4	46.3	69.5
154	112.6	56.8	85.2#



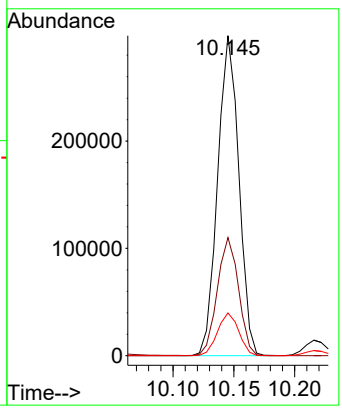


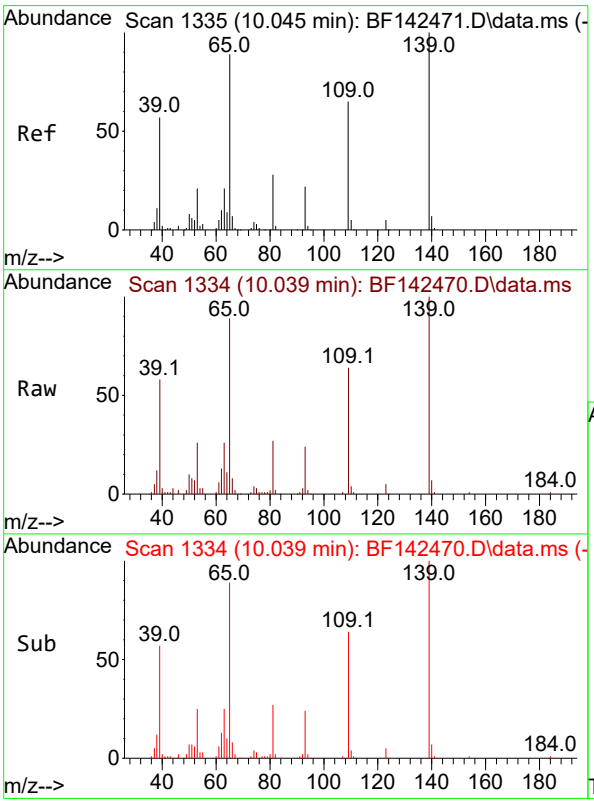
#55
Dibenzofuran
Concen: 20.792 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:168 Resp: 360936

Ion	Ratio	Lower	Upper
168	100		
139	36.9	30.2	45.2
169	13.4	10.7	16.1

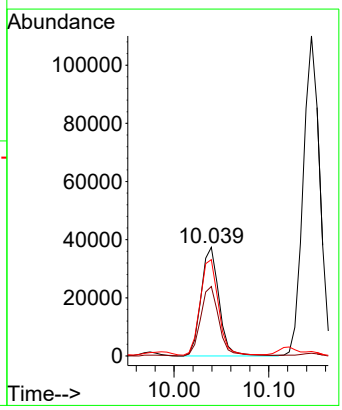


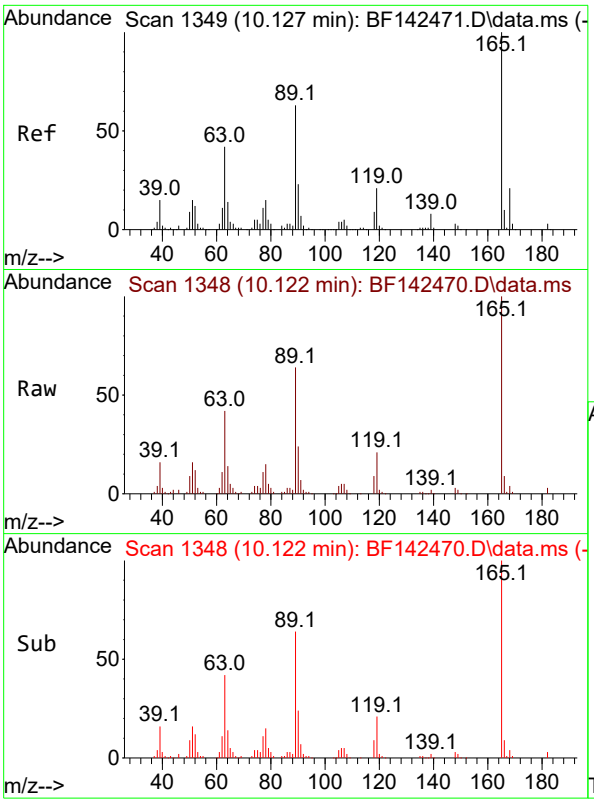


#56
4-Nitrophenol
Concen: 21.067 ng
RT: 10.039 min Scan# 1334
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:139 Resp: 49352

Ion	Ratio	Lower	Upper
139	100		
109	63.9	45.1	85.1
65	88.7	69.7	109.7



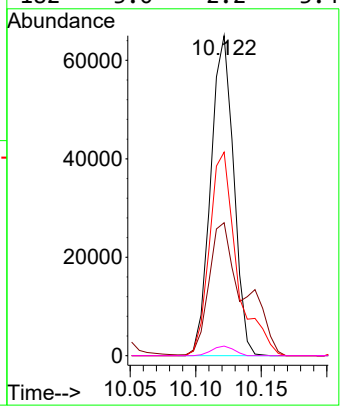


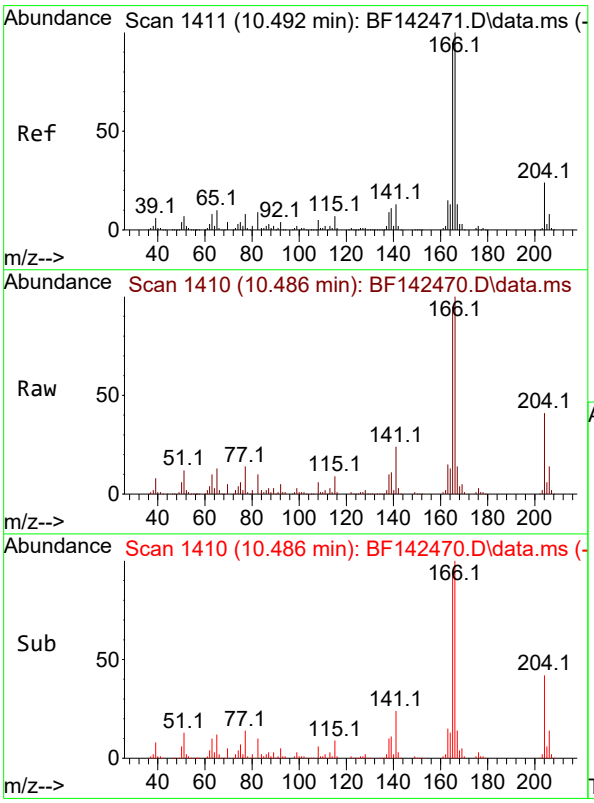
#57
2,4-Dinitrotoluene
Concen: 20.827 ng
RT: 10.122 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:165 Resp: 79063

Ion	Ratio	Lower	Upper
165	100		
63	41.5	33.6	50.4
89	63.6	50.2	75.4
182	3.0	2.2	3.4

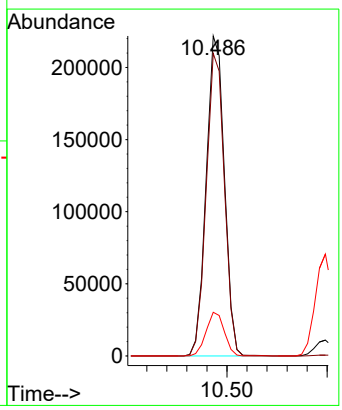


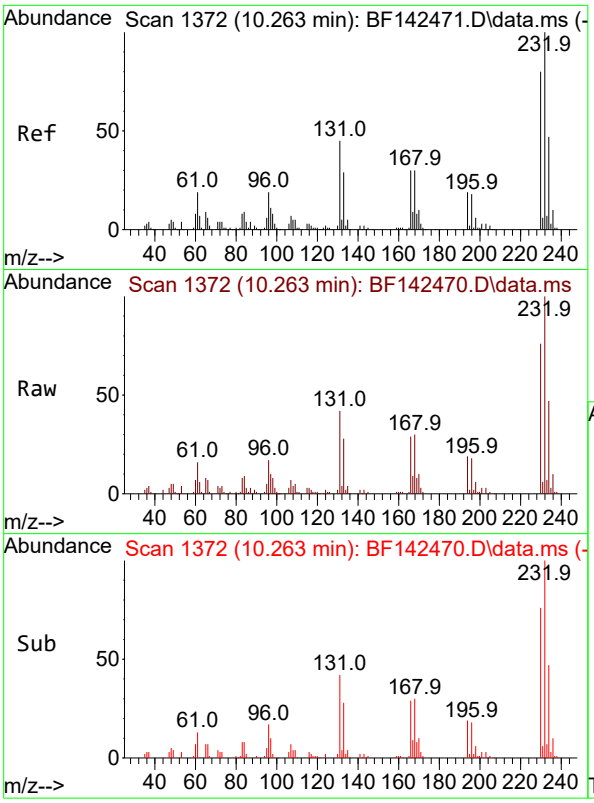


#58
Fluorene
Concen: 20.878 ng
RT: 10.486 min Scan# 1410
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:166 Resp: 279994

Ion	Ratio	Lower	Upper
166	100		
165	94.5	75.8	113.8
167	13.6	10.6	16.0



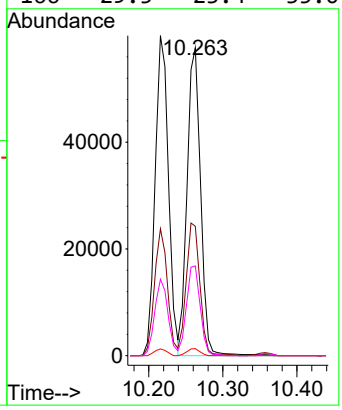


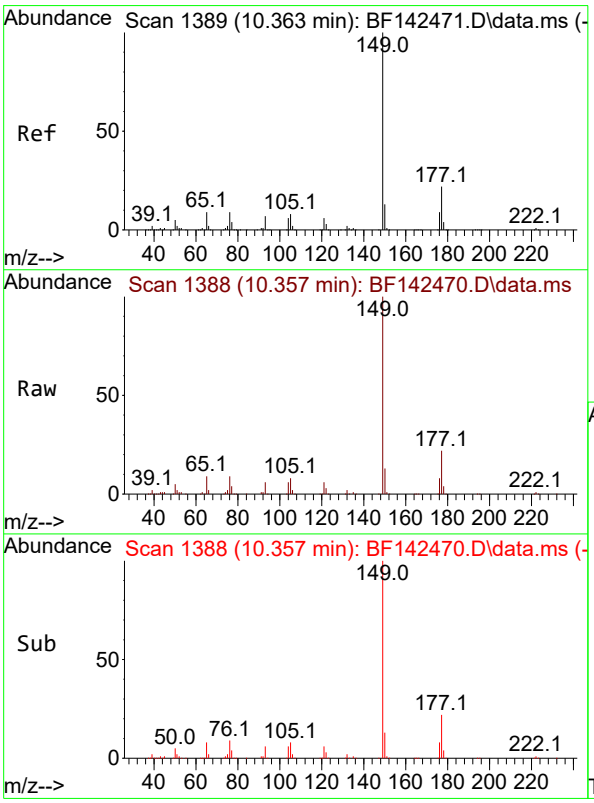
#59
2,3,4,6-Tetrachlorophenol
Concen: 21.140 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:232 Resp: 73538

Ion	Ratio	Lower	Upper
232	100		
131	43.7	35.2	52.8
130	2.2	1.7	2.5
166	29.5	23.4	35.0

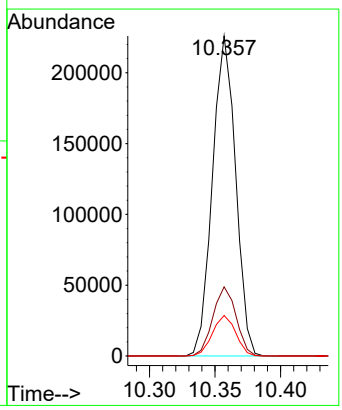


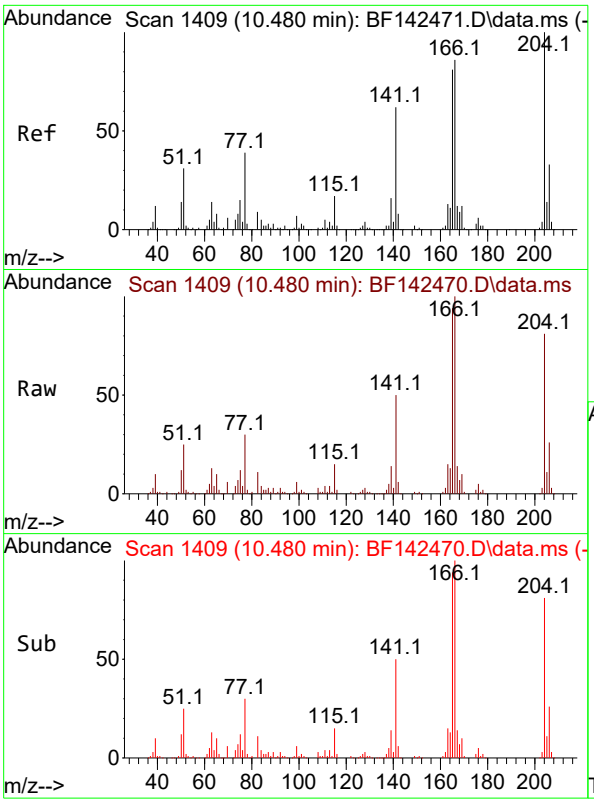


#60
Diethylphthalate
Concen: 21.084 ng
RT: 10.357 min Scan# 1388
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:149 Resp: 277325

Ion	Ratio	Lower	Upper
149	100		
177	21.6	17.6	26.4
150	12.7	10.1	15.1



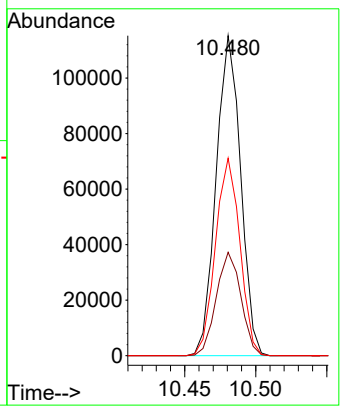


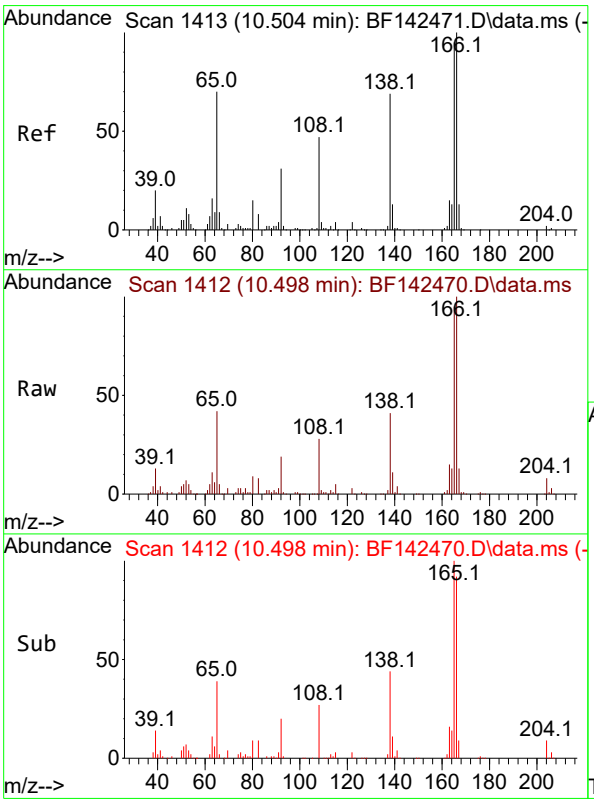
#61
4-Chlorophenyl-phenylether
Concen: 20.944 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:204 Resp: 137985

Ion	Ratio	Lower	Upper
204	100		
206	32.3	26.3	39.5
141	61.7	49.5	74.3

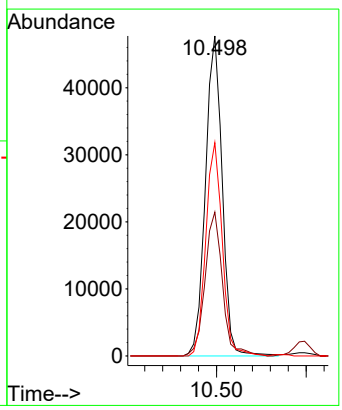


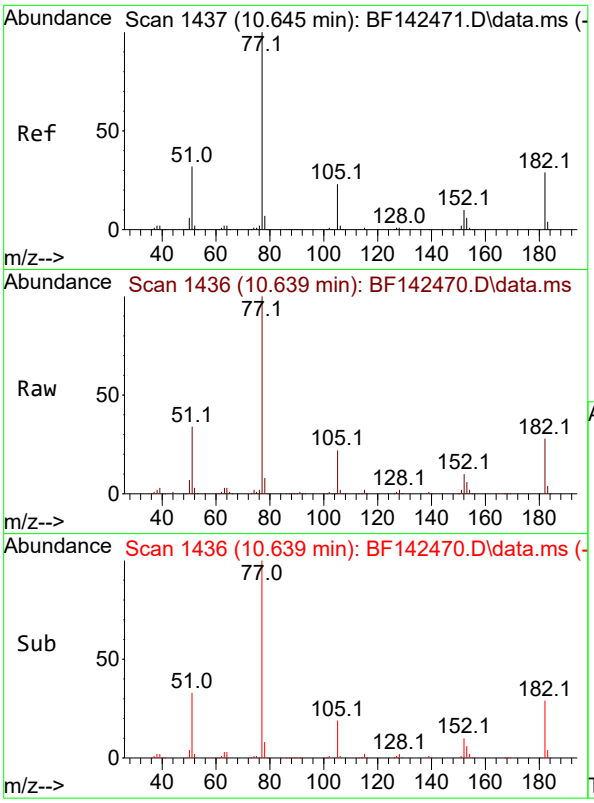


#62
4-Nitroaniline
Concen: 21.481 ng
RT: 10.498 min Scan# 1412
Delta R.T. -0.018 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:138 Resp: 61856

Ion	Ratio	Lower	Upper
138	100		
92	44.9	26.0	66.0
108	66.7	48.4	88.4



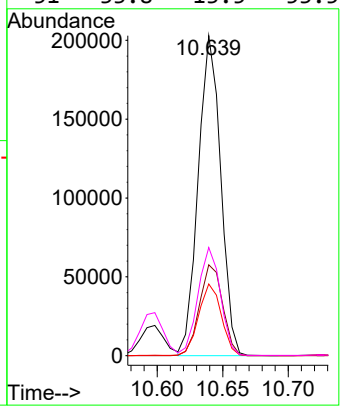


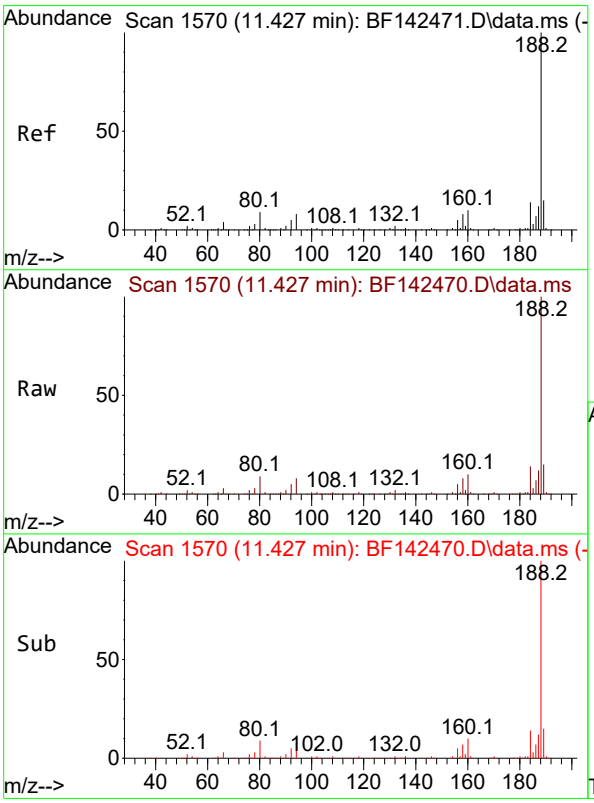
#63
Azobenzene
Concen: 20.530 ng
RT: 10.639 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion: 77 Resp: 242545

Ion	Ratio	Lower	Upper
77	100		
182	28.4	9.0	49.0
105	22.4	2.4	42.4
51	33.8	13.5	53.5

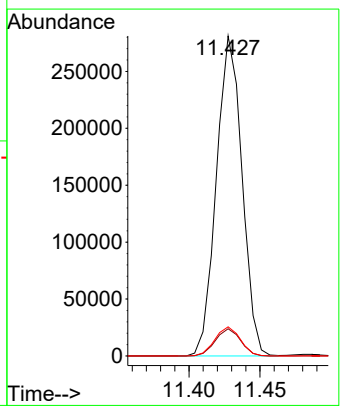


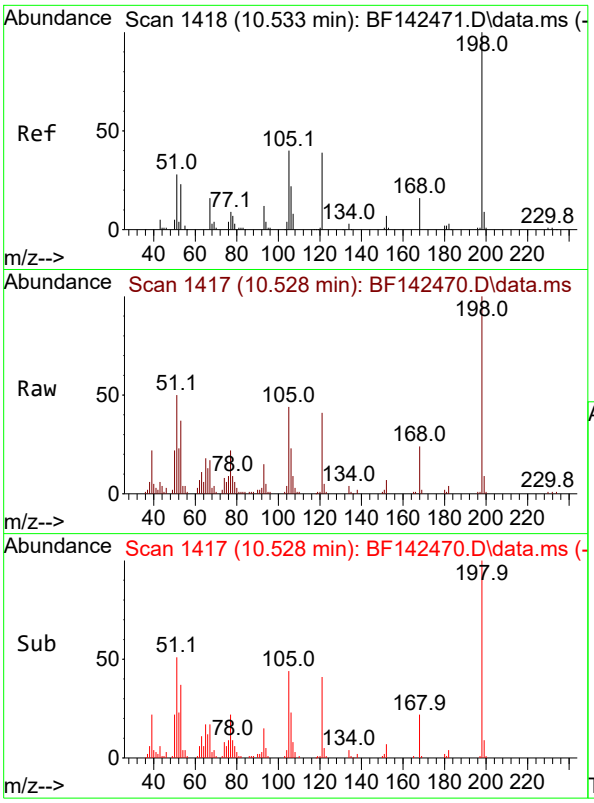


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:188 Resp: 353003

Ion	Ratio	Lower	Upper
188	100		
94	8.5	6.6	10.0
80	9.1	7.4	11.0



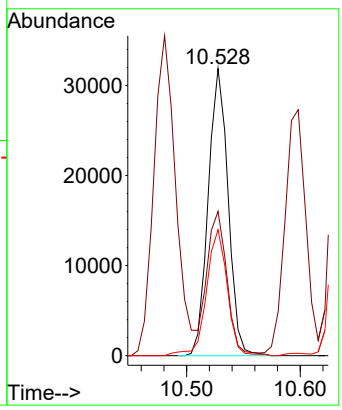


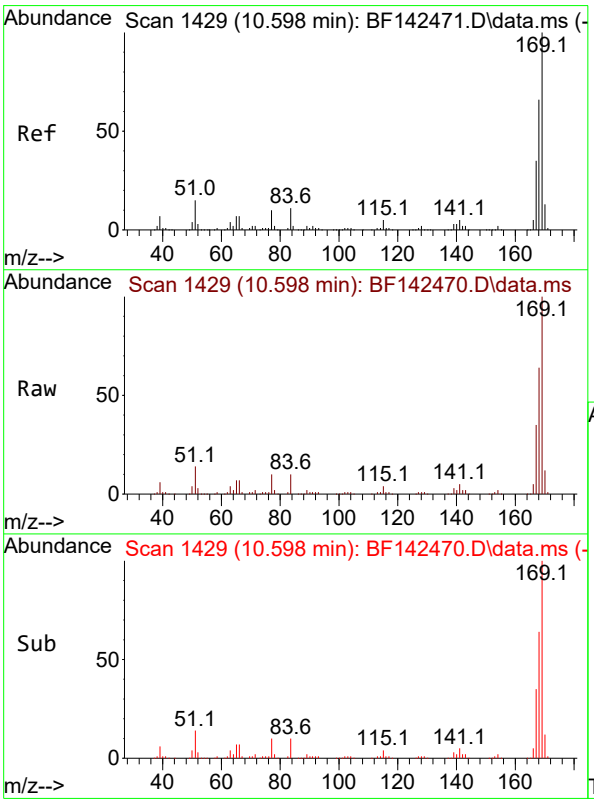
#65
4,6-Dinitro-2-methylphenol
Concen: 19.673 ng
RT: 10.528 min Scan# 14
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:198 Resp: 38757

Ion	Ratio	Lower	Upper
198	100		
51	50.3	28.3	68.3
105	43.9	21.3	61.3

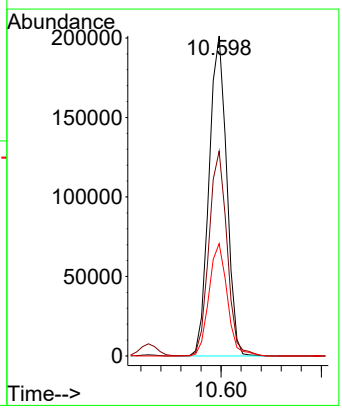


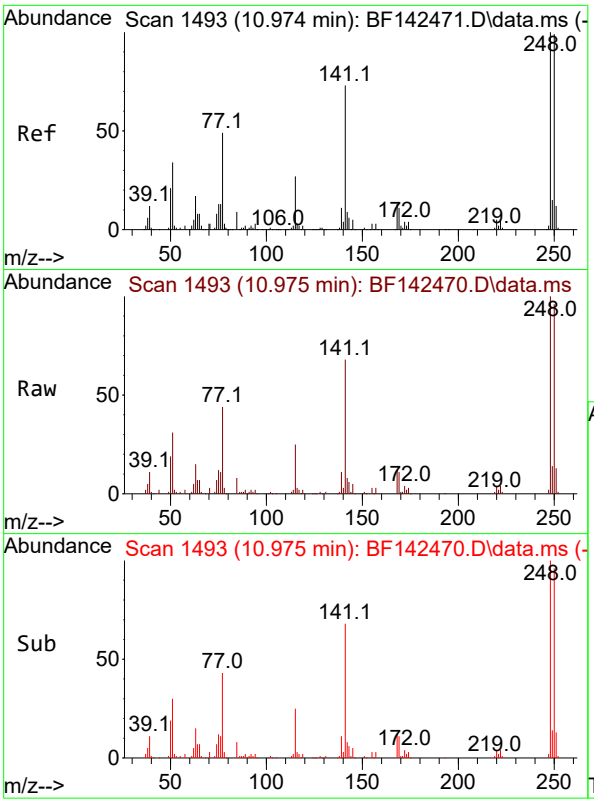


#66
n-Nitrosodiphenylamine
Concen: 20.348 ng
RT: 10.598 min Scan# 1429
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:169 Resp: 245739

Ion	Ratio	Lower	Upper
169	100		
168	64.0	52.7	79.1
167	35.1	28.3	42.5



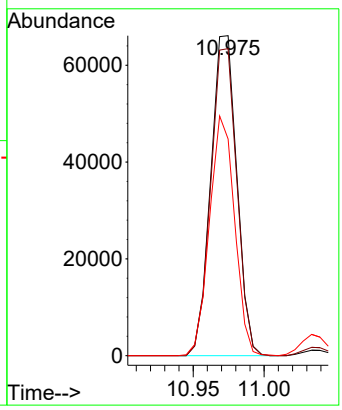


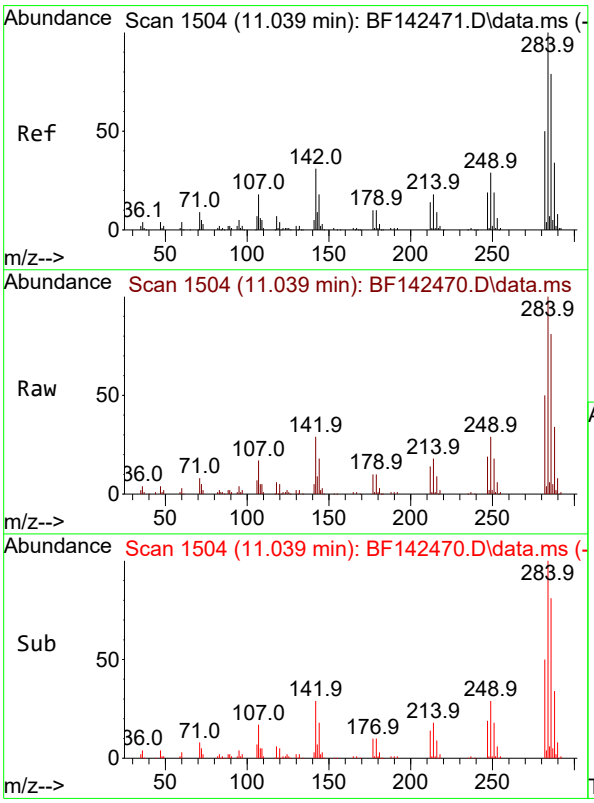
#67
4-Bromophenyl-phenylether
Concen: 20.222 ng
RT: 10.975 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:248 Resp: 84406

Ion	Ratio	Lower	Upper
248	100		
250	95.9	79.0	118.4
141	67.7	58.4	87.6

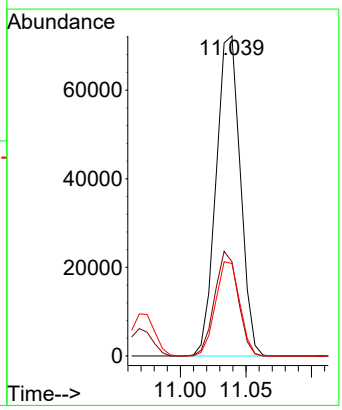


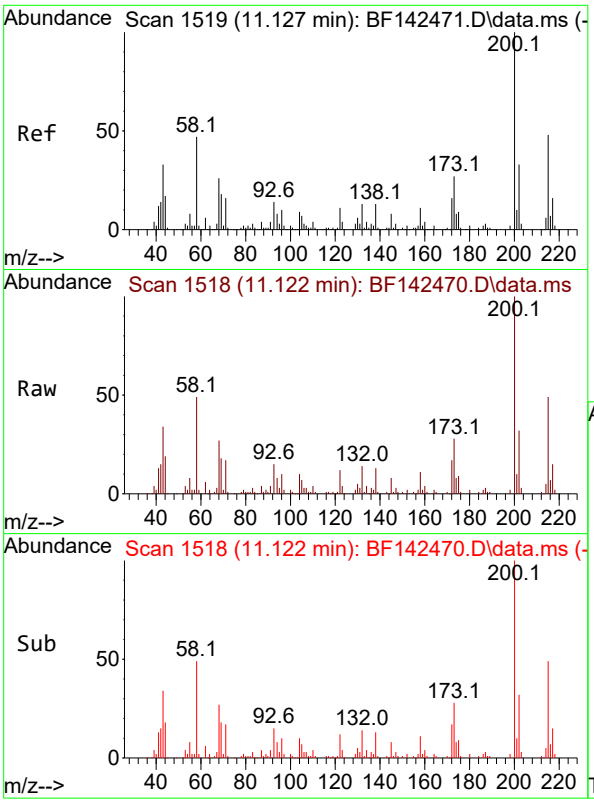


#68
Hexachlorobenzene
Concen: 20.102 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:284 Resp: 92803

Ion	Ratio	Lower	Upper
284	100		
142	29.4	24.8	37.2
249	28.9	23.6	35.4



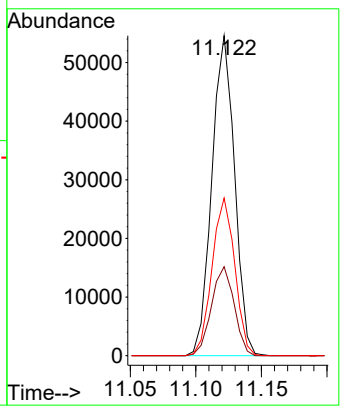


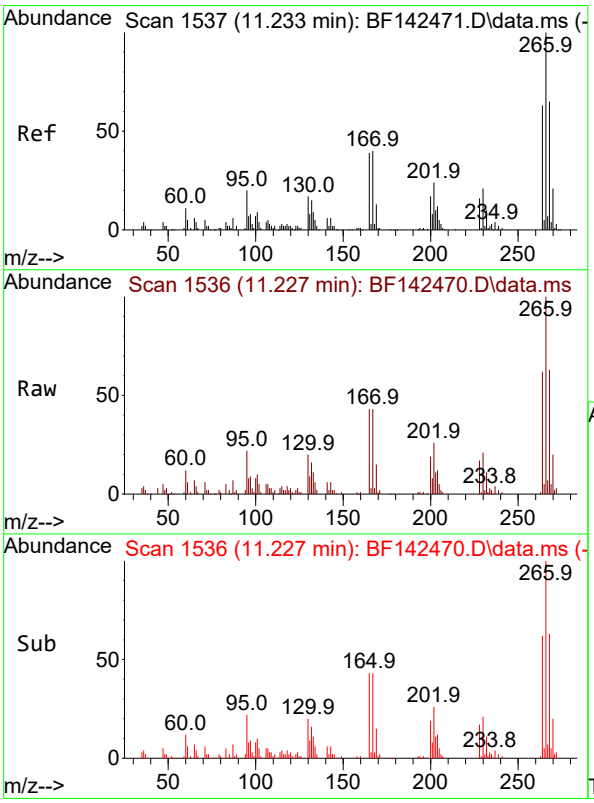
#69
Atrazine
Concen: 20.471 ng
RT: 11.122 min Scan# 1
Delta R.T. -0.005 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:200 Resp: 65656

Ion	Ratio	Lower	Upper
200	100		
173	27.8	7.4	47.4
215	49.2	28.5	68.5

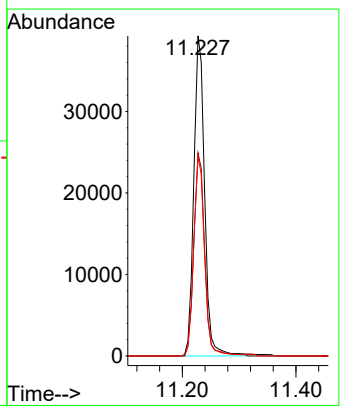


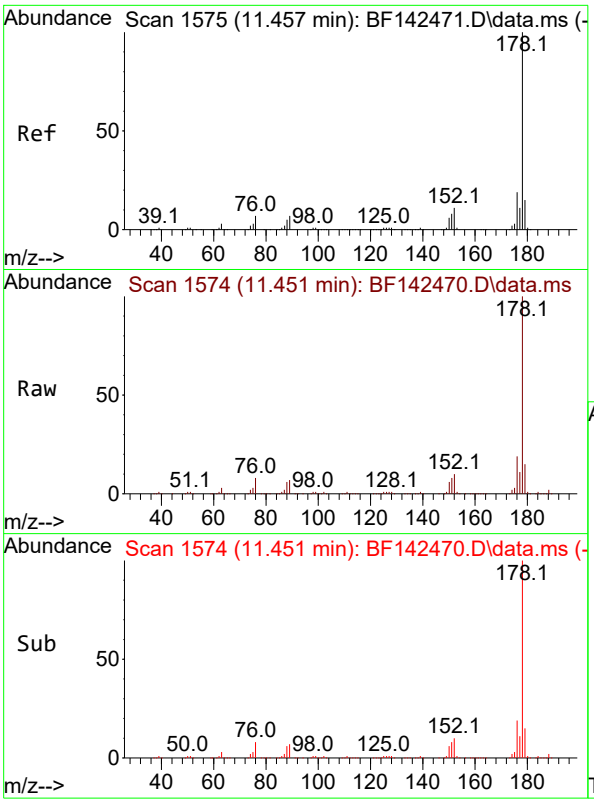


#70
Pentachlorophenol
Concen: 20.152 ng
RT: 11.227 min Scan# 1536
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:266 Resp: 52525

Ion	Ratio	Lower	Upper
266	100		
268	63.4	51.7	77.5
264	62.5	50.4	75.6



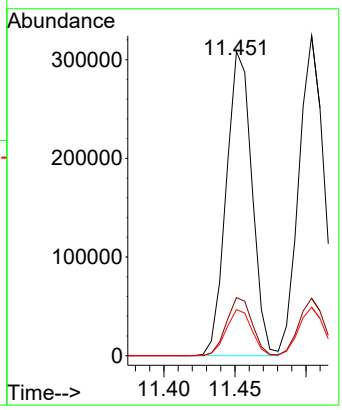


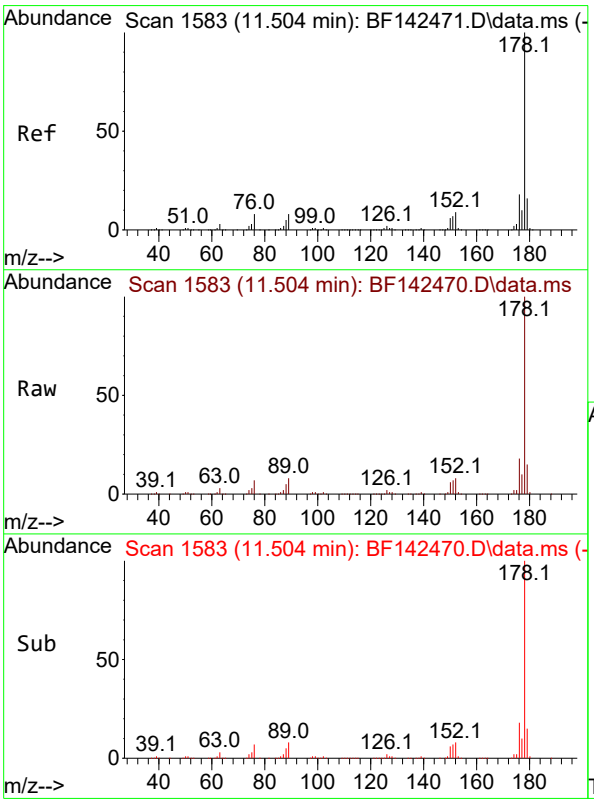
#71
Phenanthrene
Concen: 20.584 ng
RT: 11.451 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:178 Resp: 388317

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.0
179	15.2	12.3	18.5

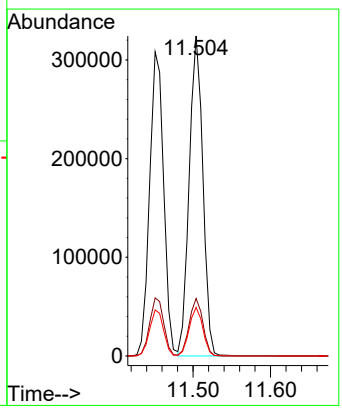


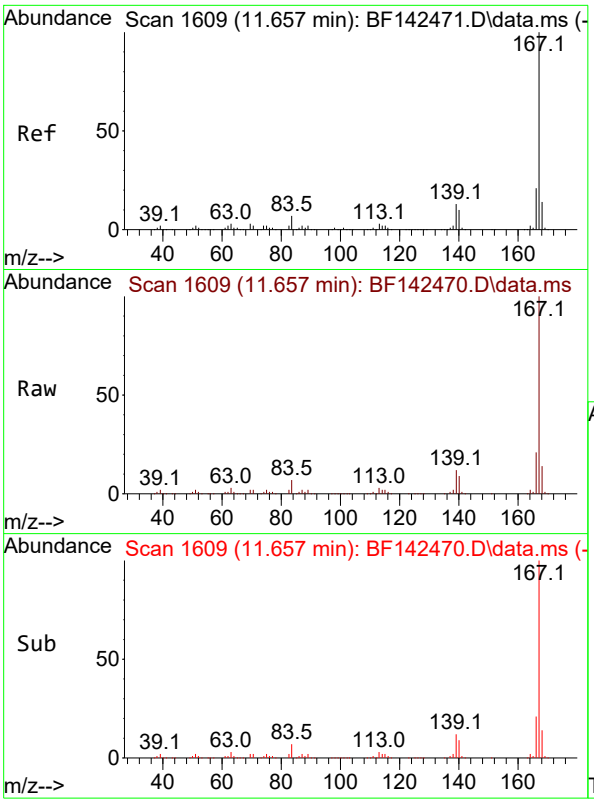


#72
Anthracene
Concen: 20.604 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:178 Resp: 396704

Ion	Ratio	Lower	Upper
178	100		
176	18.0	14.6	21.8
179	15.2	12.4	18.6



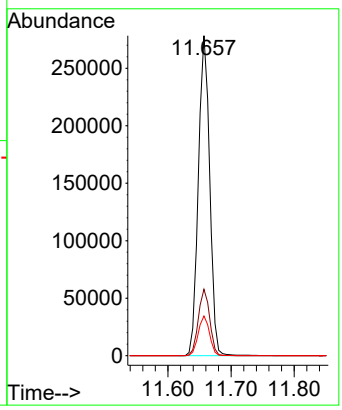


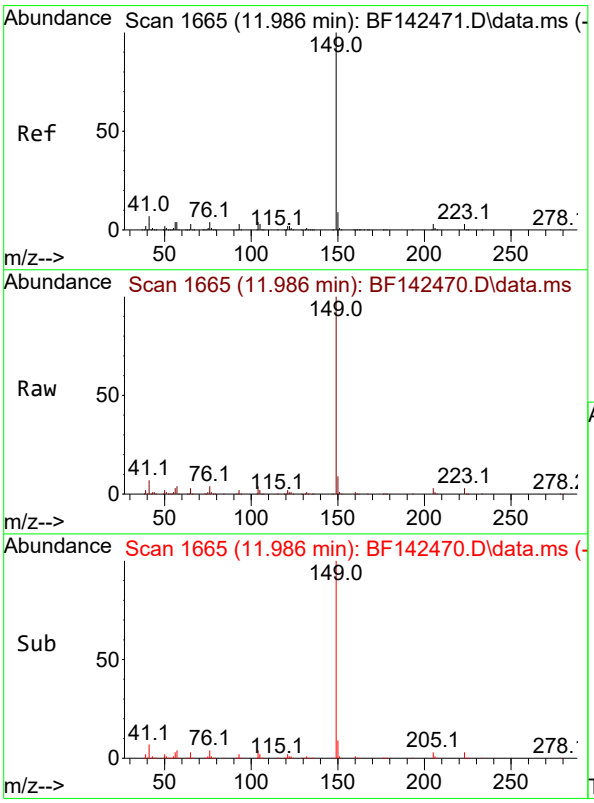
#73
Carbazole
Concen: 21.055 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:167 Resp: 346558

Ion	Ratio	Lower	Upper
167	100		
166	20.8	16.9	25.3
139	12.4	10.2	15.4

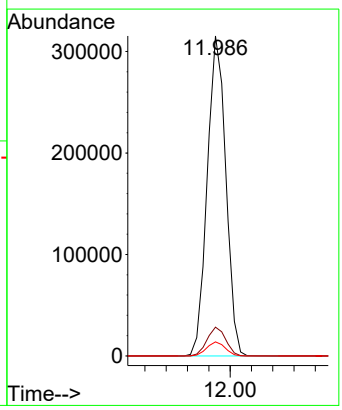


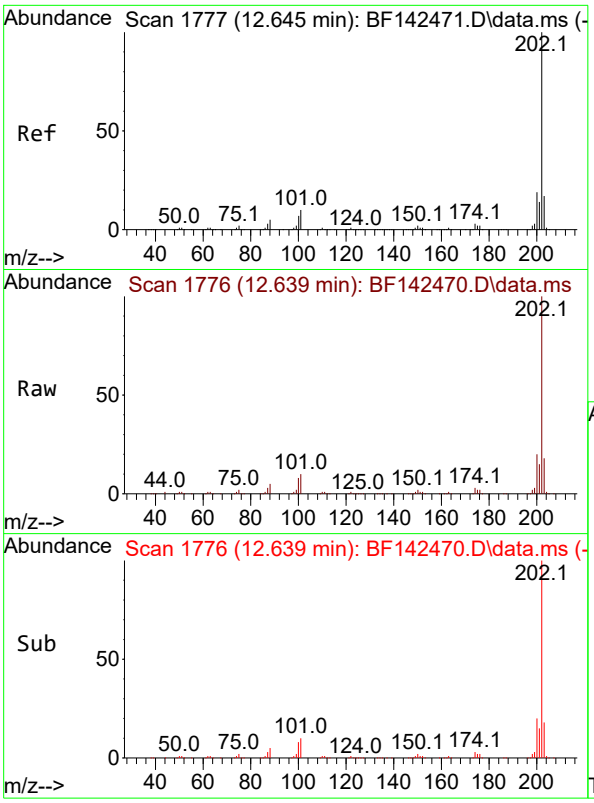


#74
Di-n-butylphthalate
Concen: 21.221 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:149 Resp: 382324

Ion	Ratio	Lower	Upper
149	100		
150	9.0	7.3	10.9
104	4.4	3.6	5.4



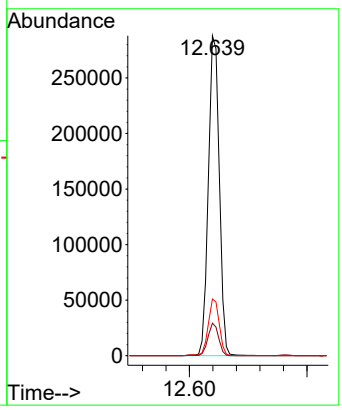


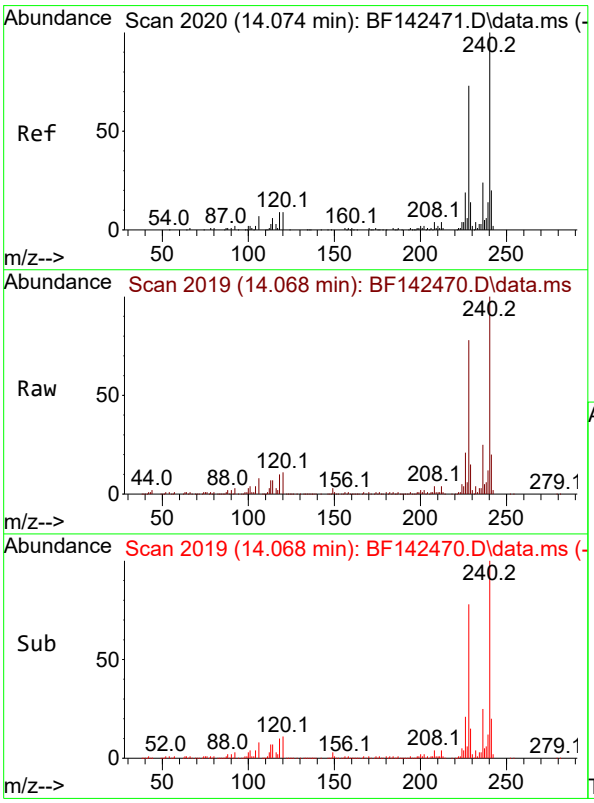
#75
Fluoranthene
Concen: 21.059 ng
RT: 12.639 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:202 Resp: 371226

Ion	Ratio	Lower	Upper
202	100		
101	10.2	0.0	29.6
203	17.7	0.0	37.2

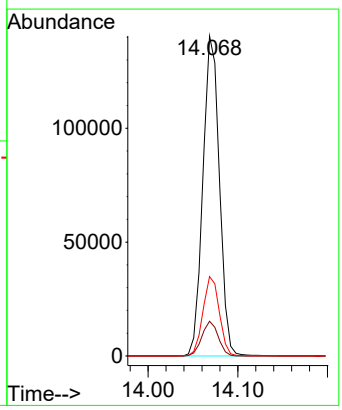


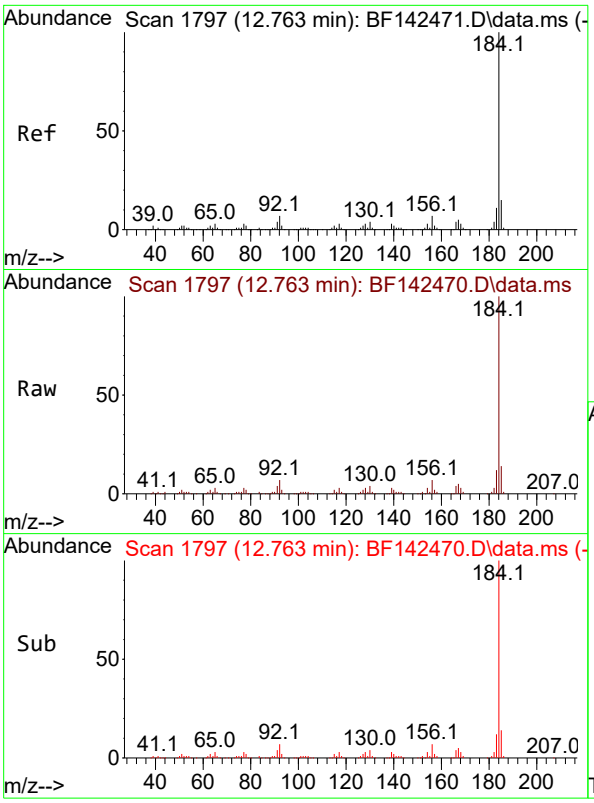


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:240 Resp: 179495

Ion	Ratio	Lower	Upper
240	100		
120	10.9	7.5	11.3
236	24.8	19.6	29.4



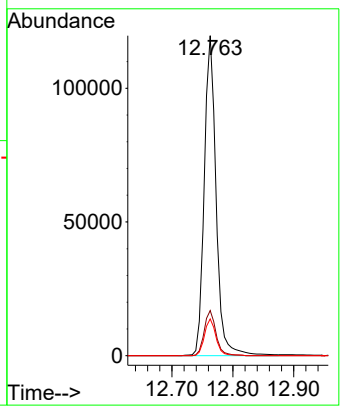


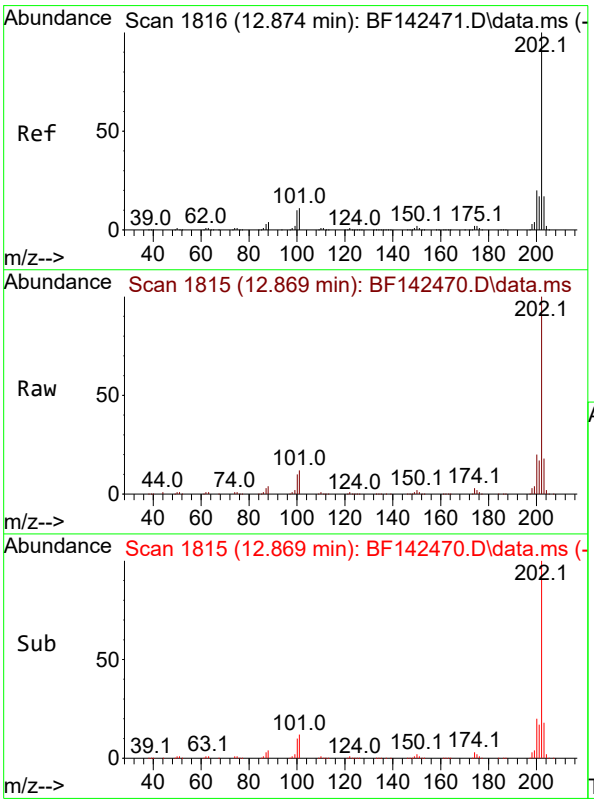
#77
Benzidine
Concen: 24.258 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:184 Resp: 162031

Ion	Ratio	Lower	Upper
184	100		
185	14.1	11.6	17.4
183	11.5	9.0	13.4

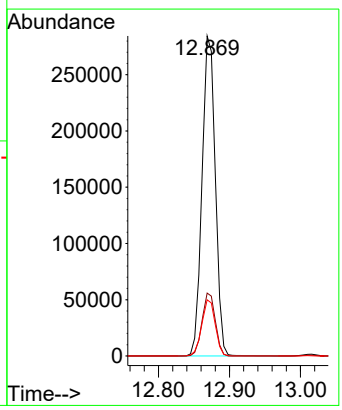


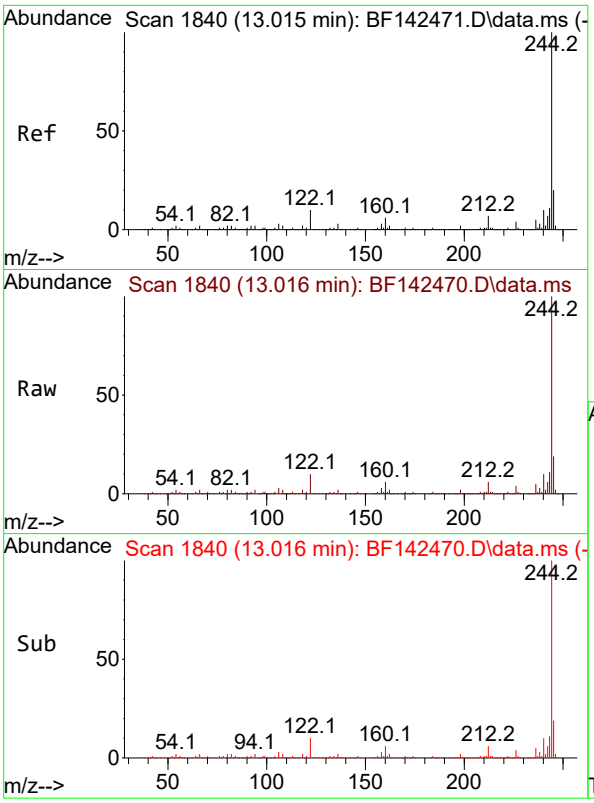


#78
Pyrene
Concen: 22.144 ng
RT: 12.869 min Scan# 1815
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:202 Resp: 370789

Ion	Ratio	Lower	Upper
202	100		
200	19.7	16.1	24.1
203	17.6	13.9	20.9



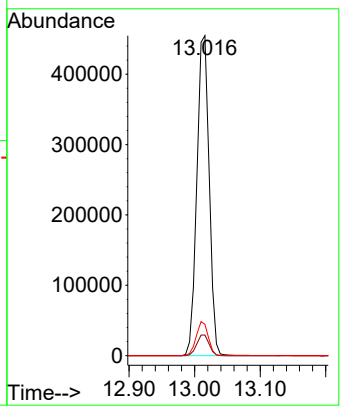


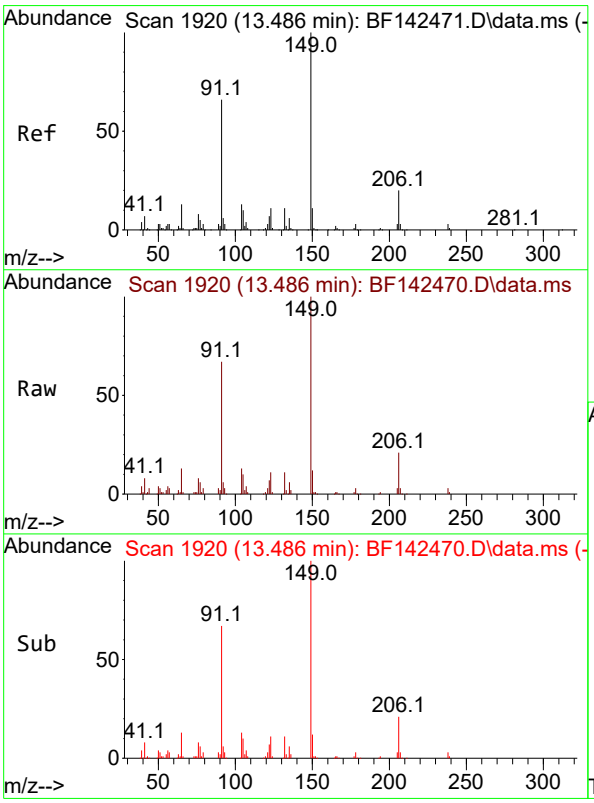
#79
Terphenyl-d14
Concen: 45.382 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:244 Resp: 596097

Ion	Ratio	Lower	Upper
244	100		
212	6.5	5.3	7.9
122	9.8	8.2	12.2

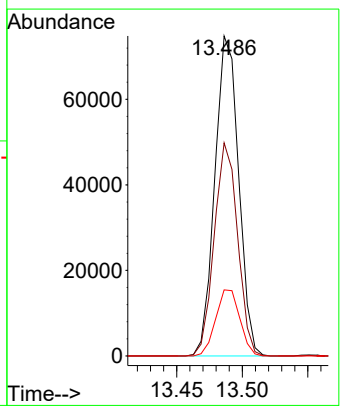


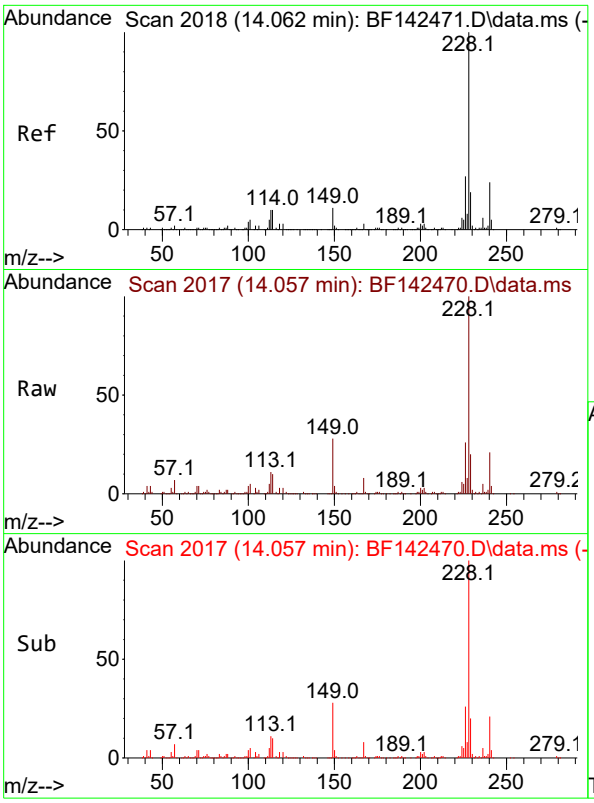


#80
Butylbenzylphthalate
Concen: 20.379 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:149 Resp: 94290

Ion	Ratio	Lower	Upper
149	100		
91	66.6	52.9	79.3
206	20.7	16.2	24.2



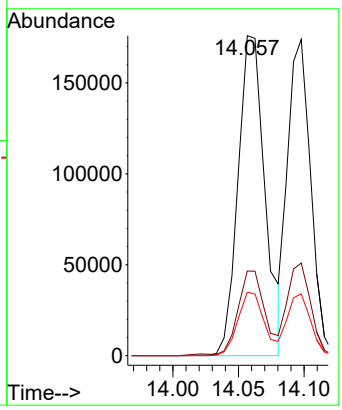


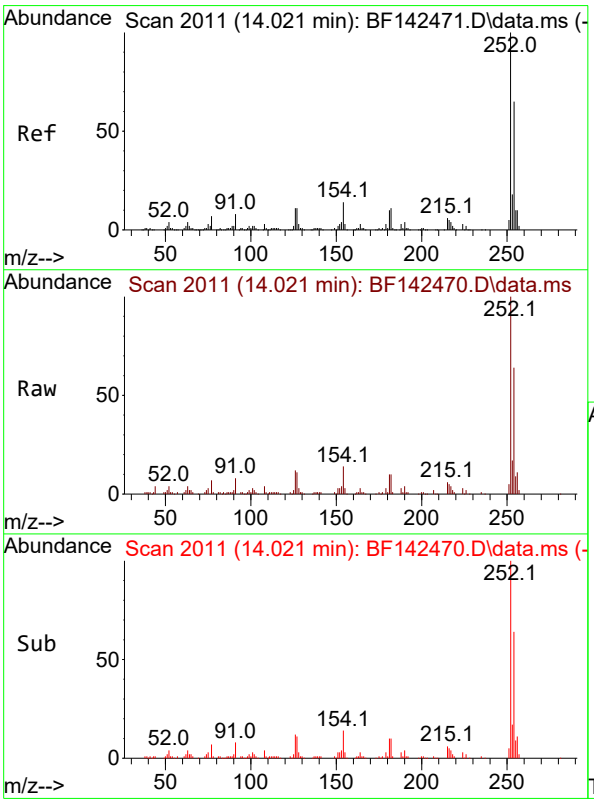
#81
Benzo(a)anthracene
Concen: 21.013 ng
RT: 14.057 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:228 Resp: 251858

Ion	Ratio	Lower	Upper
228	100		
226	26.5	21.2	31.8
229	19.8	15.5	23.3

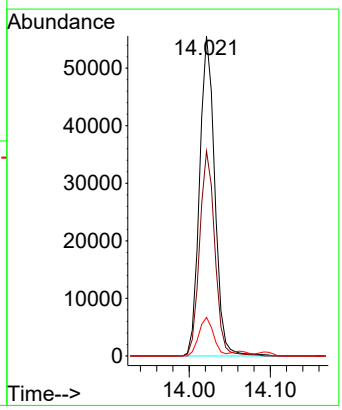


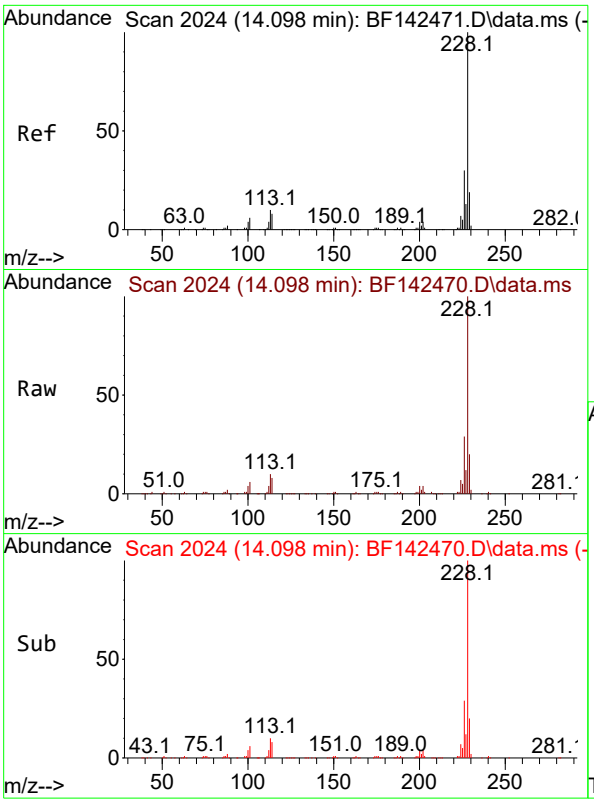


#82
3,3'-Dichlorobenzidine
Concen: 19.865 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:252 Resp: 72218

Ion	Ratio	Lower	Upper
252	100		
254	64.1	52.0	78.0
126	12.1	8.9	13.3



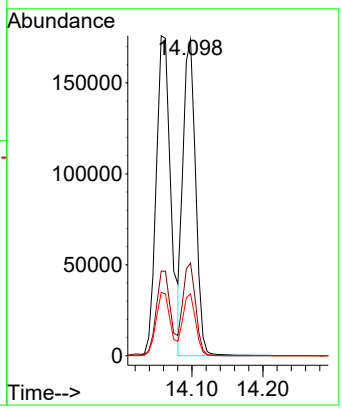


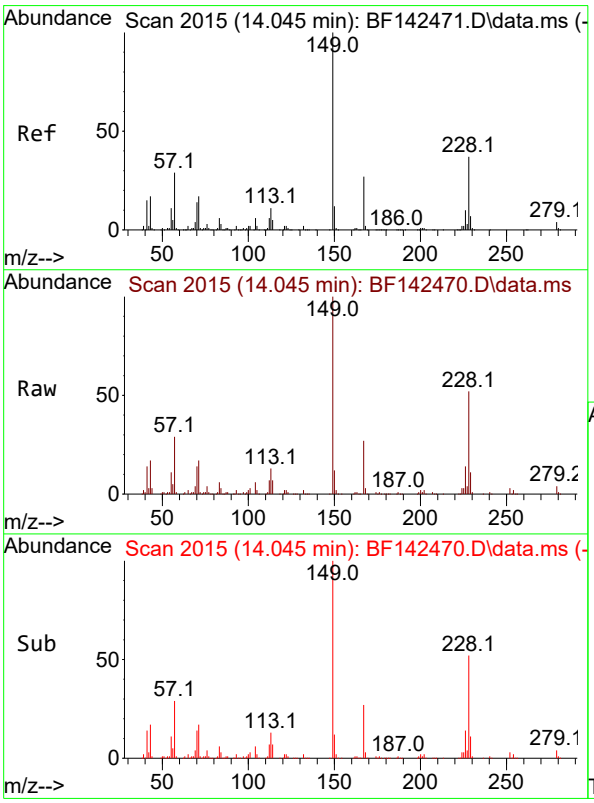
#83
Chrysene
Concen: 19.890 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:228 Resp: 214213

Ion	Ratio	Lower	Upper
228	100		
226	29.3	23.8	35.6
229	19.5	15.4	23.2

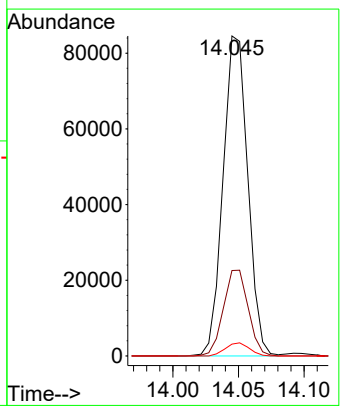


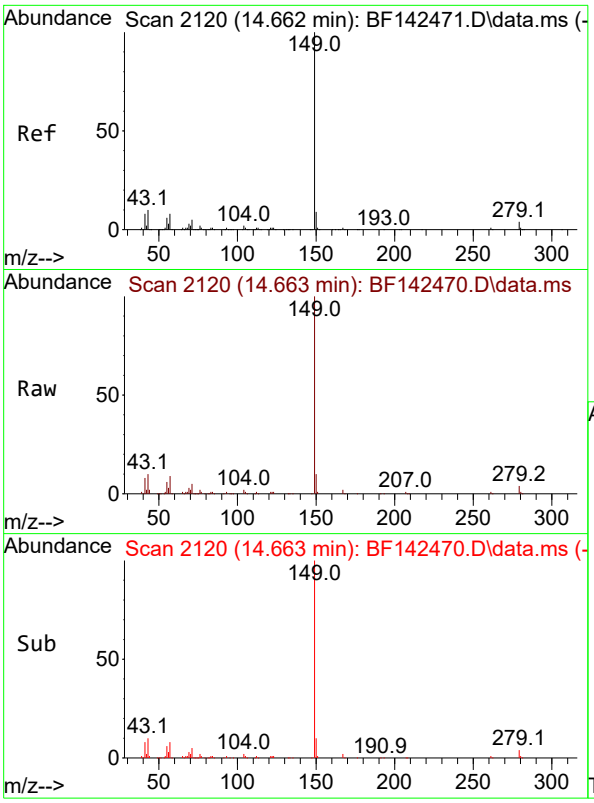


#84
Bis(2-ethylhexyl)phthalate
Concen: 18.743 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:149 Resp: 111015

Ion	Ratio	Lower	Upper
149	100		
167	26.7	21.5	32.3
279	3.7	3.2	4.8



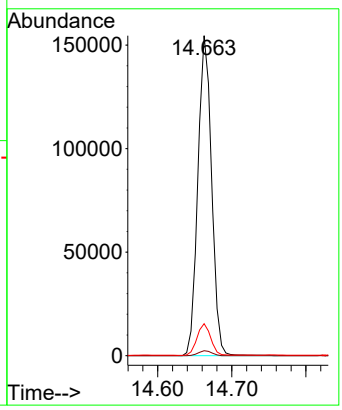


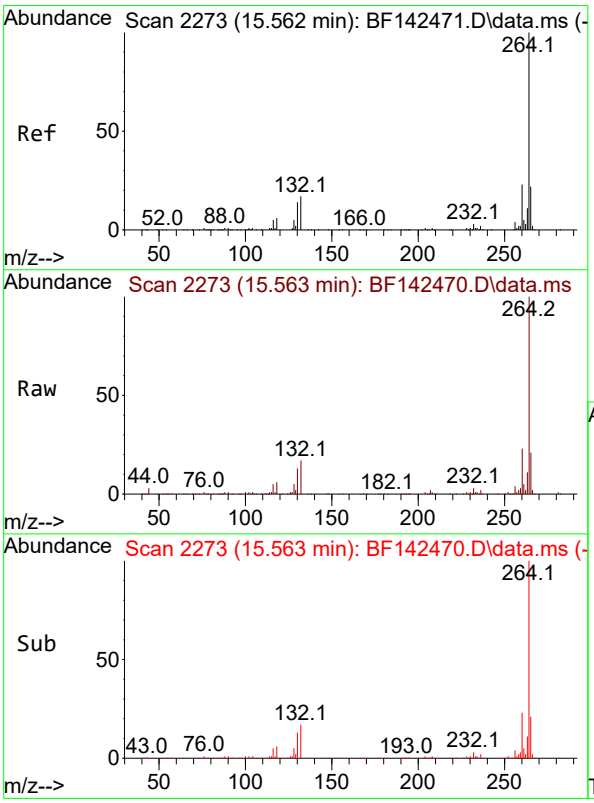
#85
Di-n-octyl phthalate
Concen: 17.166 ng
RT: 14.663 min Scan# 21
Delta R.T. -0.005 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:149 Resp: 198800

Ion	Ratio	Lower	Upper
149	100		
167	1.5	1.2	1.8
43	9.9	7.9	11.9

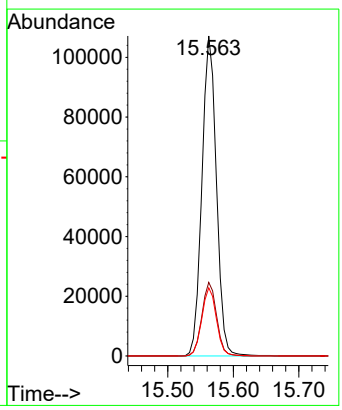


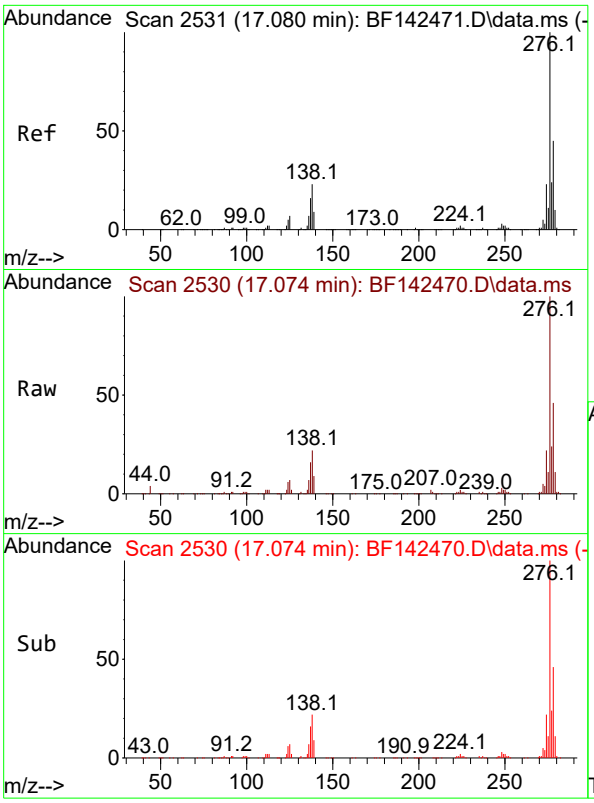


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.563 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:264 Resp: 165092

Ion	Ratio	Lower	Upper
264	100		
260	23.0	18.6	28.0
265	21.3	17.7	26.5



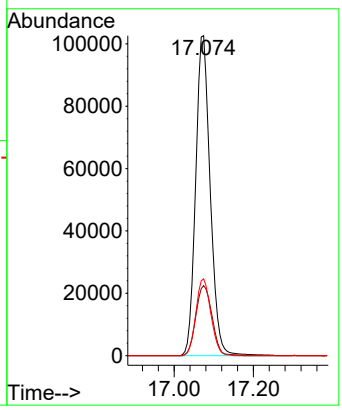


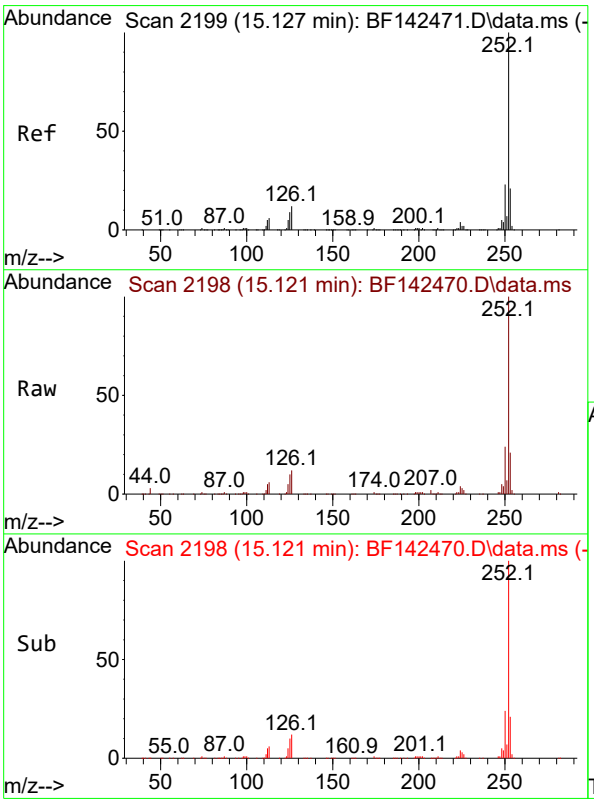
#87
Indeno(1,2,3-cd)pyrene
Concen: 21.080 ng
RT: 17.074 min Scan# 2
Delta R.T. -0.018 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:276 Resp: 261271

Ion	Ratio	Lower	Upper
276	100		
138	24.3	19.9	29.9
277	24.7	20.2	30.2

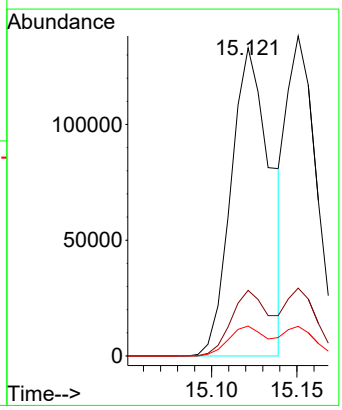


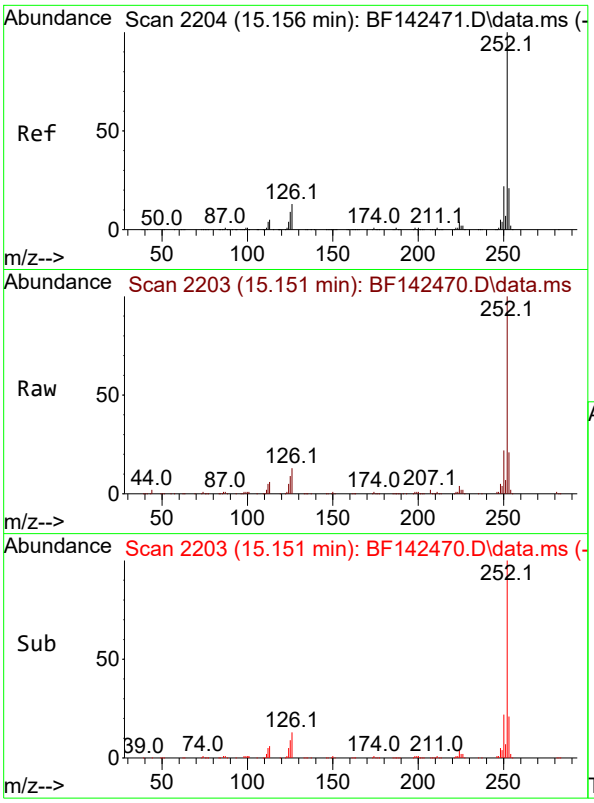


#88
Benzo(b)fluoranthene
Concen: 21.849 ng
RT: 15.121 min Scan# 2198
Delta R.T. -0.006 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:252 Resp: 213487

Ion	Ratio	Lower	Upper
252	100		
253	21.3	17.0	25.4
125	9.7	7.4	11.0



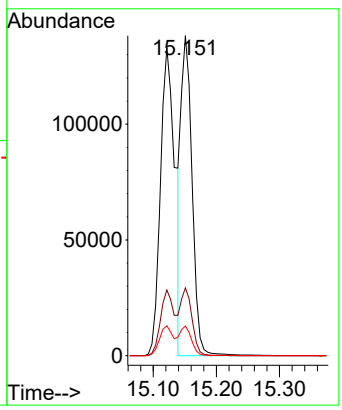


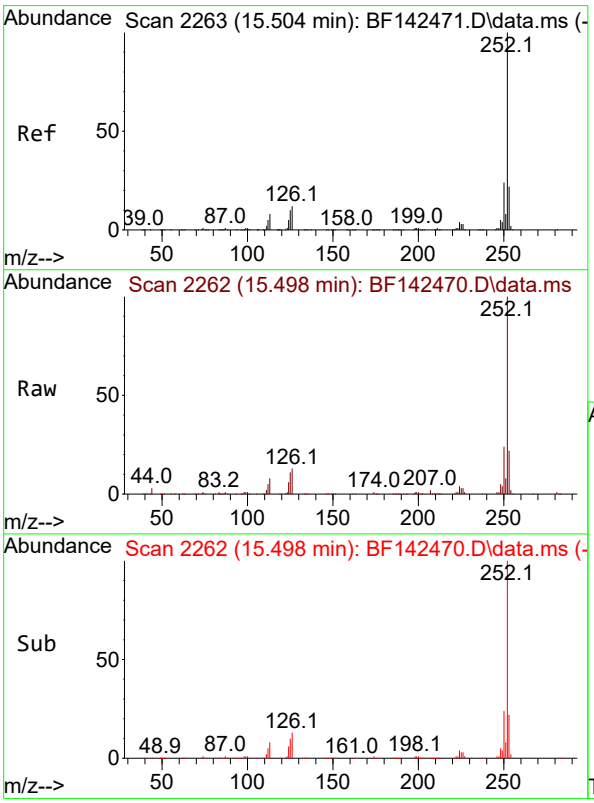
#89
Benzo(k)fluoranthene
Concen: 18.611 ng
RT: 15.151 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:252 Resp: 170316

Ion	Ratio	Lower	Upper
252	100		
253	21.2	17.0	25.4
125	9.3	7.3	10.9

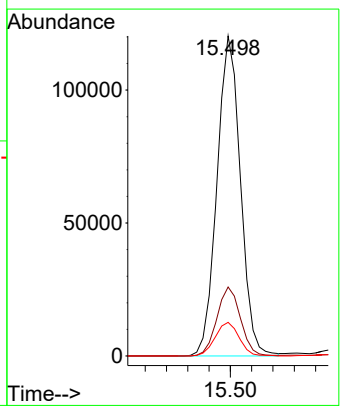


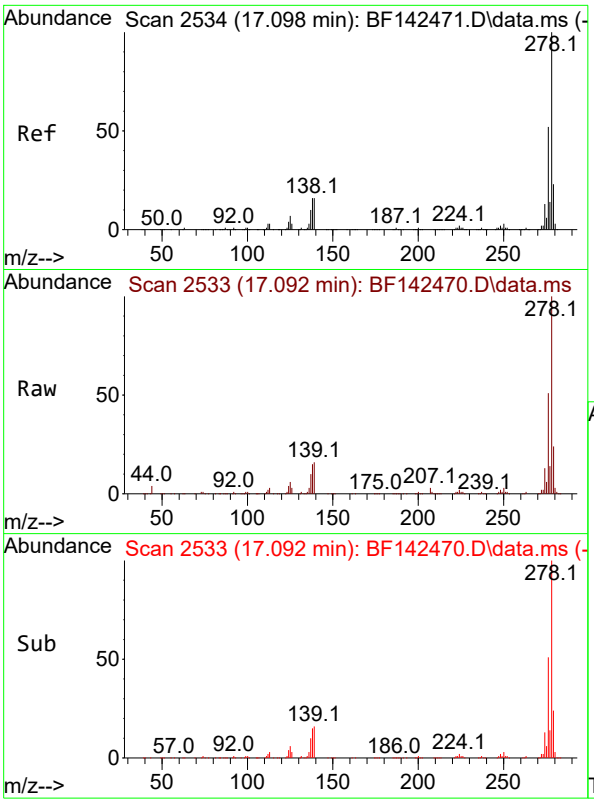


#90
Benzo(a)pyrene
Concen: 19.976 ng
RT: 15.498 min Scan# 2262
Delta R.T. -0.012 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:252 Resp: 183983

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.4	26.0
125	10.5	7.9	11.9



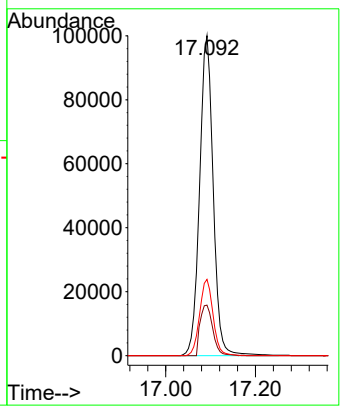


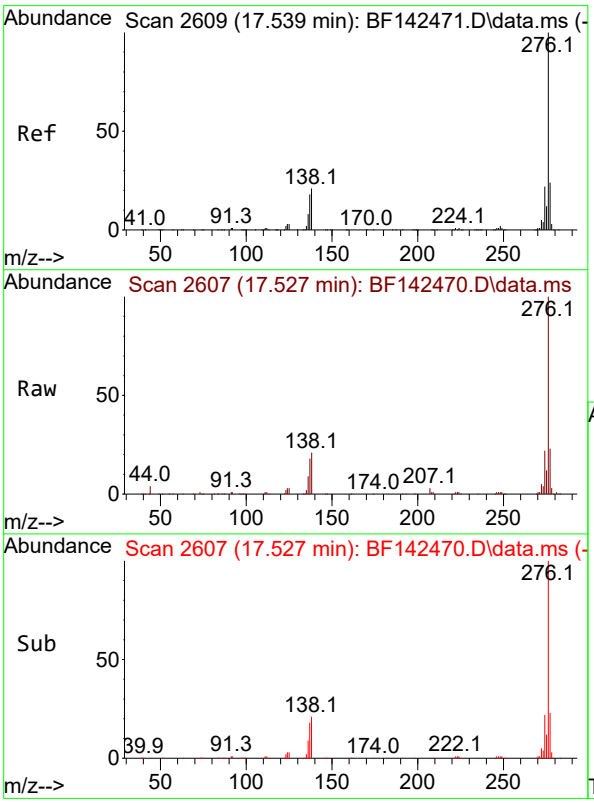
#91
Dibenzo(a,h)anthracene
Concen: 20.946 ng
RT: 17.092 min Scan# 2
Delta R.T. -0.023 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Tgt Ion:278 Resp: 210557

Ion	Ratio	Lower	Upper
278	100		
139	15.8	12.8	19.2
279	23.8	18.6	28.0

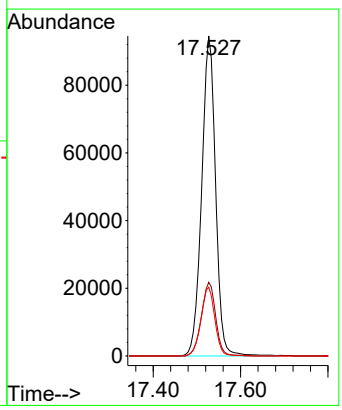




#92
Benzo(g,h,i)perylene
Concen: 20.859 ng
RT: 17.527 min Scan# 2607
Delta R.T. -0.029 min
Lab File: BF142470.D
Acq: 20 May 2025 13:36

Tgt Ion:276 Resp: 209719

Ion	Ratio	Lower	Upper
276	100		
277	23.0	19.2	28.8
138	21.5	16.8	25.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142471.D
Acq On : 20 May 2025 14:05
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Quant Time: May 20 16:55:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	97580	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	377433	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	206343	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	343068	20.000	ng	0.00
76) Chrysene-d12	14.074	240	169022	20.000	ng	0.00
86) Perylene-d12	15.562	264	189289	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	439258	75.840	ng	0.00
7) Phenol-d6	6.522	99	533569	76.529	ng	-0.01
23) Nitrobenzene-d5	7.463	82	537832	77.702	ng	-0.01
42) 2,4,6-Tribromophenol	10.733	330	174483	76.189	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	1144883	74.452	ng	0.00
79) Terphenyl-d14	13.015	244	962300	77.802	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.669	88	89364	38.557	ng	100
3) Pyridine	3.440	79	228376	38.694	ng	100
4) n-Nitrosodimethylamine	3.387	42	120777	39.412	ng	100
6) Aniline	6.563	93	359784	38.378	ng	100
8) 2-Chlorophenol	6.686	128	244270	38.720	ng	100
9) Benzaldehyde	6.451	77	159492	38.033	ng	100
10) Phenol	6.539	94	298690	38.073	ng	100
11) bis(2-Chloroethyl)ether	6.634	93	216144	38.275	ng	100
12) 1,3-Dichlorobenzene	6.839	146	271118	38.514	ng	100
13) 1,4-Dichlorobenzene	6.916	146	274616	38.727	ng	100
14) 1,2-Dichlorobenzene	7.069	146	258896	38.156	ng	100
15) Benzyl Alcohol	7.039	79	199176	38.657	ng	100
16) 2,2'-oxybis(1-Chloropr...	7.175	45	364537	38.439	ng	100
17) 2-Methylphenol	7.145	107	190501	38.677	ng	100
18) Hexachloroethane	7.416	117	95436	38.543	ng	100
19) n-Nitroso-di-n-propyla...	7.310	70	164556	38.083	ng	100
20) 3+4-Methylphenols	7.304	107	243075	38.538	ng	100
22) Acetophenone	7.310	105	323676	38.740	ng	100
24) Nitrobenzene	7.486	77	243446	38.996	ng	100
25) Isophorone	7.722	82	447323	38.653	ng	100
26) 2-Nitrophenol	7.798	139	132248	39.646	ng	100
27) 2,4-Dimethylphenol	7.833	122	228588	38.858	ng	100
28) bis(2-Chloroethoxy)met...	7.933	93	274724	38.002	ng	100
29) 2,4-Dichlorophenol	8.039	162	208444	38.963	ng	100
30) 1,2,4-Trichlorobenzene	8.128	180	222613	38.342	ng	100
31) Naphthalene	8.210	128	710368	38.223	ng	100
32) Benzoic acid	7.939	122	142061	39.672	ng	100
33) 4-Chloroaniline	8.251	127	293373	38.957	ng	100
34) Hexachlorobutadiene	8.322	225	141200	38.949	ng	100
35) Caprolactam	8.622	113	59309	39.473	ng	100
36) 4-Chloro-3-methylphenol	8.728	107	212728	38.800	ng	100
37) 2-Methylnaphthalene	8.898	142	445368	38.092	ng	100
38) 1-Methylnaphthalene	8.998	142	464365	38.397	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	227685	38.439	ng	100
41) Hexachlorocyclopentadiene	9.051	237	162314	40.622	ng	100
43) 2,4,6-Trichlorophenol	9.175	196	153308	38.383	ng	100

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142471.D
Acq On : 20 May 2025 14:05
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Quant Time: May 20 16:55:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	162880	38.667	ng	100
46) 1,1'-Biphenyl	9.363	154	610663	38.146	ng	100
47) 2-Chloronaphthalene	9.386	162	451638	38.185	ng	100
48) 2-Nitroaniline	9.480	65	133679	39.102	ng	100
49) Acenaphthylene	9.804	152	763730	38.240	ng	100
50) Dimethylphthalate	9.663	163	518078	38.051	ng	100
51) 2,6-Dinitrotoluene	9.722	165	115691	39.370	ng	100
52) Acenaphthene	9.974	154	462249	37.904	ng	100
53) 3-Nitroaniline	9.892	138	123293	38.413	ng	100
54) 2,4-Dinitrophenol	9.998	184	61452	40.477	ng	100
55) Dibenzofuran	10.145	168	662626	37.758	ng	100
56) 4-Nitrophenol	10.045	139	93606	39.526	ng	100
57) 2,4-Dinitrotoluene	10.127	165	150036	39.095	ng	100
58) Fluorene	10.492	166	507836	37.457	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	137225	39.022	ng	100
60) Diethylphthalate	10.363	149	508183	38.217	ng	100
61) 4-Chlorophenyl-phenyle...	10.480	204	251129	37.706	ng	100
62) 4-Nitroaniline	10.504	138	114265	39.253	ng	100
63) Azobenzene	10.645	77	456781	38.246	ng	100
65) 4,6-Dinitro-2-methylph...	10.533	198	79121	41.326	ng	100
66) n-Nitrosodiphenylamine	10.598	169	445033	37.917	ng	100
67) 4-Bromophenyl-phenylether	10.974	248	152348	37.556	ng	100
68) Hexachlorobenzene	11.039	284	171918	38.318	ng	100
69) Atrazine	11.127	200	121790	39.072	ng	100
70) Pentachlorophenol	11.233	266	100877	39.824	ng	100
71) Phenanthrene	11.457	178	694045	37.855	ng	100
72) Anthracene	11.504	178	711162	38.007	ng	100
73) Carbazole	11.657	167	610097	38.140	ng	100
74) Di-n-butylphthalate	11.986	149	669345	38.227	ng	100
75) Fluoranthene	12.645	202	643610	37.569	ng	100
77) Benzidine	12.763	184	269307	42.816	ng	100
78) Pyrene	12.874	202	628371	39.853	ng	100
80) Butylbenzylphthalate	13.486	149	177841	40.819	ng	100
81) Benzo(a)anthracene	14.062	228	431998	38.276	ng	100
82) 3,3'-Dichlorobenzidine	14.021	252	137438	40.148	ng	100
83) Chrysene	14.098	228	387081	38.168	ng	100
84) Bis(2-ethylhexyl)phtha...	14.045	149	227555	40.800	ng	100
85) Di-n-octyl phthalate	14.662	149	427995	39.246	ng	100
87) Indeno(1,2,3-cd)pyrene	17.080	276	548309	38.584	ng	100
88) Benzo(b)fluoranthene	15.127	252	426174	38.041	ng	100
89) Benzo(k)fluoranthene	15.156	252	394567	37.603	ng	100
90) Benzo(a)pyrene	15.504	252	409312	38.761	ng	100
91) Dibenzo(a,h)anthracene	17.098	278	448372	38.903	ng	100
92) Benzo(g,h,i)perylene	17.539	276	446674	38.747	ng	100

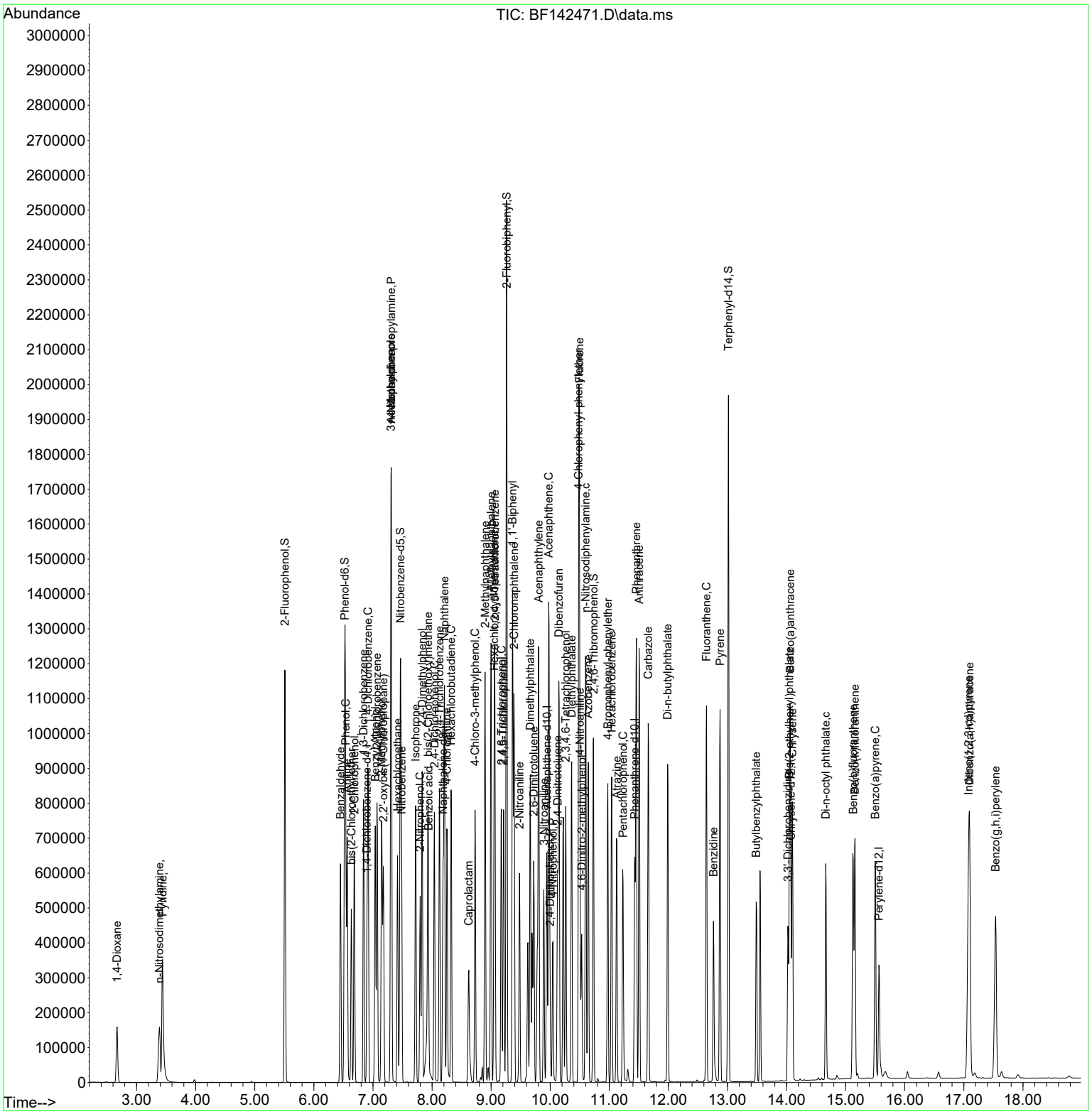
(#) = qualifier out of range (m) = manual integration (+) = signals summed

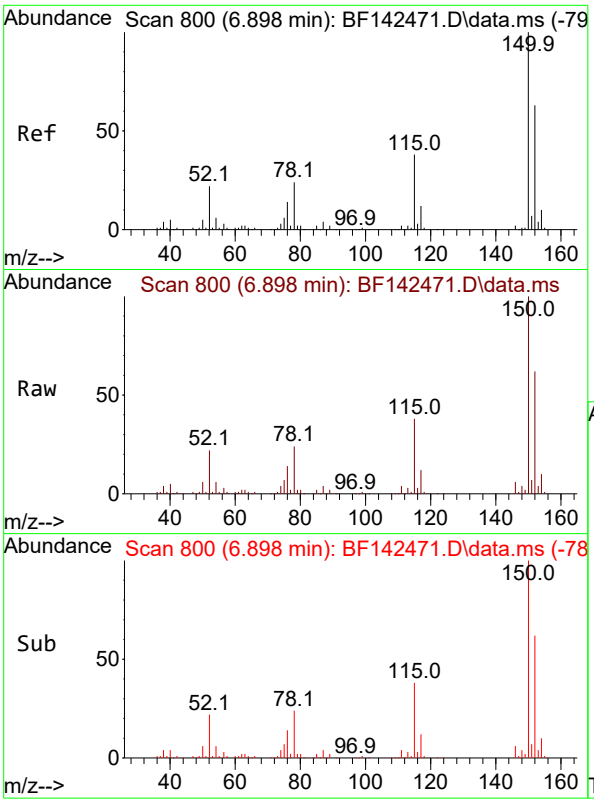
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142471.D
Acq On : 20 May 2025 14:05
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Quant Time: May 20 16:55:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



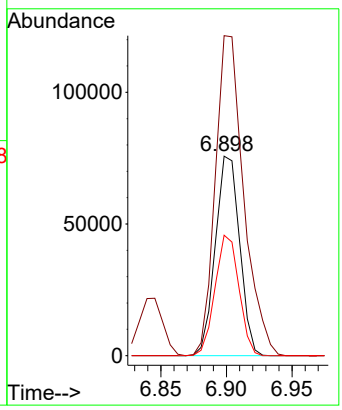


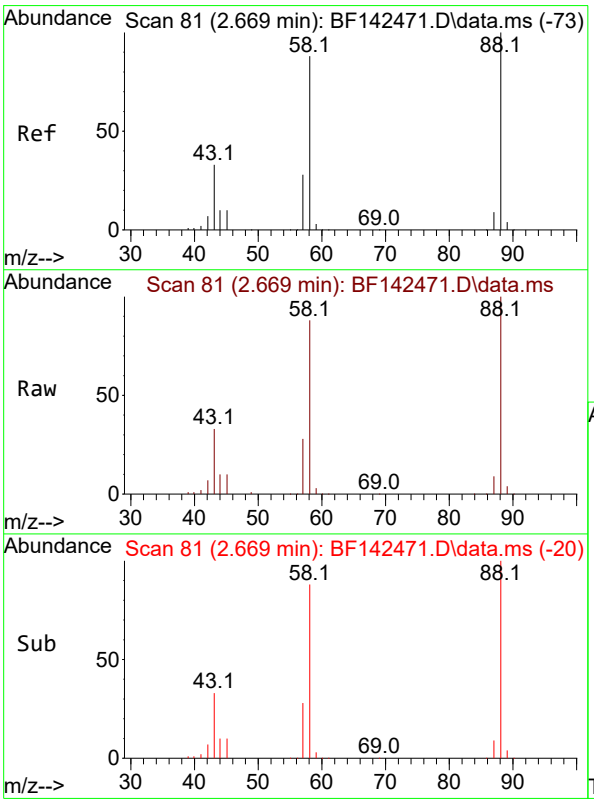
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:152 Resp: 97580

Ion	Ratio	Lower	Upper
152	100		
150	160.3	128.2	192.4
115	60.4	48.3	72.5

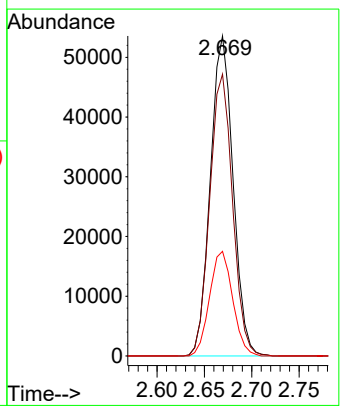


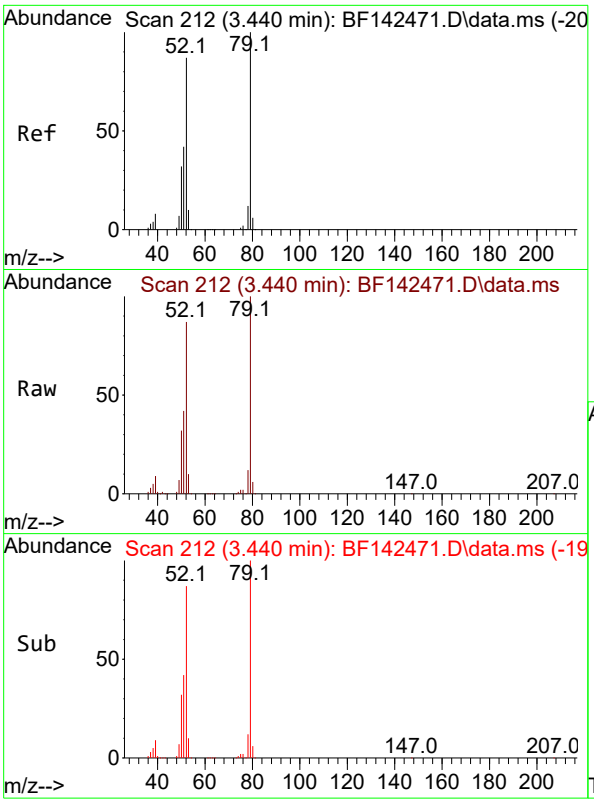


#2
1,4-Dioxane
Concen: 38.557 ng
RT: 2.669 min Scan# 81
Delta R.T. 0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 88 Resp: 89364

Ion	Ratio	Lower	Upper
88	100		
58	88.5	70.8	106.2
43	33.3	26.6	40.0



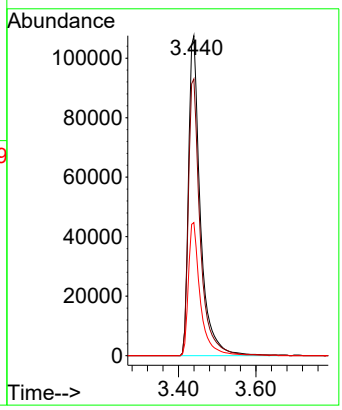


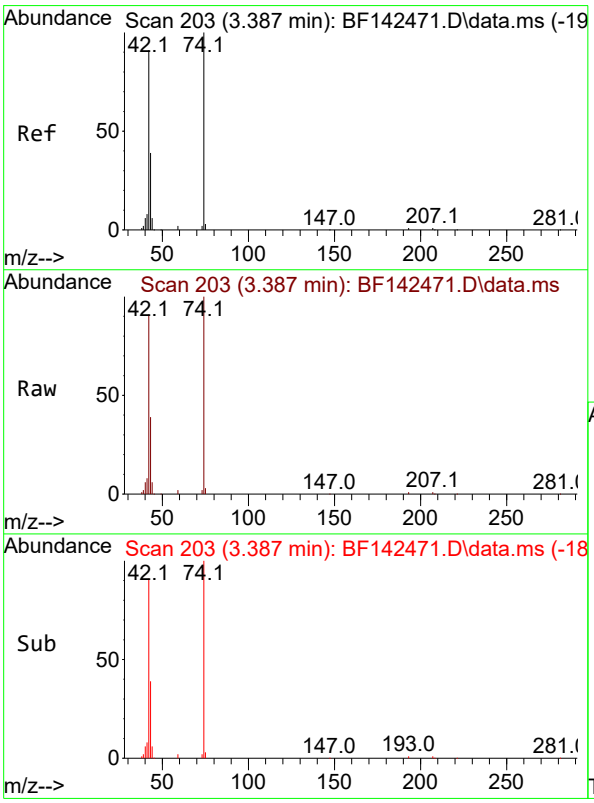
#3
Pyridine
Concen: 38.694 ng
RT: 3.440 min Scan# 21
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 79 Resp: 228376

Ion	Ratio	Lower	Upper
79	100		
52	86.5	69.2	103.8
51	41.6	33.3	49.9

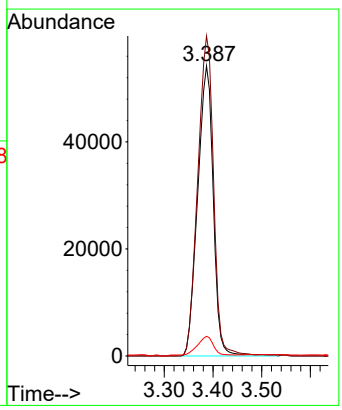


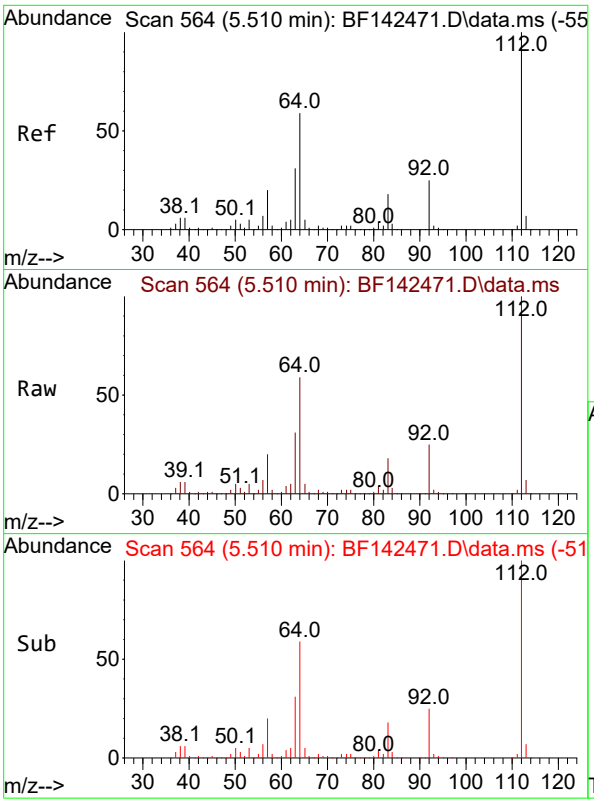


#4
n-Nitrosodimethylamine
Concen: 39.412 ng
RT: 3.387 min Scan# 203
Delta R.T. -0.018 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 42 Resp: 120777

Ion	Ratio	Lower	Upper
42	100		
74	110.3	88.2	132.4
44	6.8	5.4	8.2



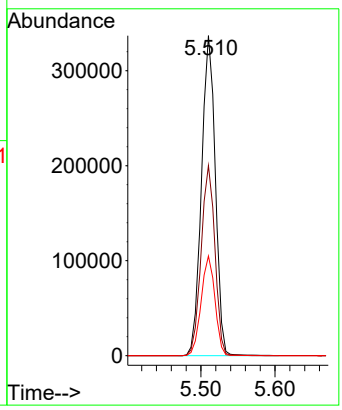


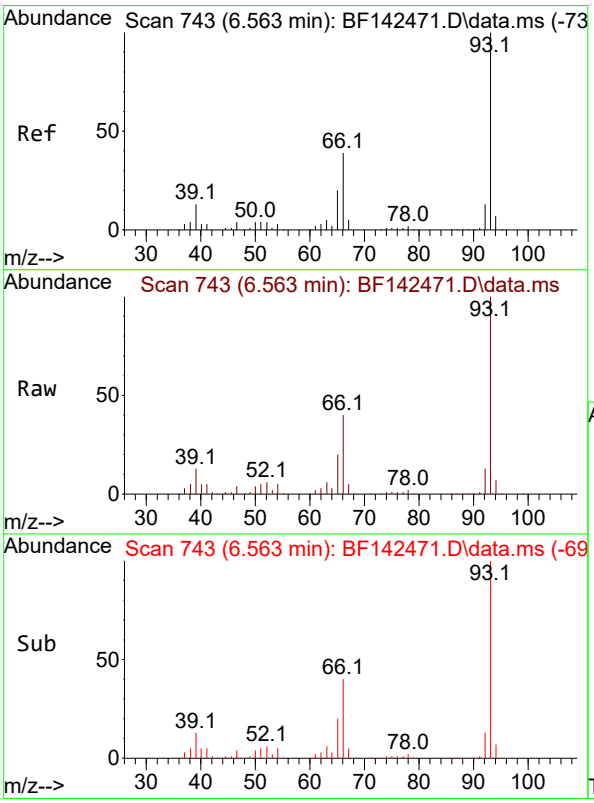
#5
2-Fluorophenol
Concen: 75.840 ng
RT: 5.510 min Scan# 5
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:112 Resp: 439258

Ion	Ratio	Lower	Upper
112	100		
64	59.4	47.5	71.3
63	31.1	24.9	37.3

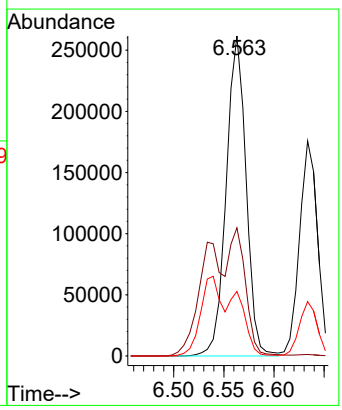


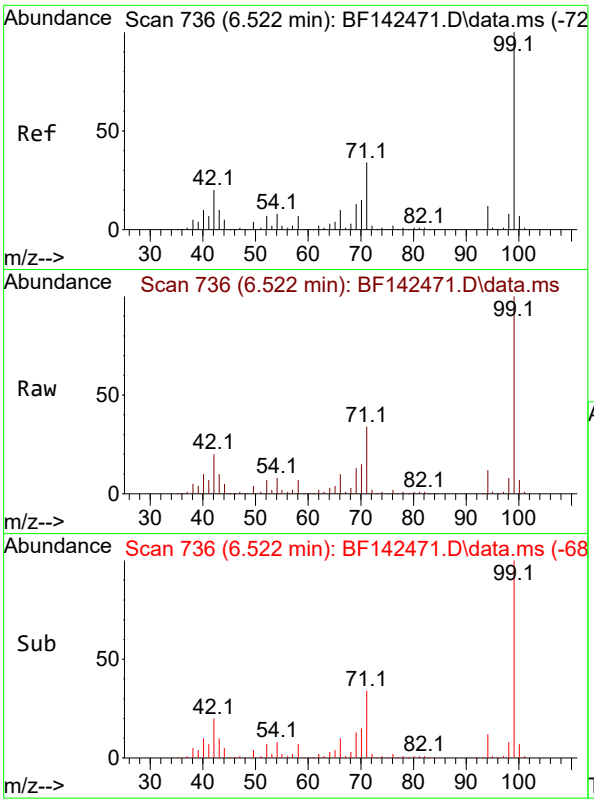


#6
Aniline
Concen: 38.378 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 93 Resp: 359784

Ion	Ratio	Lower	Upper
93	100		
66	40.0	32.0	48.0
65	20.1	16.1	24.1



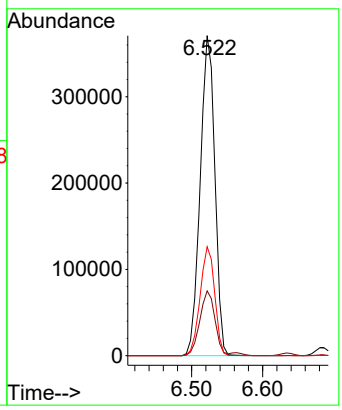


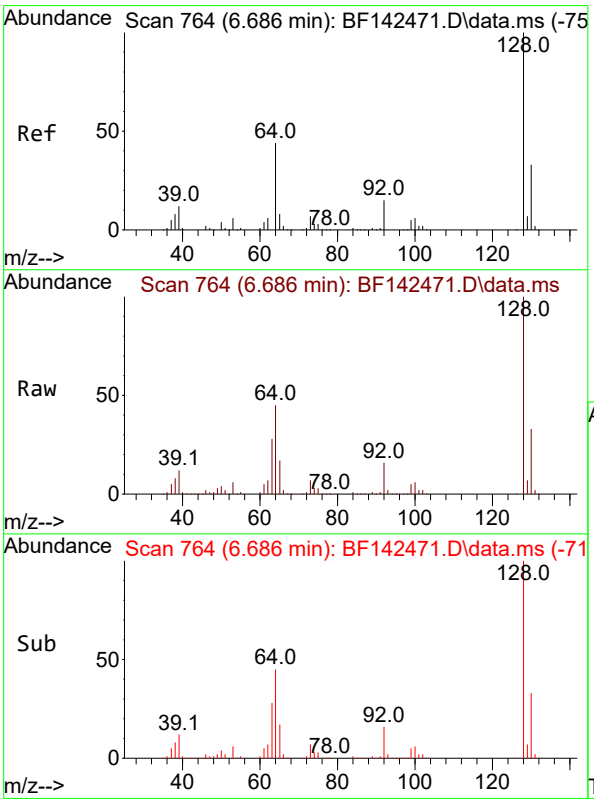
#7
Phenol-d6
Concen: 76.529 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 99 Resp: 533569

Ion	Ratio	Lower	Upper
99	100		
42	20.2	16.2	24.2
71	34.1	27.3	40.9

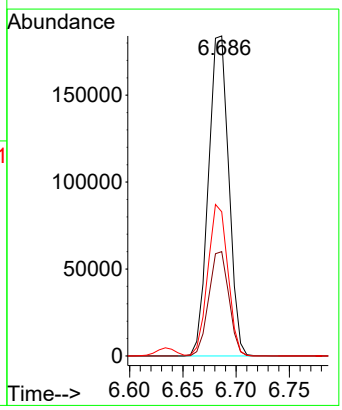


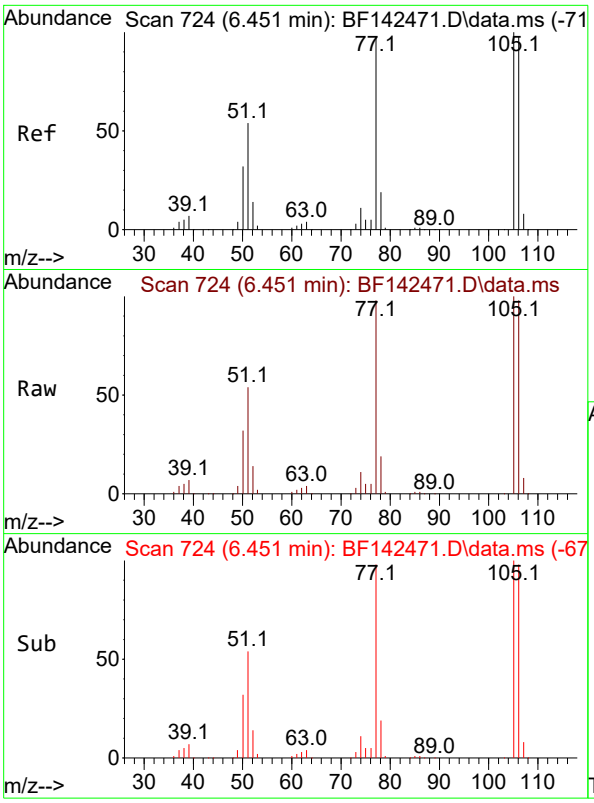


#8
2-Chlorophenol
Concen: 38.720 ng
RT: 6.686 min Scan# 764
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:128 Resp: 244270

Ion	Ratio	Lower	Upper
128	100		
130	32.6	12.6	52.6
64	45.1	25.1	65.1



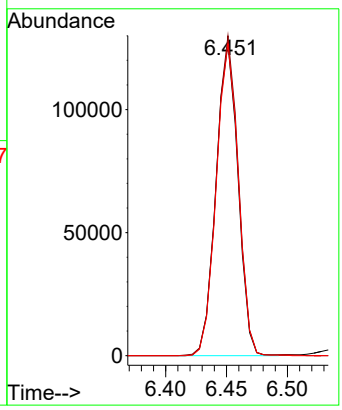


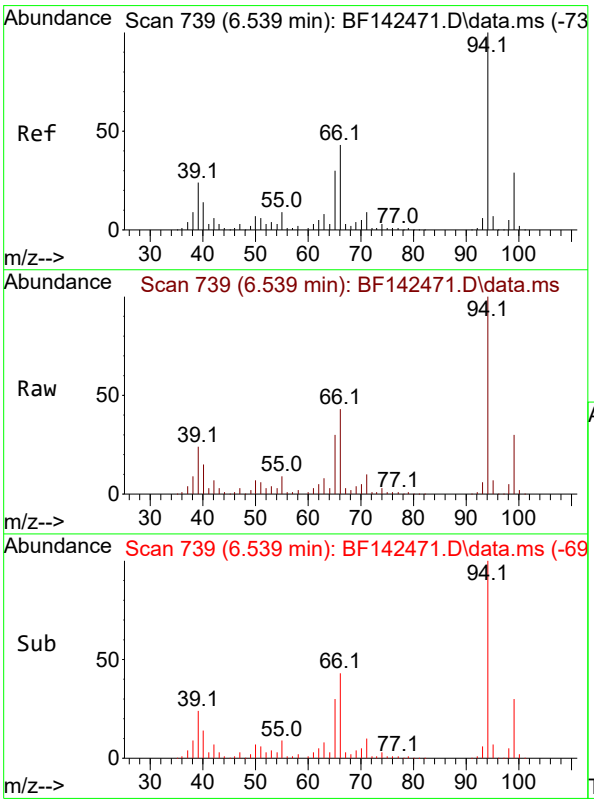
#9
Benzaldehyde
Concen: 38.033 ng
RT: 6.451 min Scan# 7
Delta R.T. -0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 77 Resp: 159492

Ion	Ratio	Lower	Upper
77	100		
105	102.5	82.5	122.5
106	100.0	80.0	120.0

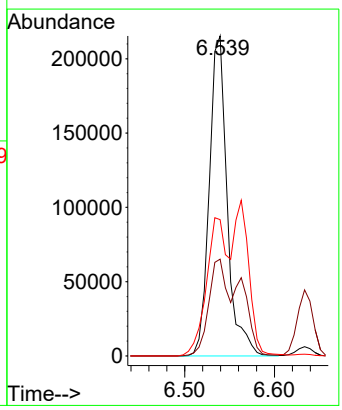


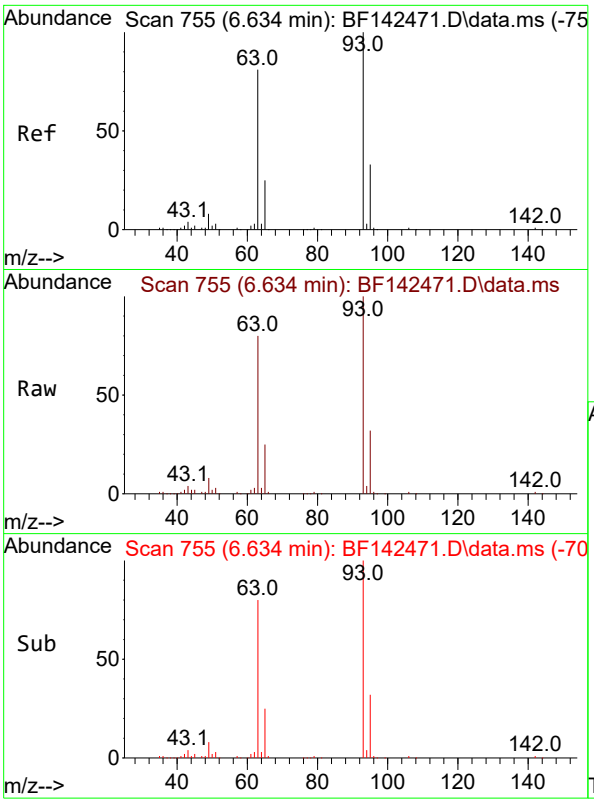


#10
Phenol
Concen: 38.073 ng
RT: 6.539 min Scan# 739
Delta R.T. -0.012 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 94 Resp: 298690

Ion	Ratio	Lower	Upper
94	100		
65	30.3	10.3	50.3
66	42.6	22.6	62.6



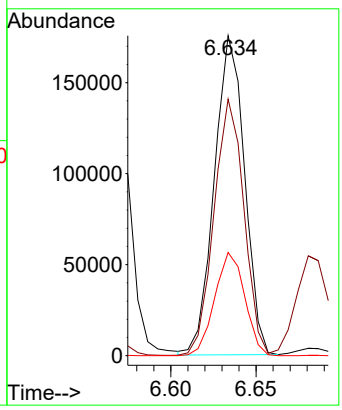


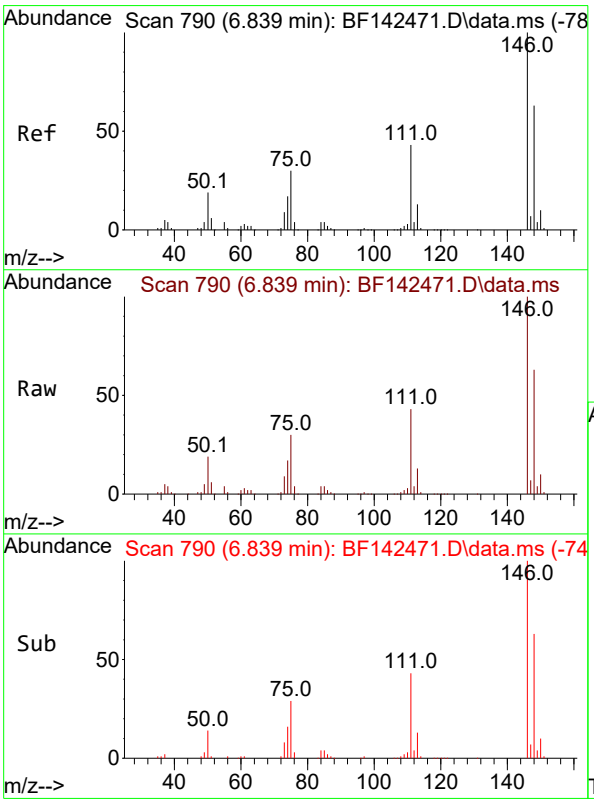
#11
bis(2-Chloroethyl)ether
Concen: 38.275 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 93 Resp: 216144

Ion	Ratio	Lower	Upper
93	100		
63	80.2	60.2	100.2
95	32.3	12.3	52.3

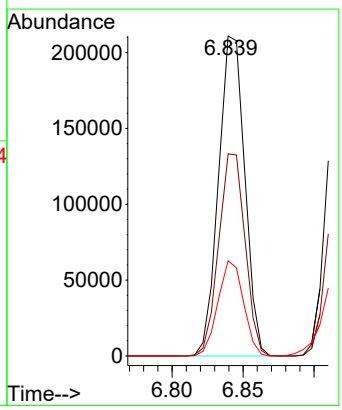


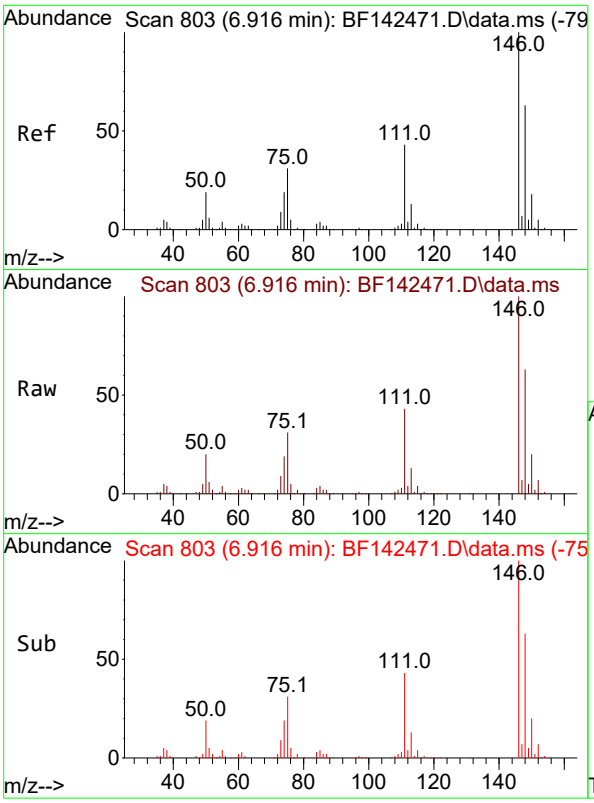


#12
1,3-Dichlorobenzene
Concen: 38.514 ng
RT: 6.839 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:146 Resp: 271118

Ion	Ratio	Lower	Upper
146	100		
148	63.2	50.6	75.8
75	29.7	23.8	35.6



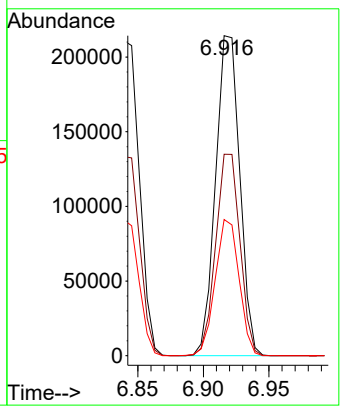


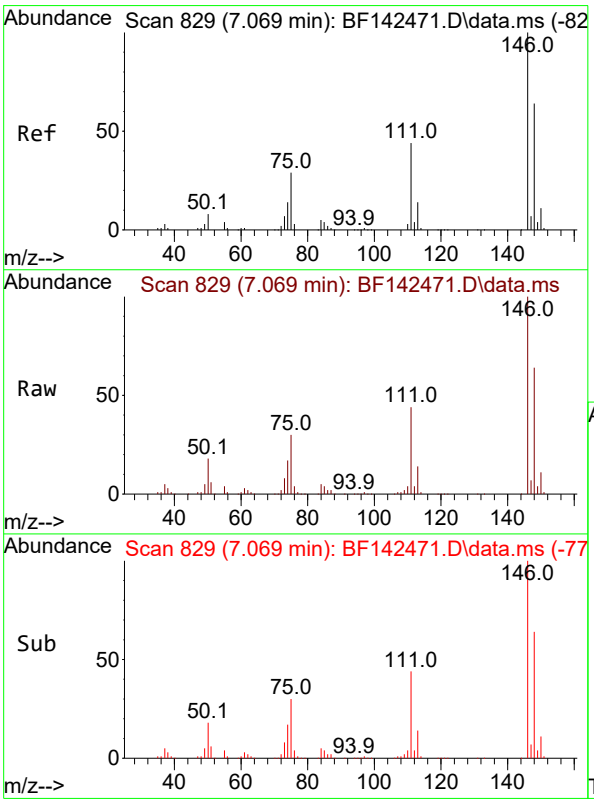
#13
1,4-Dichlorobenzene
Concen: 38.727 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:146 Resp: 274616

Ion	Ratio	Lower	Upper
146	100		
148	63.0	50.4	75.6
111	42.6	34.1	51.1

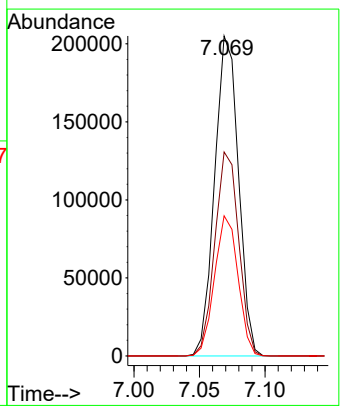


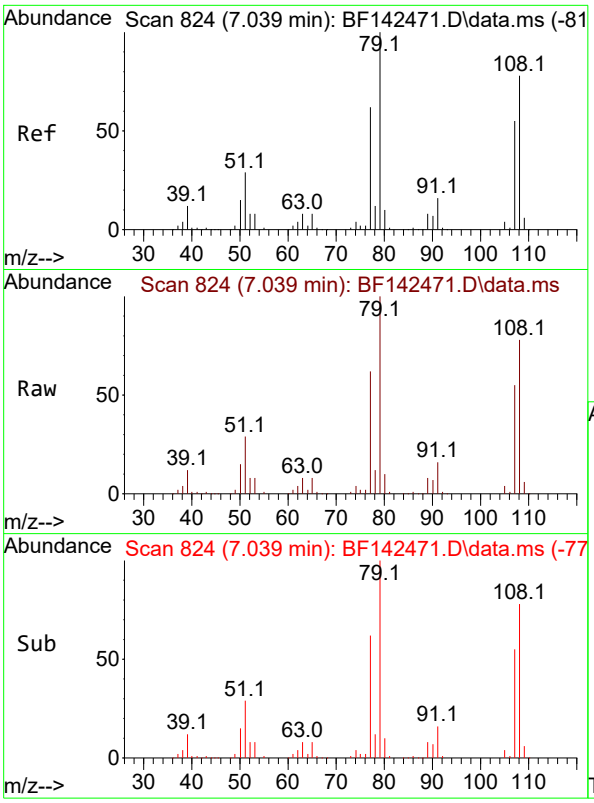


#14
1,2-Dichlorobenzene
Concen: 38.156 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:146 Resp: 258896

Ion	Ratio	Lower	Upper
146	100		
148	63.7	51.0	76.4
111	43.8	35.0	52.6



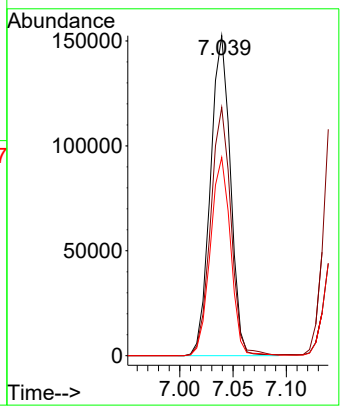


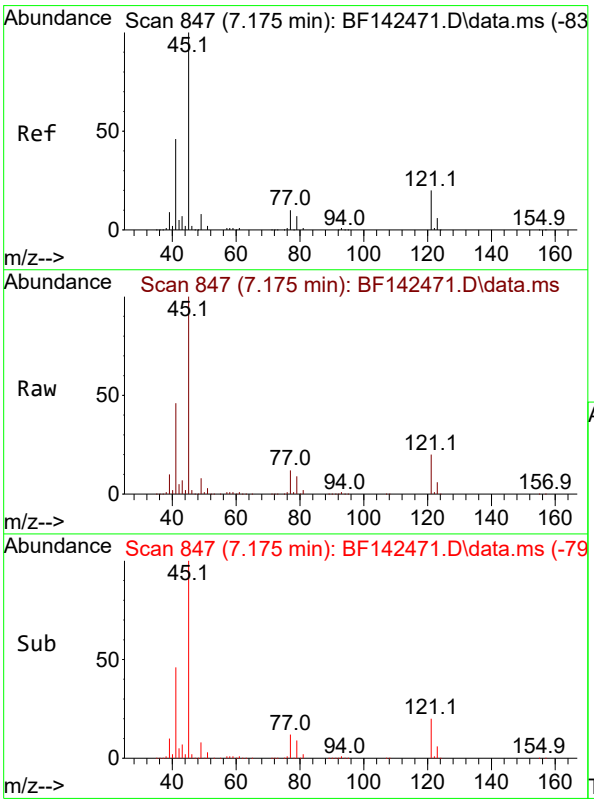
#15
Benzyl Alcohol
Concen: 38.657 ng
RT: 7.039 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 79 Resp: 199176

Ion	Ratio	Lower	Upper
79	100		
108	77.6	62.1	93.1
77	61.9	49.5	74.3

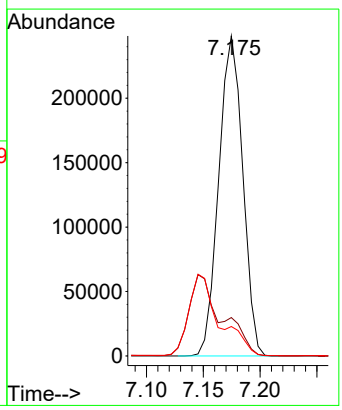


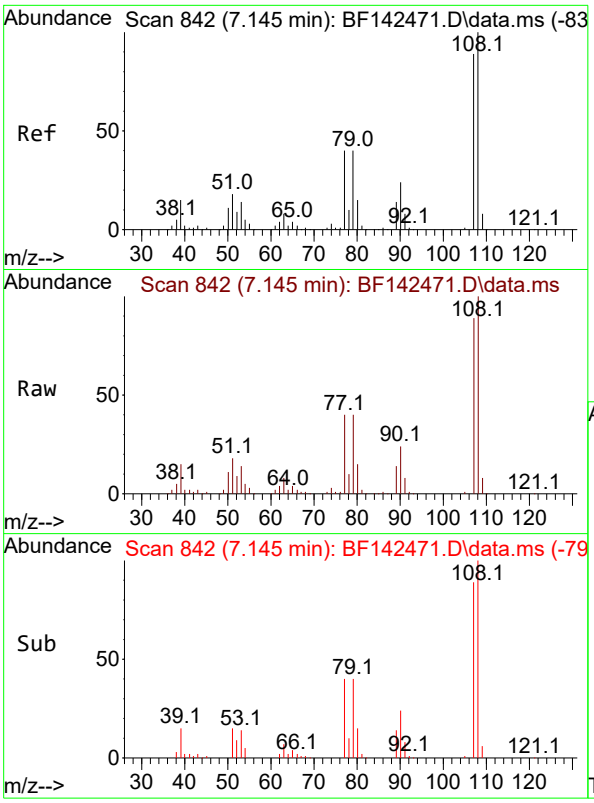


#16
2,2'-oxybis(1-Chloropropane)
Concen: 38.439 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 45 Resp: 364537

Ion	Ratio	Lower	Upper
45	100		
77	12.0	0.0	32.0
79	9.2	0.0	29.2



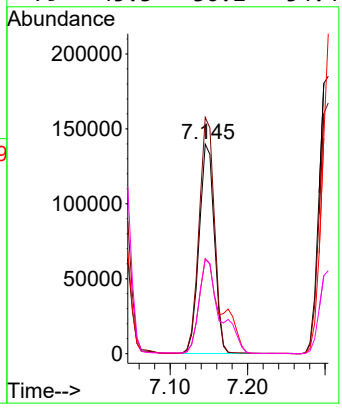


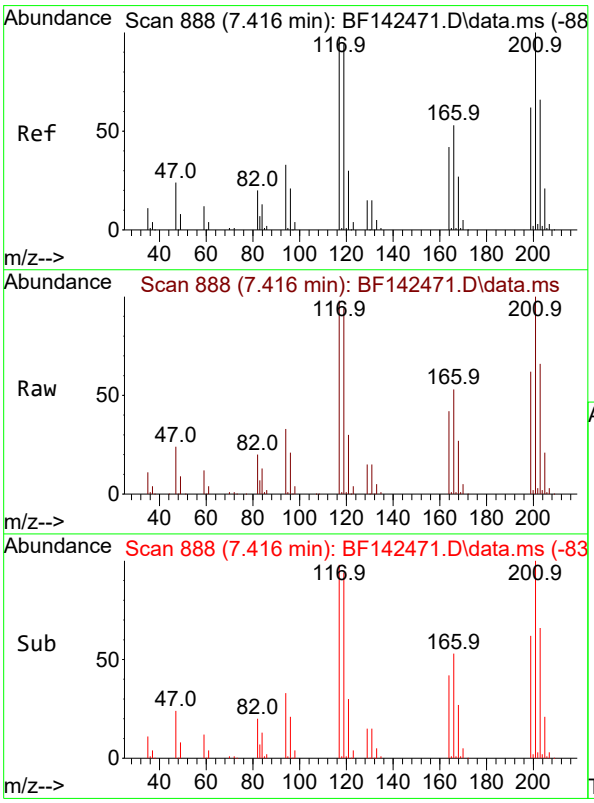
#17
2-Methylphenol
Concen: 38.677 ng
RT: 7.145 min Scan# 84
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:107 Resp: 190501

Ion	Ratio	Lower	Upper
107	100		
108	112.7	90.2	135.2
77	45.1	36.1	54.1
79	45.3	36.2	54.4

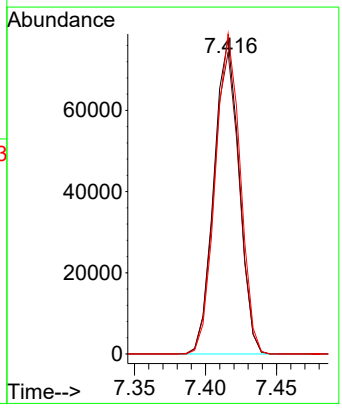


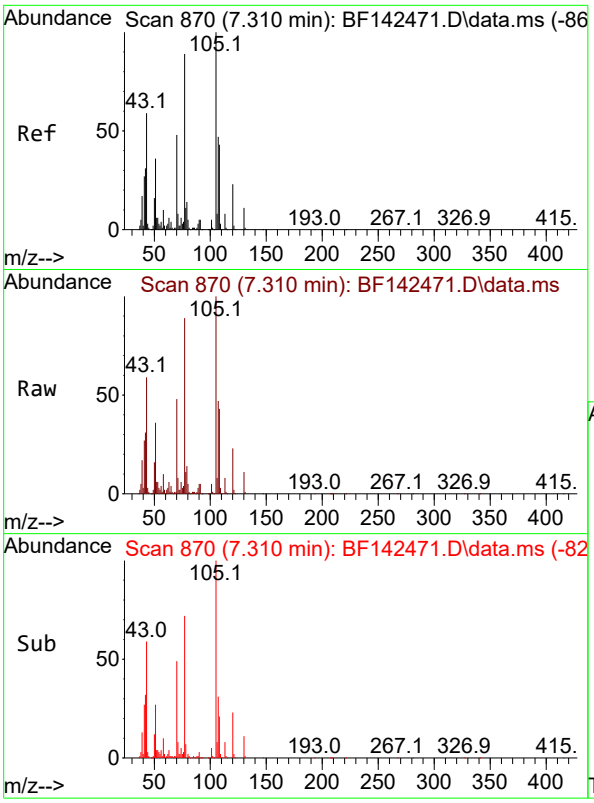


#18
Hexachloroethane
Concen: 38.543 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:117 Resp: 95436

Ion	Ratio	Lower	Upper
117	100		
119	95.7	76.6	114.8
201	101.6	81.3	121.9



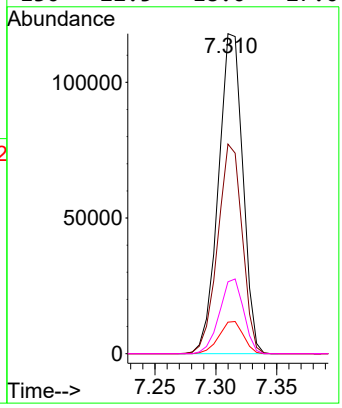


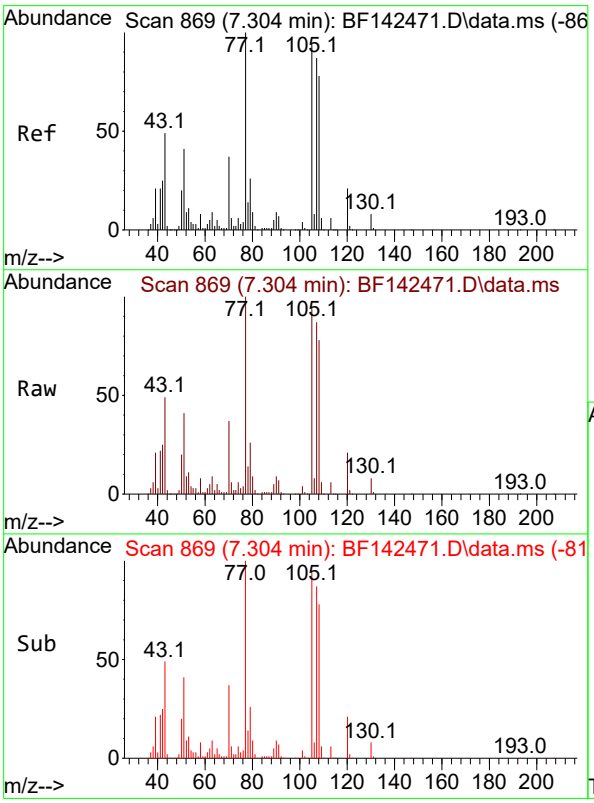
#19
n-Nitroso-di-n-propylamine
Concen: 38.083 ng
RT: 7.310 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 70 Resp: 164556

Ion	Ratio	Lower	Upper
70	100		
42	65.5	52.4	78.6
101	9.8	7.8	11.8
130	22.5	18.0	27.0

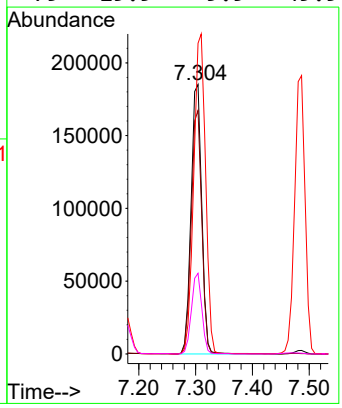


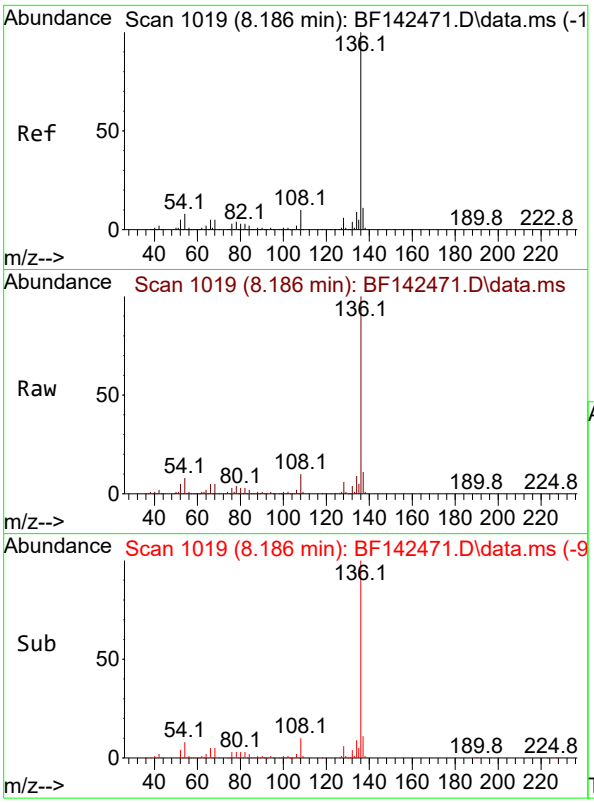


#20
3+4-Methylphenols
Concen: 38.538 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:107 Resp: 243075

Ion	Ratio	Lower	Upper
107	100		
108	90.4	70.4	110.4
77	115.4	95.4	135.4
79	29.9	9.9	49.9



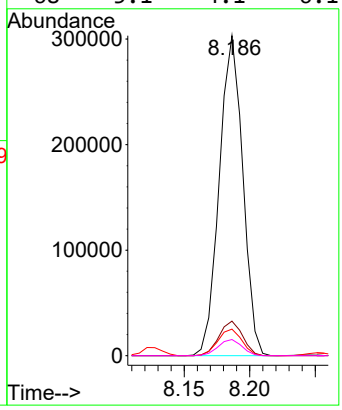


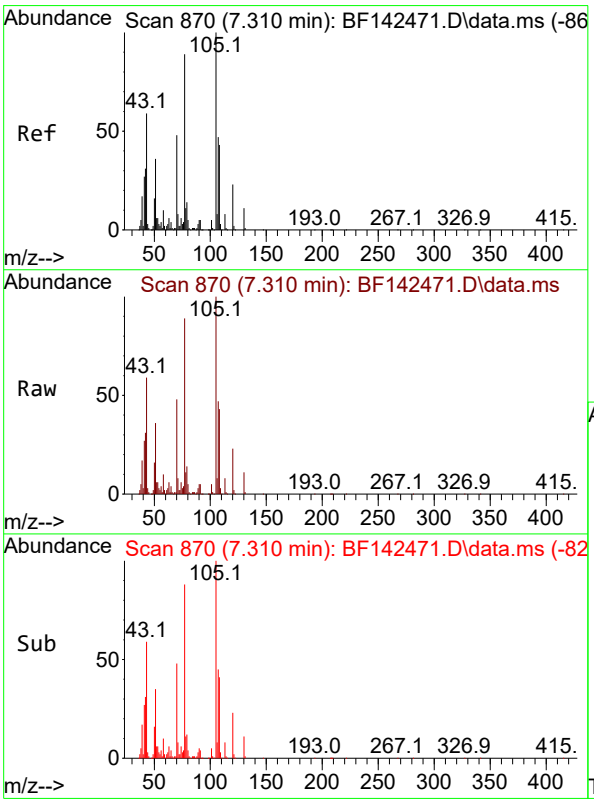
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:136 Resp: 377433

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.6	13.0
54	8.3	6.6	10.0
68	5.1	4.1	6.1

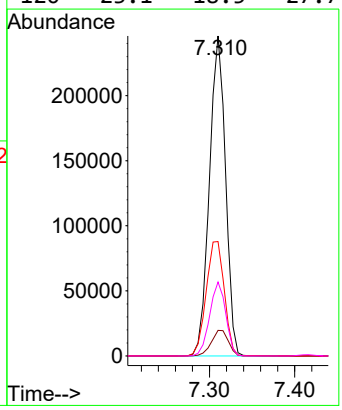


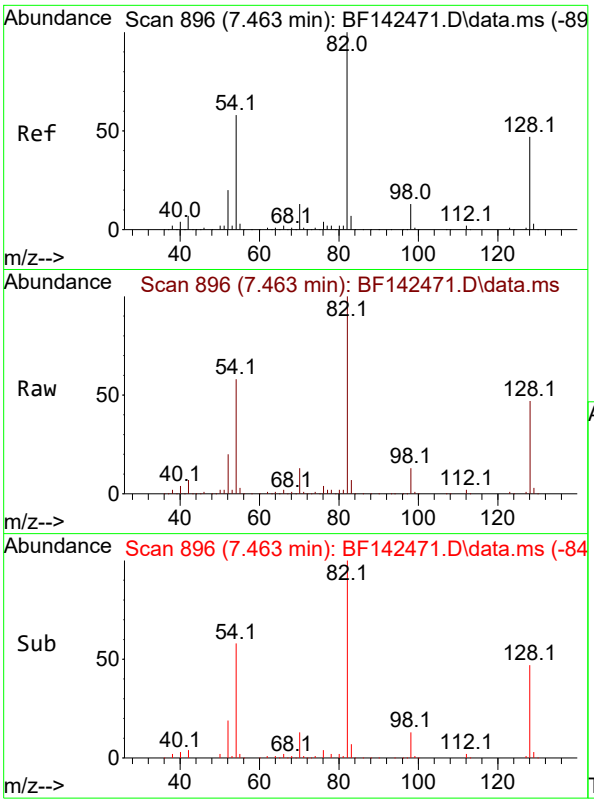


#22
Acetophenone
Concen: 38.740 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:105 Resp: 323676

Ion	Ratio	Lower	Upper
105	100		
71	8.0	6.4	9.6
51	35.7	28.6	42.8
120	23.1	18.5	27.7



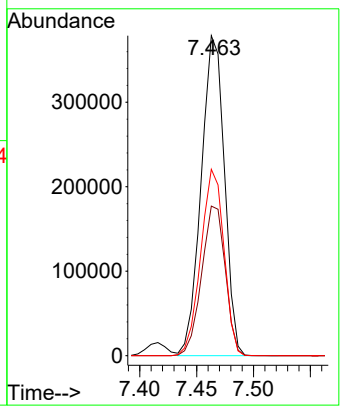


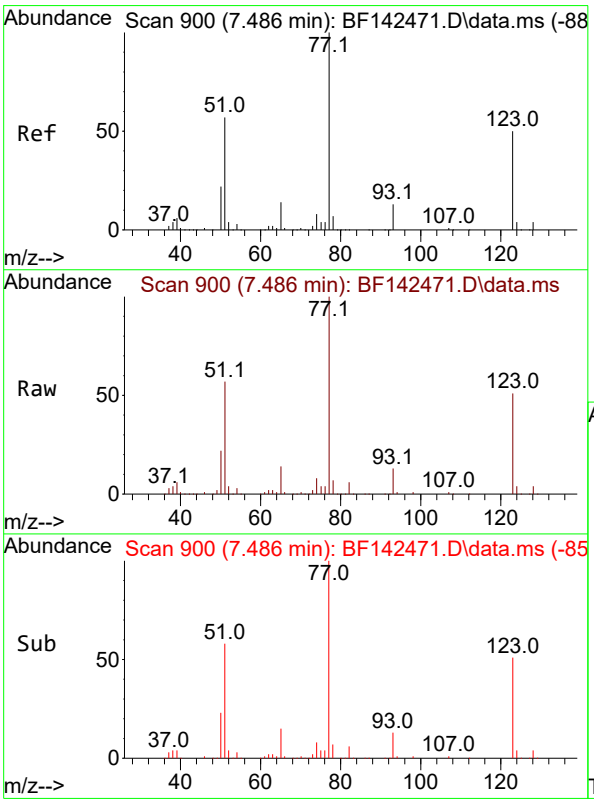
#23
Nitrobenzene-d5
Concen: 77.702 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 82 Resp: 537832

Ion	Ratio	Lower	Upper
82	100		
128	46.8	37.4	56.2
54	58.3	46.6	70.0

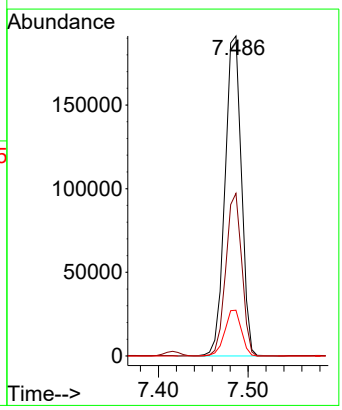


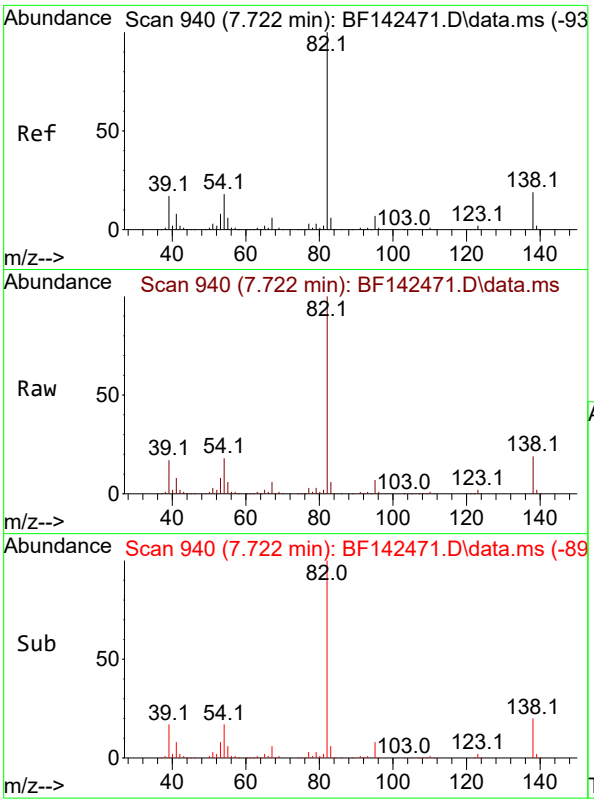


#24
Nitrobenzene
Concen: 38.996 ng
RT: 7.486 min Scan# 900
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 77 Resp: 243446

Ion	Ratio	Lower	Upper
77	100		
123	50.8	40.6	61.0
65	14.3	11.4	17.2



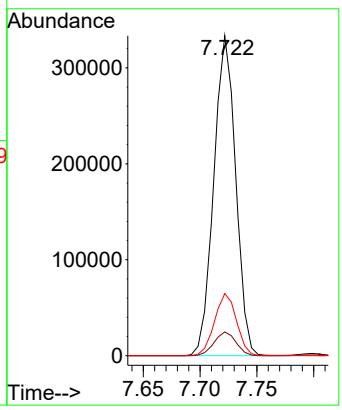


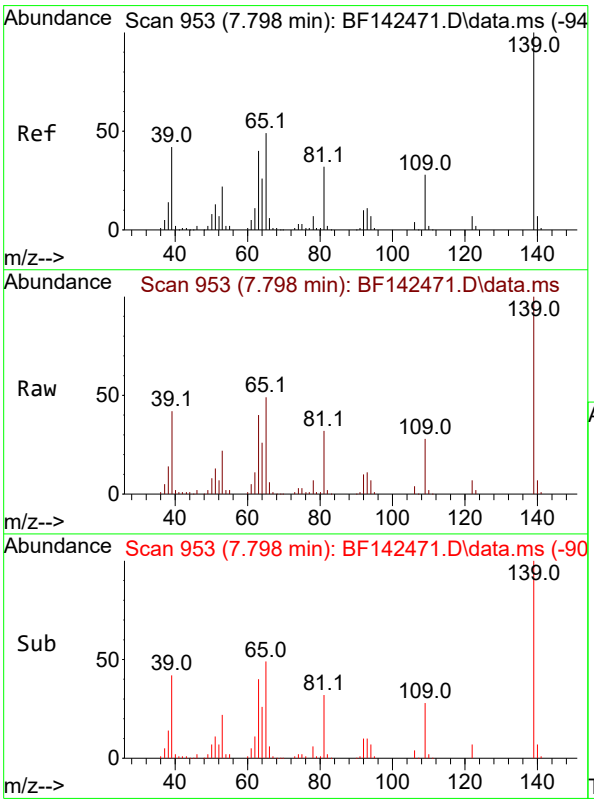
#25
Isophorone
Concen: 38.653 ng
RT: 7.722 min Scan# 94
Delta R.T. -0.012 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 82 Resp: 447323

Ion	Ratio	Lower	Upper
82	100		
95	7.5	6.0	9.0
138	19.4	15.5	23.3

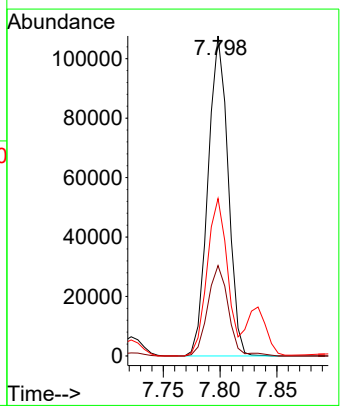


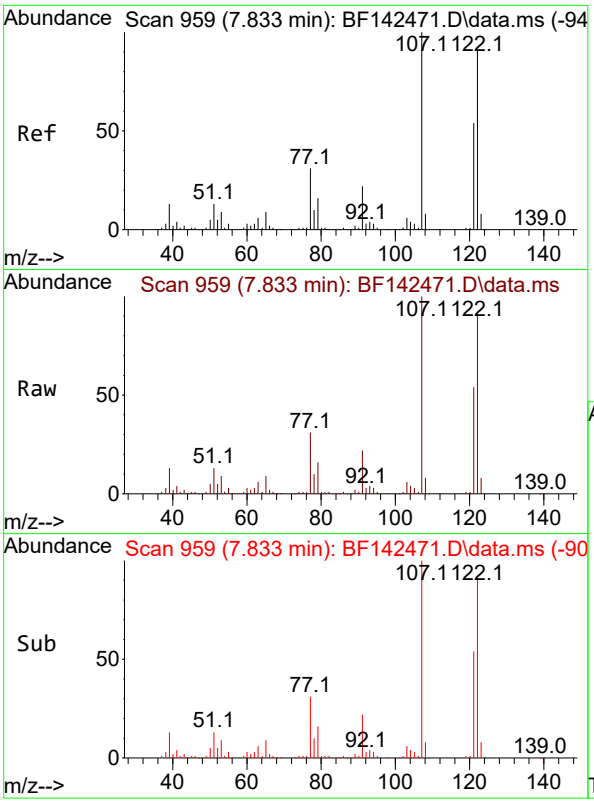


#26
2-Nitrophenol
Concen: 39.646 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:139 Resp: 132248

Ion	Ratio	Lower	Upper
139	100		
109	28.2	22.6	33.8
65	49.2	39.4	59.0



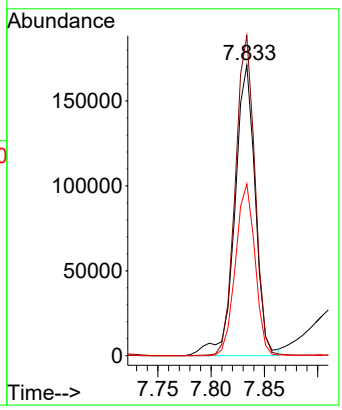


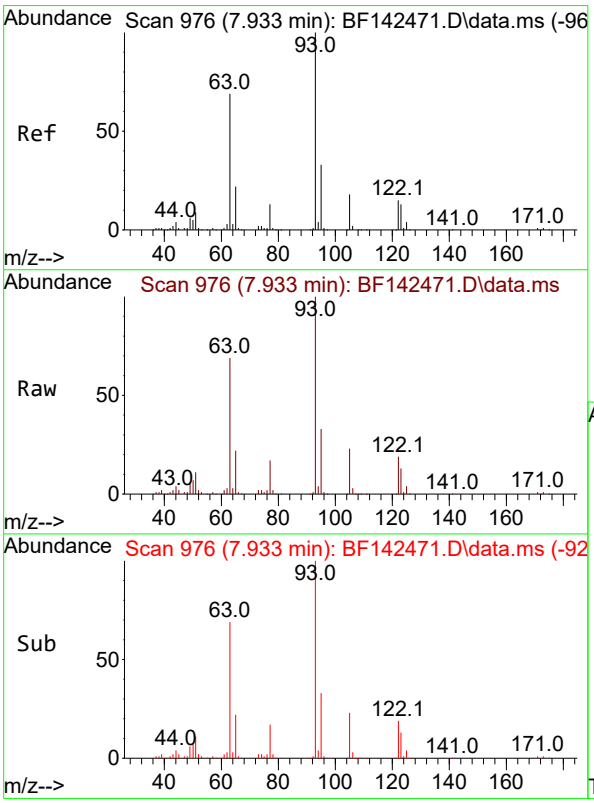
#27
2,4-Dimethylphenol
Concen: 38.858 ng
RT: 7.833 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:122 Resp: 228588

Ion	Ratio	Lower	Upper
122	100		
107	110.1	88.1	132.1
121	59.1	47.3	70.9

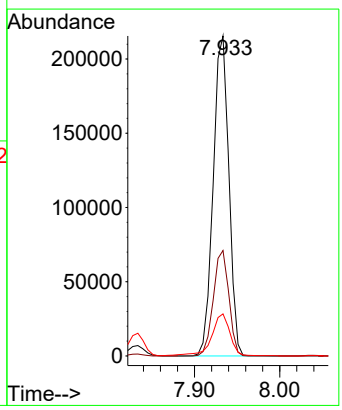


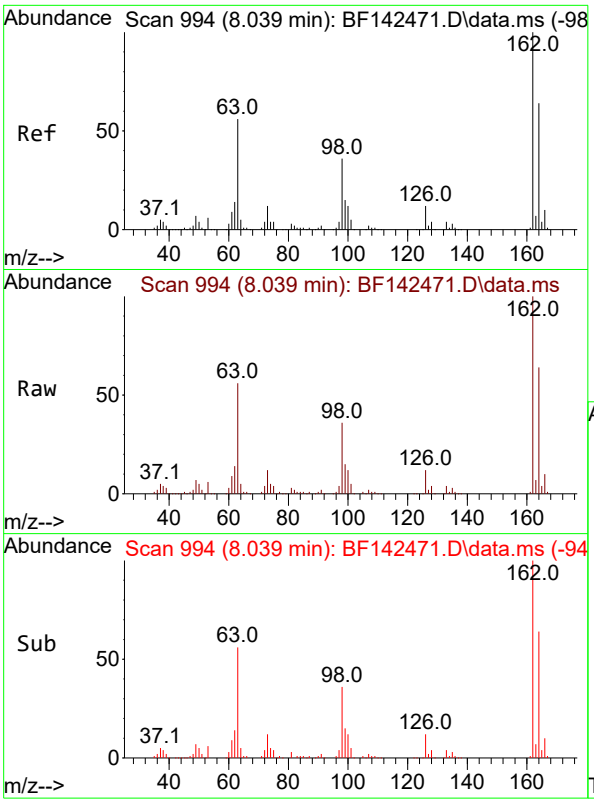


#28
bis(2-Chloroethoxy)methane
Concen: 38.002 ng
RT: 7.933 min Scan# 976
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 93 Resp: 274724

Ion	Ratio	Lower	Upper
93	100		
95	33.0	26.4	39.6
123	13.2	10.6	15.8



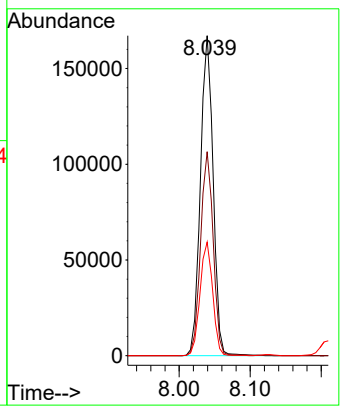


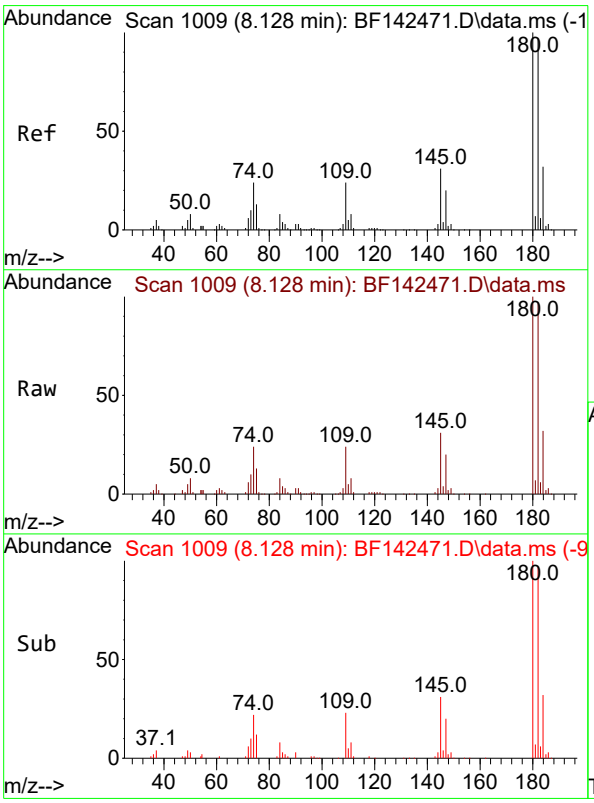
#29
2,4-Dichlorophenol
Concen: 38.963 ng
RT: 8.039 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:162 Resp: 208444

Ion	Ratio	Lower	Upper
162	100		
164	63.7	43.7	83.7
98	35.5	15.5	55.5

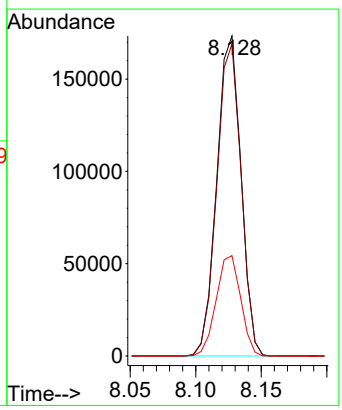


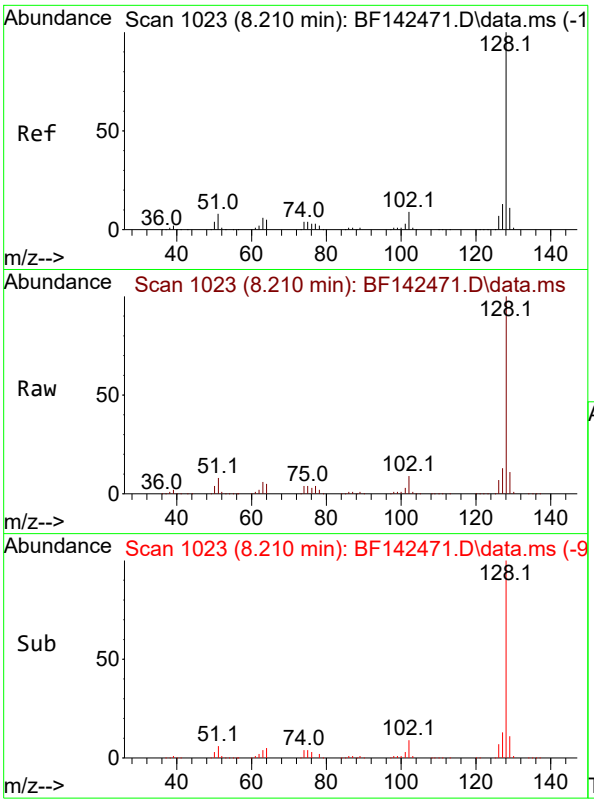


#30
1,2,4-Trichlorobenzene
Concen: 38.342 ng
RT: 8.128 min Scan# 1009
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:180 Resp: 222613

Ion	Ratio	Lower	Upper
180	100		
182	97.5	78.0	117.0
145	31.3	25.0	37.6



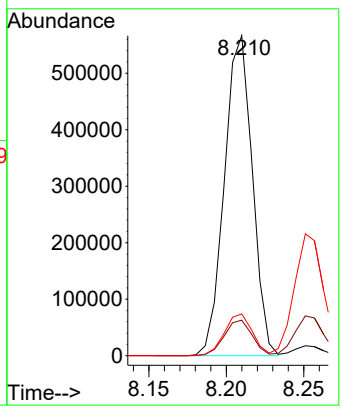


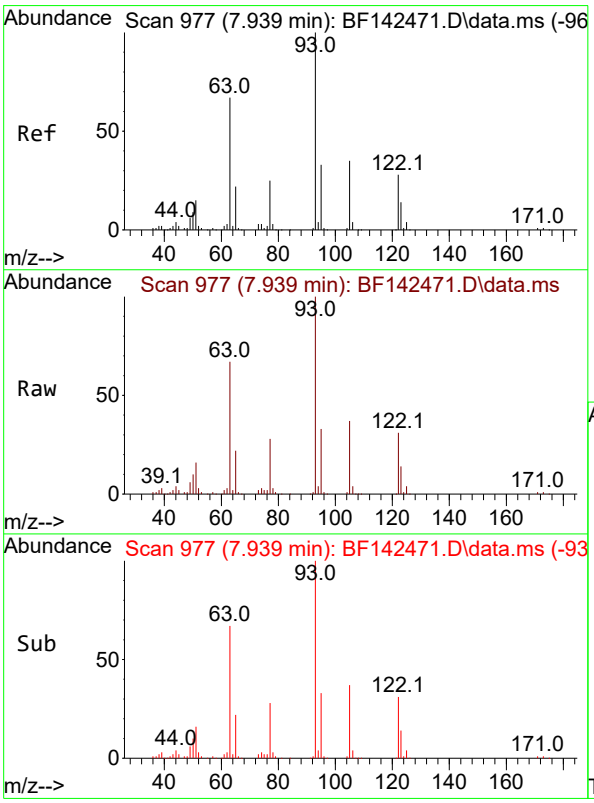
#31
Naphthalene
Concen: 38.223 ng
RT: 8.210 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:128 Resp: 710368

Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.9	13.3
127	13.1	10.5	15.7

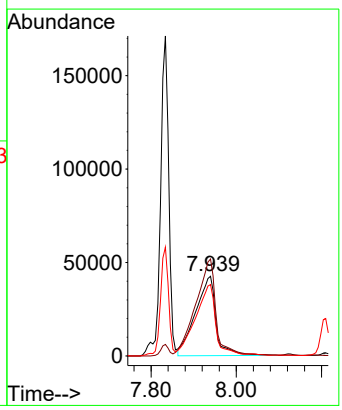


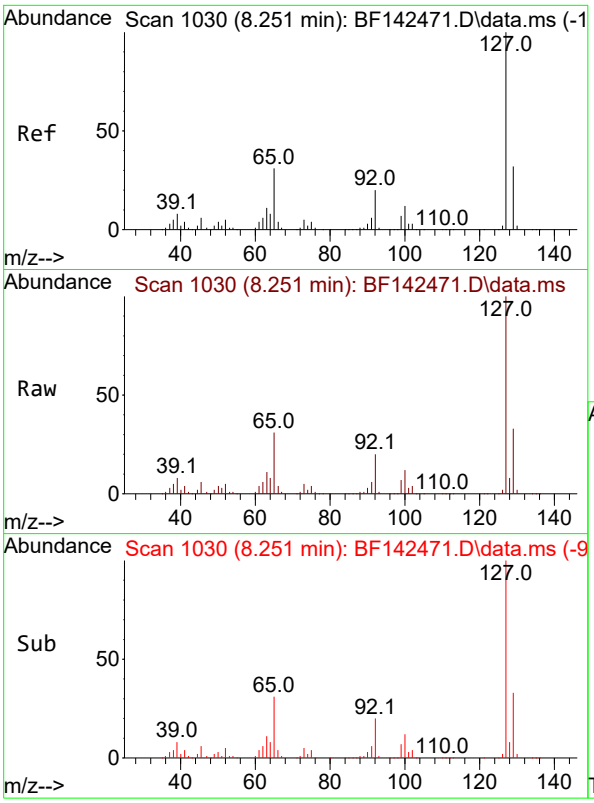


#32
Benzoic acid
Concen: 39.672 ng
RT: 7.939 min Scan# 977
Delta R.T. -0.036 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:122 Resp: 142061

Ion	Ratio	Lower	Upper
122	100		
105	121.7	101.7	141.7
77	89.5	69.5	109.5



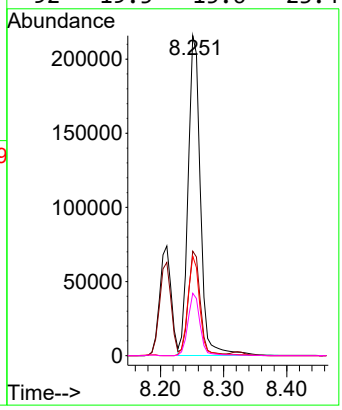


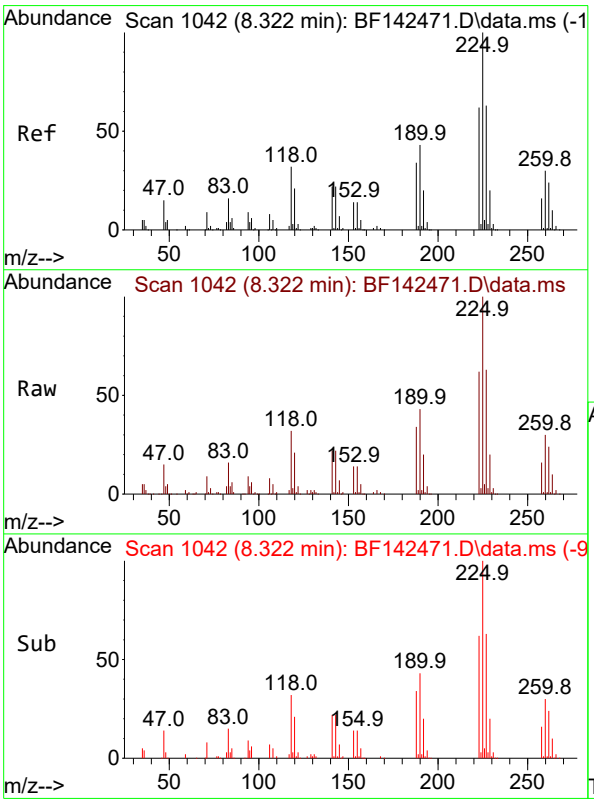
#33
4-Chloroaniline
Concen: 38.957 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:127 Resp: 293373

Ion	Ratio	Lower	Upper
127	100		
129	32.6	26.1	39.1
65	31.1	24.9	37.3
92	19.5	15.6	23.4

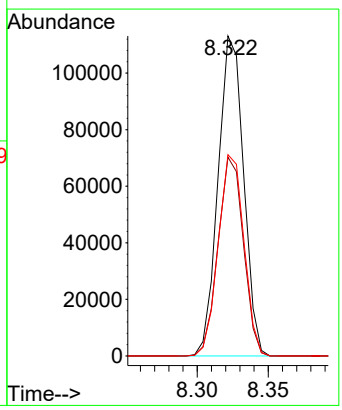


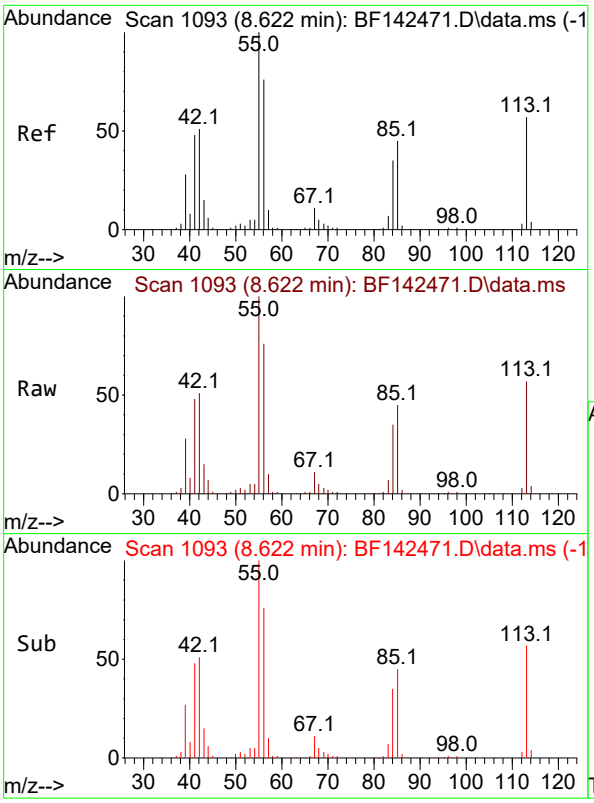


#34
Hexachlorobutadiene
Concen: 38.949 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:225 Resp: 141200

Ion	Ratio	Lower	Upper
225	100		
223	62.1	49.7	74.5
227	62.9	50.3	75.5



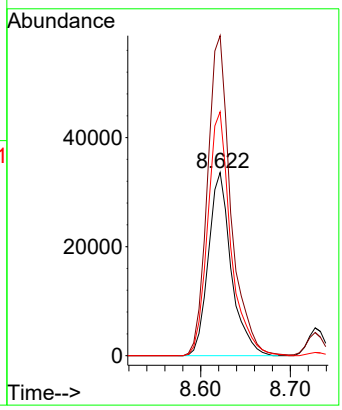


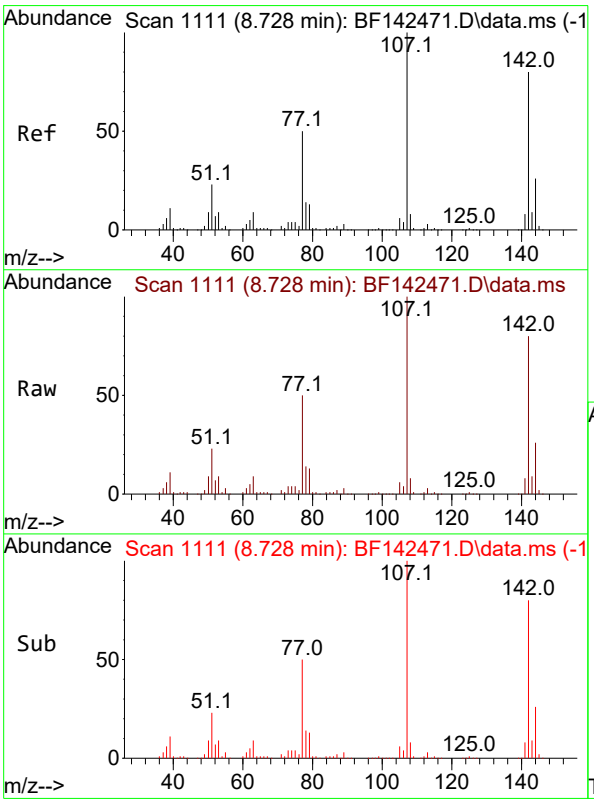
#35
Caprolactam
Concen: 39.473 ng
RT: 8.622 min Scan# 1
Delta R.T. -0.024 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:113 Resp: 59309

Ion	Ratio	Lower	Upper
113	100		
55	174.7	154.7	194.7
56	133.2	113.2	153.2

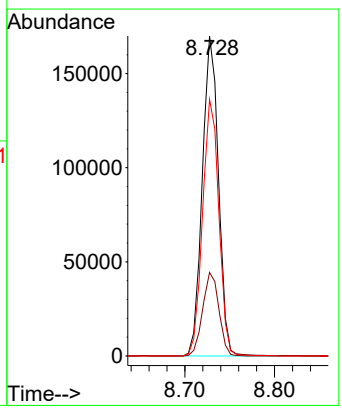


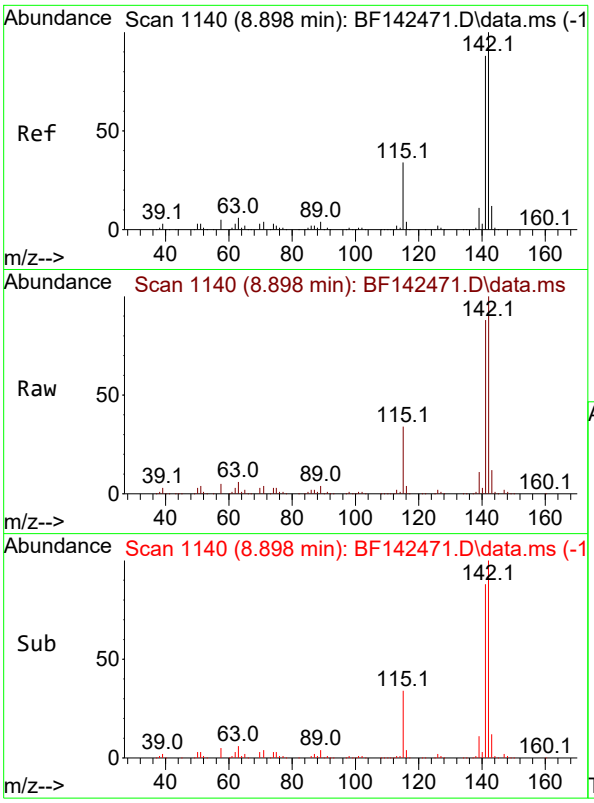


#36
4-Chloro-3-methylphenol
Concen: 38.800 ng
RT: 8.728 min Scan# 1111
Delta R.T. -0.012 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:107 Resp: 212728

Ion	Ratio	Lower	Upper
107	100		
144	26.1	20.9	31.3
142	80.2	64.2	96.2



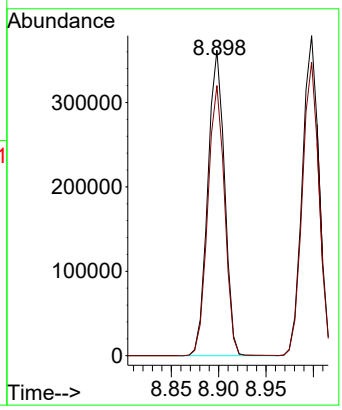


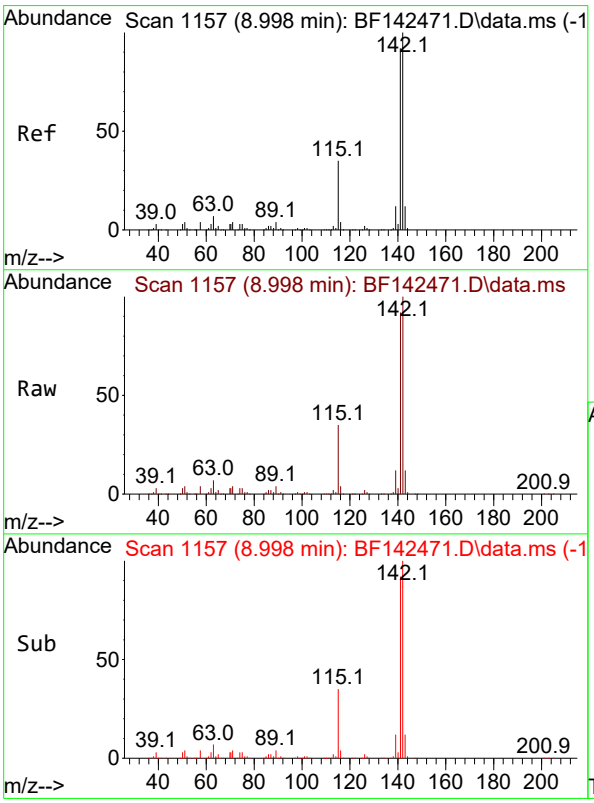
#37
2-Methylnaphthalene
Concen: 38.092 ng
RT: 8.898 min Scan# 11
Delta R.T. -0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:142 Resp: 445368

Ion	Ratio	Lower	Upper
142	100		
141	88.4	70.7	106.1

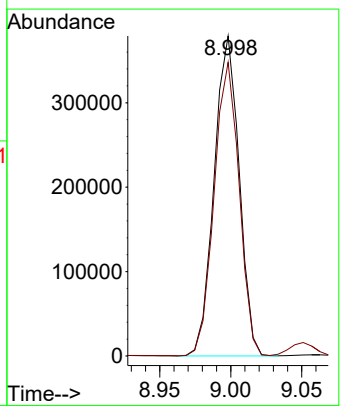


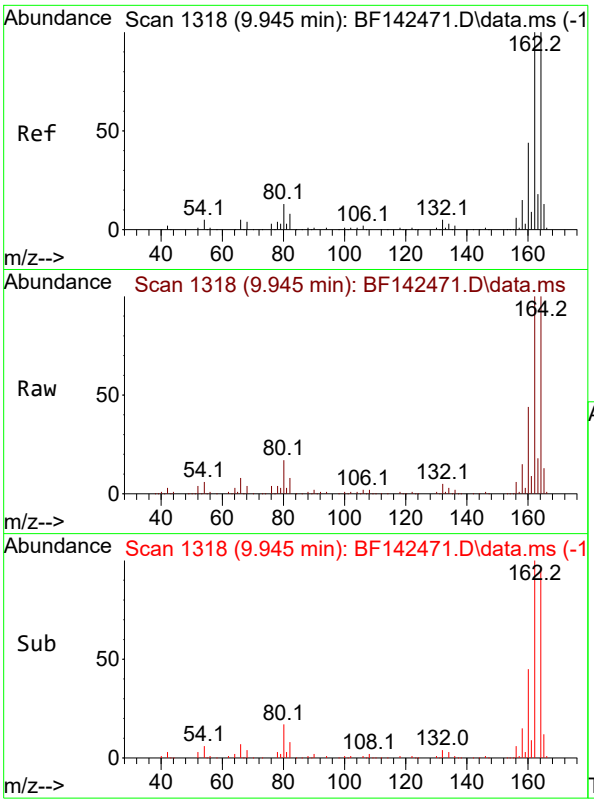


#38
1-Methylnaphthalene
Concen: 38.397 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:142 Resp: 464365

Ion	Ratio	Lower	Upper
142	100		
141	91.8	73.4	110.2



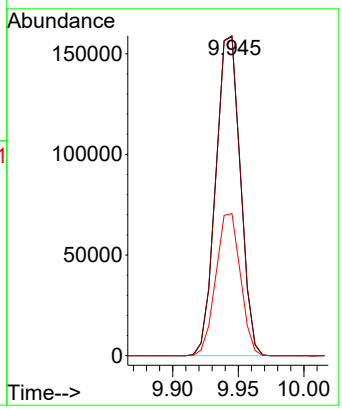


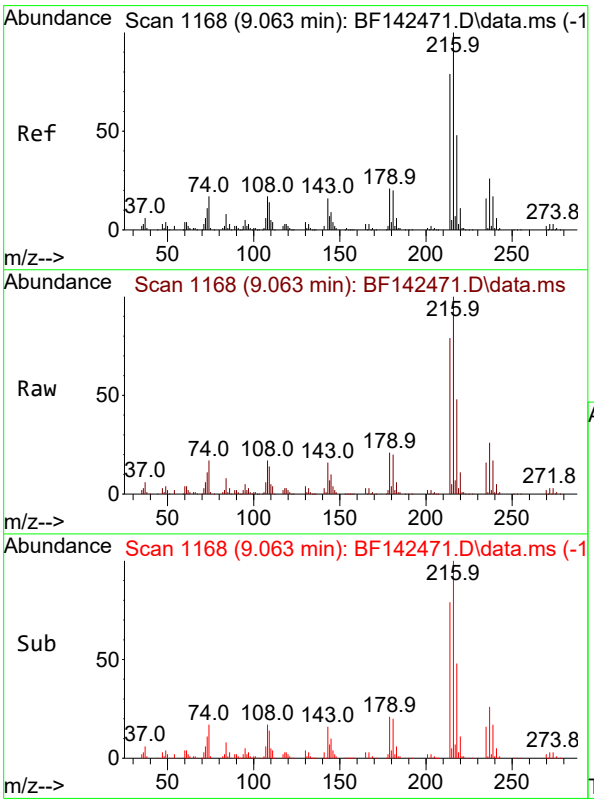
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.945 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:164 Resp: 206343

Ion	Ratio	Lower	Upper
164	100		
162	100.3	80.2	120.4
160	44.5	35.6	53.4

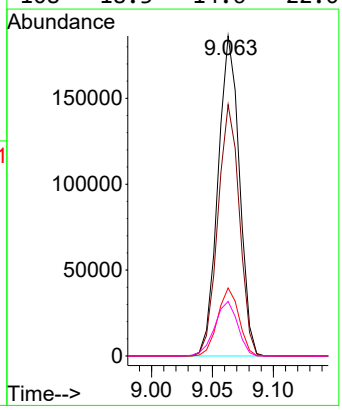


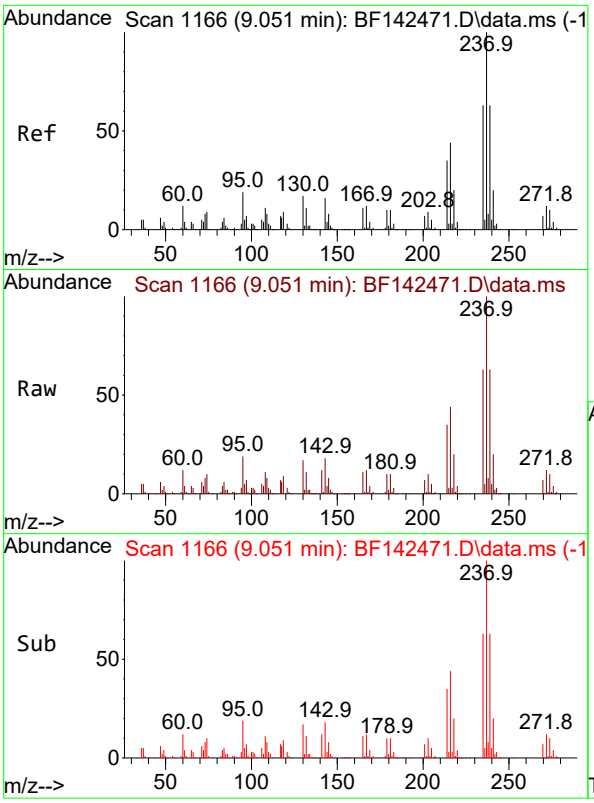


#40
1,2,4,5-Tetrachlorobenzene
Concen: 38.439 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:216 Resp: 227685

Ion	Ratio	Lower	Upper
216	100		
214	78.6	62.9	94.3
179	21.1	16.9	25.3
108	18.3	14.6	22.0



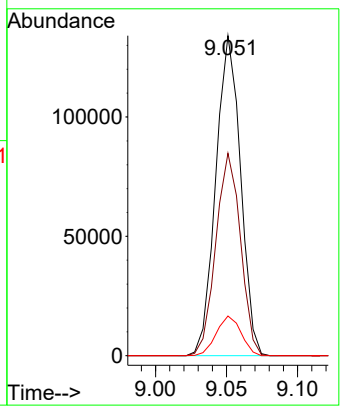


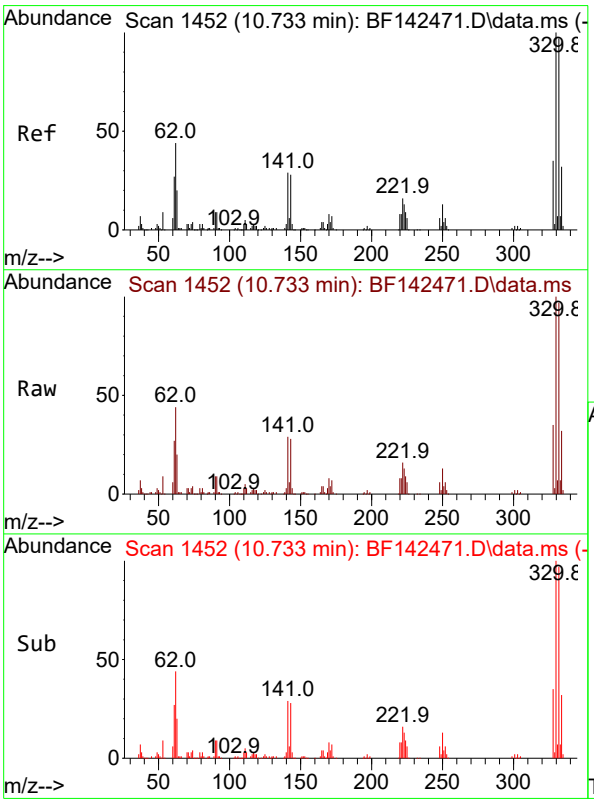
#41
Hexachlorocyclopentadiene
Concen: 40.622 ng
RT: 9.051 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:237 Resp: 162314

Ion	Ratio	Lower	Upper
237	100		
235	63.3	43.3	83.3
272	12.4	0.0	32.4

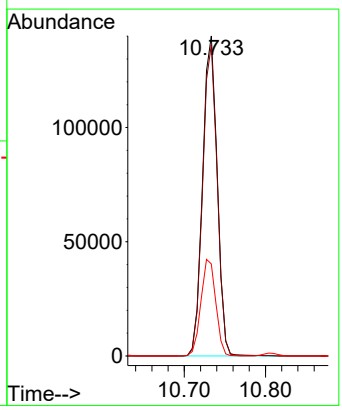


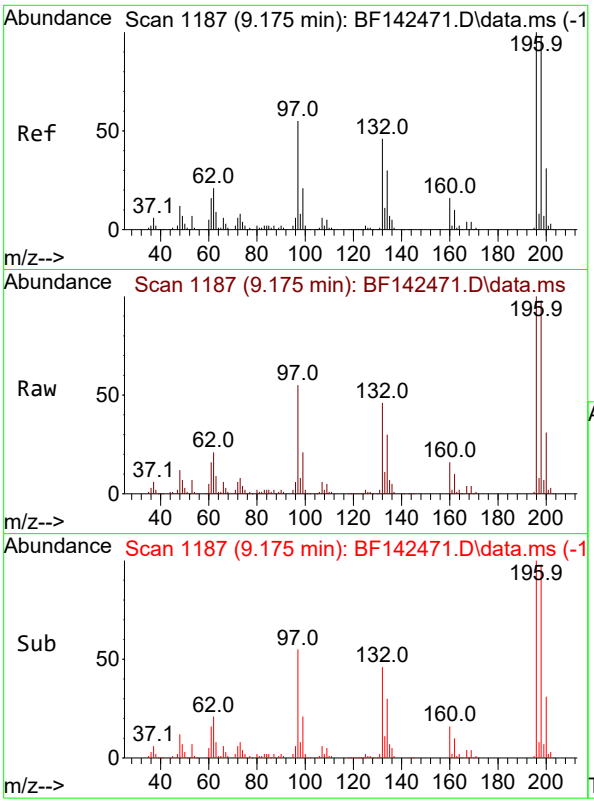


#42
2,4,6-Tribromophenol
Concen: 76.189 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:330 Resp: 174483

Ion	Ratio	Lower	Upper
330	100		
332	97.0	77.6	116.4
141	30.7	24.6	36.8



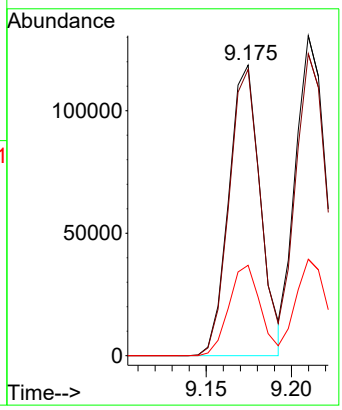


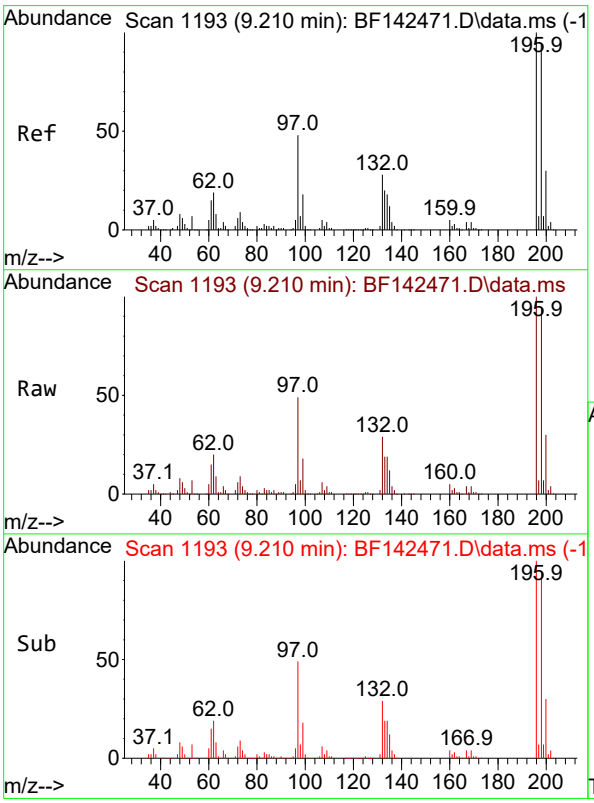
#43
2,4,6-Trichlorophenol
Concen: 38.383 ng
RT: 9.175 min Scan# 11
Delta R.T. -0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:196 Resp: 153308

Ion	Ratio	Lower	Upper
196	100		
198	98.5	78.8	118.2
200	31.1	24.9	37.3

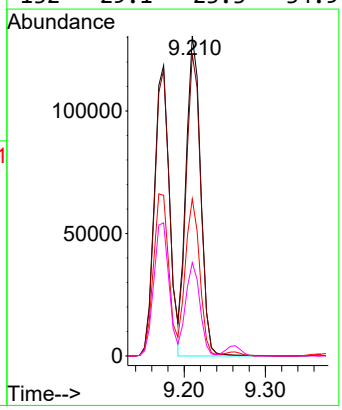


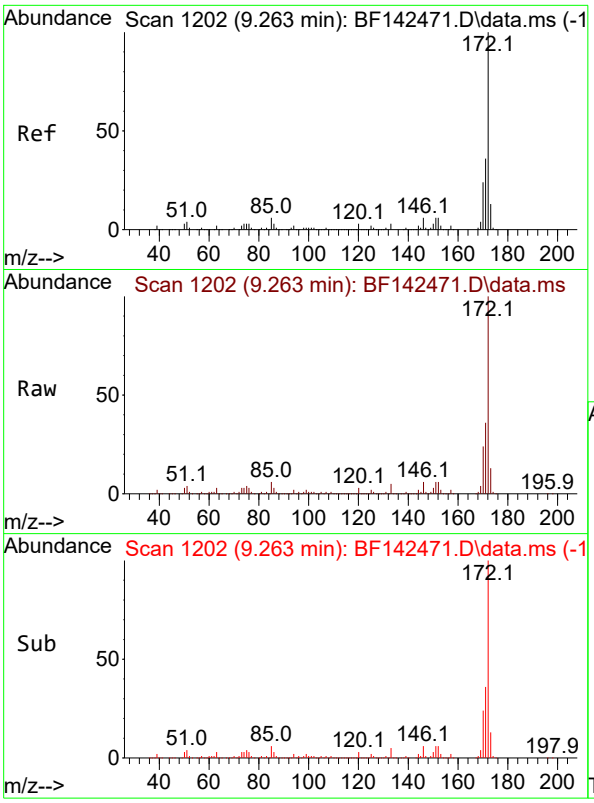


#44
2,4,5-Trichlorophenol
Concen: 38.667 ng
RT: 9.210 min Scan# 1193
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:196 Resp: 162880

Ion	Ratio	Lower	Upper
196	100		
198	94.4	75.5	113.3
97	49.1	39.3	58.9
132	29.1	23.3	34.9



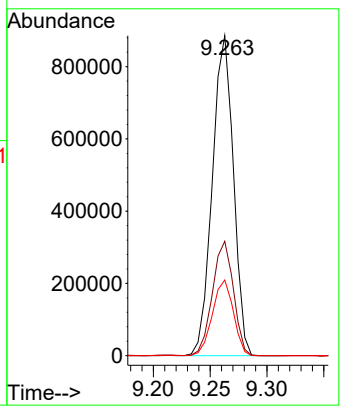


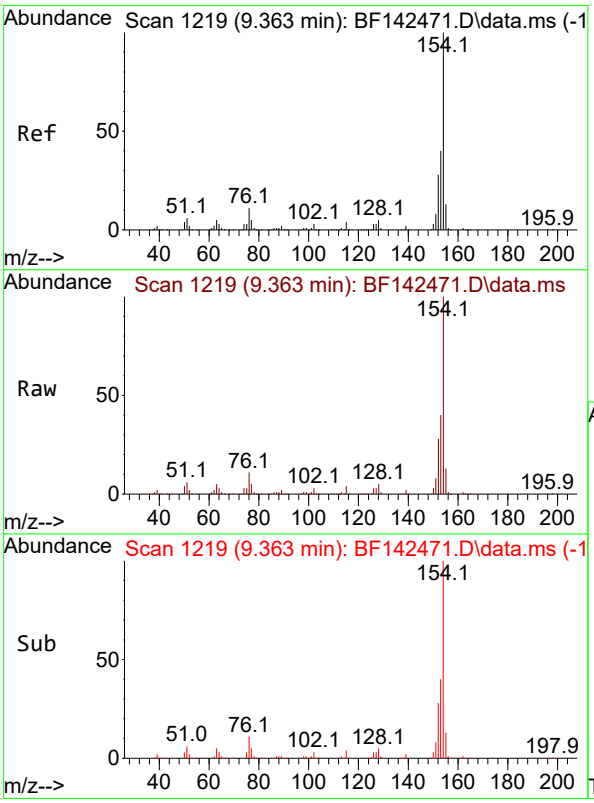
#45
2-Fluorobiphenyl
Concen: 74.452 ng
RT: 9.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:172 Resp: 1144883

Ion	Ratio	Lower	Upper
172	100		
171	35.7	28.6	42.8
170	23.6	18.9	28.3

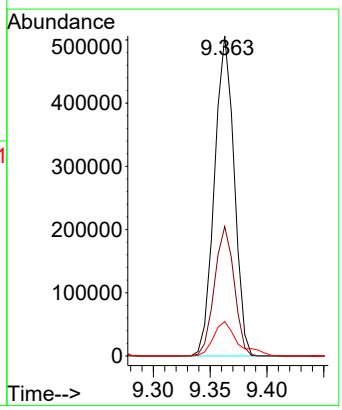


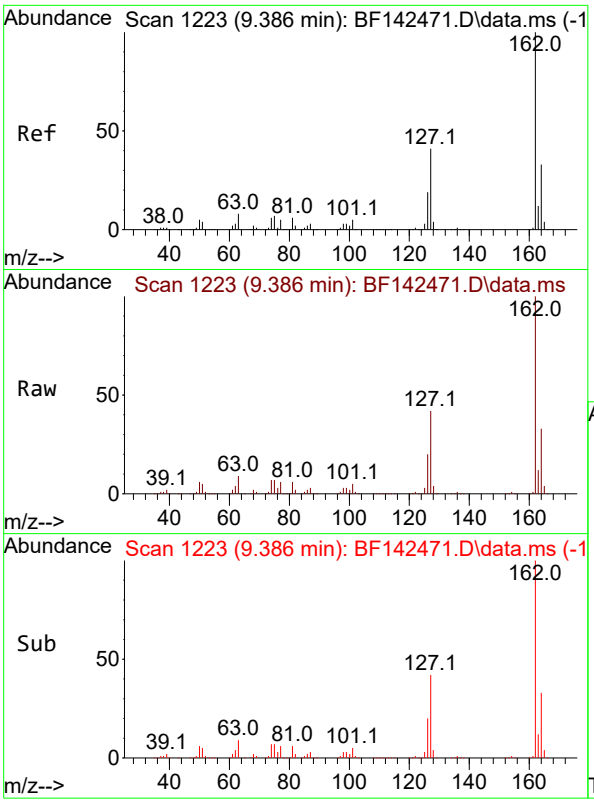


#46
1,1'-Biphenyl
Concen: 38.146 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:154 Resp: 610663

Ion	Ratio	Lower	Upper
154	100		
153	40.4	20.4	60.4
76	10.8	0.0	30.8



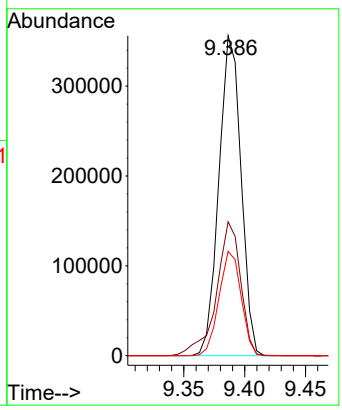


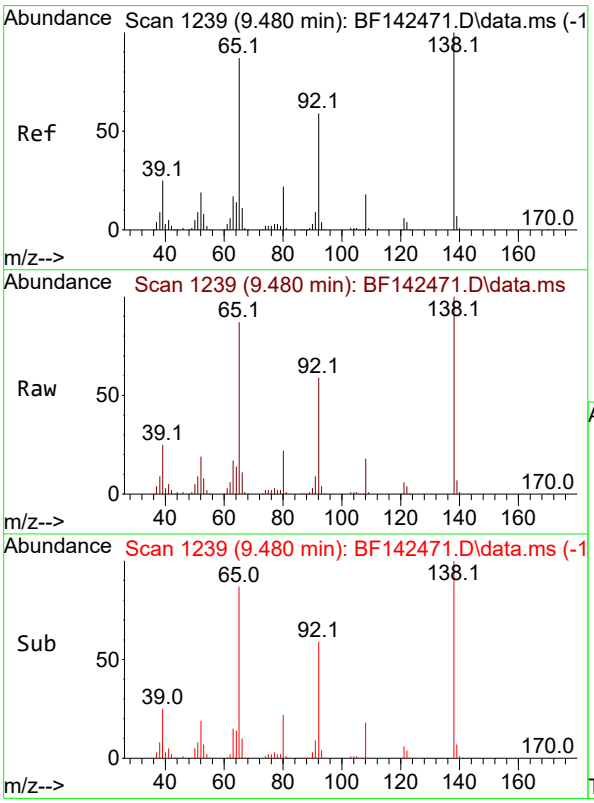
#47
2-Chloronaphthalene
Concen: 38.185 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:162 Resp: 451638

Ion	Ratio	Lower	Upper
162	100		
127	41.9	33.5	50.3
164	32.6	26.1	39.1

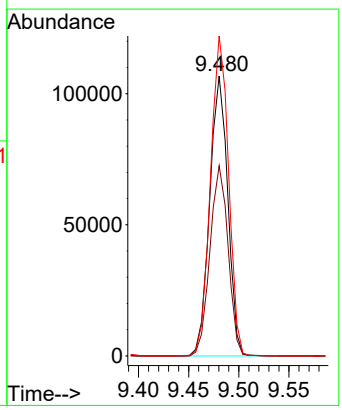


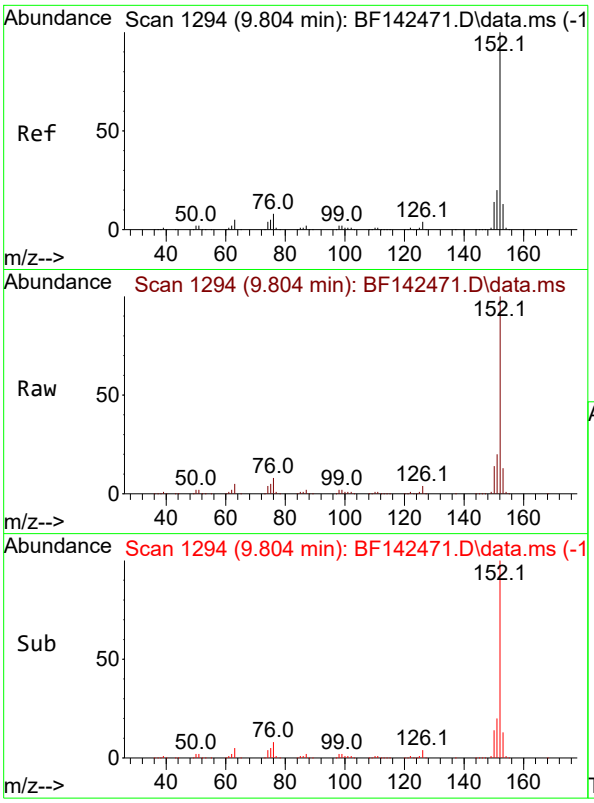


#48
2-Nitroaniline
Concen: 39.102 ng
RT: 9.480 min Scan# 1239
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion: 65 Resp: 133679

Ion	Ratio	Lower	Upper
65	100		
92	68.0	54.4	81.6
138	114.3	91.4	137.2



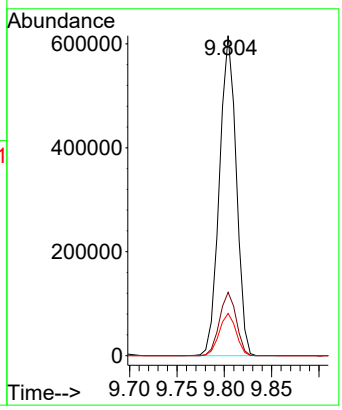


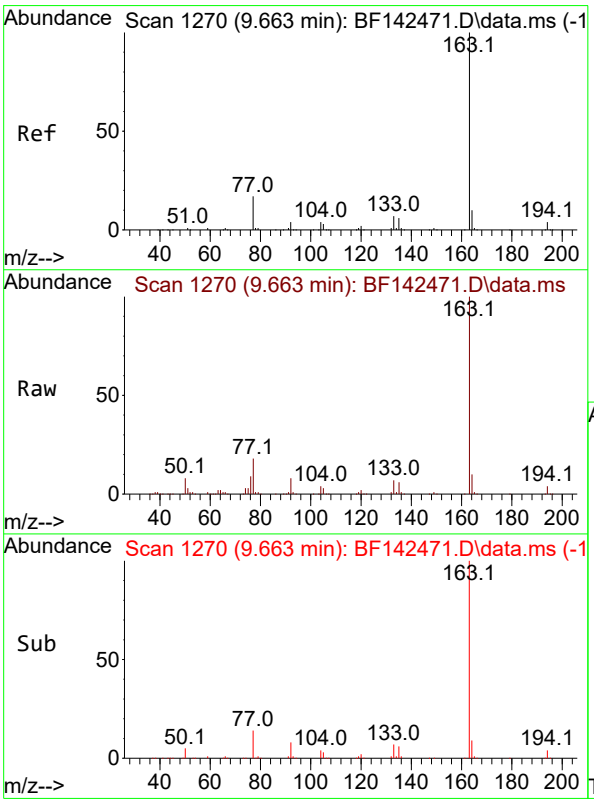
#49
Acenaphthylene
Concen: 38.240 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:152 Resp: 763730

Ion	Ratio	Lower	Upper
152	100		
151	19.8	15.8	23.8
153	13.2	10.6	15.8

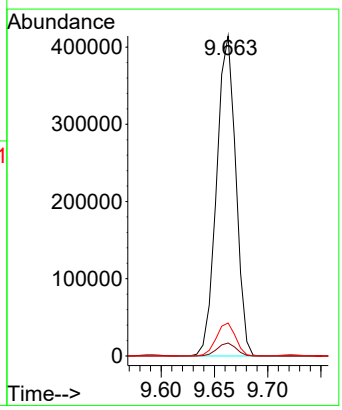


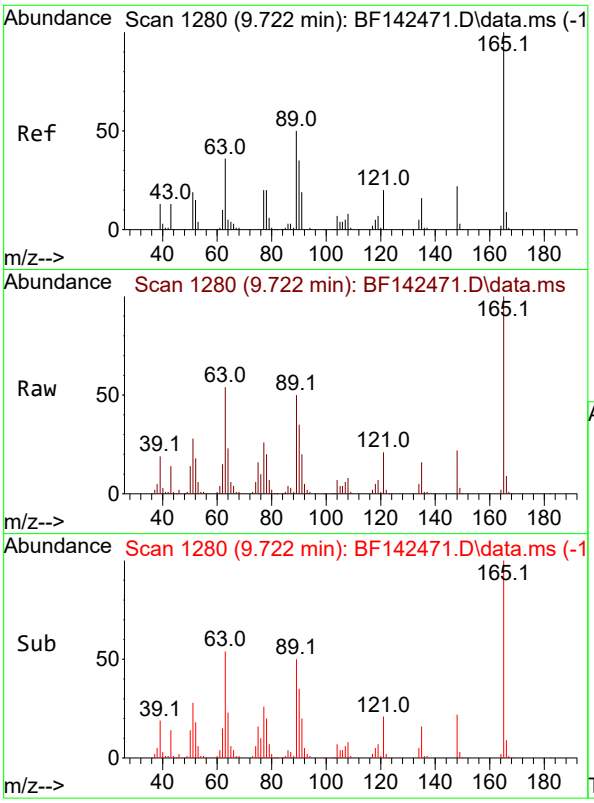


#50
Dimethylphthalate
Concen: 38.051 ng
RT: 9.663 min Scan# 1270
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:163 Resp: 518078

Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.3	4.9
164	10.3	8.2	12.4



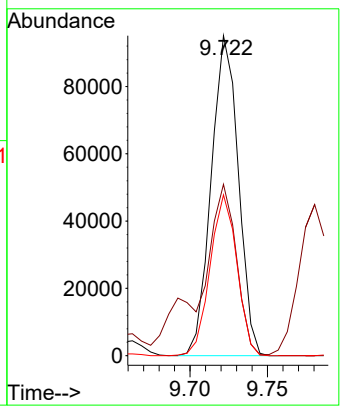


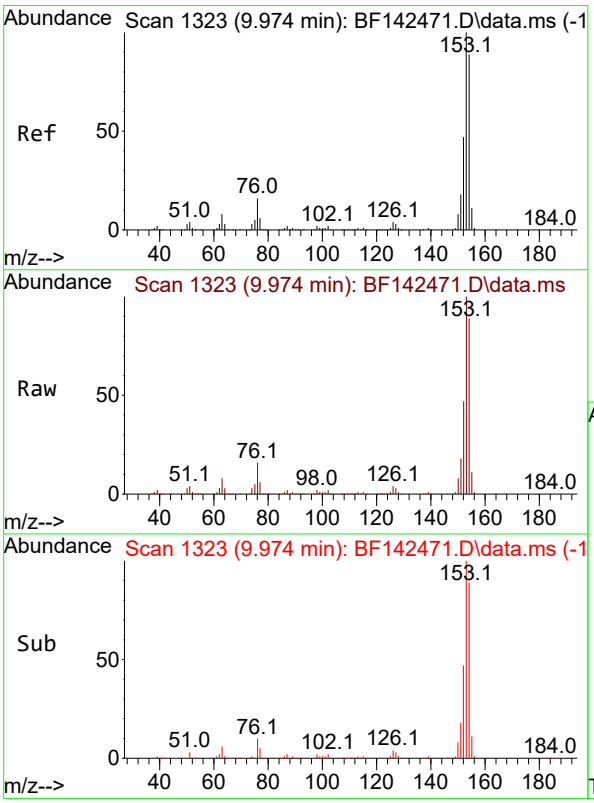
#51
2,6-Dinitrotoluene
Concen: 39.370 ng
RT: 9.722 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:165 Resp: 115691

Ion	Ratio	Lower	Upper
165	100		
63	53.6	42.9	64.3
89	50.3	40.2	60.4

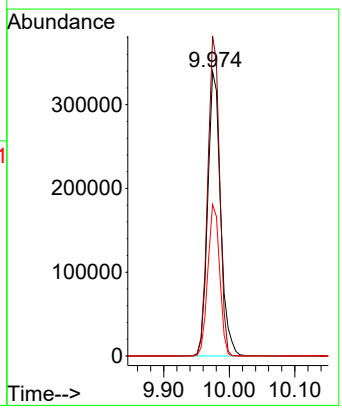


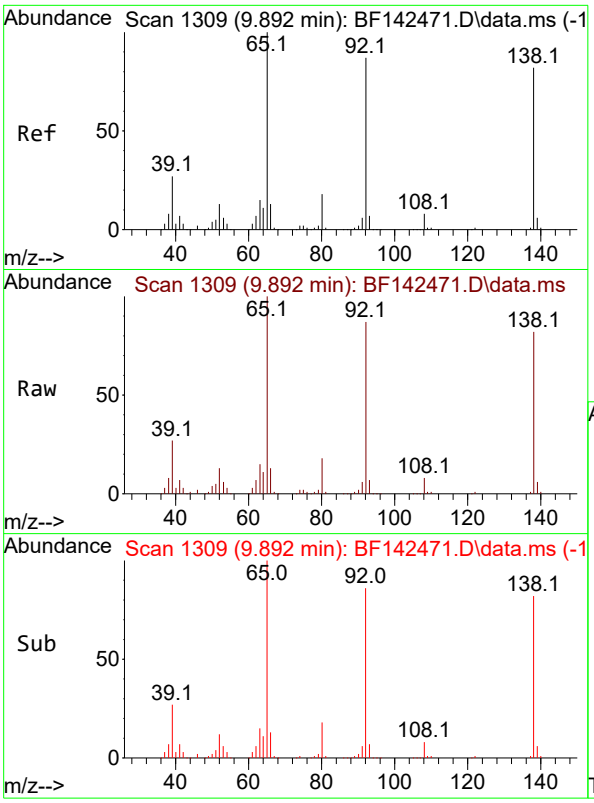


#52
Acenaphthene
Concen: 37.904 ng
RT: 9.974 min Scan# 1323
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:154 Resp: 462249

Ion	Ratio	Lower	Upper
154	100		
153	112.5	90.0	135.0
152	53.3	42.6	64.0



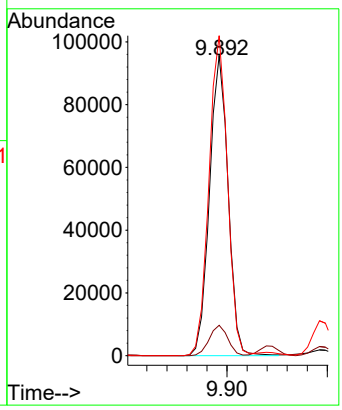


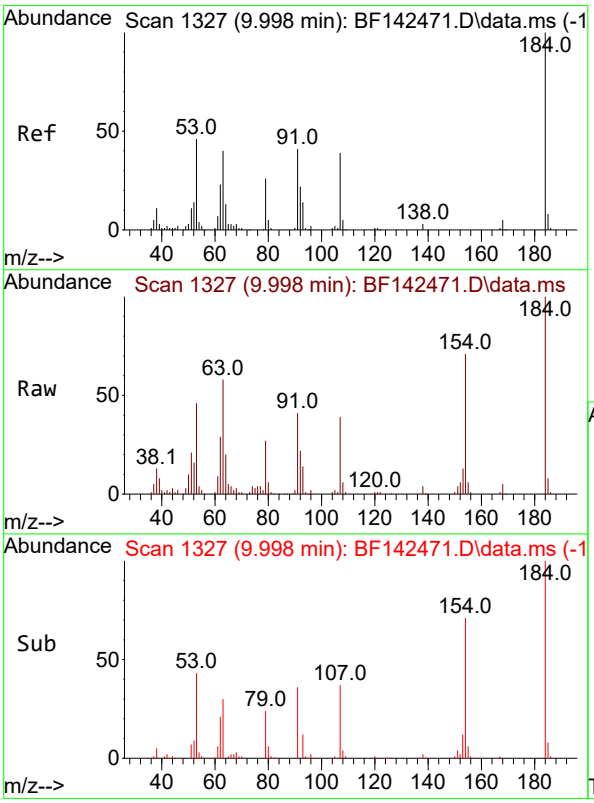
#53
3-Nitroaniline
Concen: 38.413 ng
RT: 9.892 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:138 Resp: 123293

Ion	Ratio	Lower	Upper
138	100		
108	10.1	8.1	12.1
92	106.5	85.2	127.8

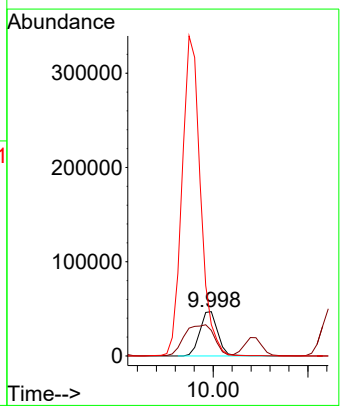


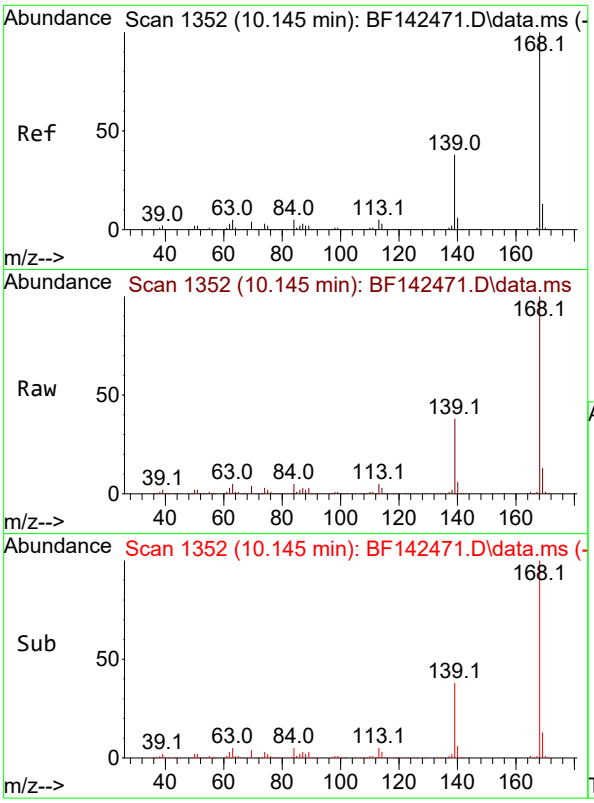


#54
2,4-Dinitrophenol
Concen: 40.477 ng
RT: 9.998 min Scan# 1327
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:184 Resp: 61452

Ion	Ratio	Lower	Upper
184	100		
63	57.9	46.3	69.5
154	71.0	56.8	85.2



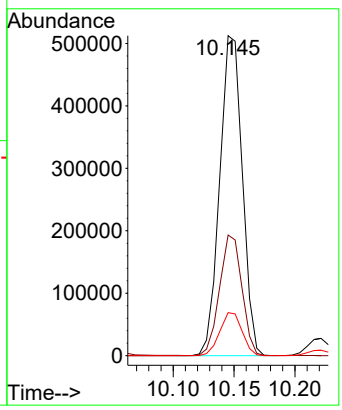


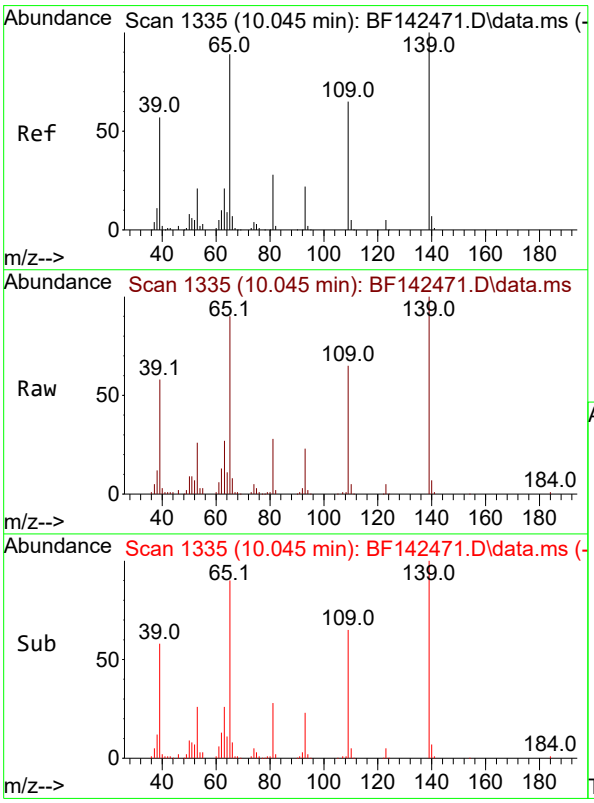
#55
Dibenzofuran
Concen: 37.758 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:168 Resp: 662626

Ion	Ratio	Lower	Upper
168	100		
139	37.7	30.2	45.2
169	13.4	10.7	16.1

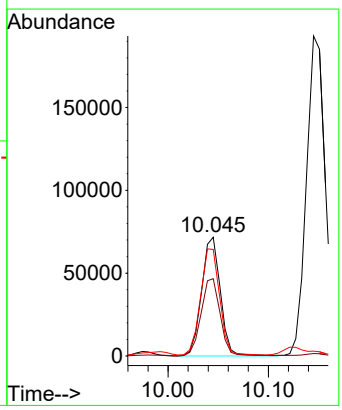


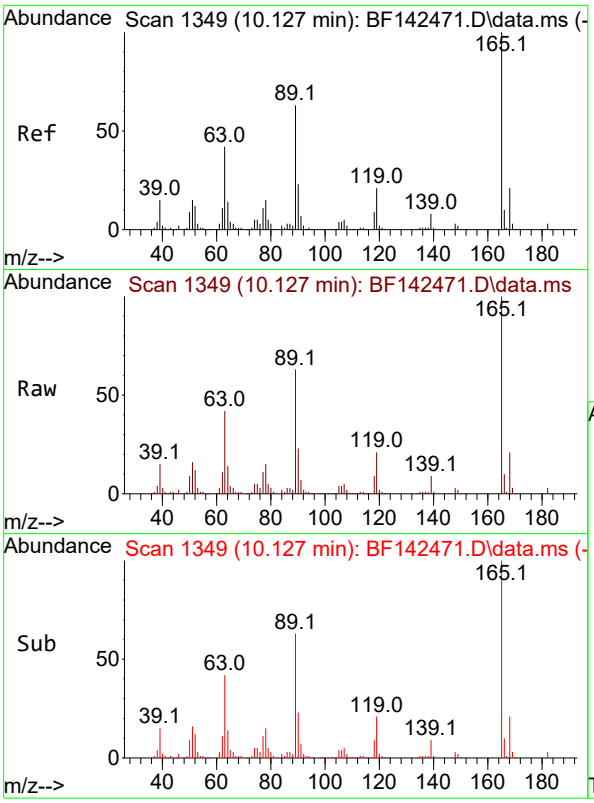


#56
4-Nitrophenol
Concen: 39.526 ng
RT: 10.045 min Scan# 1335
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:139 Resp: 93606

Ion	Ratio	Lower	Upper
139	100		
109	65.1	45.1	85.1
65	89.7	69.7	109.7



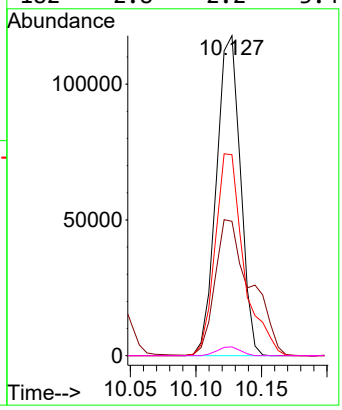


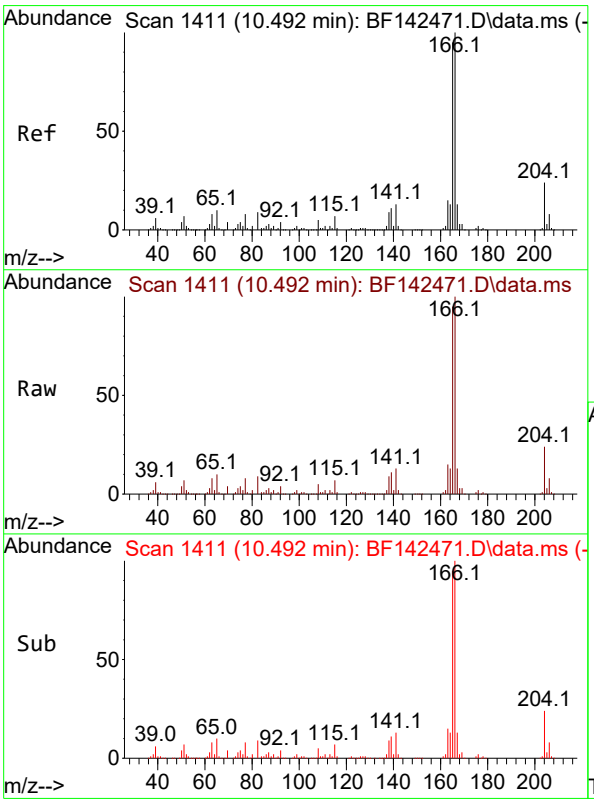
#57
2,4-Dinitrotoluene
Concen: 39.095 ng
RT: 10.127 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:165 Resp: 150036

Ion	Ratio	Lower	Upper
165	100		
63	42.0	33.6	50.4
89	62.8	50.2	75.4
182	2.8	2.2	3.4

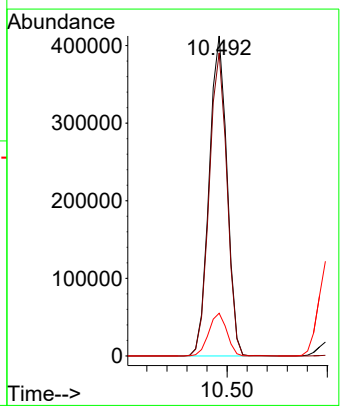


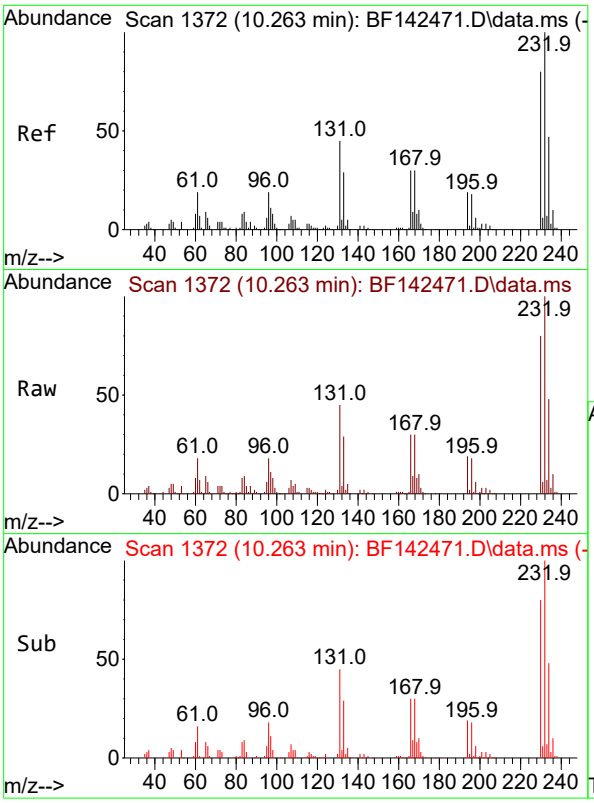


#58
Fluorene
Concen: 37.457 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:166 Resp: 507836

Ion	Ratio	Lower	Upper
166	100		
165	94.8	75.8	113.8
167	13.3	10.6	16.0



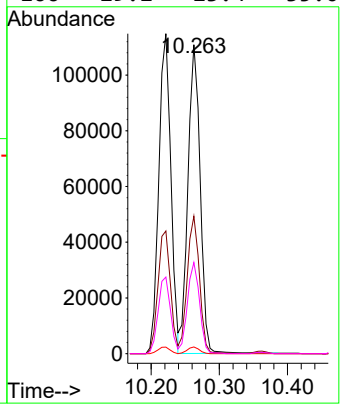


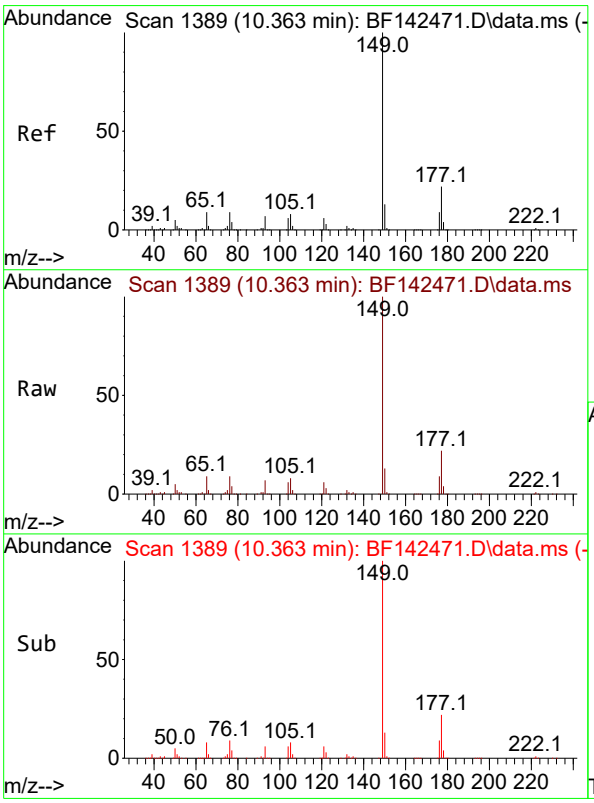
#59
2,3,4,6-Tetrachlorophenol
Concen: 39.022 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:232 Resp: 137225

Ion	Ratio	Lower	Upper
232	100		
131	44.0	35.2	52.8
130	2.1	1.7	2.5
166	29.2	23.4	35.0

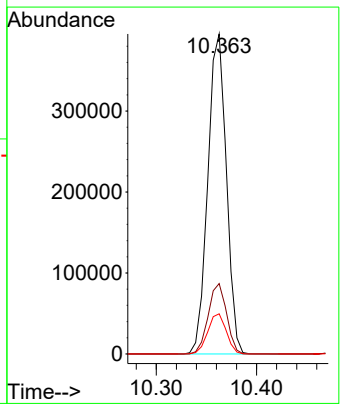


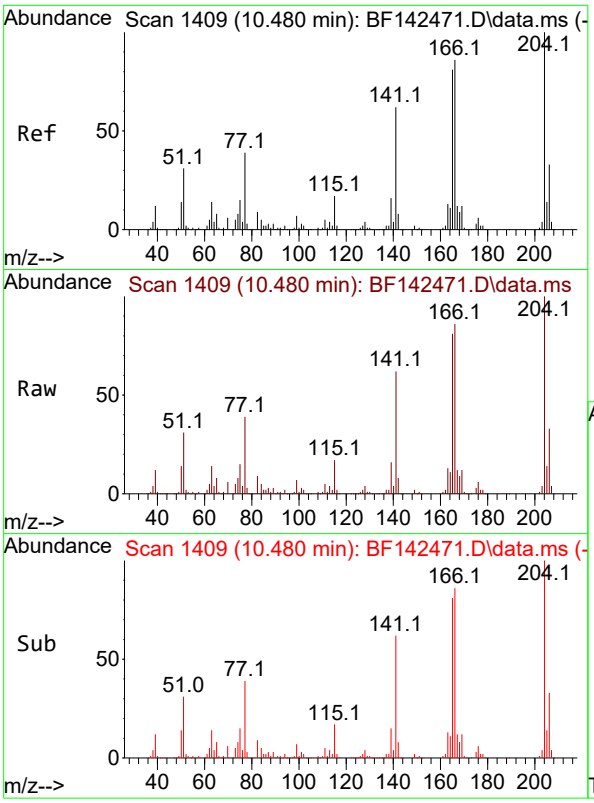


#60
Diethylphthalate
Concen: 38.217 ng
RT: 10.363 min Scan# 1389
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:149 Resp: 508183

Ion	Ratio	Lower	Upper
149	100		
177	22.0	17.6	26.4
150	12.6	10.1	15.1



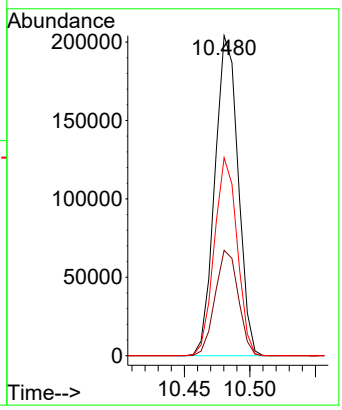


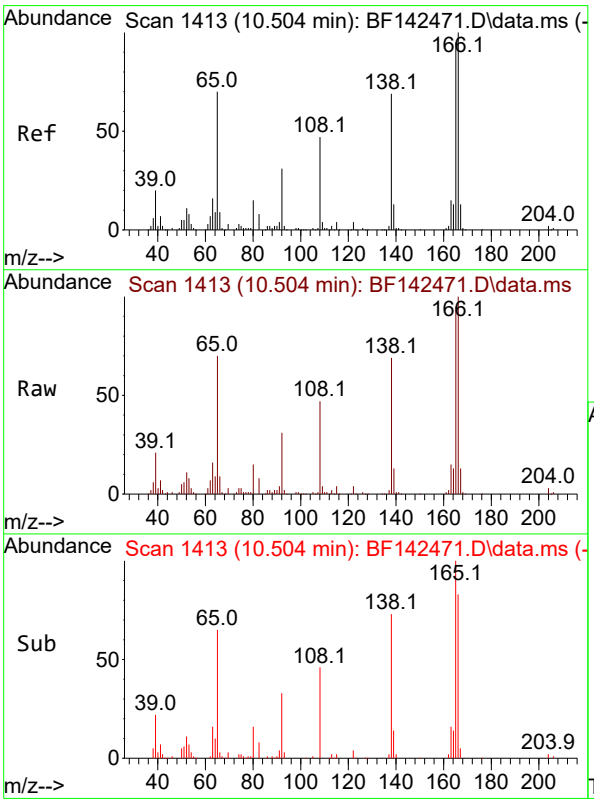
#61
4-Chlorophenyl-phenylether
Concen: 37.706 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:204 Resp: 251129

Ion	Ratio	Lower	Upper
204	100		
206	32.9	26.3	39.5
141	61.9	49.5	74.3

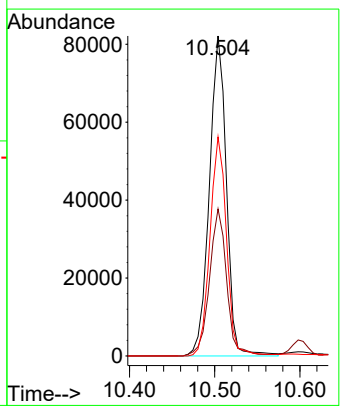


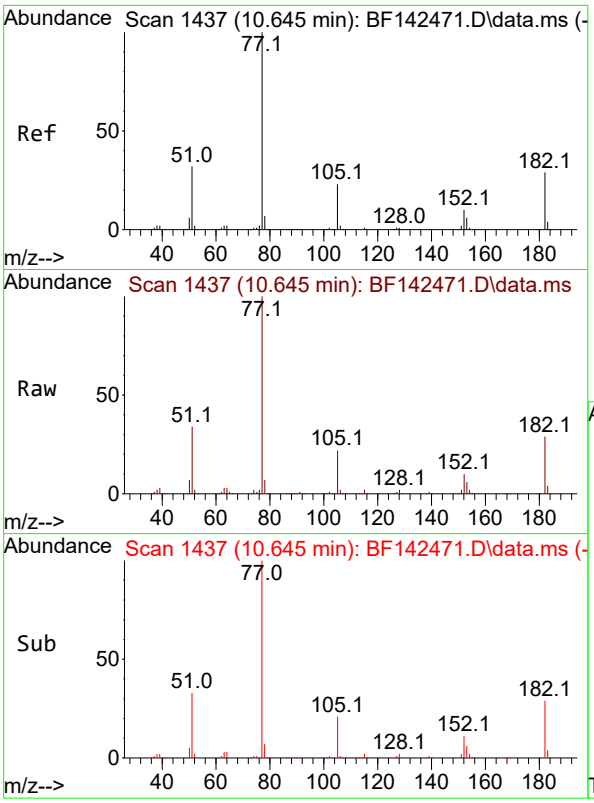


#62
4-Nitroaniline
Concen: 39.253 ng
RT: 10.504 min Scan# 1413
Delta R.T. -0.012 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:138 Resp: 114265

Ion	Ratio	Lower	Upper
138	100		
92	46.0	26.0	66.0
108	68.4	48.4	88.4



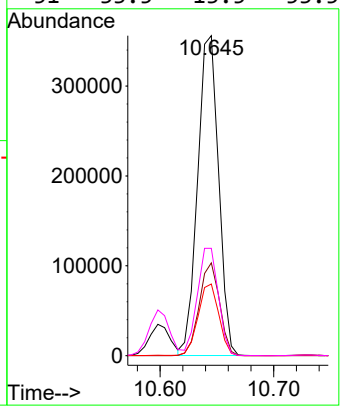


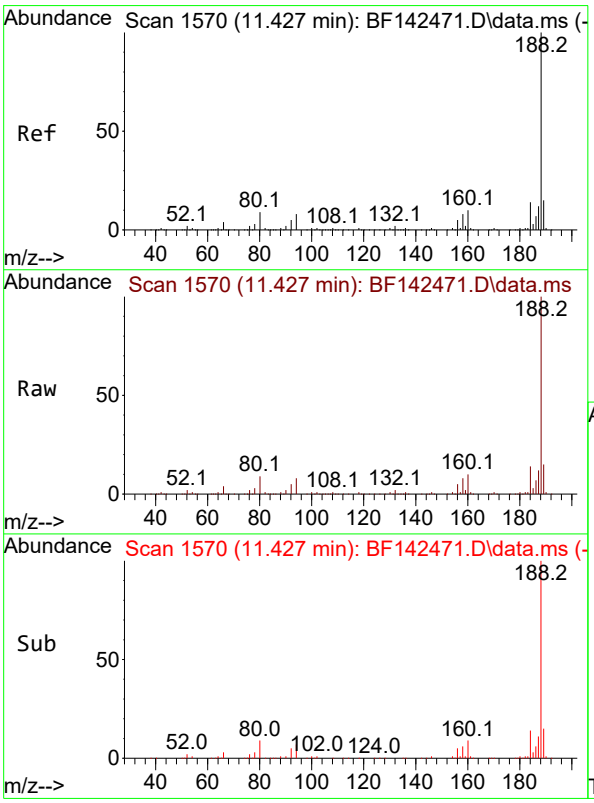
#63
Azobenzene
Concen: 38.246 ng
RT: 10.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion: 77 Resp: 456781

Ion	Ratio	Lower	Upper
77	100		
182	29.0	9.0	49.0
105	22.4	2.4	42.4
51	33.5	13.5	53.5

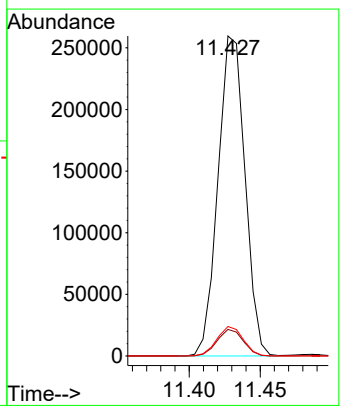


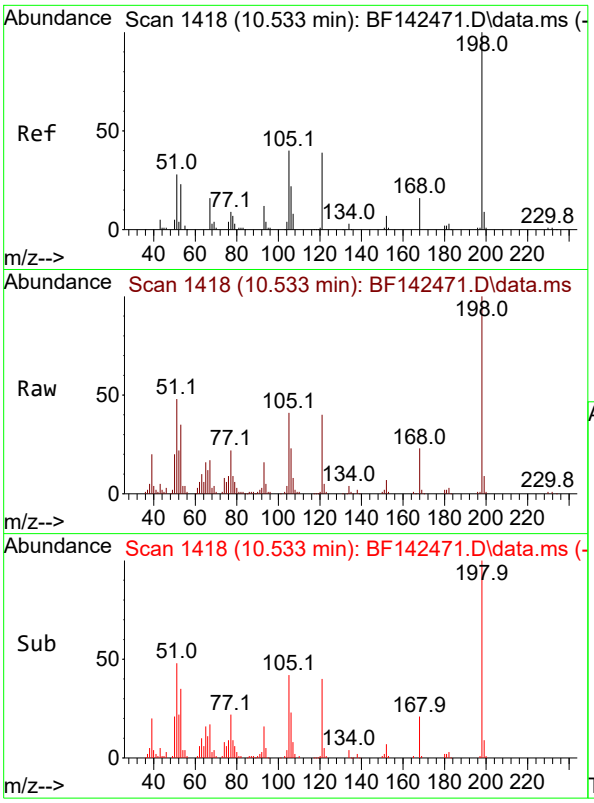


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:188 Resp: 343068

Ion	Ratio	Lower	Upper
188	100		
94	8.3	6.6	10.0
80	9.2	7.4	11.0



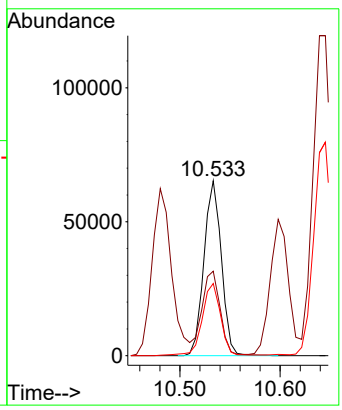


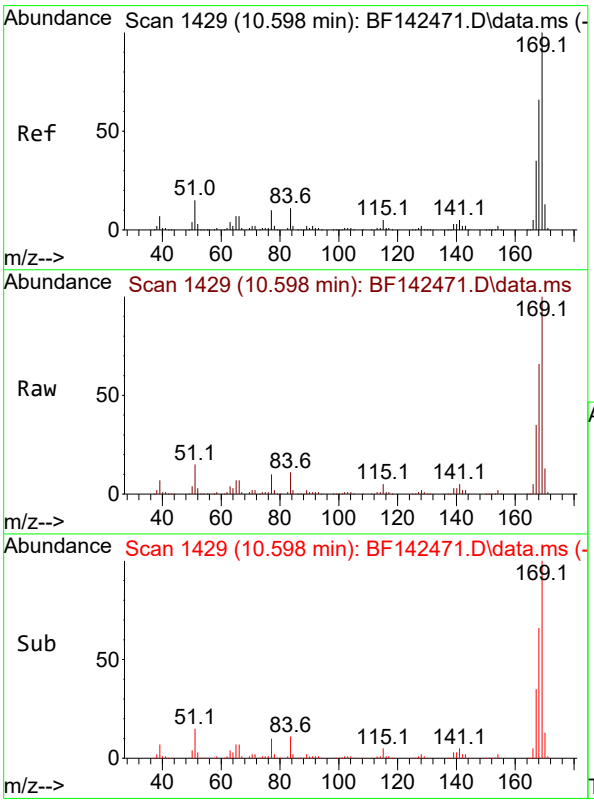
#65
4,6-Dinitro-2-methylphenol
Concen: 41.326 ng
RT: 10.533 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:198 Resp: 79121

Ion	Ratio	Lower	Upper
198	100		
51	48.3	28.3	68.3
105	41.3	21.3	61.3

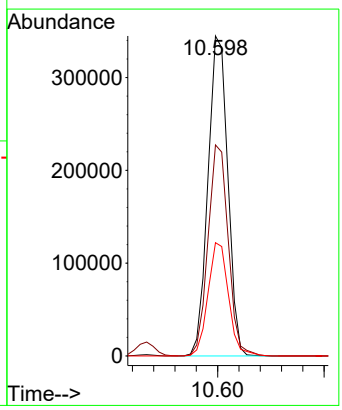


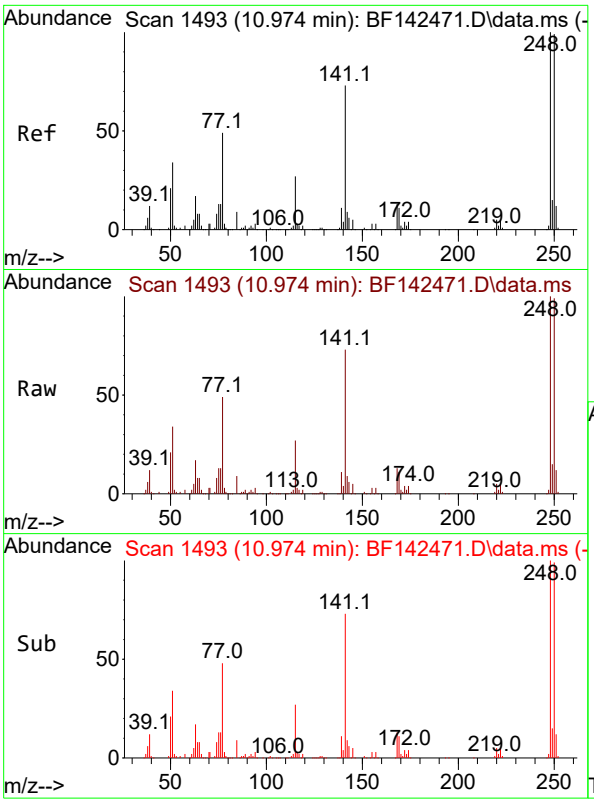


#66
n-Nitrosodiphenylamine
Concen: 37.917 ng
RT: 10.598 min Scan# 1429
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:169 Resp: 445033

Ion	Ratio	Lower	Upper
169	100		
168	65.9	52.7	79.1
167	35.4	28.3	42.5



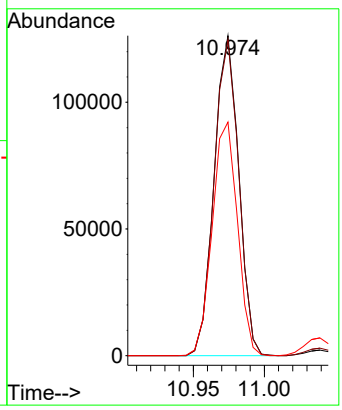


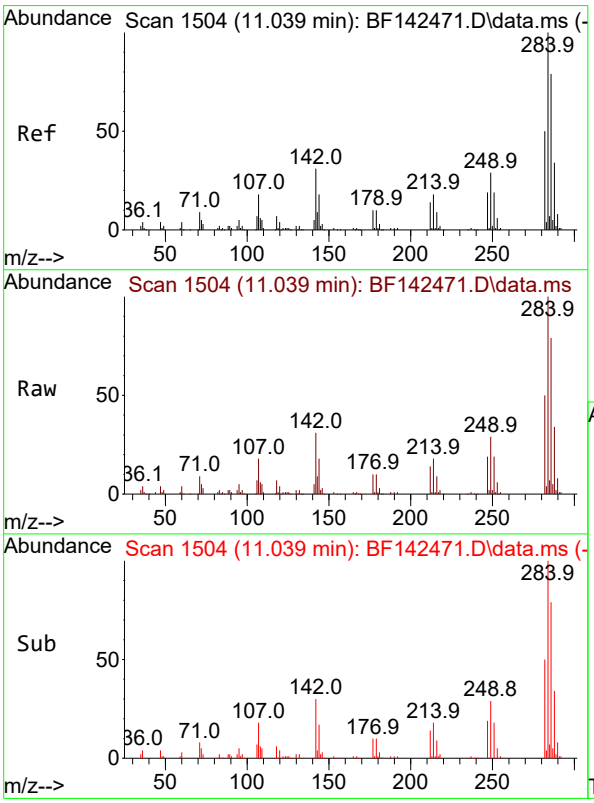
#67
4-Bromophenyl-phenylether
Concen: 37.556 ng
RT: 10.974 min Scan# 14
Delta R.T. -0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:248 Resp: 152348

Ion	Ratio	Lower	Upper
248	100		
250	98.7	79.0	118.4
141	73.0	58.4	87.6

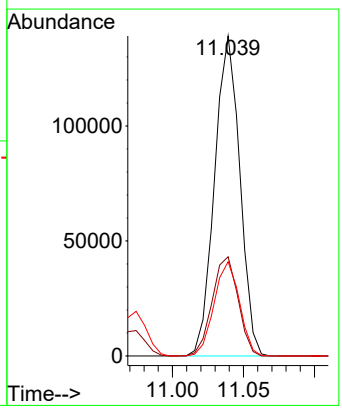


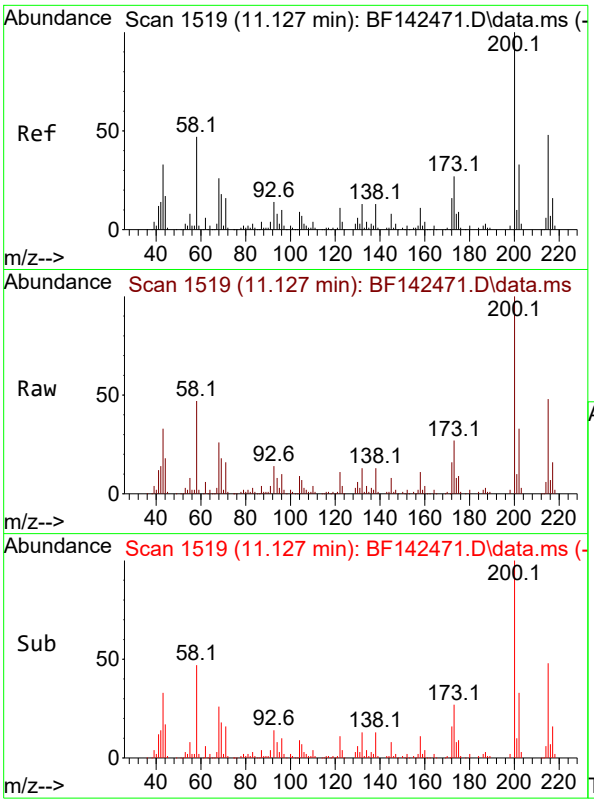


#68
Hexachlorobenzene
Concen: 38.318 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:284 Resp: 171918

Ion	Ratio	Lower	Upper
284	100		
142	31.0	24.8	37.2
249	29.5	23.6	35.4



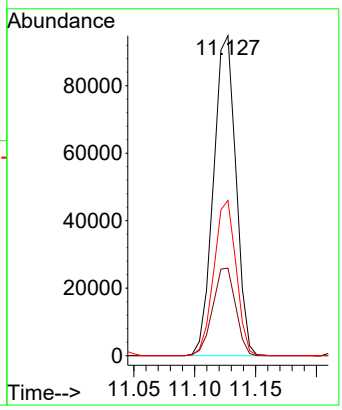


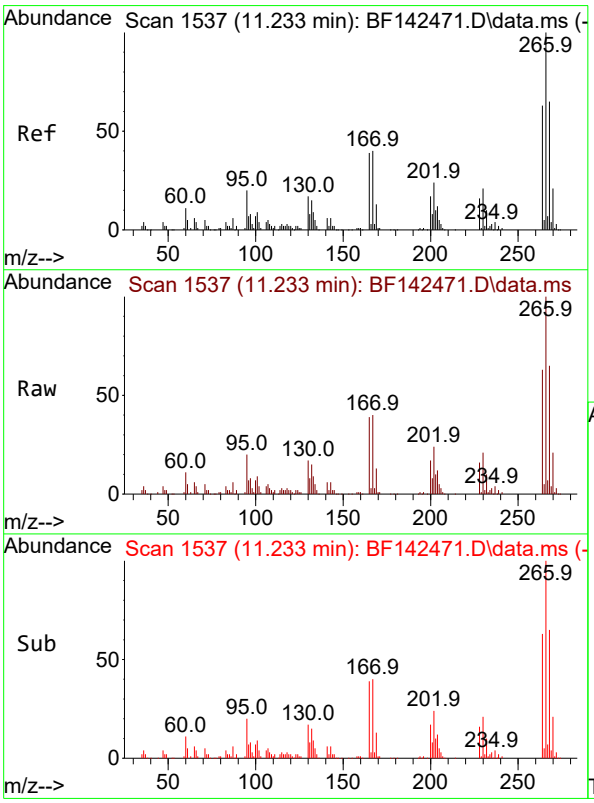
#69
Atrazine
Concen: 39.072 ng
RT: 11.127 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:200 Resp: 121790

Ion	Ratio	Lower	Upper
200	100		
173	27.4	7.4	47.4
215	48.5	28.5	68.5

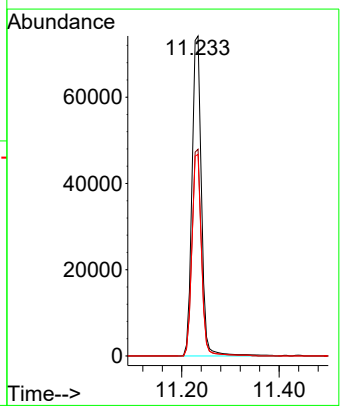


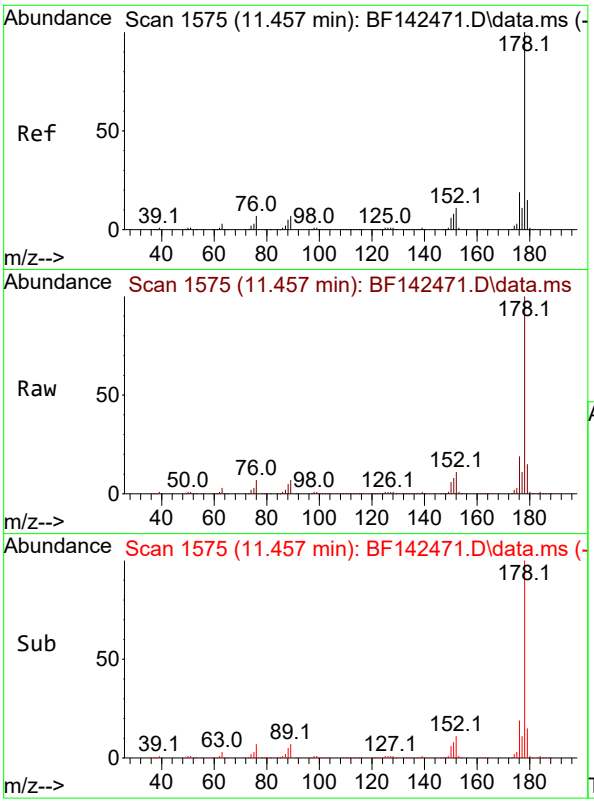


#70
Pentachlorophenol
Concen: 39.824 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:266 Resp: 100877

Ion	Ratio	Lower	Upper
266	100		
268	64.6	51.7	77.5
264	63.0	50.4	75.6



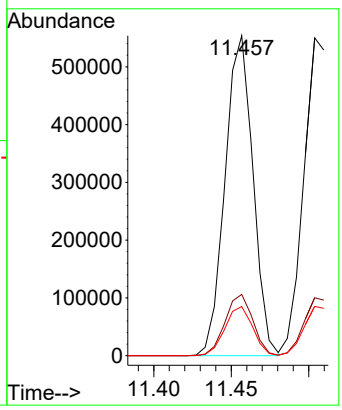


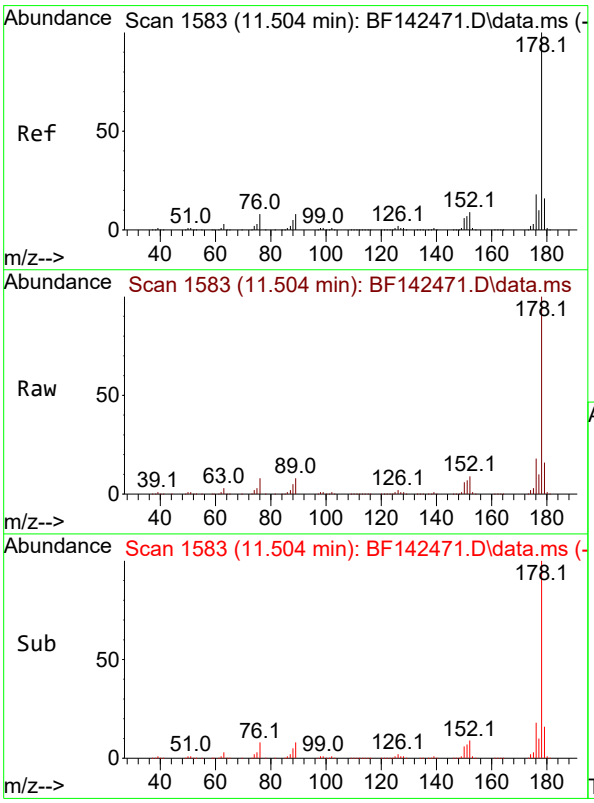
#71
Phenanthrene
Concen: 37.855 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:178 Resp: 694045

Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.0
179	15.4	12.3	18.5

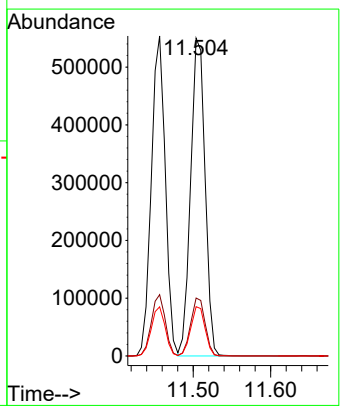


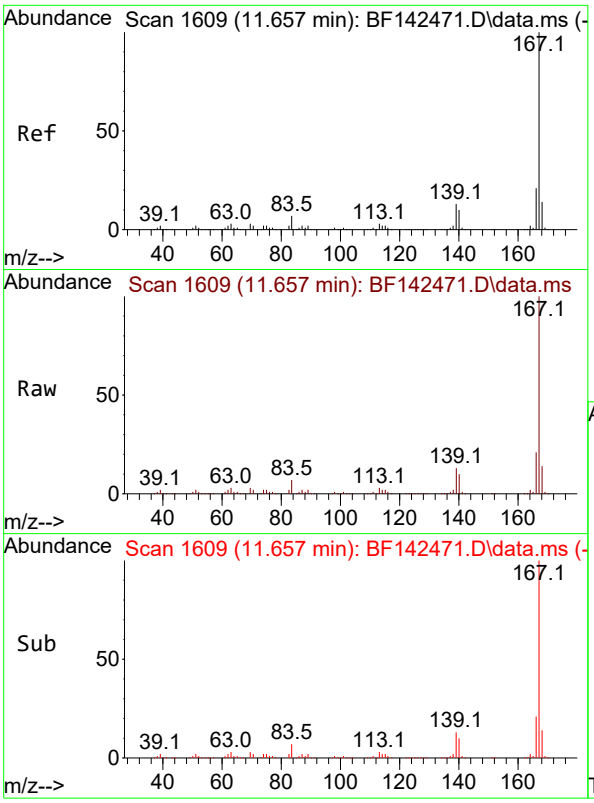


#72
Anthracene
Concen: 38.007 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:178 Resp: 711162

Ion	Ratio	Lower	Upper
178	100		
176	18.2	14.6	21.8
179	15.5	12.4	18.6



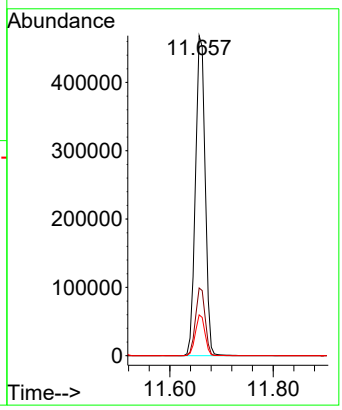


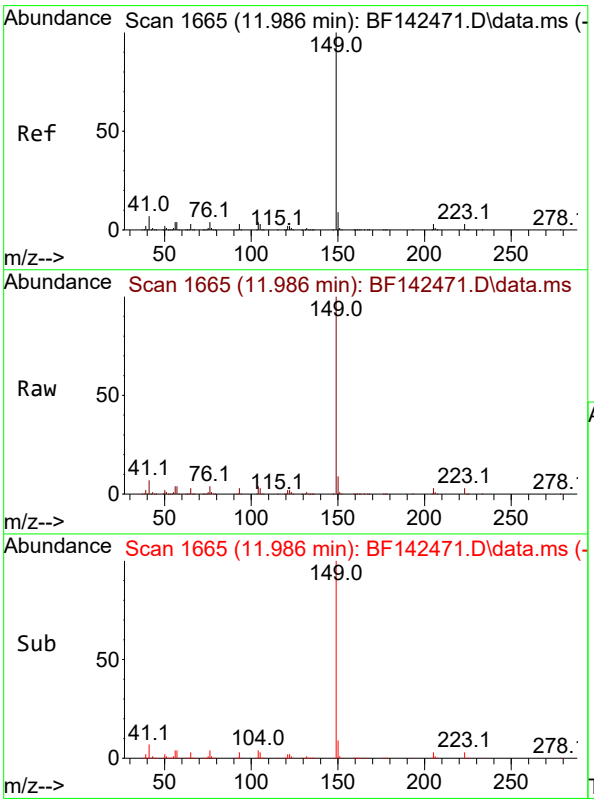
#73
Carbazole
Concen: 38.140 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:167 Resp: 610097

Ion	Ratio	Lower	Upper
167	100		
166	21.1	16.9	25.3
139	12.8	10.2	15.4

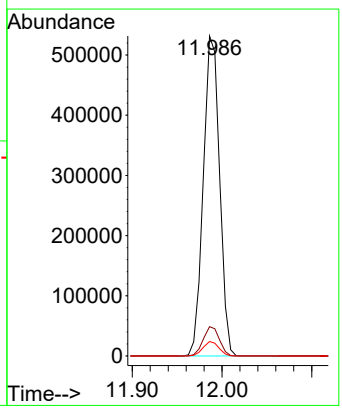


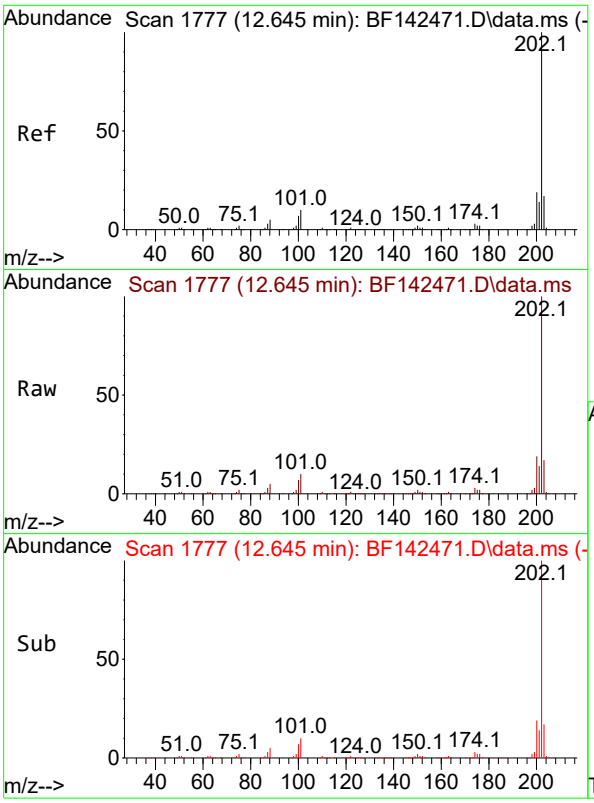


#74
Di-n-butylphthalate
Concen: 38.227 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:149 Resp: 669345

Ion	Ratio	Lower	Upper
149	100		
150	9.1	7.3	10.9
104	4.5	3.6	5.4



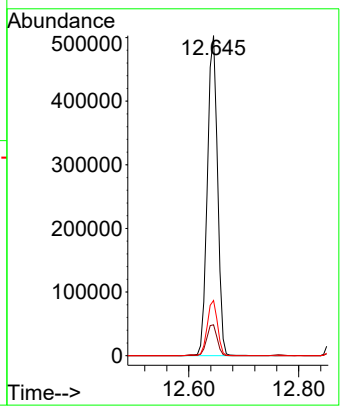


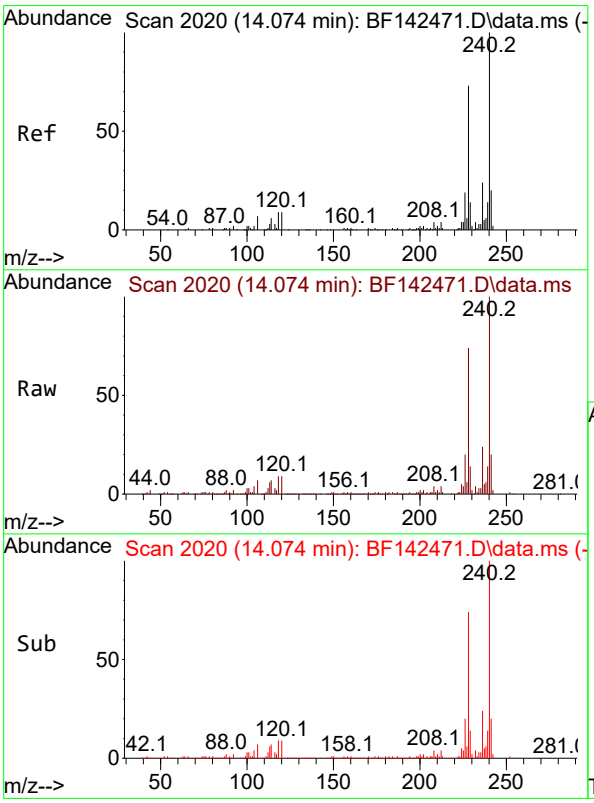
#75
Fluoranthene
Concen: 37.569 ng
RT: 12.645 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:202 Resp: 643610

Ion	Ratio	Lower	Upper
202	100		
101	9.6	0.0	29.6
203	17.2	0.0	37.2

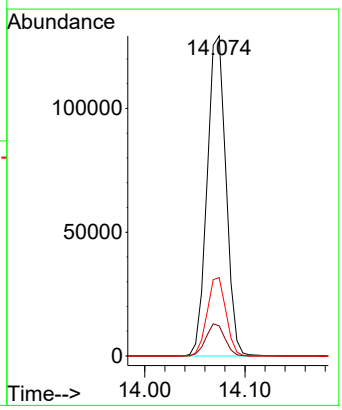


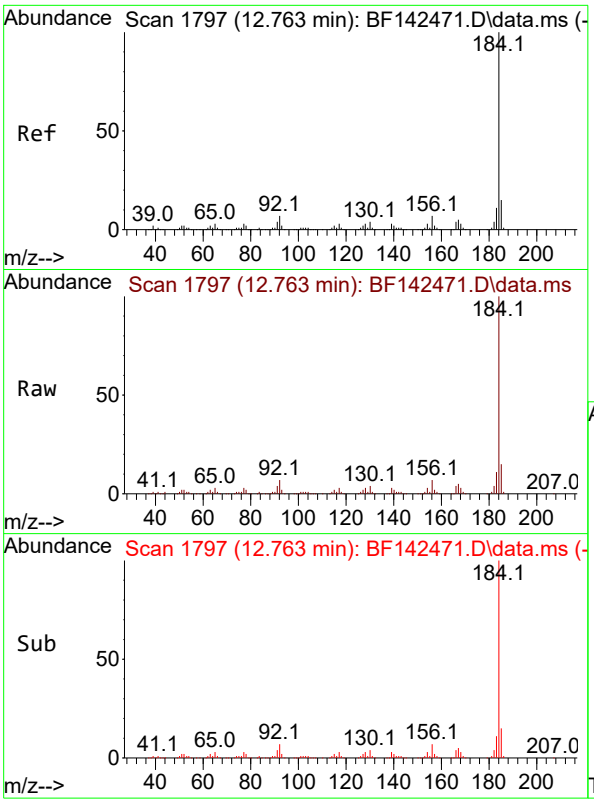


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. -0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:240 Resp: 169022

Ion	Ratio	Lower	Upper
240	100		
120	9.4	7.5	11.3
236	24.5	19.6	29.4



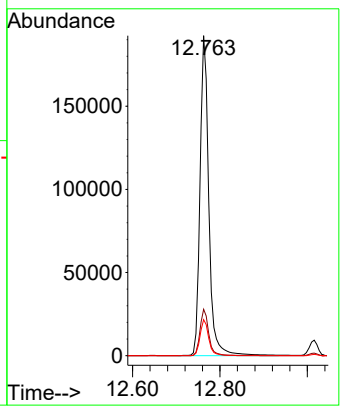


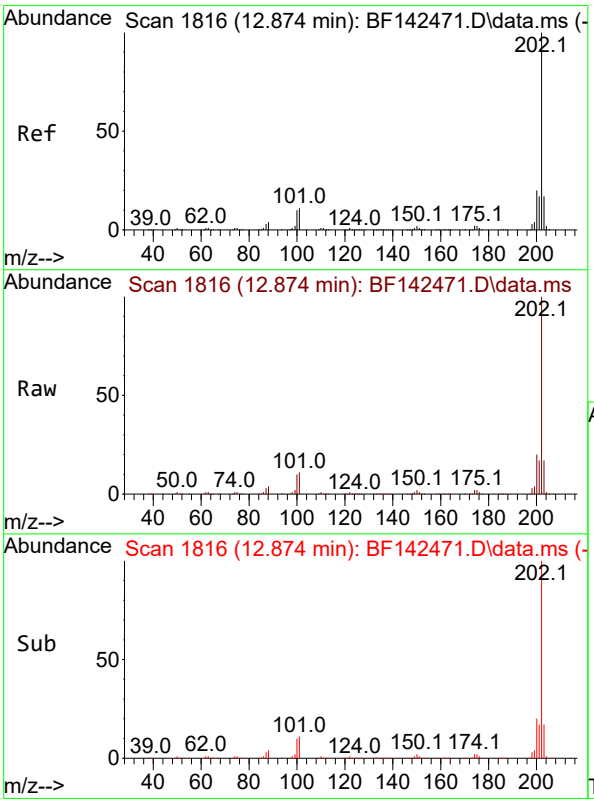
#77
Benzidine
Concen: 42.816 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:184 Resp: 269307

Ion	Ratio	Lower	Upper
184	100		
185	14.5	11.6	17.4
183	11.2	9.0	13.4

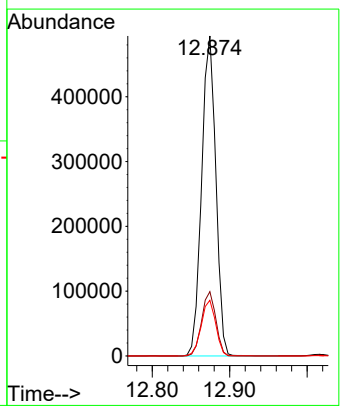


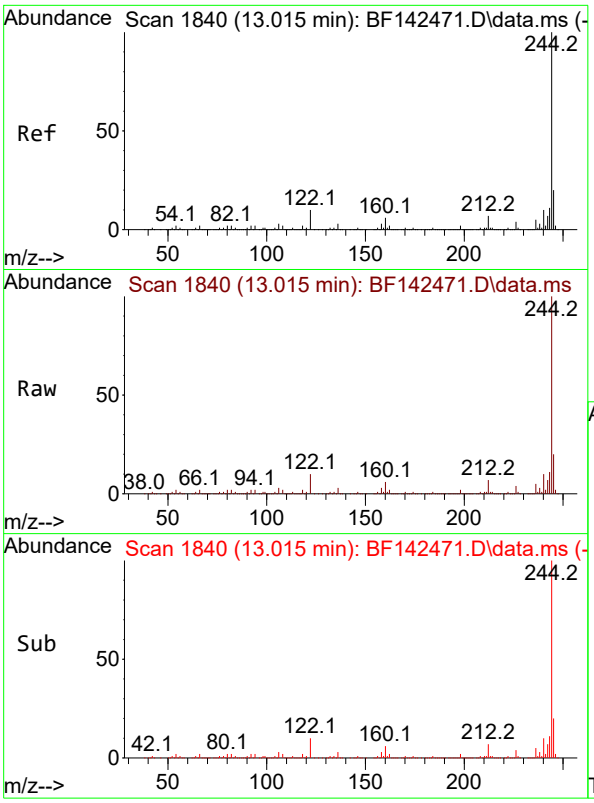


#78
Pyrene
Concen: 39.853 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:202 Resp: 628371

Ion	Ratio	Lower	Upper
202	100		
200	20.1	16.1	24.1
203	17.4	13.9	20.9



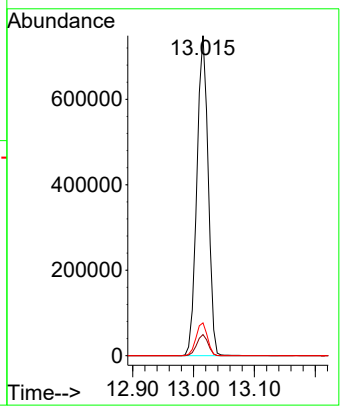


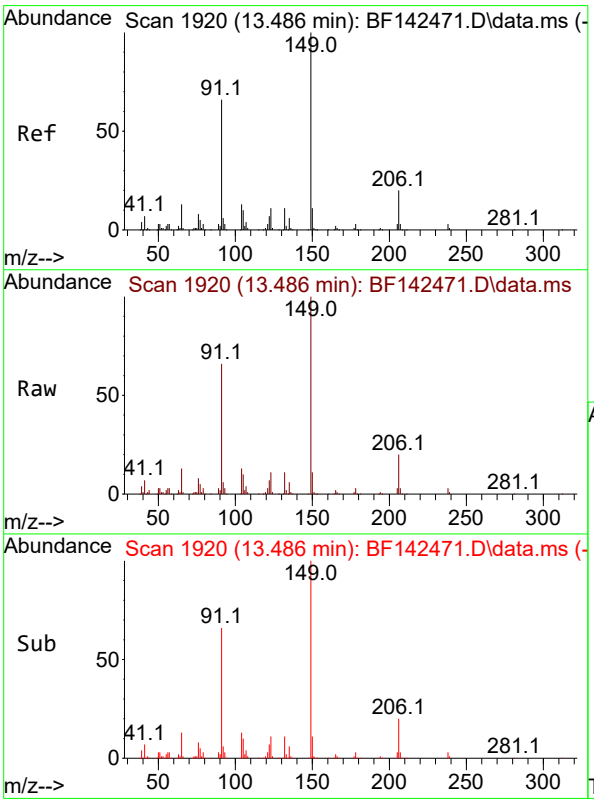
#79
Terphenyl-d14
Concen: 77.802 ng
RT: 13.015 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:244 Resp: 962300

Ion	Ratio	Lower	Upper
244	100		
212	6.6	5.3	7.9
122	10.2	8.2	12.2

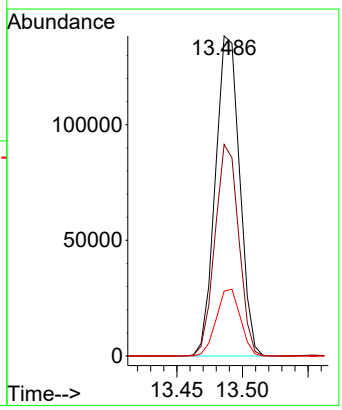


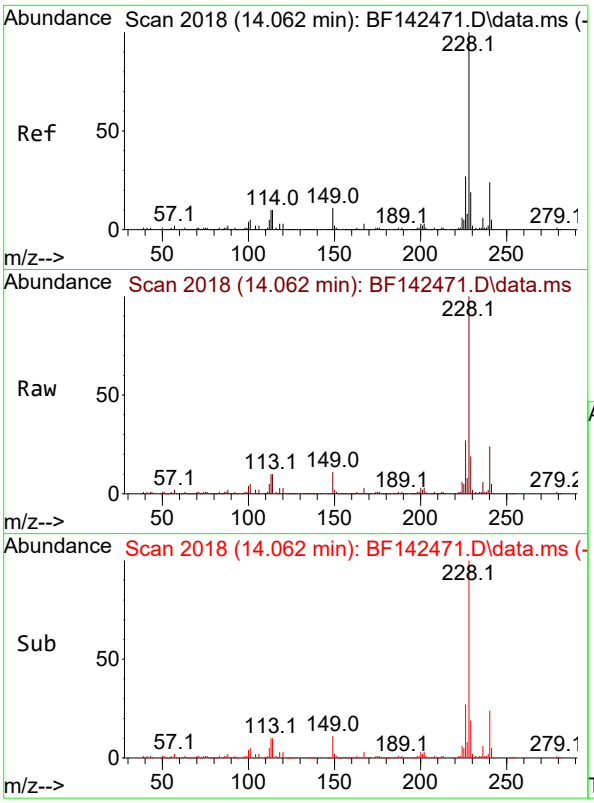


#80
Butylbenzylphthalate
Concen: 40.819 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:149 Resp: 177841

Ion	Ratio	Lower	Upper
149	100		
91	66.1	52.9	79.3
206	20.2	16.2	24.2



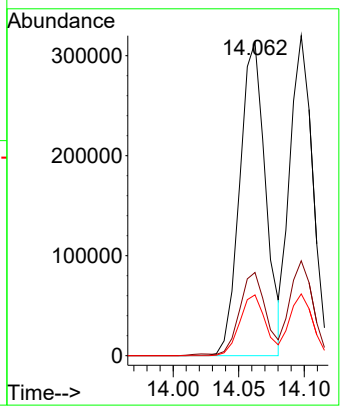


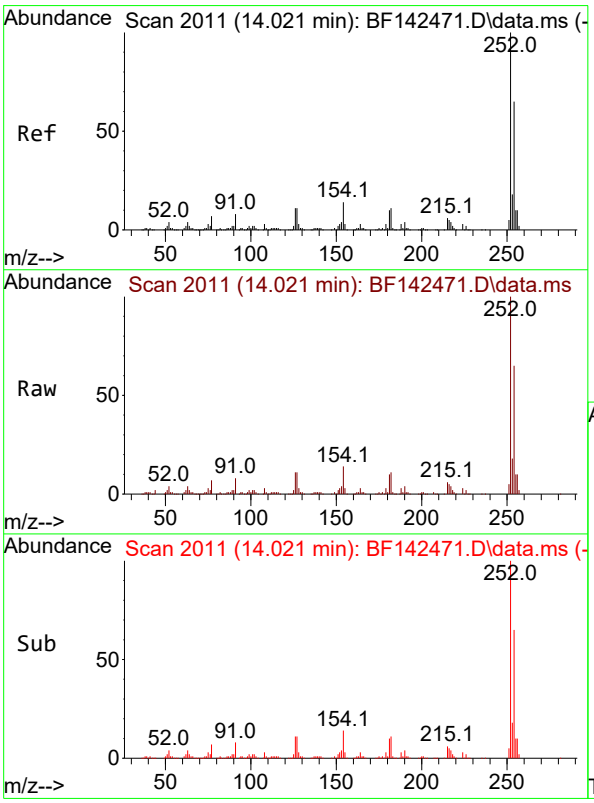
#81
Benzo(a)anthracene
Concen: 38.276 ng
RT: 14.062 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:228 Resp: 431998

Ion	Ratio	Lower	Upper
228	100		
226	26.5	21.2	31.8
229	19.4	15.5	23.3

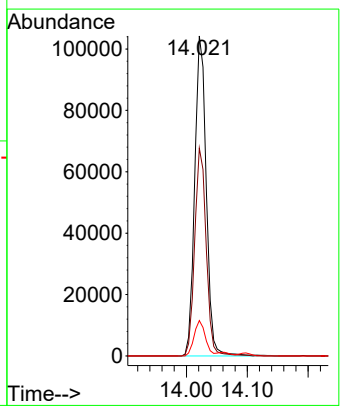


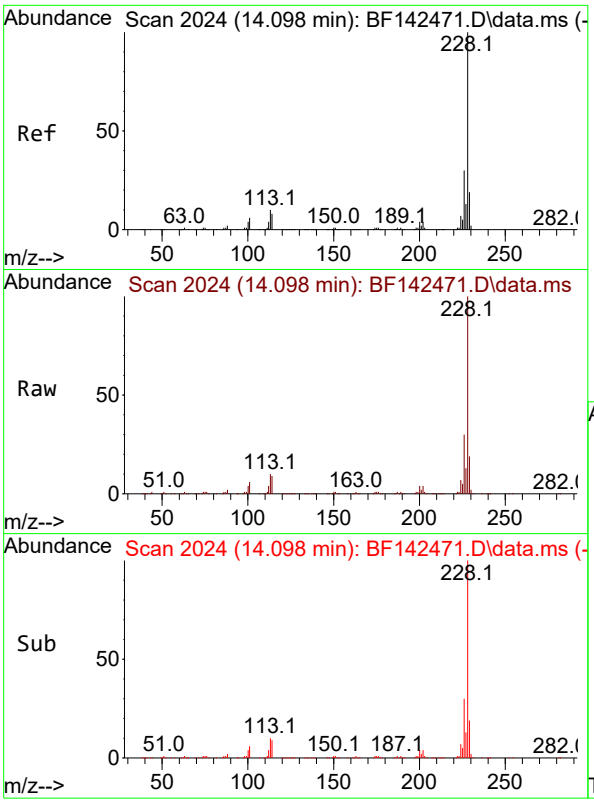


#82
3,3'-Dichlorobenzidine
Concen: 40.148 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:252 Resp: 137438

Ion	Ratio	Lower	Upper
252	100		
254	65.0	52.0	78.0
126	11.1	8.9	13.3



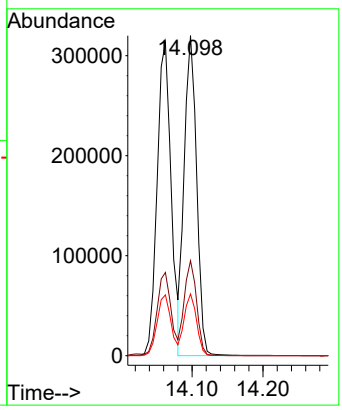


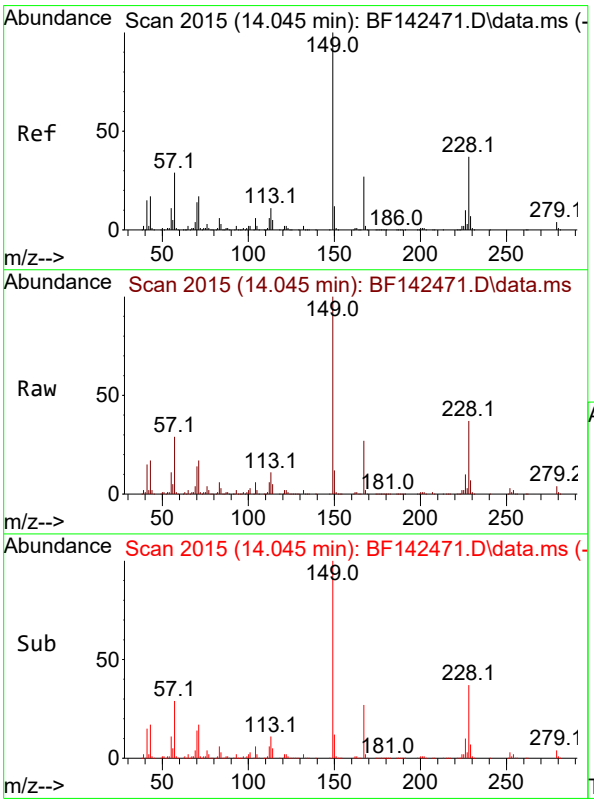
#83
Chrysene
Concen: 38.168 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:228 Resp: 387081

Ion	Ratio	Lower	Upper
228	100		
226	29.7	23.8	35.6
229	19.3	15.4	23.2

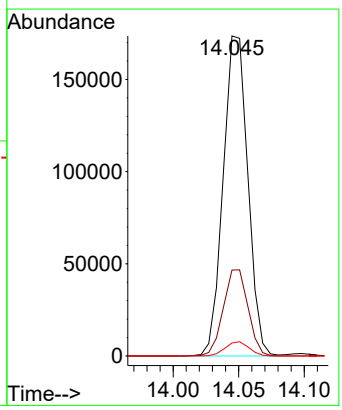


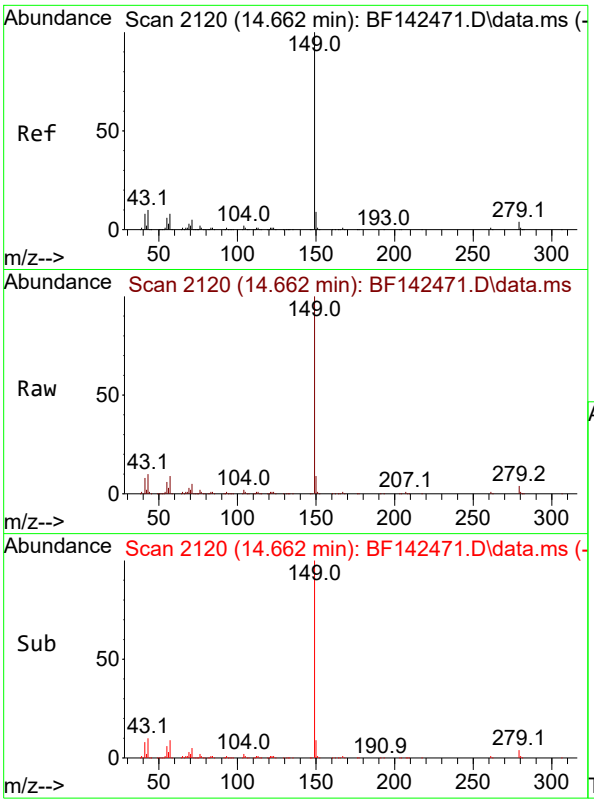


#84
Bis(2-ethylhexyl)phthalate
Concen: 40.800 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:149 Resp: 227555

Ion	Ratio	Lower	Upper
149	100		
167	26.9	21.5	32.3
279	4.0	3.2	4.8



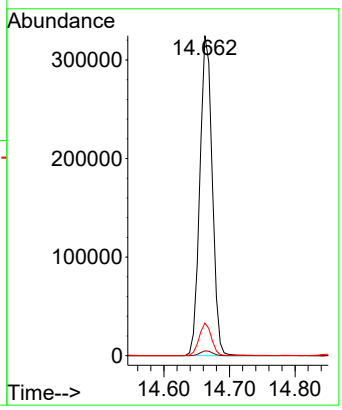


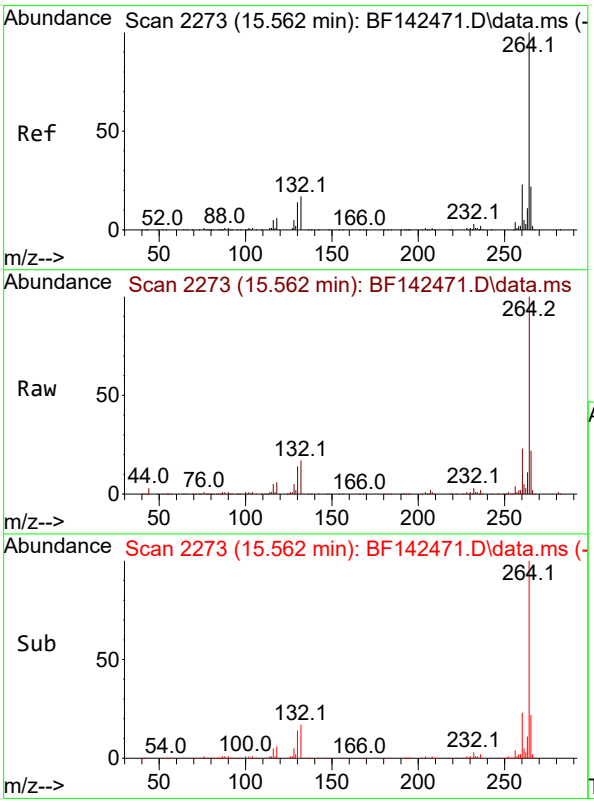
#85
Di-n-octyl phthalate
Concen: 39.246 ng
RT: 14.662 min Scan# 21
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:149 Resp: 427995

Ion	Ratio	Lower	Upper
149	100		
167	1.5	1.2	1.8
43	9.9	7.9	11.9

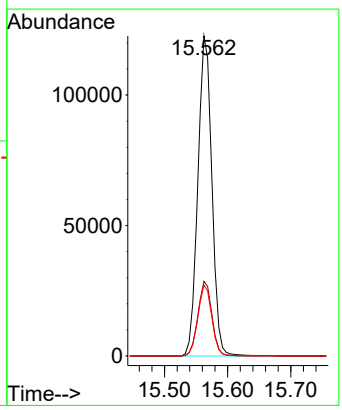


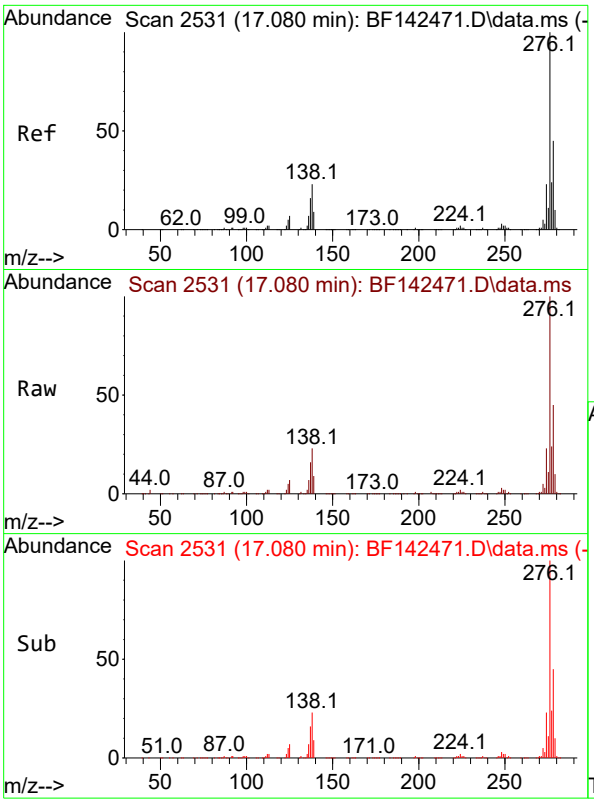


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:264 Resp: 189289

Ion	Ratio	Lower	Upper
264	100		
260	23.3	18.6	28.0
265	22.1	17.7	26.5



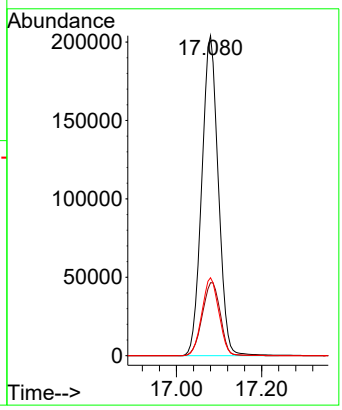


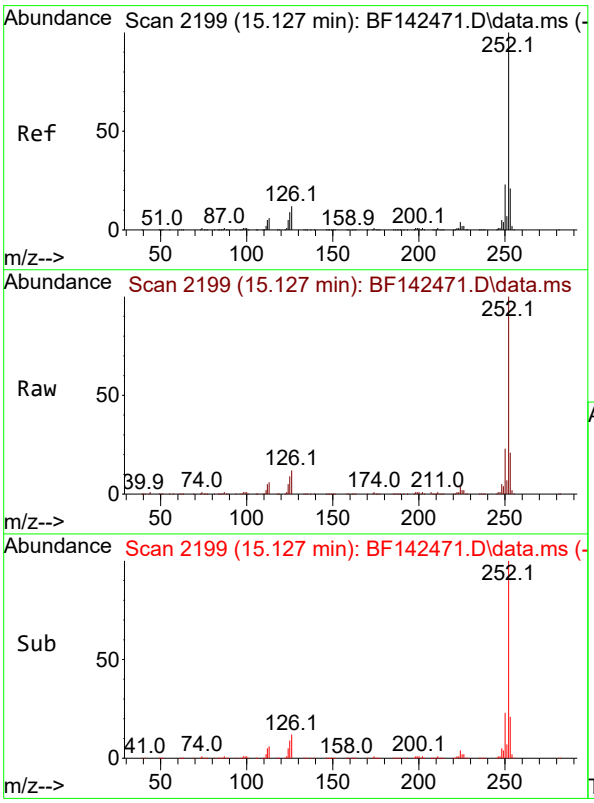
#87
Indeno(1,2,3-cd)pyrene
Concen: 38.584 ng
RT: 17.080 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:276 Resp: 548309

Ion	Ratio	Lower	Upper
276	100		
138	24.9	19.9	29.9
277	25.2	20.2	30.2

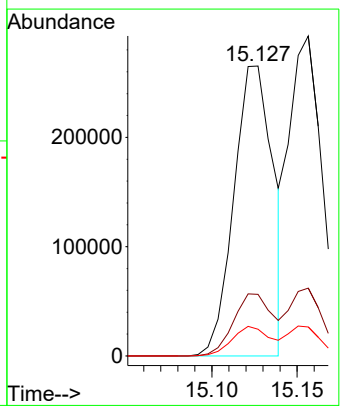


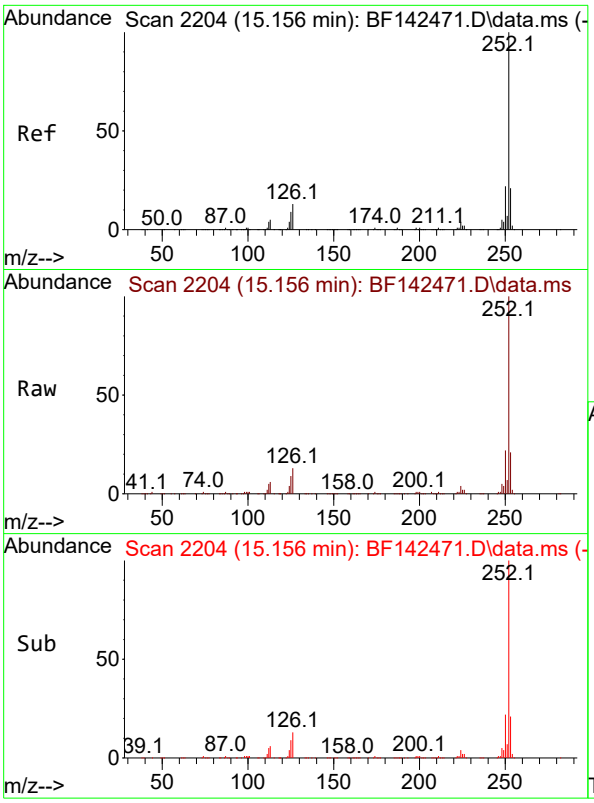


#88
Benzo(b)fluoranthene
Concen: 38.041 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:252 Resp: 426174

Ion	Ratio	Lower	Upper
252	100		
253	21.2	17.0	25.4
125	9.2	7.4	11.0



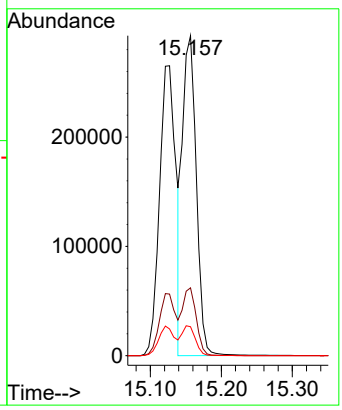


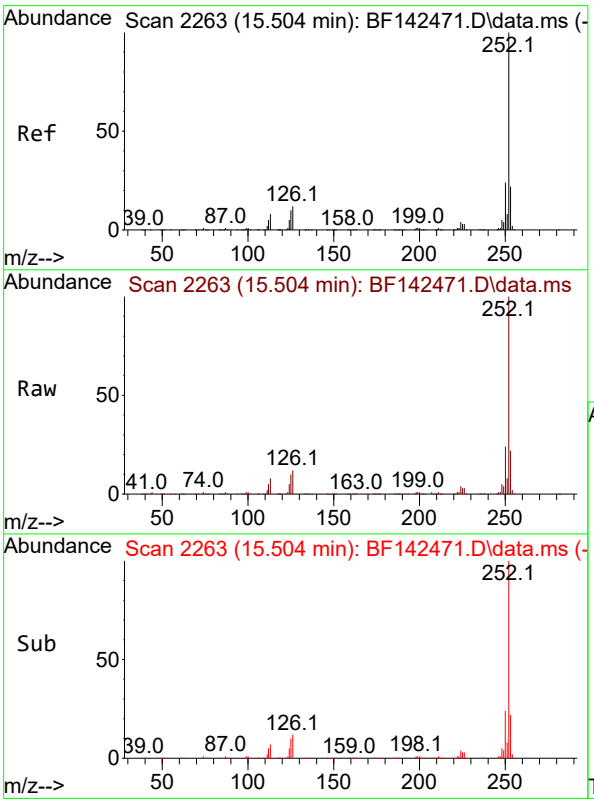
#89
Benzo(k)fluoranthene
Concen: 37.603 ng
RT: 15.156 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:252 Resp: 394567

Ion	Ratio	Lower	Upper
252	100		
253	21.2	17.0	25.4
125	9.1	7.3	10.9

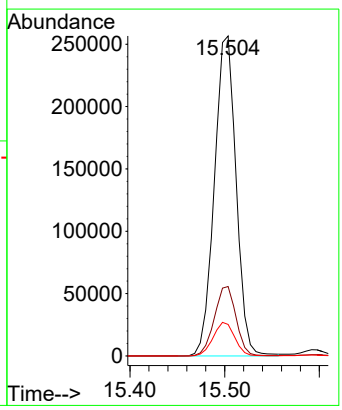


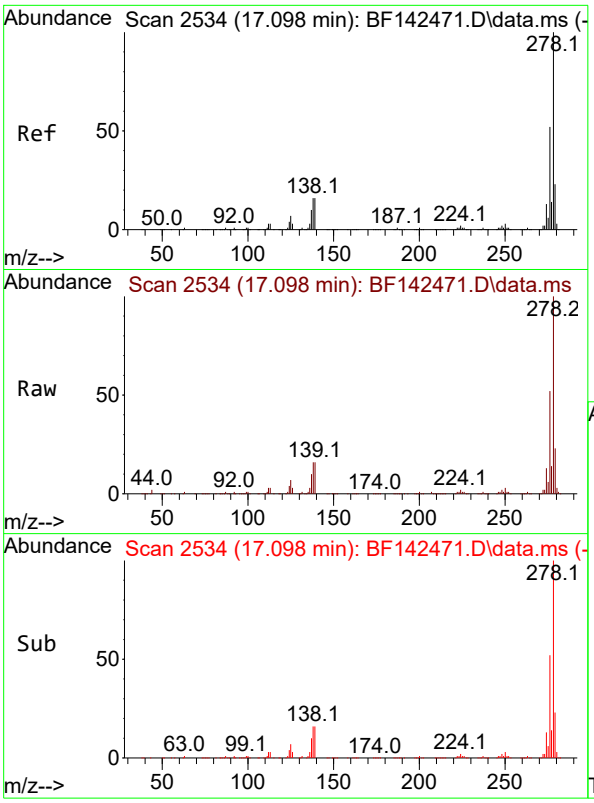


#90
Benzo(a)pyrene
Concen: 38.761 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:252 Resp: 409312

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.4	26.0
125	9.9	7.9	11.9



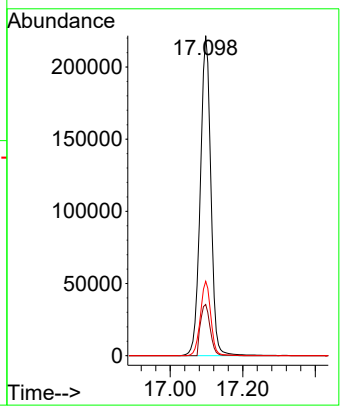


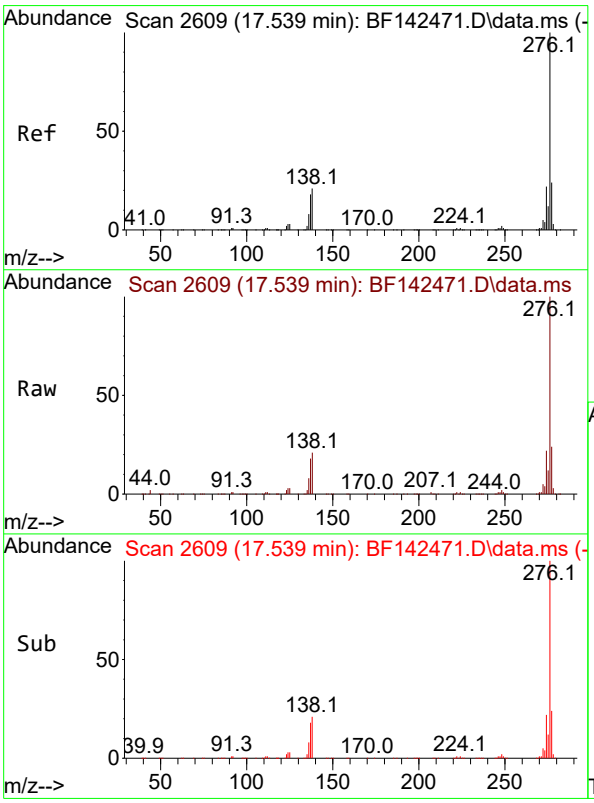
#91
Dibenzo(a,h)anthracene
Concen: 38.903 ng
RT: 17.098 min Scan# 2
Delta R.T. -0.018 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Tgt Ion:278 Resp: 448372

Ion	Ratio	Lower	Upper
278	100		
139	16.0	12.8	19.2
279	23.3	18.6	28.0

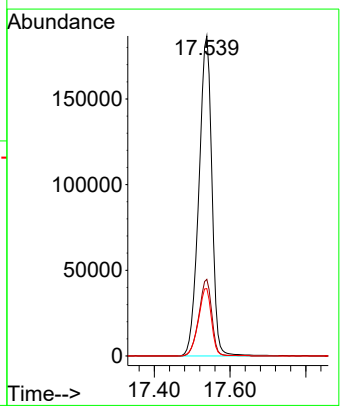




#92
Benzo(g,h,i)perylene
Concen: 38.747 ng
RT: 17.539 min Scan# 2609
Delta R.T. -0.018 min
Lab File: BF142471.D
Acq: 20 May 2025 14:05

Tgt Ion:276 Resp: 446674

Ion	Ratio	Lower	Upper
276	100		
277	24.0	19.2	28.8
138	21.0	16.8	25.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142472.D
Acq On : 20 May 2025 14:34
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Quant Time: May 20 16:55:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	86396	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	336796	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	181409	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	301685	20.000	ng	0.00
76) Chrysene-d12	14.074	240	149689	20.000	ng	0.00
86) Perylene-d12	15.562	264	171586	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	526965	102.760	ng	0.00
7) Phenol-d6	6.528	99	633841	102.679	ng	0.00
23) Nitrobenzene-d5	7.469	82	643186	104.135	ng	0.00
42) 2,4,6-Tribromophenol	10.733	330	211319	104.956	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	1342037	99.269	ng	0.00
79) Terphenyl-d14	13.016	244	1116751	101.951	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.669	88	107972	52.616	ng	99
3) Pyridine	3.434	79	275005	52.626	ng	99
4) n-Nitrosodimethylamine	3.393	42	145296	53.550	ng	99
6) Aniline	6.563	93	430377	51.852	ng	99
8) 2-Chlorophenol	6.687	128	288948	51.731	ng	99
9) Benzaldehyde	6.451	77	188241	50.700	ng	98
10) Phenol	6.540	94	357896	51.526	ng	99
11) bis(2-Chloroethyl)ether	6.634	93	261046	52.210	ng	100
12) 1,3-Dichlorobenzene	6.845	146	320095	51.357	ng	99
13) 1,4-Dichlorobenzene	6.922	146	322871	51.427	ng	99
14) 1,2-Dichlorobenzene	7.075	146	309332	51.491	ng	100
15) Benzyl Alcohol	7.040	79	244326	53.559	ng	99
16) 2,2'-oxybis(1-Chloropr...	7.175	45	434451	51.741	ng	100
17) 2-Methylphenol	7.151	107	227385	52.141	ng	99
18) Hexachloroethane	7.416	117	114346	52.159	ng	99
19) n-Nitroso-di-n-propyla...	7.316	70	197020	51.498	ng	99
20) 3+4-Methylphenols	7.304	107	288829	51.719	ng	91
22) Acetophenone	7.310	105	380175	50.992	ng	97
24) Nitrobenzene	7.487	77	288748	51.834	ng	99
25) Isophorone	7.728	82	536829	51.985	ng	99
26) 2-Nitrophenol	7.798	139	159779	53.679	ng	99
27) 2,4-Dimethylphenol	7.834	122	273604	52.123	ng	98
28) bis(2-Chloroethoxy)met...	7.934	93	329256	51.041	ng	100
29) 2,4-Dichlorophenol	8.039	162	252244	52.840	ng	100
30) 1,2,4-Trichlorobenzene	8.128	180	269064	51.934	ng	97
31) Naphthalene	8.210	128	847571	51.109	ng	100
32) Benzoic acid	7.951	122	177379	55.512	ng	98
33) 4-Chloroaniline	8.257	127	349678	52.037	ng	99
34) Hexachlorobutadiene	8.328	225	166363	51.428	ng	98
35) Caprolactam	8.628	113	71458	53.297	ng	99
36) 4-Chloro-3-methylphenol	8.733	107	253726	51.862	ng	99
37) 2-Methylnaphthalene	8.898	142	531122	50.907	ng	100
38) 1-Methylnaphthalene	8.998	142	547258	50.711	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	268407	51.543	ng	99
41) Hexachlorocyclopentadiene	9.051	237	195080	55.532	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	184076	52.421	ng	98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142472.D
Acq On : 20 May 2025 14:34
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Quant Time: May 20 16:55:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	198266	53.537	ng	99
46) 1,1'-Biphenyl	9.363	154	723473	51.405	ng	100
47) 2-Chloronaphthalene	9.386	162	536379	51.583	ng	100
48) 2-Nitroaniline	9.481	65	160529	53.410	ng	99
49) Acenaphthylene	9.804	152	906063	51.602	ng	100
50) Dimethylphthalate	9.663	163	619616	51.764	ng	100
51) 2,6-Dinitrotoluene	9.722	165	137090	53.064	ng	98
52) Acenaphthene	9.980	154	554762	51.742	ng	99
53) 3-Nitroaniline	9.892	138	149786	53.082	ng	99
54) 2,4-Dinitrophenol	9.998	184	76730	57.487	ng	95
55) Dibenzofuran	10.151	168	787446	51.038	ng	100
56) 4-Nitrophenol	10.045	139	114198	54.849	ng	99
57) 2,4-Dinitrotoluene	10.128	165	180417	53.473	ng	100
58) Fluorene	10.492	166	608966	51.090	ng	98
59) 2,3,4,6-Tetrachlorophenol	10.263	232	163539	52.897	ng	98
60) Diethylphthalate	10.363	149	608941	52.089	ng	99
61) 4-Chlorophenyl-phenyle...	10.480	204	296264	50.597	ng	99
62) 4-Nitroaniline	10.510	138	133141	52.024	ng	98
63) Azobenzene	10.645	77	542894	51.703	ng	100
65) 4,6-Dinitro-2-methylph...	10.533	198	97203	57.734	ng	98
66) n-Nitrosodiphenylamine	10.604	169	525974	50.960	ng	100
67) 4-Bromophenyl-phenylether	10.975	248	185711	52.061	ng	99
68) Hexachlorobenzene	11.039	284	205759	52.151	ng	100
69) Atrazine	11.127	200	147922	53.966	ng	99
70) Pentachlorophenol	11.233	266	122184	54.852	ng	99
71) Phenanthrene	11.457	178	818043	50.739	ng	100
72) Anthracene	11.510	178	837242	50.882	ng	99
73) Carbazole	11.663	167	716381	50.927	ng	100
74) Di-n-butylphthalate	11.986	149	798451	51.856	ng	100
75) Fluoranthene	12.645	202	752083	49.923	ng	100
77) Benzidine	12.763	184	301122	54.058	ng	99
78) Pyrene	12.874	202	733277	52.513	ng	100
80) Butylbenzylphthalate	13.492	149	215174	55.767	ng	97
81) Benzo(a)anthracene	14.063	228	520525	52.076	ng	99
82) 3,3'-Dichlorobenzidine	14.021	252	166223	54.828	ng	99
83) Chrysene	14.098	228	469491	52.273	ng	100
84) Bis(2-ethylhexyl)phtha...	14.051	149	286151	57.932	ng	100
85) Di-n-octyl phthalate	14.663	149	535844	55.482	ng	100
87) Indeno(1,2,3-cd)pyrene	17.080	276	679247	52.730	ng	99
88) Benzo(b)fluoranthene	15.127	252	518544	51.062	ng	99
89) Benzo(k)fluoranthene	15.157	252	505348	53.130	ng	99
90) Benzo(a)pyrene	15.504	252	508303	53.101	ng	100
91) Dibenzo(a,h)anthracene	17.104	278	553351	52.964	ng	100
92) Benzo(g,h,i)perylene	17.545	276	557271	53.328	ng	99

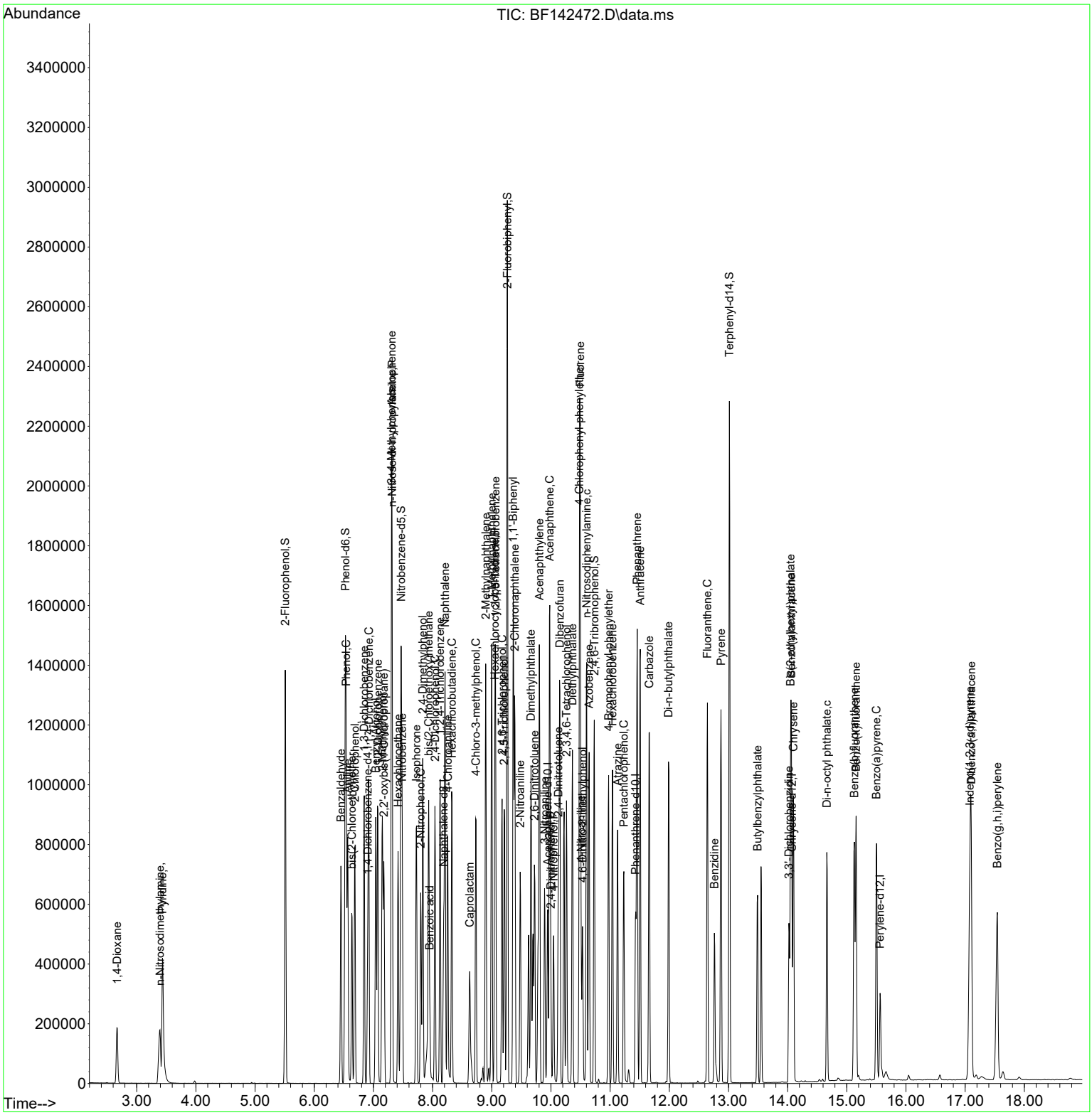
(#) = qualifier out of range (m) = manual integration (+) = signals summed

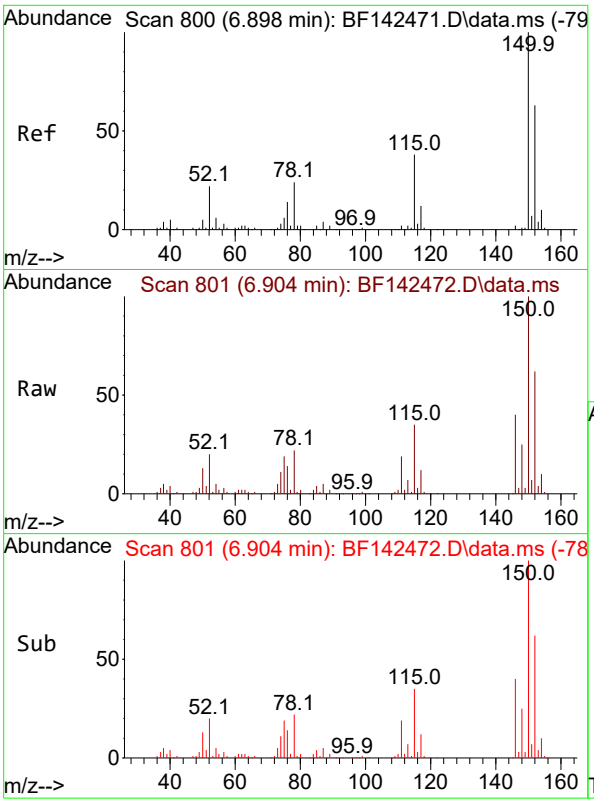
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142472.D
Acq On : 20 May 2025 14:34
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Quant Time: May 20 16:55:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



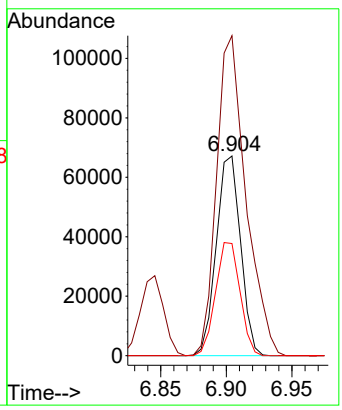


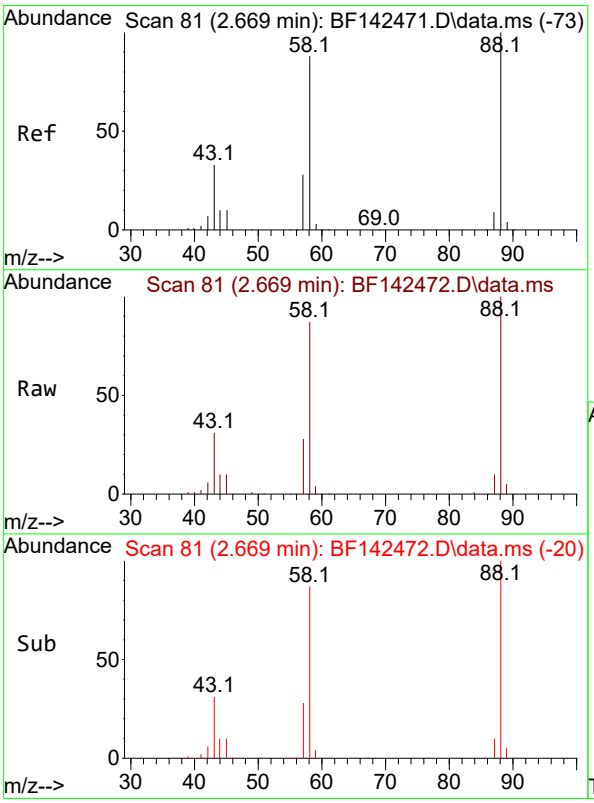
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.904 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:152 Resp: 86396

Ion	Ratio	Lower	Upper
152	100		
150	160.3	128.2	192.4
115	56.1	48.3	72.5

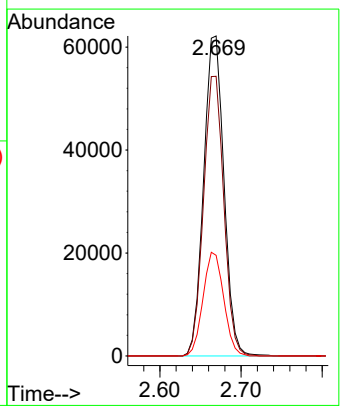


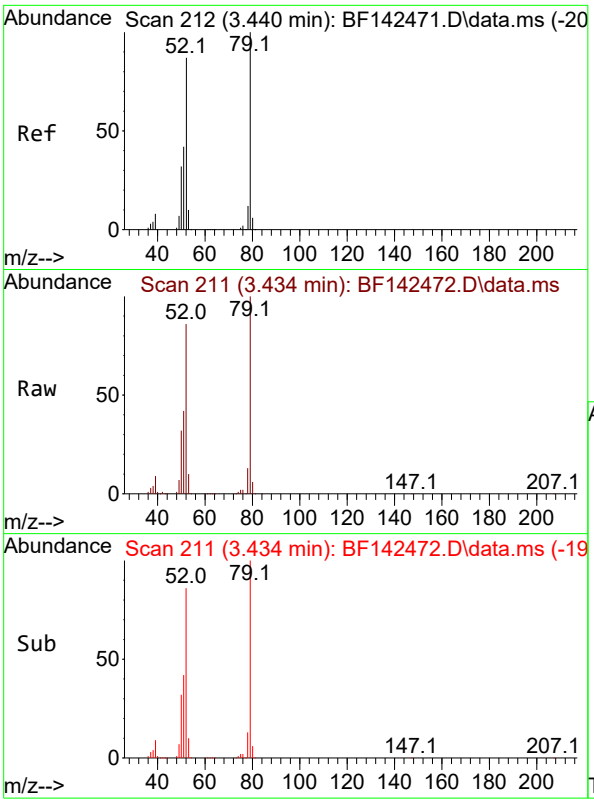


#2
1,4-Dioxane
Concen: 52.616 ng
RT: 2.669 min Scan# 81
Delta R.T. 0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 88 Resp: 107972

Ion	Ratio	Lower	Upper
88	100		
58	87.2	70.8	106.2
43	33.0	26.6	40.0



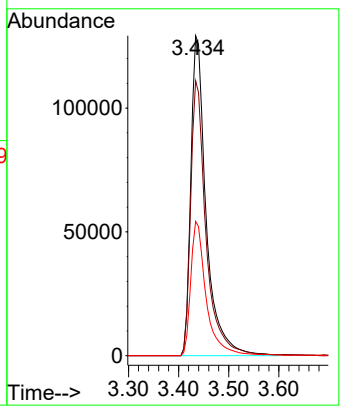


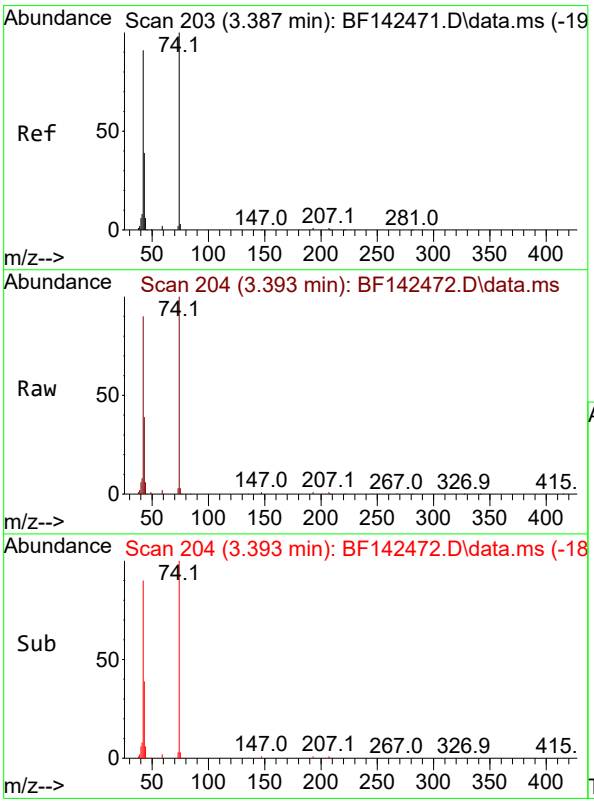
#3
Pyridine
Concen: 52.626 ng
RT: 3.434 min Scan# 21
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 79 Resp: 275005

Ion	Ratio	Lower	Upper
79	100		
52	85.9	69.2	103.8
51	41.9	33.3	49.9

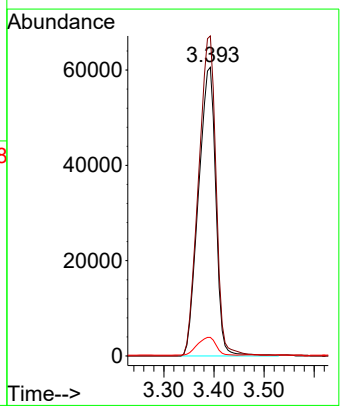


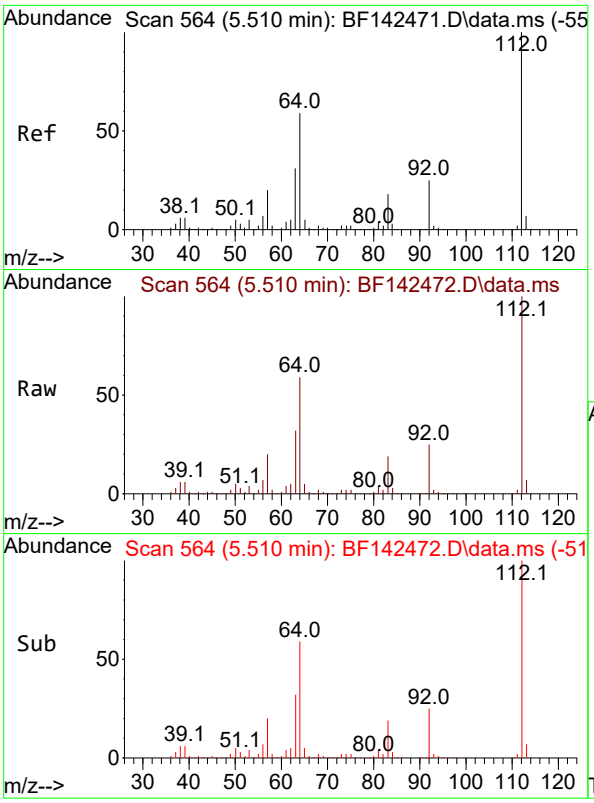


#4
n-Nitrosodimethylamine
Concen: 53.550 ng
RT: 3.393 min Scan# 204
Delta R.T. -0.012 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 42 Resp: 145296

Ion	Ratio	Lower	Upper
42	100		
74	110.9	88.2	132.4
44	6.4	5.4	8.2



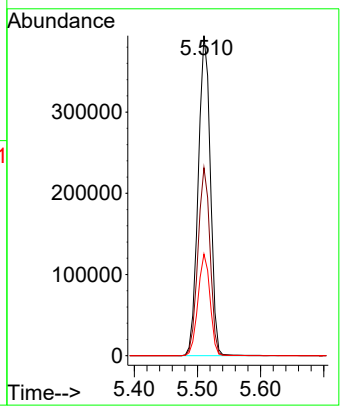


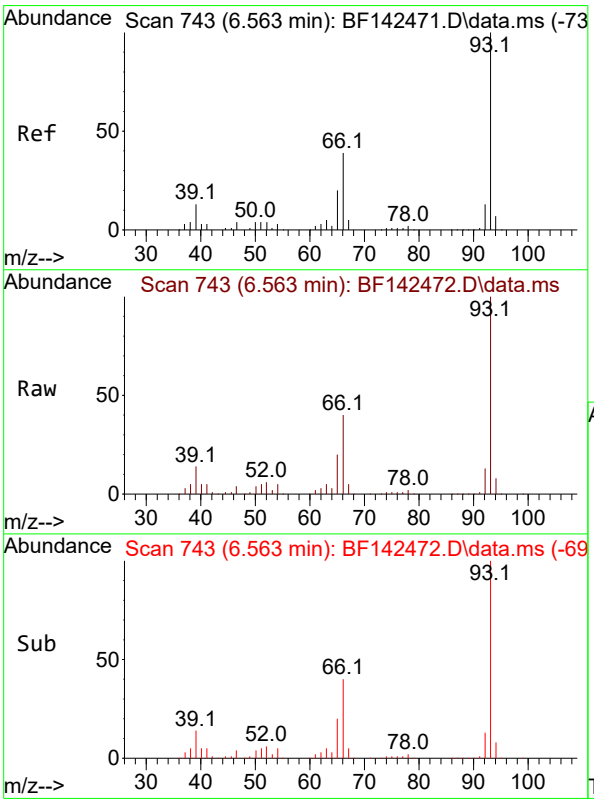
#5
2-Fluorophenol
Concen: 102.760 ng
RT: 5.510 min Scan# 5
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:112 Resp: 526965

Ion	Ratio	Lower	Upper
112	100		
64	58.8	47.5	71.3
63	31.8	24.9	37.3

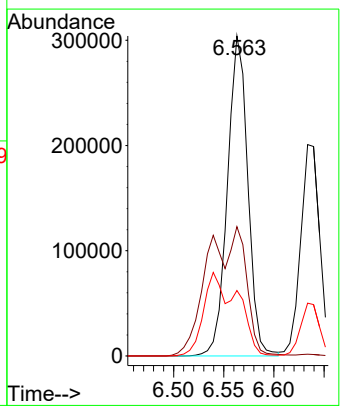


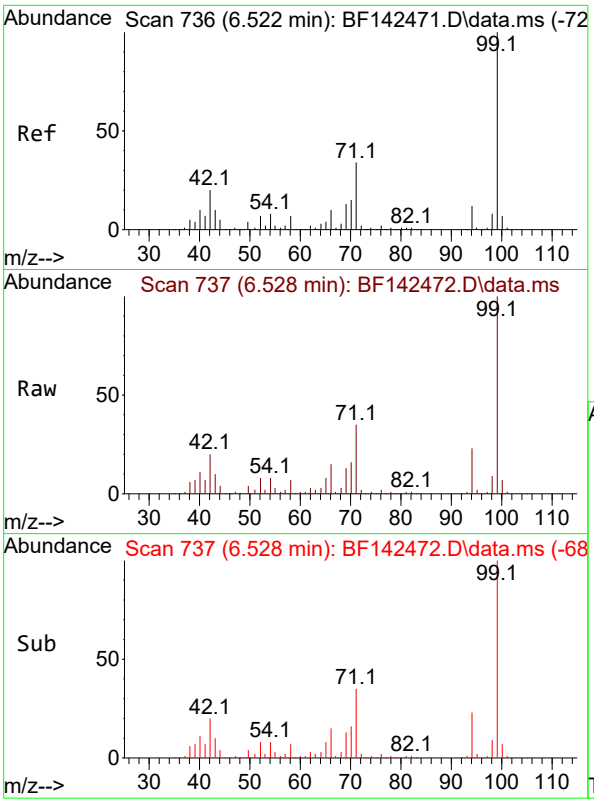


#6
Aniline
Concen: 51.852 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 93 Resp: 430377

Ion	Ratio	Lower	Upper
93	100		
66	40.4	32.0	48.0
65	20.4	16.1	24.1



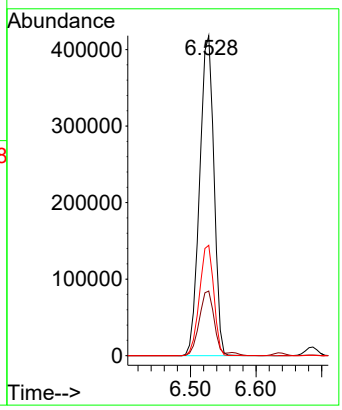


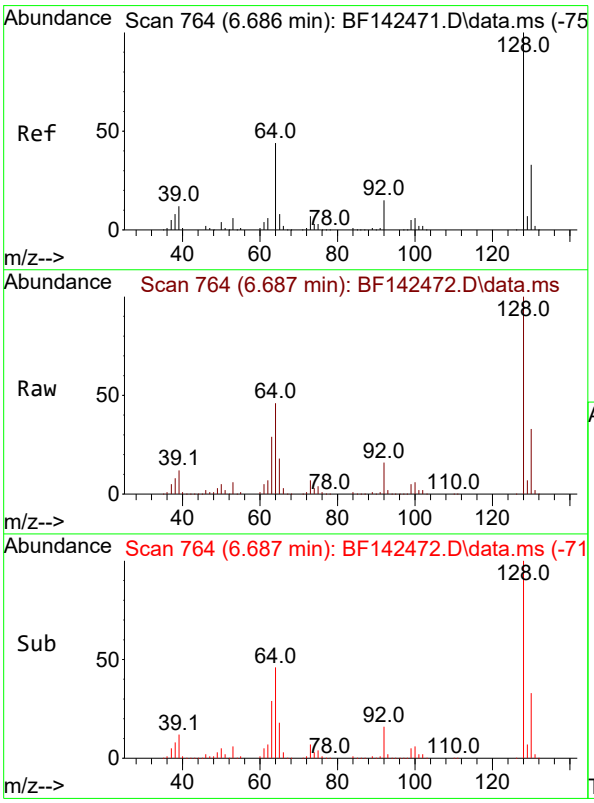
#7
Phenol-d6
Concen: 102.679 ng
RT: 6.528 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 99 Resp: 633841

Ion	Ratio	Lower	Upper
99	100		
42	20.2	16.2	24.2
71	34.5	27.3	40.9

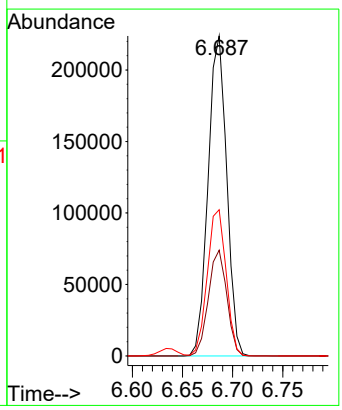


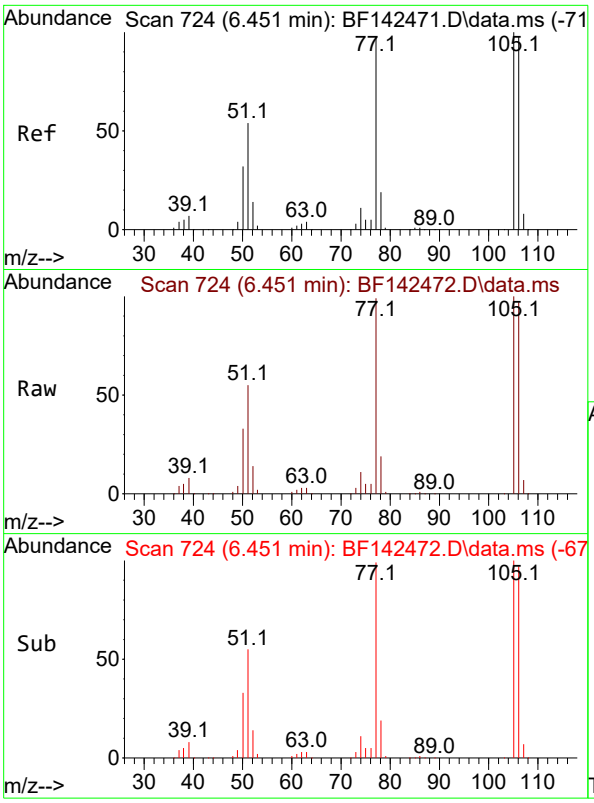


#8
2-Chlorophenol
Concen: 51.731 ng
RT: 6.687 min Scan# 764
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:128 Resp: 288948

Ion	Ratio	Lower	Upper
128	100		
130	33.1	12.6	52.6
64	45.7	25.1	65.1



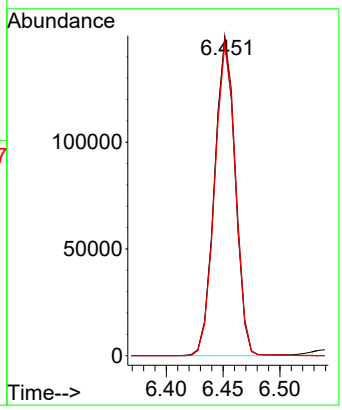


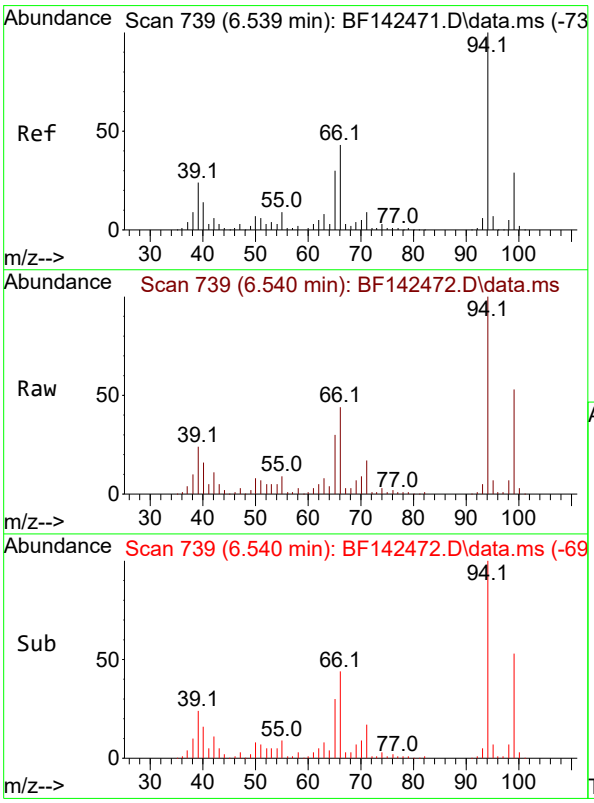
#9
Benzaldehyde
Concen: 50.700 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 77 Resp: 188241

Ion	Ratio	Lower	Upper
77	100		
105	100.9	82.5	122.5
106	98.0	80.0	120.0

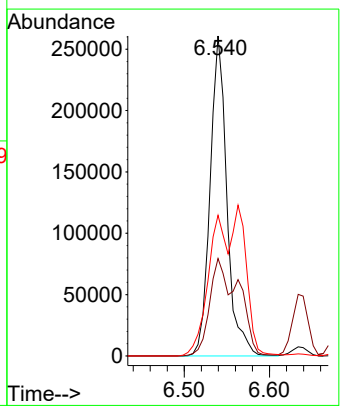


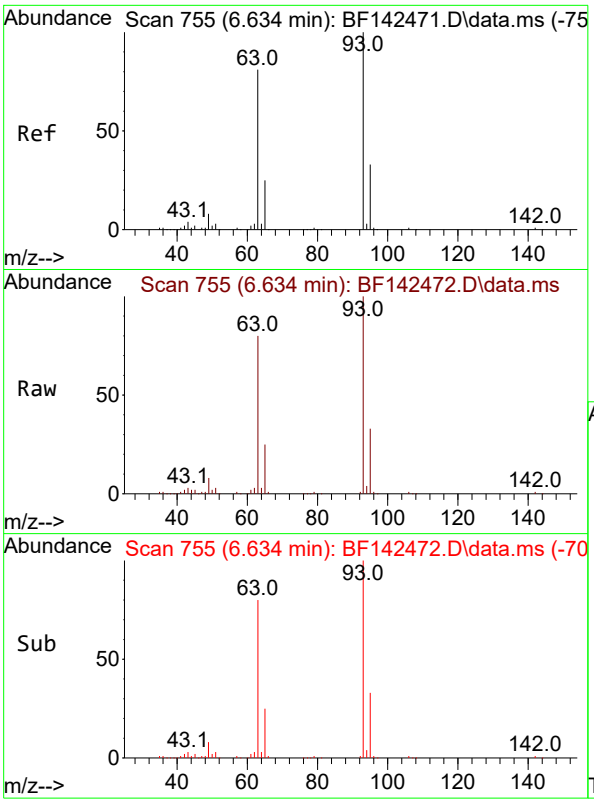


#10
Phenol
Concen: 51.526 ng
RT: 6.540 min Scan# 739
Delta R.T. -0.012 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 94 Resp: 357896

Ion	Ratio	Lower	Upper
94	100		
65	30.4	10.3	50.3
66	44.0	22.6	62.6



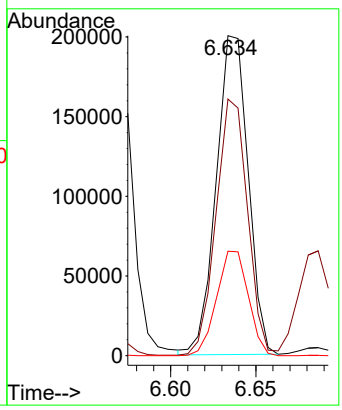


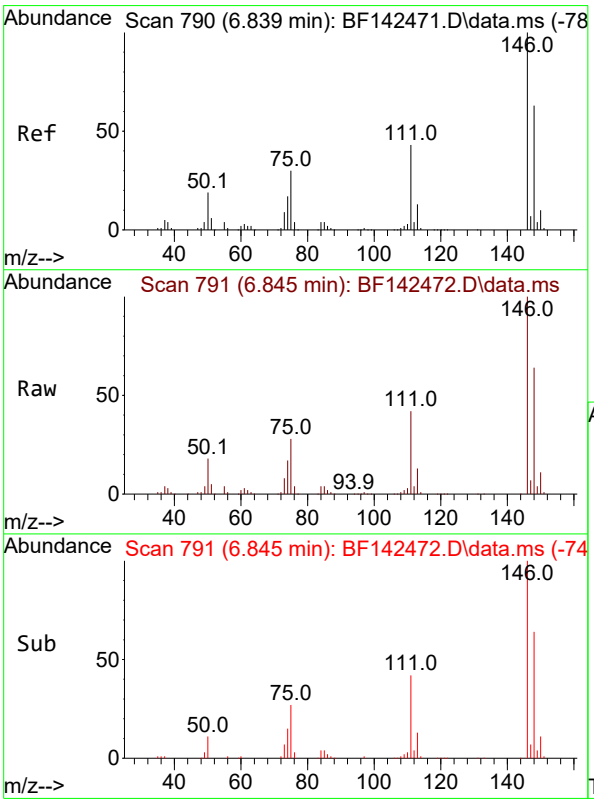
#11
bis(2-Chloroethyl)ether
Concen: 52.210 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 93 Resp: 261046

Ion	Ratio	Lower	Upper
93	100		
63	80.2	60.2	100.2
95	32.7	12.3	52.3

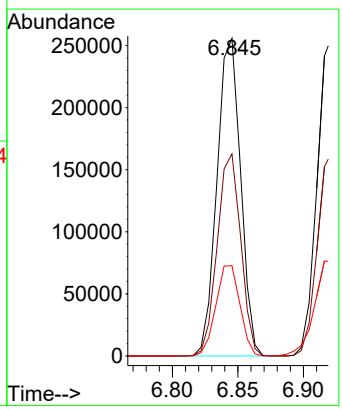


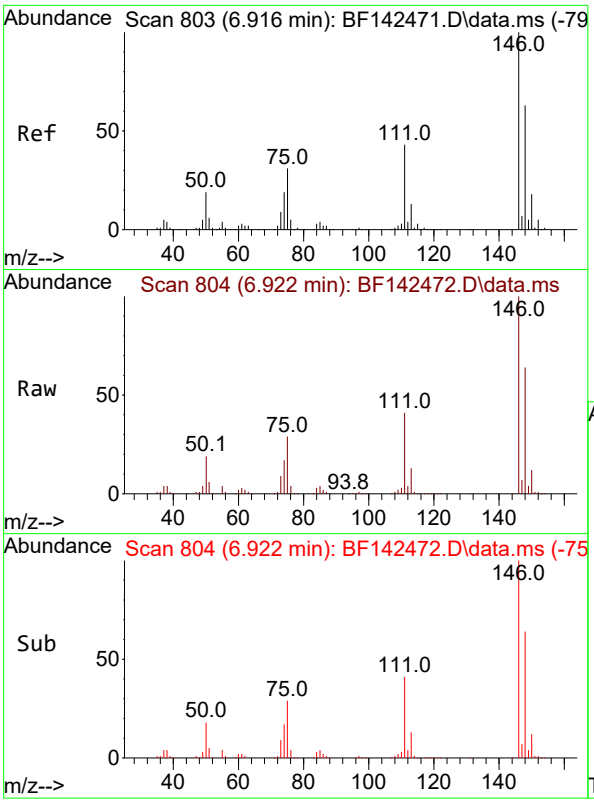


#12
1,3-Dichlorobenzene
Concen: 51.357 ng
RT: 6.845 min Scan# 791
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:146 Resp: 320095

Ion	Ratio	Lower	Upper
146	100		
148	63.6	50.6	75.8
75	28.4	23.8	35.6



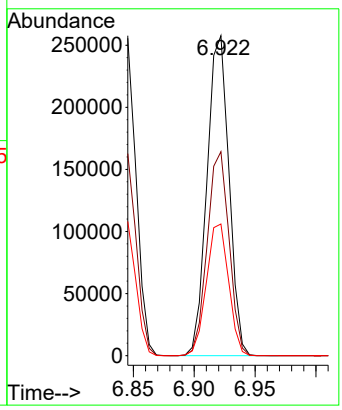


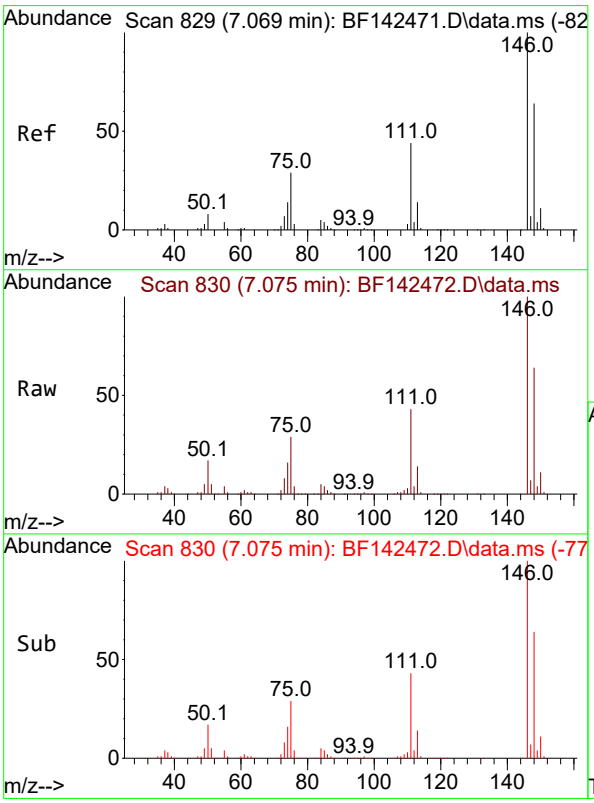
#13
1,4-Dichlorobenzene
Concen: 51.427 ng
RT: 6.922 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:146 Resp: 322871

Ion	Ratio	Lower	Upper
146	100		
148	63.7	50.4	75.6
111	41.1	34.1	51.1

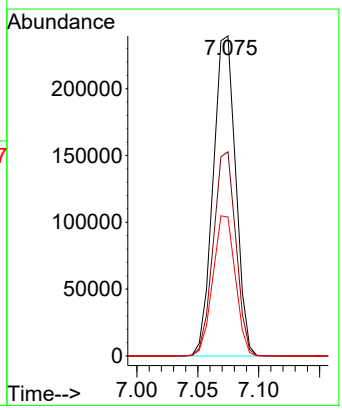


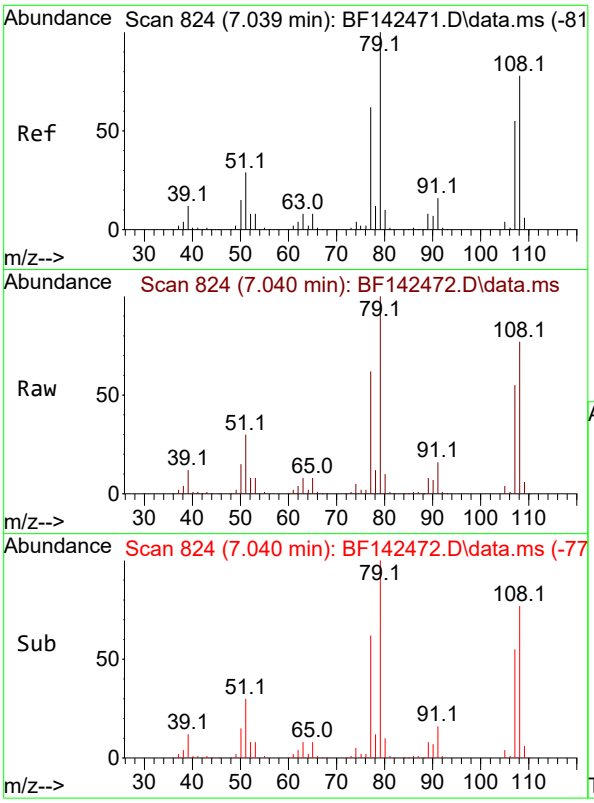


#14
1,2-Dichlorobenzene
Concen: 51.491 ng
RT: 7.075 min Scan# 830
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:146 Resp: 309332

Ion	Ratio	Lower	Upper
146	100		
148	63.8	51.0	76.4
111	43.4	35.0	52.6



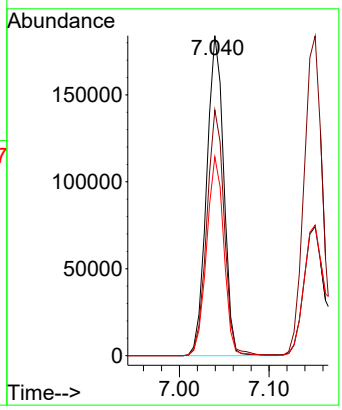


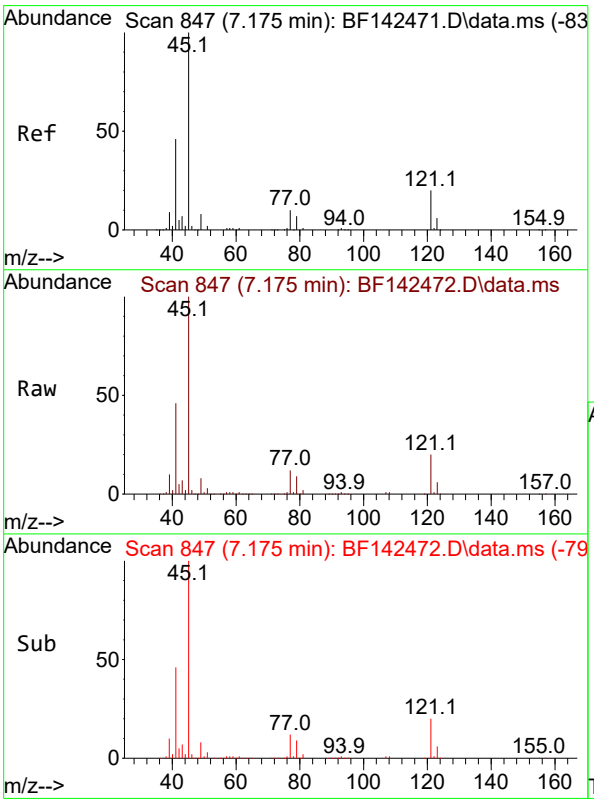
#15
Benzyl Alcohol
Concen: 53.559 ng
RT: 7.040 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 79 Resp: 244326

Ion	Ratio	Lower	Upper
79	100		
108	76.8	62.1	93.1
77	62.1	49.5	74.3

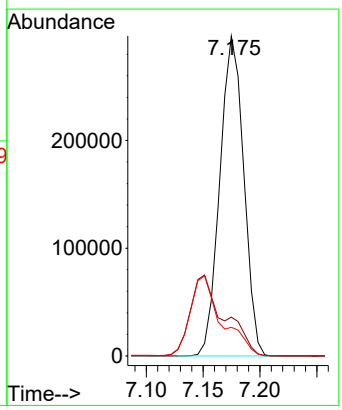


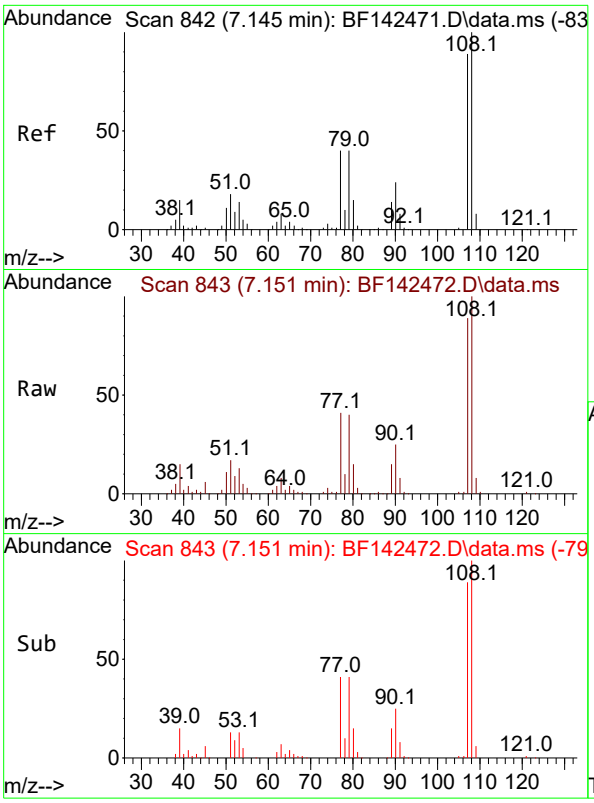


#16
2,2'-oxybis(1-Chloropropane)
Concen: 51.741 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 45 Resp: 434451

Ion	Ratio	Lower	Upper
45	100		
77	12.1	0.0	32.0
79	9.0	0.0	29.2



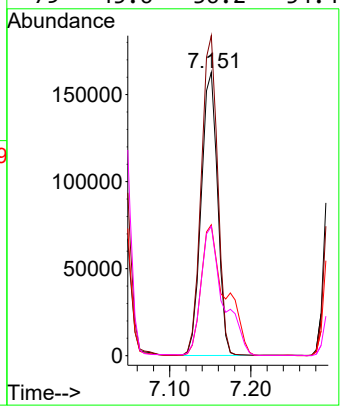


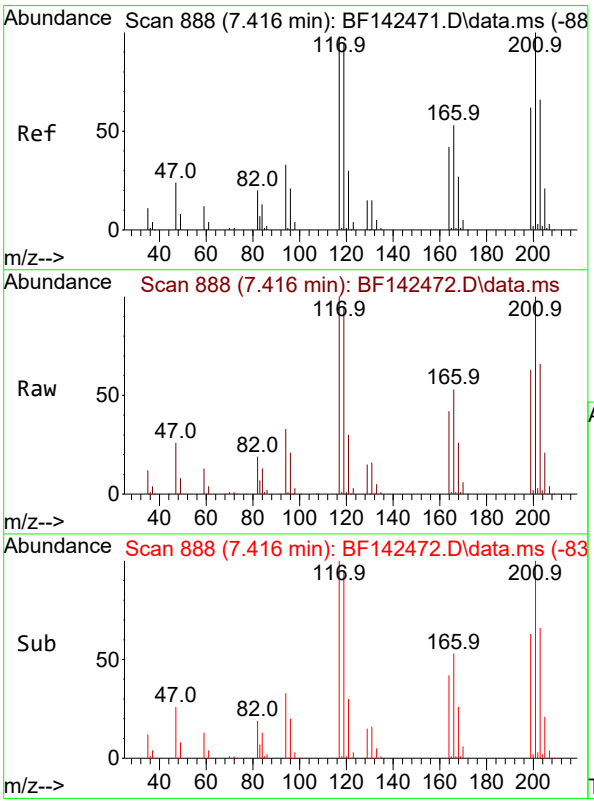
#17
2-Methylphenol
Concen: 52.141 ng
RT: 7.151 min Scan# 84
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:107 Resp: 227385

Ion	Ratio	Lower	Upper
107	100		
108	112.9	90.2	135.2
77	46.2	36.1	54.1
79	45.6	36.2	54.4

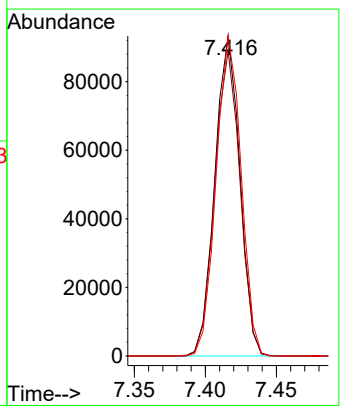


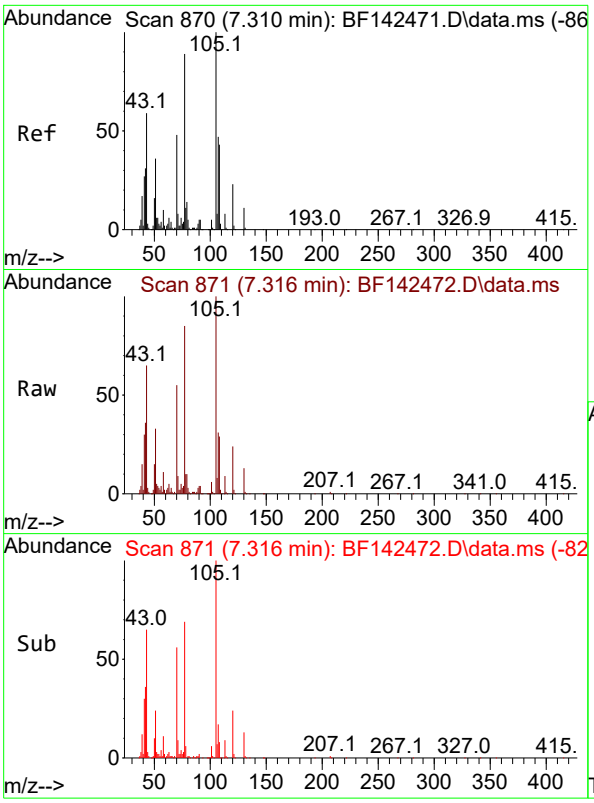


#18
Hexachloroethane
Concen: 52.159 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:117 Resp: 114346

Ion	Ratio	Lower	Upper
117	100		
119	95.3	76.6	114.8
201	100.0	81.3	121.9



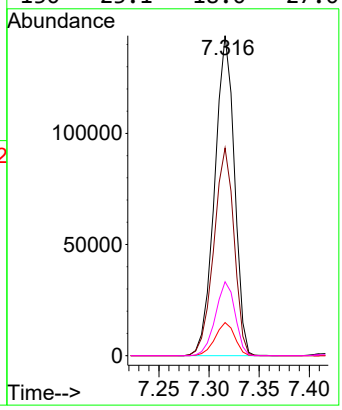


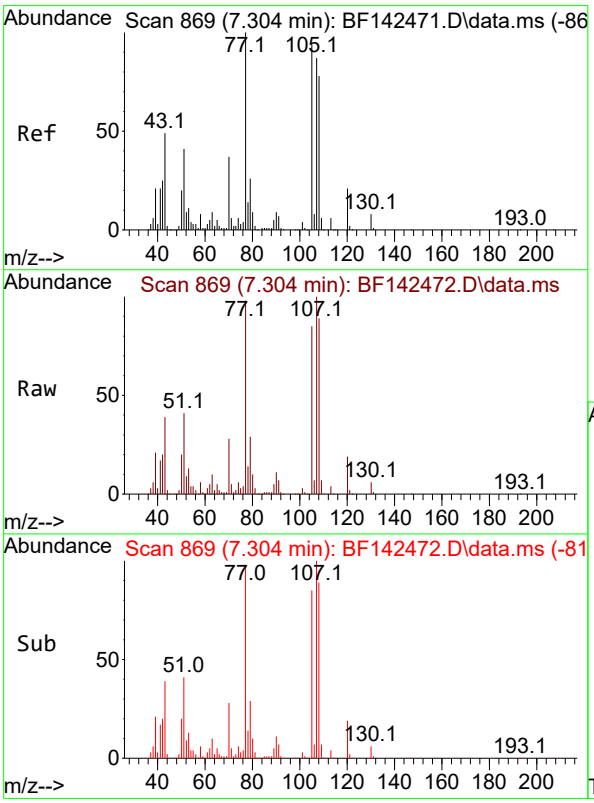
#19
n-Nitroso-di-n-propylamine
Concen: 51.498 ng
RT: 7.316 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 70 Resp: 197020

Ion	Ratio	Lower	Upper
70	100		
42	64.9	52.4	78.6
101	10.4	7.8	11.8
130	23.1	18.0	27.0

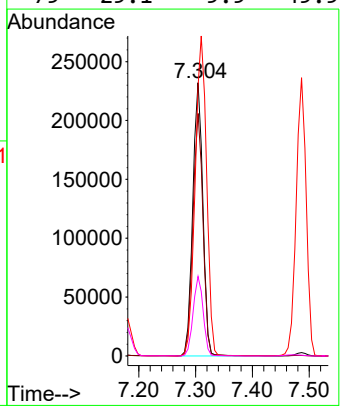


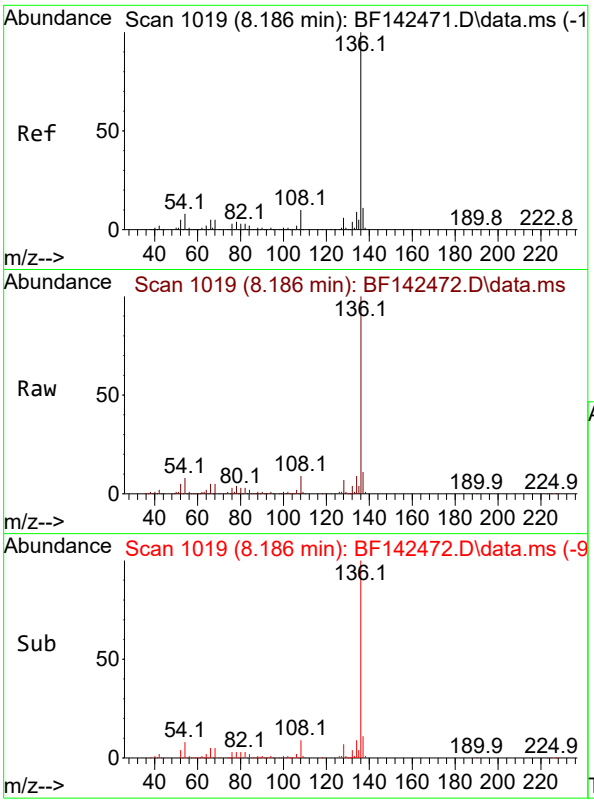


#20
3+4-Methylphenols
Concen: 51.719 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:107 Resp: 288829

Ion	Ratio	Lower	Upper
107	100		
108	88.8	70.4	110.4
77	98.4	95.4	135.4
79	29.1	9.9	49.9



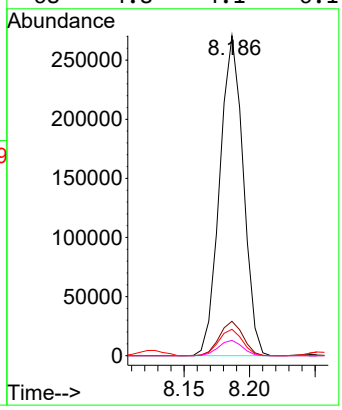


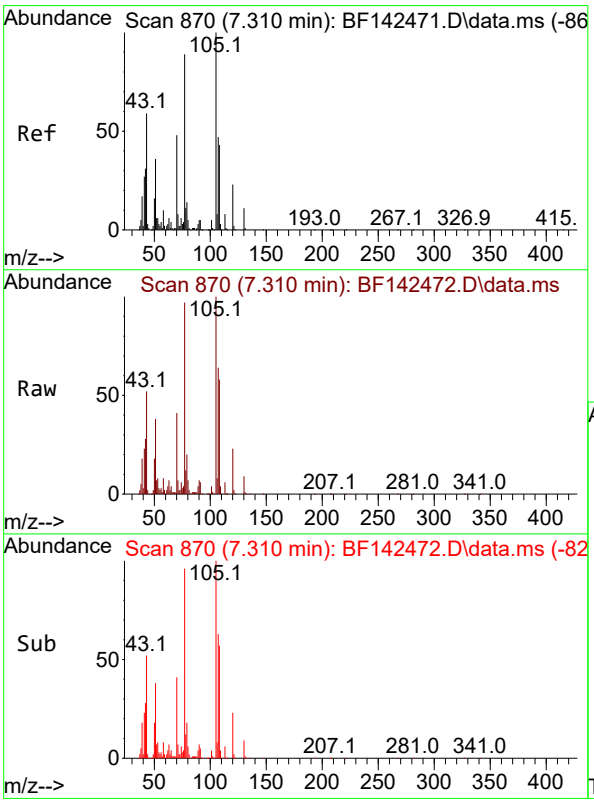
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:136 Resp: 336796

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.6	13.0
54	8.2	6.6	10.0
68	4.8	4.1	6.1

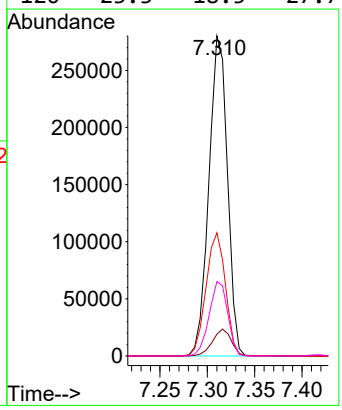


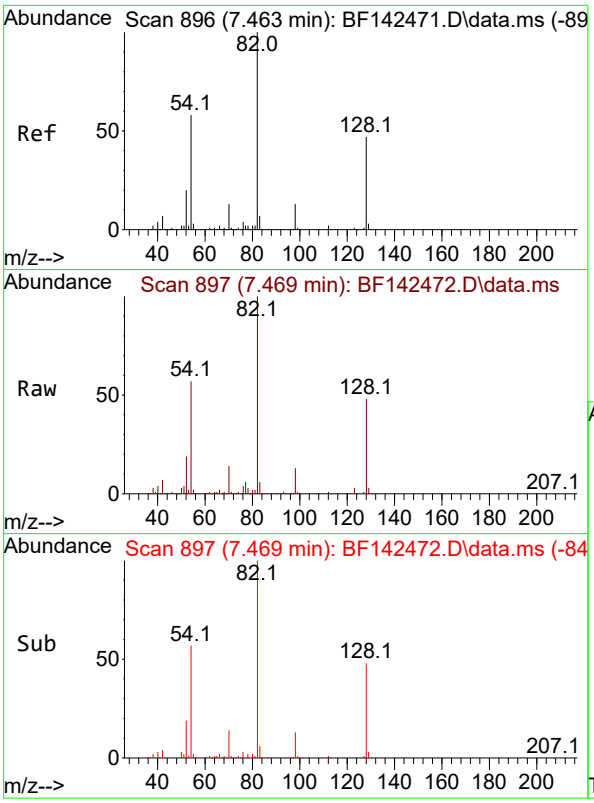


#22
Acetophenone
Concen: 50.992 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:105 Resp: 380175

Ion	Ratio	Lower	Upper
105	100		
71	6.8	6.4	9.6
51	38.5	28.6	42.8
120	23.3	18.5	27.7



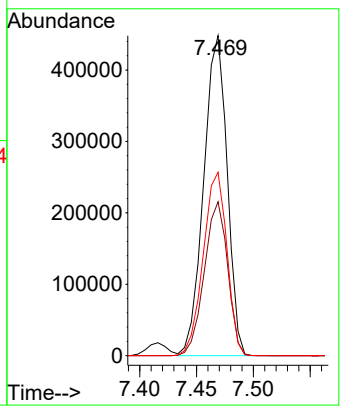


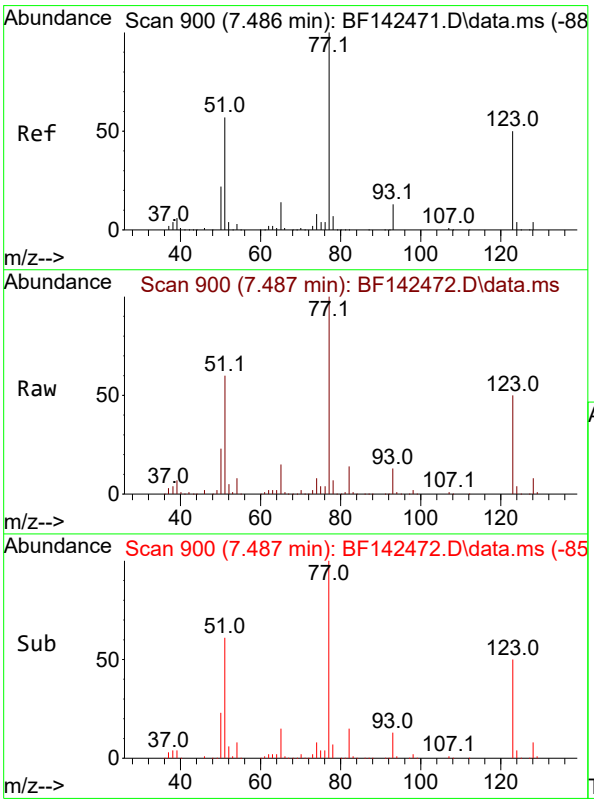
#23
Nitrobenzene-d5
Concen: 104.135 ng
RT: 7.469 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 82 Resp: 643186

Ion	Ratio	Lower	Upper
82	100		
128	48.1	37.4	56.2
54	57.3	46.6	70.0

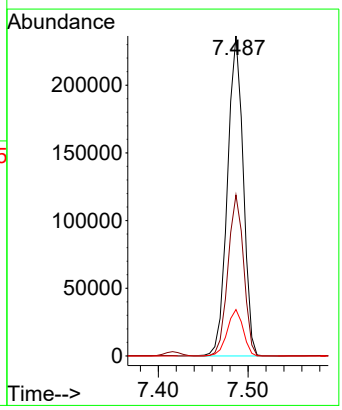


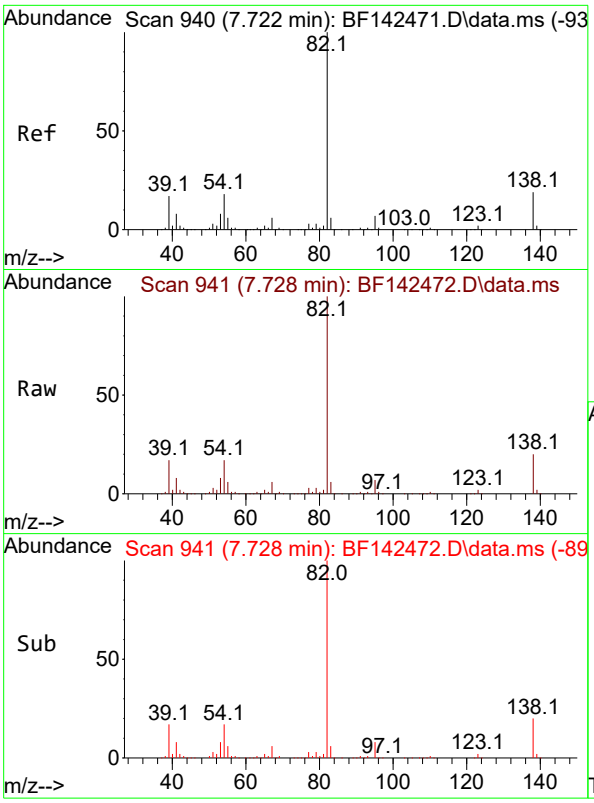


#24
Nitrobenzene
Concen: 51.834 ng
RT: 7.487 min Scan# 900
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 77 Resp: 288748

Ion	Ratio	Lower	Upper
77	100		
123	50.3	40.6	61.0
65	14.5	11.4	17.2



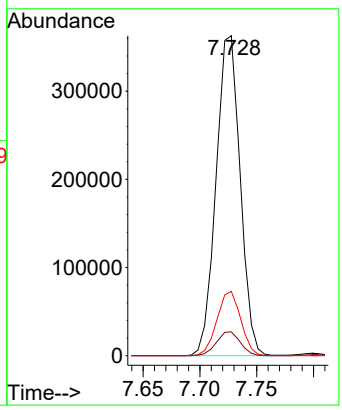


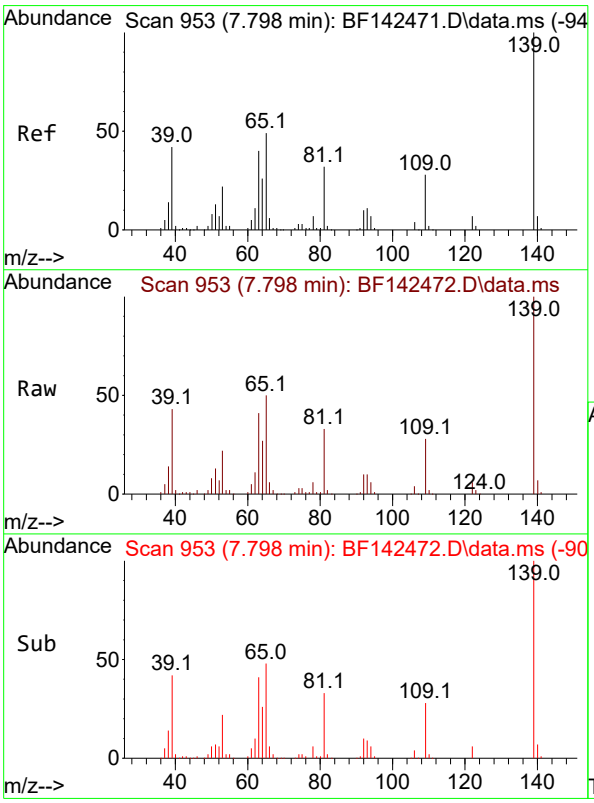
#25
Isophorone
Concen: 51.985 ng
RT: 7.728 min Scan# 94
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 82 Resp: 536829

Ion	Ratio	Lower	Upper
82	100		
95	7.5	6.0	9.0
138	20.1	15.5	23.3

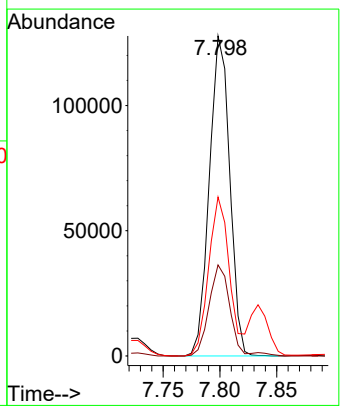


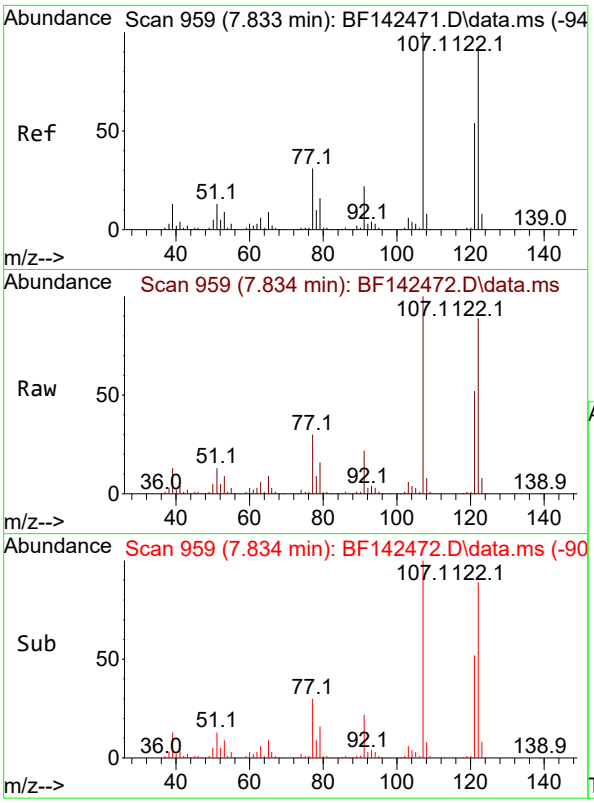


#26
2-Nitrophenol
Concen: 53.679 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:139 Resp: 159779

Ion	Ratio	Lower	Upper
139	100		
109	28.4	22.6	33.8
65	49.6	39.4	59.0



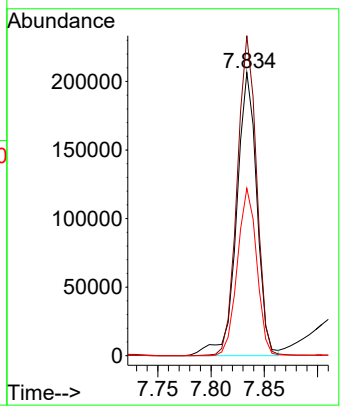


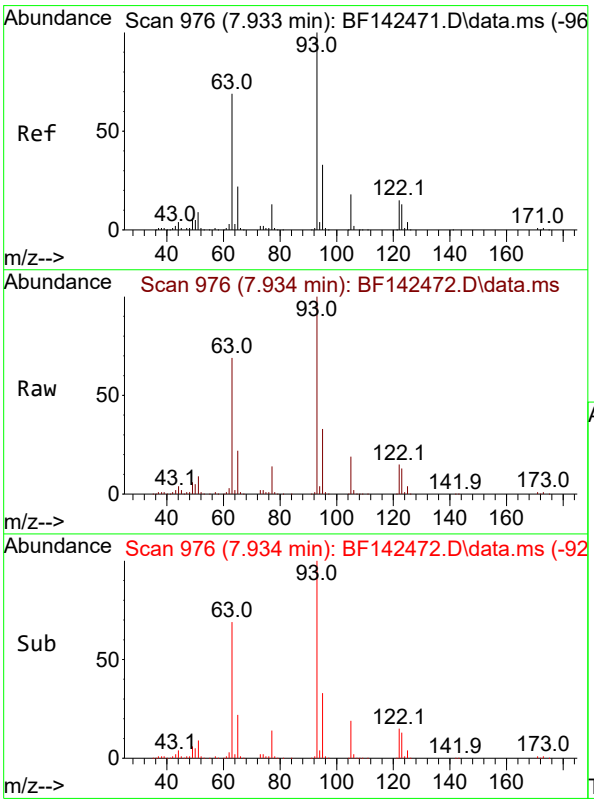
#27
2,4-Dimethylphenol
Concen: 52.123 ng
RT: 7.834 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:122 Resp: 273604

Ion	Ratio	Lower	Upper
122	100		
107	113.0	88.1	132.1
121	59.1	47.3	70.9

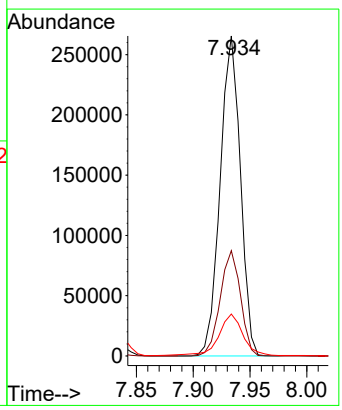


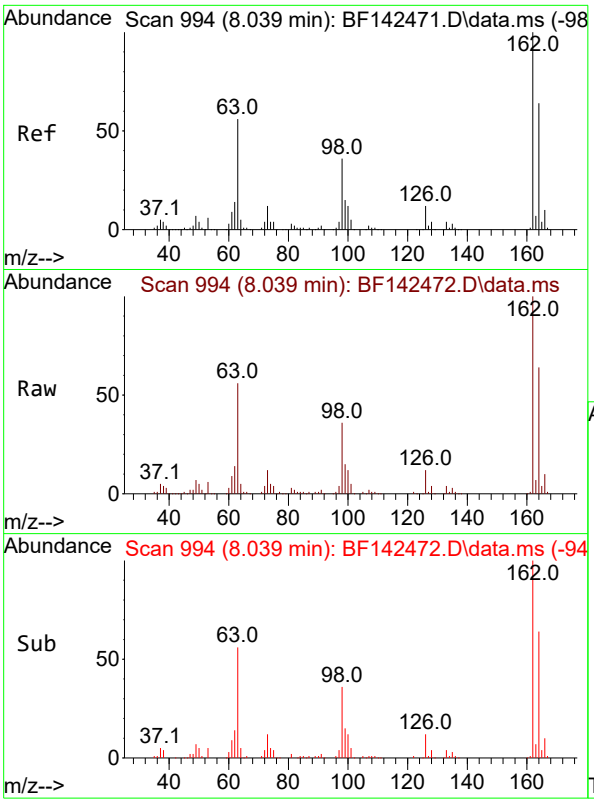


#28
bis(2-Chloroethoxy)methane
Concen: 51.041 ng
RT: 7.934 min Scan# 976
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 93 Resp: 329256

Ion	Ratio	Lower	Upper
93	100		
95	32.9	26.4	39.6
123	13.1	10.6	15.8



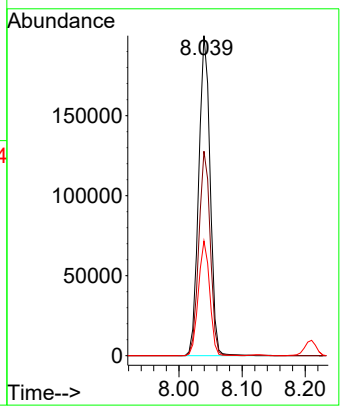


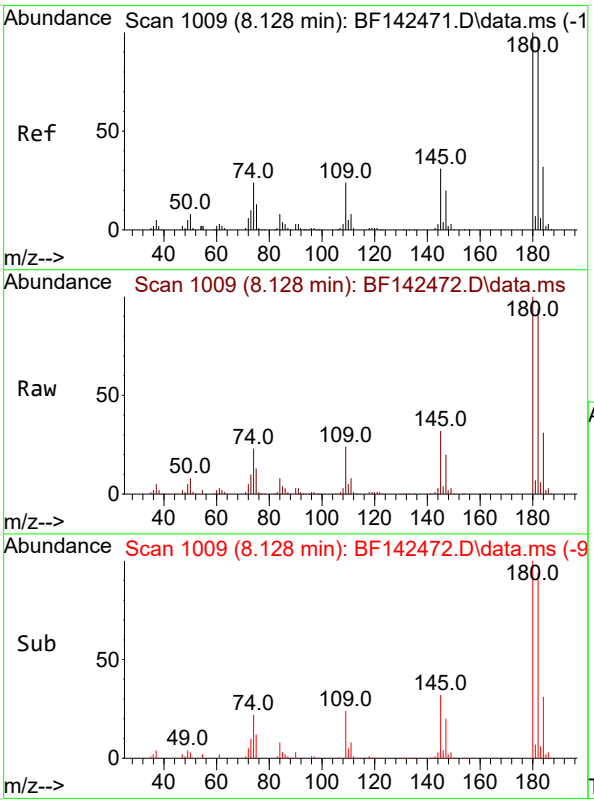
#29
2,4-Dichlorophenol
Concen: 52.840 ng
RT: 8.039 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:162 Resp: 252244

Ion	Ratio	Lower	Upper
162	100		
164	63.9	43.7	83.7
98	35.9	15.5	55.5

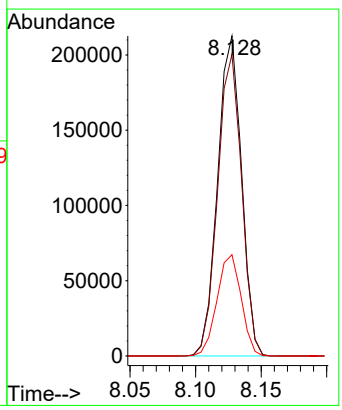


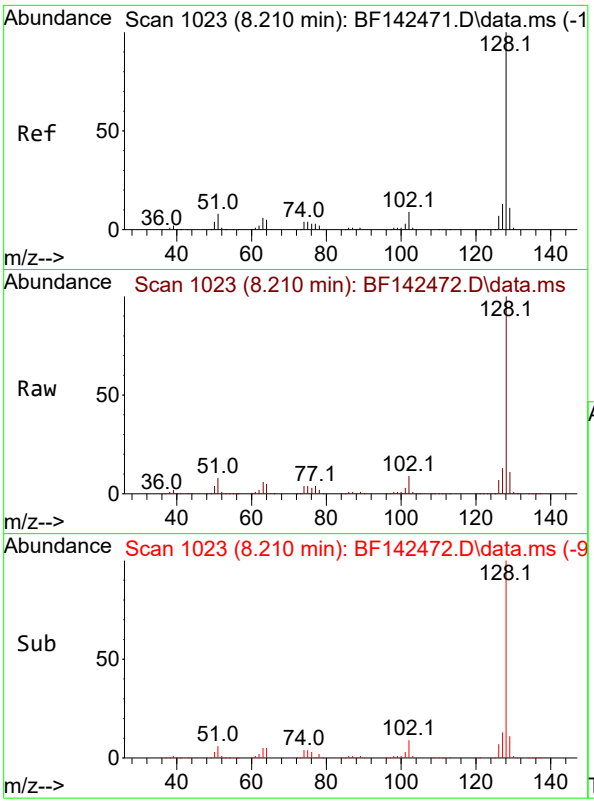


#30
1,2,4-Trichlorobenzene
Concen: 51.934 ng
RT: 8.128 min Scan# 1009
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:180 Resp: 269064

Ion	Ratio	Lower	Upper
180	100		
182	94.3	78.0	117.0
145	31.7	25.0	37.6



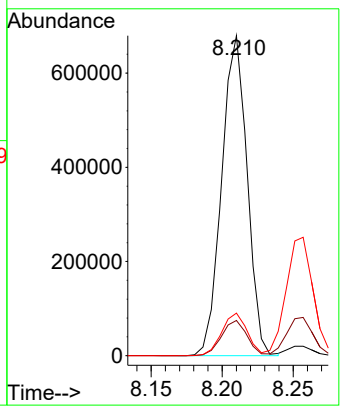


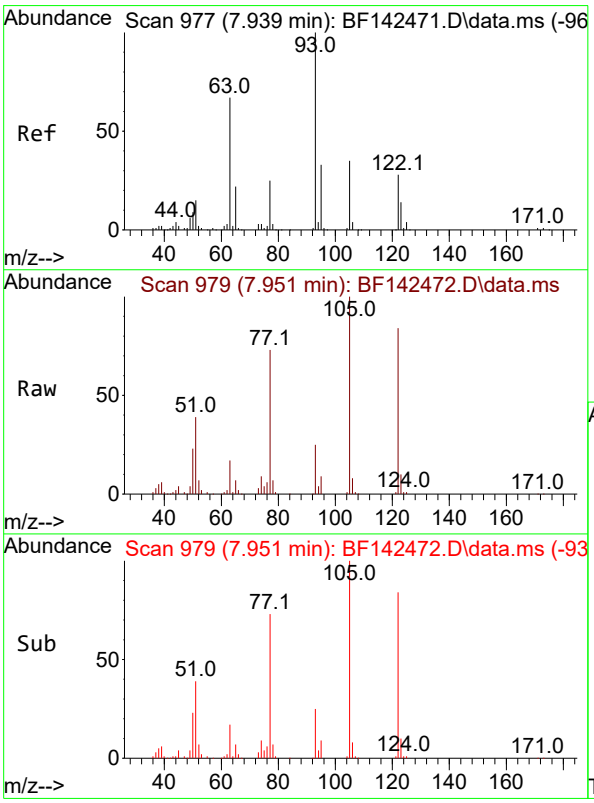
#31
Naphthalene
Concen: 51.109 ng
RT: 8.210 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:128 Resp: 847571

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.9	13.3
127	13.3	10.5	15.7

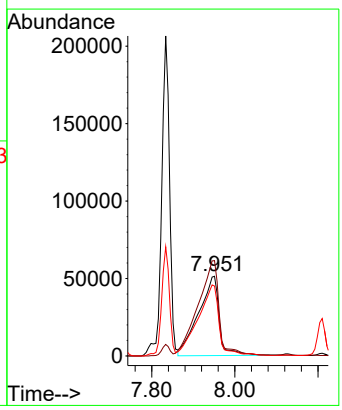


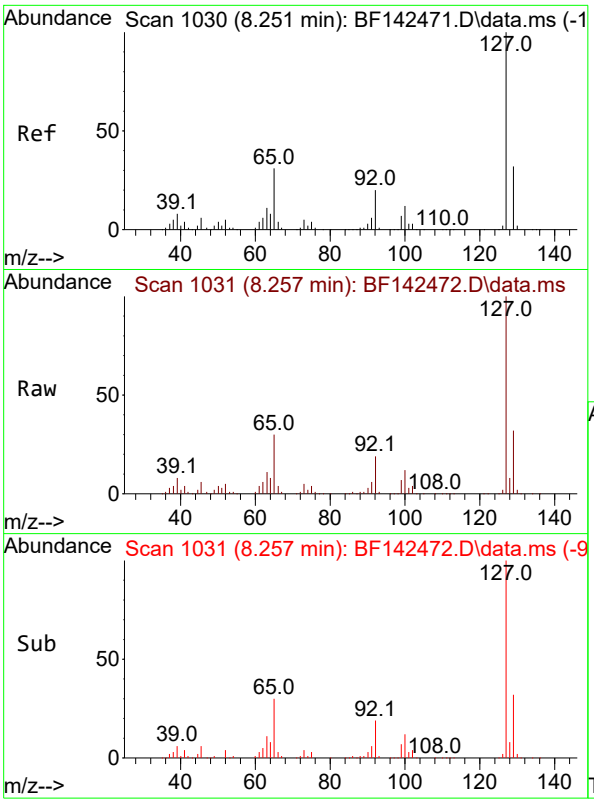


#32
Benzoic acid
Concen: 55.512 ng
RT: 7.951 min Scan# 979
Delta R.T. -0.024 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:122 Resp: 177379

Ion	Ratio	Lower	Upper
122	100		
105	119.5	101.7	141.7
77	87.7	69.5	109.5



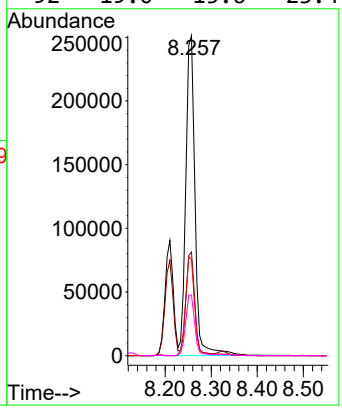


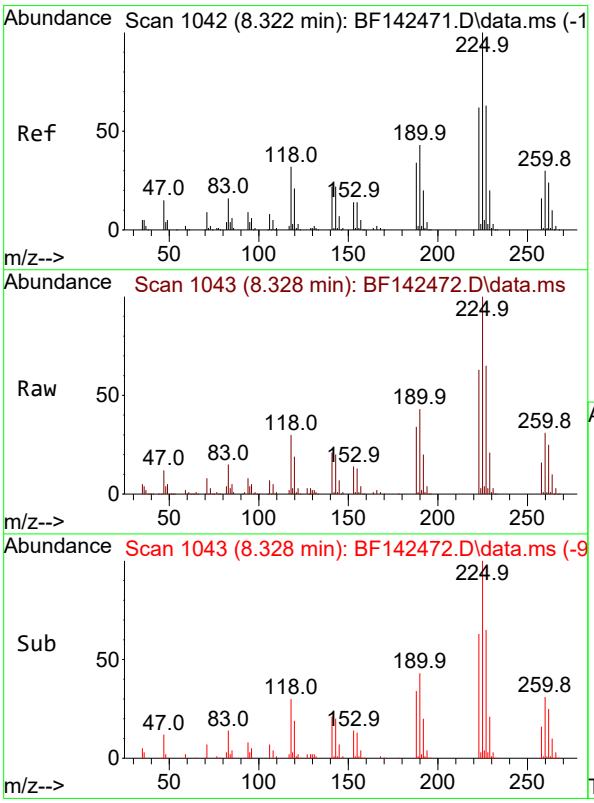
#33
4-Chloroaniline
Concen: 52.037 ng
RT: 8.257 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:127 Resp: 349678

Ion	Ratio	Lower	Upper
127	100		
129	32.4	26.1	39.1
65	30.2	24.9	37.3
92	19.0	15.6	23.4

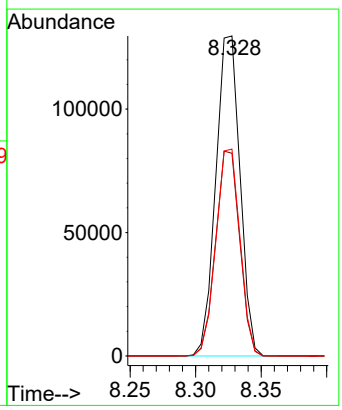


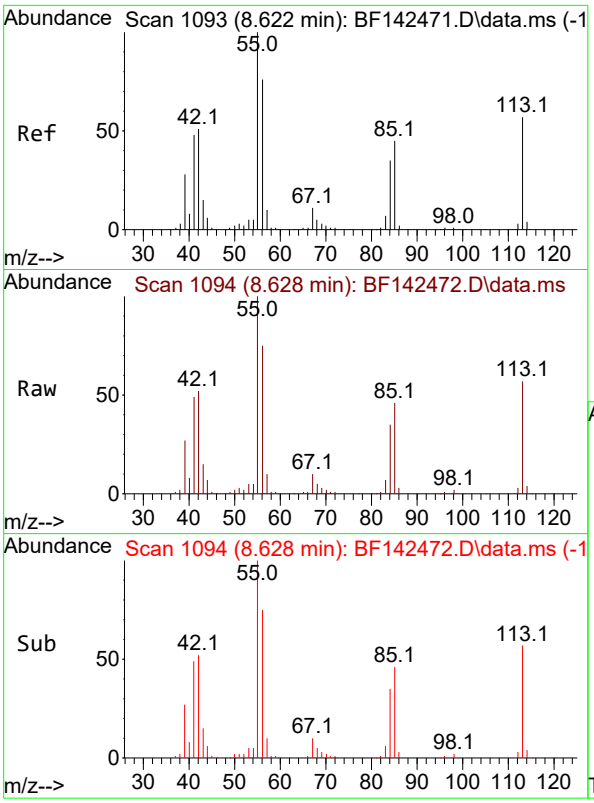


#34
Hexachlorobutadiene
Concen: 51.428 ng
RT: 8.328 min Scan# 1043
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:225 Resp: 166363

Ion	Ratio	Lower	Upper
225	100		
223	63.3	49.7	74.5
227	64.6	50.3	75.5



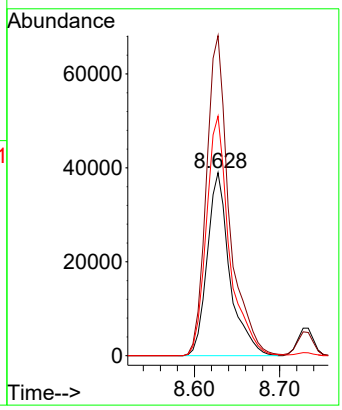


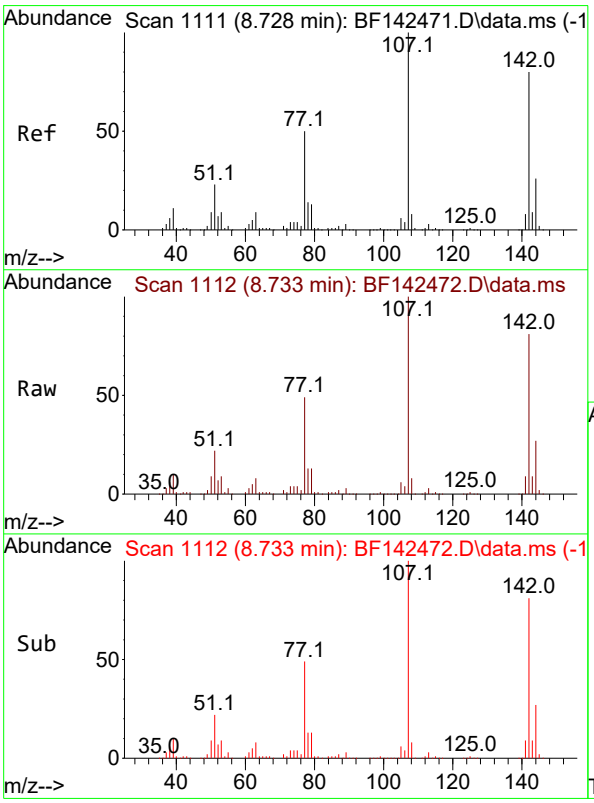
#35
Caprolactam
Concen: 53.297 ng
RT: 8.628 min Scan# 1
Delta R.T. -0.018 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:113 Resp: 71458

Ion	Ratio	Lower	Upper
113	100		
55	174.8	154.7	194.7
56	130.8	113.2	153.2

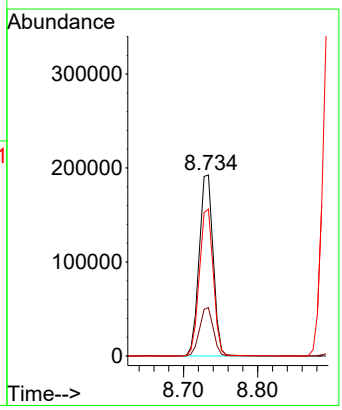


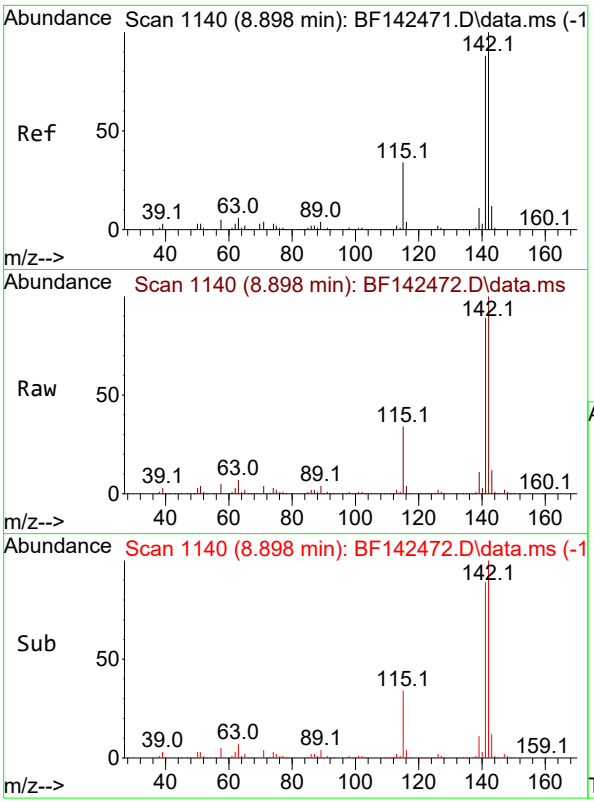


#36
4-Chloro-3-methylphenol
Concen: 51.862 ng
RT: 8.733 min Scan# 1112
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:107 Resp: 253726

Ion	Ratio	Lower	Upper
107	100		
144	26.7	20.9	31.3
142	81.2	64.2	96.2



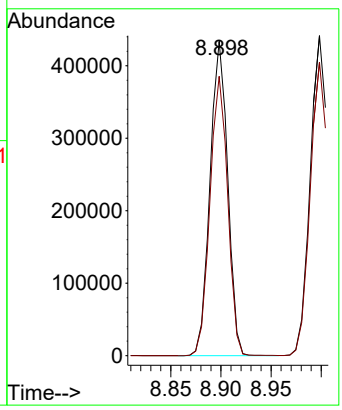


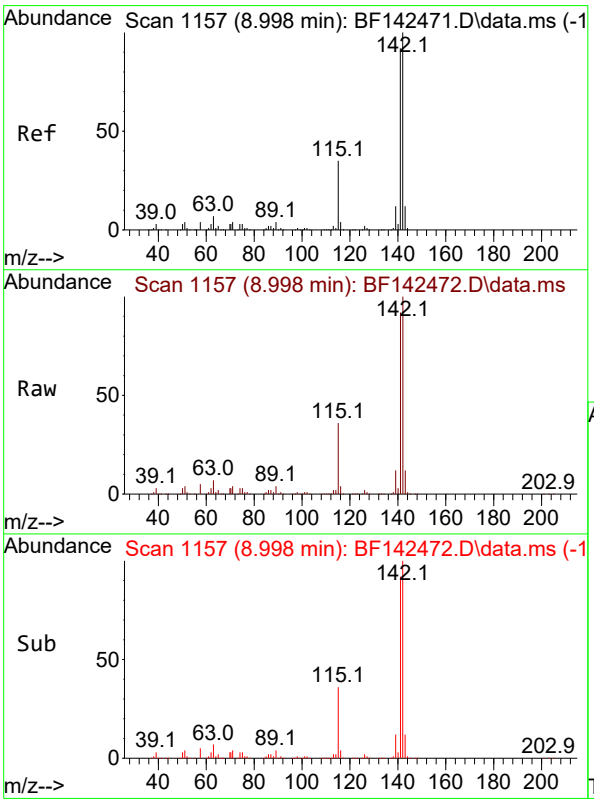
#37
2-Methylnaphthalene
Concen: 50.907 ng
RT: 8.898 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:142 Resp: 531122

Ion	Ratio	Lower	Upper
142	100		
141	88.8	70.7	106.1

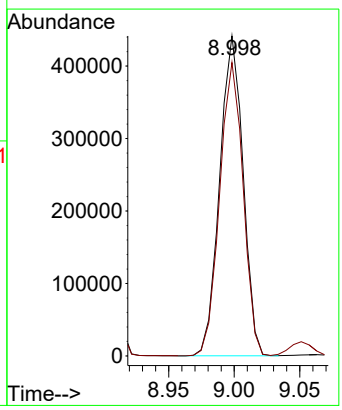


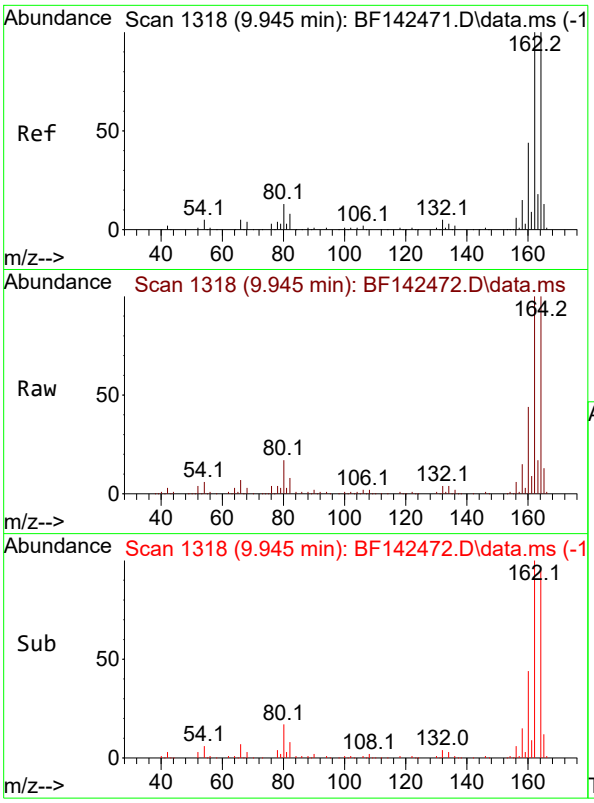


#38
1-Methylnaphthalene
Concen: 50.711 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:142 Resp: 547258

Ion	Ratio	Lower	Upper
142	100		
141	91.7	73.4	110.2



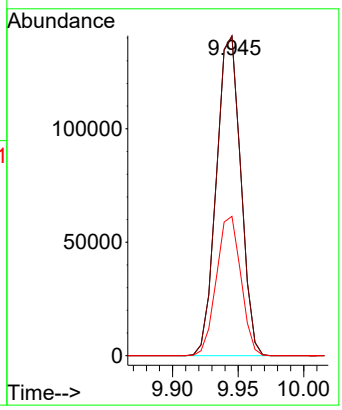


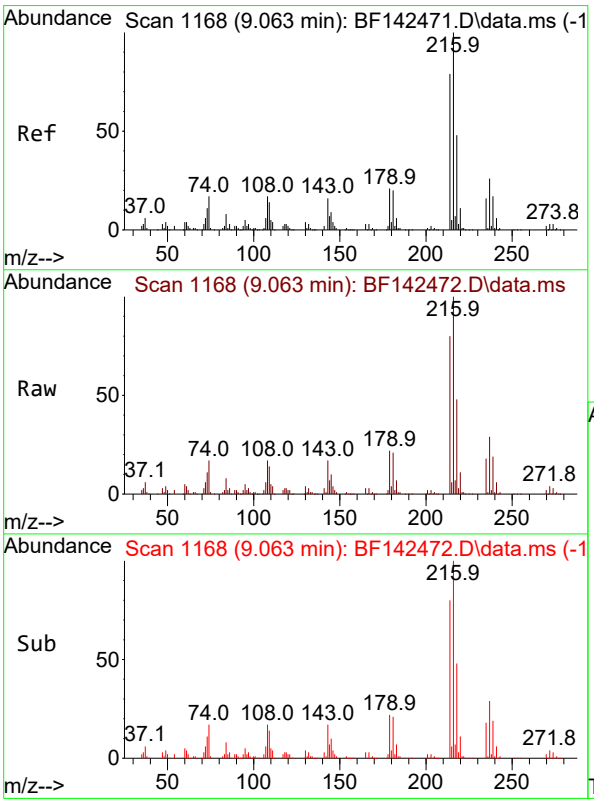
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.945 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:164 Resp: 181409

Ion	Ratio	Lower	Upper
164	100		
162	100.3	80.2	120.4
160	43.7	35.6	53.4

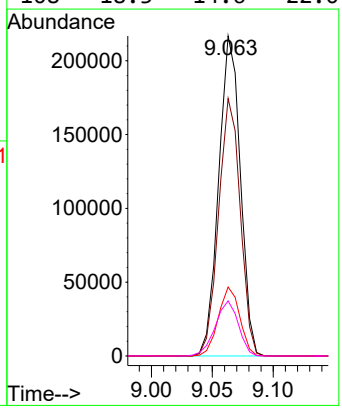


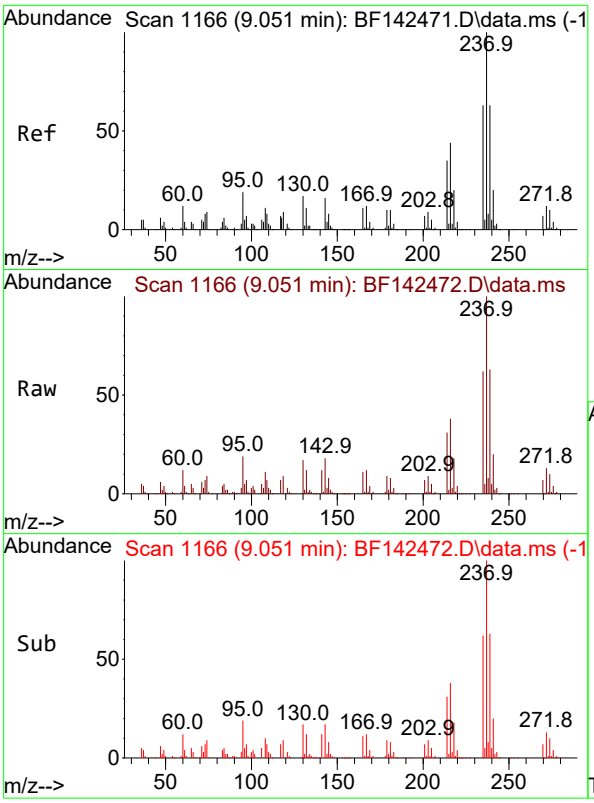


#40
1,2,4,5-Tetrachlorobenzene
Concen: 51.543 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:216 Resp: 268407

Ion	Ratio	Lower	Upper
216	100		
214	80.3	62.9	94.3
179	21.3	16.9	25.3
108	18.3	14.6	22.0



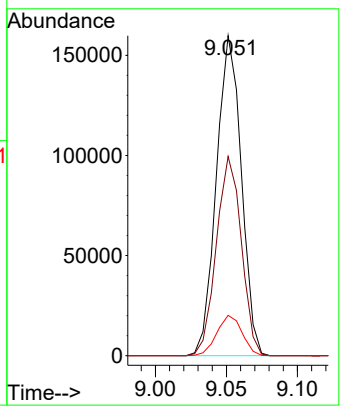


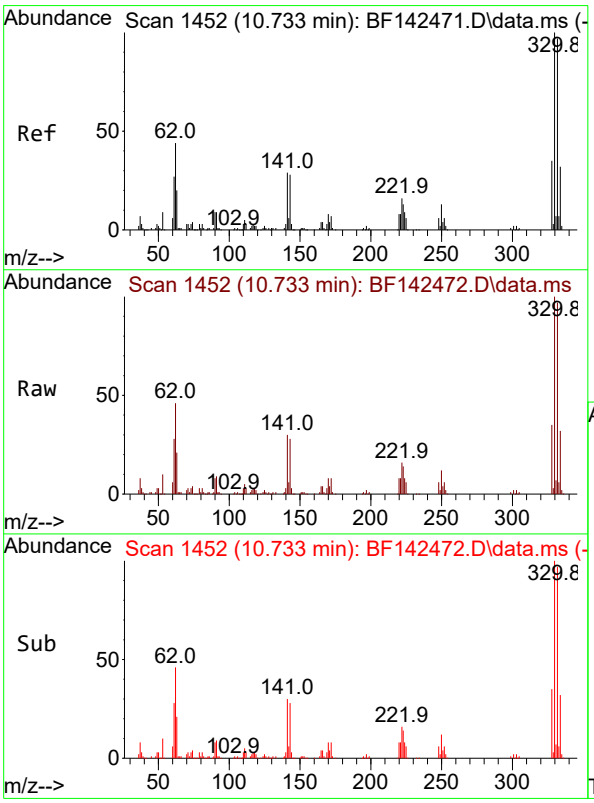
#41
Hexachlorocyclopentadiene
Concen: 55.532 ng
RT: 9.051 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:237 Resp: 195080

Ion	Ratio	Lower	Upper
237	100		
235	62.3	43.3	83.3
272	12.6	0.0	32.4

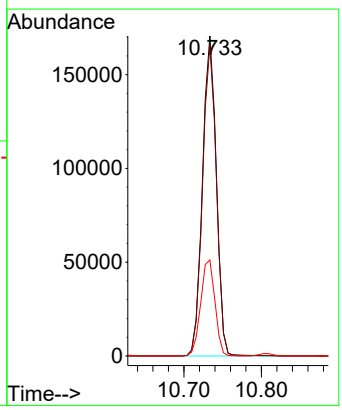


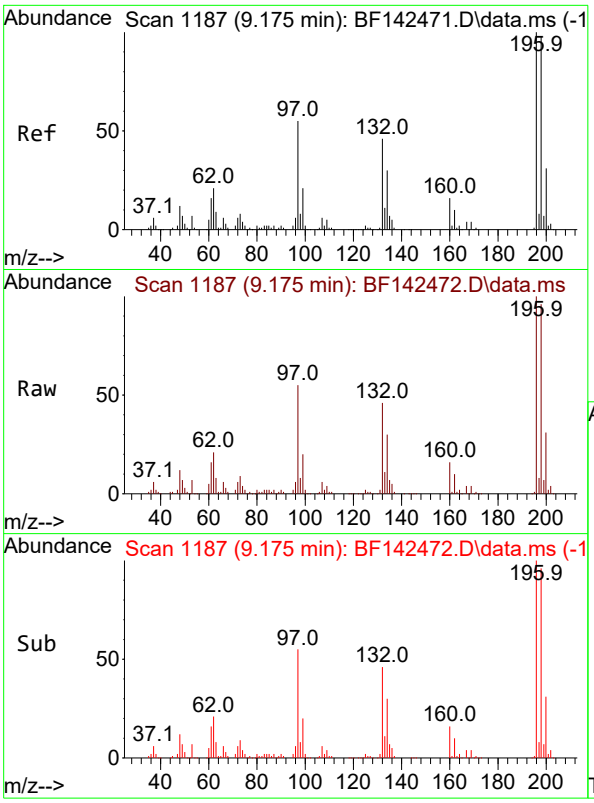


#42
2,4,6-Tribromophenol
Concen: 104.956 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:330 Resp: 211319

Ion	Ratio	Lower	Upper
330	100		
332	97.0	77.6	116.4
141	30.9	24.6	36.8



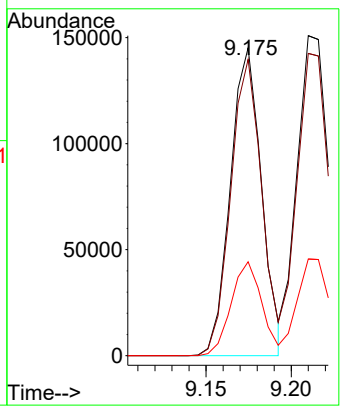


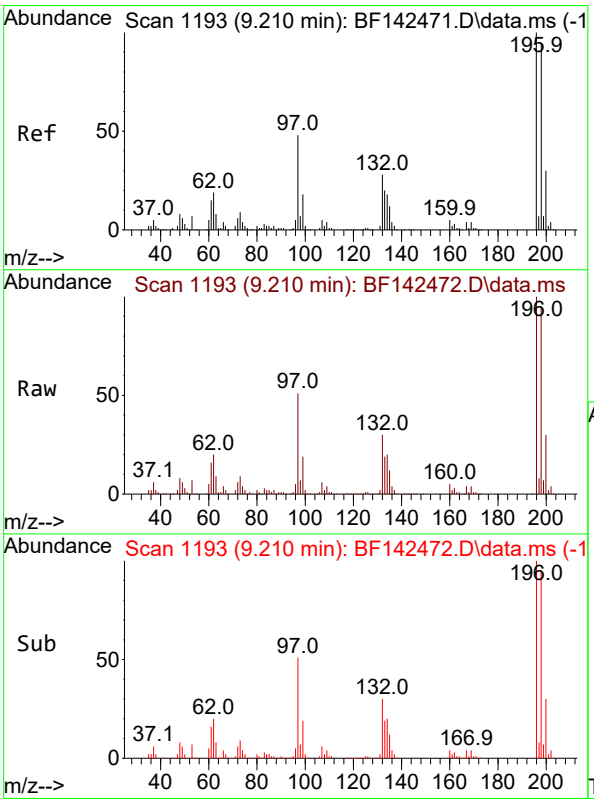
#43
2,4,6-Trichlorophenol
Concen: 52.421 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:196 Resp: 184076

Ion	Ratio	Lower	Upper
196	100		
198	96.3	78.8	118.2
200	30.5	24.9	37.3

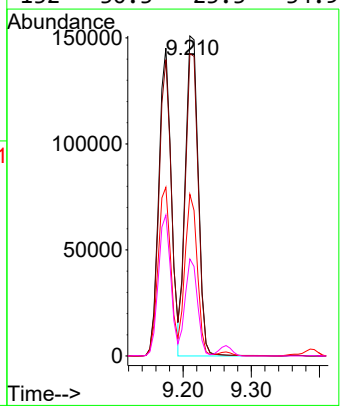


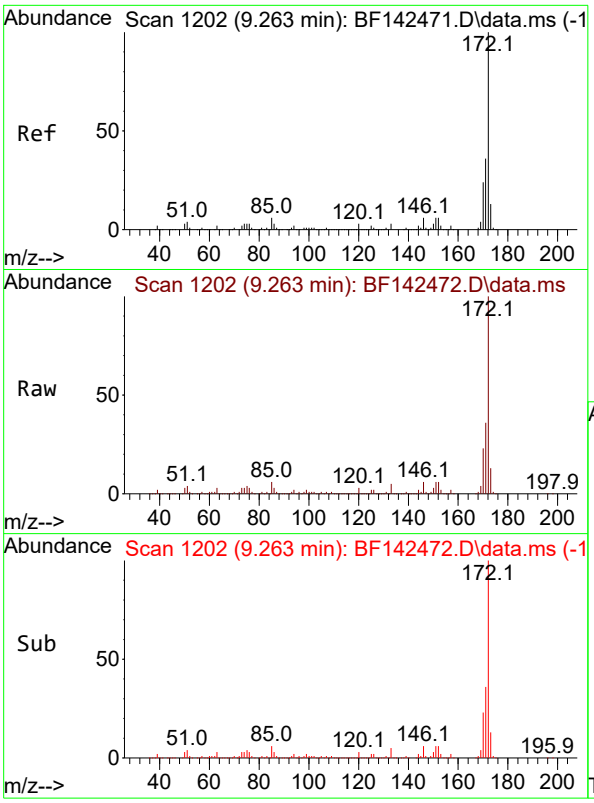


#44
2,4,5-Trichlorophenol
Concen: 53.537 ng
RT: 9.210 min Scan# 1193
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:196 Resp: 198266

Ion	Ratio	Lower	Upper
196	100		
198	94.4	75.5	113.3
97	50.5	39.3	58.9
132	30.3	23.3	34.9



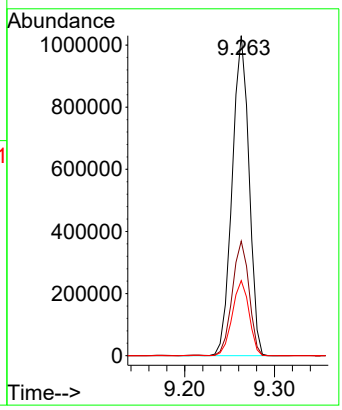


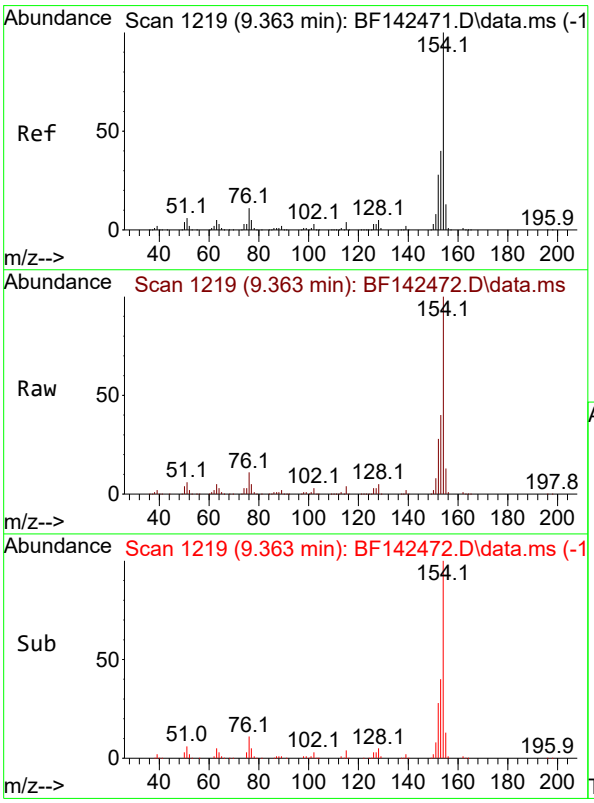
#45
2-Fluorobiphenyl
Concen: 99.269 ng
RT: 9.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:172 Resp: 1342037

Ion	Ratio	Lower	Upper
172	100		
171	35.8	28.6	42.8
170	23.4	18.9	28.3

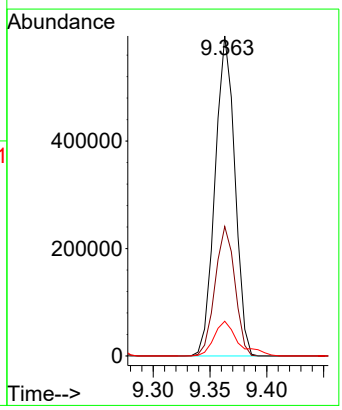


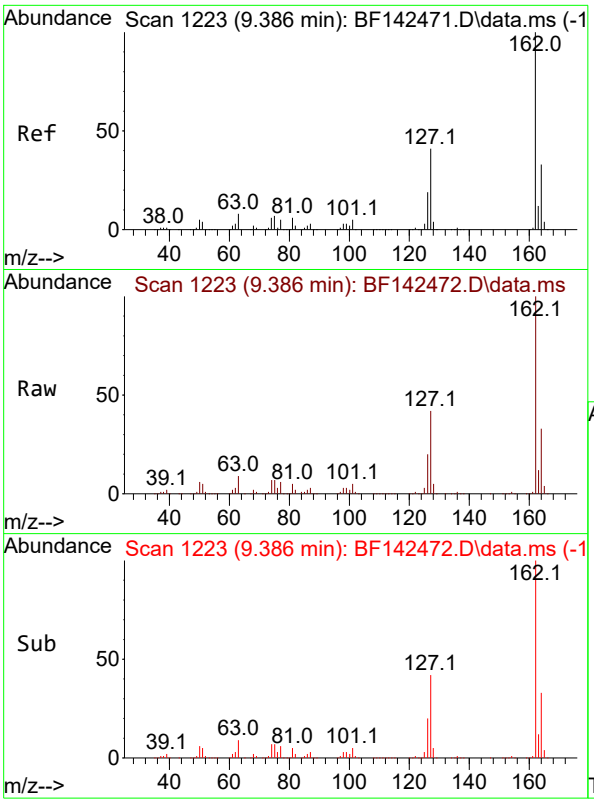


#46
1,1'-Biphenyl
Concen: 51.405 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:154 Resp: 723473

Ion	Ratio	Lower	Upper
154	100		
153	40.4	20.4	60.4
76	10.8	0.0	30.8



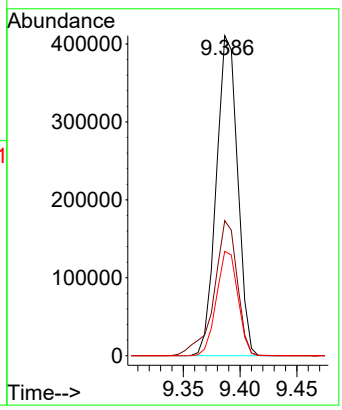


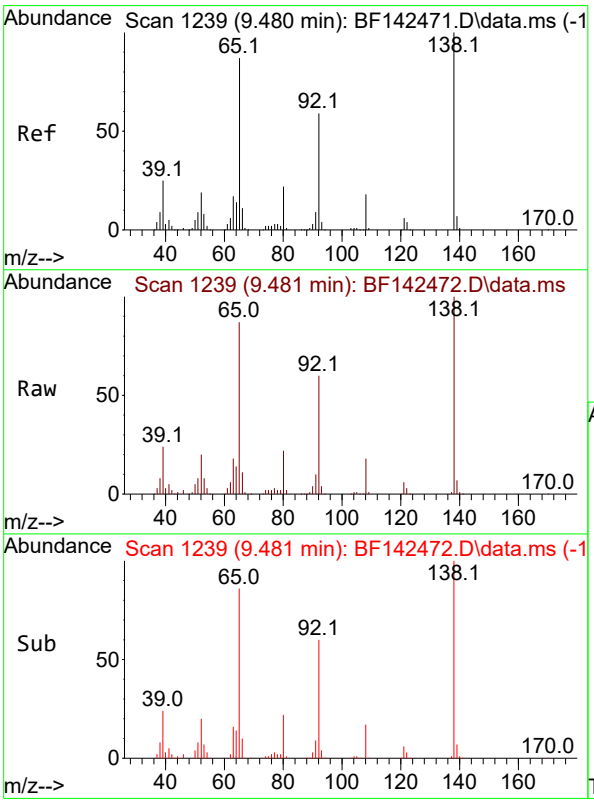
#47
2-Chloronaphthalene
Concen: 51.583 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:162 Resp: 536379

Ion	Ratio	Lower	Upper
162	100		
127	42.2	33.5	50.3
164	32.6	26.1	39.1

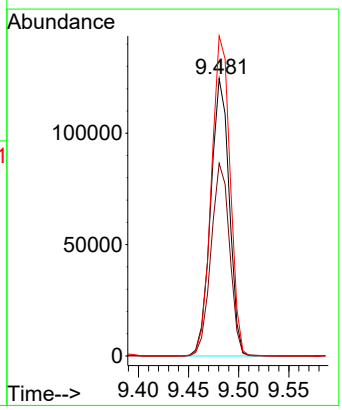


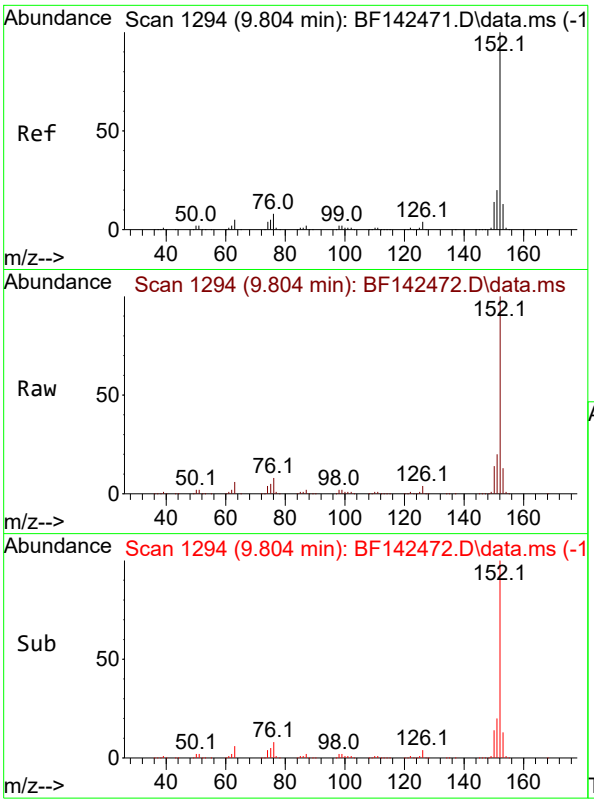


#48
2-Nitroaniline
Concen: 53.410 ng
RT: 9.481 min Scan# 1239
Delta R.T. -0.005 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion: 65 Resp: 160529

Ion	Ratio	Lower	Upper
65	100		
92	69.4	54.4	81.6
138	115.3	91.4	137.2



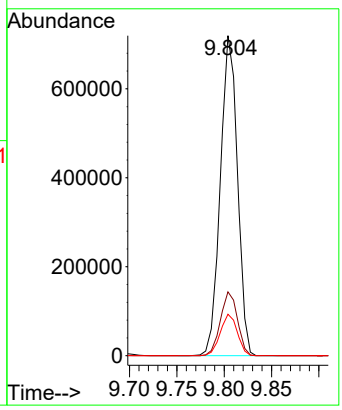


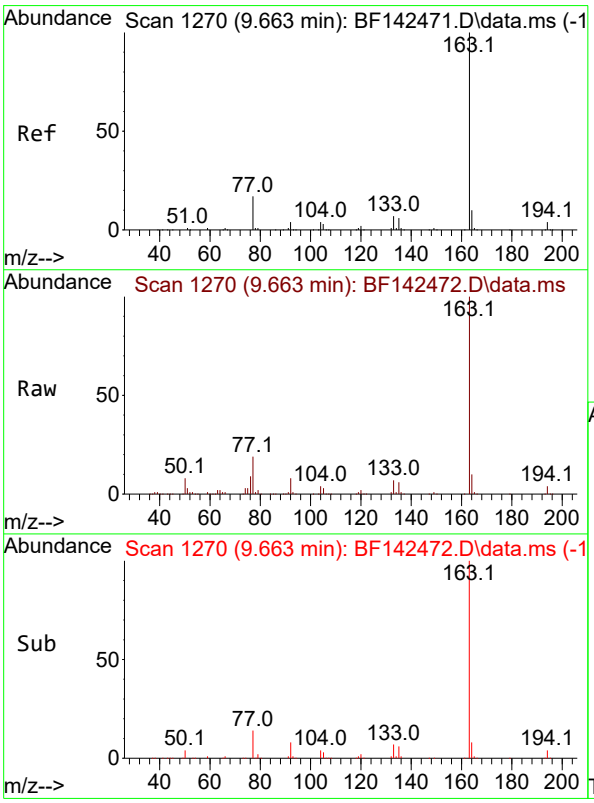
#49
Acenaphthylene
Concen: 51.602 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:152 Resp: 906063

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.8
153	12.9	10.6	15.8

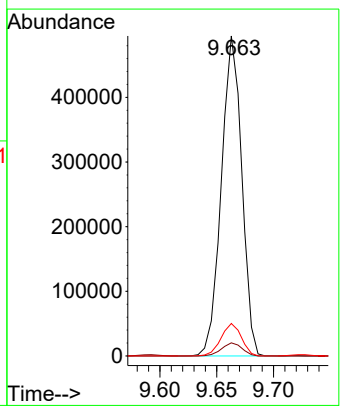


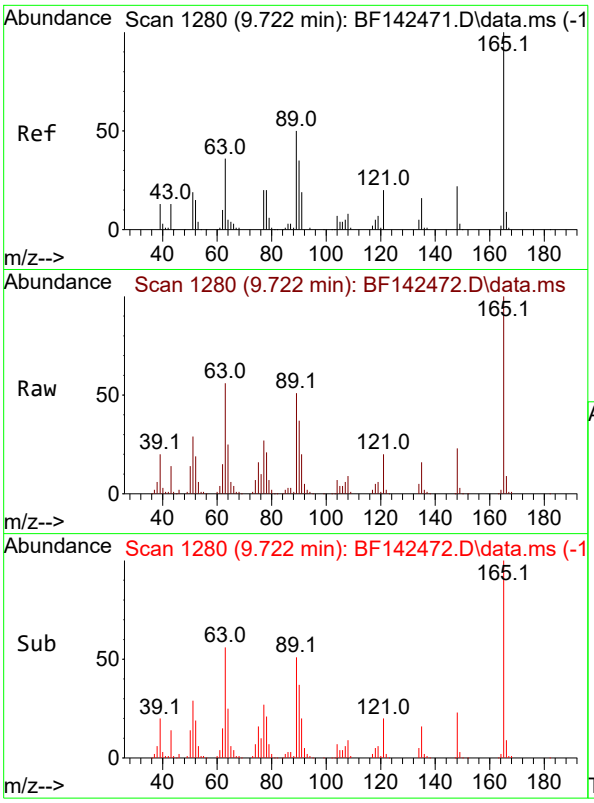


#50
Dimethylphthalate
Concen: 51.764 ng
RT: 9.663 min Scan# 1270
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:163 Resp: 619616

Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.3	4.9
164	10.1	8.2	12.4



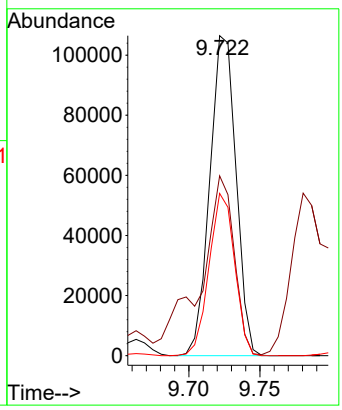


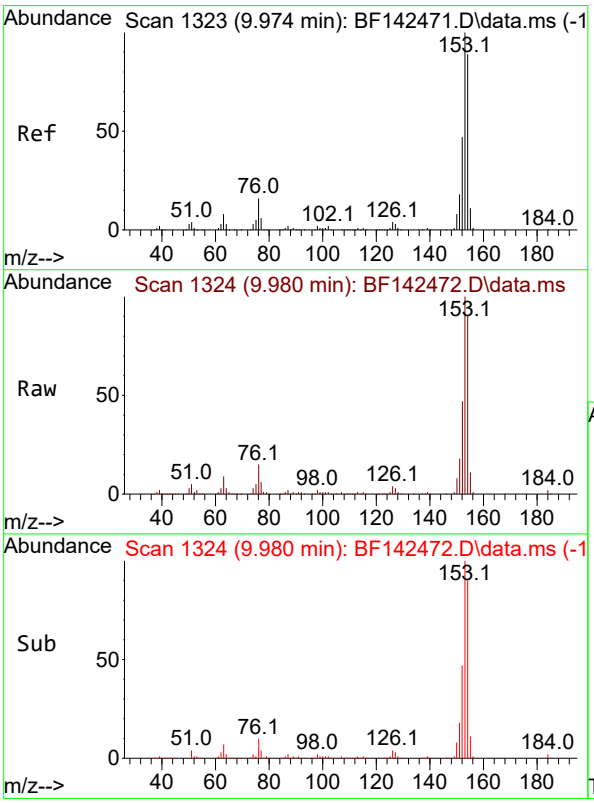
#51
2,6-Dinitrotoluene
Concen: 53.064 ng
RT: 9.722 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:165 Resp: 137090

Ion	Ratio	Lower	Upper
165	100		
63	56.2	42.9	64.3
89	50.7	40.2	60.4

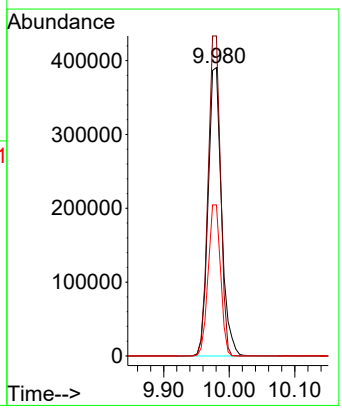


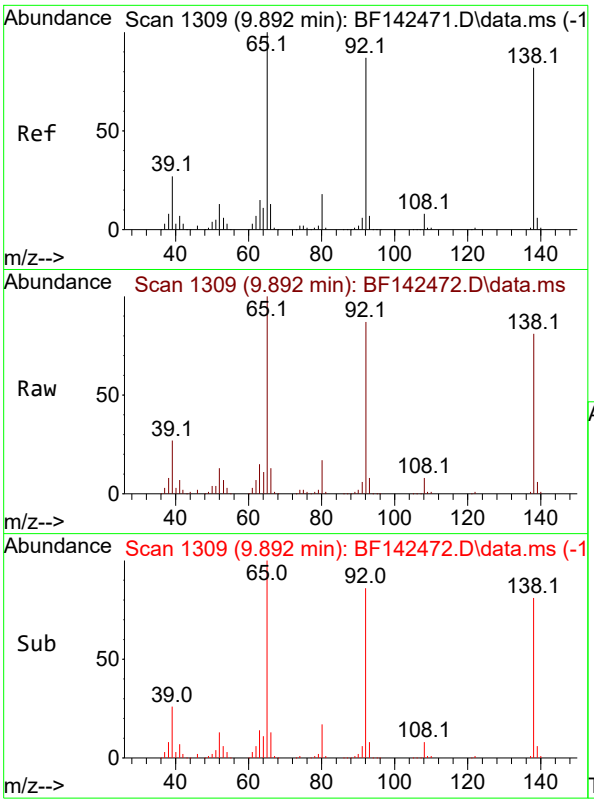


#52
Acenaphthene
Concen: 51.742 ng
RT: 9.980 min Scan# 1324
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:154 Resp: 554762

Ion	Ratio	Lower	Upper
154	100		
153	111.0	90.0	135.0
152	52.4	42.6	64.0



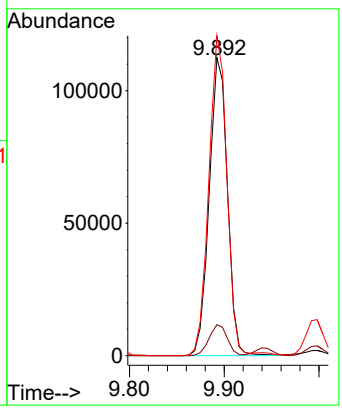


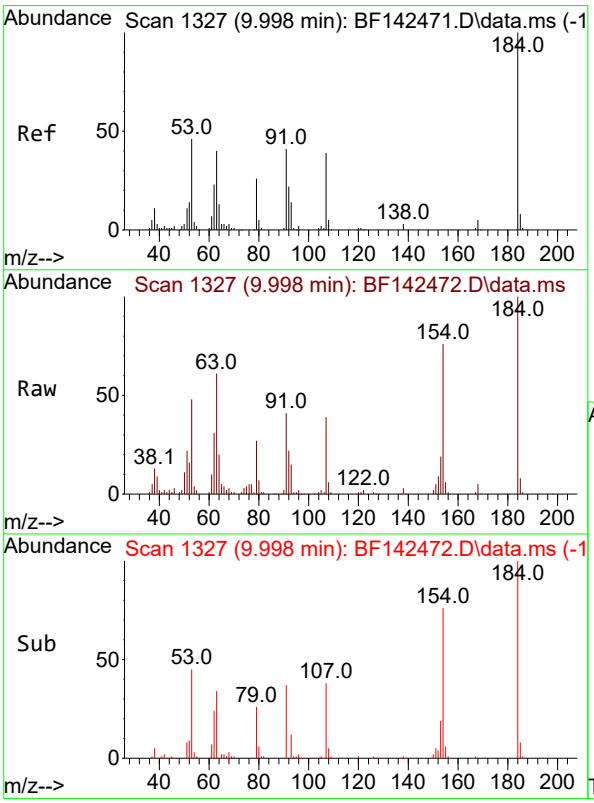
#53
3-Nitroaniline
Concen: 53.082 ng
RT: 9.892 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:138 Resp: 149786

Ion	Ratio	Lower	Upper
138	100		
108	10.4	8.1	12.1
92	107.3	85.2	127.8

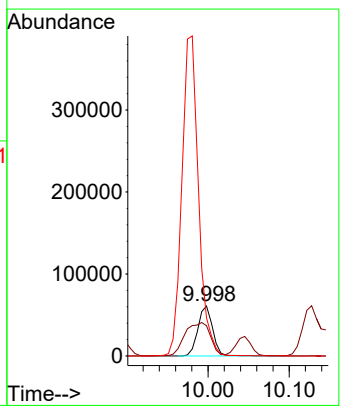


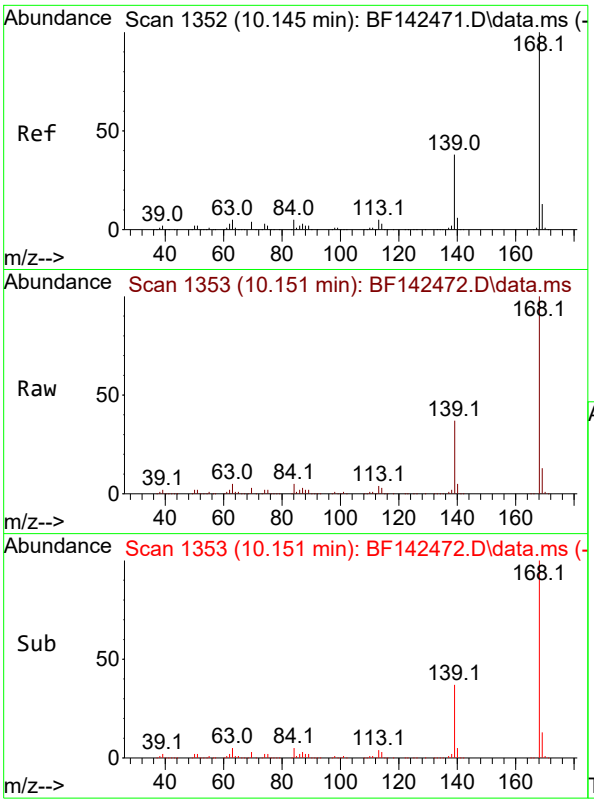


#54
2,4-Dinitrophenol
Concen: 57.487 ng
RT: 9.998 min Scan# 1327
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:184 Resp: 76730

Ion	Ratio	Lower	Upper
184	100		
63	60.6	46.3	69.5
154	76.3	56.8	85.2



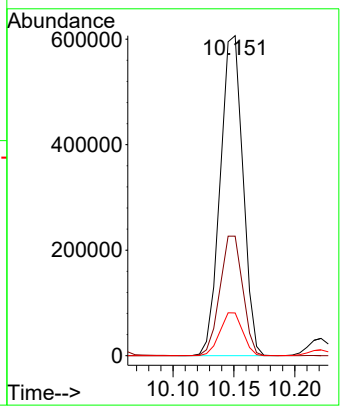


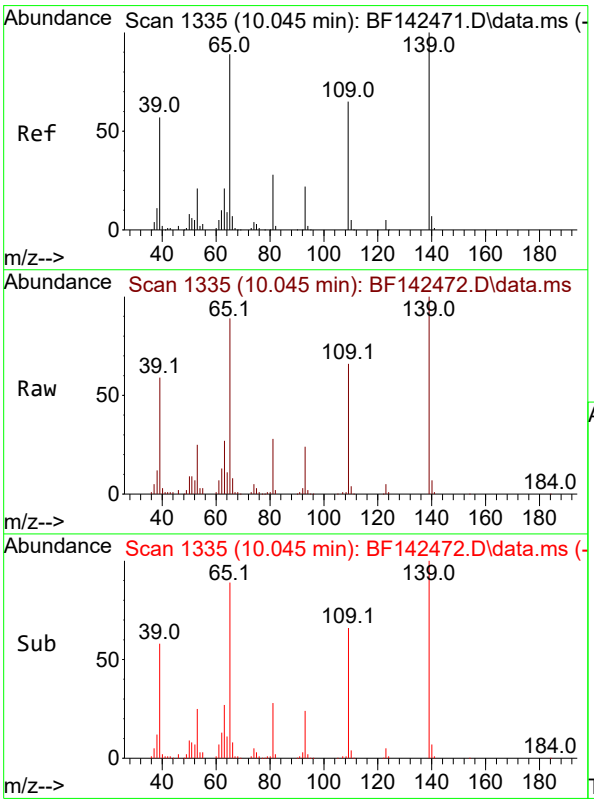
#55
Dibenzofuran
Concen: 51.038 ng
RT: 10.151 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:168 Resp: 787446

Ion	Ratio	Lower	Upper
168	100		
139	37.3	30.2	45.2
169	13.3	10.7	16.1

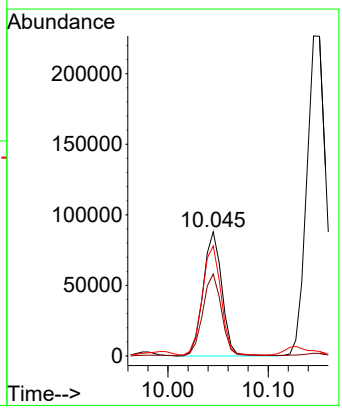


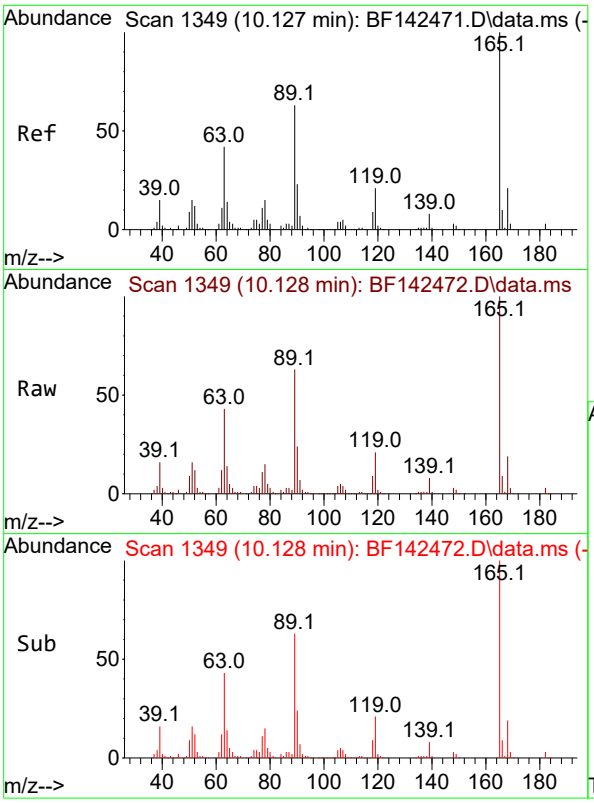


#56
4-Nitrophenol
Concen: 54.849 ng
RT: 10.045 min Scan# 1335
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:139 Resp: 114198

Ion	Ratio	Lower	Upper
139	100		
109	66.1	45.1	85.1
65	88.7	69.7	109.7



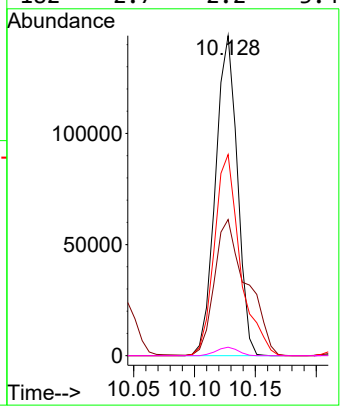


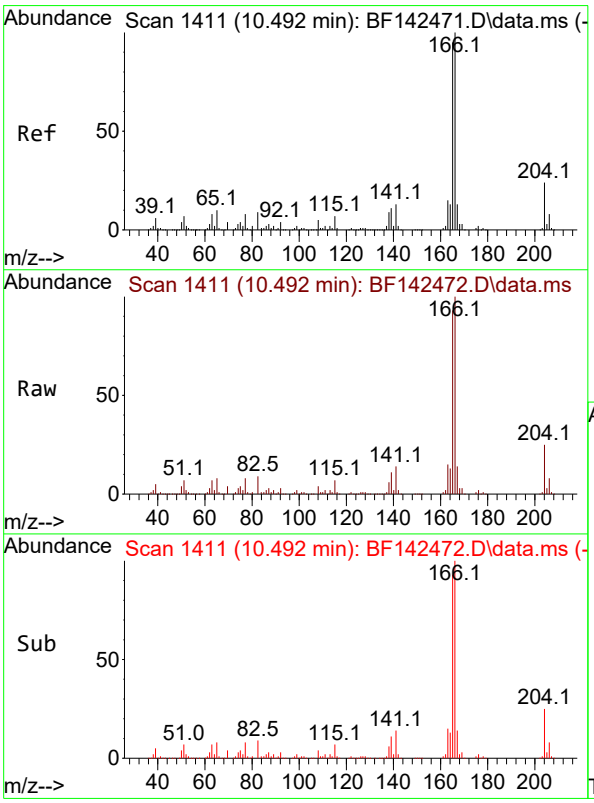
#57
2,4-Dinitrotoluene
Concen: 53.473 ng
RT: 10.128 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:165 Resp: 180417

Ion	Ratio	Lower	Upper
165	100		
63	42.5	33.6	50.4
89	62.8	50.2	75.4
182	2.7	2.2	3.4

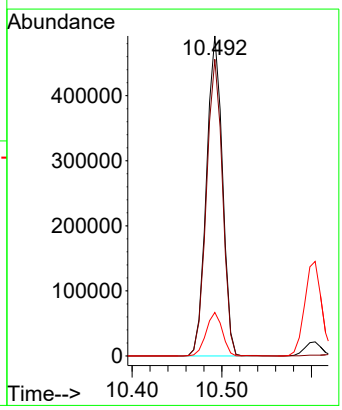


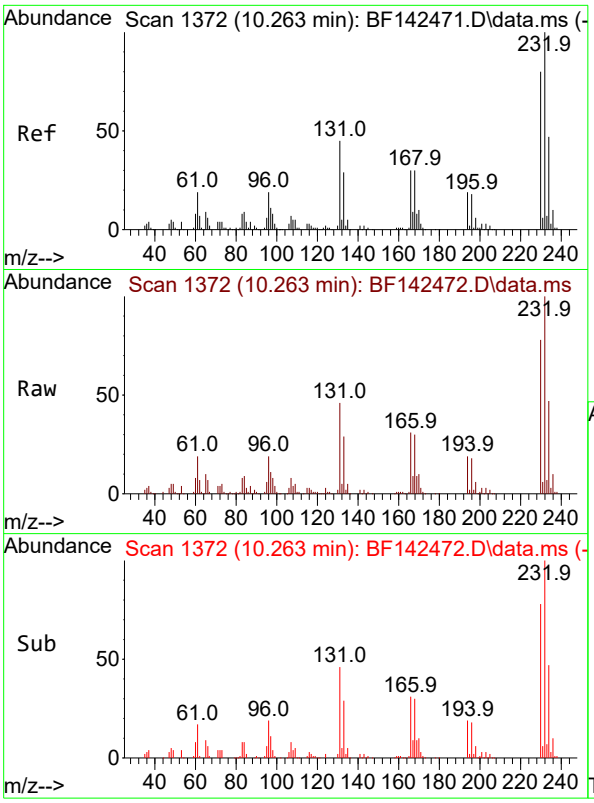


#58
Fluorene
Concen: 51.090 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:166 Resp: 608966

Ion	Ratio	Lower	Upper
166	100		
165	92.7	75.8	113.8
167	13.6	10.6	16.0



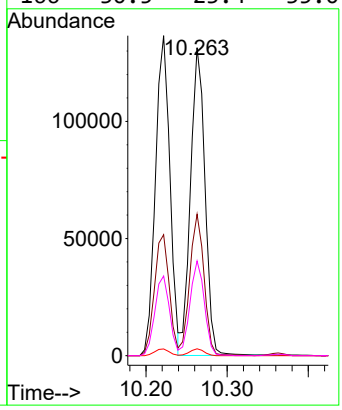


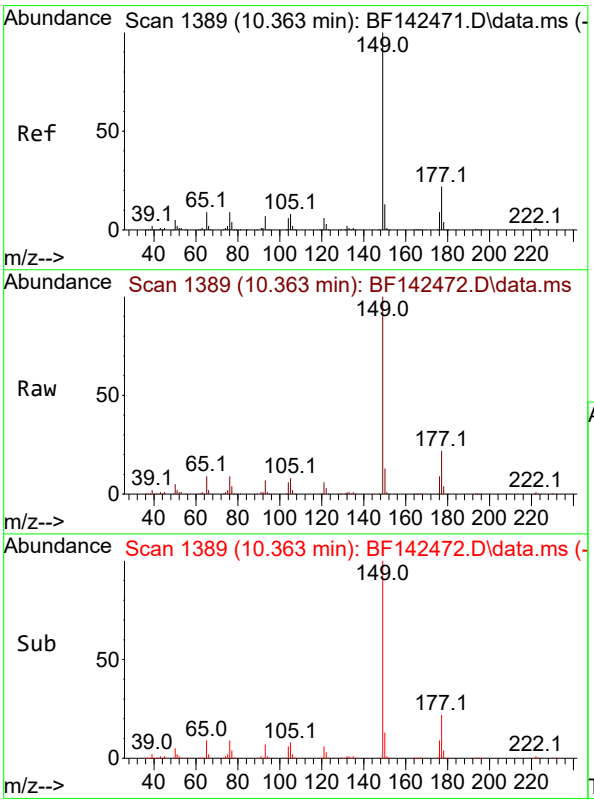
#59
2,3,4,6-Tetrachlorophenol
Concen: 52.897 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:232 Resp: 163539

Ion	Ratio	Lower	Upper
232	100		
131	45.5	35.2	52.8
130	2.2	1.7	2.5
166	30.5	23.4	35.0

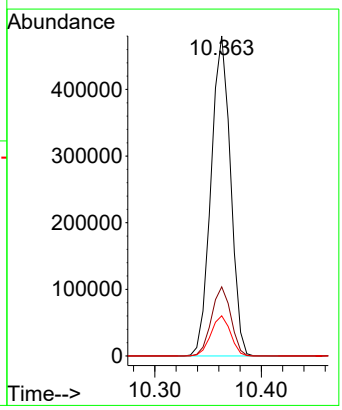


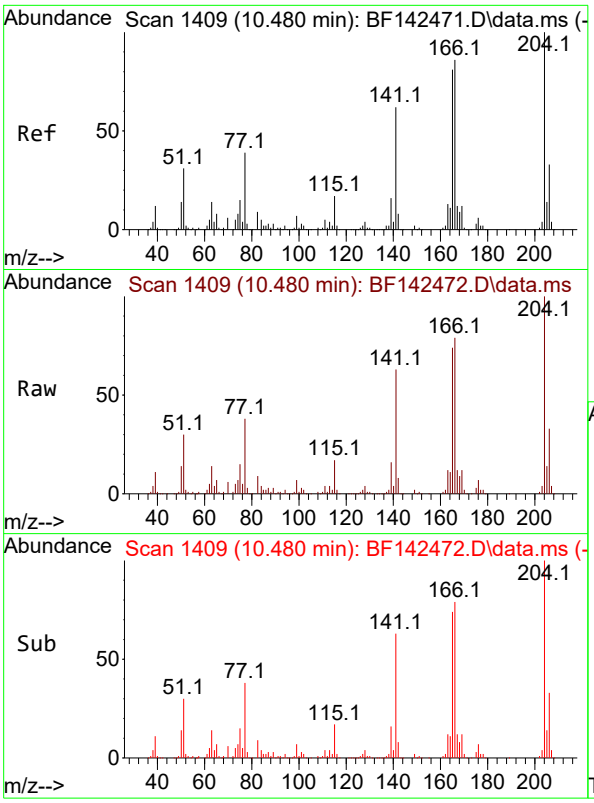


#60
Diethylphthalate
Concen: 52.089 ng
RT: 10.363 min Scan# 1389
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:149 Resp: 608941

Ion	Ratio	Lower	Upper
149	100		
177	21.6	17.6	26.4
150	12.5	10.1	15.1



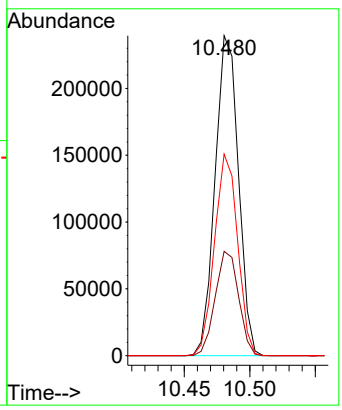


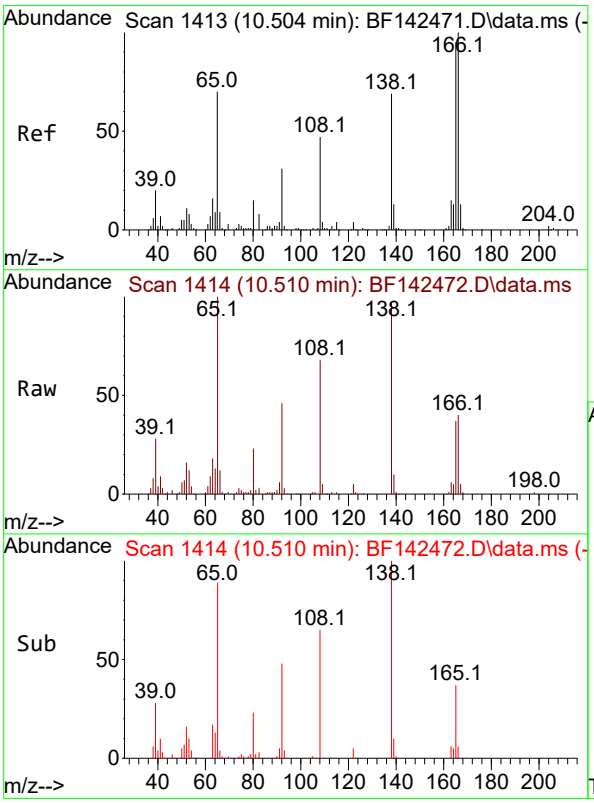
#61
4-Chlorophenyl-phenylether
Concen: 50.597 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:204 Resp: 296264

Ion	Ratio	Lower	Upper
204	100		
206	32.6	26.3	39.5
141	63.0	49.5	74.3

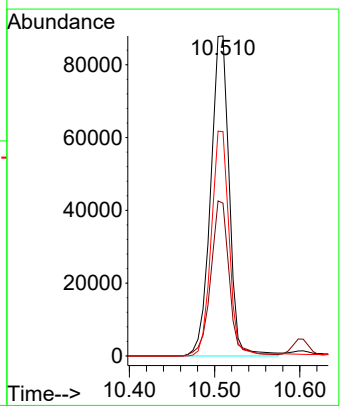


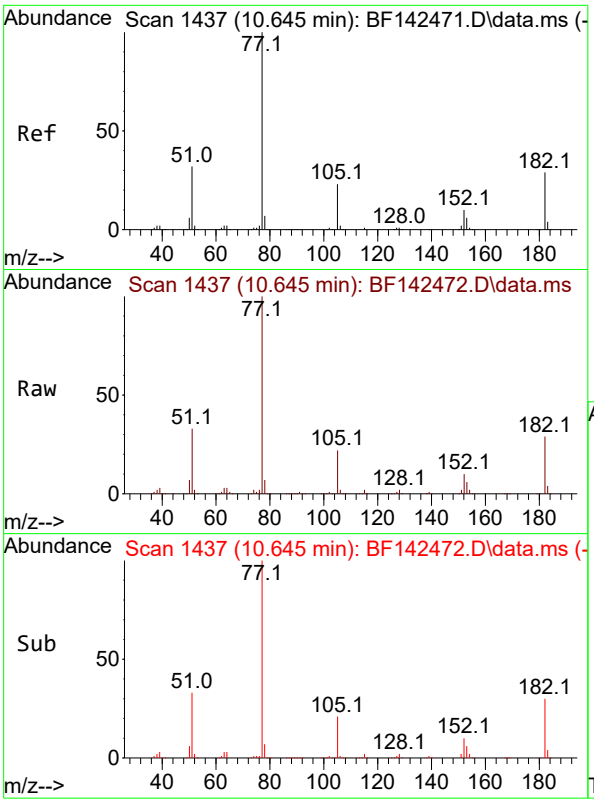


#62
4-Nitroaniline
Concen: 52.024 ng
RT: 10.510 min Scan# 1414
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:138 Resp: 133141

Ion	Ratio	Lower	Upper
138	100		
92	47.7	26.0	66.0
108	70.1	48.4	88.4



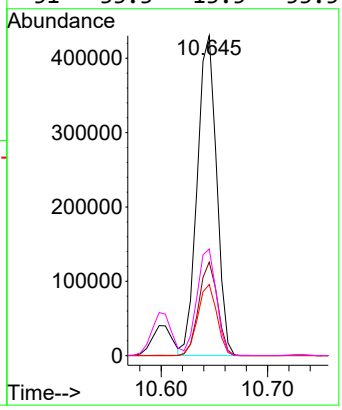


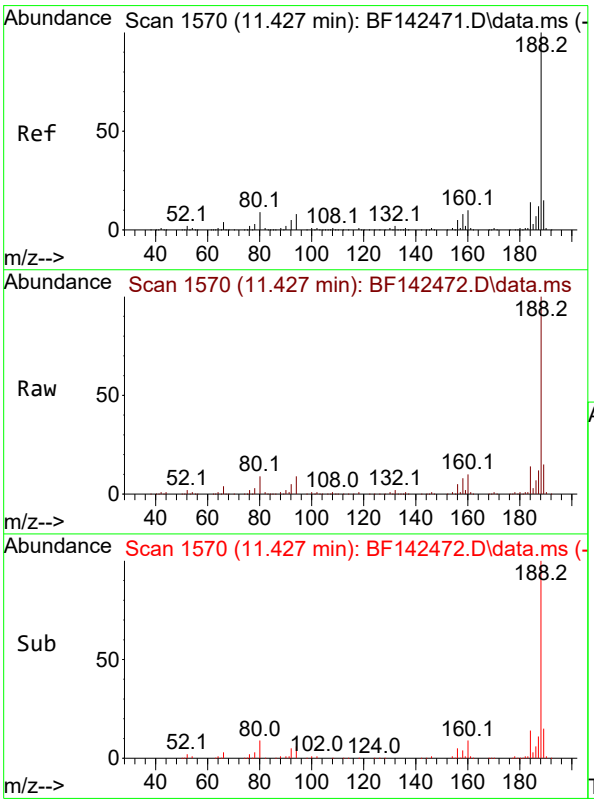
#63
Azobenzene
Concen: 51.703 ng
RT: 10.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion: 77 Resp: 542894

Ion	Ratio	Lower	Upper
77	100		
182	29.3	9.0	49.0
105	22.3	2.4	42.4
51	33.3	13.5	53.5

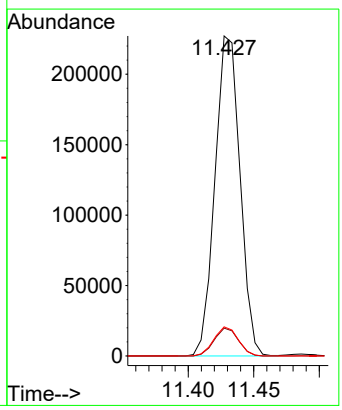


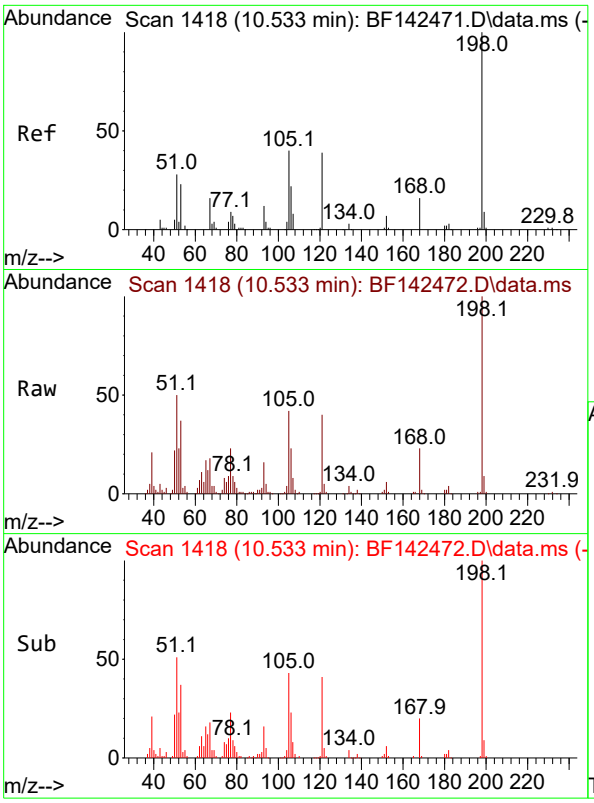


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:188 Resp: 301685

Ion	Ratio	Lower	Upper
188	100		
94	8.7	6.6	10.0
80	9.1	7.4	11.0



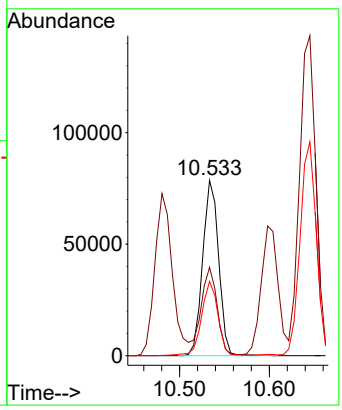


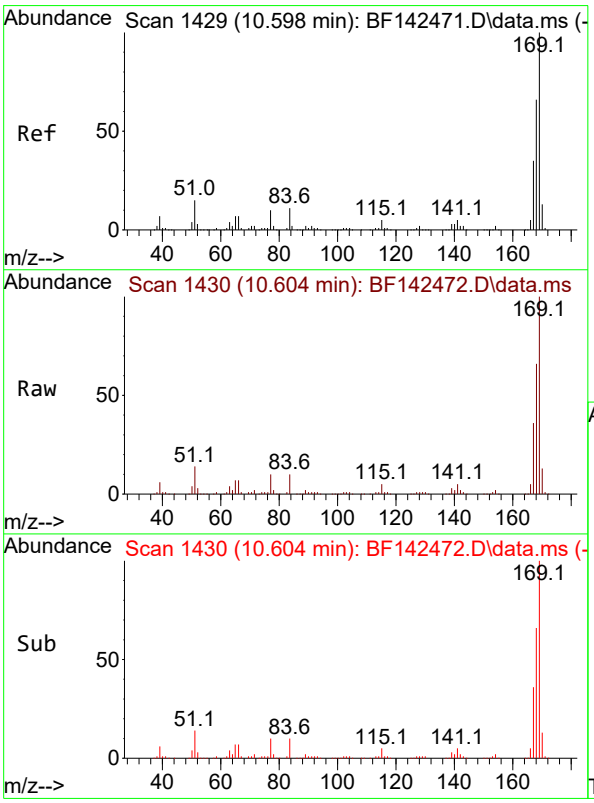
#65
4,6-Dinitro-2-methylphenol
Concen: 57.734 ng
RT: 10.533 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:198 Resp: 97203

Ion	Ratio	Lower	Upper
198	100		
51	50.4	28.3	68.3
105	42.4	21.3	61.3

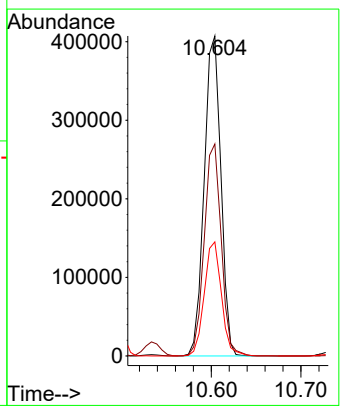


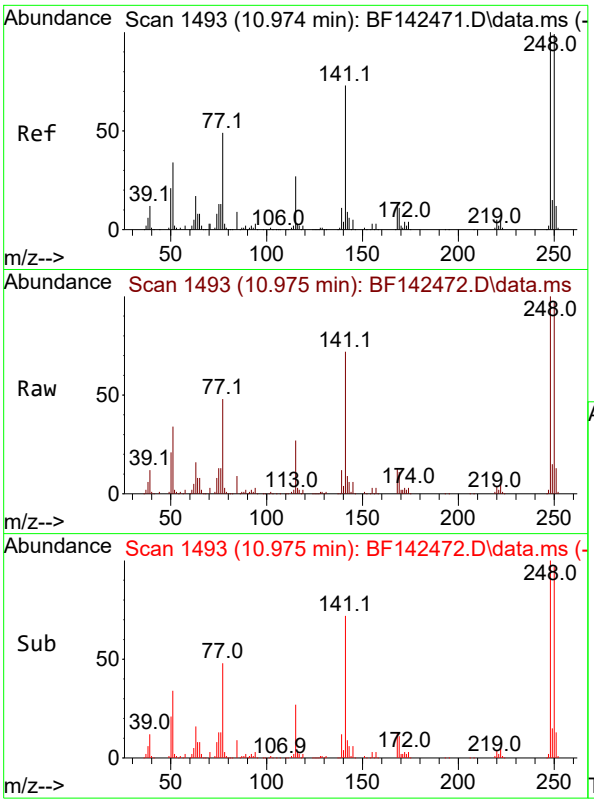


#66
n-Nitrosodiphenylamine
Concen: 50.960 ng
RT: 10.604 min Scan# 1430
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:169 Resp: 525974

Ion	Ratio	Lower	Upper
169	100		
168	66.3	52.7	79.1
167	35.7	28.3	42.5



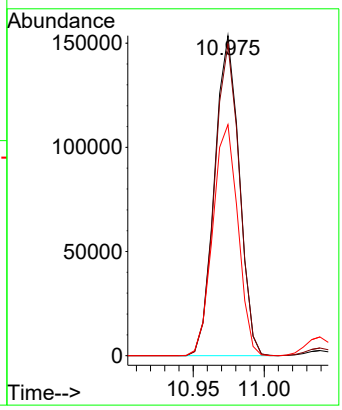


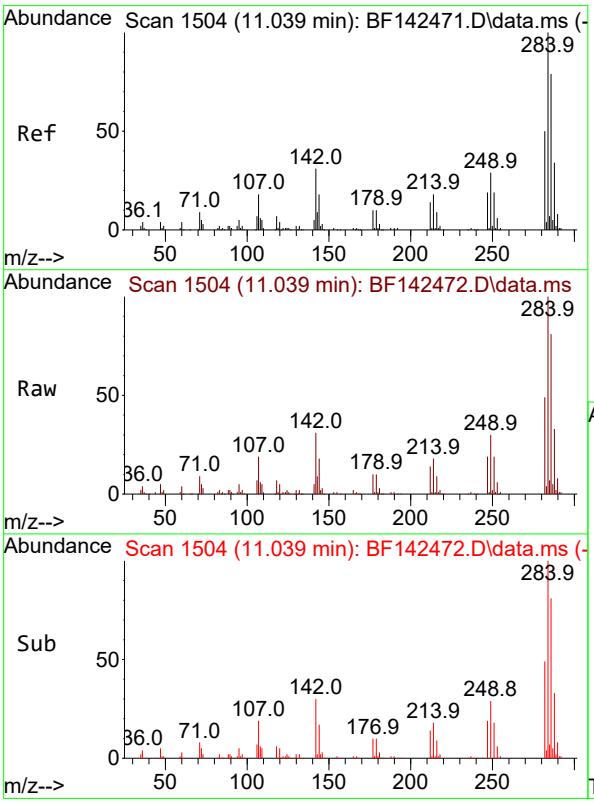
#67
4-Bromophenyl-phenylether
Concen: 52.061 ng
RT: 10.975 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:248 Resp: 185711

Ion	Ratio	Lower	Upper
248	100		
250	97.3	79.0	118.4
141	72.2	58.4	87.6

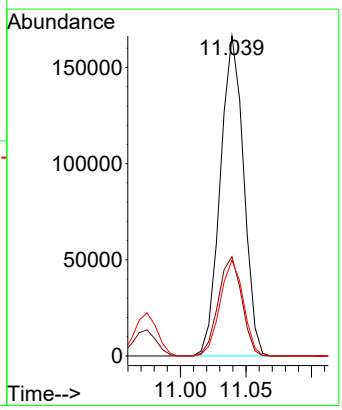


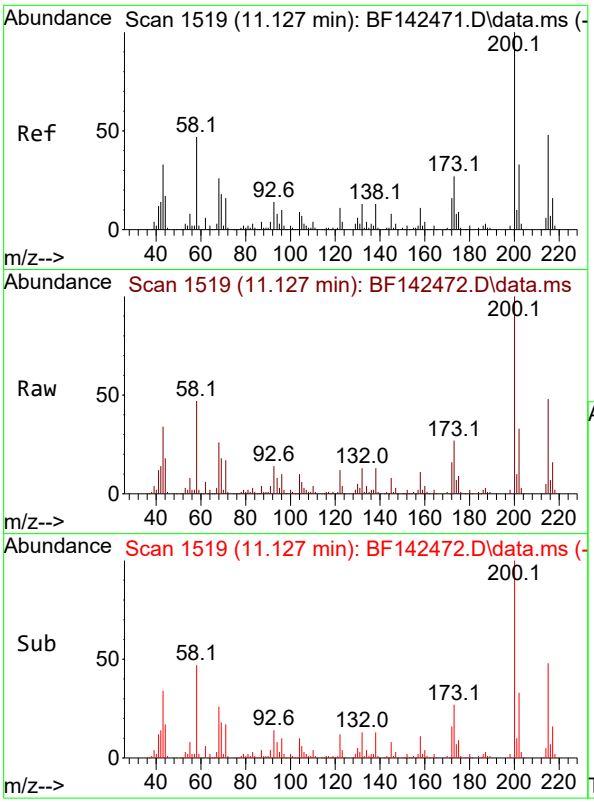


#68
Hexachlorobenzene
Concen: 52.151 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:284 Resp: 205759

Ion	Ratio	Lower	Upper
284	100		
142	31.1	24.8	37.2
249	29.9	23.6	35.4



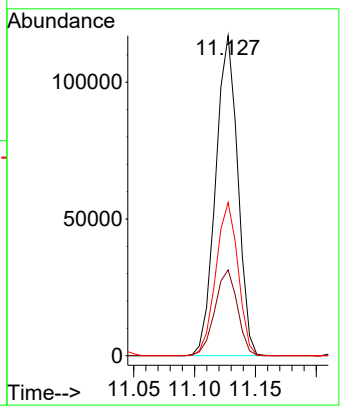


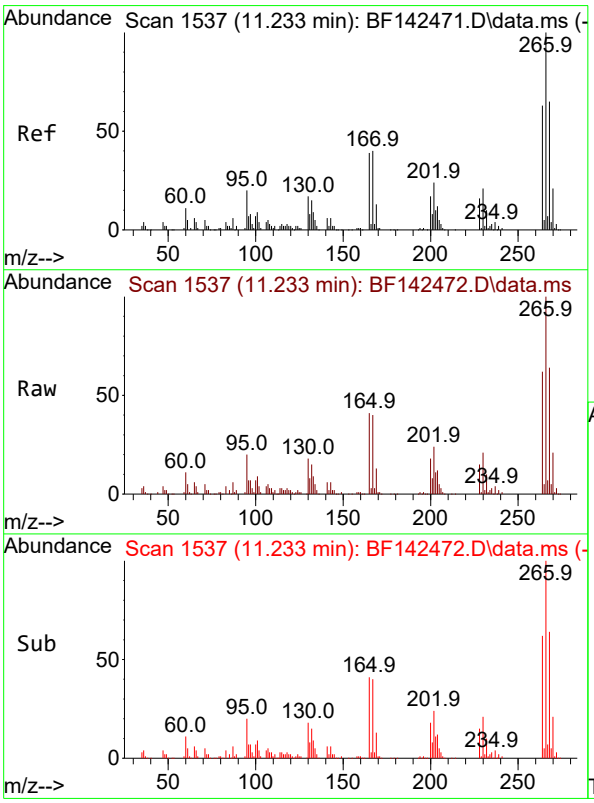
#69
Atrazine
Concen: 53.966 ng
RT: 11.127 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:200 Resp: 147922

Ion	Ratio	Lower	Upper
200	100		
173	26.8	7.4	47.4
215	47.9	28.5	68.5

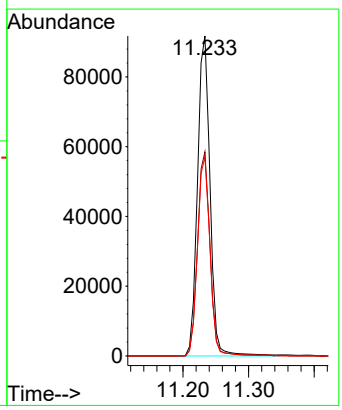


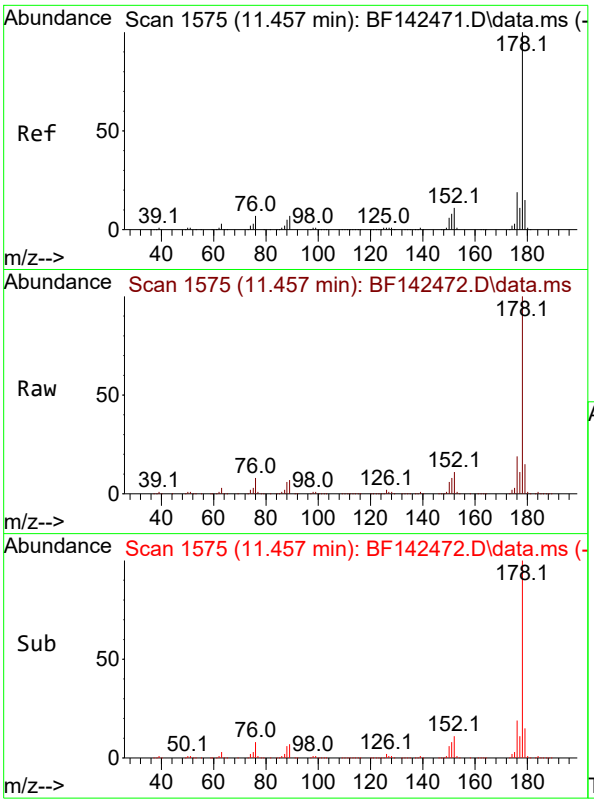


#70
Pentachlorophenol
Concen: 54.852 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:266 Resp: 122184

Ion	Ratio	Lower	Upper
266	100		
268	63.8	51.7	77.5
264	62.2	50.4	75.6



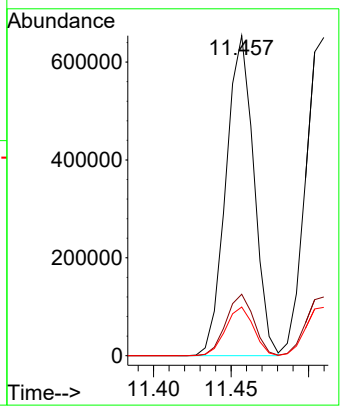


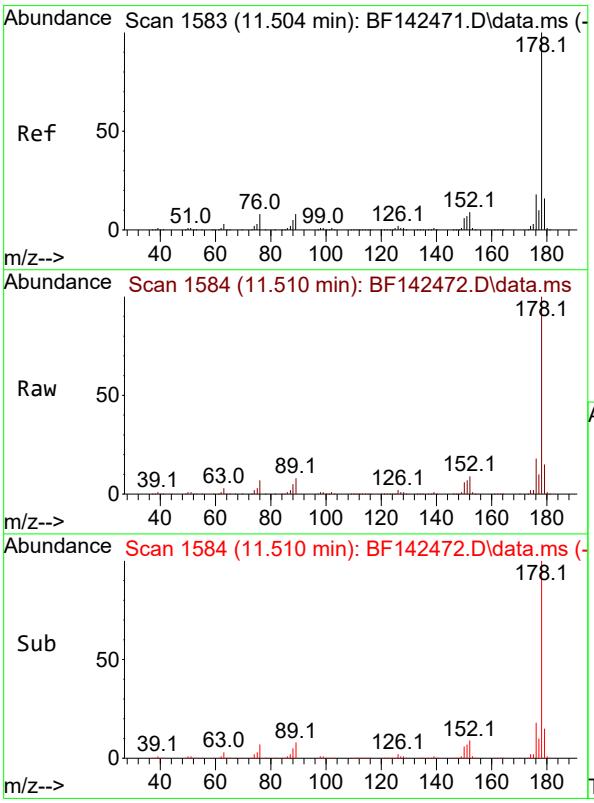
#71
Phenanthrene
Concen: 50.739 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:178 Resp: 818043

Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.0
179	15.2	12.3	18.5

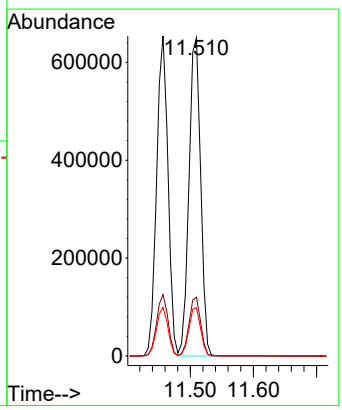


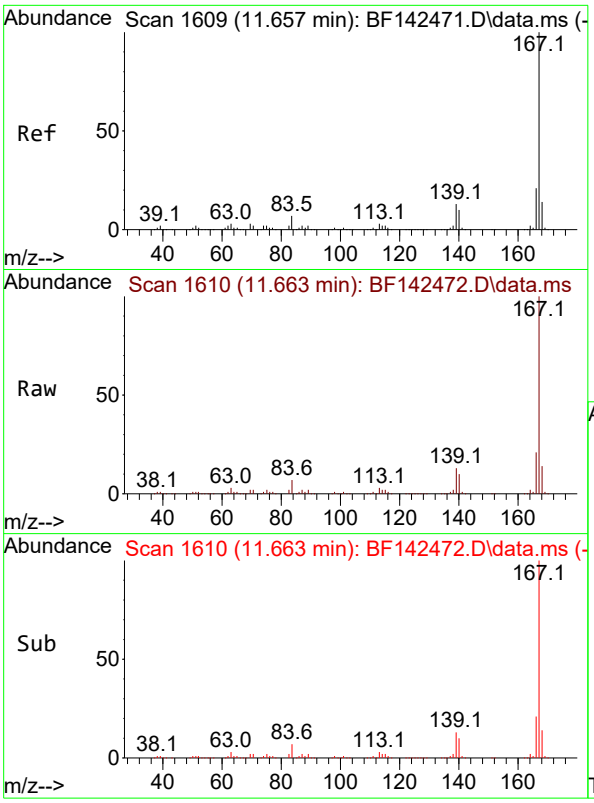


#72
Anthracene
Concen: 50.882 ng
RT: 11.510 min Scan# 1584
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:178 Resp: 837242

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.6	21.8
179	15.2	12.4	18.6



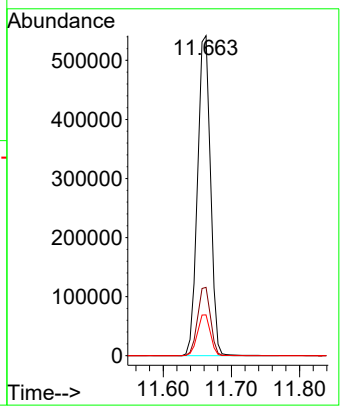


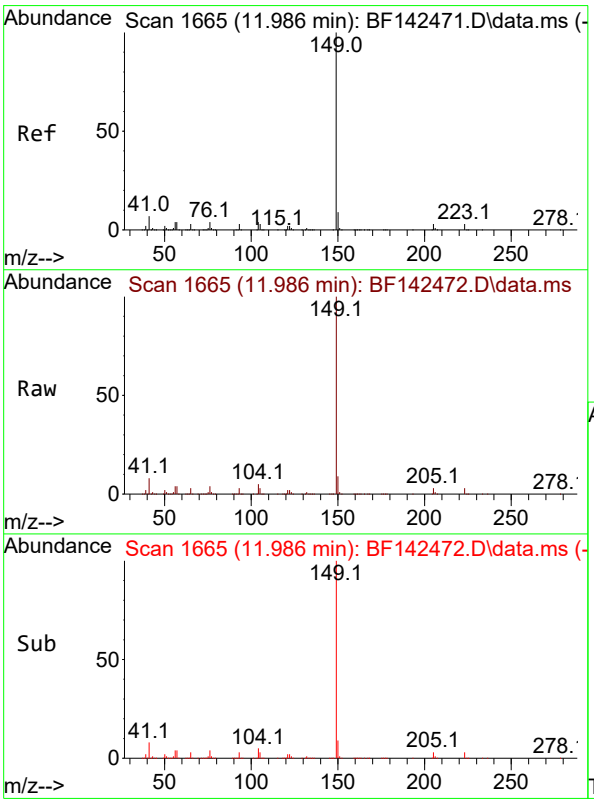
#73
Carbazole
Concen: 50.927 ng
RT: 11.663 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:167 Resp: 716381

Ion	Ratio	Lower	Upper
167	100		
166	21.4	16.9	25.3
139	12.7	10.2	15.4

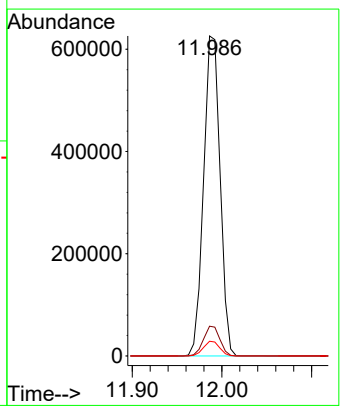


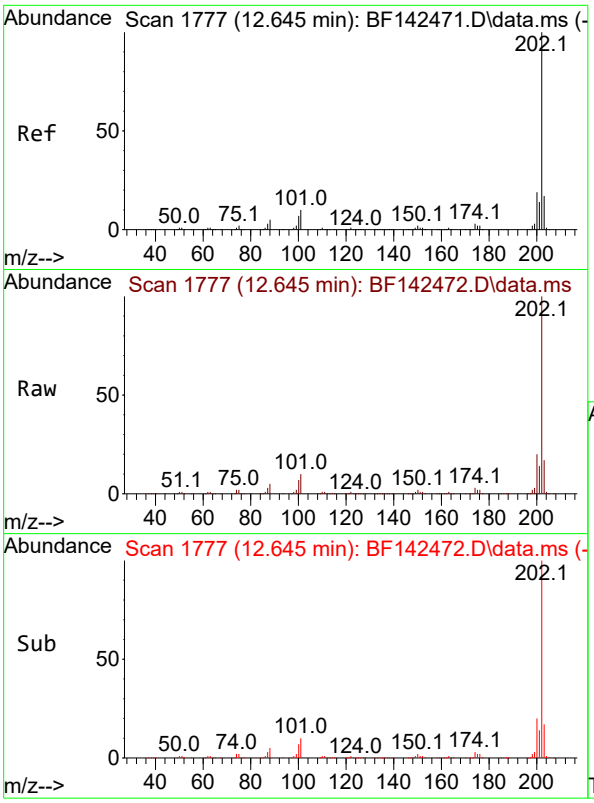


#74
Di-n-butylphthalate
Concen: 51.856 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:149 Resp: 798451

Ion	Ratio	Lower	Upper
149	100		
150	9.3	7.3	10.9
104	4.6	3.6	5.4



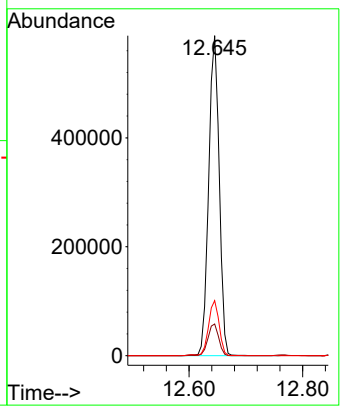


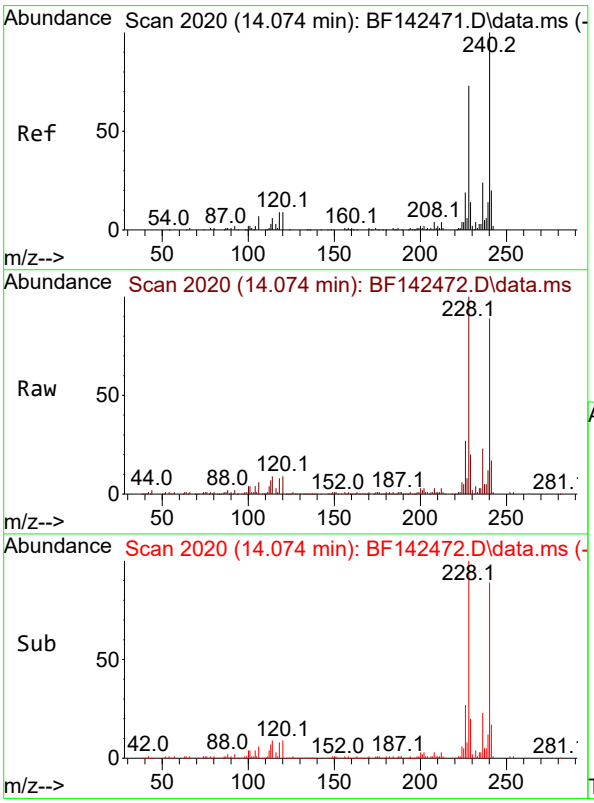
#75
Fluoranthene
Concen: 49.923 ng
RT: 12.645 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:202 Resp: 752083

Ion	Ratio	Lower	Upper
202	100		
101	9.9	0.0	29.6
203	17.2	0.0	37.2

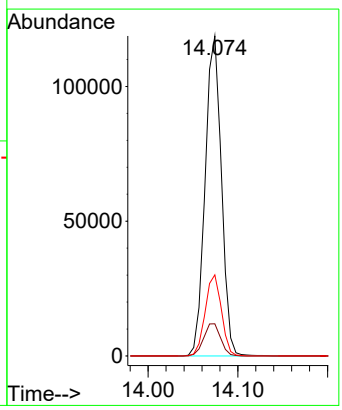


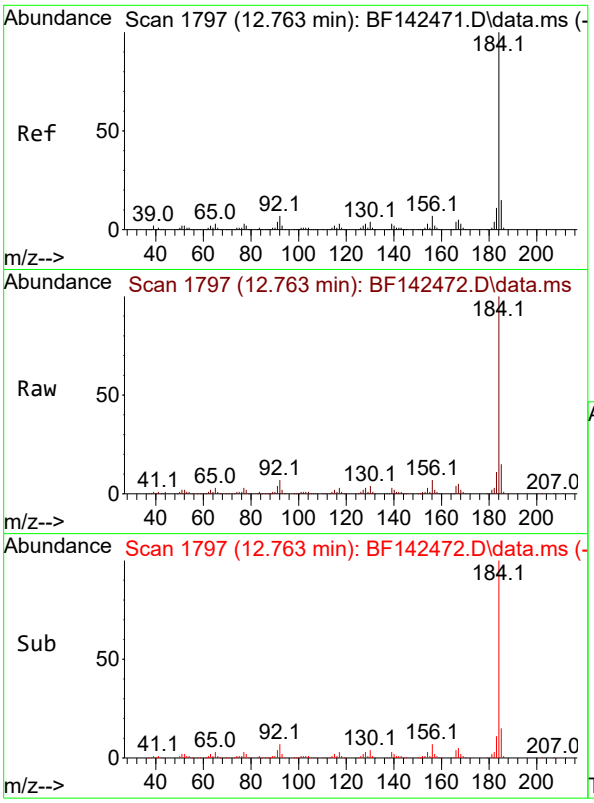


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:240 Resp: 149689

Ion	Ratio	Lower	Upper
240	100		
120	10.0	7.5	11.3
236	25.4	19.6	29.4



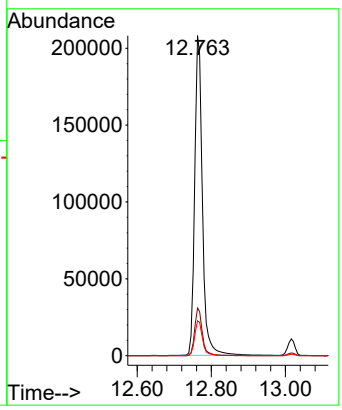


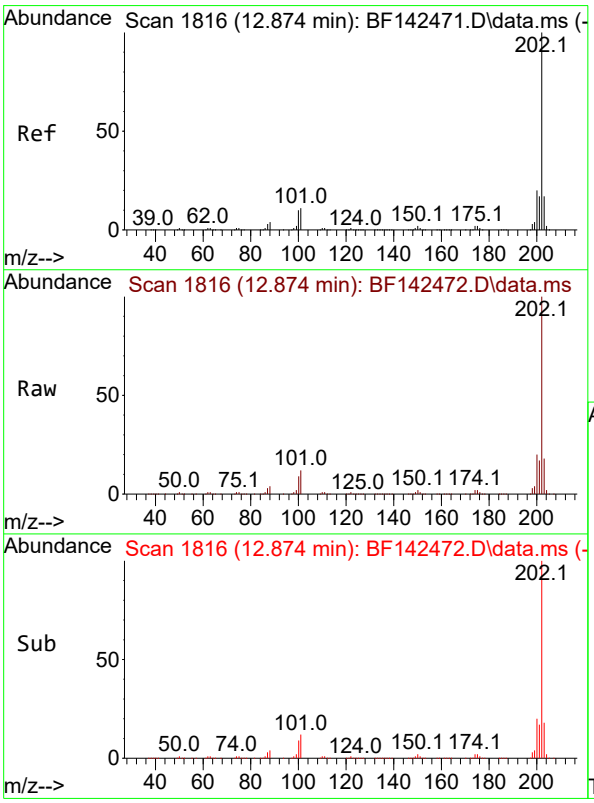
#77
Benzidine
Concen: 54.058 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:184 Resp: 301122

Ion	Ratio	Lower	Upper
184	100		
185	14.9	11.6	17.4
183	10.9	9.0	13.4

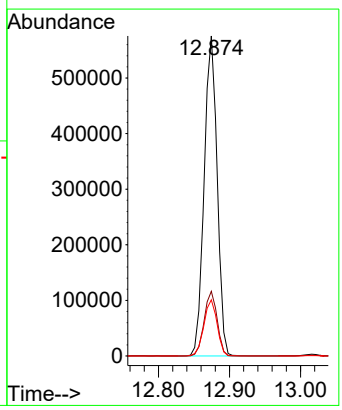


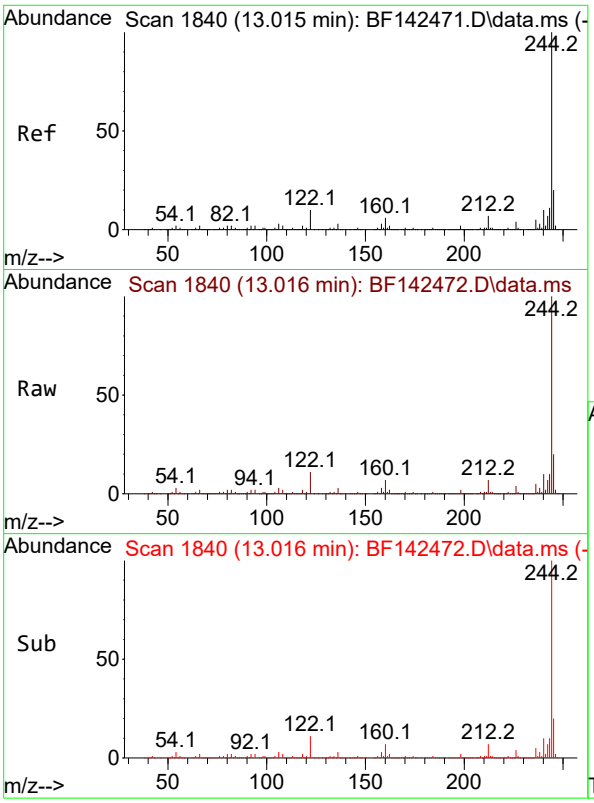


#78
Pyrene
Concen: 52.513 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:202 Resp: 733277

Ion	Ratio	Lower	Upper
202	100		
200	20.2	16.1	24.1
203	17.5	13.9	20.9



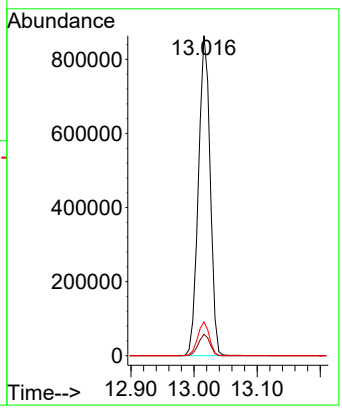


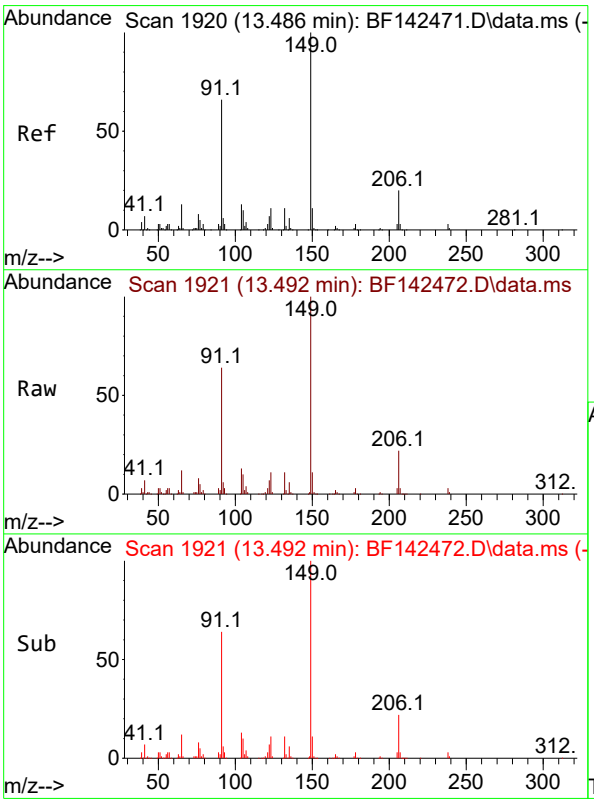
#79
Terphenyl-d14
Concen: 101.951 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:244 Resp: 1116751

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.3	7.9
122	10.5	8.2	12.2

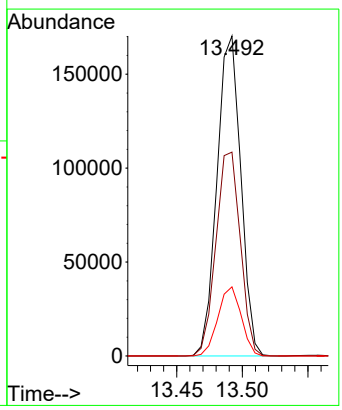


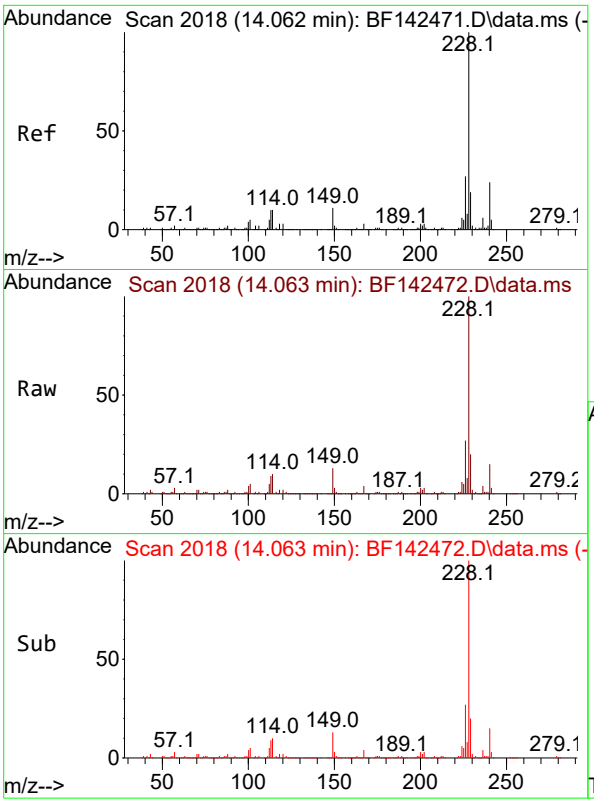


#80
Butylbenzylphthalate
Concen: 55.767 ng
RT: 13.492 min Scan# 1921
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:149 Resp: 215174

Ion	Ratio	Lower	Upper
149	100		
91	63.7	52.9	79.3
206	21.6	16.2	24.2



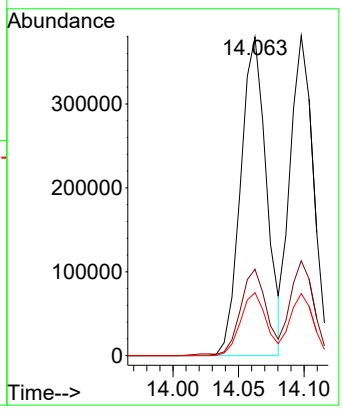


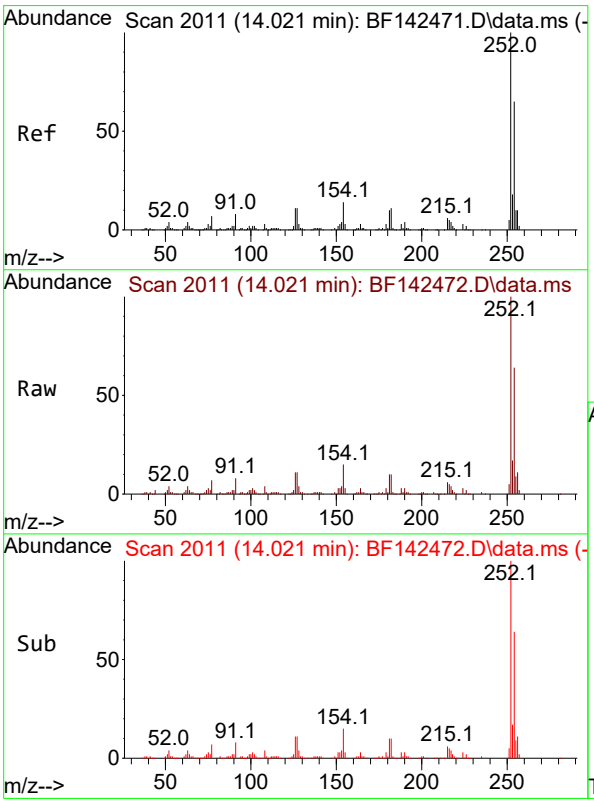
#81
Benzo(a)anthracene
Concen: 52.076 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:228 Resp: 520525

Ion	Ratio	Lower	Upper
228	100		
226	27.1	21.2	31.8
229	19.8	15.5	23.3

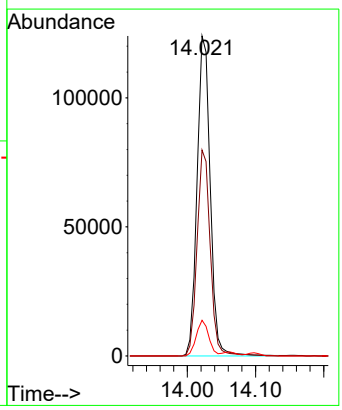


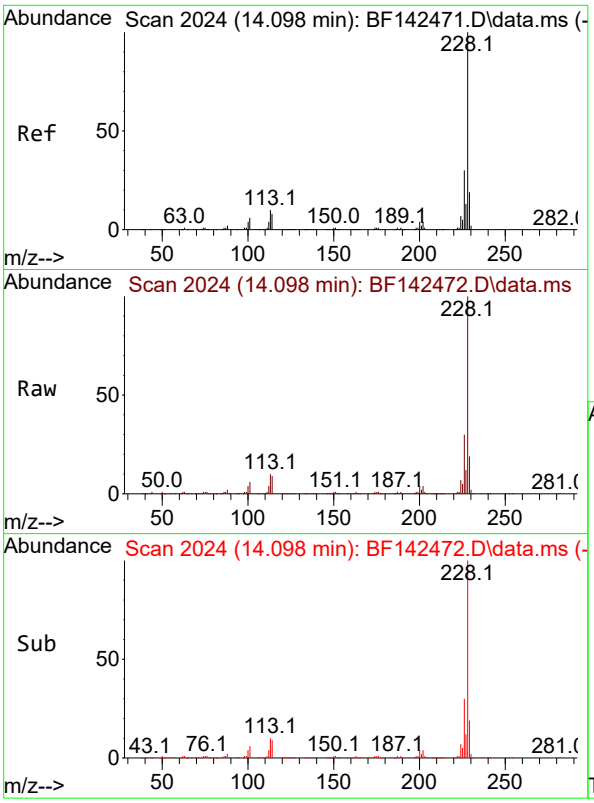


#82
3,3'-Dichlorobenzidine
Concen: 54.828 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:252 Resp: 166223

Ion	Ratio	Lower	Upper
252	100		
254	64.4	52.0	78.0
126	11.2	8.9	13.3



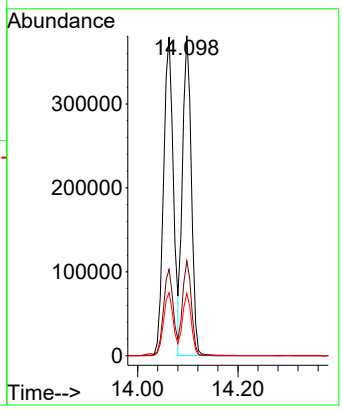


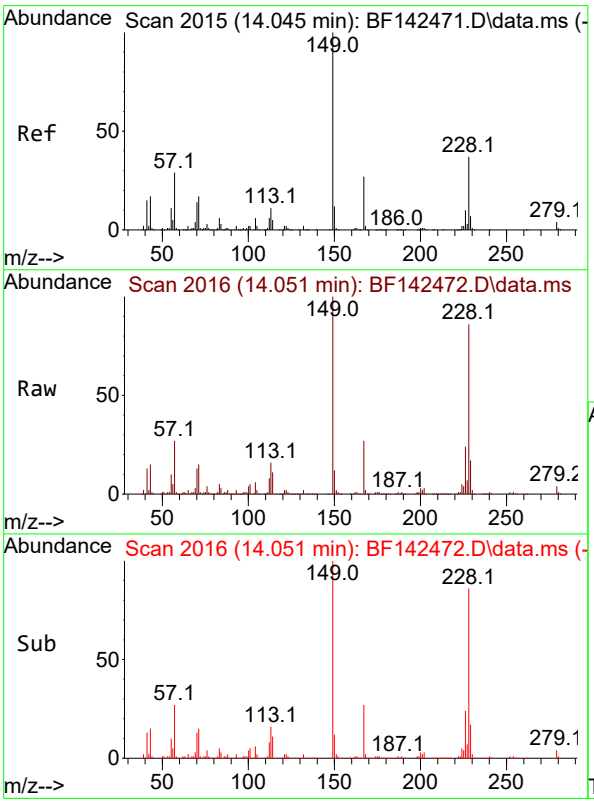
#83
Chrysene
Concen: 52.273 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:228 Resp: 469491

Ion	Ratio	Lower	Upper
228	100		
226	29.7	23.8	35.6
229	19.4	15.4	23.2

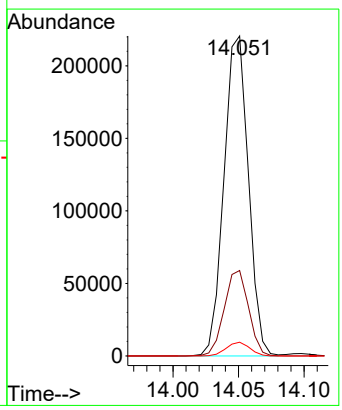


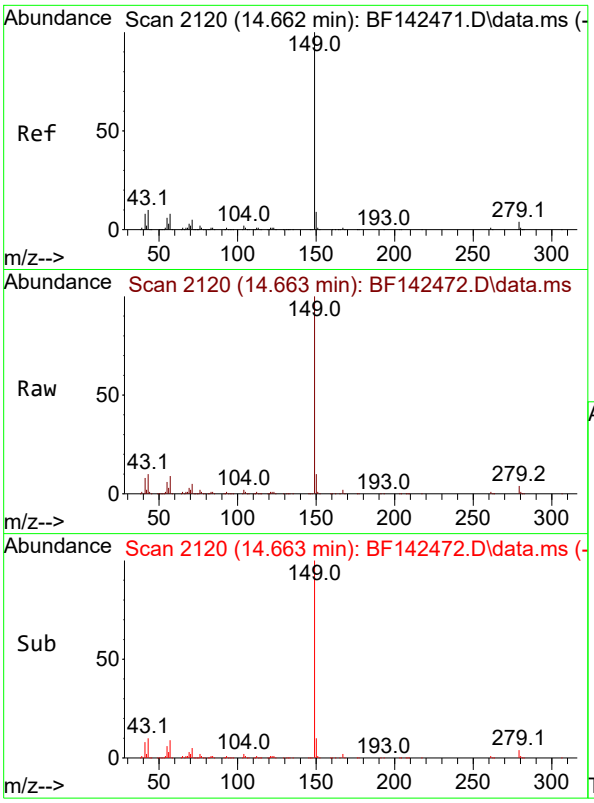


#84
Bis(2-ethylhexyl)phthalate
Concen: 57.932 ng
RT: 14.051 min Scan# 2016
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:149 Resp: 286151

Ion	Ratio	Lower	Upper
149	100		
167	26.7	21.5	32.3
279	4.3	3.2	4.8



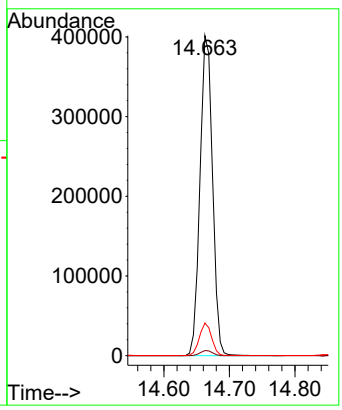


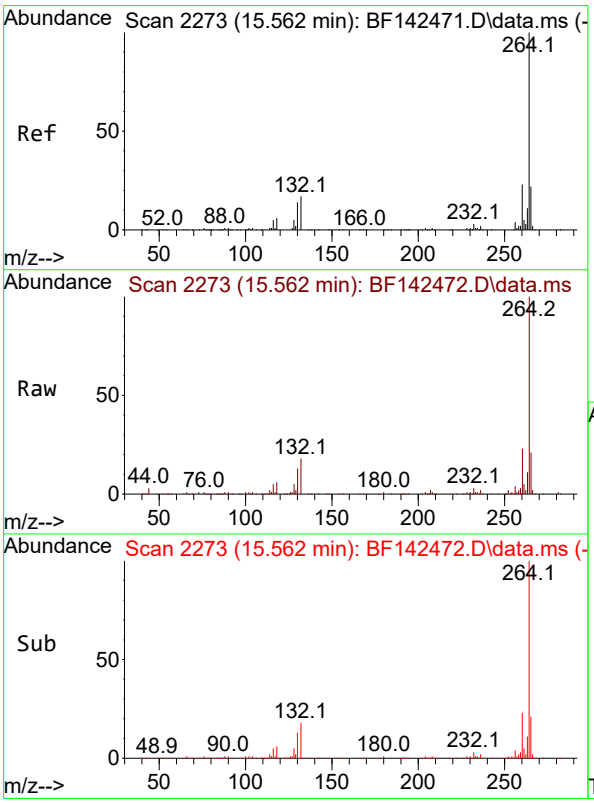
#85
Di-n-octyl phthalate
Concen: 55.482 ng
RT: 14.663 min Scan# 21
Delta R.T. -0.005 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:149 Resp: 535844

Ion	Ratio	Lower	Upper
149	100		
167	1.6	1.2	1.8
43	9.9	7.9	11.9

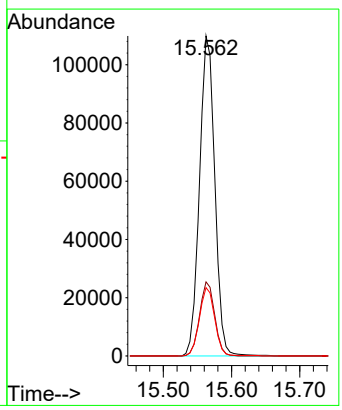


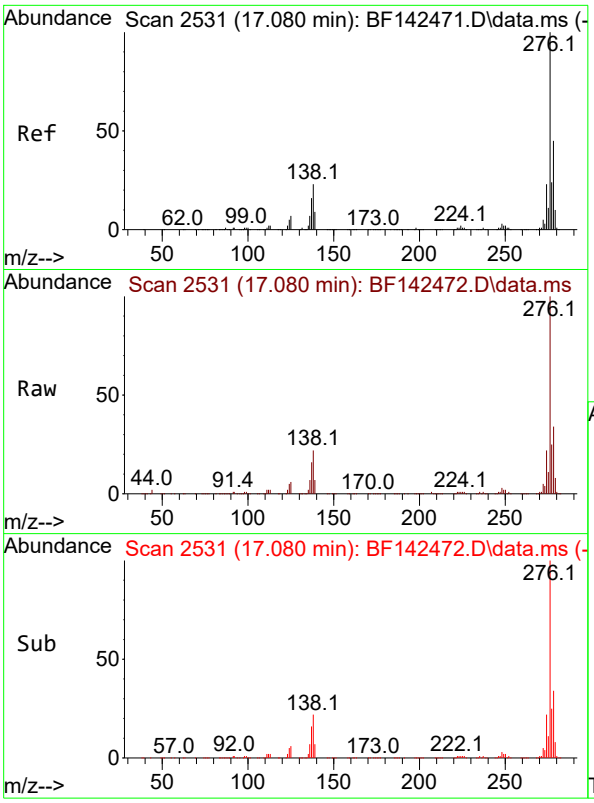


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:264 Resp: 171586

Ion	Ratio	Lower	Upper
264	100		
260	23.1	18.6	28.0
265	21.3	17.7	26.5



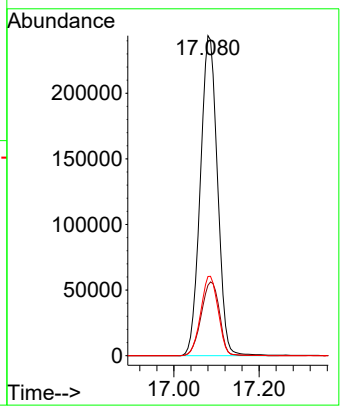


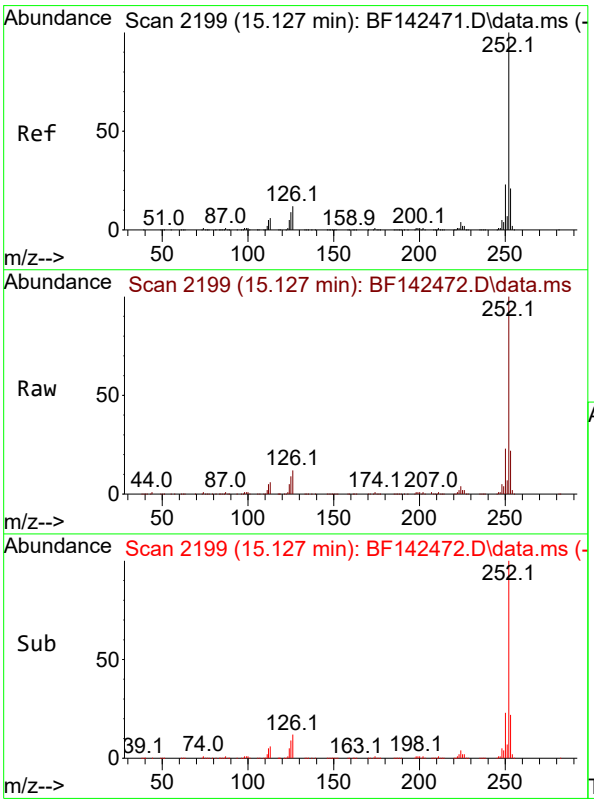
#87
Indeno(1,2,3-cd)pyrene
Concen: 52.730 ng
RT: 17.080 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:276 Resp: 679247

Ion	Ratio	Lower	Upper
276	100		
138	24.5	19.9	29.9
277	25.3	20.2	30.2

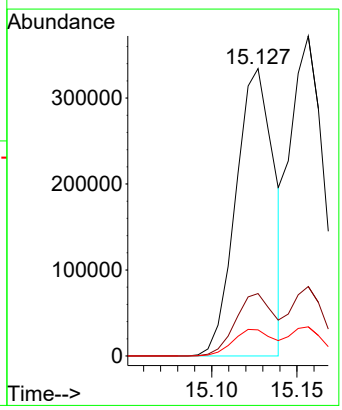


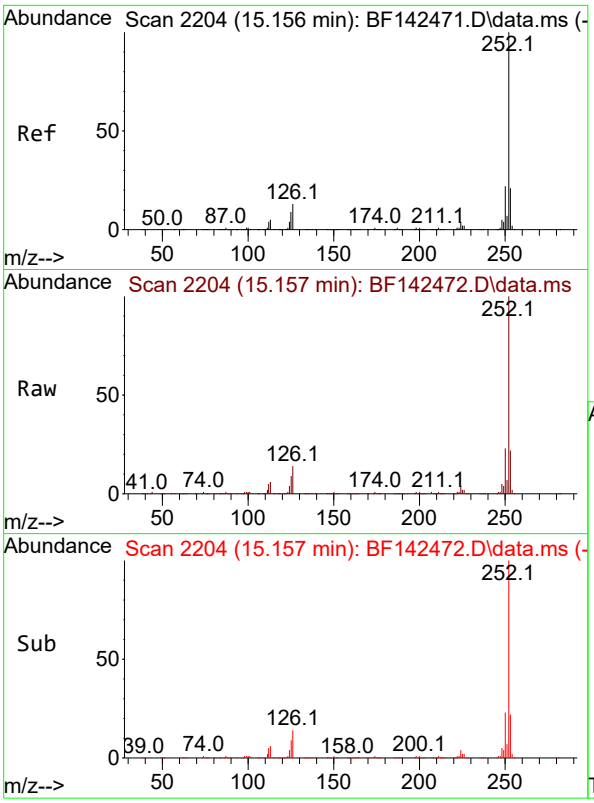


#88
Benzo(b)fluoranthene
Concen: 51.062 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:252 Resp: 518544

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.0	25.4
125	9.1	7.4	11.0



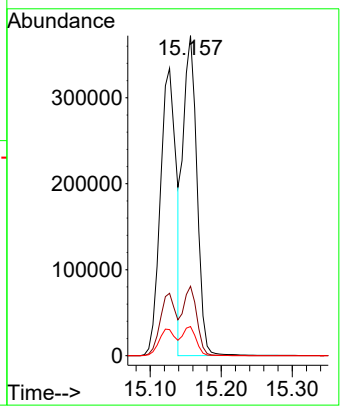


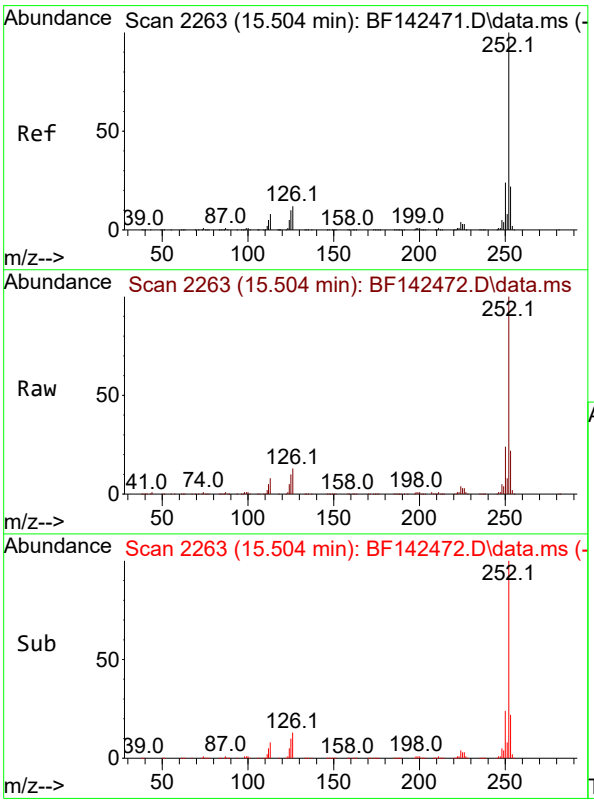
#89
Benzo(k)fluoranthene
Concen: 53.130 ng
RT: 15.157 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:252 Resp: 505348

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.0	25.4
125	9.1	7.3	10.9

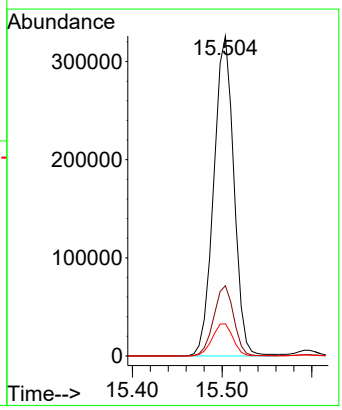


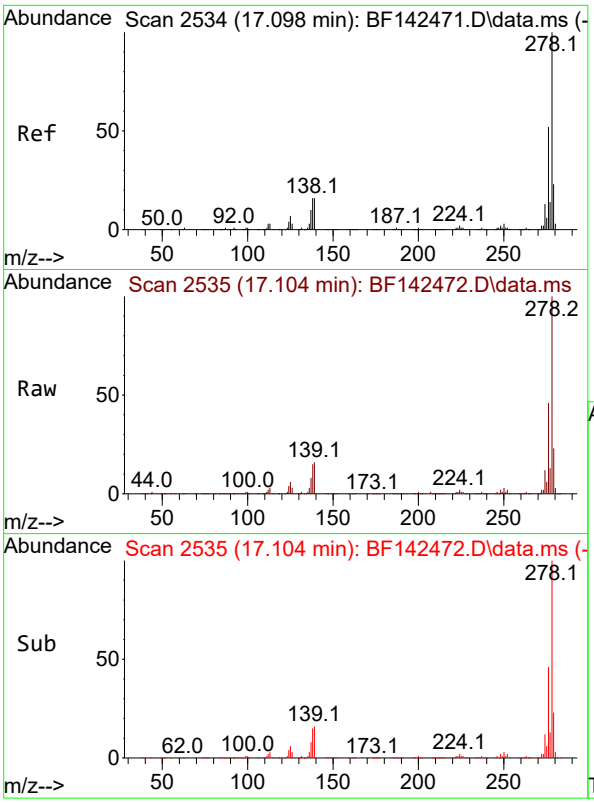


#90
Benzo(a)pyrene
Concen: 53.101 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:252 Resp: 508303

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.0
125	10.0	7.9	11.9



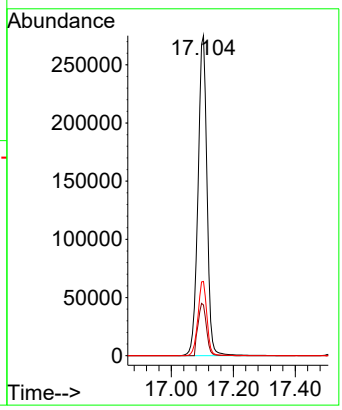


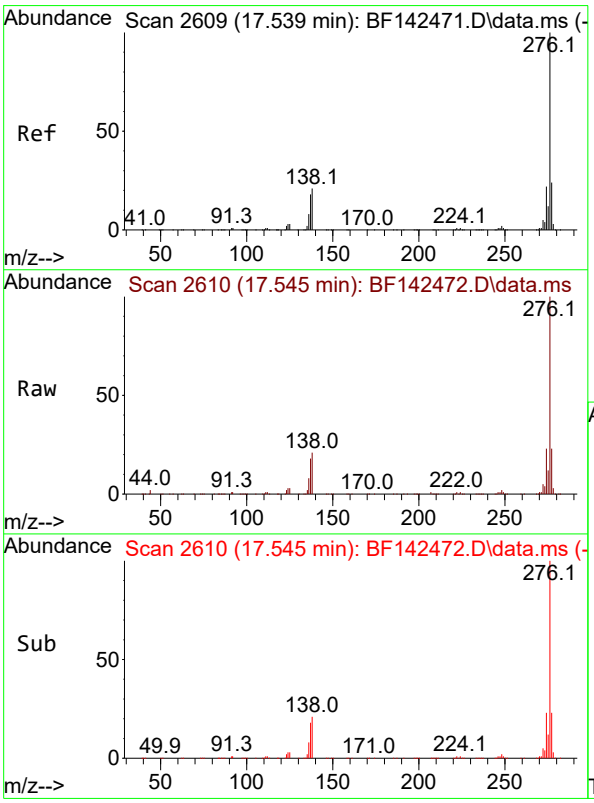
#91
Dibenzo(a,h)anthracene
Concen: 52.964 ng
RT: 17.104 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Tgt Ion:278 Resp: 553351

Ion	Ratio	Lower	Upper
278	100		
139	15.9	12.8	19.2
279	23.2	18.6	28.0

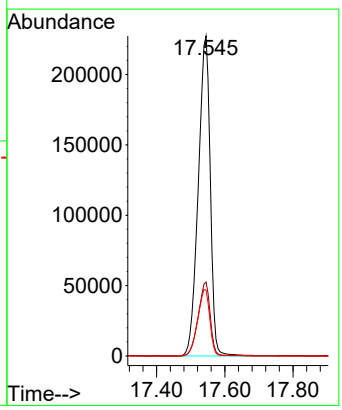




#92
Benzo(g,h,i)perylene
Concen: 53.328 ng
RT: 17.545 min Scan# 2610
Delta R.T. -0.012 min
Lab File: BF142472.D
Acq: 20 May 2025 14:34

Tgt Ion:276 Resp: 557271

Ion	Ratio	Lower	Upper
276	100		
277	23.1	19.2	28.8
138	20.5	16.8	25.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142473.D
Acq On : 20 May 2025 15:03
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Quant Time: May 20 16:55:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.904	152	91151	20.000	ng		0.00
21) Naphthalene-d8	8.187	136	354160	20.000	ng		0.00
39) Acenaphthene-d10	9.945	164	187285	20.000	ng		0.00
64) Phenanthrene-d10	11.428	188	292190	20.000	ng		0.00
76) Chrysene-d12	14.074	240	143579	20.000	ng		0.00
86) Perylene-d12	15.563	264	183052	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.510	112	636815	117.703	ng		0.00
7) Phenol-d6	6.528	99	767355	117.823	ng		0.00
23) Nitrobenzene-d5	7.469	82	771758	118.825	ng		0.00
42) 2,4,6-Tribromophenol	10.733	330	244491	117.621	ng		0.00
45) 2-Fluorobiphenyl	9.263	172	1569136	112.426	ng		0.00
79) Terphenyl-d14	13.016	244	1151893	109.634	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.669	88	132790	61.335	ng		98
3) Pyridine	3.440	79	337570	61.229	ng		99
4) n-Nitrosodimethylamine	3.393	42	178276	62.278	ng		100
6) Aniline	6.563	93	522409	59.656	ng		99
8) 2-Chlorophenol	6.687	128	351459	59.640	ng		99
9) Benzaldehyde	6.451	77	207213	52.898	ng		99
10) Phenol	6.545	94	436789	59.604	ng		95
11) bis(2-Chloroethyl)ether	6.640	93	316232	59.948	ng		100
12) 1,3-Dichlorobenzene	6.845	146	384777	58.514	ng		99
13) 1,4-Dichlorobenzene	6.922	146	390981	59.027	ng		99
14) 1,2-Dichlorobenzene	7.075	146	370996	58.534	ng		99
15) Benzyl Alcohol	7.040	79	293457	60.973	ng		99
16) 2,2'-oxybis(1-Chloropr...	7.175	45	519064	58.593	ng		99
17) 2-Methylphenol	7.151	107	277466	60.306	ng		99
18) Hexachloroethane	7.416	117	135953	58.780	ng		99
19) n-Nitroso-di-n-propyla...	7.322	70	236814	58.671	ng		98
20) 3+4-Methylphenols	7.304	107	341788	58.010	ng	#	87
22) Acetophenone	7.316	105	454226	57.937	ng		99
24) Nitrobenzene	7.487	77	351378	59.984	ng		98
25) Isophorone	7.728	82	644818	59.381	ng		99
26) 2-Nitrophenol	7.798	139	193662	61.872	ng		98
27) 2,4-Dimethylphenol	7.834	122	331159	59.994	ng		99
28) bis(2-Chloroethoxy)met...	7.934	93	398177	58.699	ng		99
29) 2,4-Dichlorophenol	8.045	162	300754	59.913	ng		98
30) 1,2,4-Trichlorobenzene	8.128	180	318487	58.460	ng		99
31) Naphthalene	8.210	128	1012926	58.085	ng		99
32) Benzoic acid	7.957	122	221962	66.059	ng		99
33) 4-Chloroaniline	8.257	127	421281	59.619	ng		99
34) Hexachlorobutadiene	8.328	225	203527	59.831	ng		99
35) Caprolactam	8.634	113	82688	58.650	ng		100
36) 4-Chloro-3-methylphenol	8.734	107	305341	59.352	ng		99
37) 2-Methylnaphthalene	8.898	142	635148	57.893	ng		100
38) 1-Methylnaphthalene	8.998	142	649652	57.247	ng		100
40) 1,2,4,5-Tetrachloroben...	9.063	216	321732	59.844	ng		99
41) Hexachlorocyclopentadiene	9.051	237	238708	65.820	ng		99
43) 2,4,6-Trichlorophenol	9.175	196	217868	60.098	ng		97

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142473.D
Acq On : 20 May 2025 15:03
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Quant Time: May 20 16:55:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	229079	59.916	ng	99
46) 1,1'-Biphenyl	9.363	154	846783	58.279	ng	99
47) 2-Chloronaphthalene	9.392	162	630647	58.746	ng	99
48) 2-Nitroaniline	9.481	65	186466	60.093	ng	98
49) Acenaphthylene	9.804	152	1058826	58.411	ng	100
50) Dimethylphthalate	9.669	163	705857	57.119	ng	100
51) 2,6-Dinitrotoluene	9.728	165	157884	59.195	ng	99
52) Acenaphthene	9.981	154	643773	58.160	ng	99
53) 3-Nitroaniline	9.898	138	171137	58.746	ng	99
54) 2,4-Dinitrophenol	9.998	184	89741	65.126	ng	88
55) Dibenzofuran	10.151	168	918703	57.677	ng	100
56) 4-Nitrophenol	10.045	139	128501	59.782	ng	96
57) 2,4-Dinitrotoluene	10.128	165	209035	60.012	ng	100
58) Fluorene	10.492	166	695462	56.516	ng	99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	187067	58.609	ng	98
60) Diethylphthalate	10.363	149	684259	56.695	ng	100
61) 4-Chlorophenyl-phenyle...	10.481	204	343838	56.880	ng	98
62) 4-Nitroaniline	10.510	138	148755	56.302	ng	99
63) Azobenzene	10.645	77	631137	58.221	ng	99
65) 4,6-Dinitro-2-methylph...	10.539	198	109172	66.950	ng	98
66) n-Nitrosodiphenylamine	10.604	169	608394	60.861	ng	100
67) 4-Bromophenyl-phenylether	10.975	248	212638	61.546	ng	99
68) Hexachlorobenzene	11.039	284	229917	60.168	ng	98
69) Atrazine	11.128	200	158234	59.604	ng	100
70) Pentachlorophenol	11.233	266	137347	63.663	ng	99
71) Phenanthrene	11.457	178	905073	57.961	ng	100
72) Anthracene	11.510	178	918369	57.627	ng	99
73) Carbazole	11.663	167	769151	56.455	ng	100
74) Di-n-butylphthalate	11.986	149	853524	57.234	ng	100
75) Fluoranthene	12.645	202	789533	54.112	ng	99
77) Benzidine	12.763	184	300547	56.251	ng	100
78) Pyrene	12.874	202	763672	57.017	ng	100
80) Butylbenzylphthalate	13.492	149	236758	63.972	ng	97
81) Benzo(a)anthracene	14.063	228	571607	59.620	ng	99
82) 3,3'-Dichlorobenzidine	14.021	252	190415	65.480	ng	100
83) Chrysene	14.098	228	526831	61.153	ng	100
84) Bis(2-ethylhexyl)phtha...	14.051	149	334950	70.698	ng	98
85) Di-n-octyl phthalate	14.663	149	664220	71.701	ng	100
87) Indeno(1,2,3-cd)pyrene	17.086	276	848752	61.761	ng	100
88) Benzo(b)fluoranthene	15.127	252	616210	56.878	ng	99
89) Benzo(k)fluoranthene	15.157	252	619660	61.068	ng	98
90) Benzo(a)pyrene	15.504	252	622347	60.943	ng	99
91) Dibenzo(a,h)anthracene	17.104	278	683473	61.321	ng	99
92) Benzo(g,h,i)perylene	17.545	276	683528	61.313	ng	99

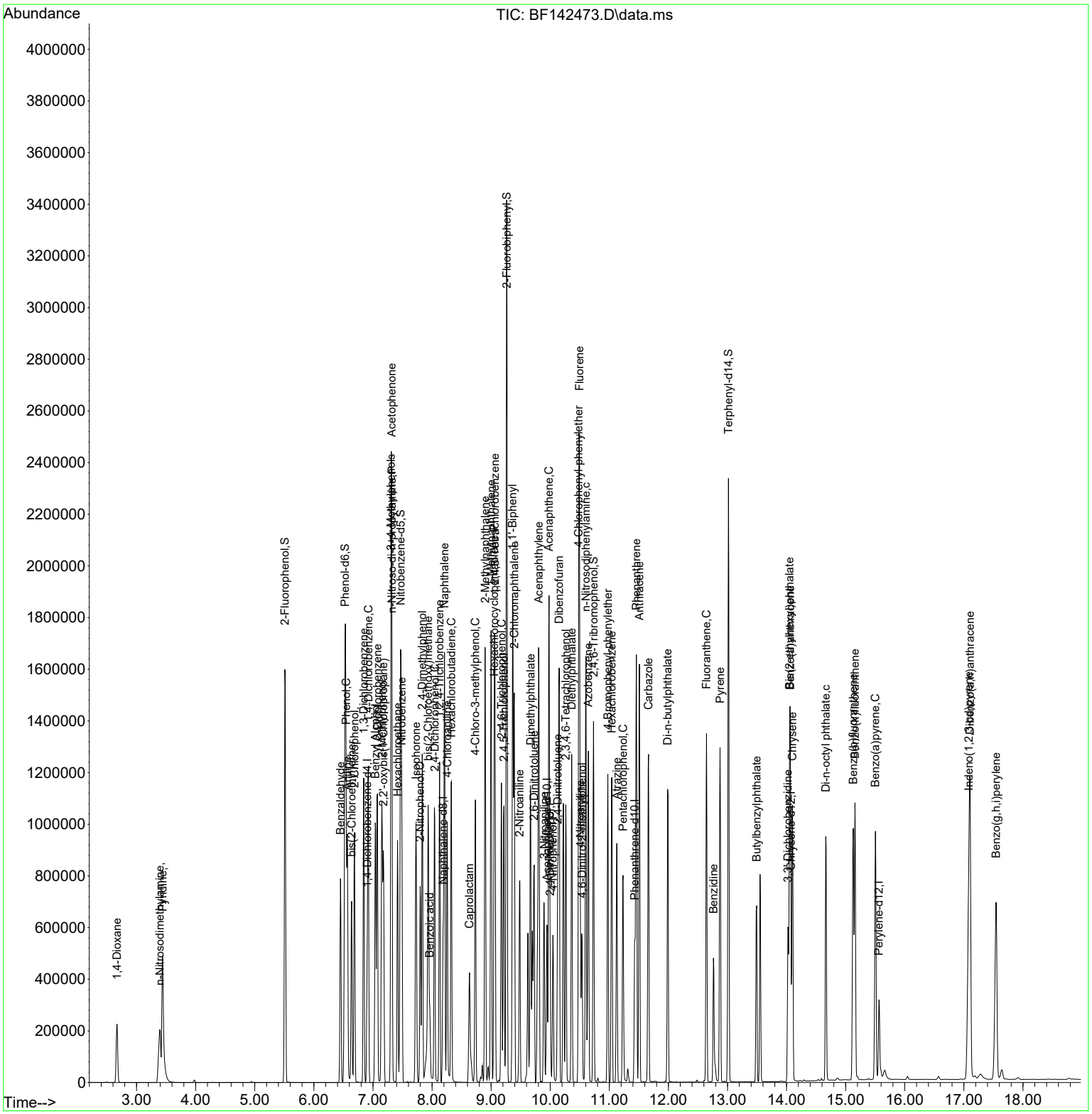
(#) = qualifier out of range (m) = manual integration (+) = signals summed

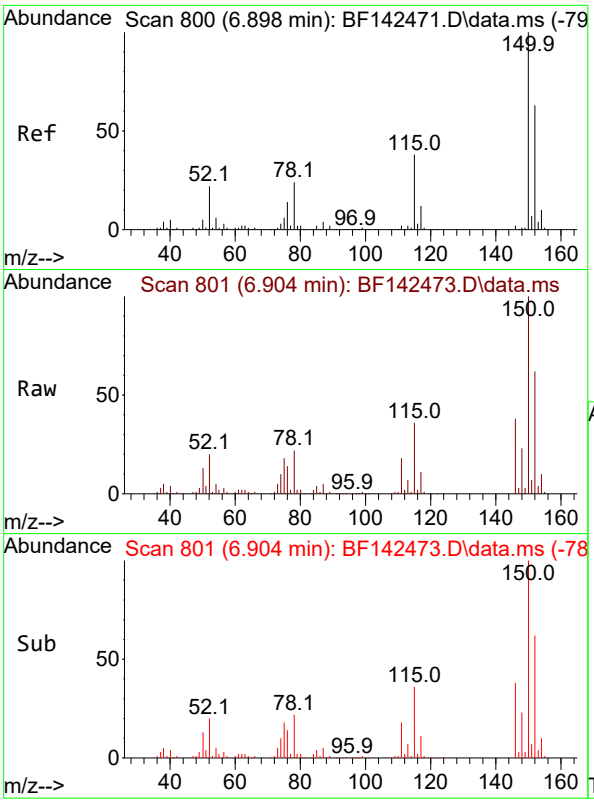
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142473.D
Acq On : 20 May 2025 15:03
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Quant Time: May 20 16:55:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



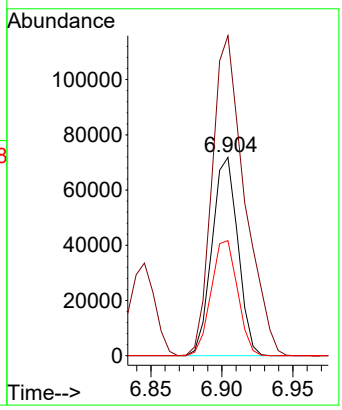


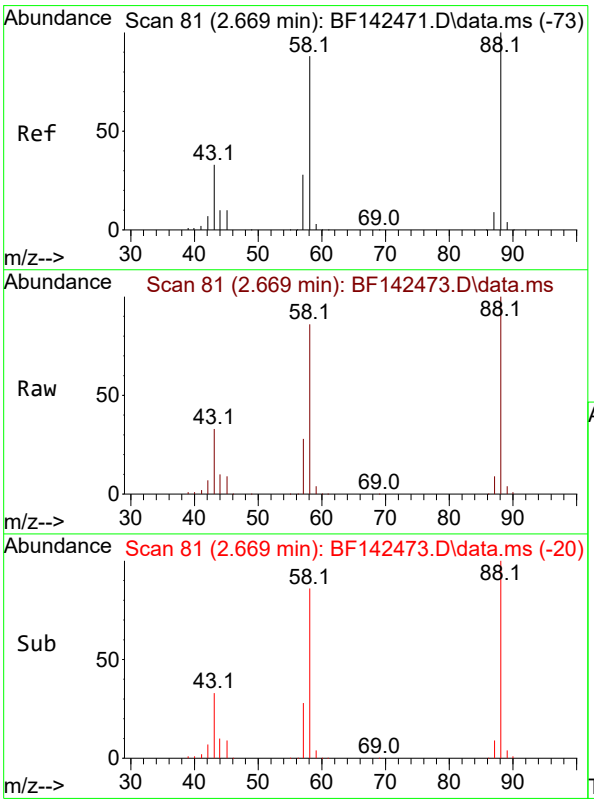
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.904 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:152 Resp: 91151

Ion	Ratio	Lower	Upper
152	100		
150	161.4	128.2	192.4
115	58.0	48.3	72.5

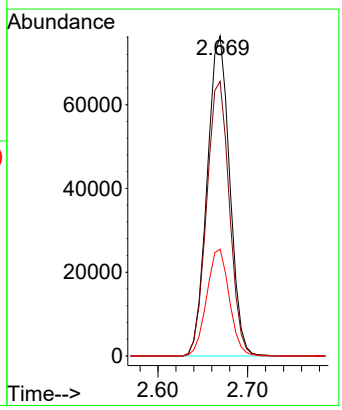


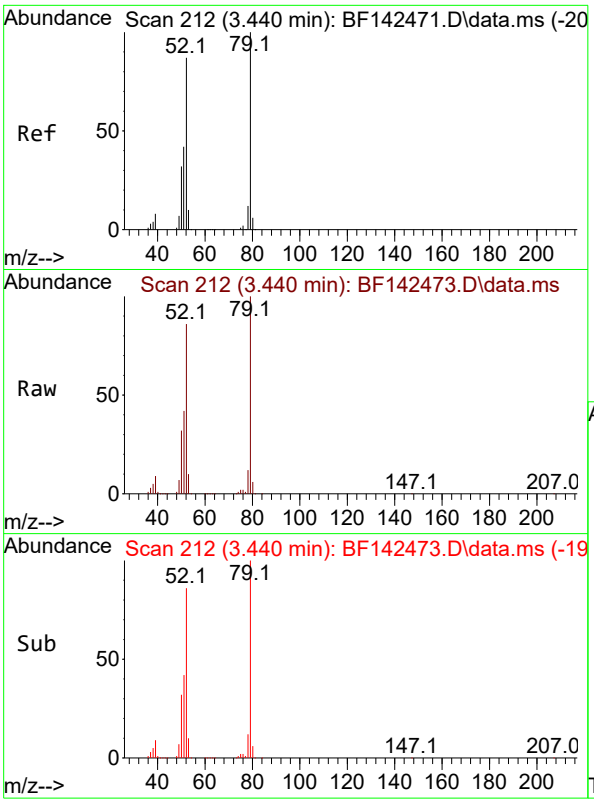


#2
1,4-Dioxane
Concen: 61.335 ng
RT: 2.669 min Scan# 81
Delta R.T. 0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 88 Resp: 132790

Ion	Ratio	Lower	Upper
88	100		
58	86.7	70.8	106.2
43	33.5	26.6	40.0



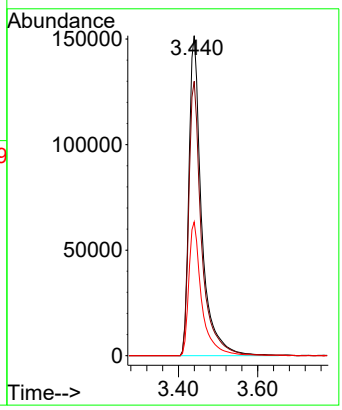


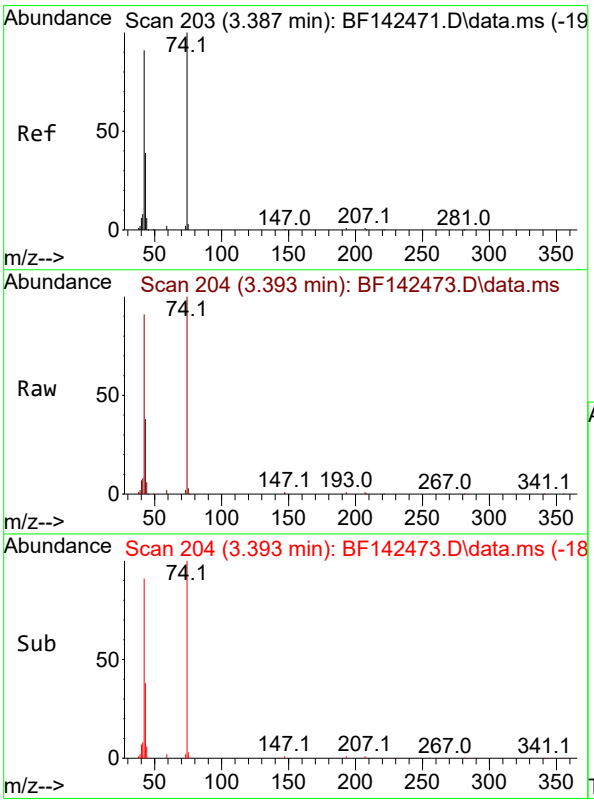
#3
Pyridine
Concen: 61.229 ng
RT: 3.440 min Scan# 21
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 79 Resp: 337570

Ion	Ratio	Lower	Upper
79	100		
52	85.7	69.2	103.8
51	41.8	33.3	49.9

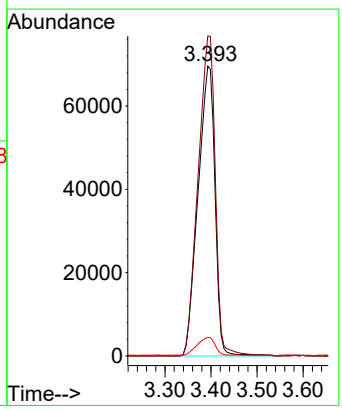


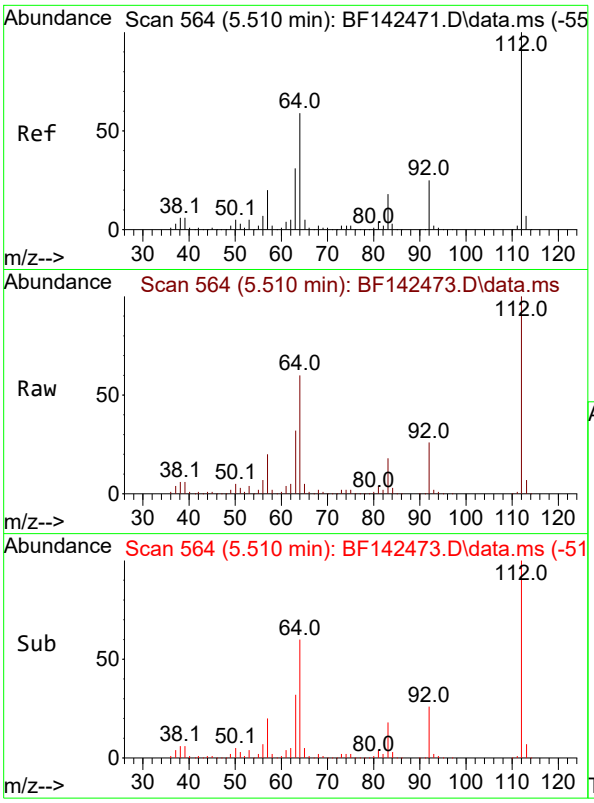


#4
n-Nitrosodimethylamine
Concen: 62.278 ng
RT: 3.393 min Scan# 204
Delta R.T. -0.012 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 42 Resp: 178276

Ion	Ratio	Lower	Upper
42	100		
74	110.4	88.2	132.4
44	6.4	5.4	8.2



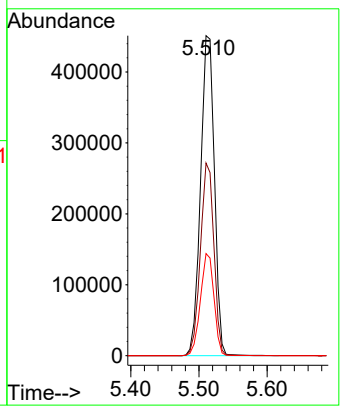


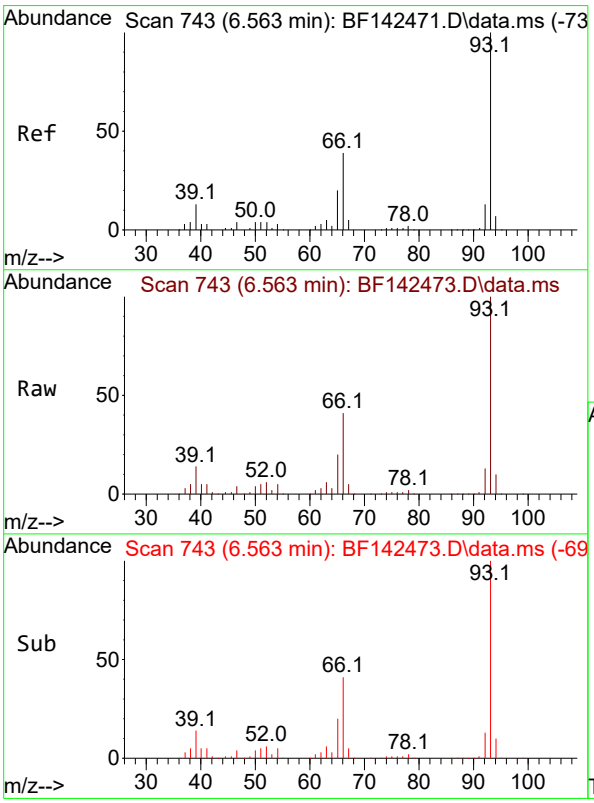
#5
2-Fluorophenol
Concen: 117.703 ng
RT: 5.510 min Scan# 5
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:112 Resp: 636815

Ion	Ratio	Lower	Upper
112	100		
64	60.2	47.5	71.3
63	31.9	24.9	37.3

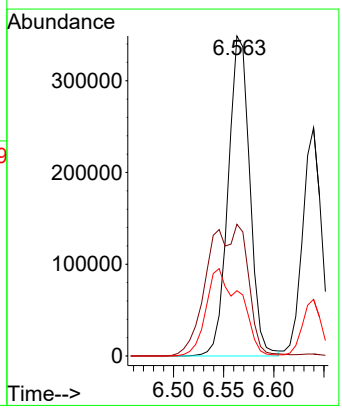


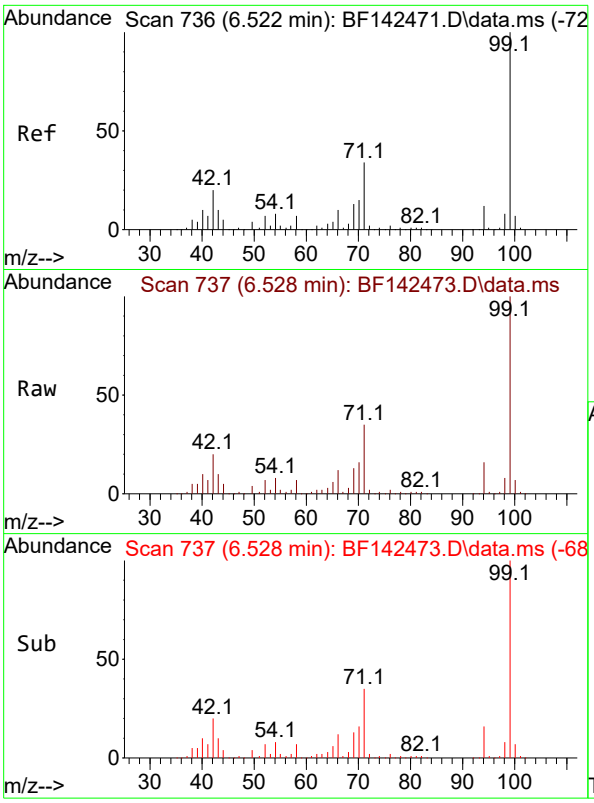


#6
Aniline
Concen: 59.656 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 93 Resp: 522409

Ion	Ratio	Lower	Upper
93	100		
66	41.2	32.0	48.0
65	20.4	16.1	24.1



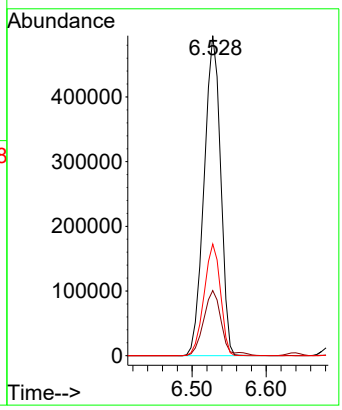


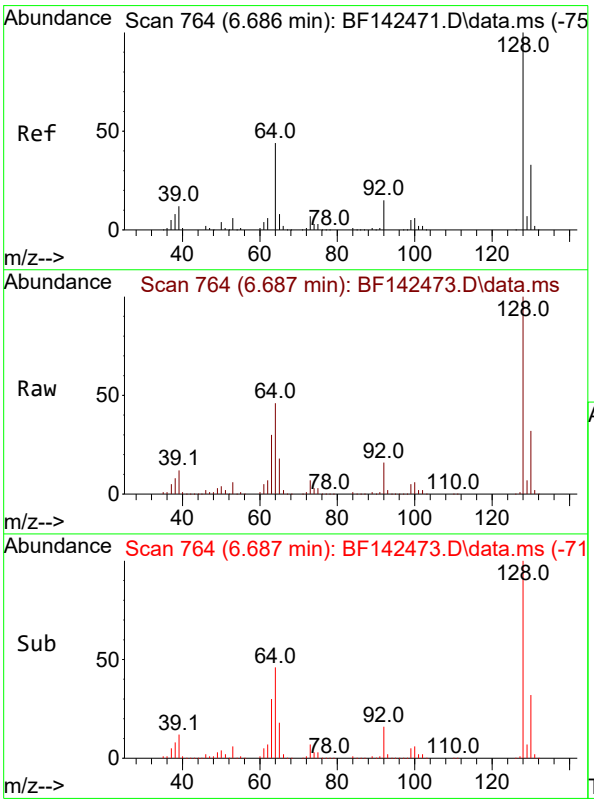
#7
Phenol-d6
Concen: 117.823 ng
RT: 6.528 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 99 Resp: 767355

Ion	Ratio	Lower	Upper
99	100		
42	20.4	16.2	24.2
71	34.9	27.3	40.9

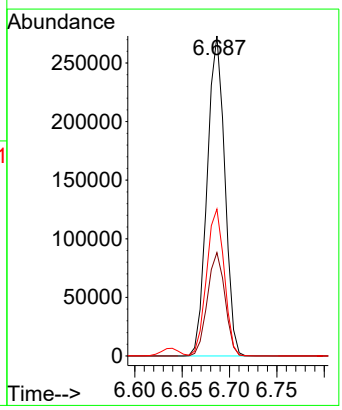


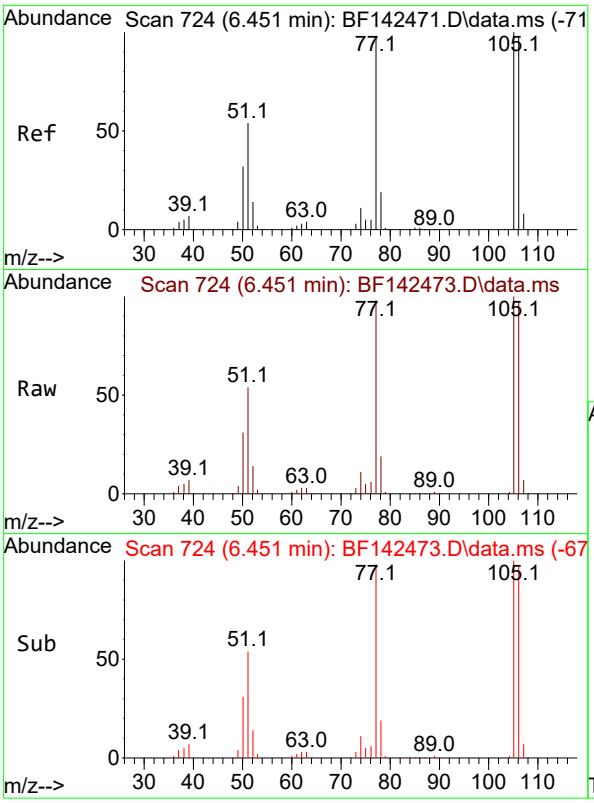


#8
2-Chlorophenol
Concen: 59.640 ng
RT: 6.687 min Scan# 764
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:128 Resp: 351459

Ion	Ratio	Lower	Upper
128	100		
130	32.3	12.6	52.6
64	45.9	25.1	65.1



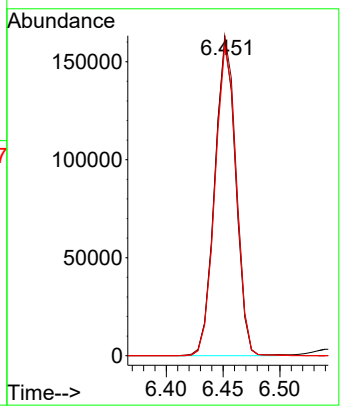


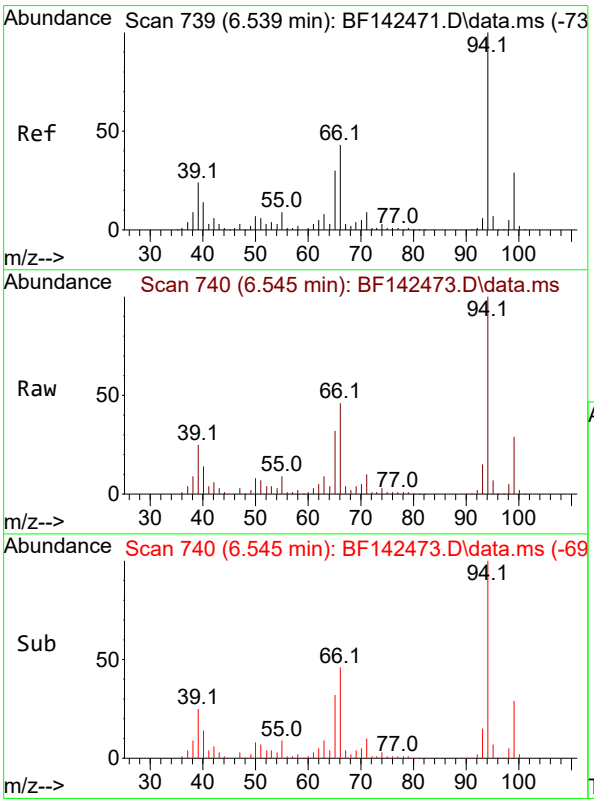
#9
Benzaldehyde
Concen: 52.898 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 77 Resp: 207213

Ion	Ratio	Lower	Upper
77	100		
105	101.7	82.5	122.5
106	98.3	80.0	120.0

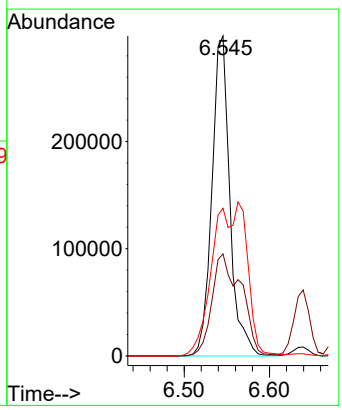


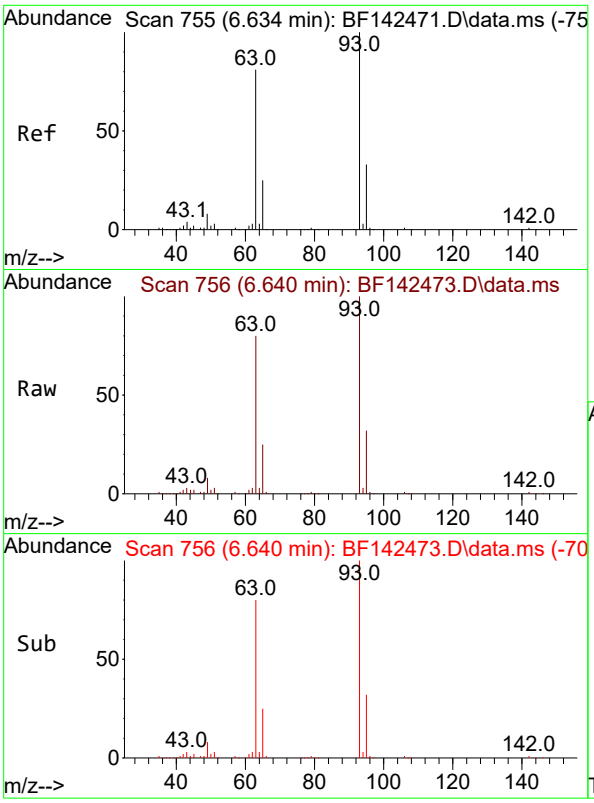


#10
Phenol
Concen: 59.604 ng
RT: 6.545 min Scan# 740
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 94 Resp: 436789

Ion	Ratio	Lower	Upper
94	100		
65	31.9	10.3	50.3
66	46.2	22.6	62.6



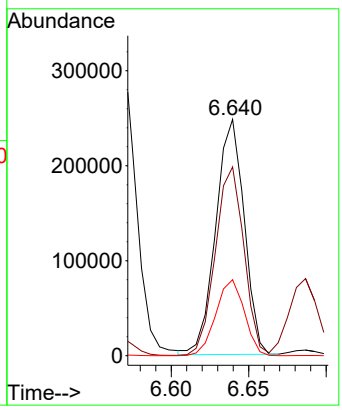


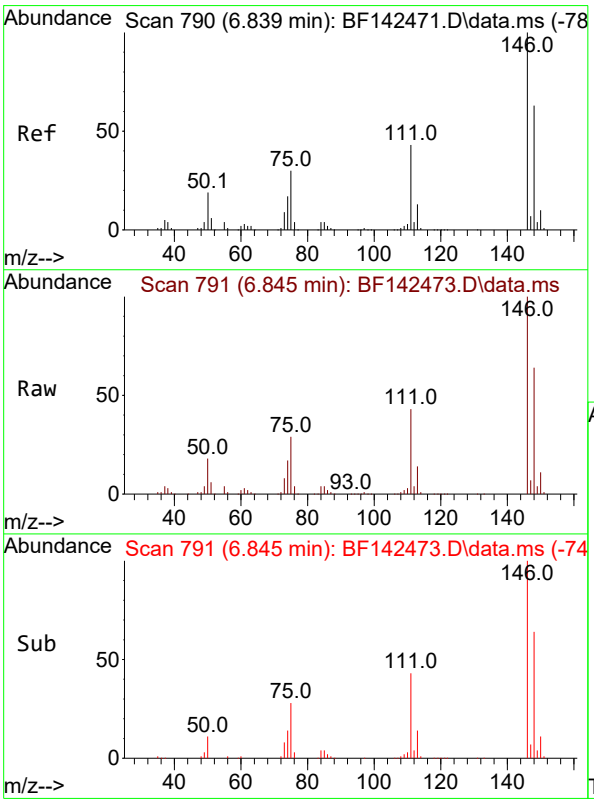
#11
bis(2-Chloroethyl)ether
Concen: 59.948 ng
RT: 6.640 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 93 Resp: 316232

Ion	Ratio	Lower	Upper
93	100		
63	79.9	60.2	100.2
95	32.2	12.3	52.3

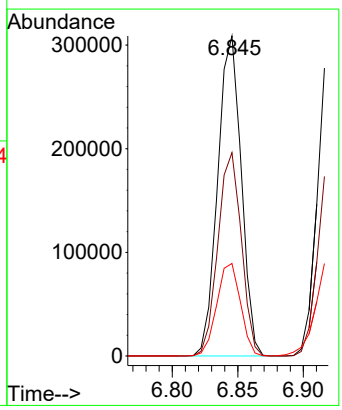


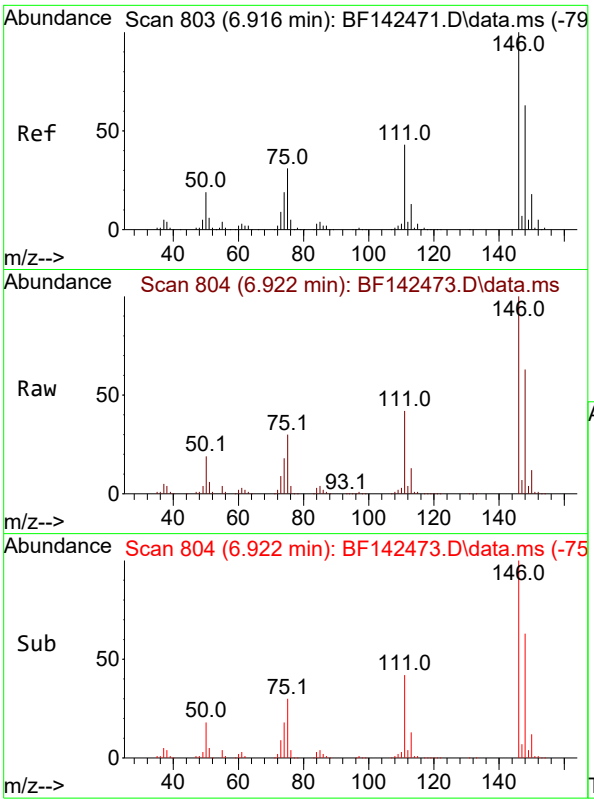


#12
1,3-Dichlorobenzene
Concen: 58.514 ng
RT: 6.845 min Scan# 791
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:146 Resp: 384777

Ion	Ratio	Lower	Upper
146	100		
148	63.6	50.6	75.8
75	28.9	23.8	35.6



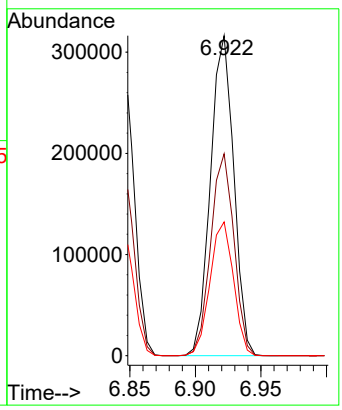


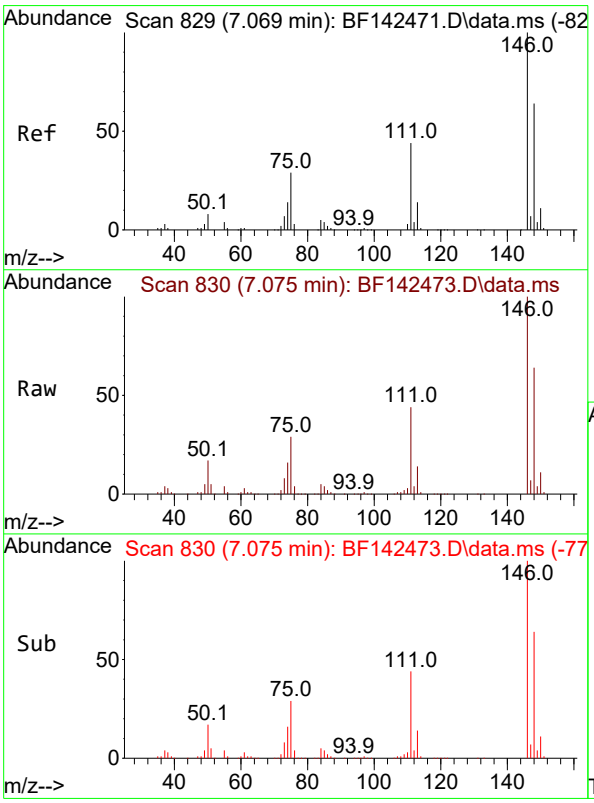
#13
1,4-Dichlorobenzene
Concen: 59.027 ng
RT: 6.922 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:146 Resp: 390981

Ion	Ratio	Lower	Upper
146	100		
148	63.1	50.4	75.6
111	41.8	34.1	51.1

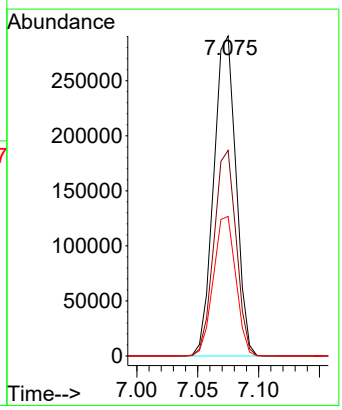


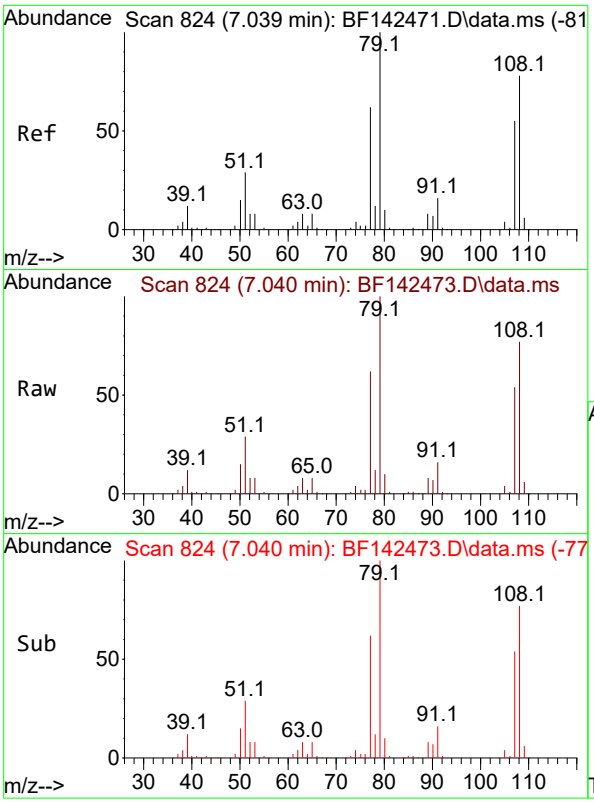


#14
1,2-Dichlorobenzene
Concen: 58.534 ng
RT: 7.075 min Scan# 830
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:146 Resp: 370996

Ion	Ratio	Lower	Upper
146	100		
148	64.2	51.0	76.4
111	43.6	35.0	52.6



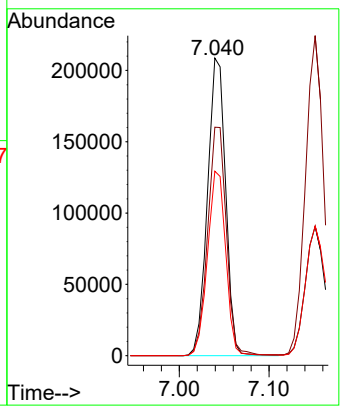


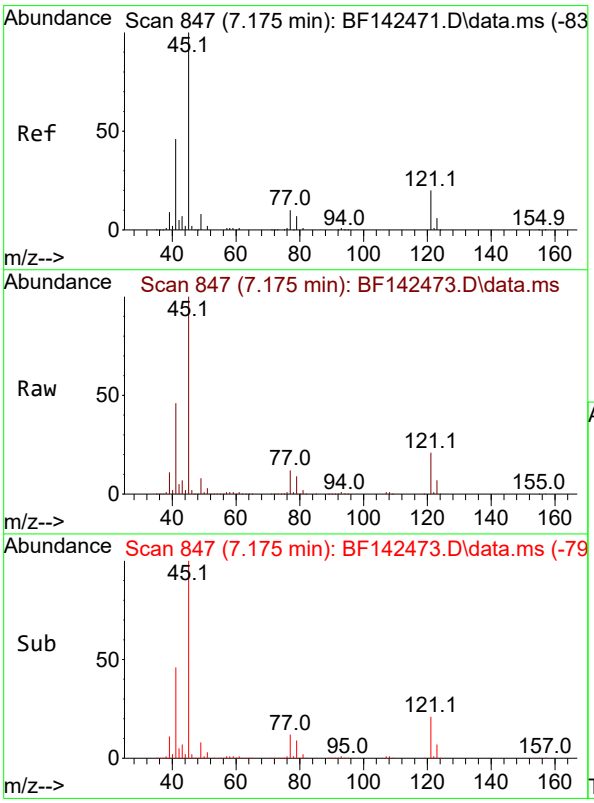
#15
Benzyl Alcohol
Concen: 60.973 ng
RT: 7.040 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 79 Resp: 293457

Ion	Ratio	Lower	Upper
79	100		
108	76.8	62.1	93.1
77	62.0	49.5	74.3

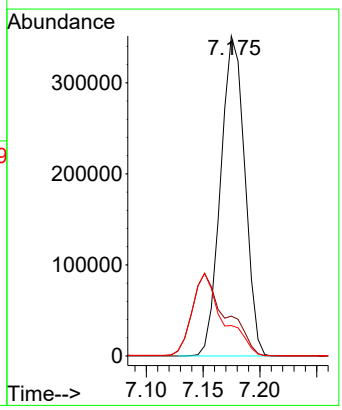


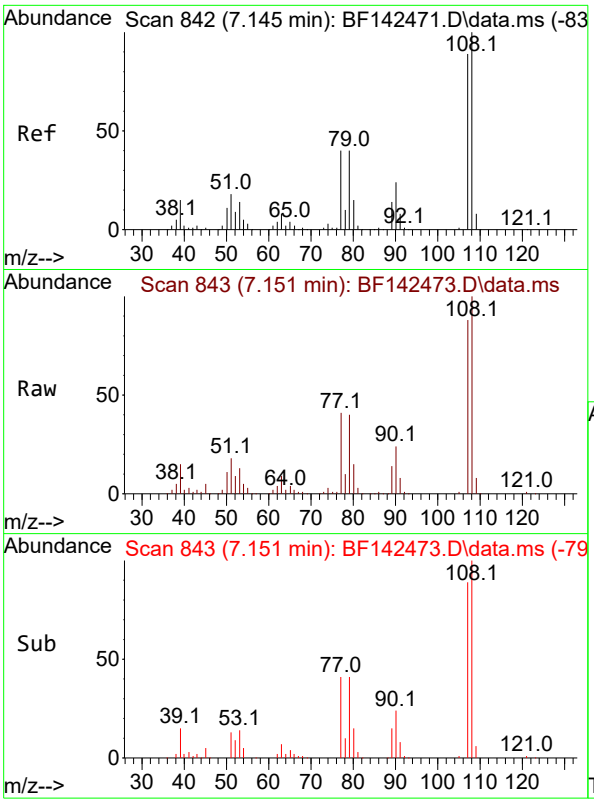


#16
2,2'-oxybis(1-Chloropropane)
Concen: 58.593 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 45 Resp: 519064

Ion	Ratio	Lower	Upper
45	100		
77	12.5	0.0	32.0
79	9.5	0.0	29.2



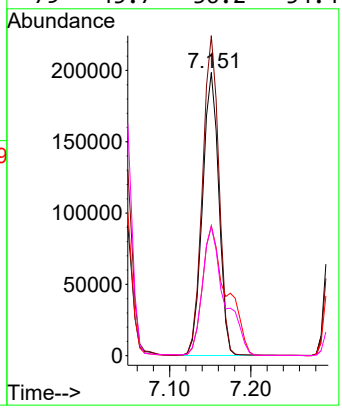


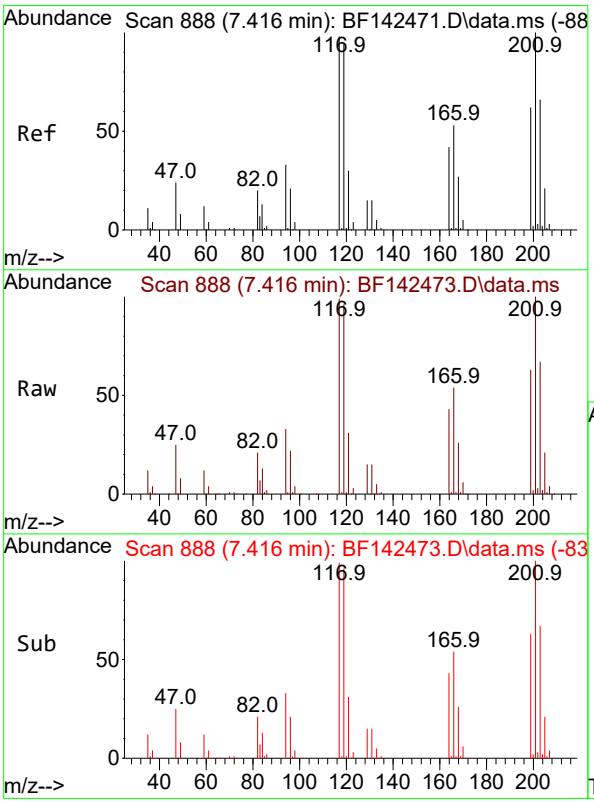
#17
2-Methylphenol
Concen: 60.306 ng
RT: 7.151 min Scan# 84
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:107 Resp: 277466

Ion	Ratio	Lower	Upper
107	100		
108	113.0	90.2	135.2
77	45.8	36.1	54.1
79	45.7	36.2	54.4

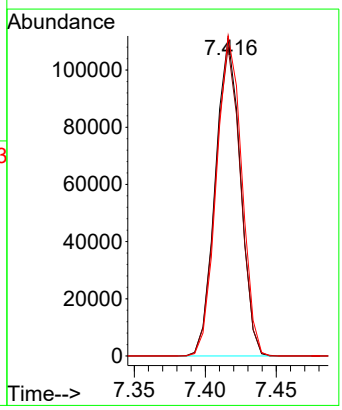


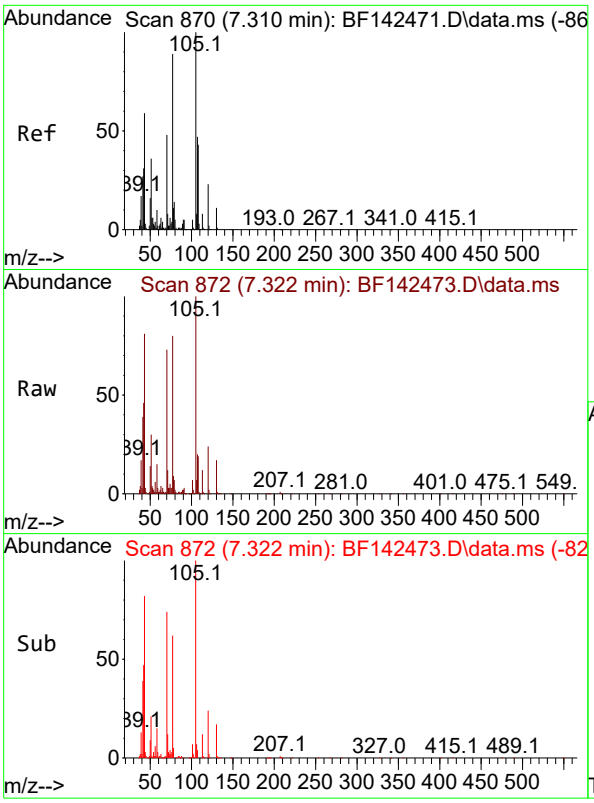


#18
Hexachloroethane
Concen: 58.780 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:117 Resp: 135953

Ion	Ratio	Lower	Upper
117	100		
119	96.9	76.6	114.8
201	100.6	81.3	121.9



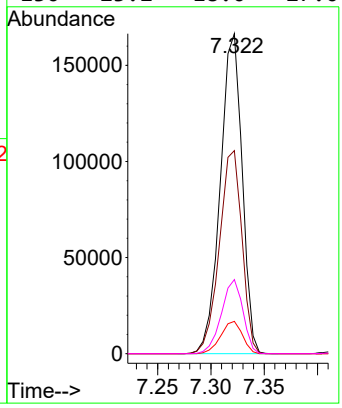


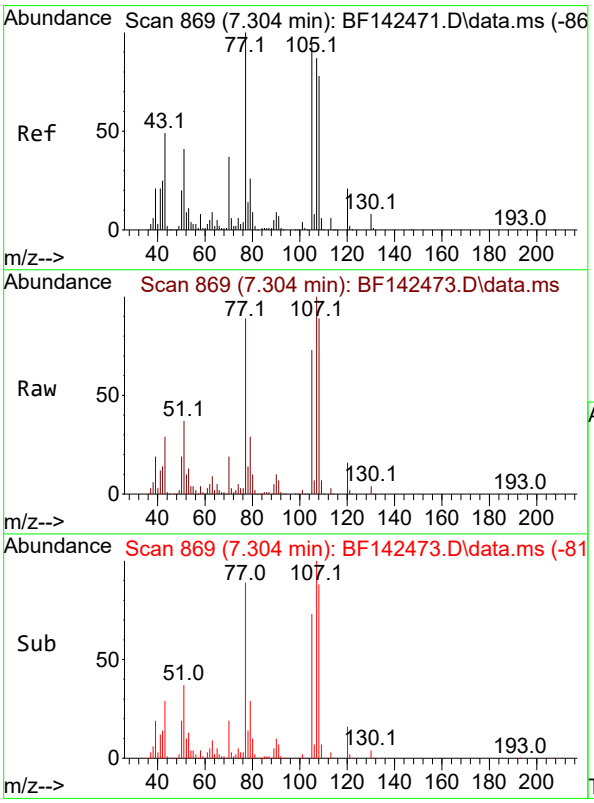
#19
n-Nitroso-di-n-propylamine
Concen: 58.671 ng
RT: 7.322 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 70 Resp: 236814

Ion	Ratio	Lower	Upper
70	100		
42	63.4	52.4	78.6
101	10.1	7.8	11.8
130	23.2	18.0	27.0

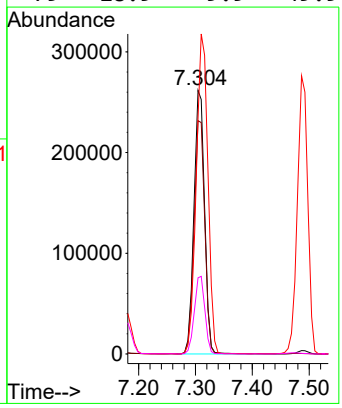


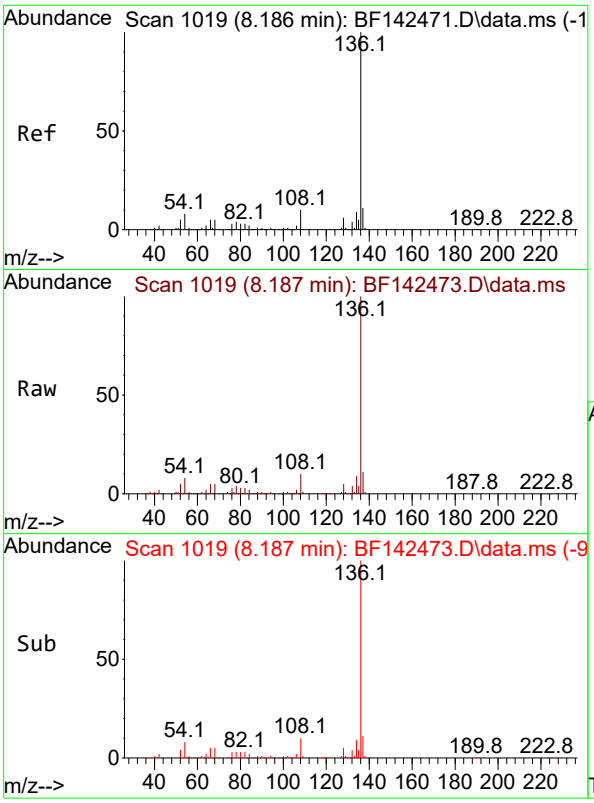


#20
3+4-Methylphenols
Concen: 58.010 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:107 Resp: 341788

Ion	Ratio	Lower	Upper
107	100		
108	88.5	70.4	110.4
77	89.5	95.4	135.4#
79	28.9	9.9	49.9



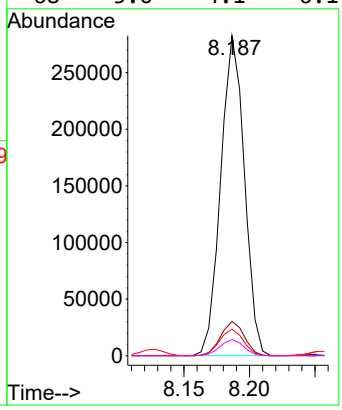


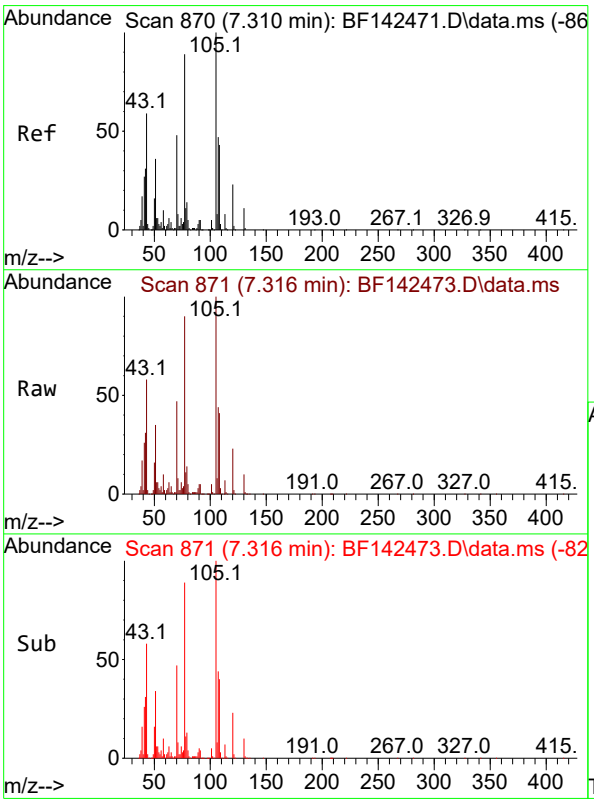
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.187 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:136 Resp: 354160

Ion	Ratio	Lower	Upper
136	100		
137	10.7	8.6	13.0
54	8.3	6.6	10.0
68	5.0	4.1	6.1

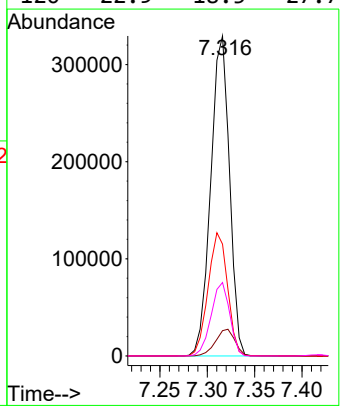


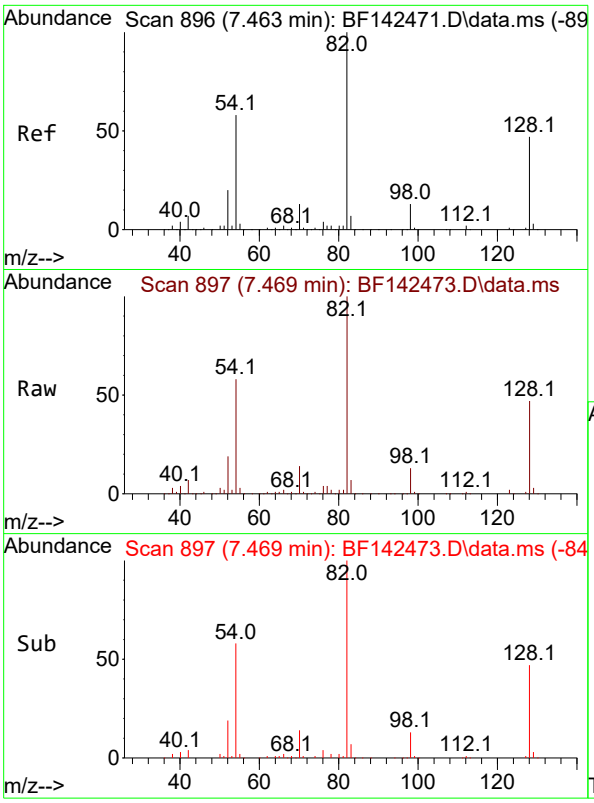


#22
Acetophenone
Concen: 57.937 ng
RT: 7.316 min Scan# 871
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:105 Resp: 454226

Ion	Ratio	Lower	Upper
105	100		
71	7.9	6.4	9.6
51	34.9	28.6	42.8
120	22.9	18.5	27.7



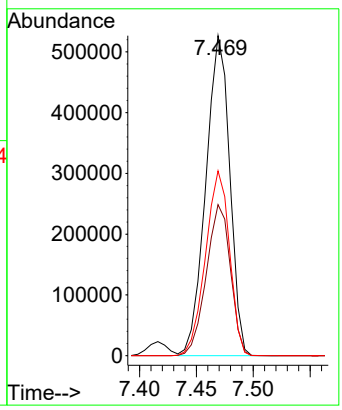


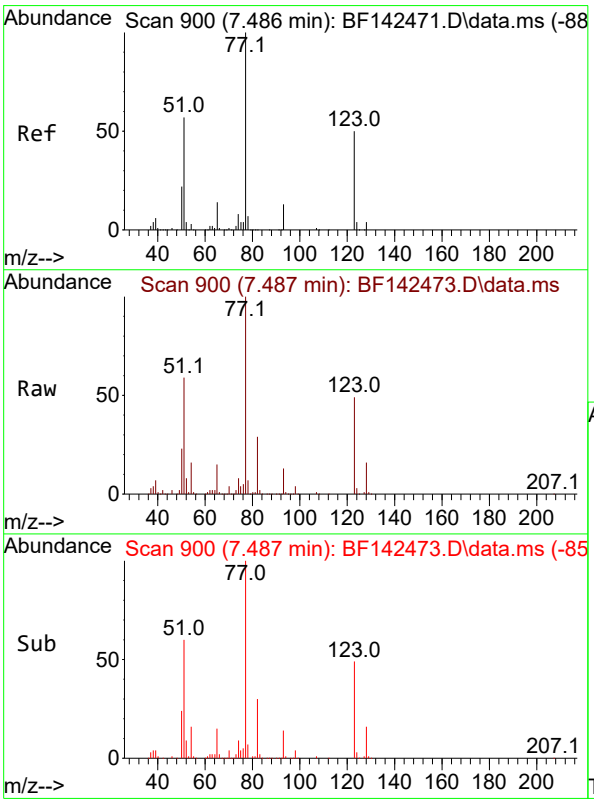
#23
Nitrobenzene-d5
Concen: 118.825 ng
RT: 7.469 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 82 Resp: 771758

Ion	Ratio	Lower	Upper
82	100		
128	47.2	37.4	56.2
54	57.7	46.6	70.0

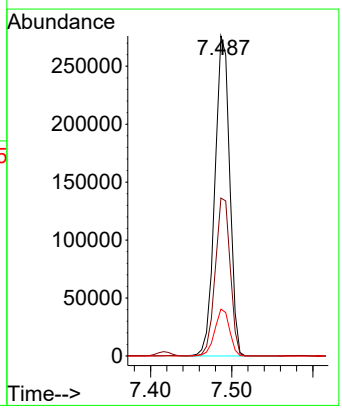


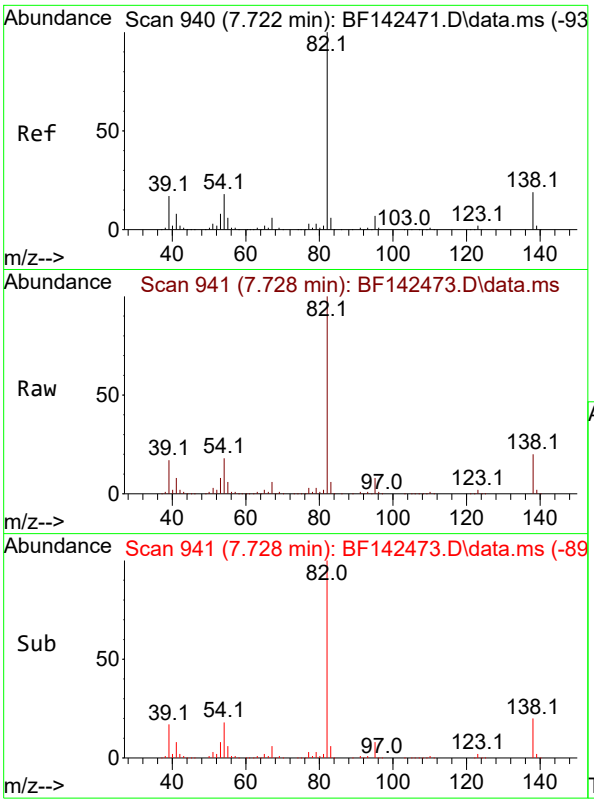


#24
Nitrobenzene
Concen: 59.984 ng
RT: 7.487 min Scan# 900
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 77 Resp: 351378

Ion	Ratio	Lower	Upper
77	100		
123	49.4	40.6	61.0
65	14.7	11.4	17.2



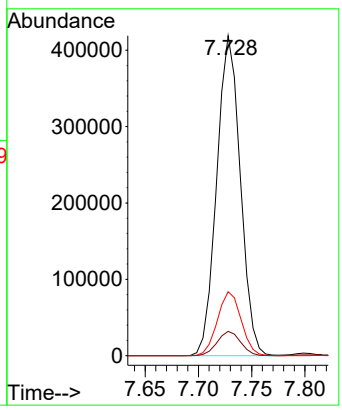


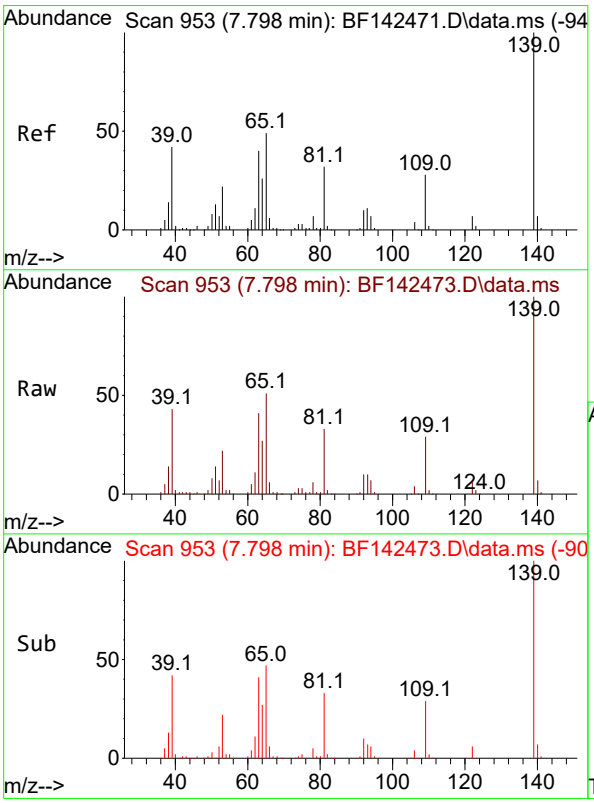
#25
Isophorone
Concen: 59.381 ng
RT: 7.728 min Scan# 94
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 82 Resp: 644818

Ion	Ratio	Lower	Upper
82	100		
95	7.6	6.0	9.0
138	20.0	15.5	23.3

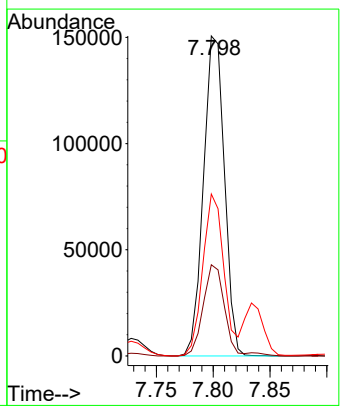


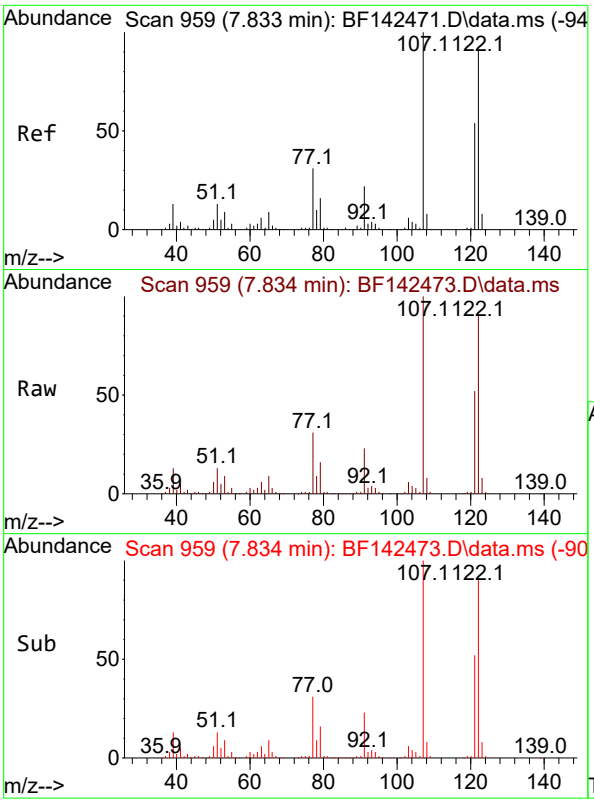


#26
2-Nitrophenol
Concen: 61.872 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:139 Resp: 193662

Ion	Ratio	Lower	Upper
139	100		
109	28.5	22.6	33.8
65	50.6	39.4	59.0



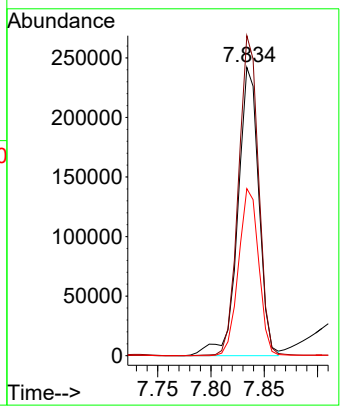


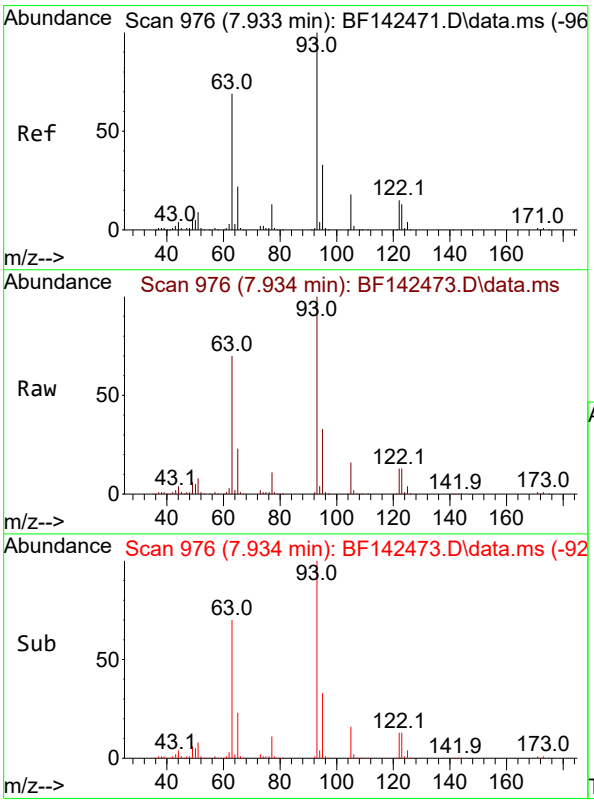
#27
2,4-Dimethylphenol
Concen: 59.994 ng
RT: 7.834 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:122 Resp: 331159

Ion	Ratio	Lower	Upper
122	100		
107	111.0	88.1	132.1
121	57.9	47.3	70.9

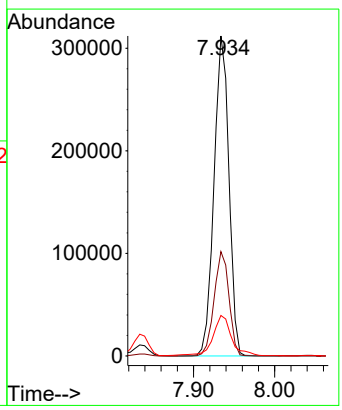


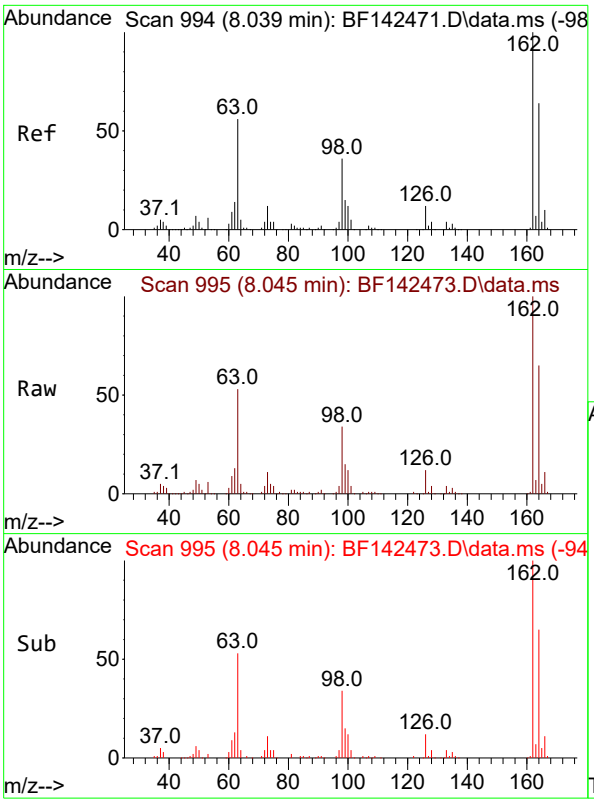


#28
bis(2-Chloroethoxy)methane
Concen: 58.699 ng
RT: 7.934 min Scan# 976
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 93 Resp: 398177

Ion	Ratio	Lower	Upper
93	100		
95	32.6	26.4	39.6
123	12.7	10.6	15.8



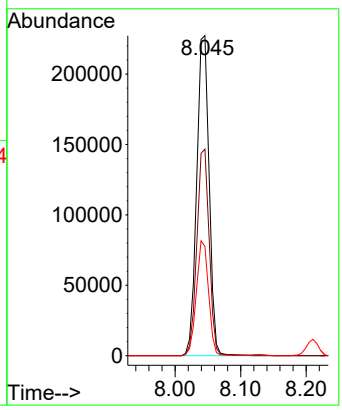


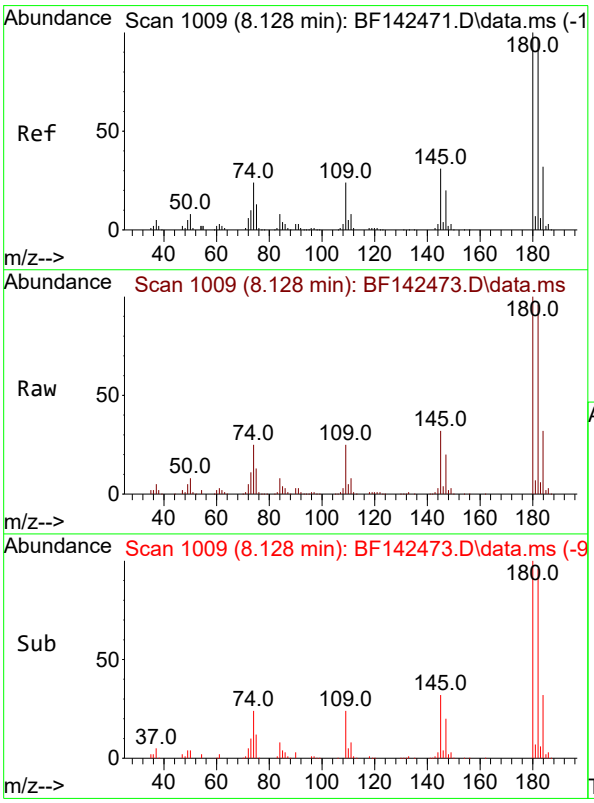
#29
2,4-Dichlorophenol
Concen: 59.913 ng
RT: 8.045 min Scan# 9
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:162 Resp: 300754

Ion	Ratio	Lower	Upper
162	100		
164	64.6	43.7	83.7
98	34.1	15.5	55.5

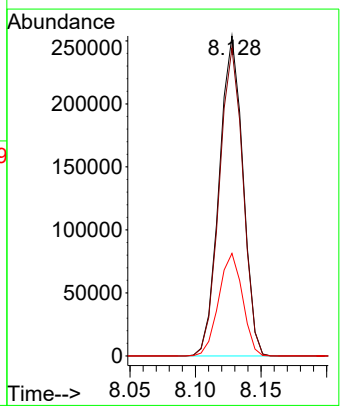


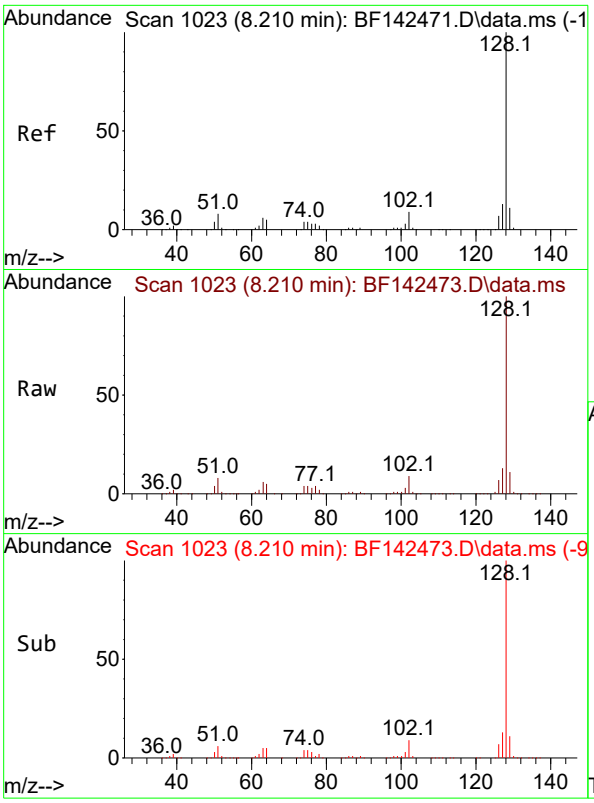


#30
1,2,4-Trichlorobenzene
Concen: 58.460 ng
RT: 8.128 min Scan# 1009
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:180 Resp: 318487

Ion	Ratio	Lower	Upper
180	100		
182	96.2	78.0	117.0
145	32.0	25.0	37.6



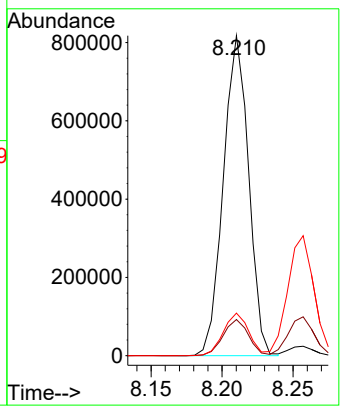


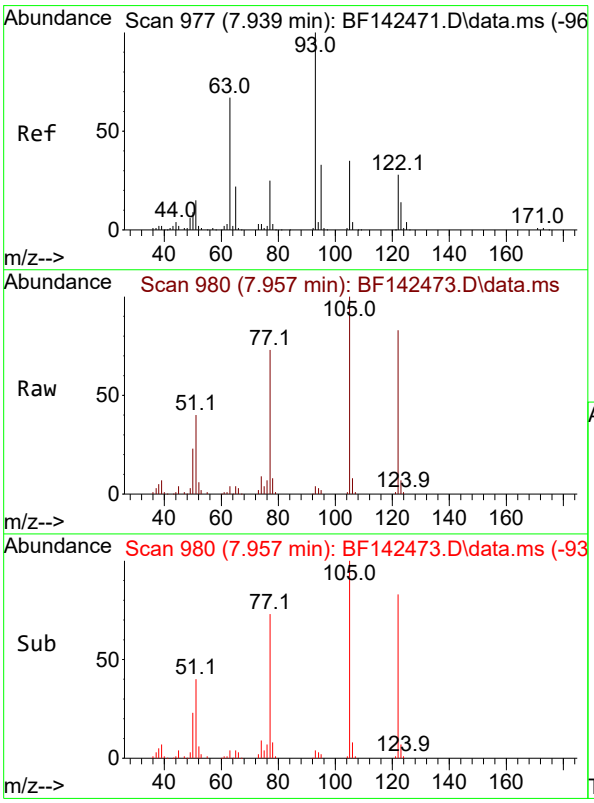
#31
Naphthalene
Concen: 58.085 ng
RT: 8.210 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:128 Resp: 1012926

Ion	Ratio	Lower	Upper
128	100		
129	11.3	8.9	13.3
127	13.3	10.5	15.7

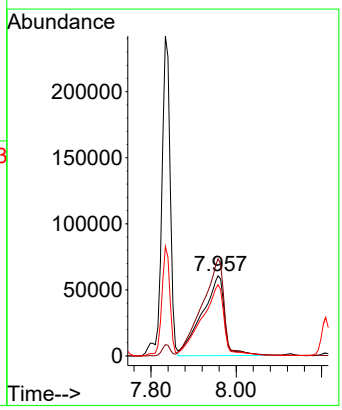


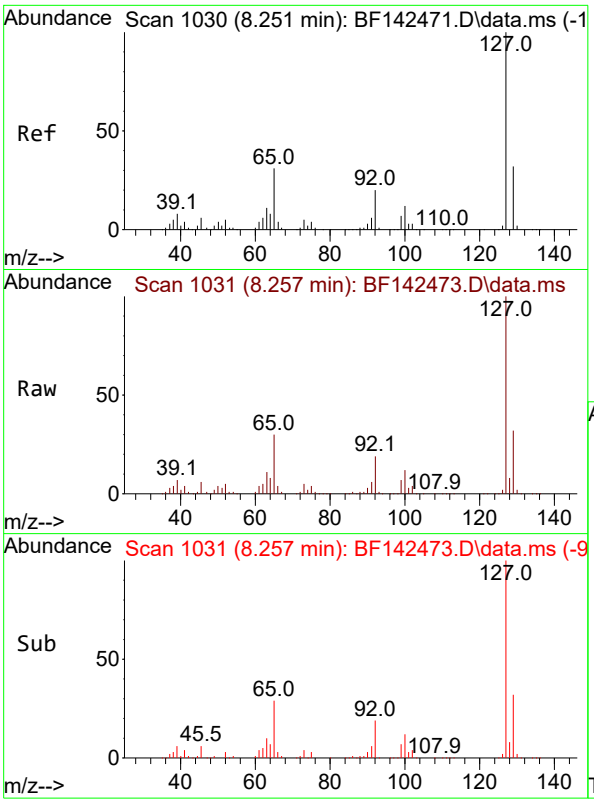


#32
Benzoic acid
Concen: 66.059 ng
RT: 7.957 min Scan# 980
Delta R.T. -0.018 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:122 Resp: 221962

Ion	Ratio	Lower	Upper
122	100		
105	121.2	101.7	141.7
77	88.9	69.5	109.5



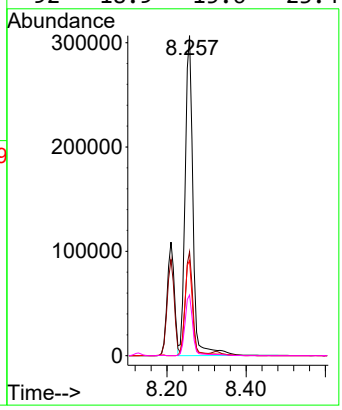


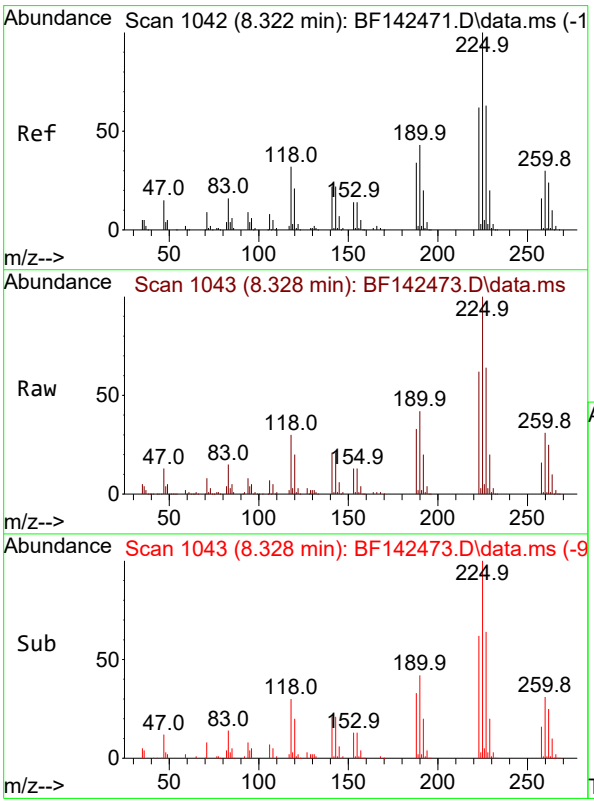
#33
4-Chloroaniline
Concen: 59.619 ng
RT: 8.257 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:127 Resp: 421281

Ion	Ratio	Lower	Upper
127	100		
129	32.4	26.1	39.1
65	29.7	24.9	37.3
92	18.9	15.6	23.4

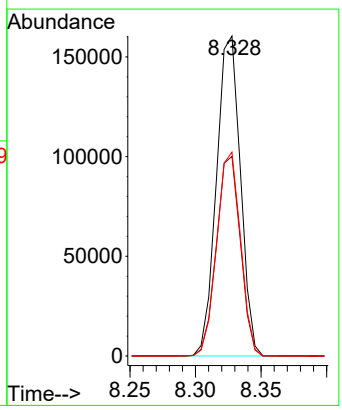


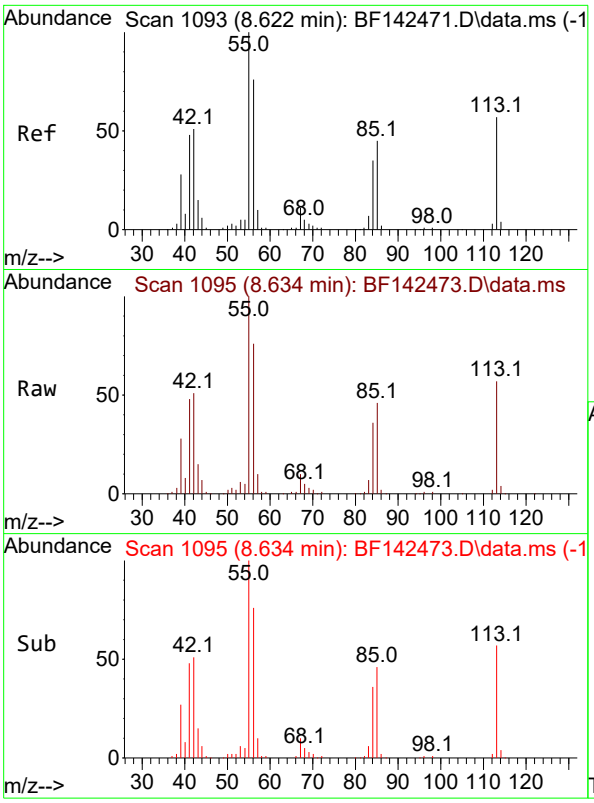


#34
Hexachlorobutadiene
Concen: 59.831 ng
RT: 8.328 min Scan# 1043
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:225 Resp: 203527

Ion	Ratio	Lower	Upper
225	100		
223	62.4	49.7	74.5
227	63.7	50.3	75.5



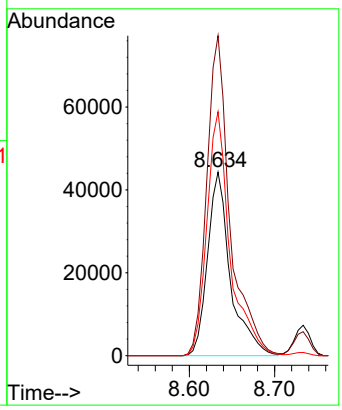


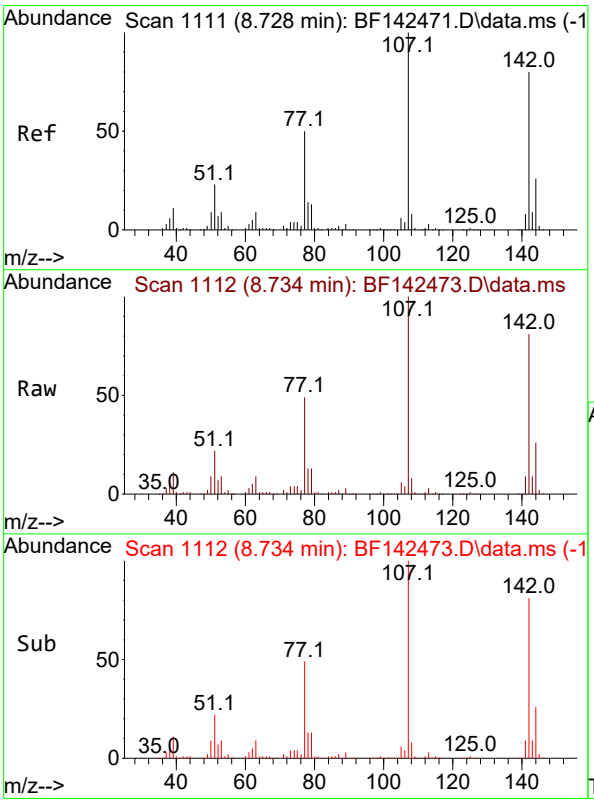
#35
Caprolactam
Concen: 58.650 ng
RT: 8.634 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:113 Resp: 82688

Ion	Ratio	Lower	Upper
113	100		
55	174.4	154.7	194.7
56	133.0	113.2	153.2

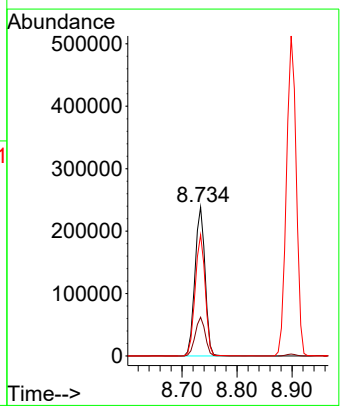


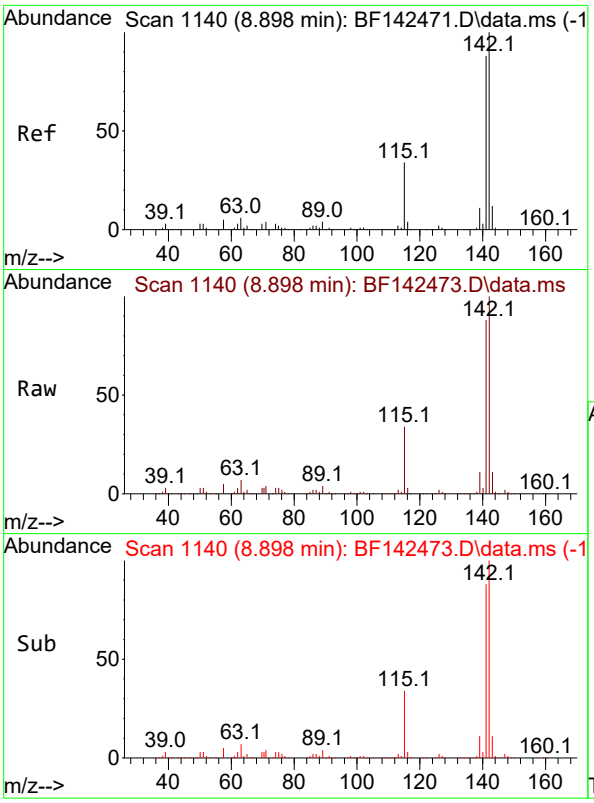


#36
4-Chloro-3-methylphenol
Concen: 59.352 ng
RT: 8.734 min Scan# 1112
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:107 Resp: 305341

Ion	Ratio	Lower	Upper
107	100		
144	26.0	20.9	31.3
142	81.3	64.2	96.2



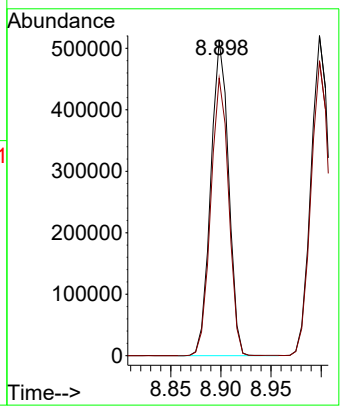


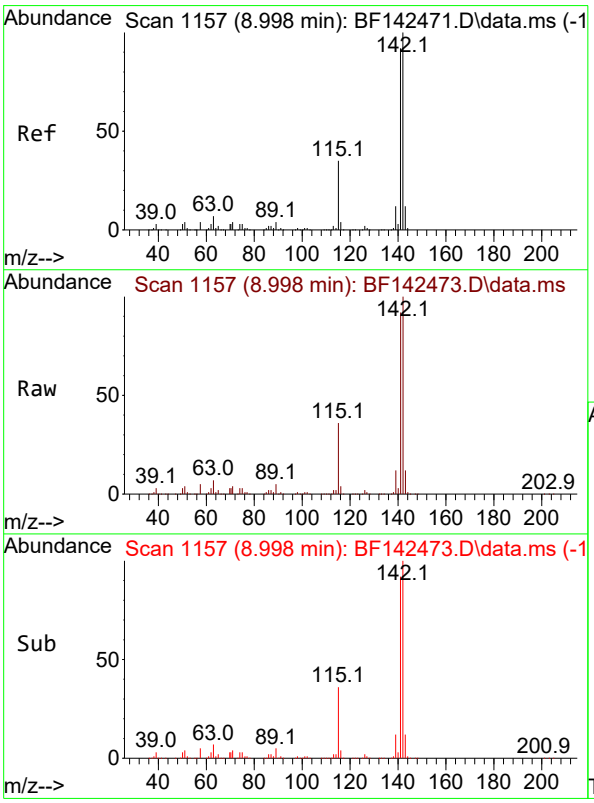
#37
2-Methylnaphthalene
Concen: 57.893 ng
RT: 8.898 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:142 Resp: 635148

Ion	Ratio	Lower	Upper
142	100		
141	88.1	70.7	106.1

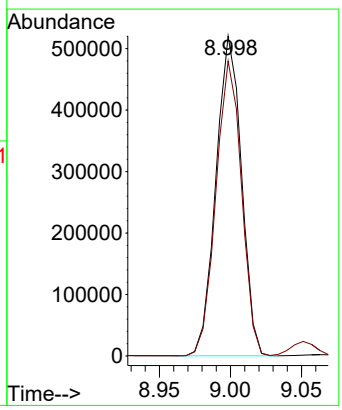


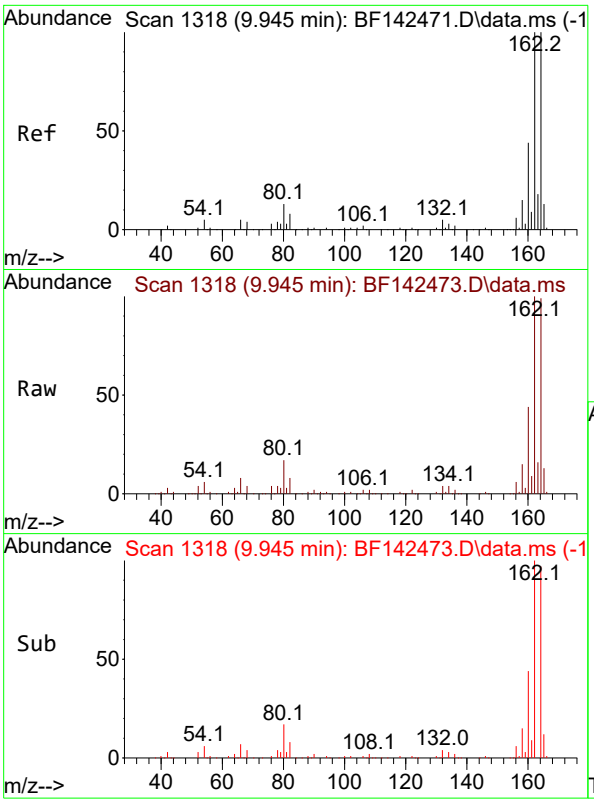


#38
1-Methylnaphthalene
Concen: 57.247 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:142 Resp: 649652

Ion	Ratio	Lower	Upper
142	100		
141	92.1	73.4	110.2



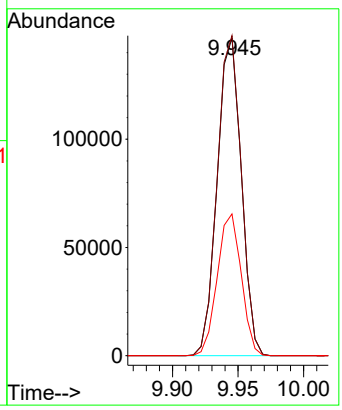


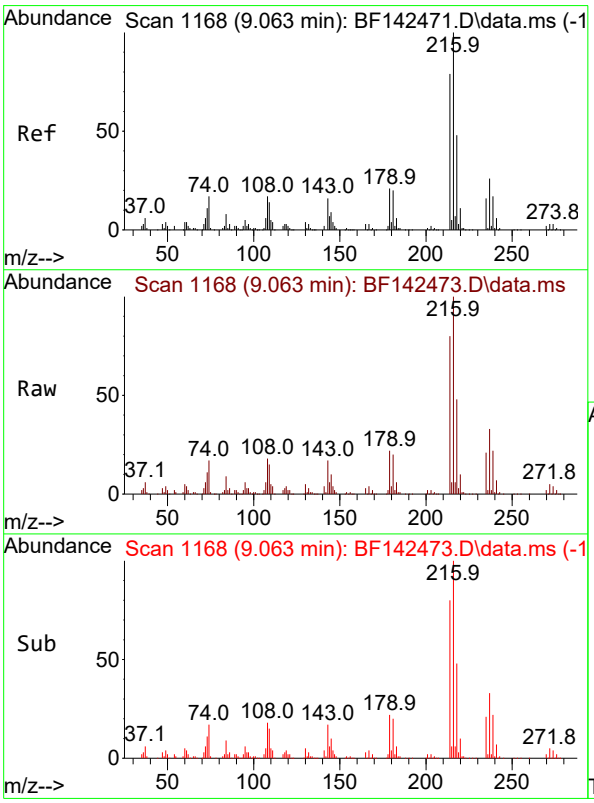
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.945 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:164 Resp: 187285

Ion	Ratio	Lower	Upper
164	100		
162	100.7	80.2	120.4
160	44.6	35.6	53.4

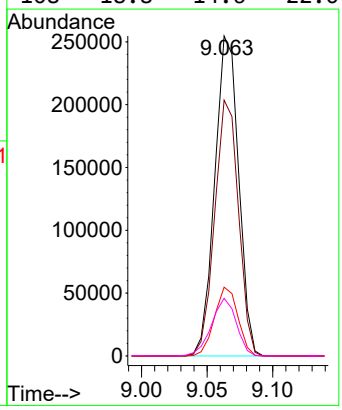


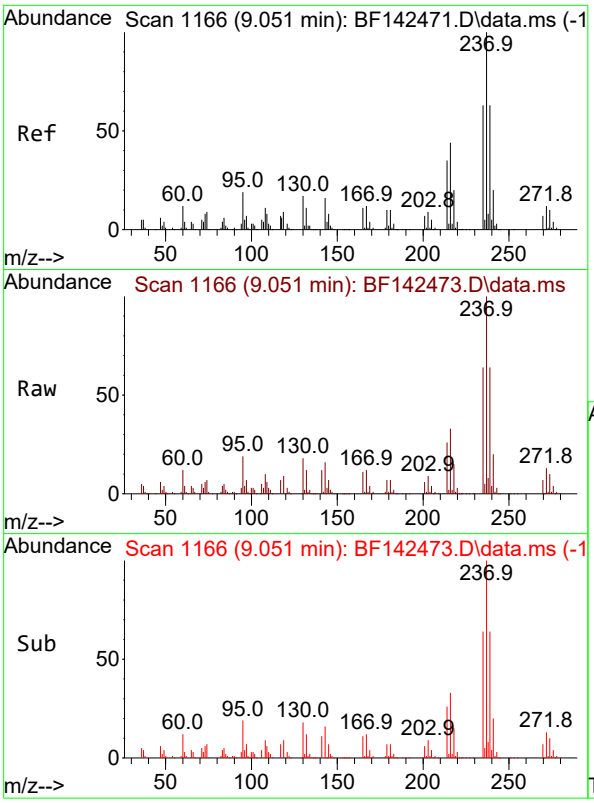


#40
1,2,4,5-Tetrachlorobenzene
Concen: 59.844 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:216 Resp: 321732

Ion	Ratio	Lower	Upper
216	100		
214	79.5	62.9	94.3
179	21.1	16.9	25.3
108	18.8	14.6	22.0



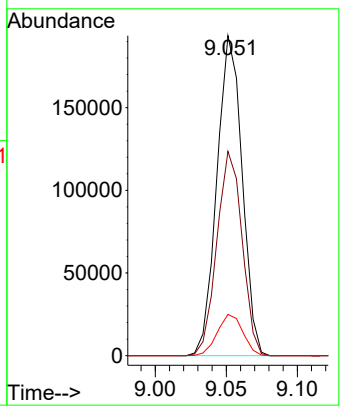


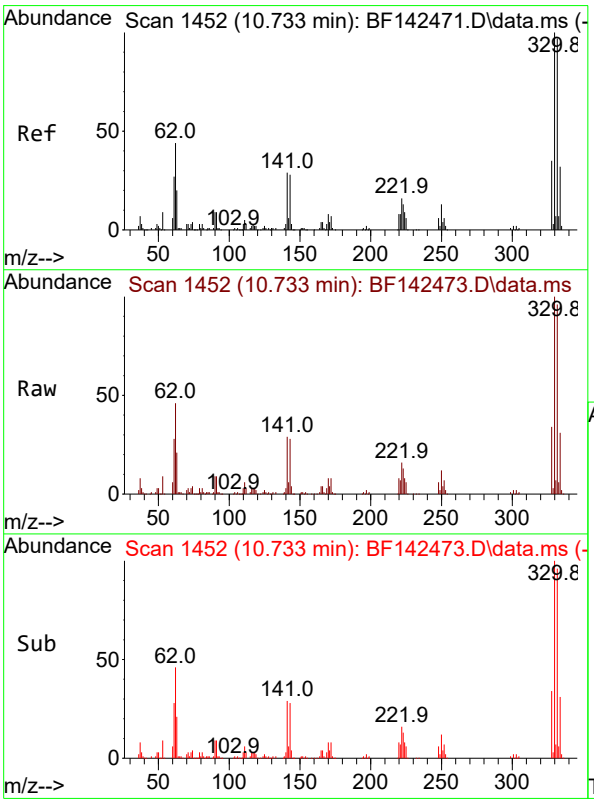
#41
Hexachlorocyclopentadiene
Concen: 65.820 ng
RT: 9.051 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:237 Resp: 238708

Ion	Ratio	Lower	Upper
237	100		
235	63.9	43.3	83.3
272	12.9	0.0	32.4

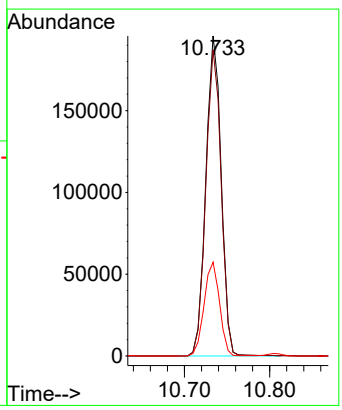


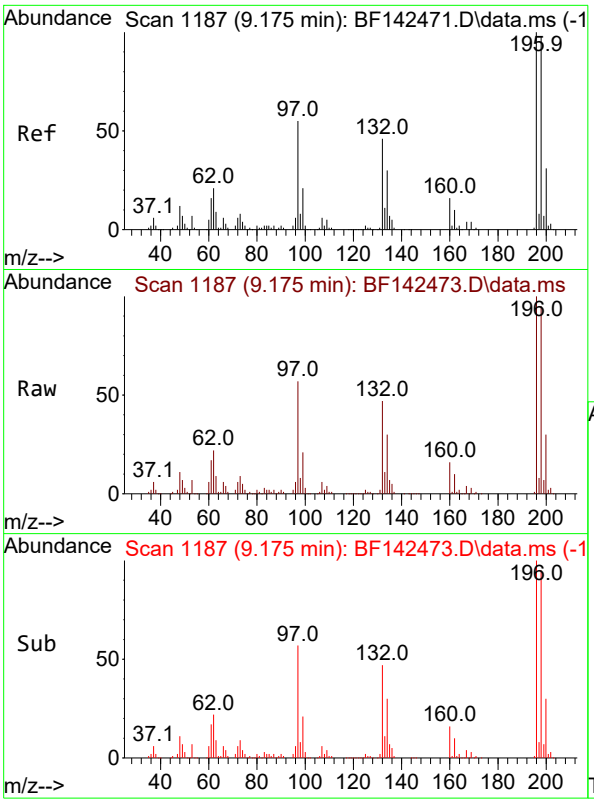


#42
2,4,6-Tribromophenol
Concen: 117.621 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:330 Resp: 244491

Ion	Ratio	Lower	Upper
330	100		
332	95.7	77.6	116.4
141	29.6	24.6	36.8



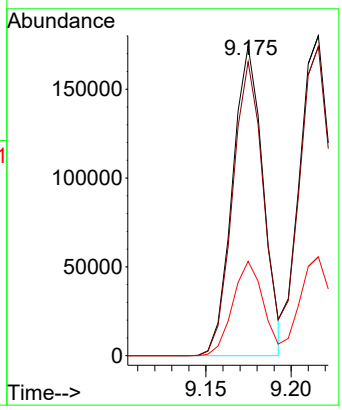


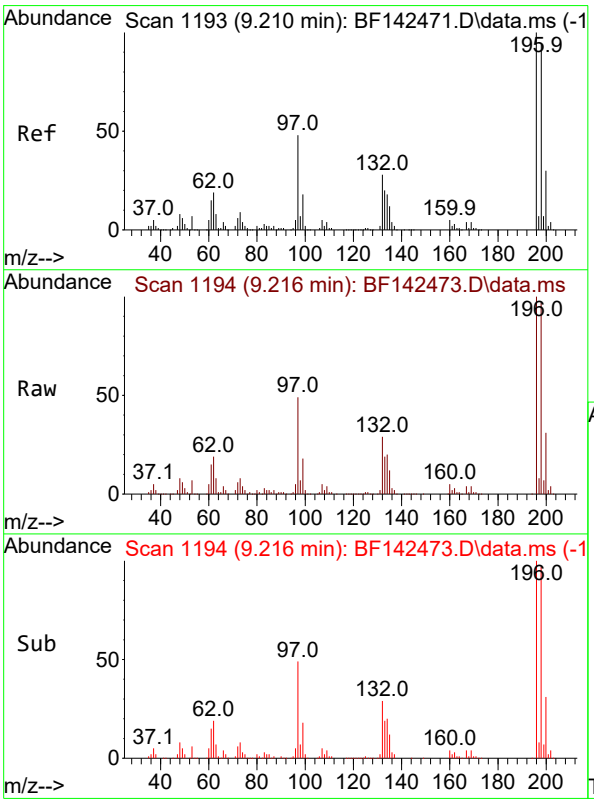
#43
2,4,6-Trichlorophenol
Concen: 60.098 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:196 Resp: 217868

Ion	Ratio	Lower	Upper
196	100		
198	94.9	78.8	118.2
200	30.4	24.9	37.3

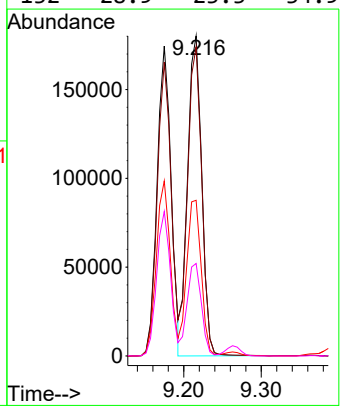


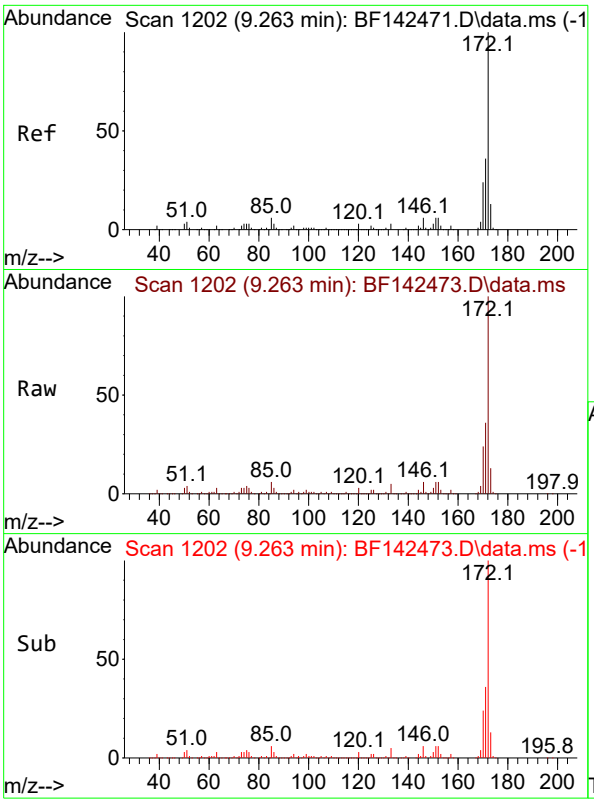


#44
2,4,5-Trichlorophenol
Concen: 59.916 ng
RT: 9.216 min Scan# 1194
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:196 Resp: 229079

Ion	Ratio	Lower	Upper
196	100		
198	96.6	75.5	113.3
97	48.6	39.3	58.9
132	28.9	23.3	34.9



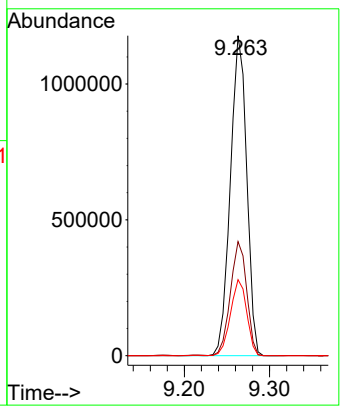


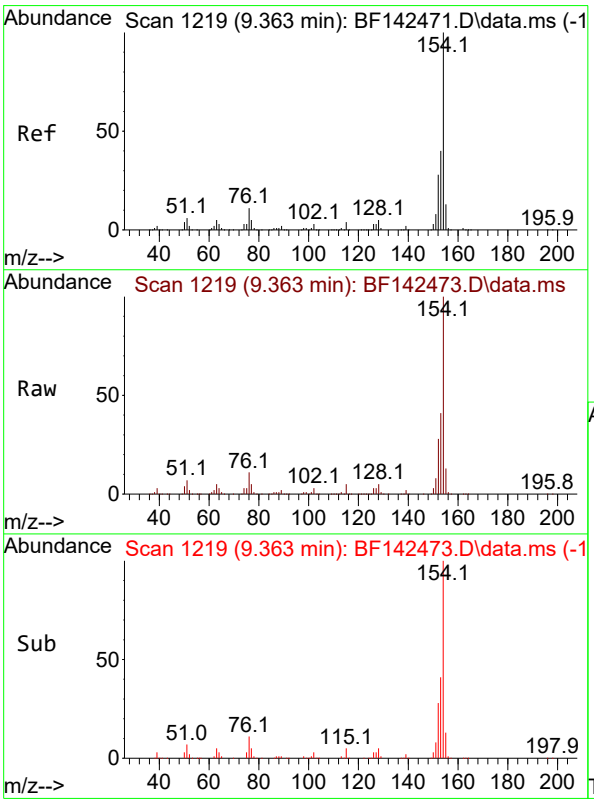
#45
2-Fluorobiphenyl
Concen: 112.426 ng
RT: 9.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:172 Resp: 1569136

Ion	Ratio	Lower	Upper
172	100		
171	35.7	28.6	42.8
170	23.7	18.9	28.3

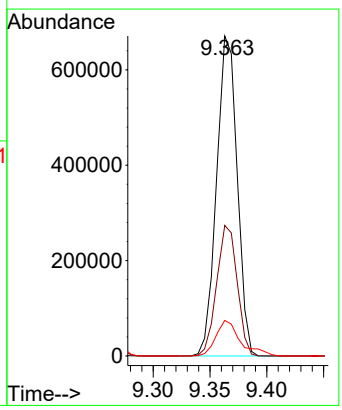


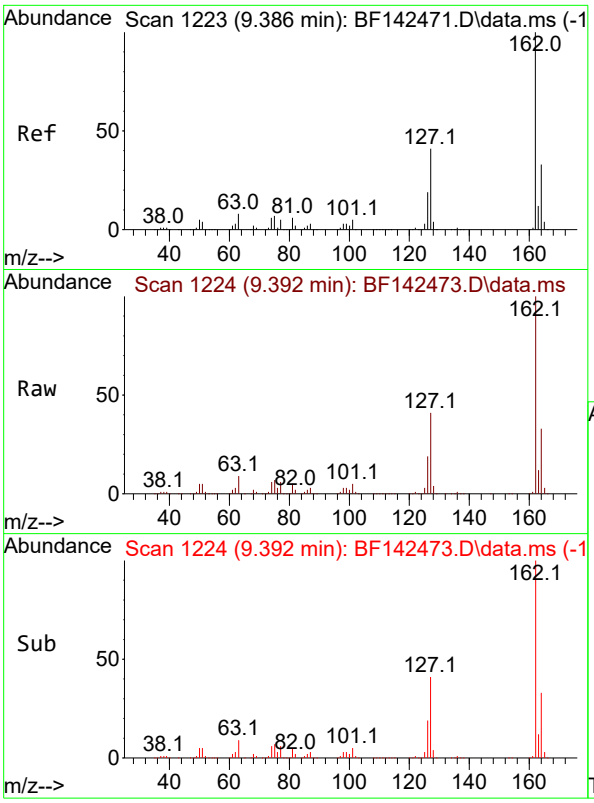


#46
1,1'-Biphenyl
Concen: 58.279 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:154 Resp: 846783

Ion	Ratio	Lower	Upper
154	100		
153	40.8	20.4	60.4
76	11.1	0.0	30.8



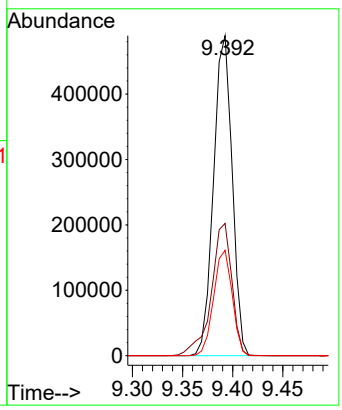


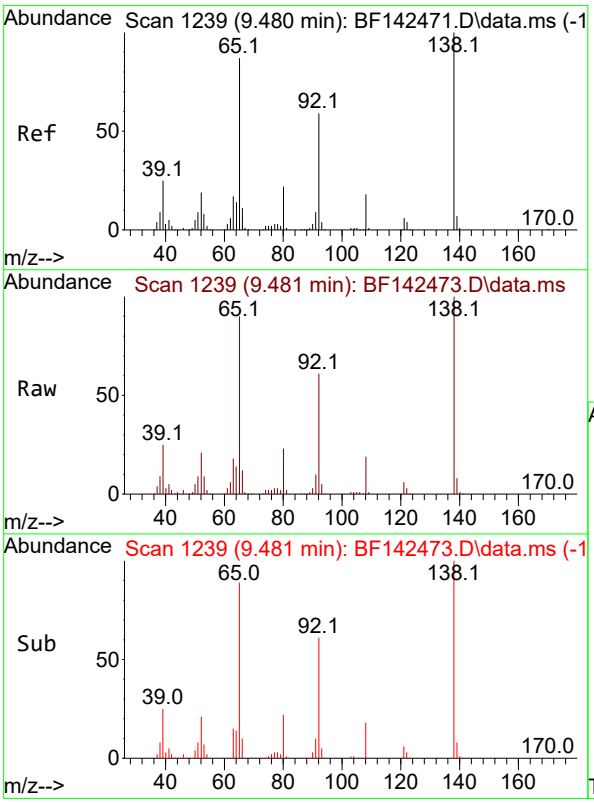
#47
2-Chloronaphthalene
Concen: 58.746 ng
RT: 9.392 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:162 Resp: 630647

Ion	Ratio	Lower	Upper
162	100		
127	41.3	33.5	50.3
164	33.0	26.1	39.1

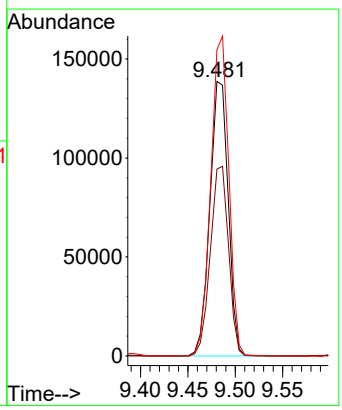


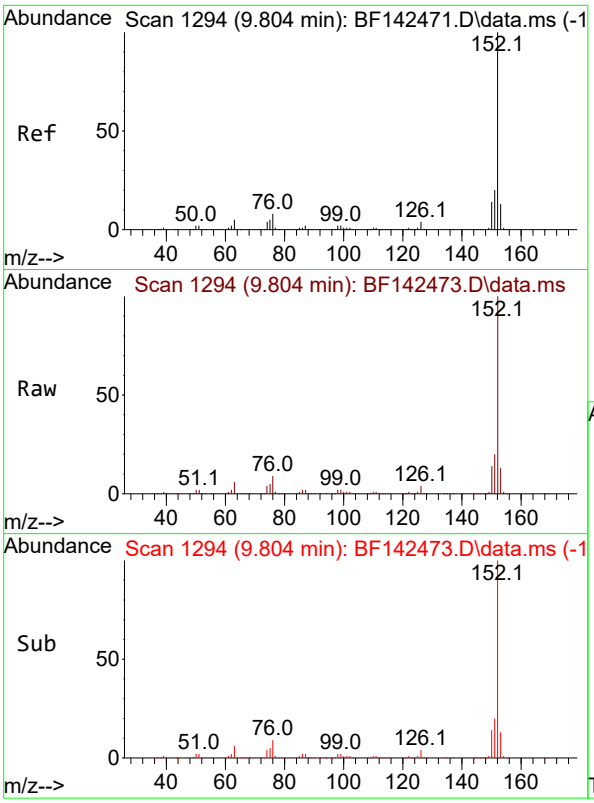


#48
2-Nitroaniline
Concen: 60.093 ng
RT: 9.481 min Scan# 1239
Delta R.T. -0.005 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion: 65 Resp: 186466

Ion	Ratio	Lower	Upper
65	100		
92	68.1	54.4	81.6
138	111.5	91.4	137.2



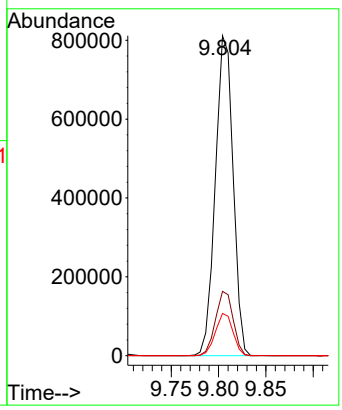


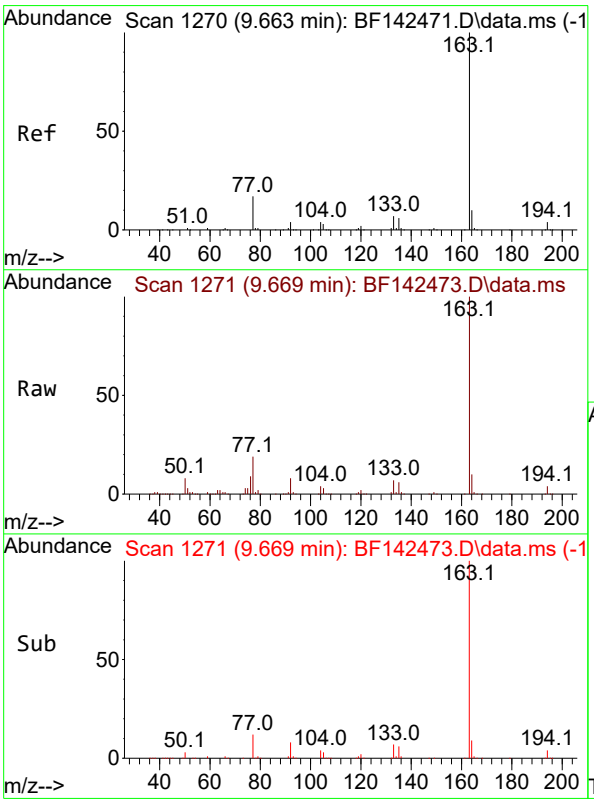
#49
Acenaphthylene
Concen: 58.411 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:152 Resp: 1058826

Ion	Ratio	Lower	Upper
152	100		
151	20.1	15.8	23.8
153	13.2	10.6	15.8

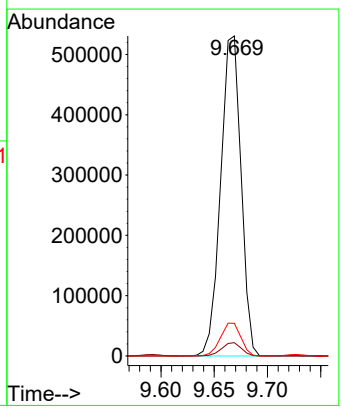


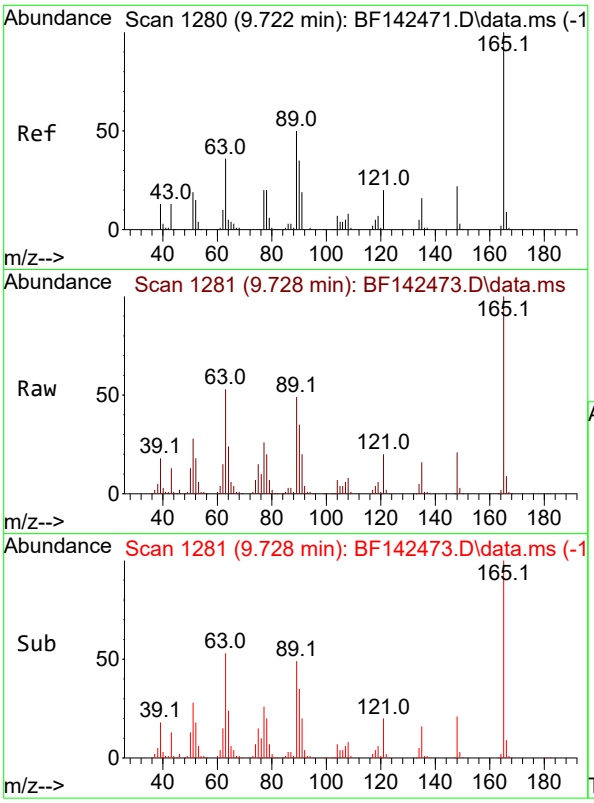


#50
Dimethylphthalate
Concen: 57.119 ng
RT: 9.669 min Scan# 1271
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:163 Resp: 705857

Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.3	4.9
164	10.2	8.2	12.4



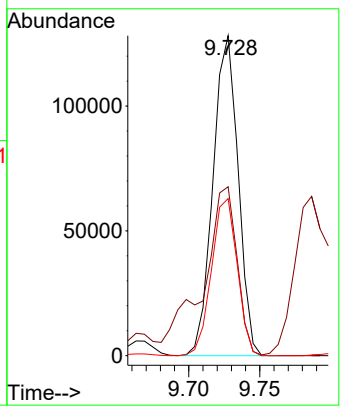


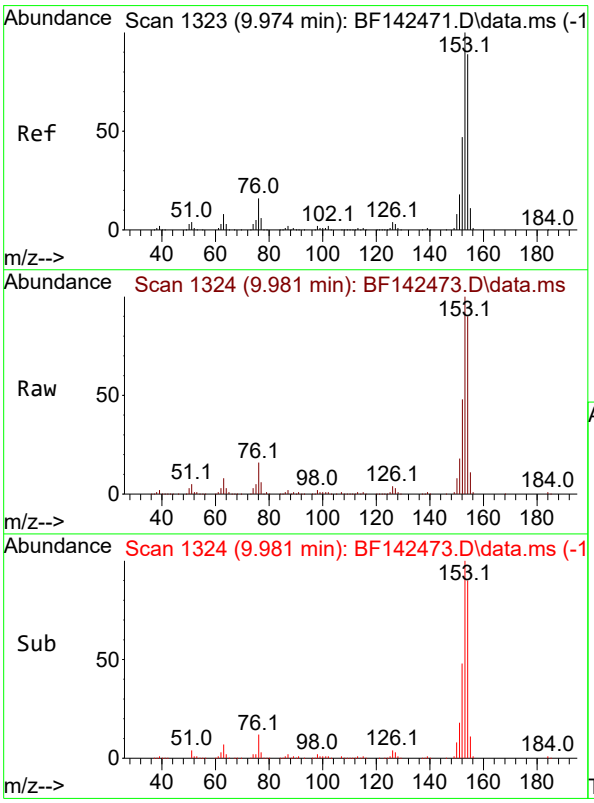
#51
2,6-Dinitrotoluene
Concen: 59.195 ng
RT: 9.728 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:165 Resp: 157884

Ion	Ratio	Lower	Upper
165	100		
63	52.8	42.9	64.3
89	49.1	40.2	60.4

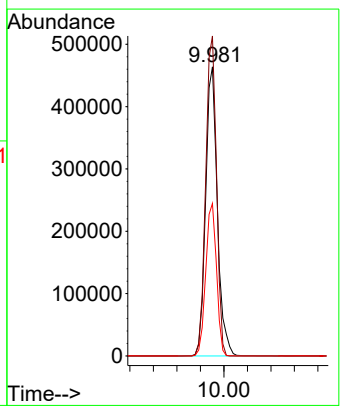


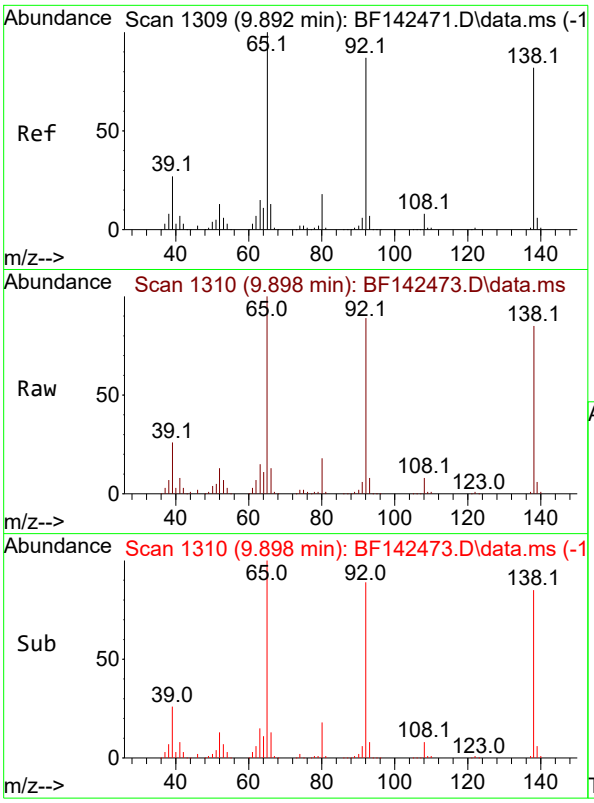


#52
Acenaphthene
Concen: 58.160 ng
RT: 9.981 min Scan# 1324
Delta R.T. 0.001 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:154 Resp: 643773

Ion	Ratio	Lower	Upper
154	100		
153	110.7	90.0	135.0
152	52.8	42.6	64.0



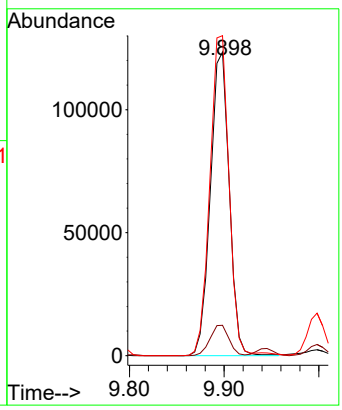


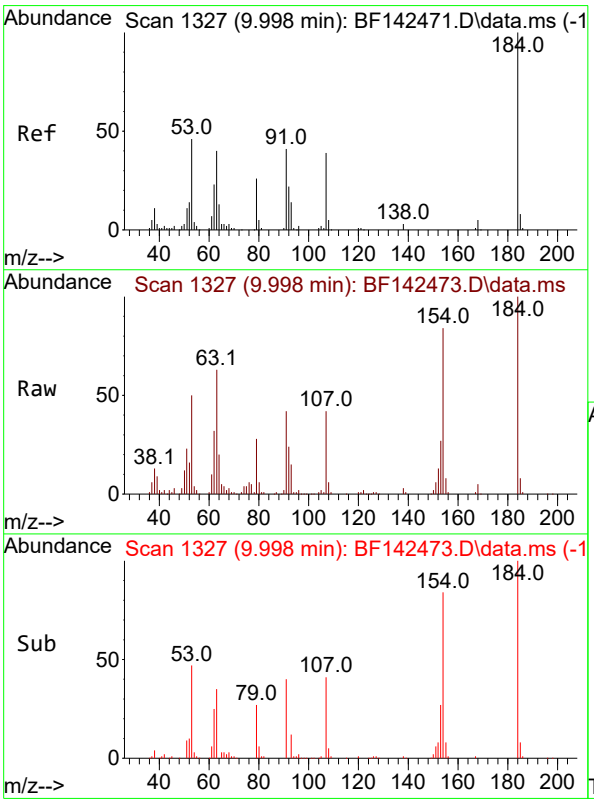
#53
3-Nitroaniline
Concen: 58.746 ng
RT: 9.898 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:138 Resp: 171137

Ion	Ratio	Lower	Upper
138	100		
108	10.0	8.1	12.1
92	105.4	85.2	127.8

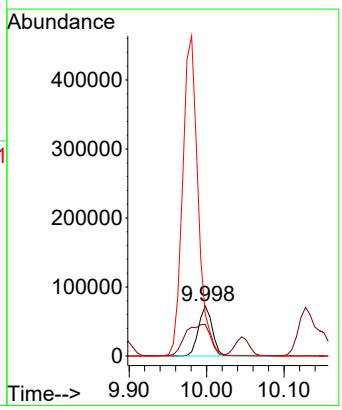


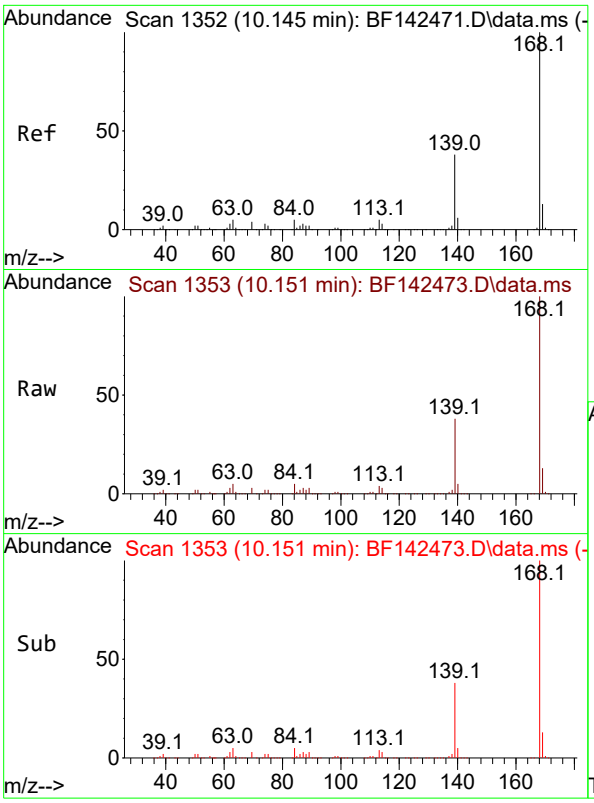


#54
2,4-Dinitrophenol
Concen: 65.126 ng
RT: 9.998 min Scan# 1327
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:184 Resp: 89741

Ion	Ratio	Lower	Upper
184	100		
63	63.3	46.3	69.5
154	84.0	56.8	85.2



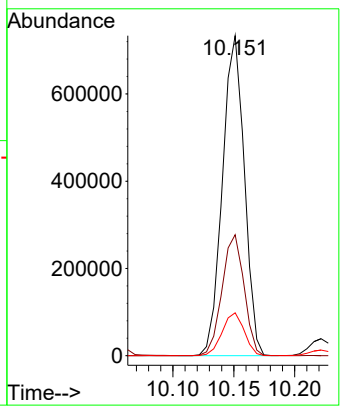


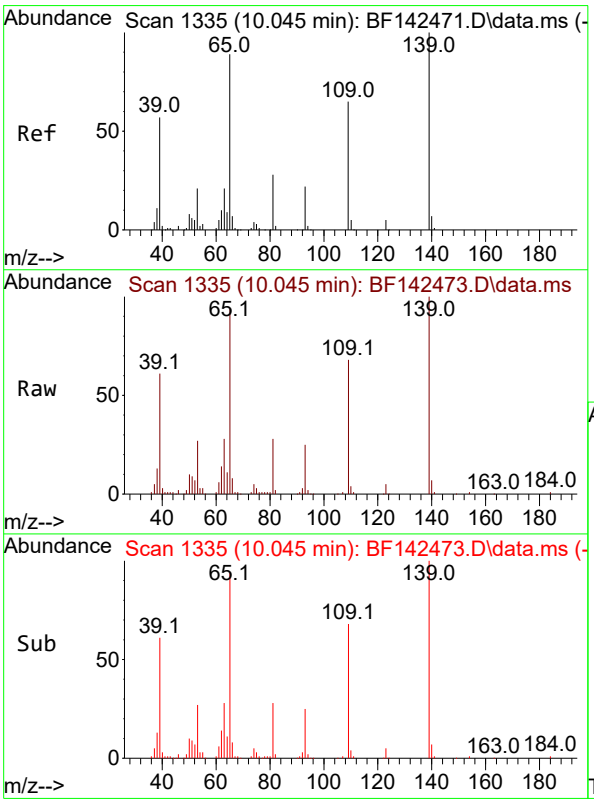
#55
Dibenzofuran
Concen: 57.677 ng
RT: 10.151 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:168 Resp: 918703

Ion	Ratio	Lower	Upper
168	100		
139	37.8	30.2	45.2
169	13.4	10.7	16.1

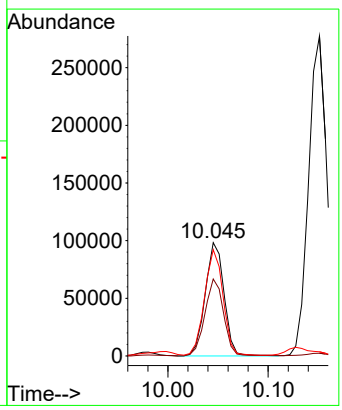


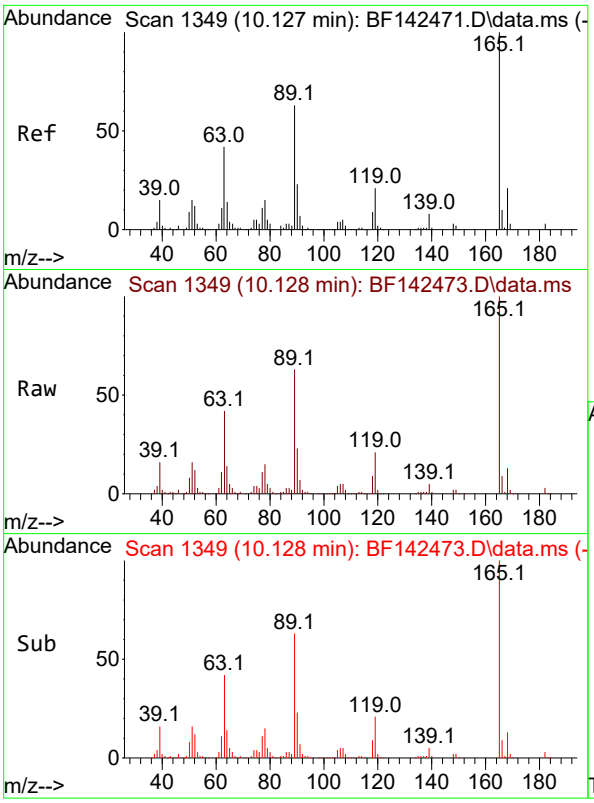


#56
4-Nitrophenol
Concen: 59.782 ng
RT: 10.045 min Scan# 1335
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:139 Resp: 128501

Ion	Ratio	Lower	Upper
139	100		
109	67.9	45.1	85.1
65	93.8	69.7	109.7



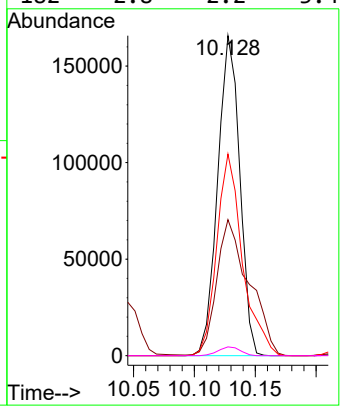


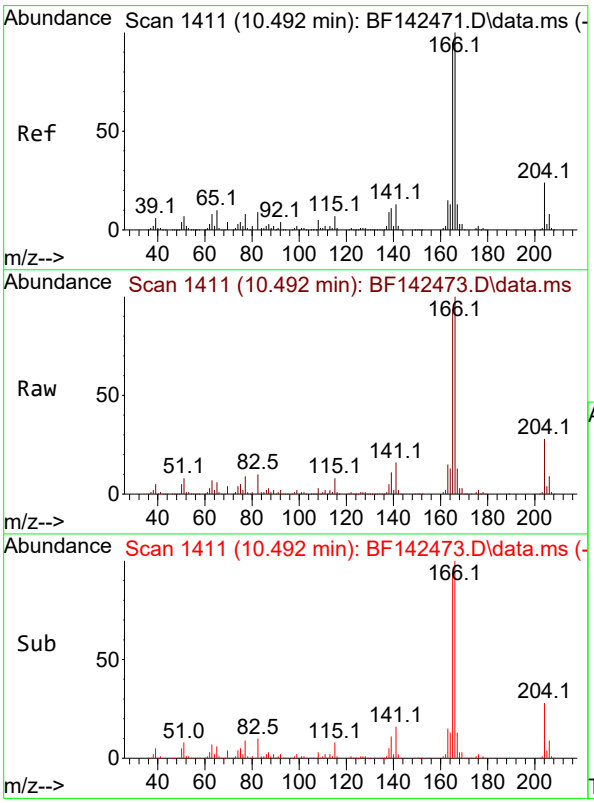
#57
2,4-Dinitrotoluene
Concen: 60.012 ng
RT: 10.128 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:165 Resp: 209035

Ion	Ratio	Lower	Upper
165	100		
63	42.5	33.6	50.4
89	63.0	50.2	75.4
182	2.8	2.2	3.4

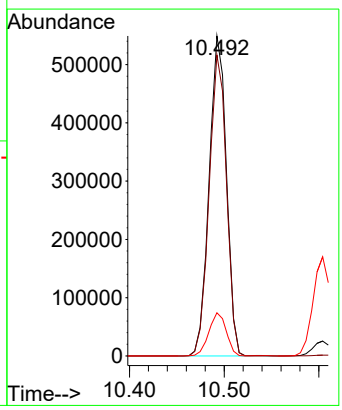


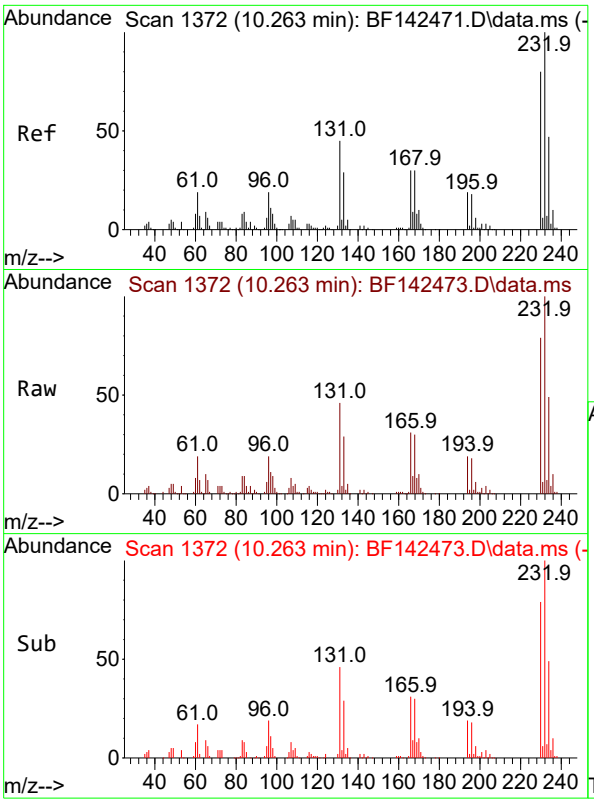


#58
Fluorene
Concen: 56.516 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:166 Resp: 695462

Ion	Ratio	Lower	Upper
166	100		
165	94.1	75.8	113.8
167	13.5	10.6	16.0



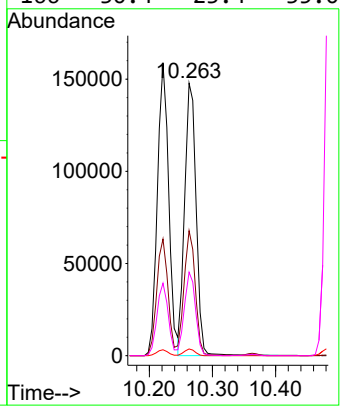


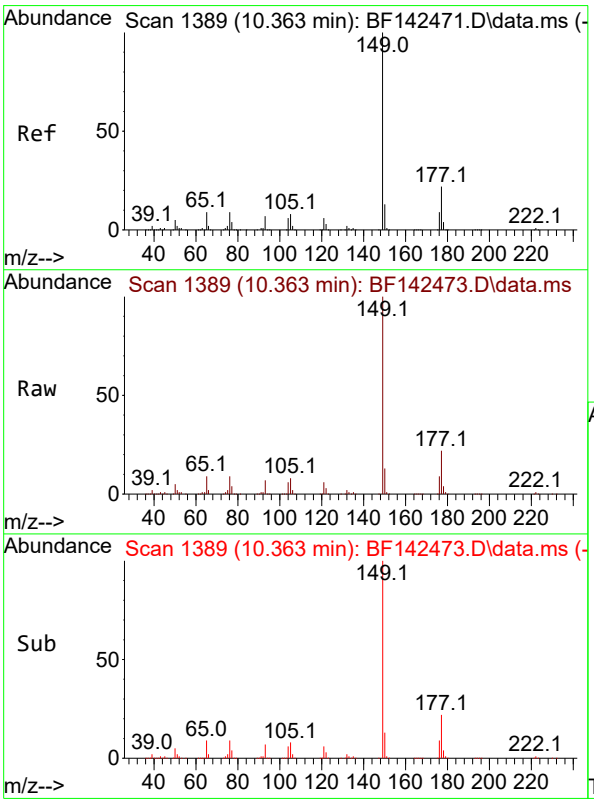
#59
2,3,4,6-Tetrachlorophenol
Concen: 58.609 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:232 Resp: 187067

Ion	Ratio	Lower	Upper
232	100		
131	45.0	35.2	52.8
130	2.4	1.7	2.5
166	30.4	23.4	35.0

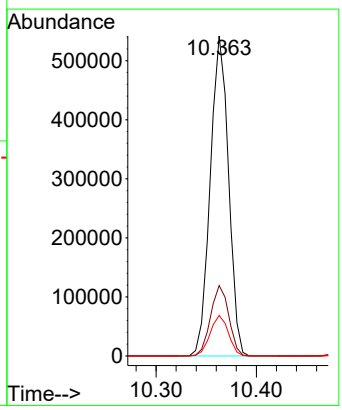


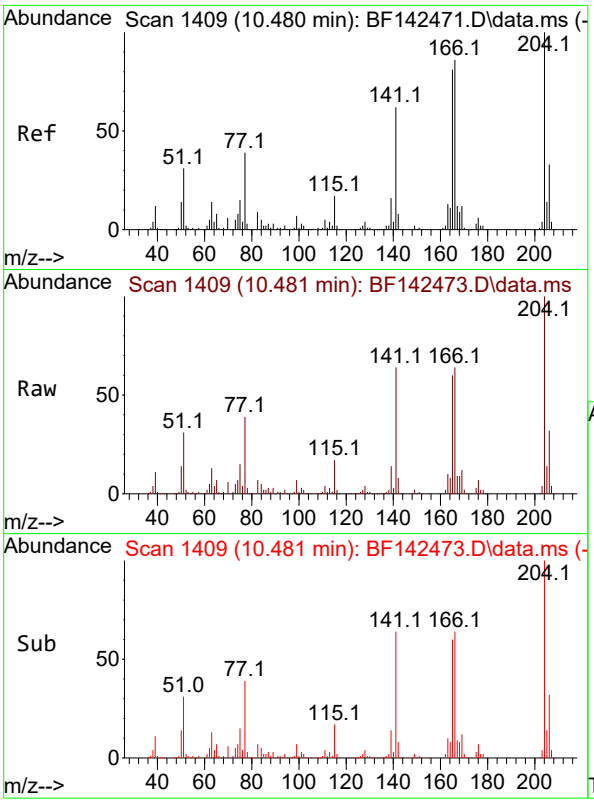


#60
Diethylphthalate
Concen: 56.695 ng
RT: 10.363 min Scan# 1389
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:149 Resp: 684259

Ion	Ratio	Lower	Upper
149	100		
177	22.0	17.6	26.4
150	12.6	10.1	15.1



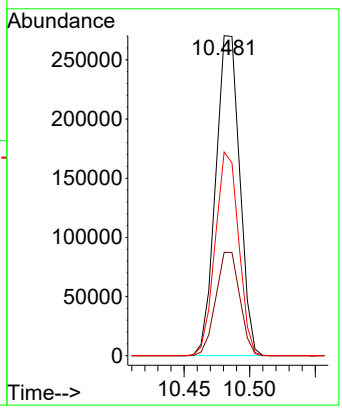


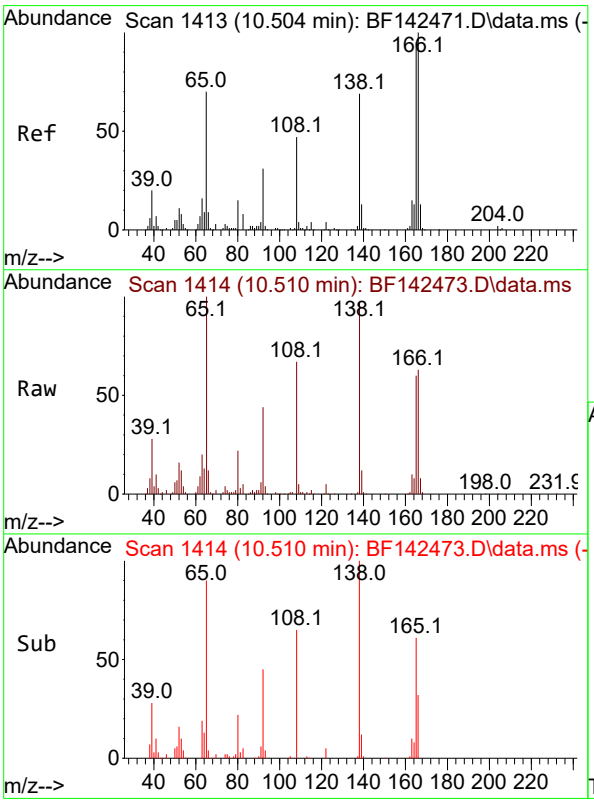
#61
4-Chlorophenyl-phenylether
Concen: 56.880 ng
RT: 10.481 min Scan# 14
Delta R.T. -0.005 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:204 Resp: 343838

Ion	Ratio	Lower	Upper
204	100		
206	32.3	26.3	39.5
141	63.7	49.5	74.3

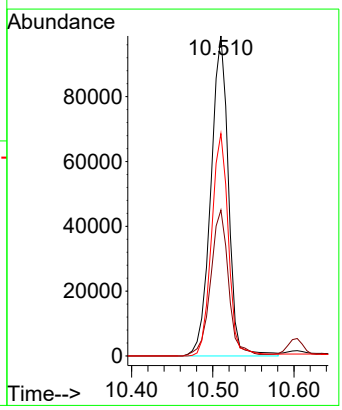


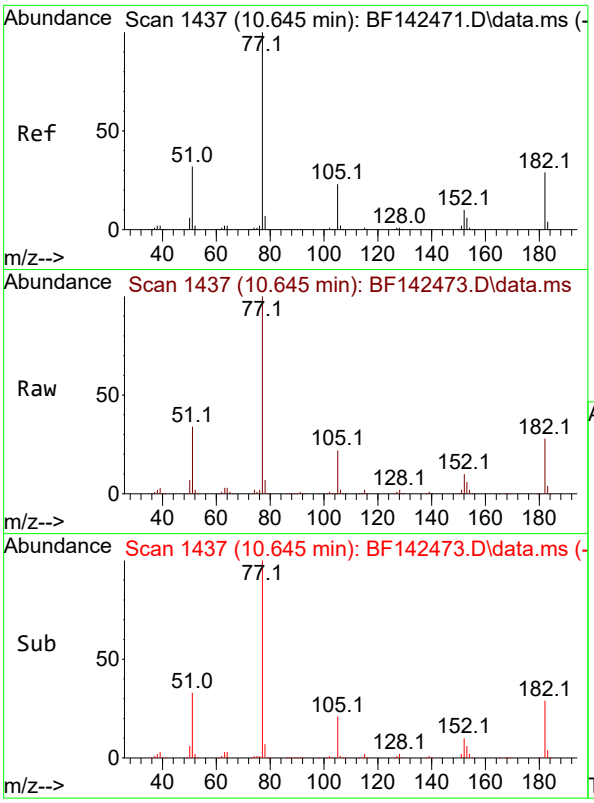


#62
4-Nitroaniline
Concen: 56.302 ng
RT: 10.510 min Scan# 1414
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:138 Resp: 148755

Ion	Ratio	Lower	Upper
138	100		
92	45.6	26.0	66.0
108	69.5	48.4	88.4



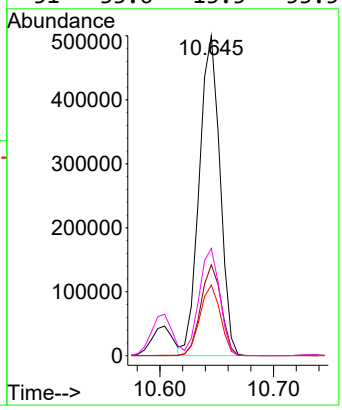


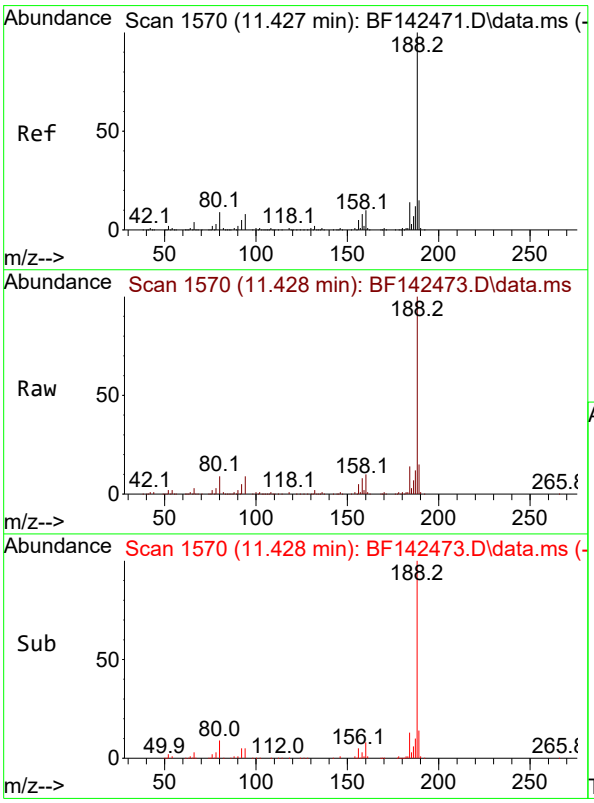
#63
Azobenzene
Concen: 58.221 ng
RT: 10.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion: 77 Resp: 631137

Ion	Ratio	Lower	Upper
77	100		
182	28.4	9.0	49.0
105	22.1	2.4	42.4
51	33.6	13.5	53.5

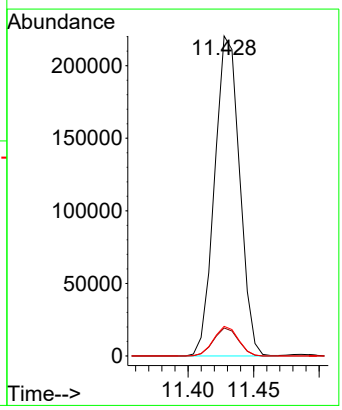


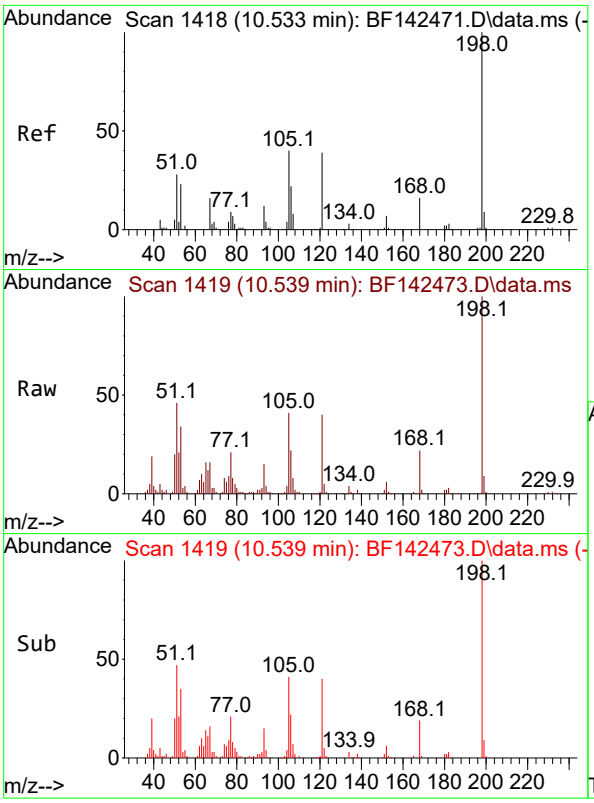


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.428 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:188 Resp: 292190

Ion	Ratio	Lower	Upper
188	100		
94	8.7	6.6	10.0
80	9.2	7.4	11.0



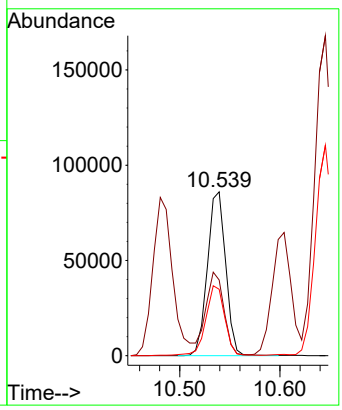


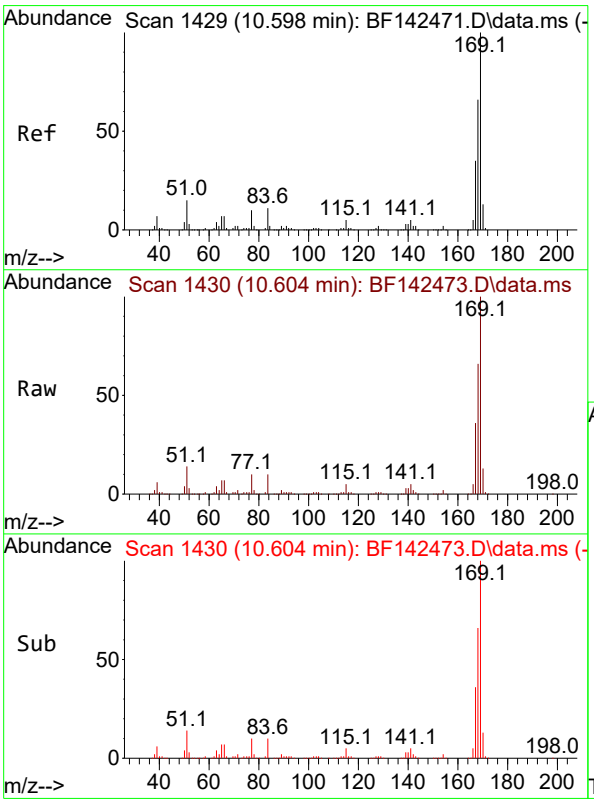
#65
4,6-Dinitro-2-methylphenol
Concen: 66.950 ng
RT: 10.539 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:198 Resp: 109172

Ion	Ratio	Lower	Upper
198	100		
51	46.2	28.3	68.3
105	40.5	21.3	61.3

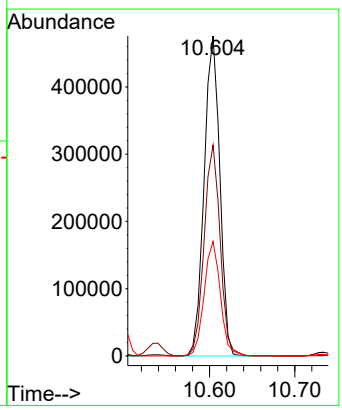


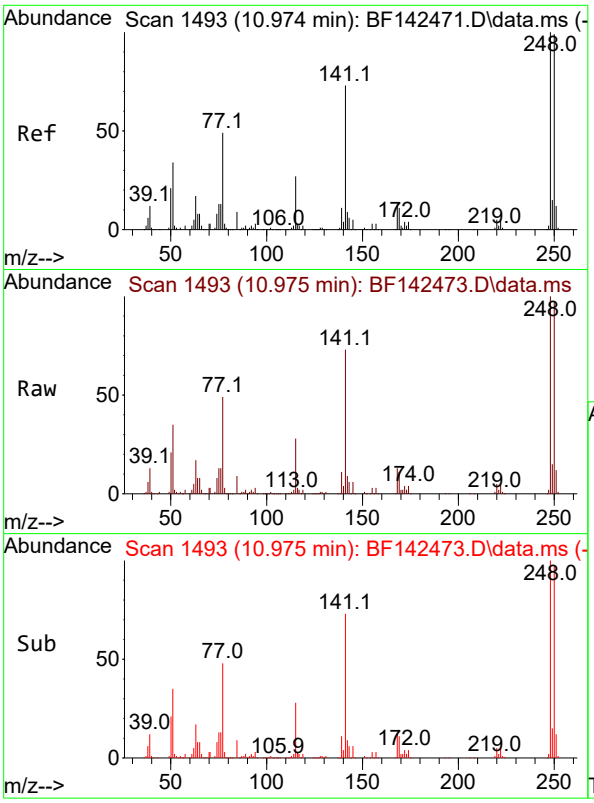


#66
n-Nitrosodiphenylamine
Concen: 60.861 ng
RT: 10.604 min Scan# 1430
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:169 Resp: 608394

Ion	Ratio	Lower	Upper
169	100		
168	65.9	52.7	79.1
167	35.8	28.3	42.5



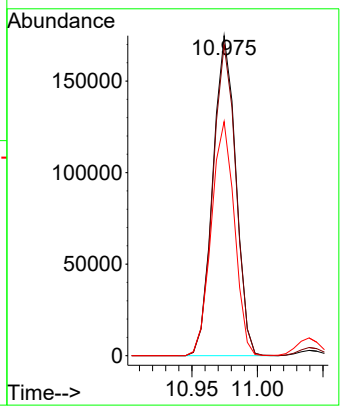


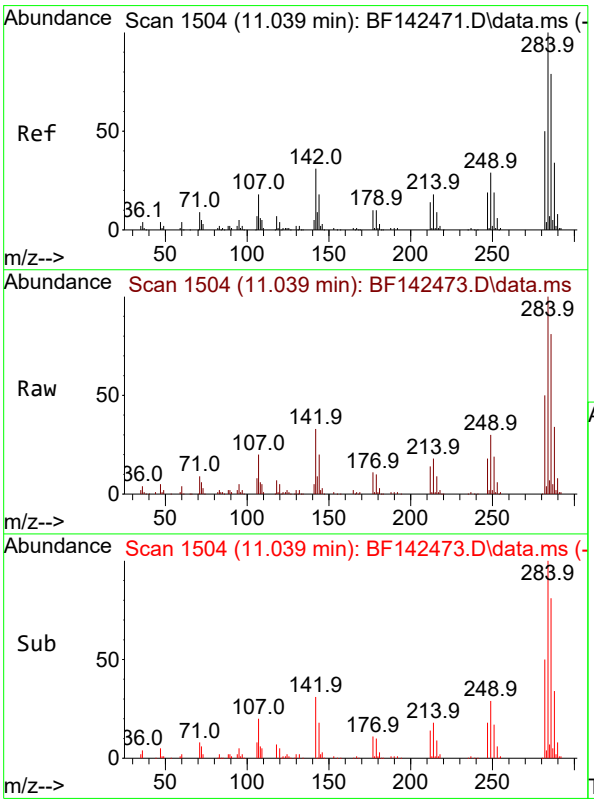
#67
4-Bromophenyl-phenylether
Concen: 61.546 ng
RT: 10.975 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:248 Resp: 212638

Ion	Ratio	Lower	Upper
248	100		
250	97.2	79.0	118.4
141	73.2	58.4	87.6

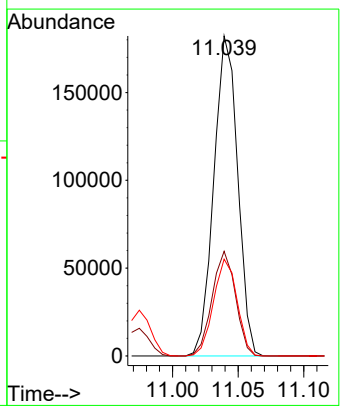


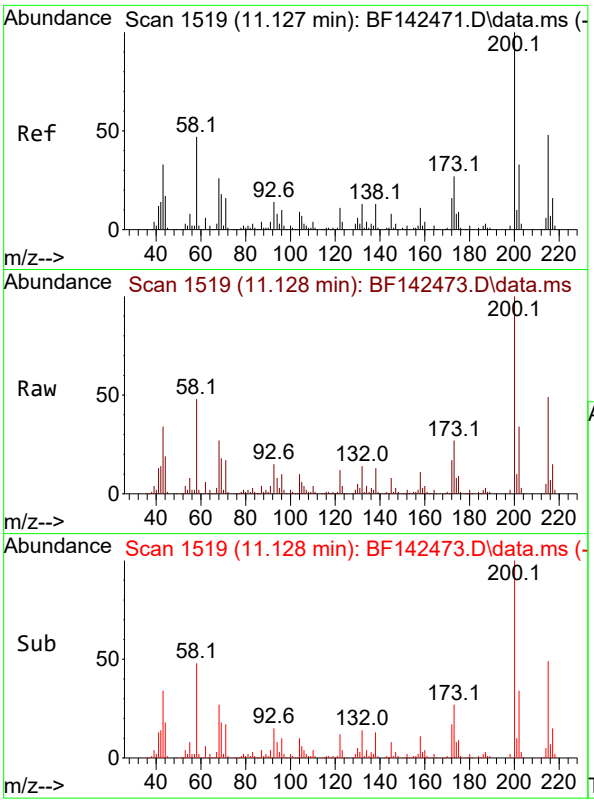


#68
Hexachlorobenzene
Concen: 60.168 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:284 Resp: 229917

Ion	Ratio	Lower	Upper
284	100		
142	32.7	24.8	37.2
249	30.2	23.6	35.4



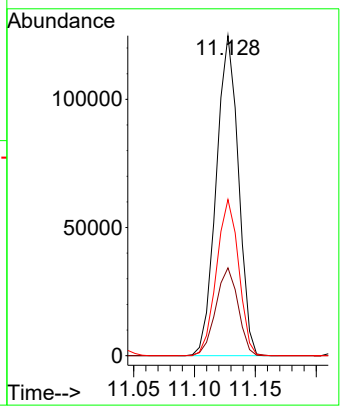


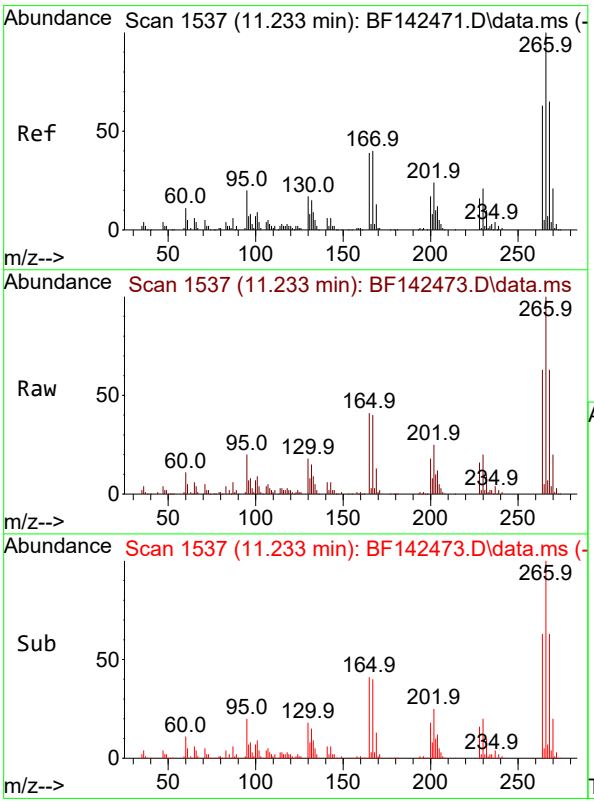
#69
Atrazine
Concen: 59.604 ng
RT: 11.128 min Scan# 1
Delta R.T. 0.001 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:200 Resp: 158234

Ion	Ratio	Lower	Upper
200	100		
173	27.4	7.4	47.4
215	48.8	28.5	68.5

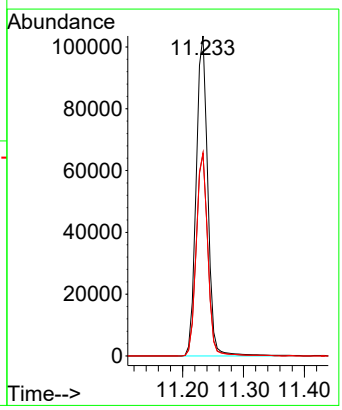


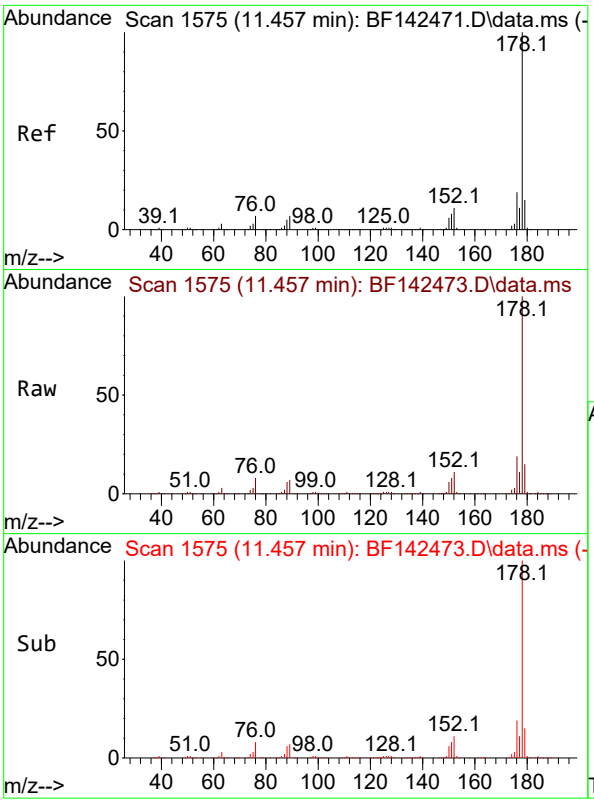


#70
Pentachlorophenol
Concen: 63.663 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:266 Resp: 137347

Ion	Ratio	Lower	Upper
266	100		
268	63.3	51.7	77.5
264	63.4	50.4	75.6



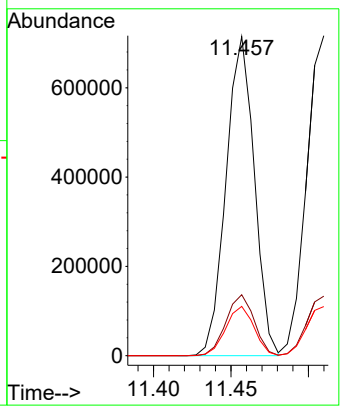


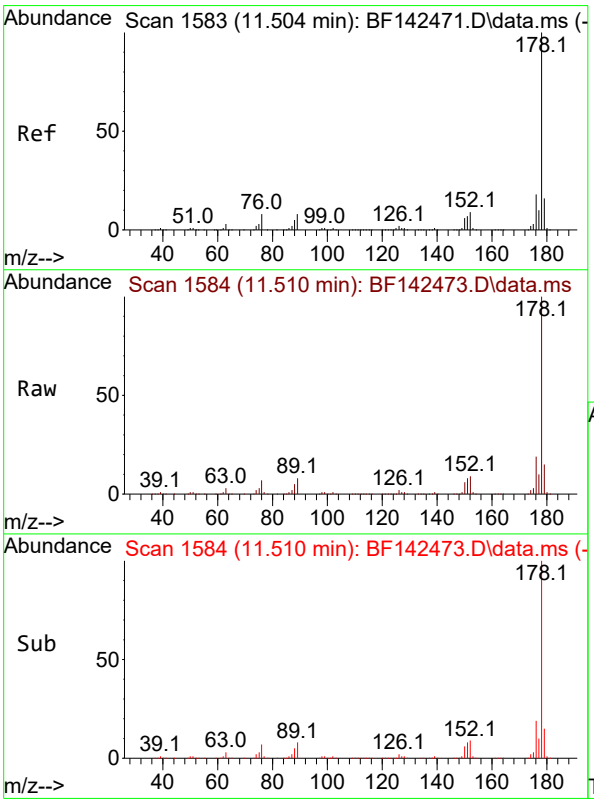
#71
Phenanthrene
Concen: 57.961 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:178 Resp: 905073

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.0
179	15.4	12.3	18.5

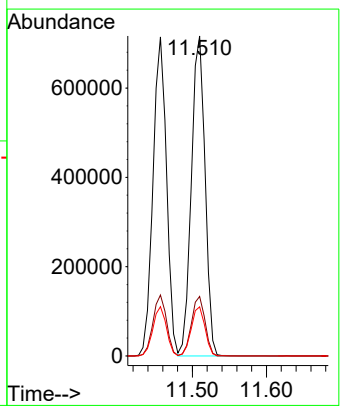


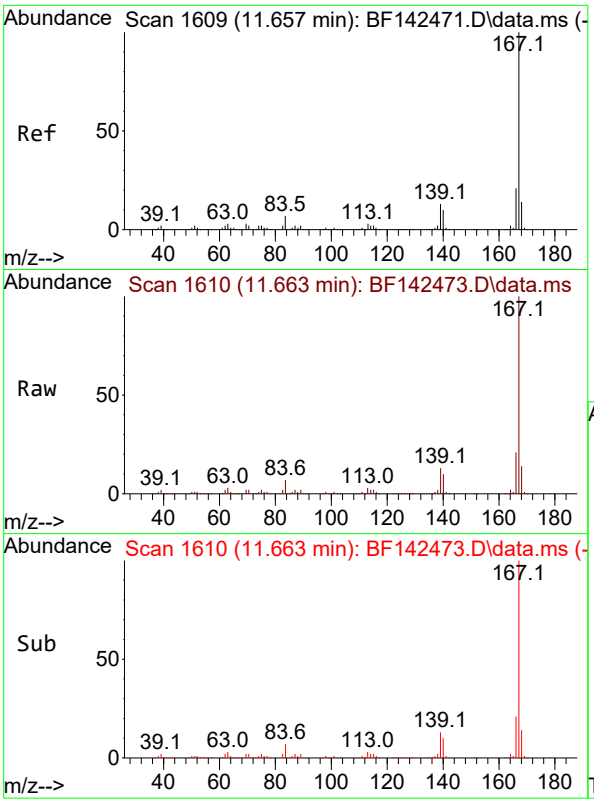


#72
Anthracene
Concen: 57.627 ng
RT: 11.510 min Scan# 1584
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:178 Resp: 918369

Ion	Ratio	Lower	Upper
178	100		
176	18.6	14.6	21.8
179	15.3	12.4	18.6



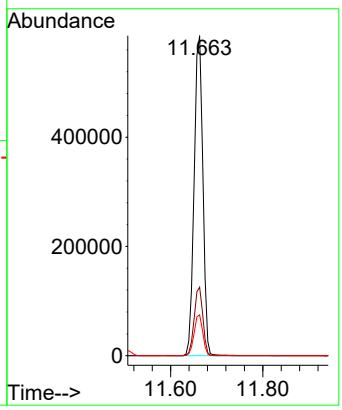


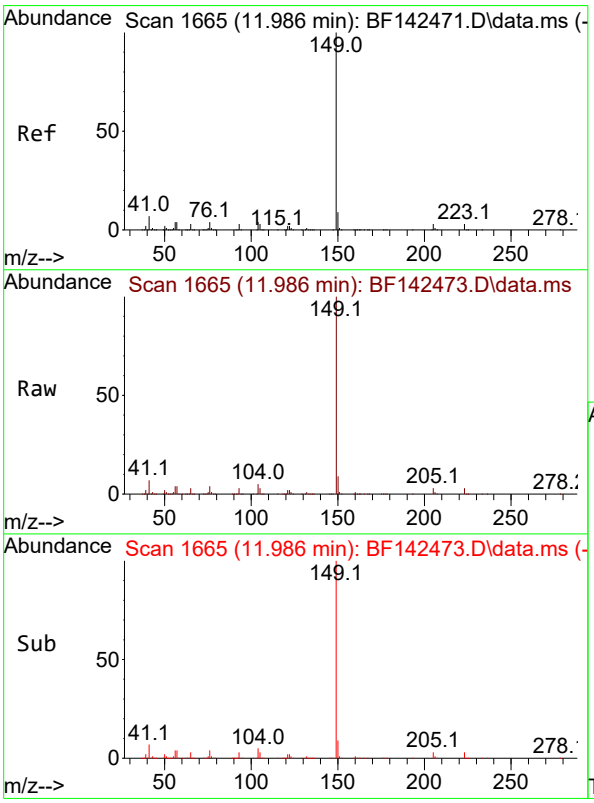
#73
Carbazole
Concen: 56.455 ng
RT: 11.663 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:167 Resp: 769151

Ion	Ratio	Lower	Upper
167	100		
166	21.4	16.9	25.3
139	12.8	10.2	15.4

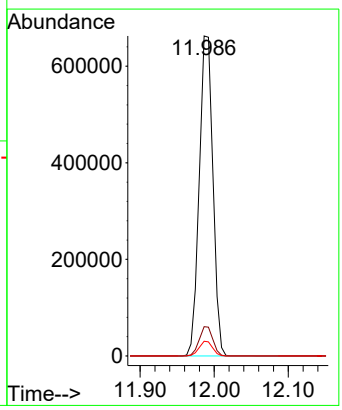


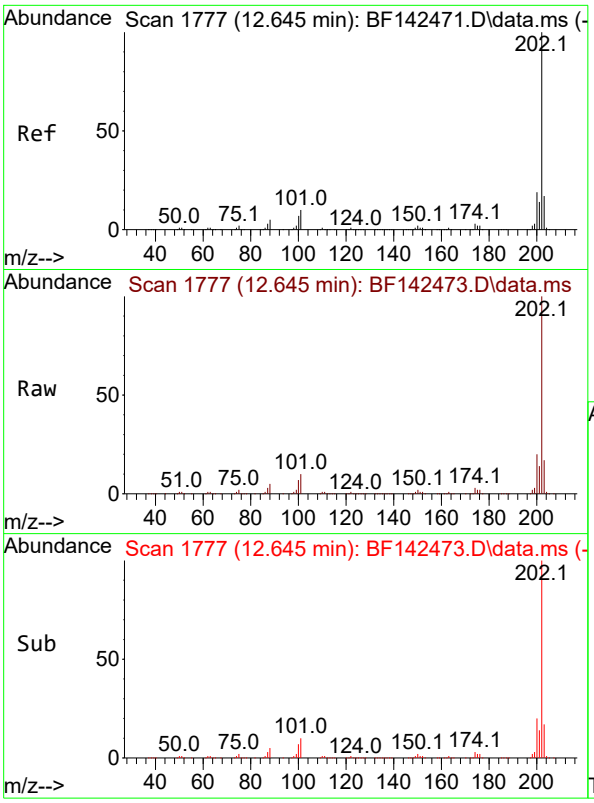


#74
Di-n-butylphthalate
Concen: 57.234 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:149 Resp: 853524

Ion	Ratio	Lower	Upper
149	100		
150	9.1	7.3	10.9
104	4.6	3.6	5.4



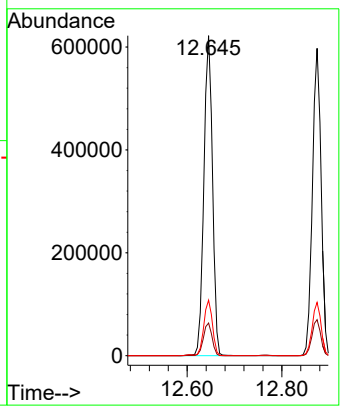


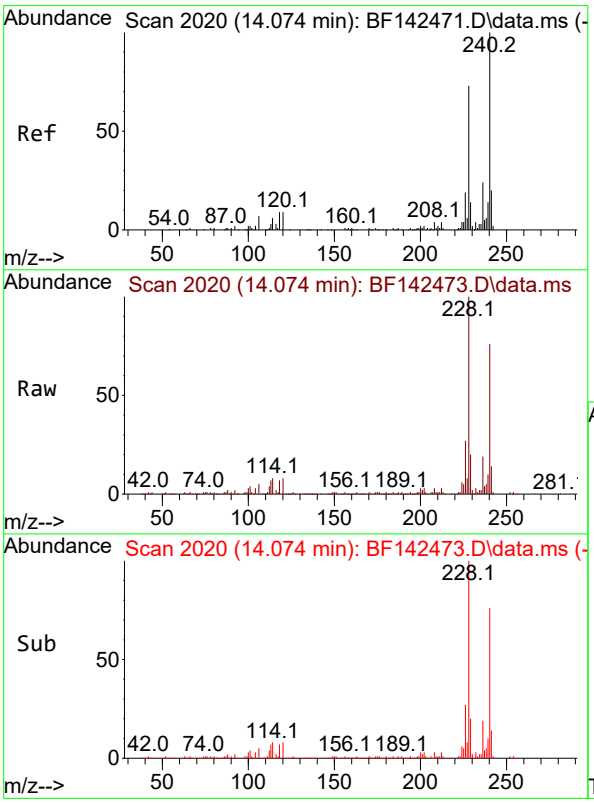
#75
Fluoranthene
Concen: 54.112 ng
RT: 12.645 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:202 Resp: 789533

Ion	Ratio	Lower	Upper
202	100		
101	10.2	0.0	29.6
203	17.3	0.0	37.2

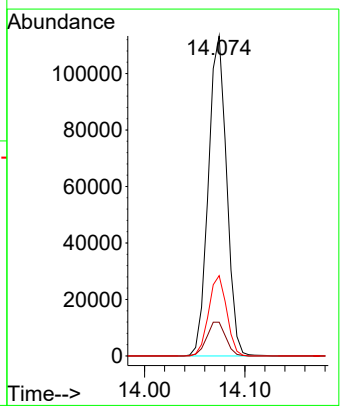


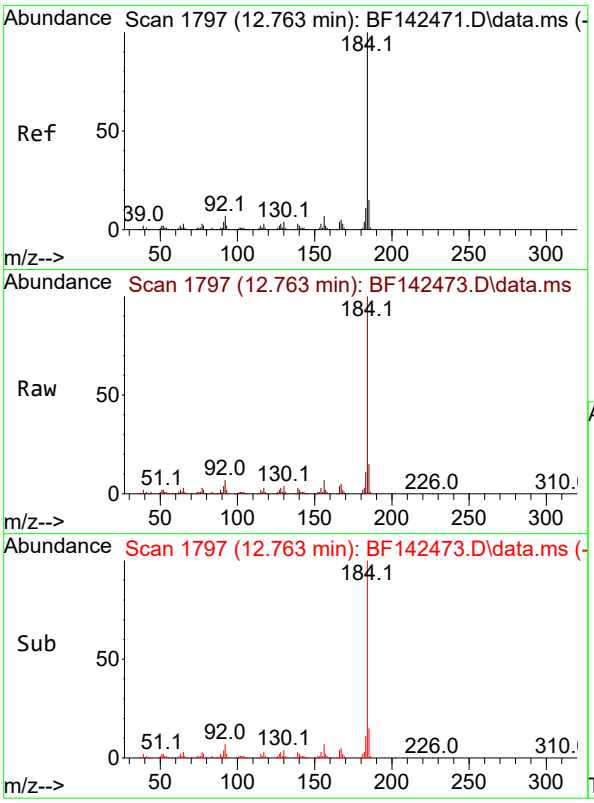


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:240 Resp: 143579

Ion	Ratio	Lower	Upper
240	100		
120	10.6	7.5	11.3
236	25.1	19.6	29.4



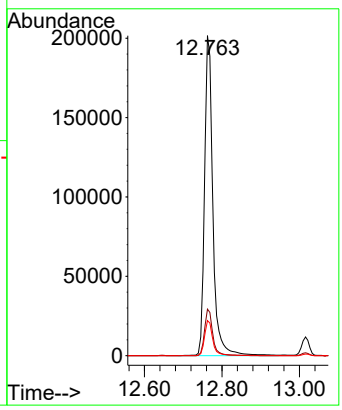


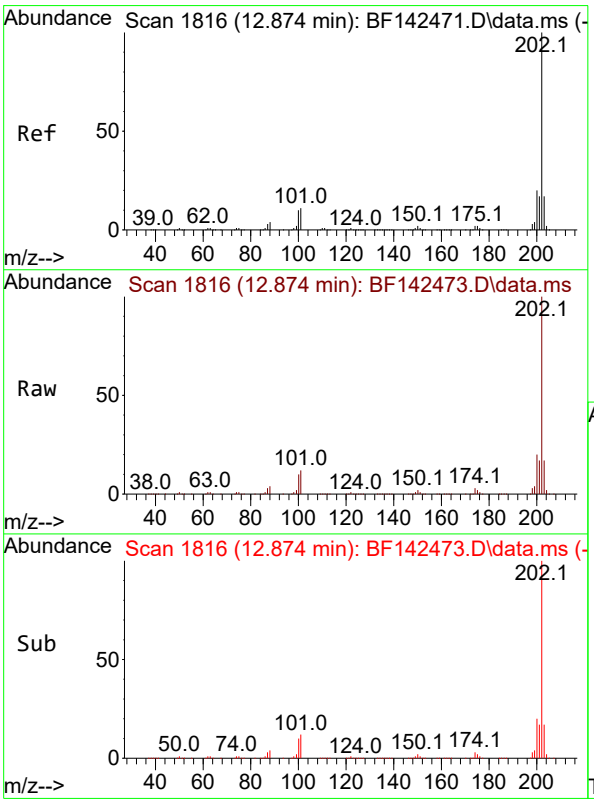
#77
Benzidine
Concen: 56.251 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:184 Resp: 300547

Ion	Ratio	Lower	Upper
184	100		
185	14.6	11.6	17.4
183	11.0	9.0	13.4

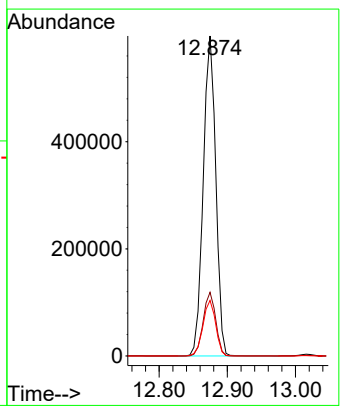


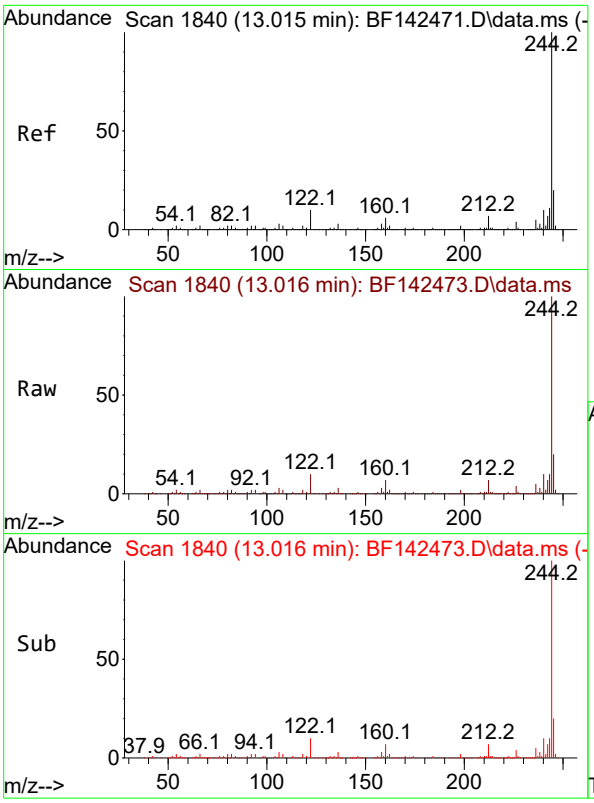


#78
Pyrene
Concen: 57.017 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:202 Resp: 763672

Ion	Ratio	Lower	Upper
202	100		
200	19.9	16.1	24.1
203	17.4	13.9	20.9



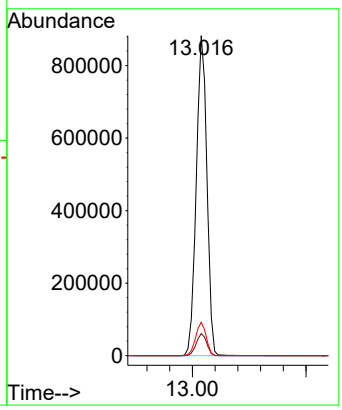


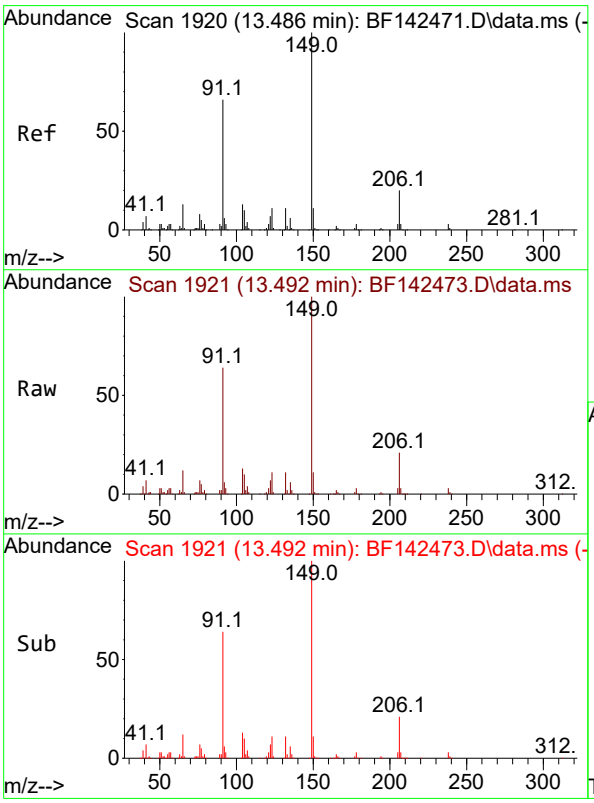
#79
Terphenyl-d14
Concen: 109.634 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:244 Resp: 1151893

Ion	Ratio	Lower	Upper
244	100		
212	6.9	5.3	7.9
122	10.4	8.2	12.2

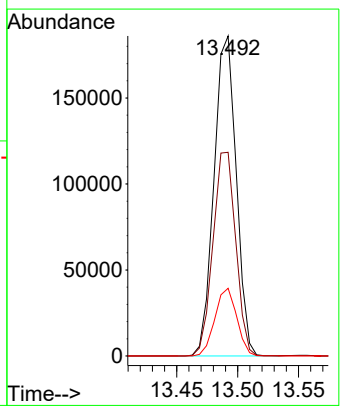


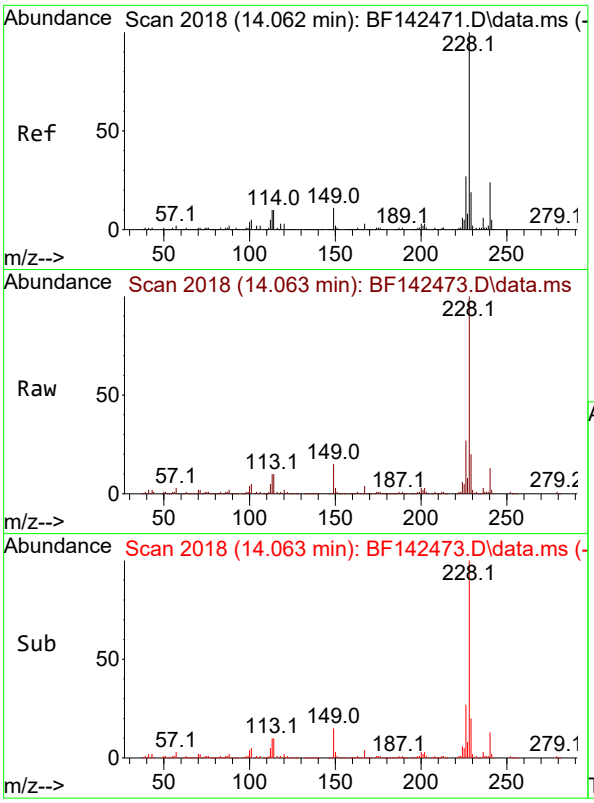


#80
Butylbenzylphthalate
Concen: 63.972 ng
RT: 13.492 min Scan# 1921
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:149 Resp: 236758

Ion	Ratio	Lower	Upper
149	100		
91	63.7	52.9	79.3
206	21.2	16.2	24.2



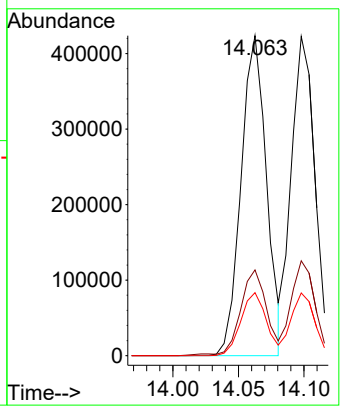


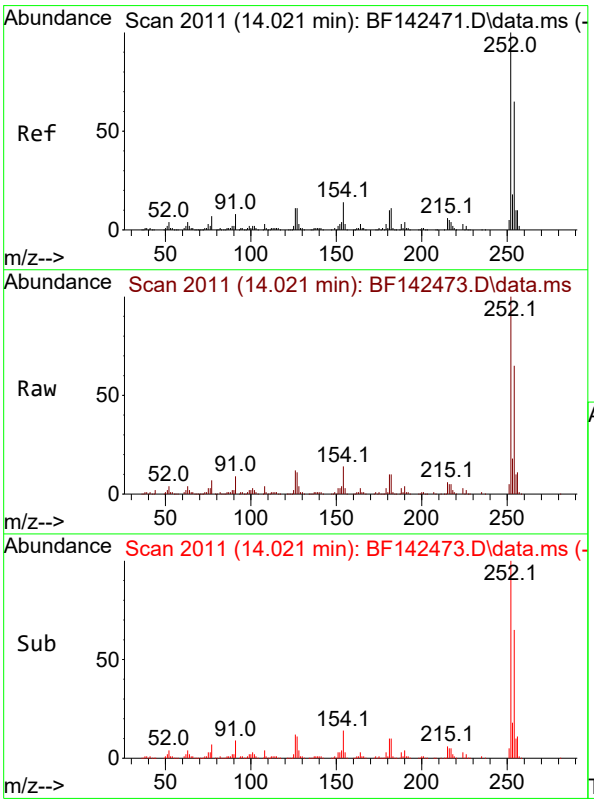
#81
Benzo(a)anthracene
Concen: 59.620 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:228 Resp: 571607

Ion	Ratio	Lower	Upper
228	100		
226	26.8	21.2	31.8
229	19.7	15.5	23.3

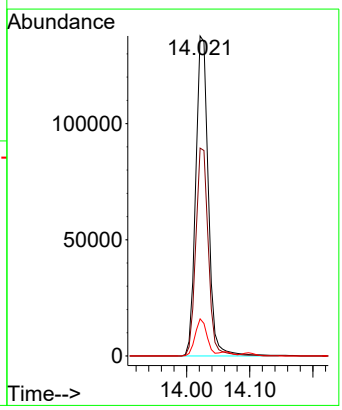


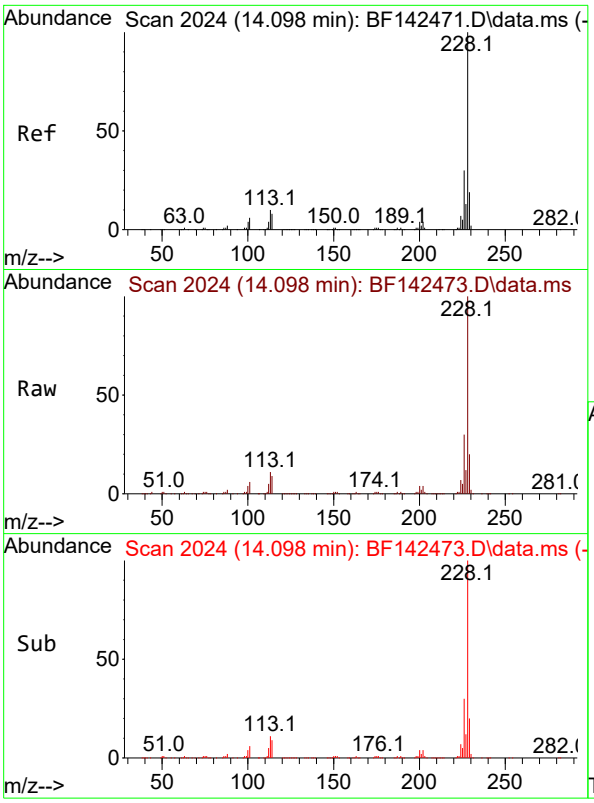


#82
3,3'-Dichlorobenzidine
Concen: 65.480 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:252 Resp: 190415

Ion	Ratio	Lower	Upper
252	100		
254	64.9	52.0	78.0
126	11.6	8.9	13.3



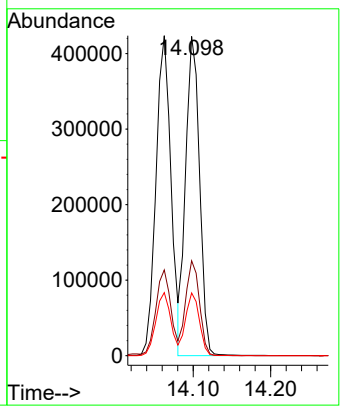


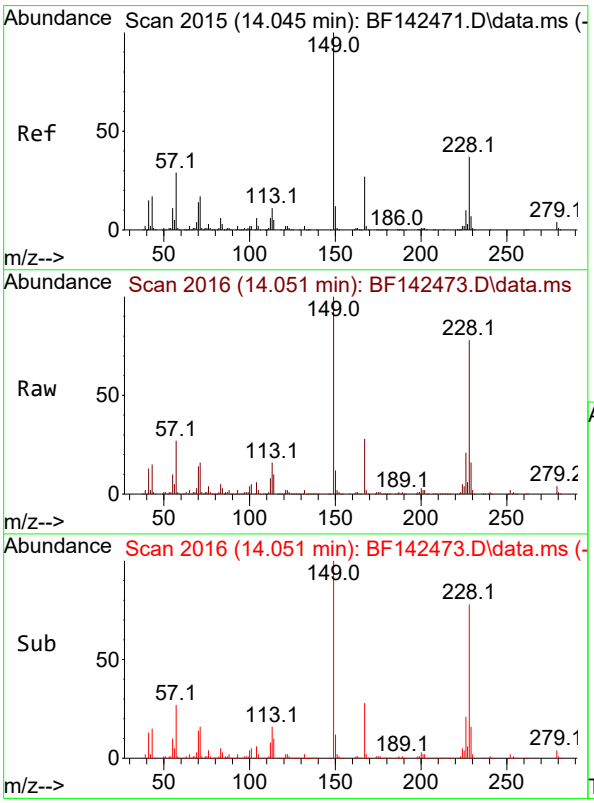
#83
Chrysene
Concen: 61.153 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:228 Resp: 526831

Ion	Ratio	Lower	Upper
228	100		
226	29.7	23.8	35.6
229	19.6	15.4	23.2

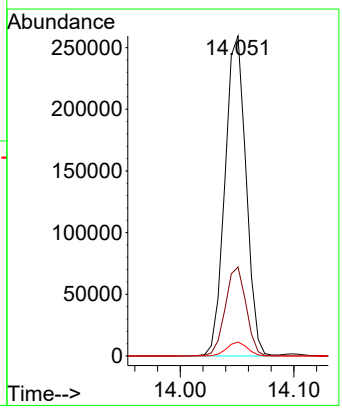


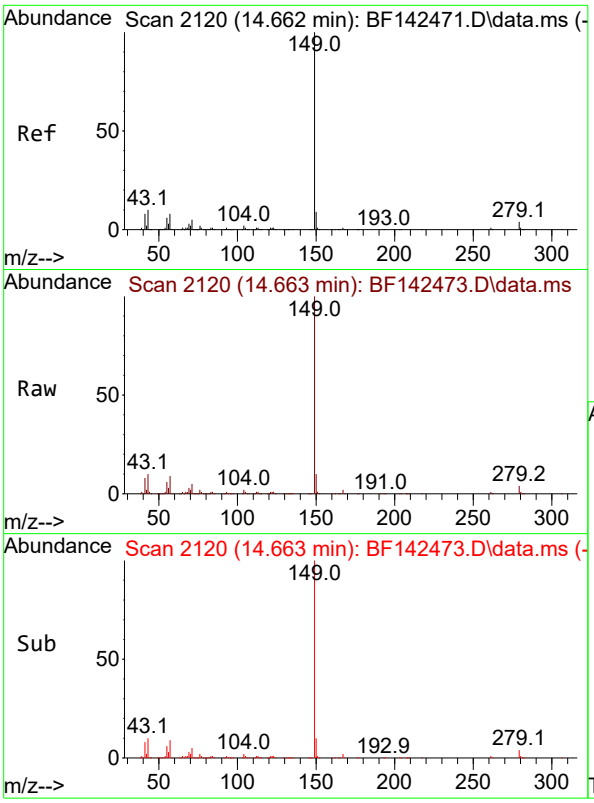


#84
Bis(2-ethylhexyl)phthalate
Concen: 70.698 ng
RT: 14.051 min Scan# 2016
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:149 Resp: 334950

Ion	Ratio	Lower	Upper
149	100		
167	27.8	21.5	32.3
279	4.4	3.2	4.8



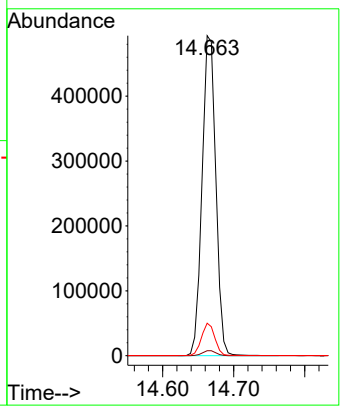


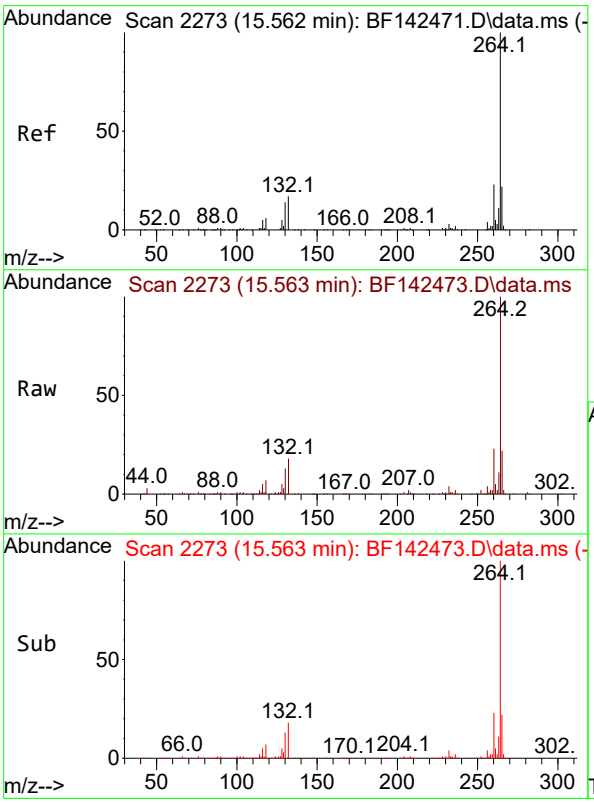
#85
Di-n-octyl phthalate
Concen: 71.701 ng
RT: 14.663 min Scan# 21
Delta R.T. -0.005 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:149 Resp: 664220

Ion	Ratio	Lower	Upper
149	100		
167	1.5	1.2	1.8
43	9.8	7.9	11.9

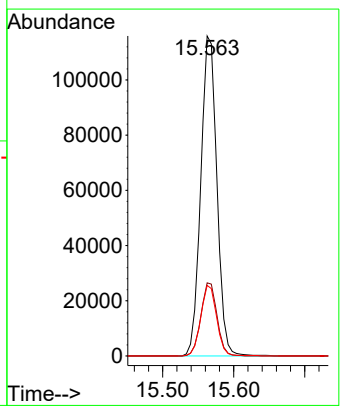


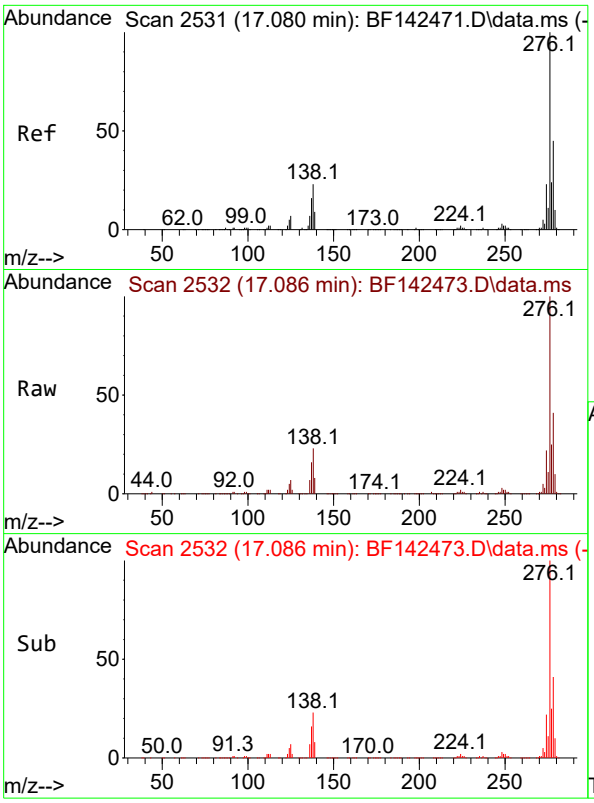


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.563 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:264 Resp: 183052

Ion	Ratio	Lower	Upper
264	100		
260	22.9	18.6	28.0
265	22.0	17.7	26.5



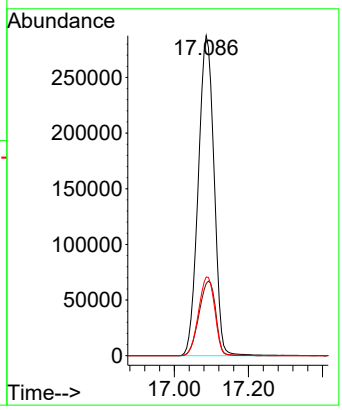


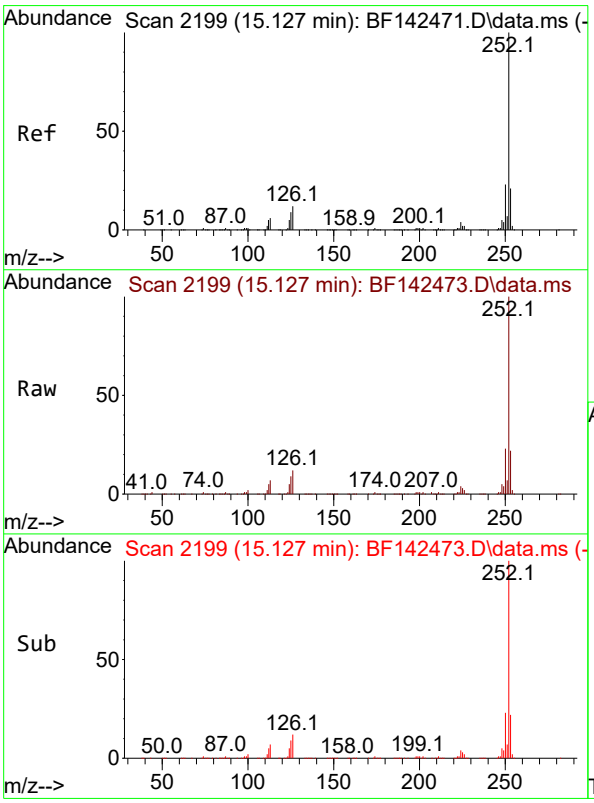
#87
Indeno(1,2,3-cd)pyrene
Concen: 61.761 ng
RT: 17.086 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:276 Resp: 848752

Ion	Ratio	Lower	Upper
276	100		
138	24.6	19.9	29.9
277	25.3	20.2	30.2

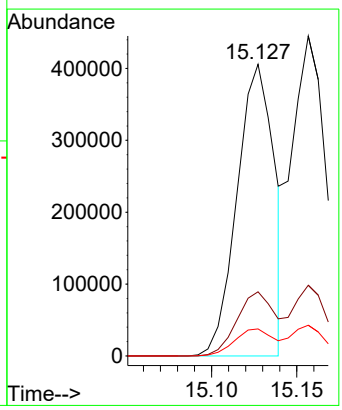


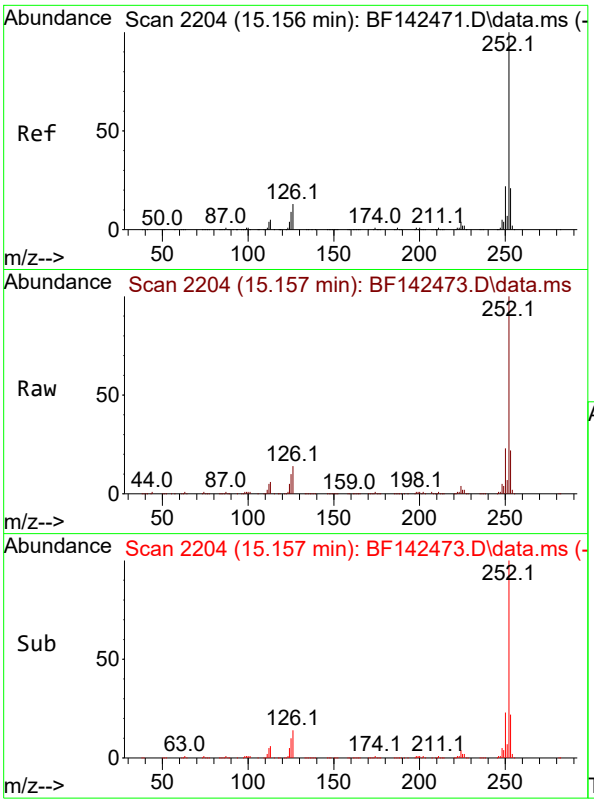


#88
Benzo(b)fluoranthene
Concen: 56.878 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:252 Resp: 616210

Ion	Ratio	Lower	Upper
252	100		
253	22.0	17.0	25.4
125	9.3	7.4	11.0



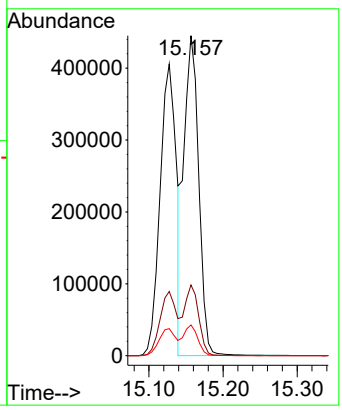


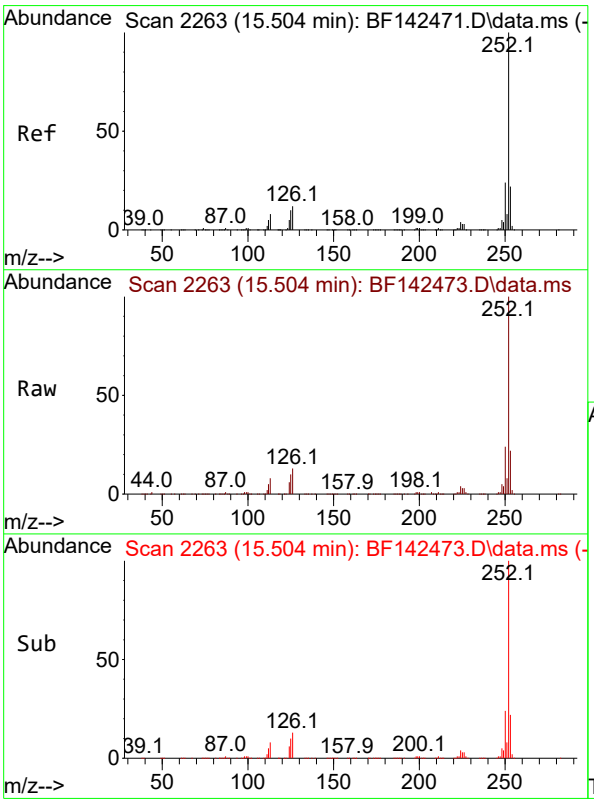
#89
Benzo(k)fluoranthene
Concen: 61.068 ng
RT: 15.157 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:252 Resp: 619660

Ion	Ratio	Lower	Upper
252	100		
253	22.1	17.0	25.4
125	9.6	7.3	10.9

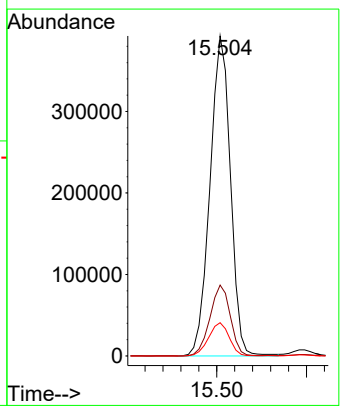


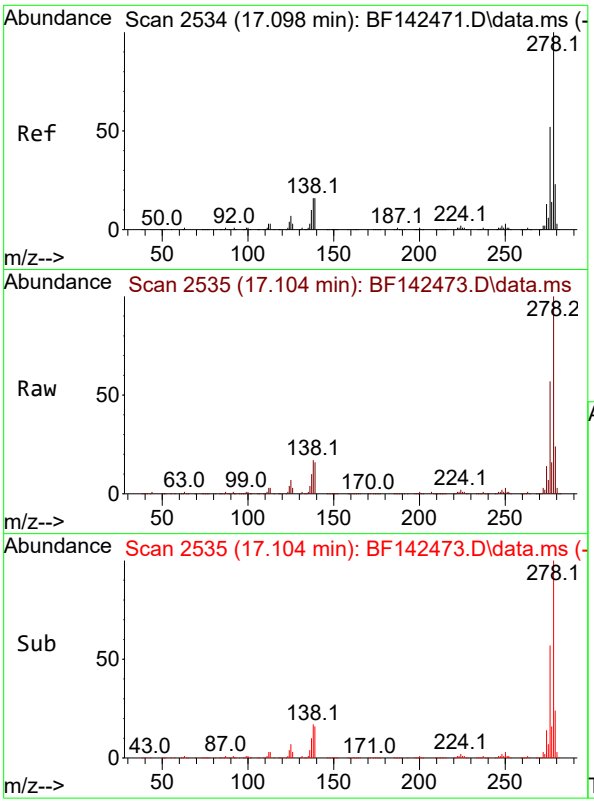


#90
Benzo(a)pyrene
Concen: 60.943 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:252 Resp: 622347

Ion	Ratio	Lower	Upper
252	100		
253	22.2	17.4	26.0
125	10.4	7.9	11.9



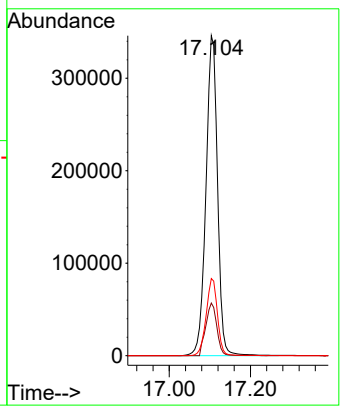


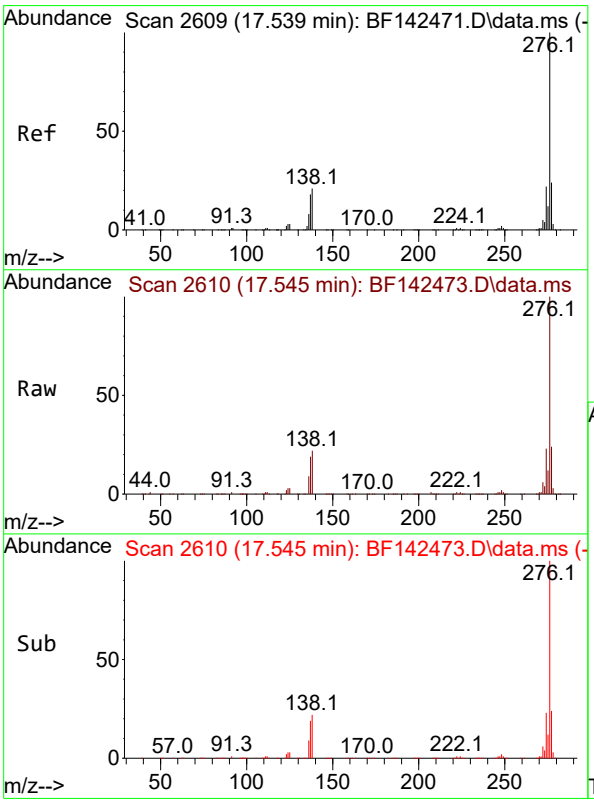
#91
Dibenzo(a,h)anthracene
Concen: 61.321 ng
RT: 17.104 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Tgt Ion:278 Resp: 683473

Ion	Ratio	Lower	Upper
278	100		
139	16.5	12.8	19.2
279	24.1	18.6	28.0

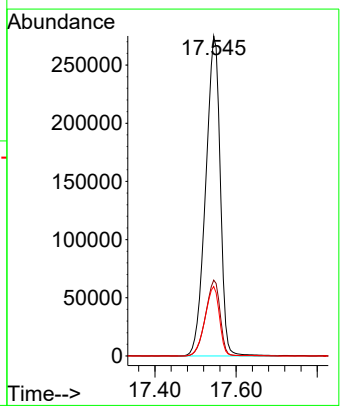




#92
Benzo(g,h,i)perylene
Concen: 61.313 ng
RT: 17.545 min Scan# 2610
Delta R.T. -0.012 min
Lab File: BF142473.D
Acq: 20 May 2025 15:03

Tgt Ion:276 Resp: 683528

Ion	Ratio	Lower	Upper
276	100		
277	23.7	19.2	28.8
138	21.7	16.8	25.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142474.D
Acq On : 20 May 2025 15:31
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Quant Time: May 20 16:55:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.904	152	92899	20.000	ng		0.00
21) Naphthalene-d8	8.186	136	358380	20.000	ng		0.00
39) Acenaphthene-d10	9.945	164	188198	20.000	ng		0.00
64) Phenanthrene-d10	11.433	188	287337	20.000	ng		0.00
76) Chrysene-d12	14.074	240	154555	20.000	ng		0.00
86) Perylene-d12	15.568	264	196342	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.516	112	815861	147.959	ng		0.00
7) Phenol-d6	6.534	99	986649	148.644	ng		0.00
23) Nitrobenzene-d5	7.475	82	993768	151.205	ng		0.00
42) 2,4,6-Tribromophenol	10.739	330	304807	145.927	ng		0.00
45) 2-Fluorobiphenyl	9.269	172	1908541	136.080	ng		0.00
79) Terphenyl-d14	13.015	244	1392704	123.140	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.663	88	169363	76.756	ng		100
3) Pyridine	3.440	79	442247	78.706	ng		98
4) n-Nitrosodimethylamine	3.404	42	230814	79.114	ng		97
6) Aniline	6.569	93	671713	75.263	ng		99
8) 2-Chlorophenol	6.686	128	454577	75.687	ng		98
9) Benzaldehyde	6.451	77	219574	54.999	ng		97
10) Phenol	6.551	94	552574	73.985	ng		87
11) bis(2-Chloroethyl)ether	6.639	93	410501	76.354	ng		100
12) 1,3-Dichlorobenzene	6.845	146	489261	73.004	ng		100
13) 1,4-Dichlorobenzene	6.922	146	495948	73.465	ng		99
14) 1,2-Dichlorobenzene	7.075	146	477210	73.875	ng		100
15) Benzyl Alcohol	7.045	79	381381	77.750	ng		99
16) 2,2'-oxybis(1-Chloropr...	7.181	45	663576	73.497	ng		99
17) 2-Methylphenol	7.151	107	358569	76.467	ng		99
18) Hexachloroethane	7.416	117	177426	75.267	ng		98
19) n-Nitroso-di-n-propyla...	7.328	70	304362	73.987	ng		97
20) 3+4-Methylphenols	7.310	107	426933	71.097	ng		94
22) Acetophenone	7.316	105	571777	72.072	ng	#	95
24) Nitrobenzene	7.492	77	452330	76.309	ng		98
25) Isophorone	7.733	82	838652	76.321	ng		99
26) 2-Nitrophenol	7.804	139	248427	78.434	ng		99
27) 2,4-Dimethylphenol	7.839	122	422403	75.623	ng		99
28) bis(2-Chloroethoxy)met...	7.939	93	513063	74.744	ng		98
29) 2,4-Dichlorophenol	8.045	162	381590	75.121	ng		99
30) 1,2,4-Trichlorobenzene	8.128	180	406857	73.801	ng		98
31) Naphthalene	8.210	128	1277048	72.369	ng		99
32) Benzoic acid	7.975	122	288731	84.918	ng		99
33) 4-Chloroaniline	8.257	127	492168	68.830	ng		100
34) Hexachlorobutadiene	8.328	225	252445	73.338	ng		98
35) Caprolactam	8.645	113	109232	76.565	ng		100
36) 4-Chloro-3-methylphenol	8.739	107	388740	74.674	ng		99
37) 2-Methylnaphthalene	8.898	142	796463	71.742	ng		100
38) 1-Methylnaphthalene	8.998	142	811747	70.689	ng		99
40) 1,2,4,5-Tetrachloroben...	9.069	216	409177	75.740	ng		100
41) Hexachlorocyclopentadiene	9.051	237	309537	84.936	ng		100
43) 2,4,6-Trichlorophenol	9.175	196	285072	78.254	ng		97

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142474.D
Acq On : 20 May 2025 15:31
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Quant Time: May 20 16:55:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

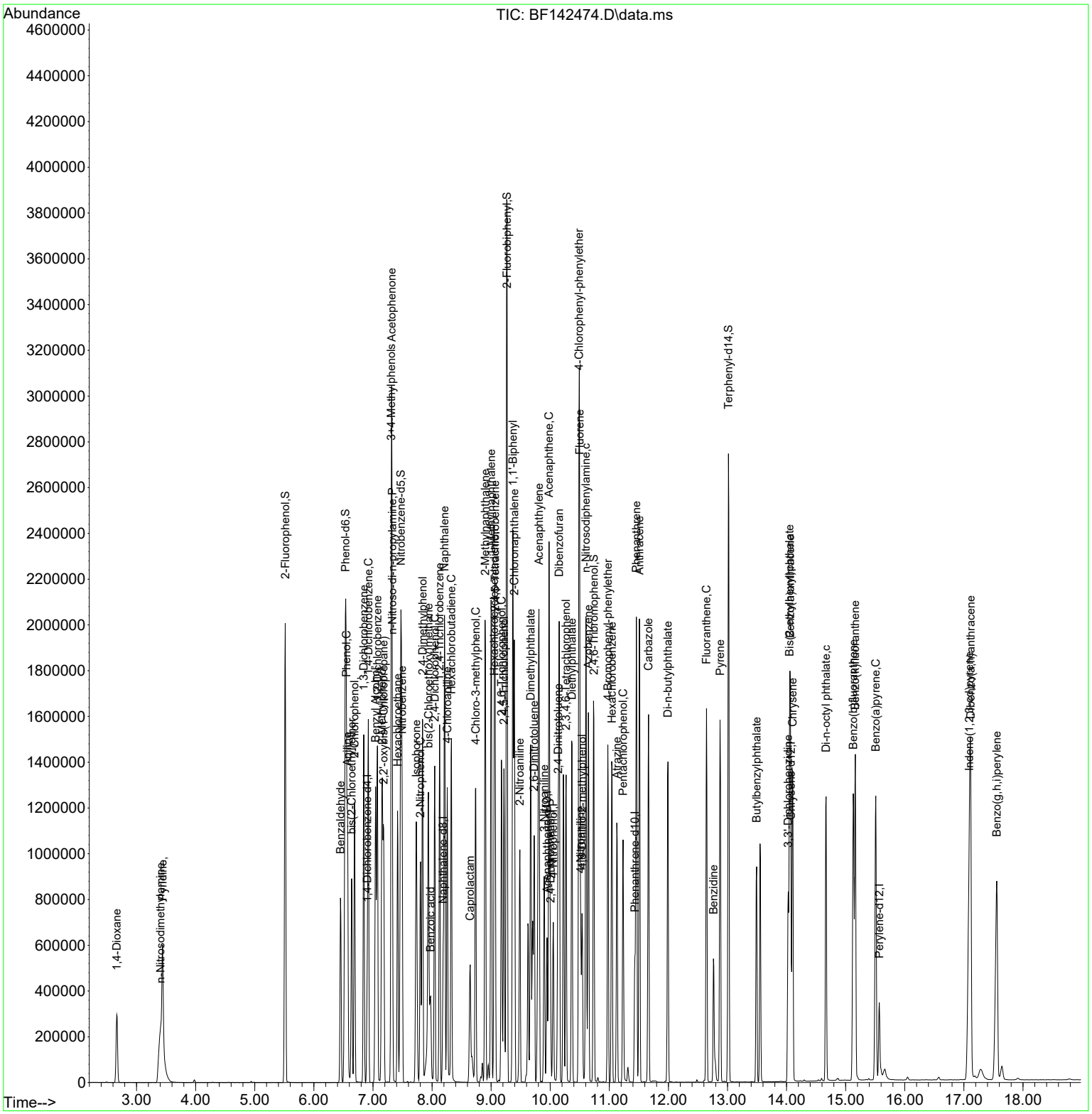
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	287041	74.712	ng	99
46) 1,1'-Biphenyl	9.369	154	1059787	72.584	ng	100
47) 2-Chloronaphthalene	9.392	162	798539	74.024	ng	99
48) 2-Nitroaniline	9.486	65	241162	77.343	ng	99
49) Acenaphthylene	9.810	152	1313668	72.118	ng	99
50) Dimethylphthalate	9.669	163	911534	73.405	ng	100
51) 2,6-Dinitrotoluene	9.727	165	201545	75.198	ng	96
52) Acenaphthene	9.980	154	810811	72.896	ng	100
53) 3-Nitroaniline	9.898	138	216422	73.930	ng	100
54) 2,4-Dinitrophenol	10.004	184	119082	85.999	ng	94
55) Dibenzofuran	10.151	168	1136276	70.990	ng	99
56) 4-Nitrophenol	10.051	139	165537	76.638	ng	99
57) 2,4-Dinitrotoluene	10.133	165	259035	74.005	ng	99
58) Fluorene	10.498	166	857882	69.377	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.269	232	238382	74.324	ng	99
60) Diethylphthalate	10.369	149	858326	70.773	ng	100
61) 4-Chlorophenyl-phenyle...	10.486	204	426386	70.193	ng	99
62) 4-Nitroaniline	10.516	138	188782	71.105	ng	98
63) Azobenzene	10.645	77	794029	72.893	ng	98
65) 4,6-Dinitro-2-methylph...	10.539	198	141863	88.468	ng	99
66) n-Nitrosodiphenylamine	10.604	169	758366	77.145	ng	99
67) 4-Bromophenyl-phenylether	10.974	248	264739	77.920	ng	98
68) Hexachlorobenzene	11.045	284	287676	76.555	ng	98
69) Atrazine	11.127	200	199929	76.581	ng	99
70) Pentachlorophenol	11.233	266	177504	83.666	ng	99
71) Phenanthrene	11.457	178	1107683	72.134	ng	100
72) Anthracene	11.510	178	1144182	73.009	ng	99
73) Carbazole	11.663	167	956069	71.360	ng	99
74) Di-n-butylphthalate	11.992	149	1043468	71.153	ng	100
75) Fluoranthene	12.645	202	972105	67.750	ng	99
77) Benzidine	12.763	184	343909	59.795	ng	100
78) Pyrene	12.874	202	931844	64.632	ng	100
80) Butylbenzylphthalate	13.492	149	319716	80.252	ng	98
81) Benzo(a)anthracene	14.062	228	765441	74.167	ng	99
82) 3,3'-Dichlorobenzidine	14.027	252	257542	82.274	ng	99
83) Chrysene	14.104	228	715970	77.206	ng	100
84) Bis(2-ethylhexyl)phtha...	14.051	149	449654	88.168	ng	99
85) Di-n-octyl phthalate	14.668	149	888230	89.073	ng	99
87) Indeno(1,2,3-cd)pyrene	17.092	276	1126401	76.417	ng	100
88) Benzo(b)fluoranthene	15.127	252	874640	75.267	ng	98
89) Benzo(k)fluoranthene	15.162	252	803775	73.850	ng	99
90) Benzo(a)pyrene	15.509	252	833783	76.121	ng	99
91) Dibenzo(a,h)anthracene	17.115	278	902757	75.513	ng	99
92) Benzo(g,h,i)perylene	17.556	276	909649	76.073	ng	99

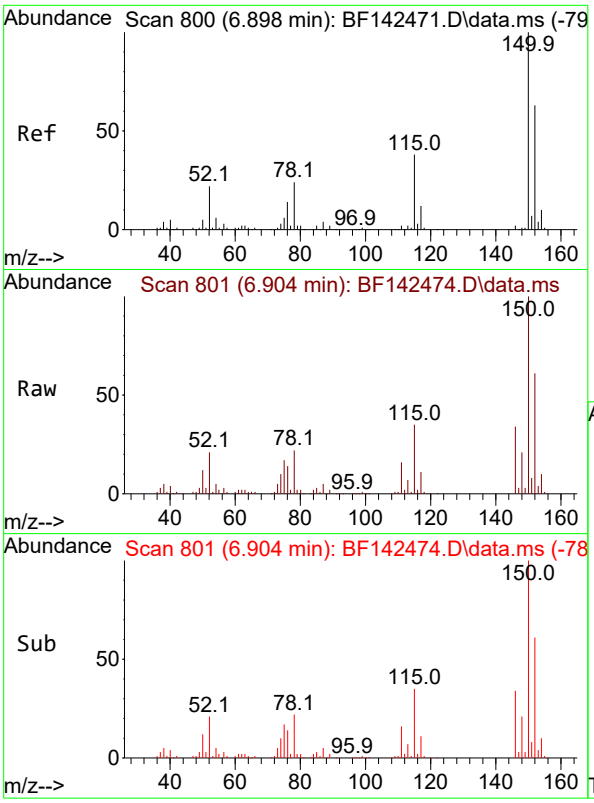
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142474.D
Acq On : 20 May 2025 15:31
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Quant Time: May 20 16:55:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



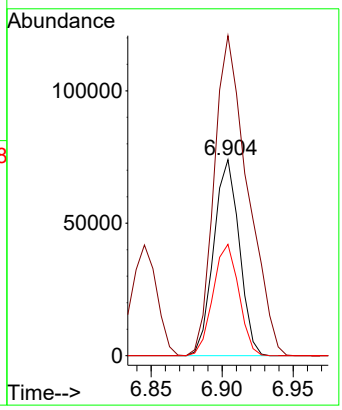


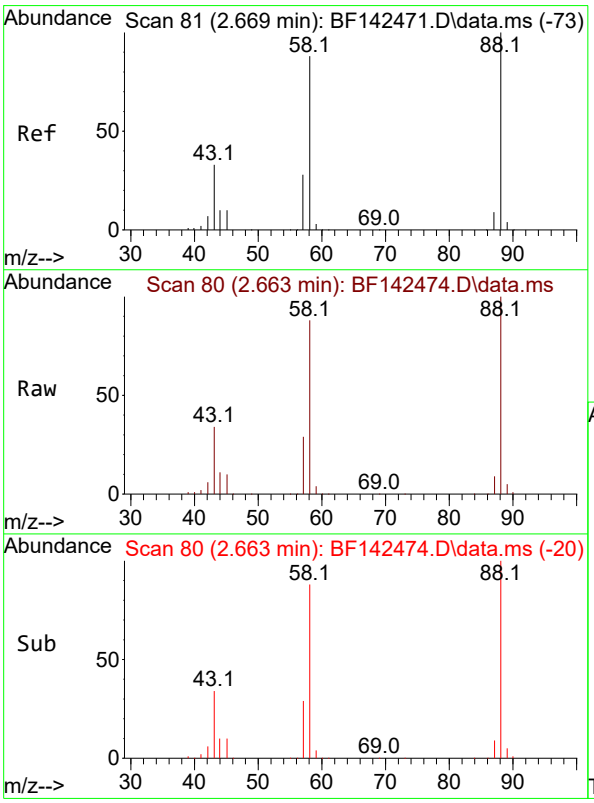
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.904 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:152 Resp: 92899

Ion	Ratio	Lower	Upper
152	100		
150	163.3	128.2	192.4
115	56.9	48.3	72.5

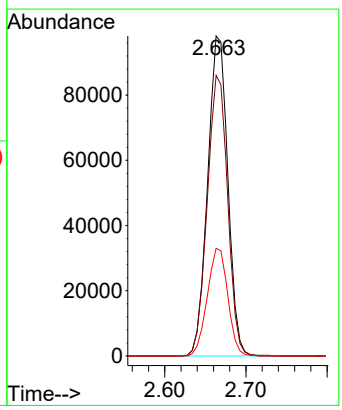


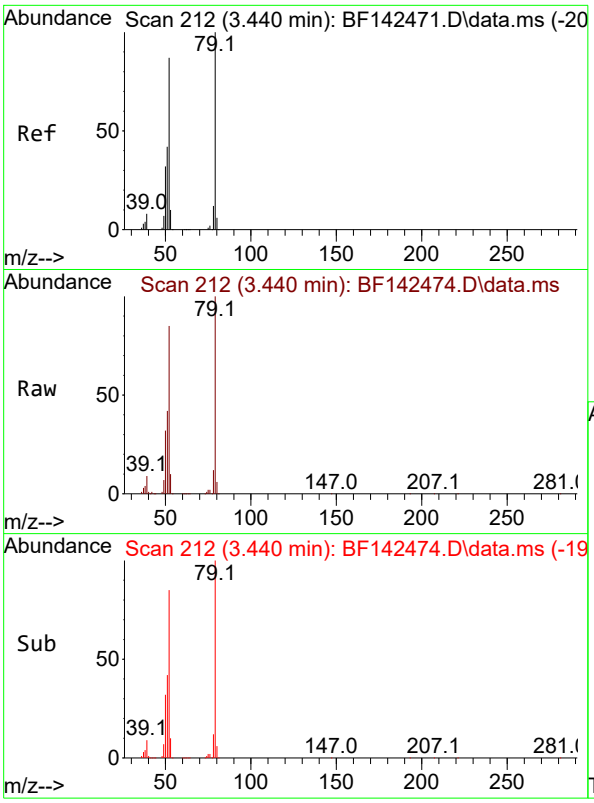


#2
1,4-Dioxane
Concen: 76.756 ng
RT: 2.663 min Scan# 80
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 88 Resp: 169363

Ion	Ratio	Lower	Upper
88	100		
58	88.4	70.8	106.2
43	34.1	26.6	40.0



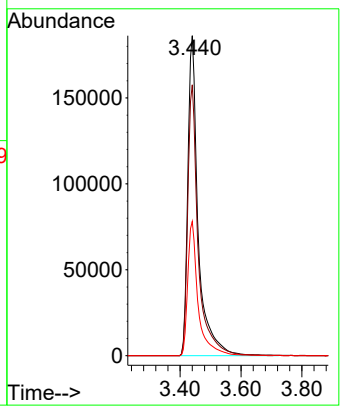


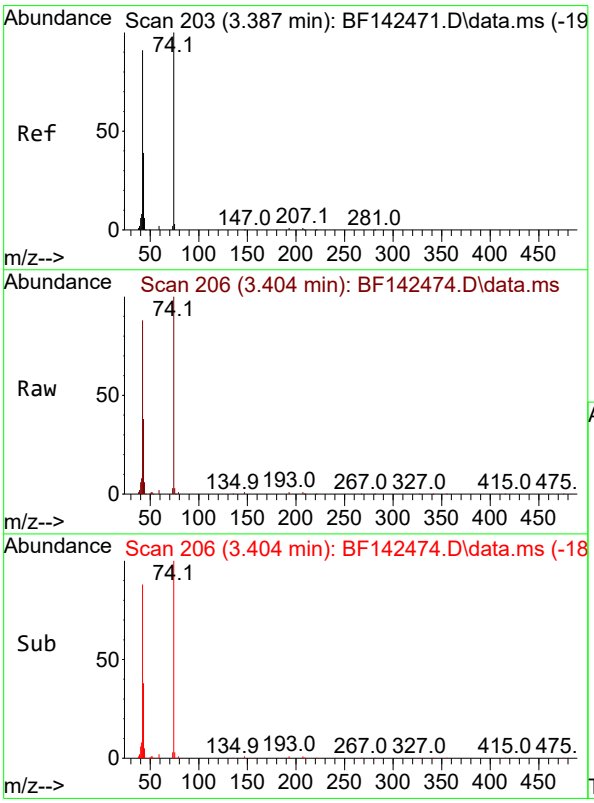
#3
Pyridine
Concen: 78.706 ng
RT: 3.440 min Scan# 21
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 79 Resp: 442247

Ion	Ratio	Lower	Upper
79	100		
52	84.6	69.2	103.8
51	42.0	33.3	49.9

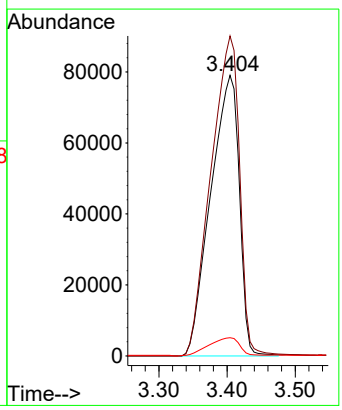


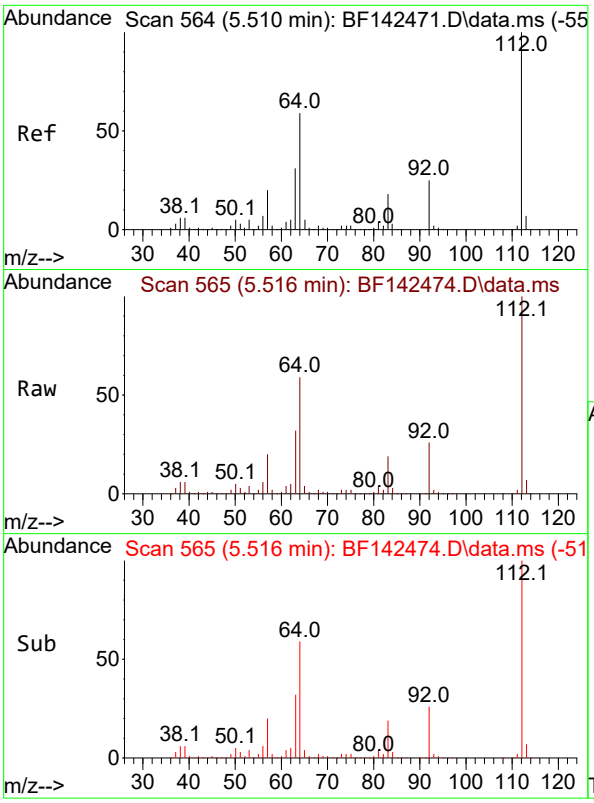


#4
n-Nitrosodimethylamine
Concen: 79.114 ng
RT: 3.404 min Scan# 206
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 42 Resp: 230814

Ion	Ratio	Lower	Upper
42	100		
74	114.0	88.2	132.4
44	6.5	5.4	8.2



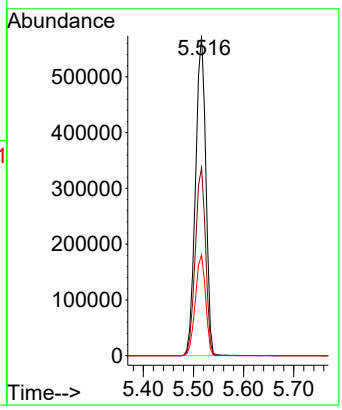


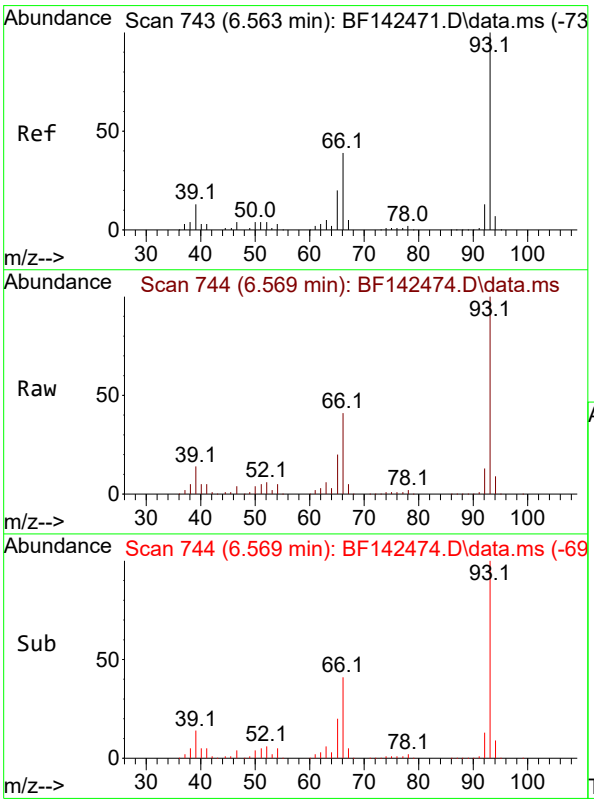
#5
2-Fluorophenol
Concen: 147.959 ng
RT: 5.516 min Scan# 5
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:112 Resp: 815861

Ion	Ratio	Lower	Upper
112	100		
64	58.7	47.5	71.3
63	31.5	24.9	37.3

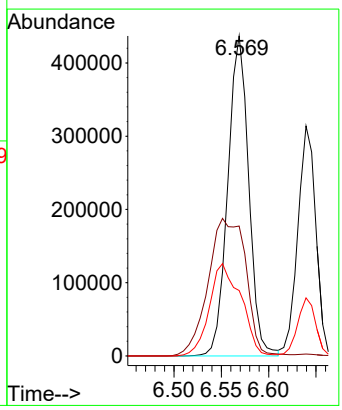


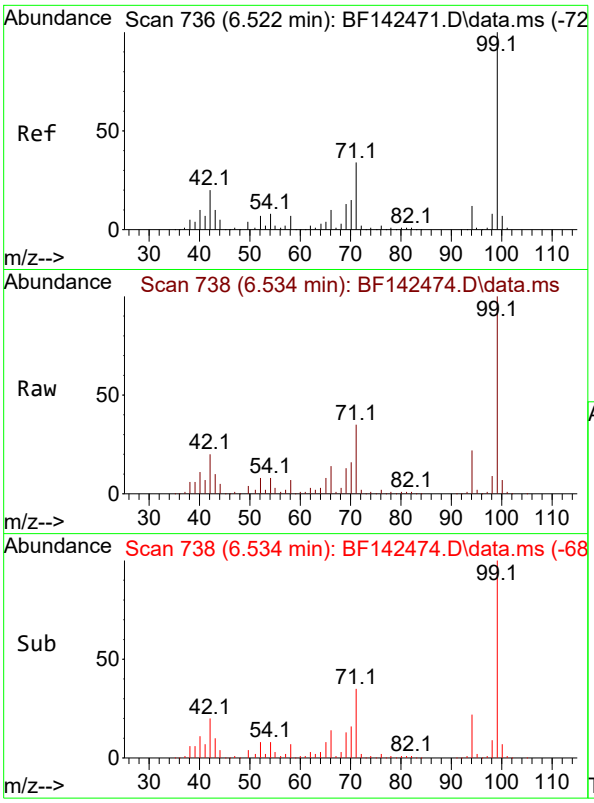


#6
Aniline
Concen: 75.263 ng
RT: 6.569 min Scan# 744
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 93 Resp: 671713

Ion	Ratio	Lower	Upper
93	100		
66	40.6	32.0	48.0
65	20.5	16.1	24.1



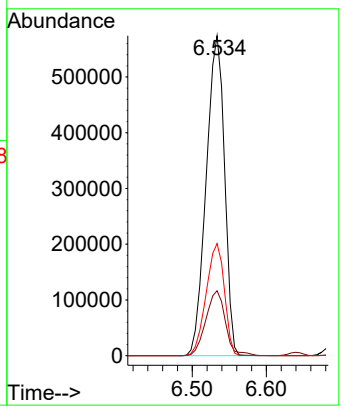


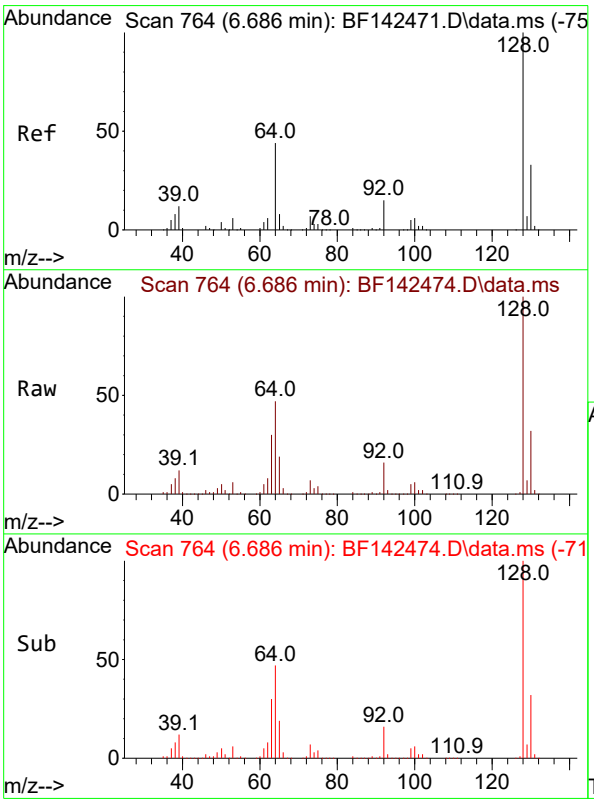
#7
Phenol-d6
Concen: 148.644 ng
RT: 6.534 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 99 Resp: 986649

Ion	Ratio	Lower	Upper
99	100		
42	20.3	16.2	24.2
71	35.1	27.3	40.9

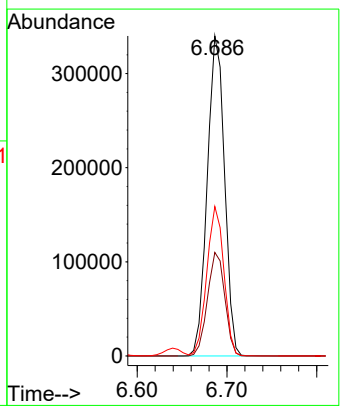


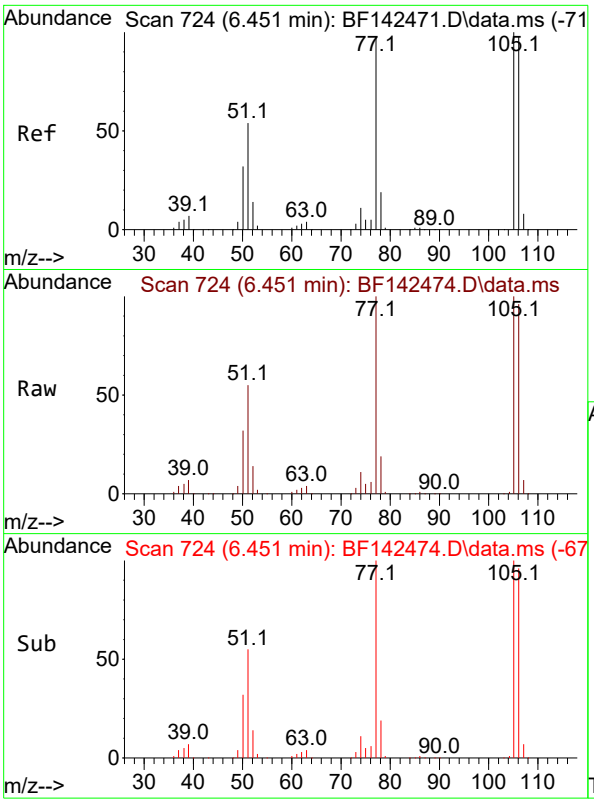


#8
2-Chlorophenol
Concen: 75.687 ng
RT: 6.686 min Scan# 764
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:128 Resp: 454577

Ion	Ratio	Lower	Upper
128	100		
130	32.3	12.6	52.6
64	46.7	25.1	65.1



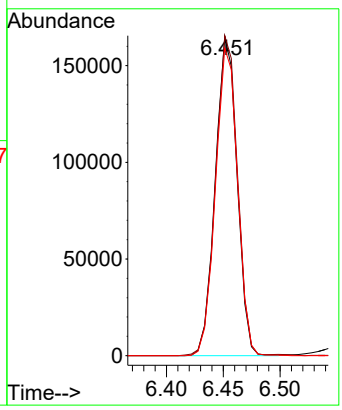


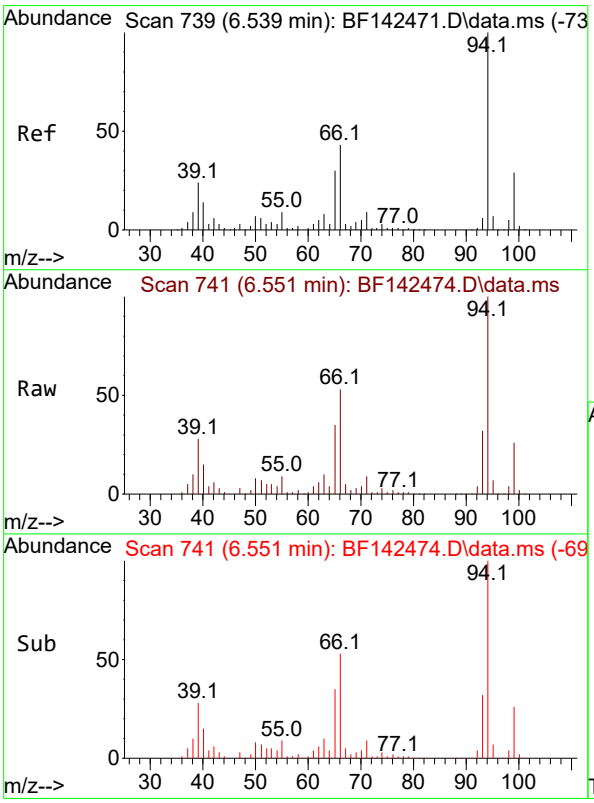
#9
Benzaldehyde
Concen: 54.999 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 77 Resp: 219574

Ion	Ratio	Lower	Upper
77	100		
105	100.3	82.5	122.5
106	96.4	80.0	120.0

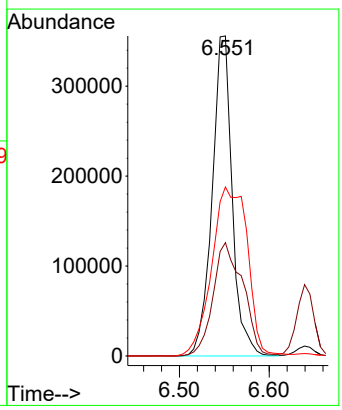


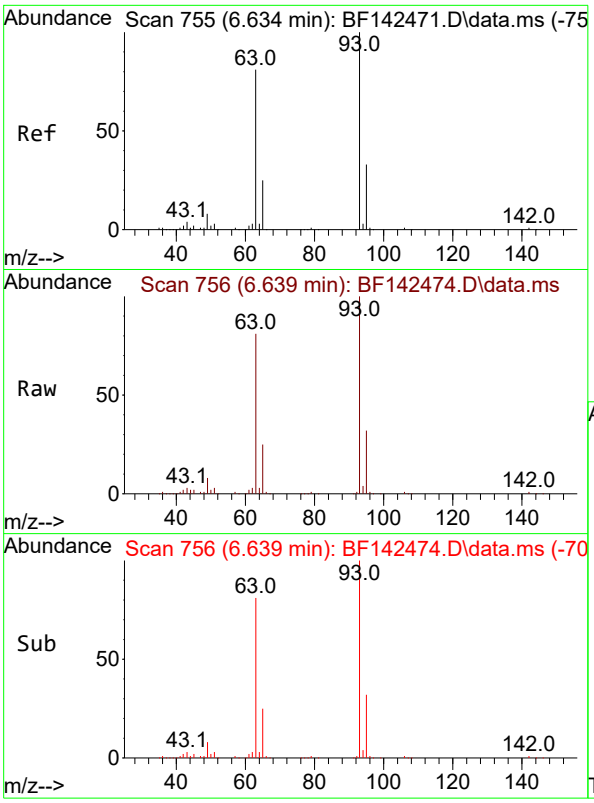


#10
Phenol
Concen: 73.985 ng
RT: 6.551 min Scan# 741
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 94 Resp: 552574

Ion	Ratio	Lower	Upper
94	100		
65	35.4	10.3	50.3
66	52.8	22.6	62.6



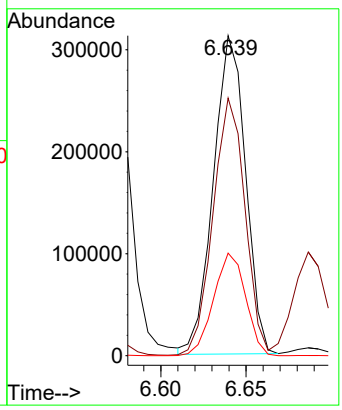


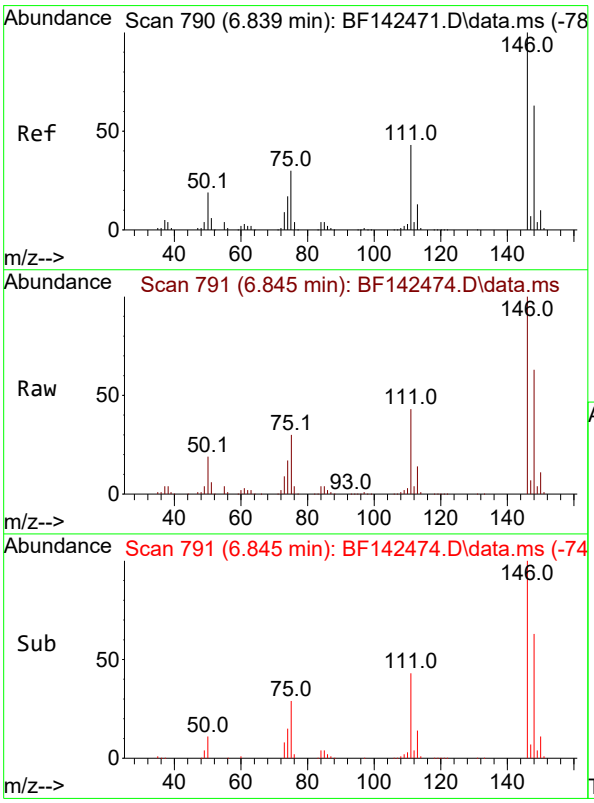
#11
bis(2-Chloroethyl)ether
Concen: 76.354 ng
RT: 6.639 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 93 Resp: 410501

Ion	Ratio	Lower	Upper
93	100		
63	80.5	60.2	100.2
95	32.1	12.3	52.3

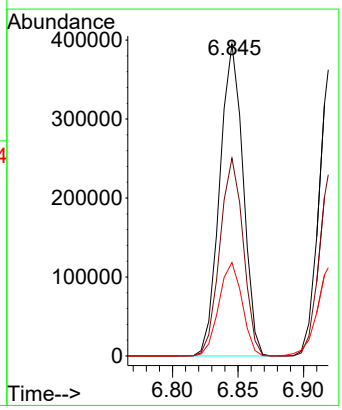


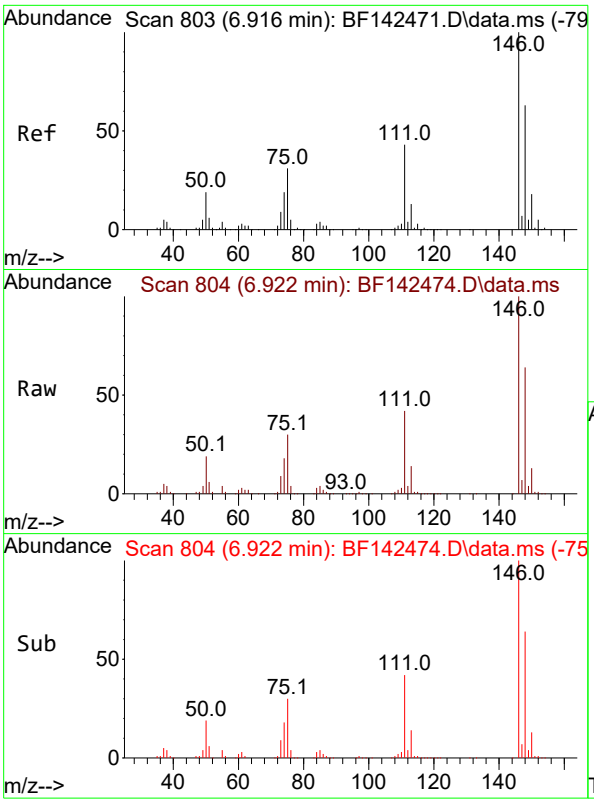


#12
1,3-Dichlorobenzene
Concen: 73.004 ng
RT: 6.845 min Scan# 791
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:146 Resp: 489261

Ion	Ratio	Lower	Upper
146	100		
148	63.4	50.6	75.8
75	30.0	23.8	35.6



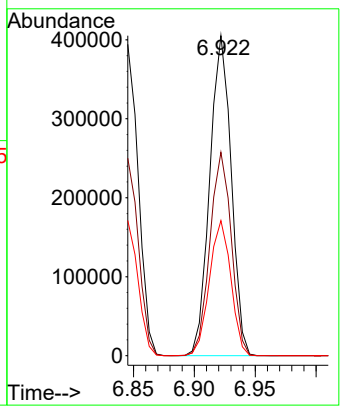


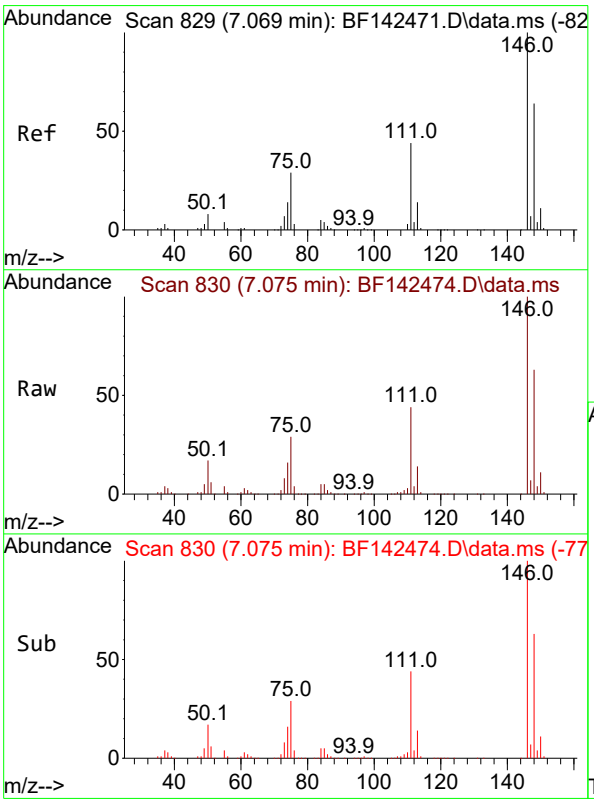
#13
1,4-Dichlorobenzene
Concen: 73.465 ng
RT: 6.922 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:146 Resp: 495948

Ion	Ratio	Lower	Upper
146	100		
148	63.6	50.4	75.6
111	42.2	34.1	51.1

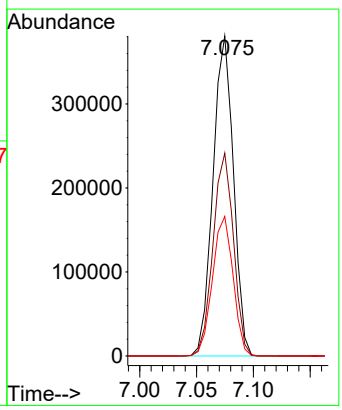


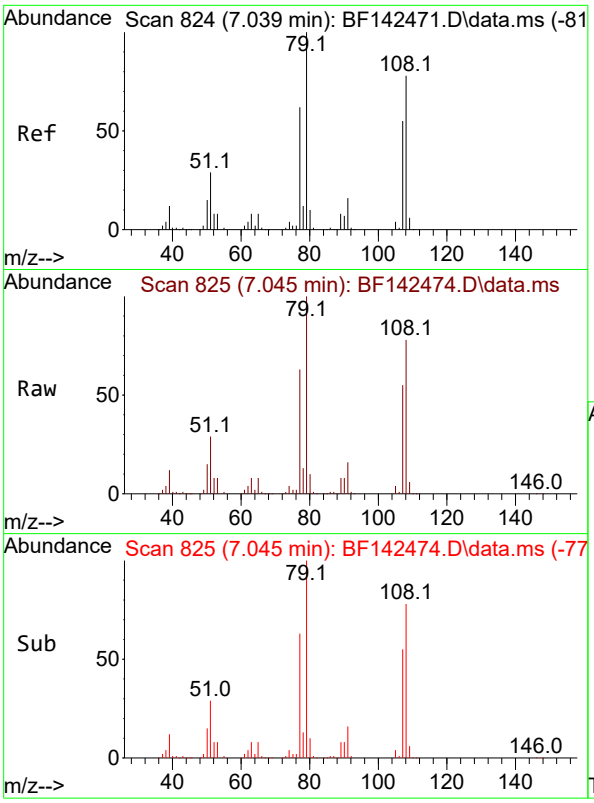


#14
1,2-Dichlorobenzene
Concen: 73.875 ng
RT: 7.075 min Scan# 830
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:146 Resp: 477210

Ion	Ratio	Lower	Upper
146	100		
148	63.4	51.0	76.4
111	43.6	35.0	52.6



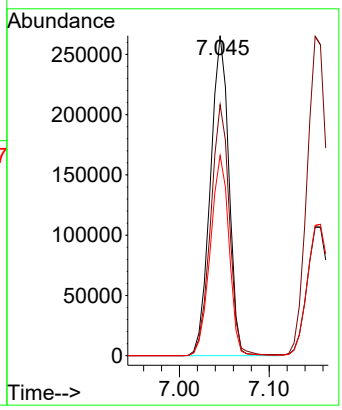


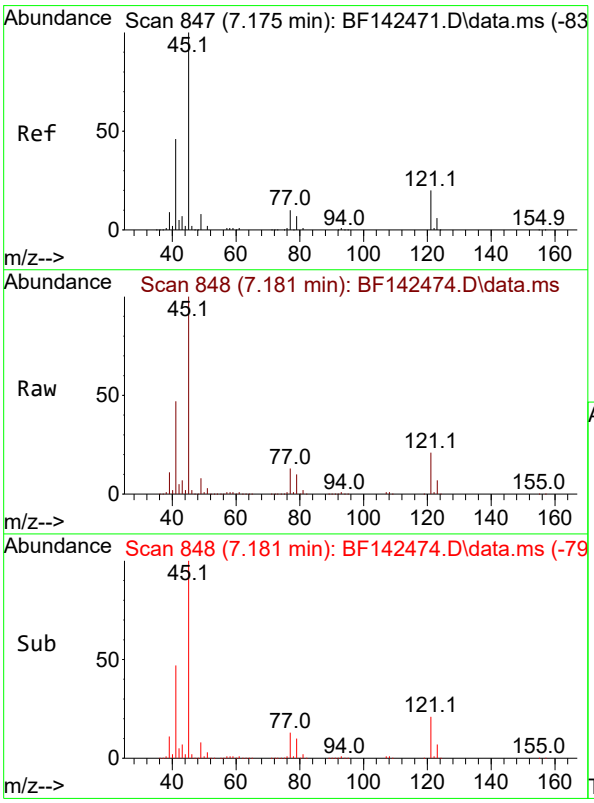
#15
Benzyl Alcohol
Concen: 77.750 ng
RT: 7.045 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 79 Resp: 381381

Ion	Ratio	Lower	Upper
79	100		
108	78.5	62.1	93.1
77	62.5	49.5	74.3

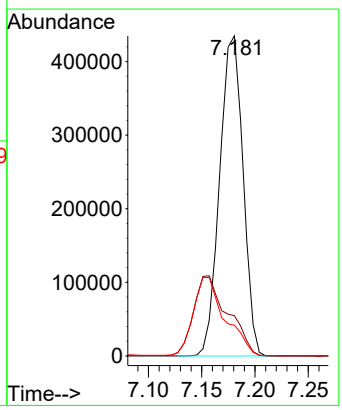


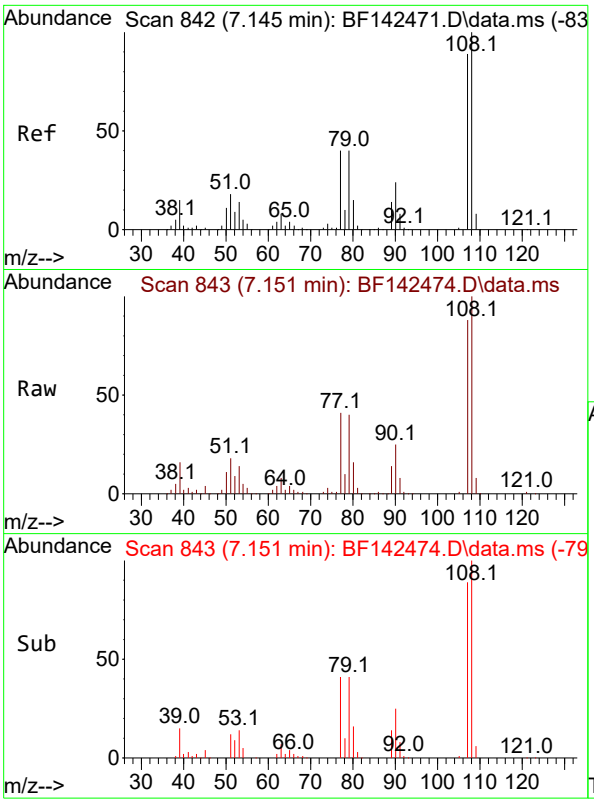


#16
2,2'-oxybis(1-Chloropropane)
Concen: 73.497 ng
RT: 7.181 min Scan# 848
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 45 Resp: 663576

Ion	Ratio	Lower	Upper
45	100		
77	12.6	0.0	32.0
79	9.6	0.0	29.2



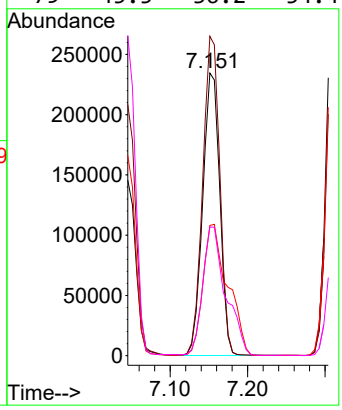


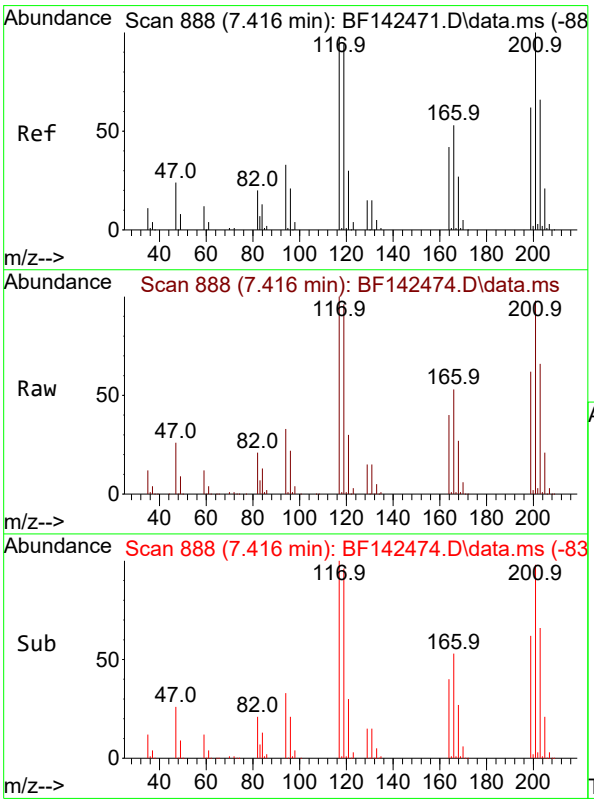
#17
2-Methylphenol
Concen: 76.467 ng
RT: 7.151 min Scan# 84
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:107 Resp: 358569

Ion	Ratio	Lower	Upper
107	100		
108	113.0	90.2	135.2
77	46.1	36.1	54.1
79	45.5	36.2	54.4

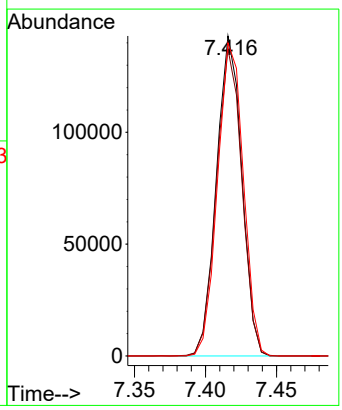


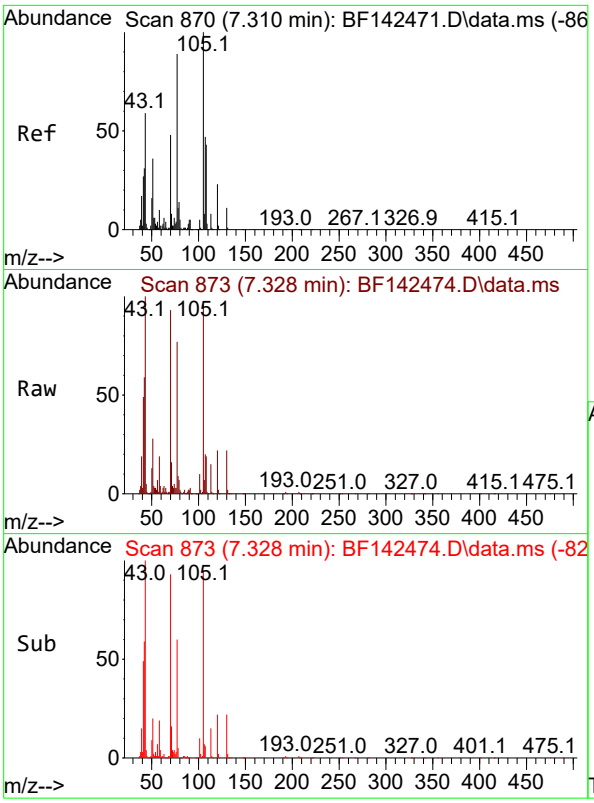


#18
Hexachloroethane
Concen: 75.267 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:117 Resp: 177426

Ion	Ratio	Lower	Upper
117	100		
119	96.0	76.6	114.8
201	97.9	81.3	121.9



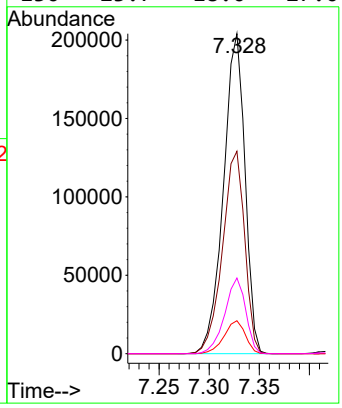


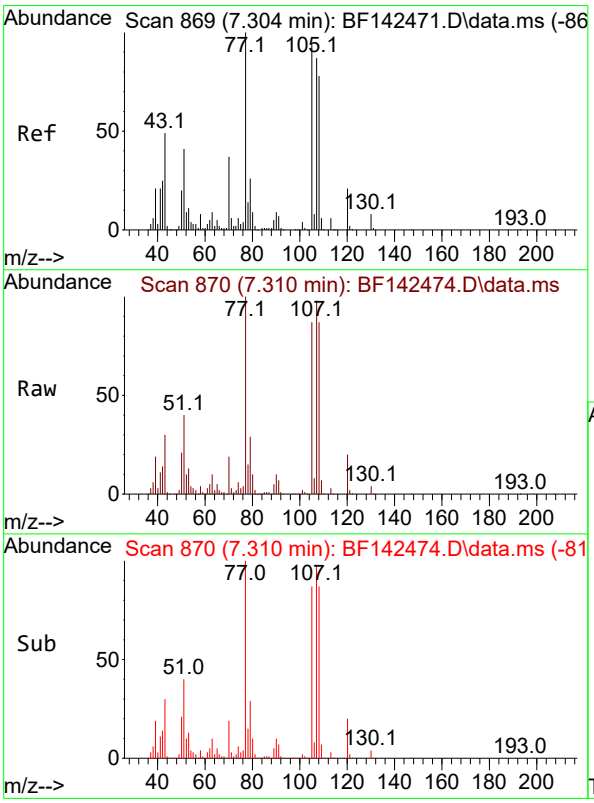
#19
n-Nitroso-di-n-propylamine
Concen: 73.987 ng
RT: 7.328 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 70 Resp: 304362

Ion	Ratio	Lower	Upper
70	100		
42	63.3	52.4	78.6
101	10.3	7.8	11.8
130	23.7	18.0	27.0

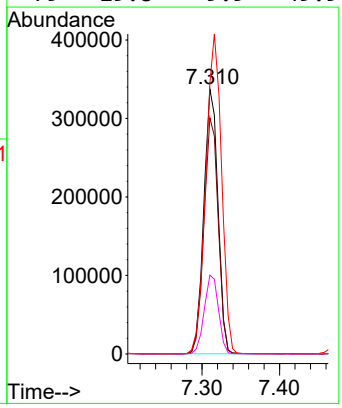


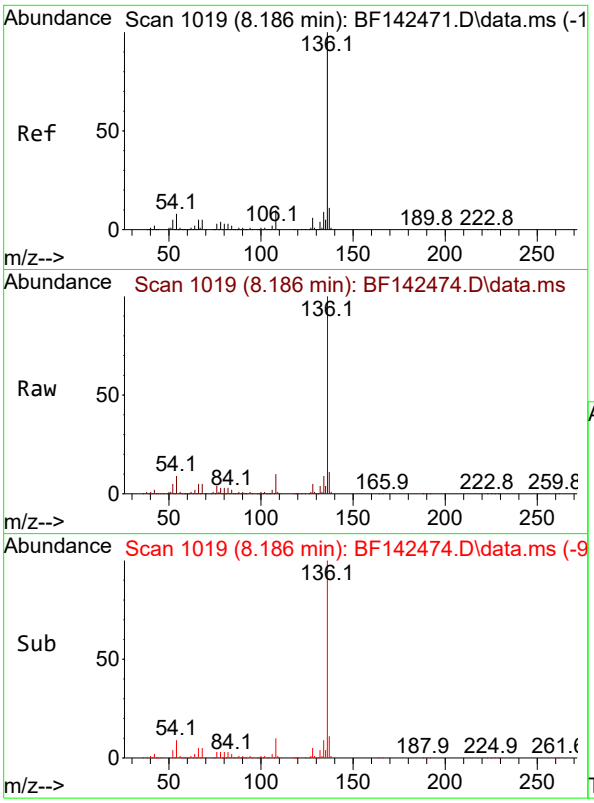


#20
3+4-Methylphenols
Concen: 71.097 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:107 Resp: 426933

Ion	Ratio	Lower	Upper
107	100		
108	89.2	70.4	110.4
77	102.1	95.4	135.4
79	29.8	9.9	49.9



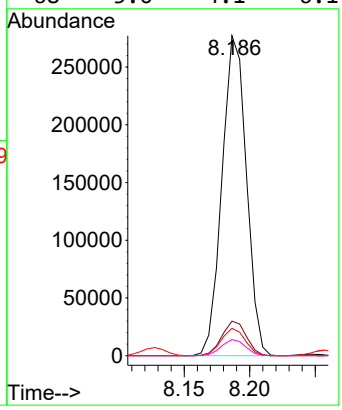


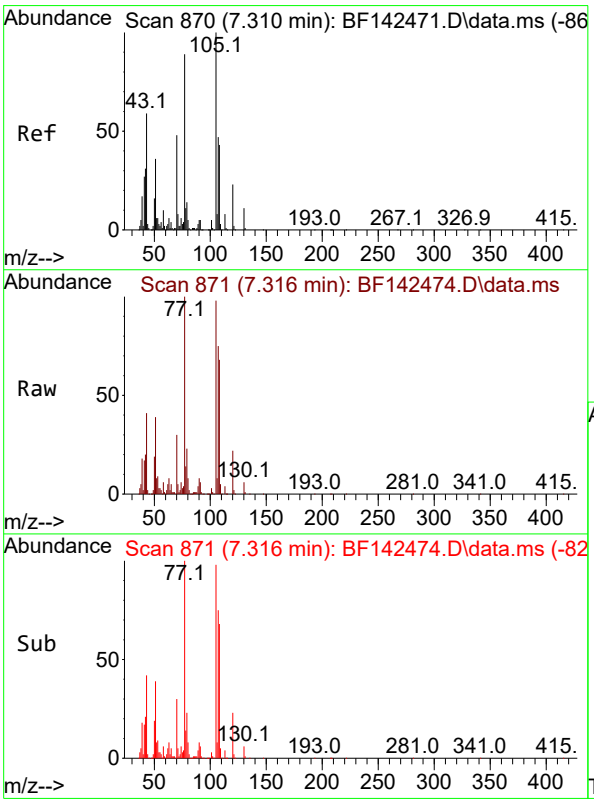
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:136 Resp: 358380

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.6	13.0
54	8.5	6.6	10.0
68	5.0	4.1	6.1

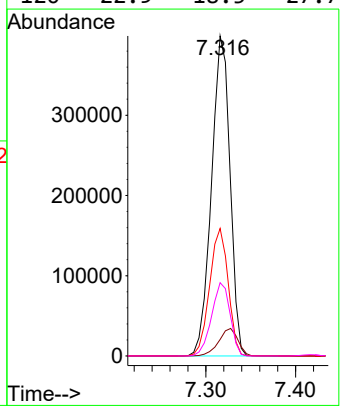


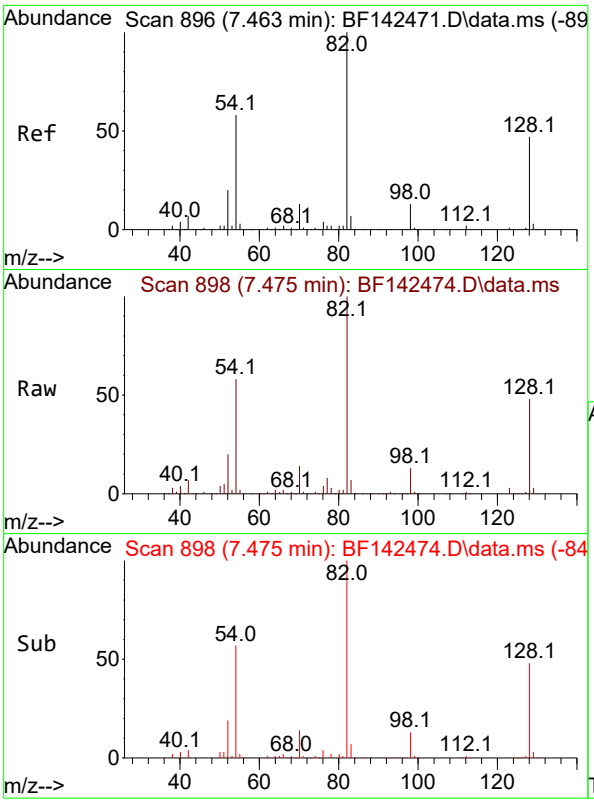


#22
Acetophenone
Concen: 72.072 ng
RT: 7.316 min Scan# 871
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:105 Resp: 571777

Ion	Ratio	Lower	Upper
105	100		
71	5.2	6.4	9.6#
51	39.9	28.6	42.8
120	22.9	18.5	27.7



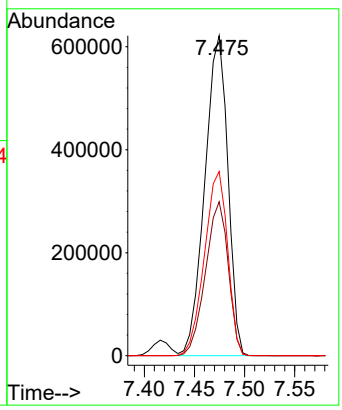


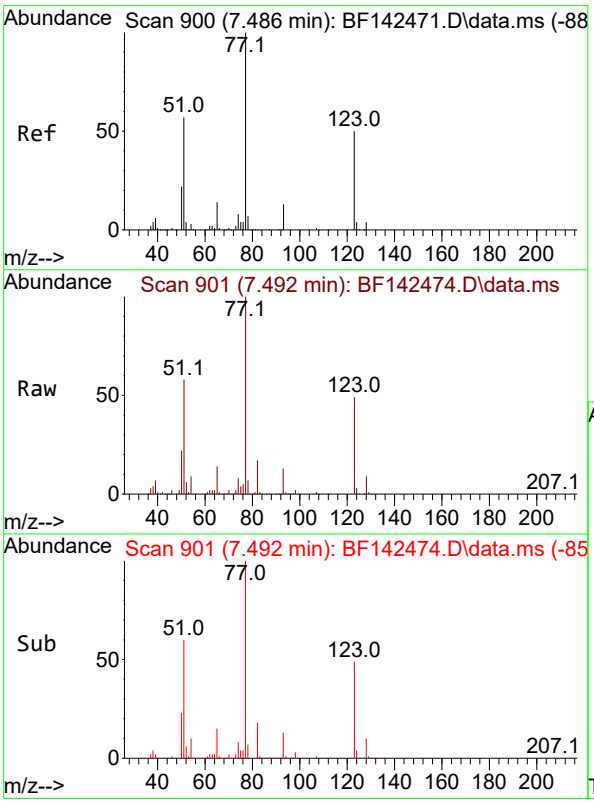
#23
Nitrobenzene-d5
Concen: 151.205 ng
RT: 7.475 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 82 Resp: 993768

Ion	Ratio	Lower	Upper
82	100		
128	48.1	37.4	56.2
54	57.5	46.6	70.0

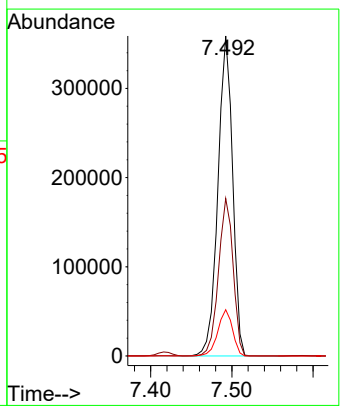


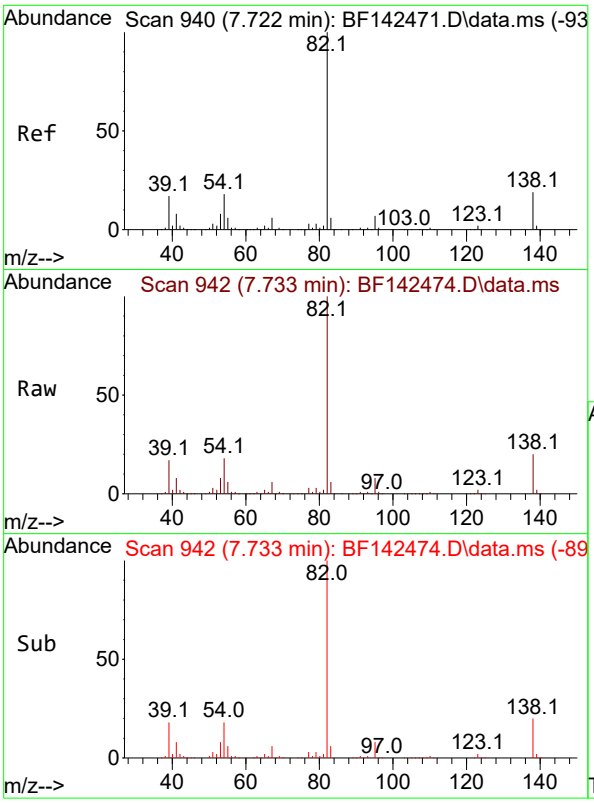


#24
Nitrobenzene
Concen: 76.309 ng
RT: 7.492 min Scan# 901
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 77 Resp: 452330

Ion	Ratio	Lower	Upper
77	100		
123	49.2	40.6	61.0
65	14.5	11.4	17.2



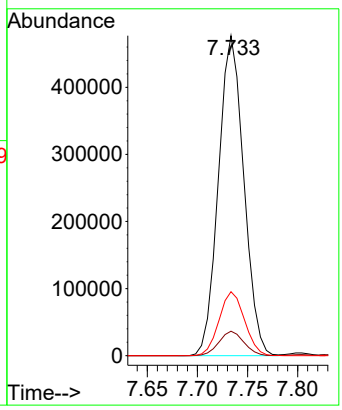


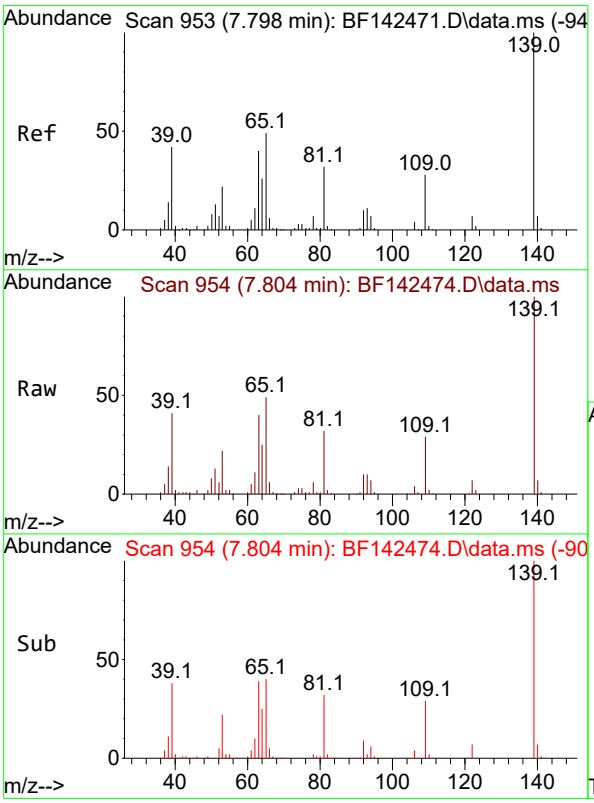
#25
Isophorone
Concen: 76.321 ng
RT: 7.733 min Scan# 94
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 82 Resp: 838652

Ion	Ratio	Lower	Upper
82	100		
95	7.7	6.0	9.0
138	20.0	15.5	23.3

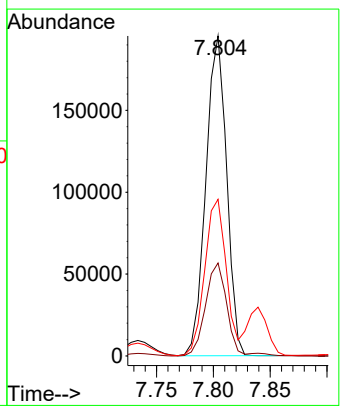


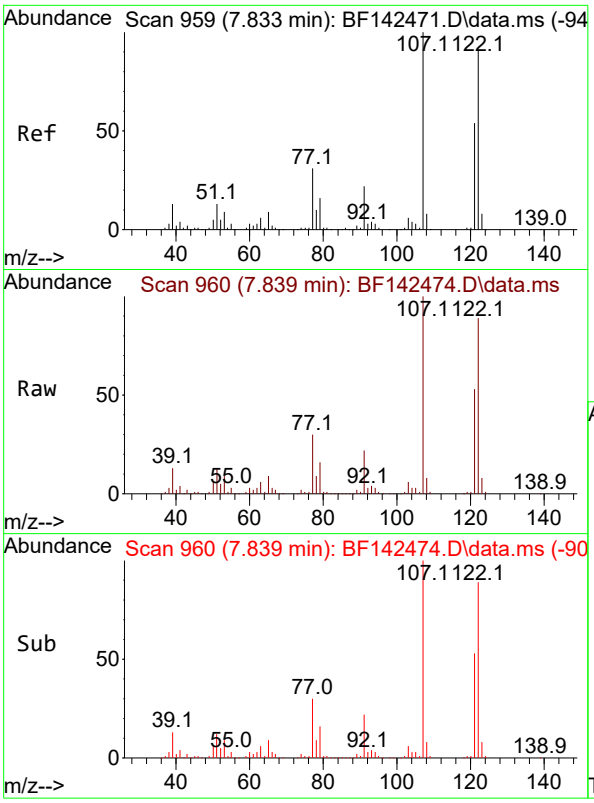


#26
2-Nitrophenol
Concen: 78.434 ng
RT: 7.804 min Scan# 954
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:139 Resp: 248427

Ion	Ratio	Lower	Upper
139	100		
109	29.1	22.6	33.8
65	48.9	39.4	59.0



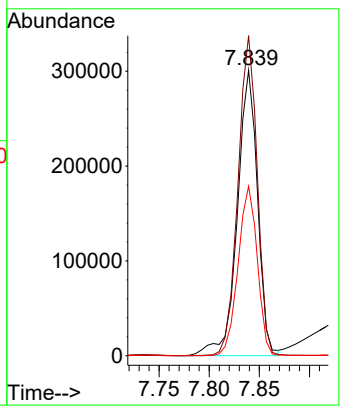


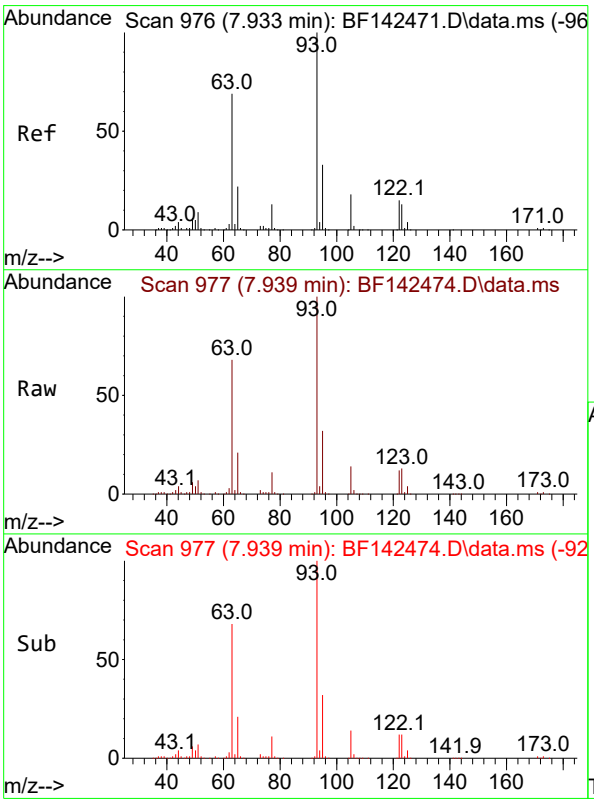
#27
2,4-Dimethylphenol
Concen: 75.623 ng
RT: 7.839 min Scan# 9
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:122 Resp: 422403

Ion	Ratio	Lower	Upper
122	100		
107	112.1	88.1	132.1
121	59.4	47.3	70.9

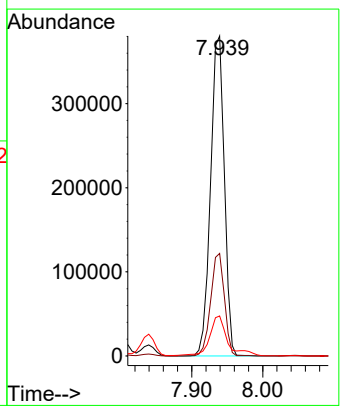


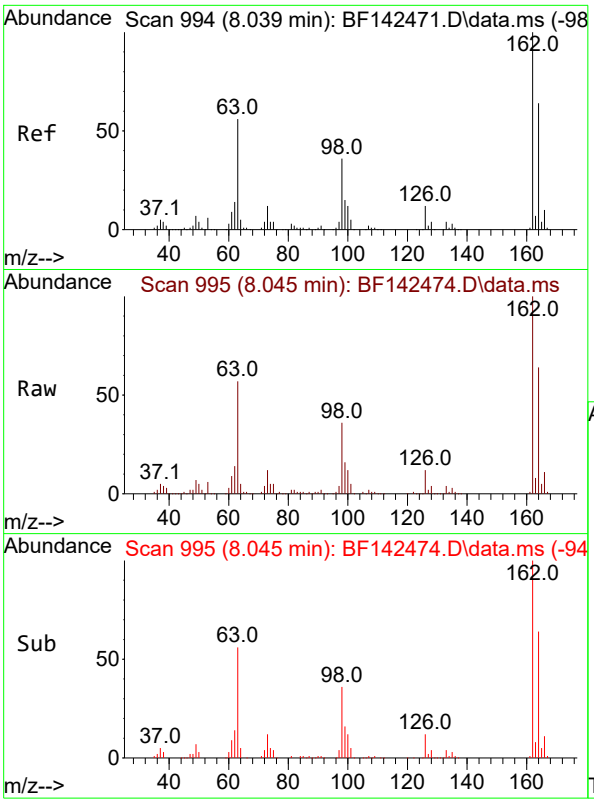


#28
bis(2-Chloroethoxy)methane
Concen: 74.744 ng
RT: 7.939 min Scan# 977
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 93 Resp: 513063

Ion	Ratio	Lower	Upper
93	100		
95	32.1	26.4	39.6
123	12.5	10.6	15.8



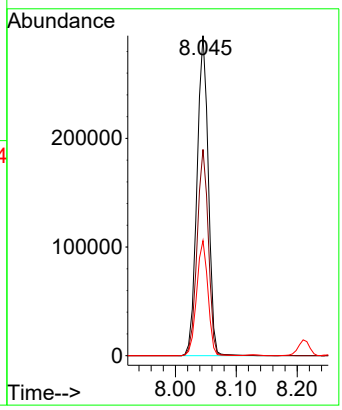


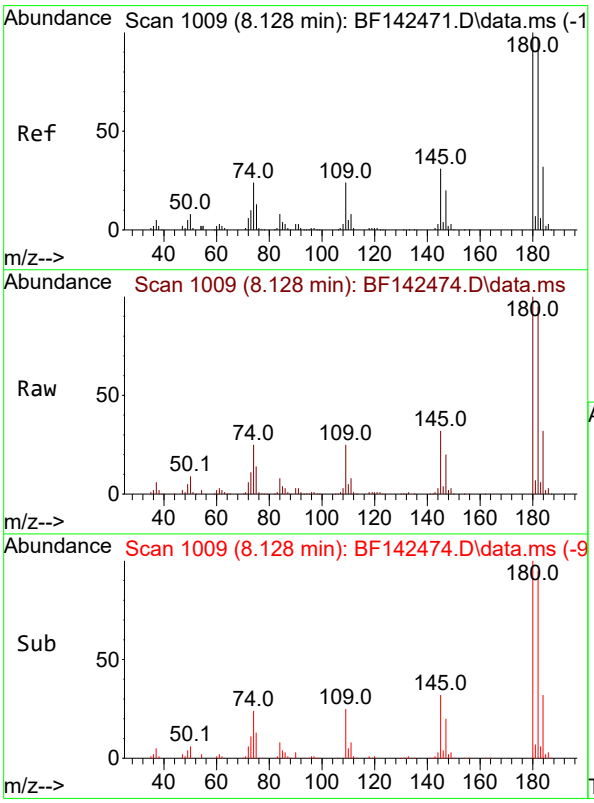
#29
2,4-Dichlorophenol
Concen: 75.121 ng
RT: 8.045 min Scan# 9
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:162 Resp: 381590

Ion	Ratio	Lower	Upper
162	100		
164	64.4	43.7	83.7
98	36.0	15.5	55.5

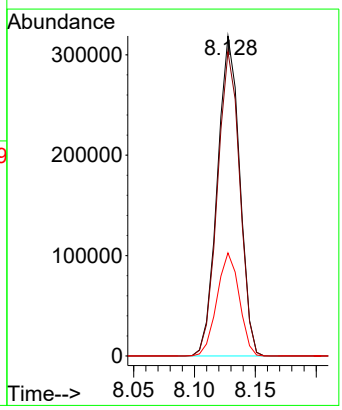


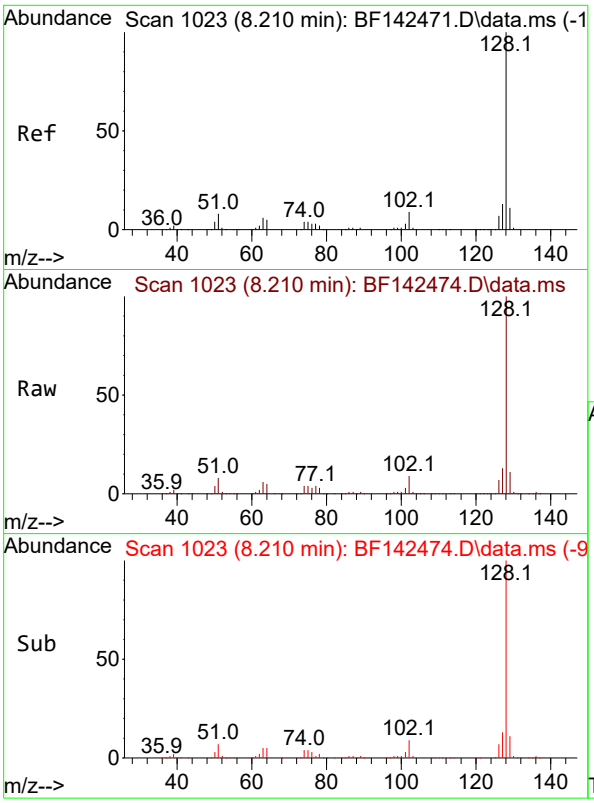


#30
1,2,4-Trichlorobenzene
Concen: 73.801 ng
RT: 8.128 min Scan# 1009
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:180 Resp: 406857

Ion	Ratio	Lower	Upper
180	100		
182	95.1	78.0	117.0
145	32.2	25.0	37.6



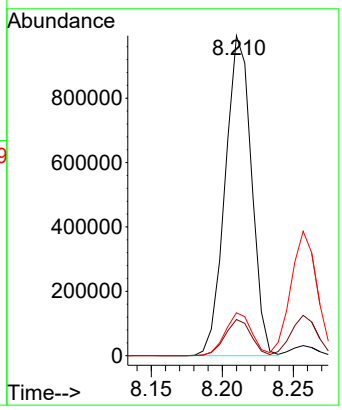


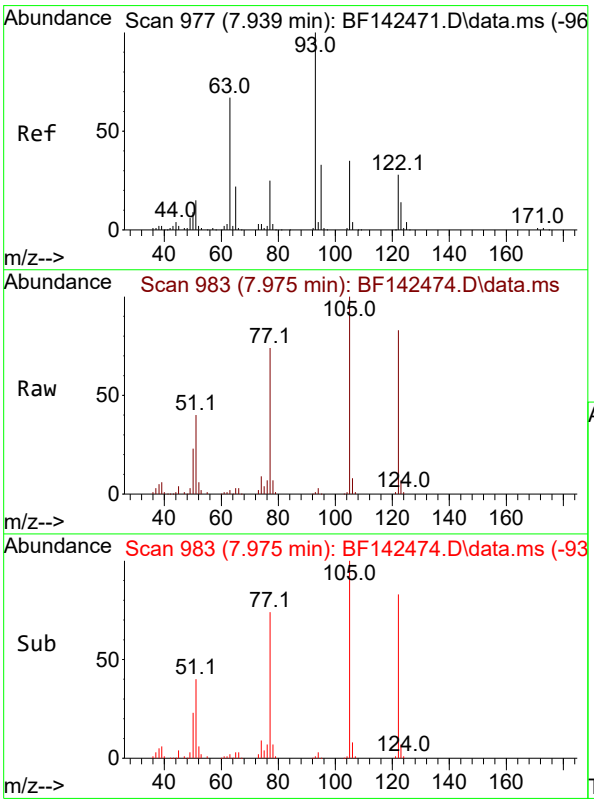
#31
Naphthalene
Concen: 72.369 ng
RT: 8.210 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:128 Resp: 1277048

Ion	Ratio	Lower	Upper
128	100		
129	11.3	8.9	13.3
127	13.4	10.5	15.7

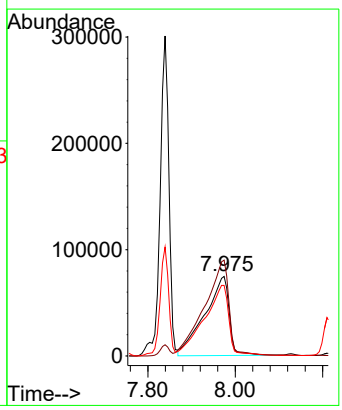


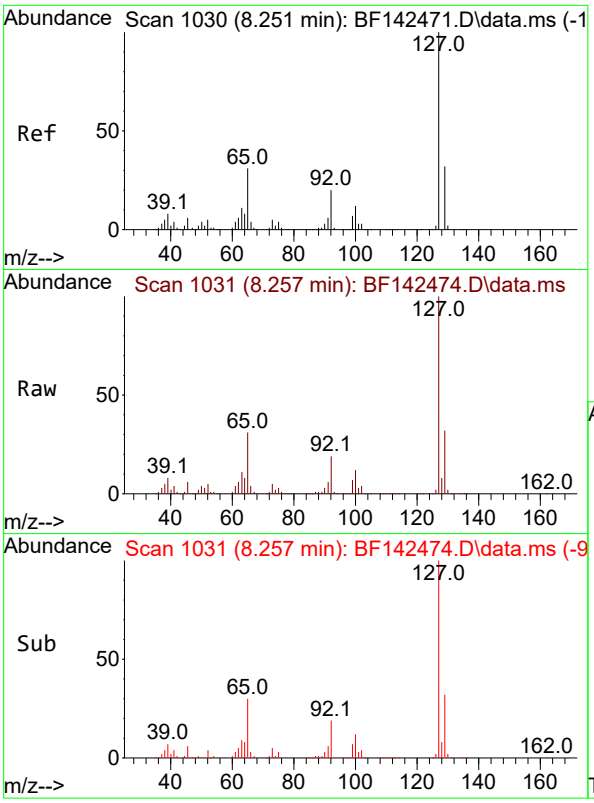


#32
Benzoic acid
Concen: 84.918 ng
RT: 7.975 min Scan# 983
Delta R.T. -0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:122 Resp: 288731

Ion	Ratio	Lower	Upper
122	100		
105	120.5	101.7	141.7
77	88.6	69.5	109.5



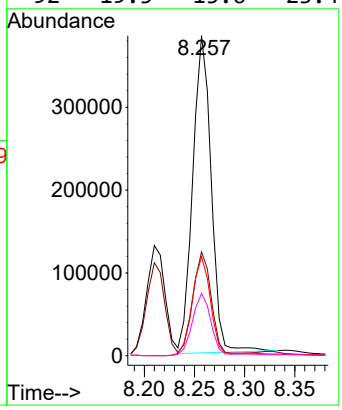


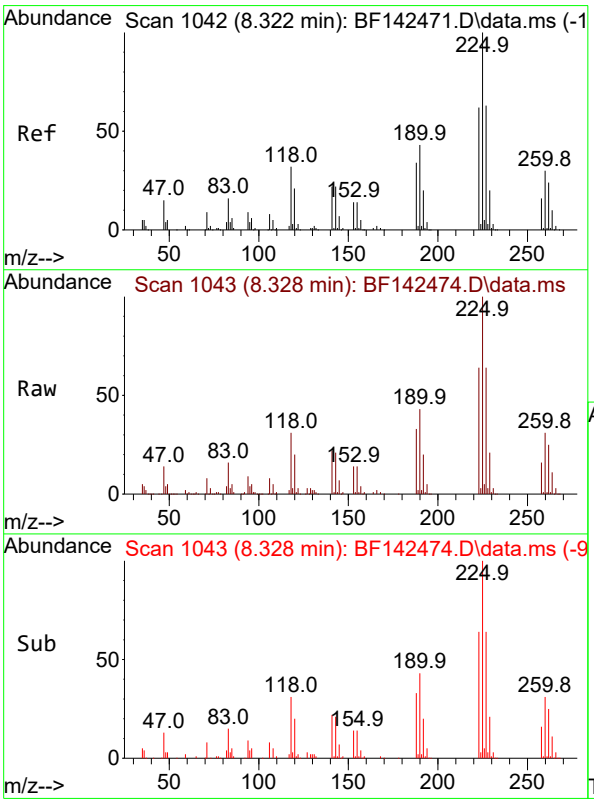
#33
4-Chloroaniline
Concen: 68.830 ng
RT: 8.257 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:127 Resp: 492168

Ion	Ratio	Lower	Upper
127	100		
129	32.5	26.1	39.1
65	30.9	24.9	37.3
92	19.5	15.6	23.4

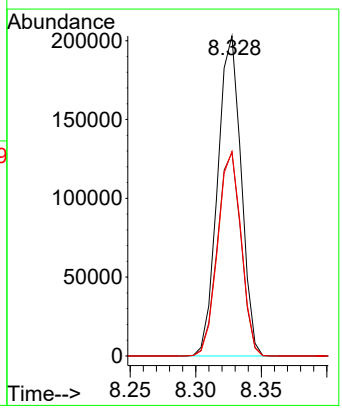


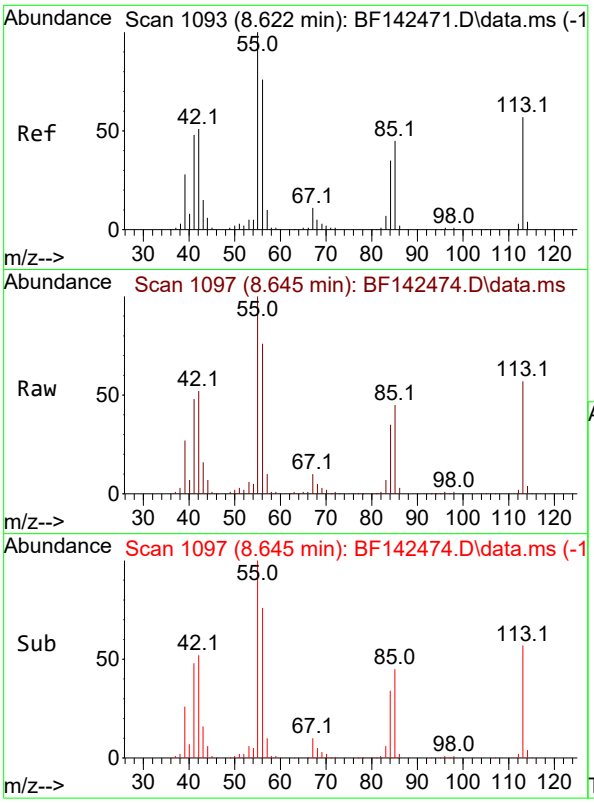


#34
Hexachlorobutadiene
Concen: 73.338 ng
RT: 8.328 min Scan# 1043
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:225 Resp: 252445

Ion	Ratio	Lower	Upper
225	100		
223	63.6	49.7	74.5
227	63.9	50.3	75.5



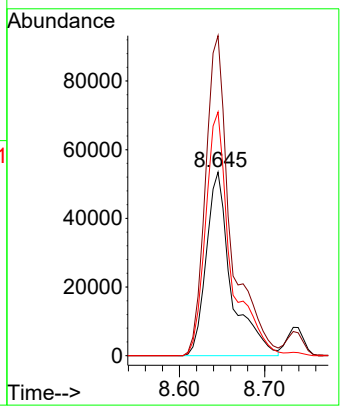


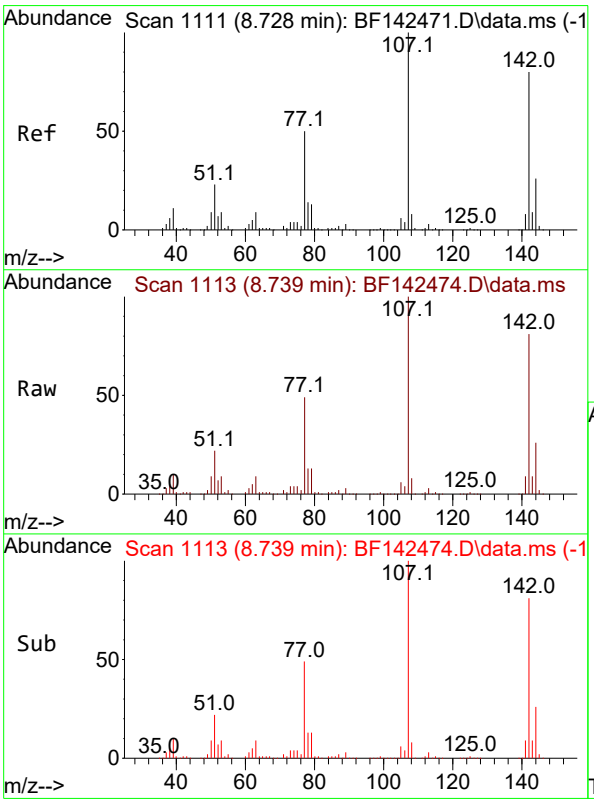
#35
Caprolactam
Concen: 76.565 ng
RT: 8.645 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:113 Resp: 109232

Ion	Ratio	Lower	Upper
113	100		
55	174.4	154.7	194.7
56	132.8	113.2	153.2

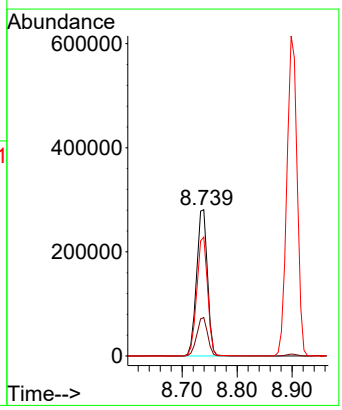


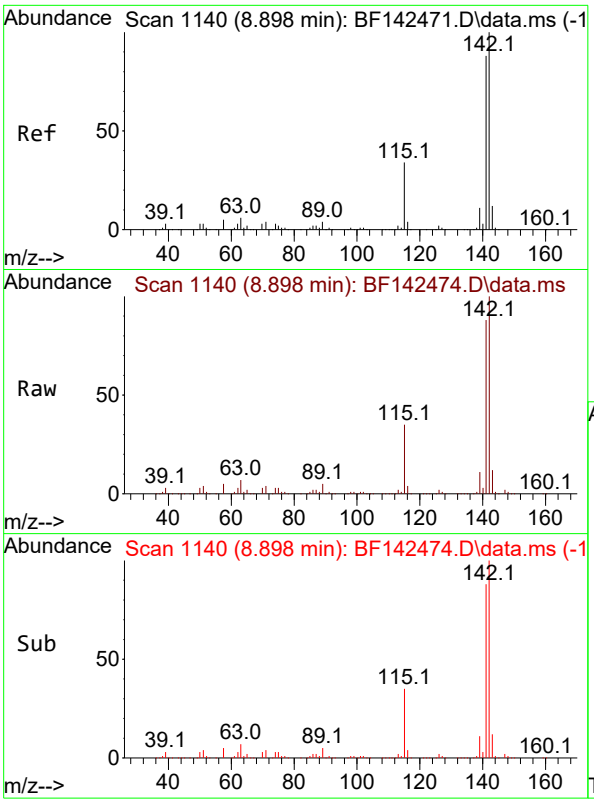


#36
4-Chloro-3-methylphenol
Concen: 74.674 ng
RT: 8.739 min Scan# 1113
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:107 Resp: 388740

Ion	Ratio	Lower	Upper
107	100		
144	26.3	20.9	31.3
142	81.3	64.2	96.2



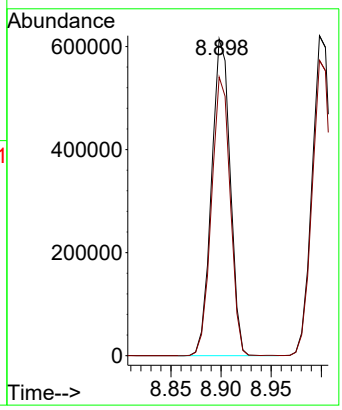


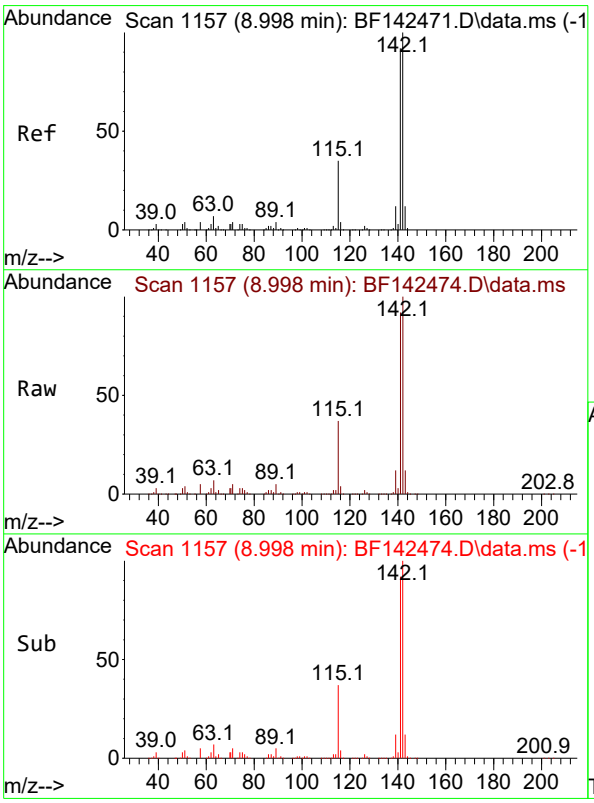
#37
2-Methylnaphthalene
Concen: 71.742 ng
RT: 8.898 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:142 Resp: 796463

Ion	Ratio	Lower	Upper
142	100		
141	88.0	70.7	106.1

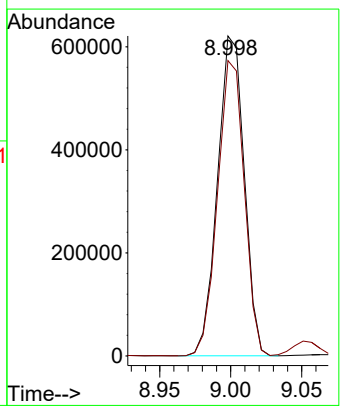


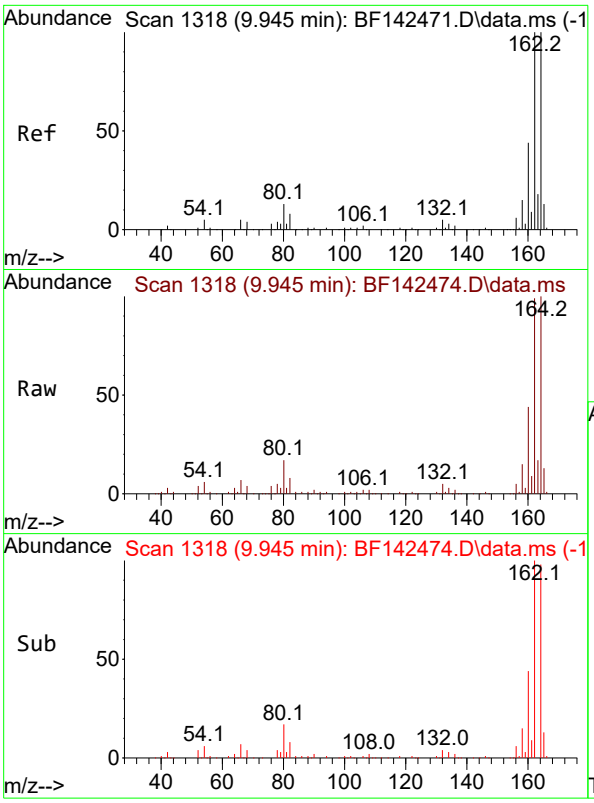


#38
1-Methylnaphthalene
Concen: 70.689 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:142 Resp: 811747

Ion	Ratio	Lower	Upper
142	100		
141	92.3	73.4	110.2



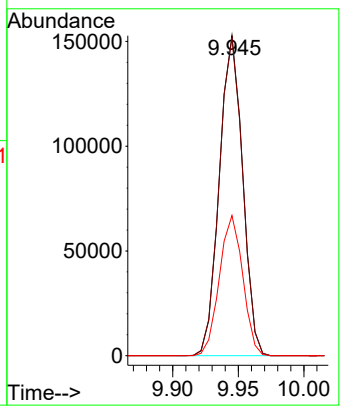


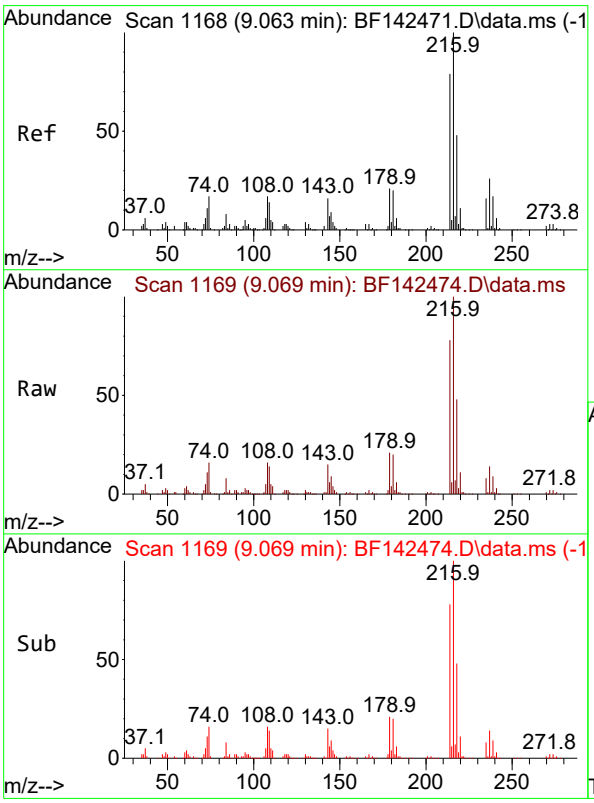
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.945 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:164 Resp: 188198

Ion	Ratio	Lower	Upper
164	100		
162	99.4	80.2	120.4
160	43.8	35.6	53.4

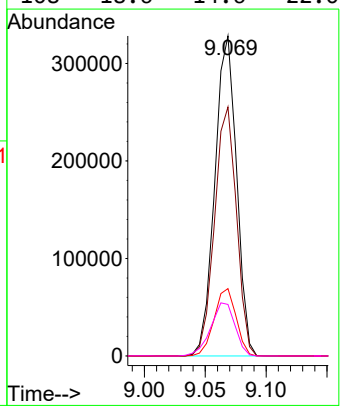


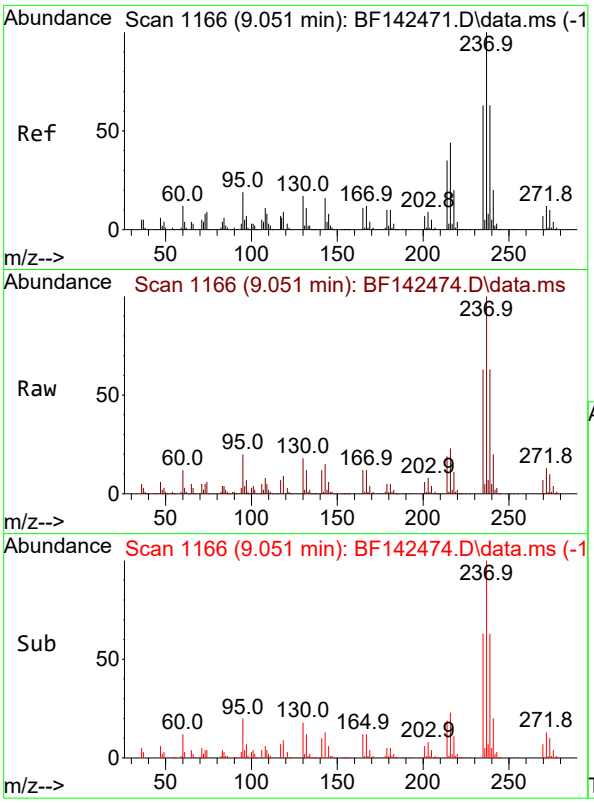


#40
1,2,4,5-Tetrachlorobenzene
Concen: 75.740 ng
RT: 9.069 min Scan# 1169
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:216 Resp: 409177

Ion	Ratio	Lower	Upper
216	100		
214	78.2	62.9	94.3
179	21.3	16.9	25.3
108	18.6	14.6	22.0



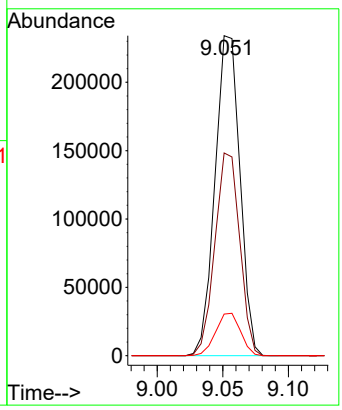


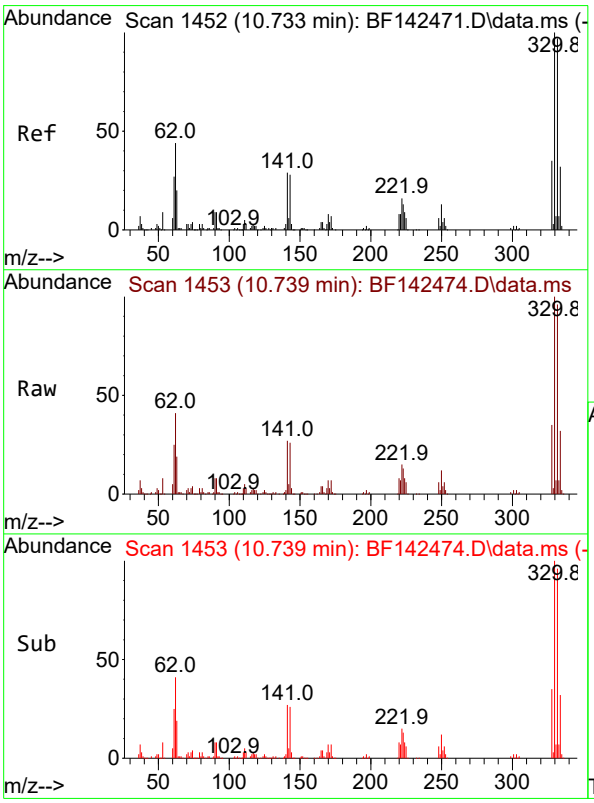
#41
Hexachlorocyclopentadiene
Concen: 84.936 ng
RT: 9.051 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:237 Resp: 309537

Ion	Ratio	Lower	Upper
237	100		
235	63.4	43.3	83.3
272	13.0	0.0	32.4

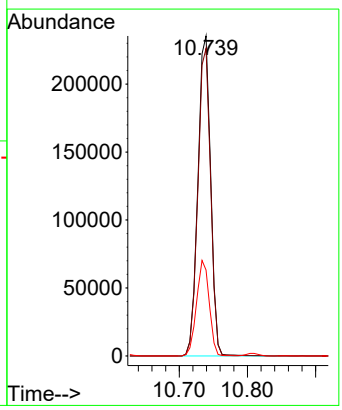


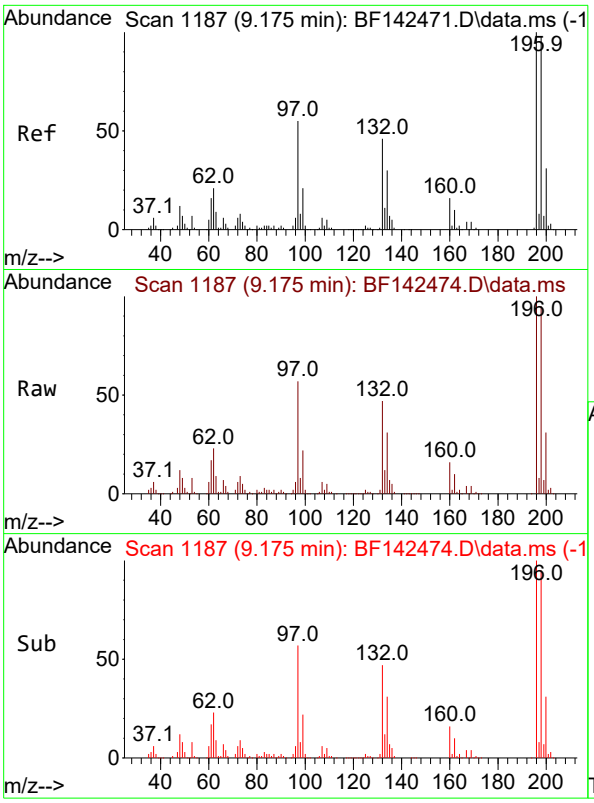


#42
2,4,6-Tribromophenol
Concen: 145.927 ng
RT: 10.739 min Scan# 1453
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:330 Resp: 304807

Ion	Ratio	Lower	Upper
330	100		
332	96.0	77.6	116.4
141	29.7	24.6	36.8



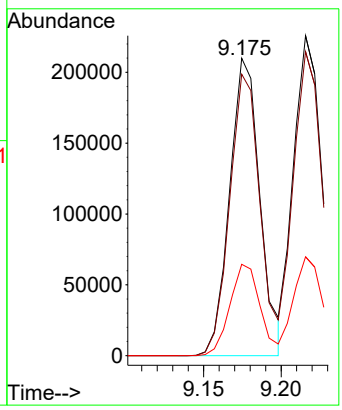


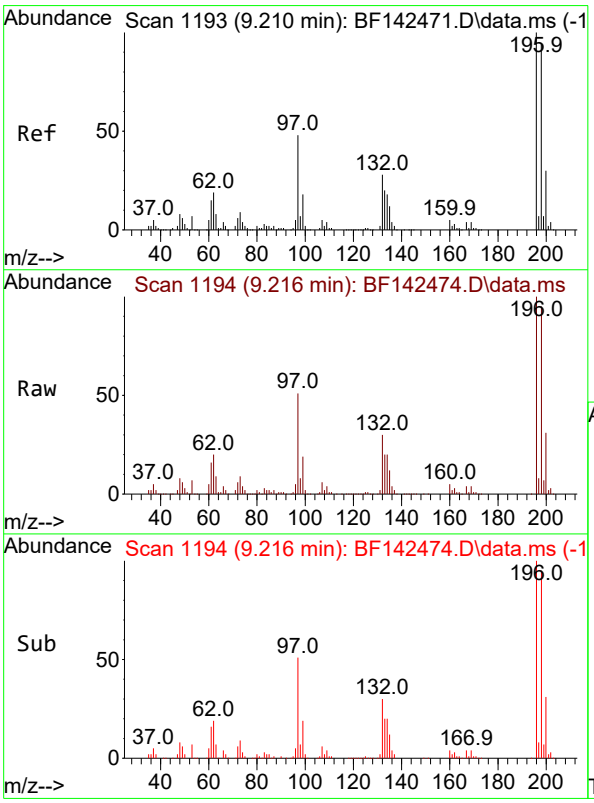
#43
2,4,6-Trichlorophenol
Concen: 78.254 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:196 Resp: 285072

Ion	Ratio	Lower	Upper
196	100		
198	94.6	78.8	118.2
200	30.7	24.9	37.3

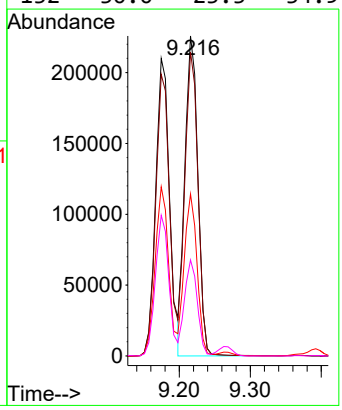


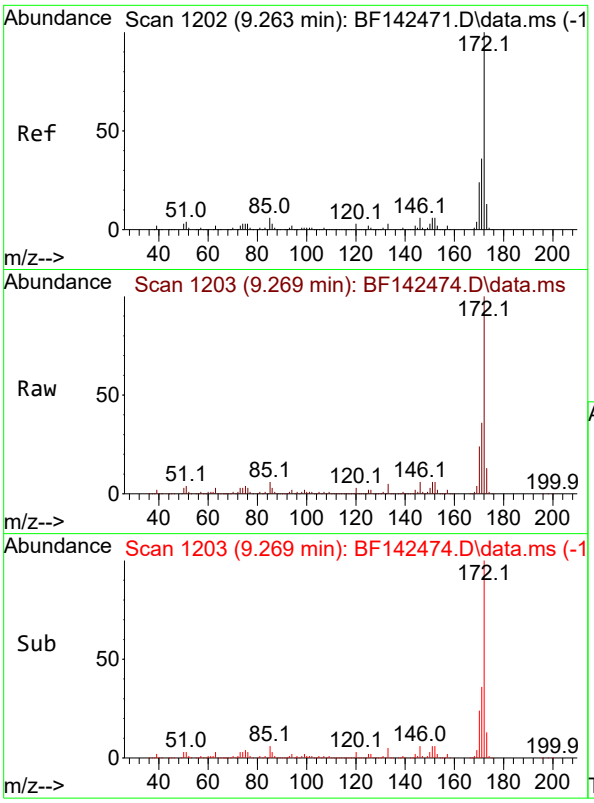


#44
2,4,5-Trichlorophenol
Concen: 74.712 ng
RT: 9.216 min Scan# 1194
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:196 Resp: 287041

Ion	Ratio	Lower	Upper
196	100		
198	95.0	75.5	113.3
97	50.6	39.3	58.9
132	30.0	23.3	34.9



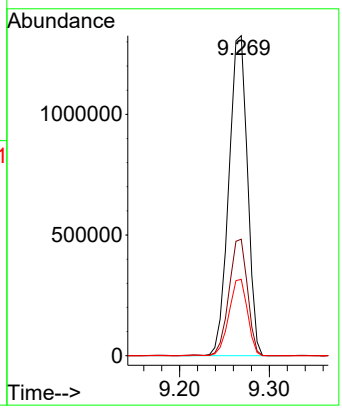


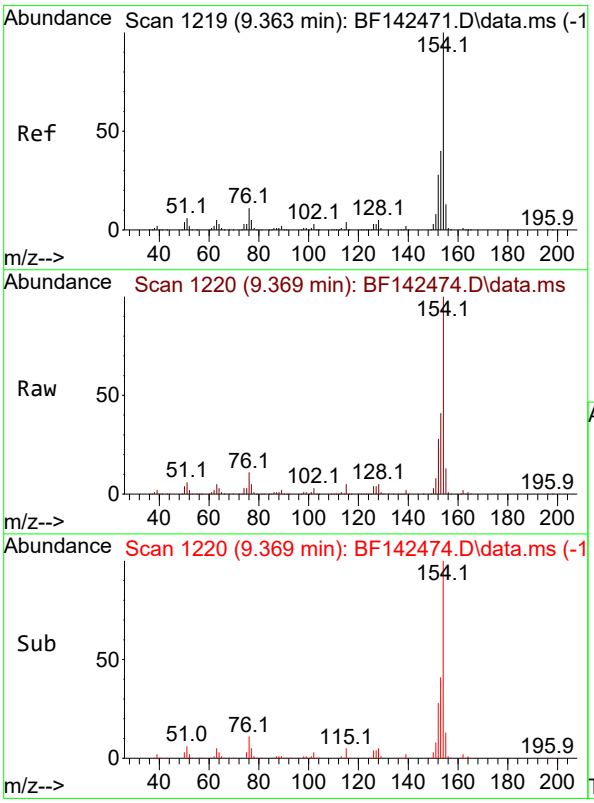
#45
2-Fluorobiphenyl
Concen: 136.080 ng
RT: 9.269 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:172 Resp: 1908541

Ion	Ratio	Lower	Upper
172	100		
171	36.4	28.6	42.8
170	23.9	18.9	28.3

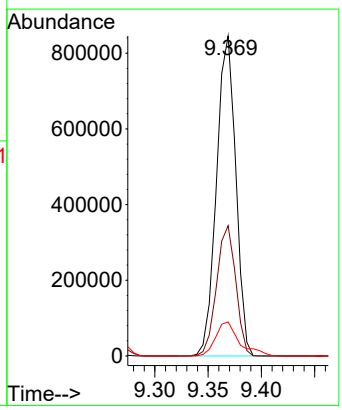


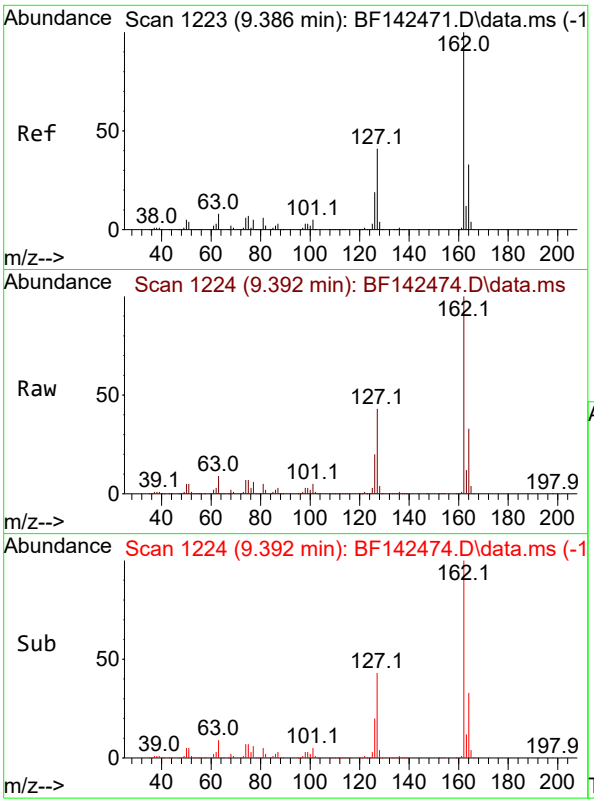


#46
1,1'-Biphenyl
Concen: 72.584 ng
RT: 9.369 min Scan# 1220
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:154 Resp: 1059787

Ion	Ratio	Lower	Upper
154	100		
153	40.7	20.4	60.4
76	10.7	0.0	30.8



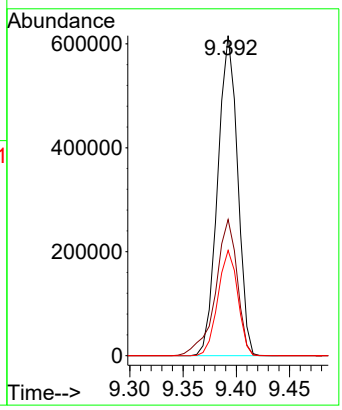


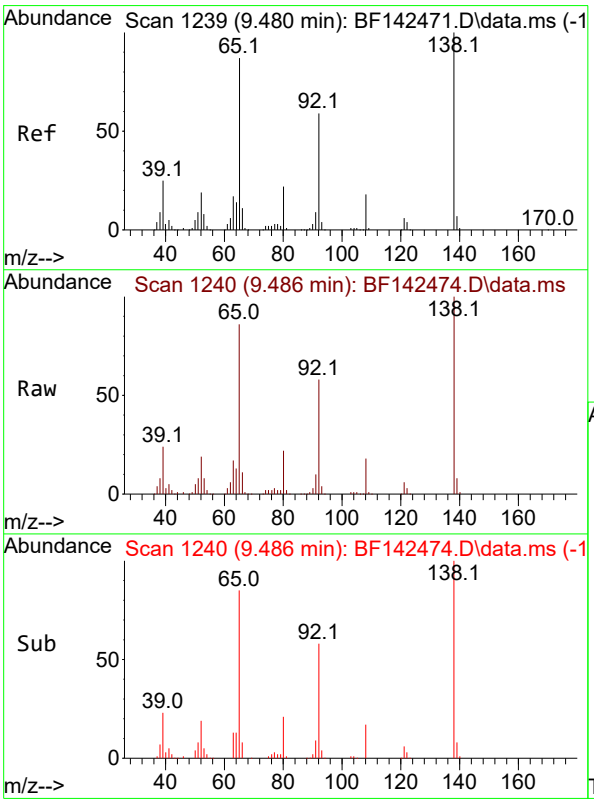
#47
2-Chloronaphthalene
Concen: 74.024 ng
RT: 9.392 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:162 Resp: 798539

Ion	Ratio	Lower	Upper
162	100		
127	42.6	33.5	50.3
164	32.9	26.1	39.1

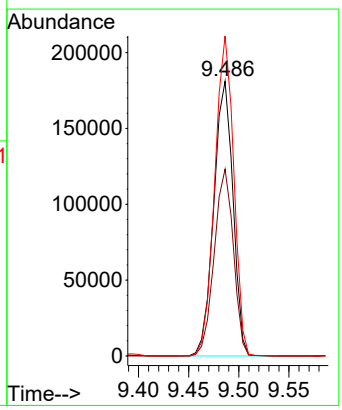


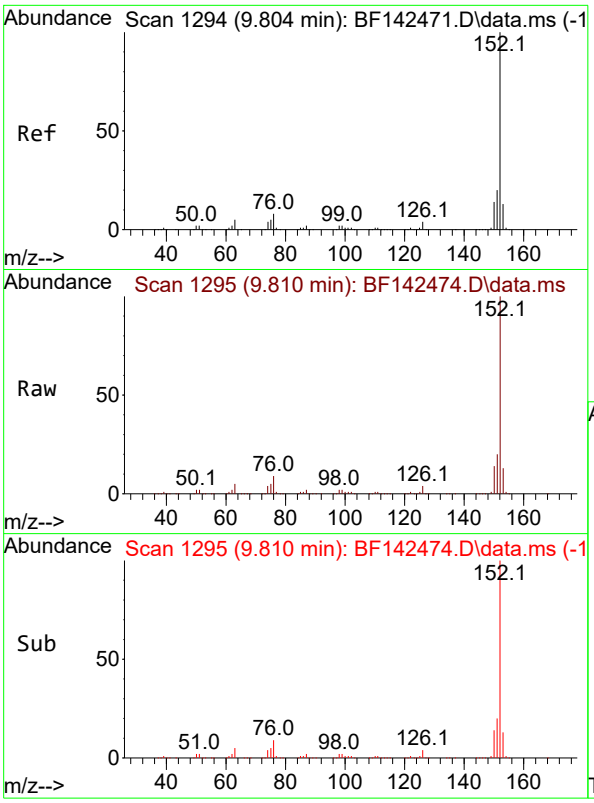


#48
2-Nitroaniline
Concen: 77.343 ng
RT: 9.486 min Scan# 1240
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion: 65 Resp: 241162

Ion	Ratio	Lower	Upper
65	100		
92	68.1	54.4	81.6
138	116.5	91.4	137.2



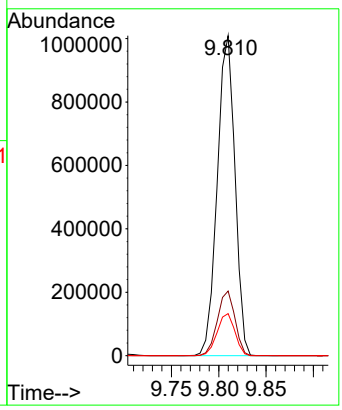


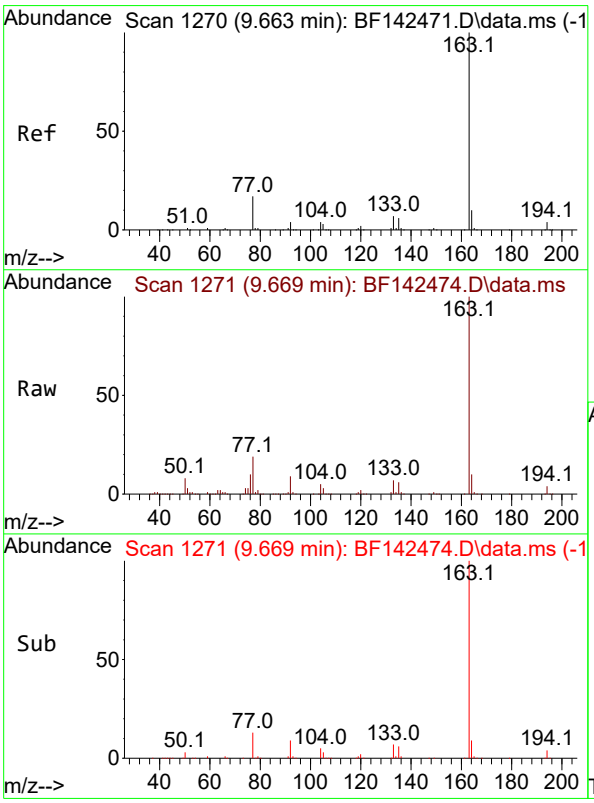
#49
Acenaphthylene
Concen: 72.118 ng
RT: 9.810 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:152 Resp: 1313668

Ion	Ratio	Lower	Upper
152	100		
151	20.2	15.8	23.8
153	13.1	10.6	15.8

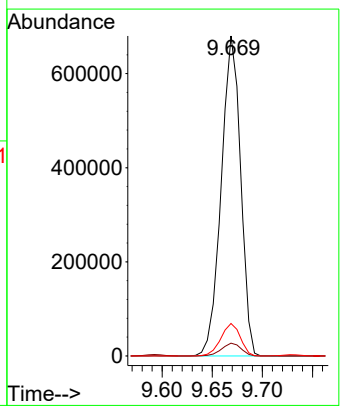


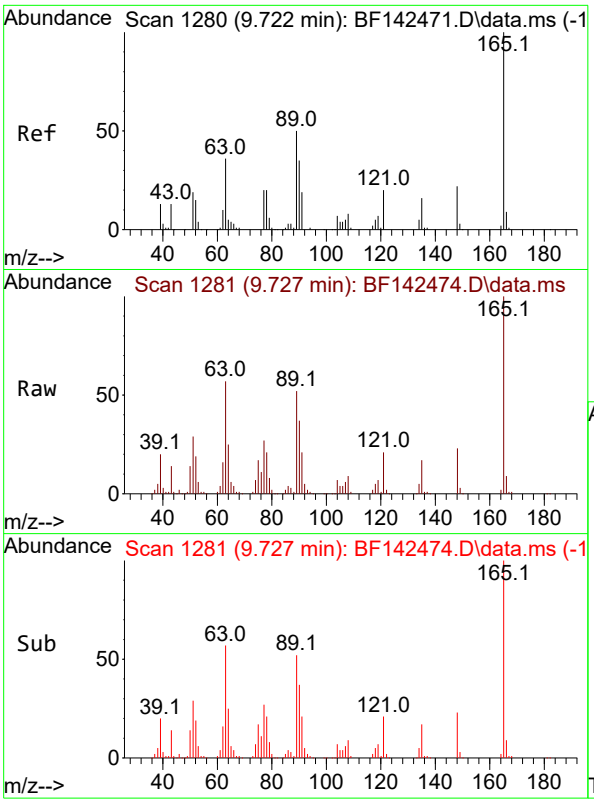


#50
Dimethylphthalate
Concen: 73.405 ng
RT: 9.669 min Scan# 1271
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:163 Resp: 911534

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.3	4.9
164	10.1	8.2	12.4



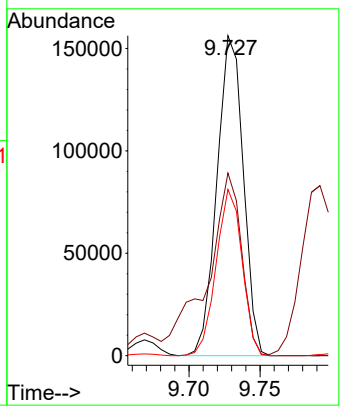


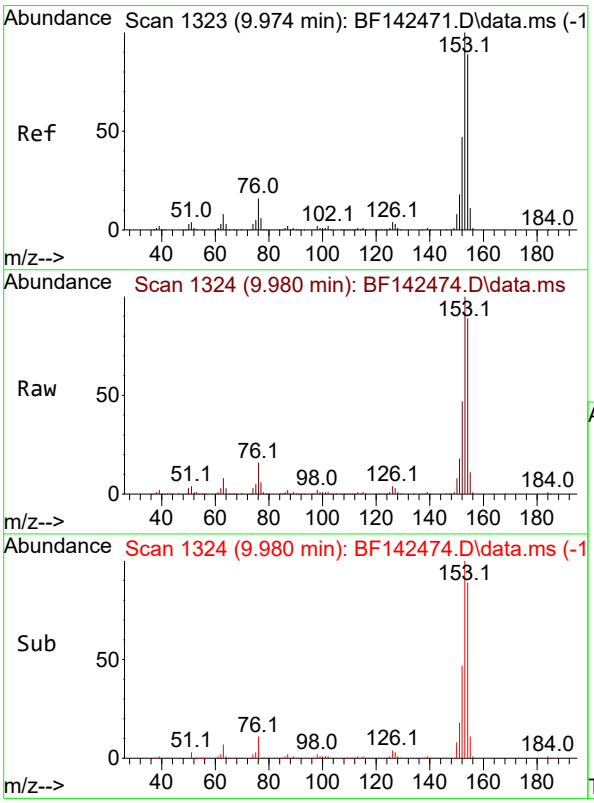
#51
2,6-Dinitrotoluene
Concen: 75.198 ng
RT: 9.727 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:165 Resp: 201545

Ion	Ratio	Lower	Upper
165	100		
63	57.0	42.9	64.3
89	51.9	40.2	60.4

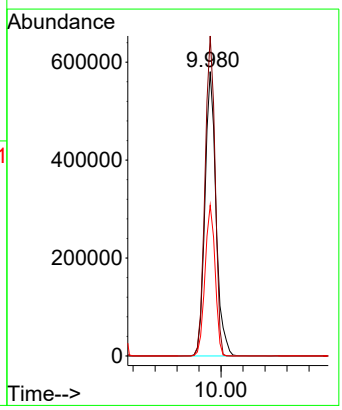


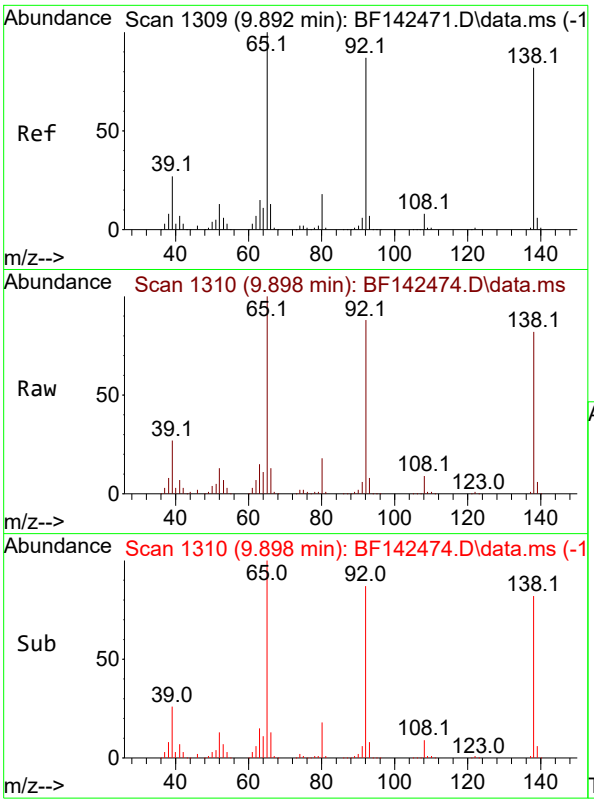


#52
Acenaphthene
Concen: 72.896 ng
RT: 9.980 min Scan# 1324
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:154 Resp: 810811

Ion	Ratio	Lower	Upper
154	100		
153	112.5	90.0	135.0
152	53.0	42.6	64.0



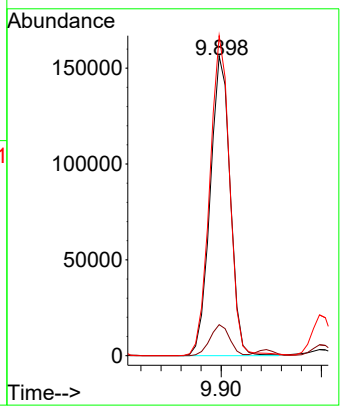


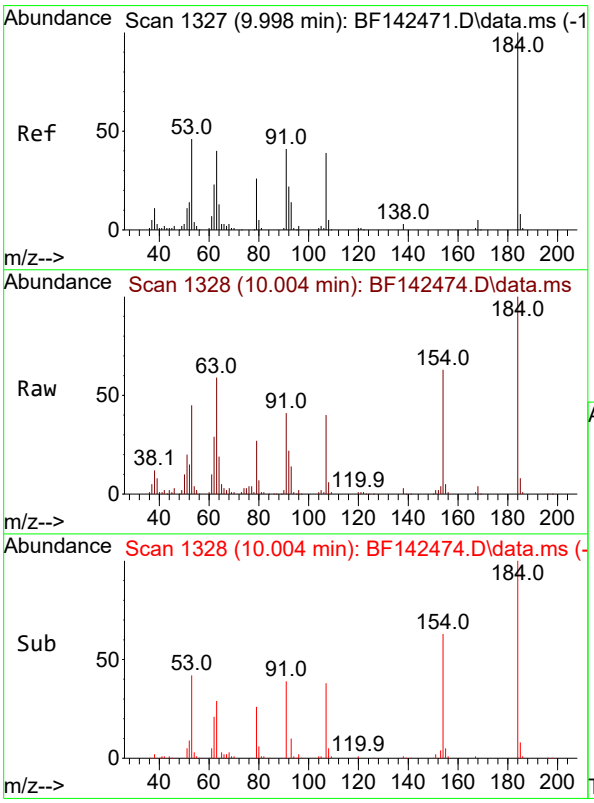
#53
3-Nitroaniline
Concen: 73.930 ng
RT: 9.898 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:138 Resp: 216422

Ion	Ratio	Lower	Upper
138	100		
108	10.4	8.1	12.1
92	106.8	85.2	127.8

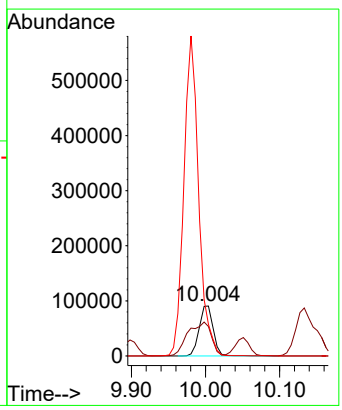


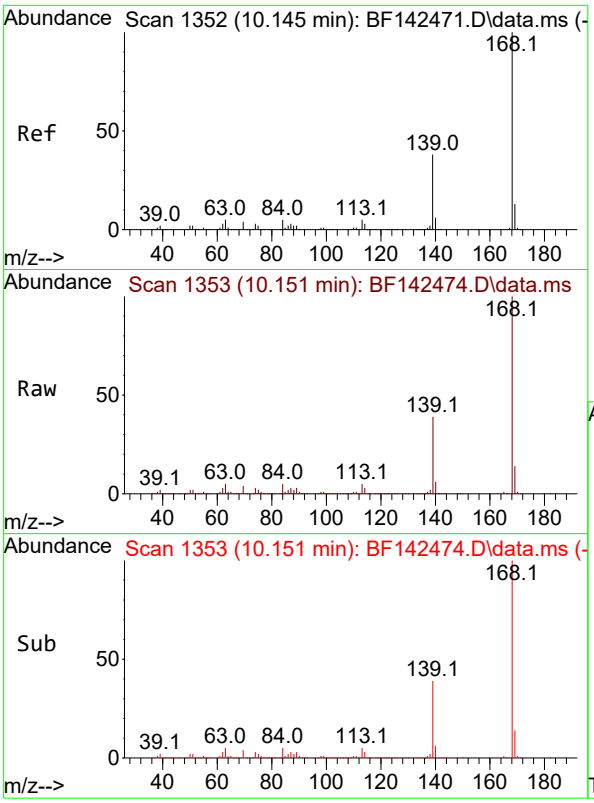


#54
2,4-Dinitrophenol
Concen: 85.999 ng
RT: 10.004 min Scan# 1328
Delta R.T. -0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:184 Resp: 119082

Ion	Ratio	Lower	Upper
184	100		
63	59.2	46.3	69.5
154	63.4	56.8	85.2



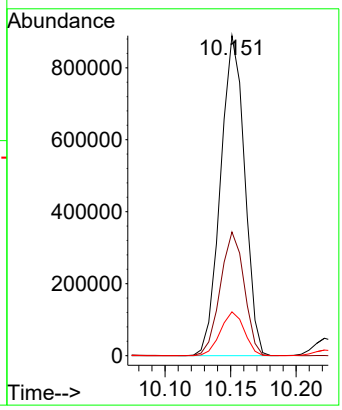


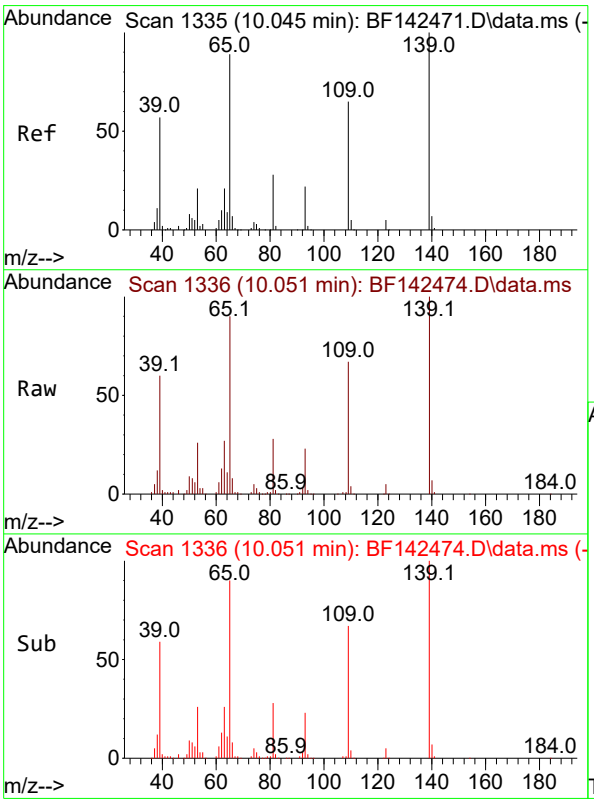
#55
Dibenzofuran
Concen: 70.990 ng
RT: 10.151 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:168 Resp: 1136276

Ion	Ratio	Lower	Upper
168	100		
139	38.6	30.2	45.2
169	13.7	10.7	16.1

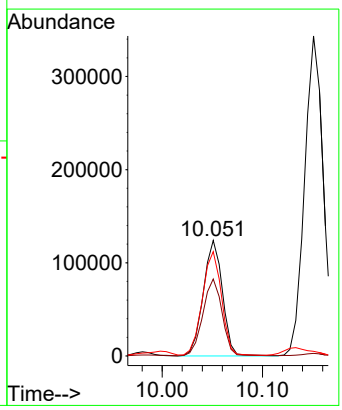


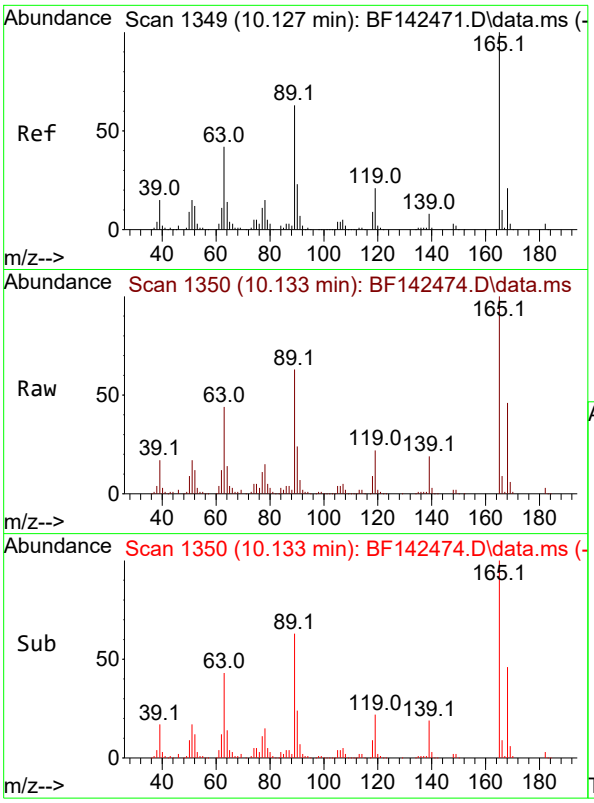


#56
4-Nitrophenol
Concen: 76.638 ng
RT: 10.051 min Scan# 1336
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:139 Resp: 165537

Ion	Ratio	Lower	Upper
139	100		
109	66.7	45.1	85.1
65	90.4	69.7	109.7



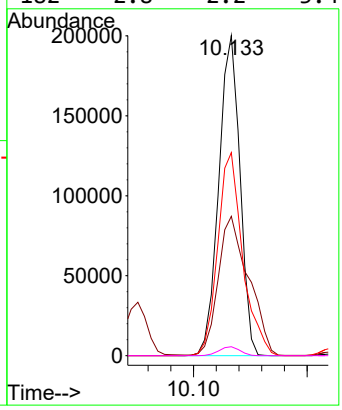


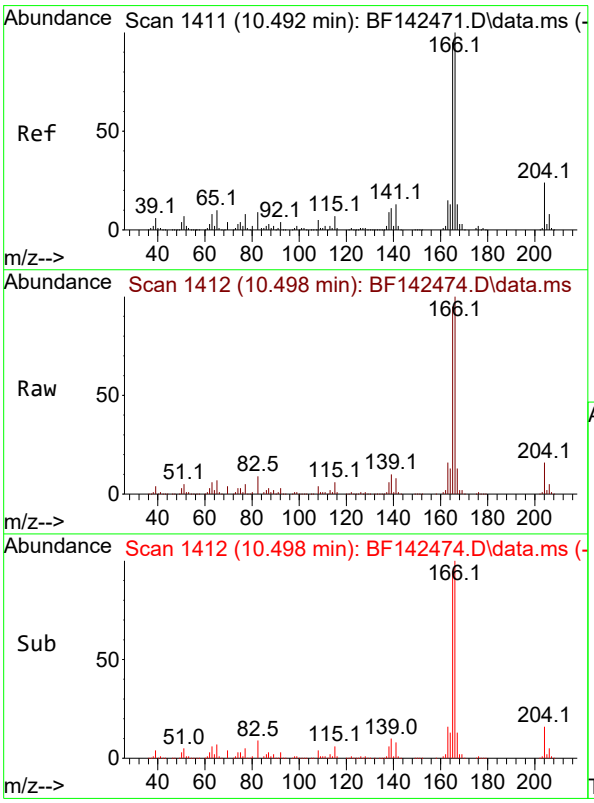
#57
2,4-Dinitrotoluene
Concen: 74.005 ng
RT: 10.133 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:165 Resp: 259035

Ion	Ratio	Lower	Upper
165	100		
63	43.5	33.6	50.4
89	63.5	50.2	75.4
182	2.8	2.2	3.4

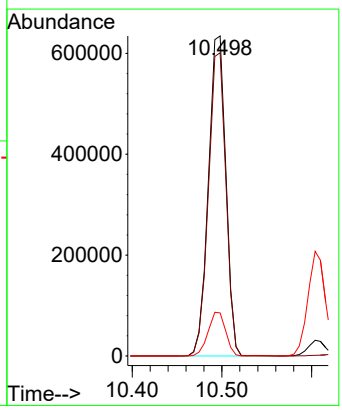


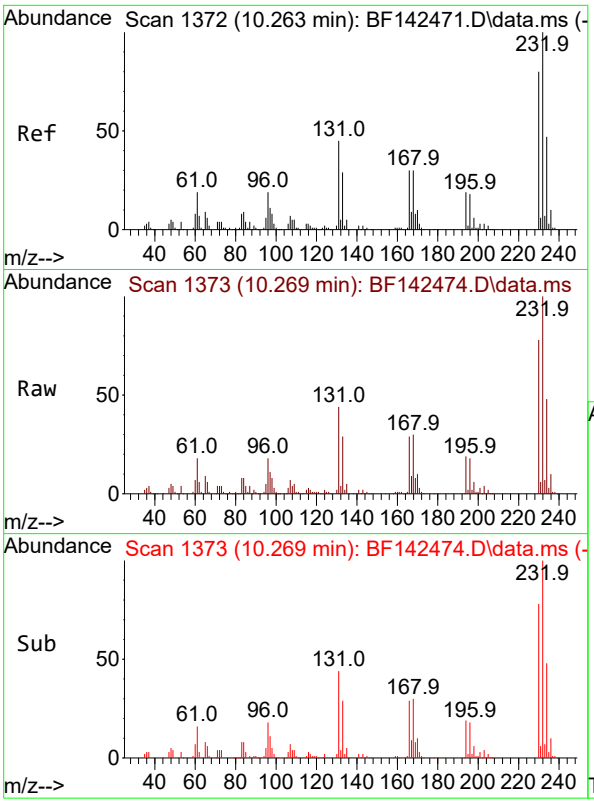


#58
Fluorene
Concen: 69.377 ng
RT: 10.498 min Scan# 1412
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:166 Resp: 857882

Ion	Ratio	Lower	Upper
166	100		
165	94.7	75.8	113.8
167	13.5	10.6	16.0



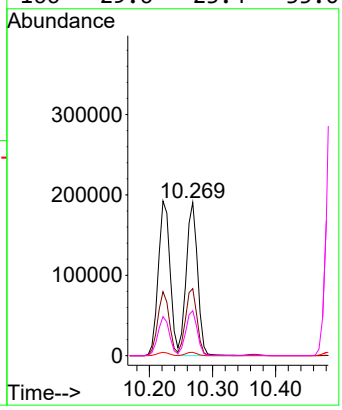


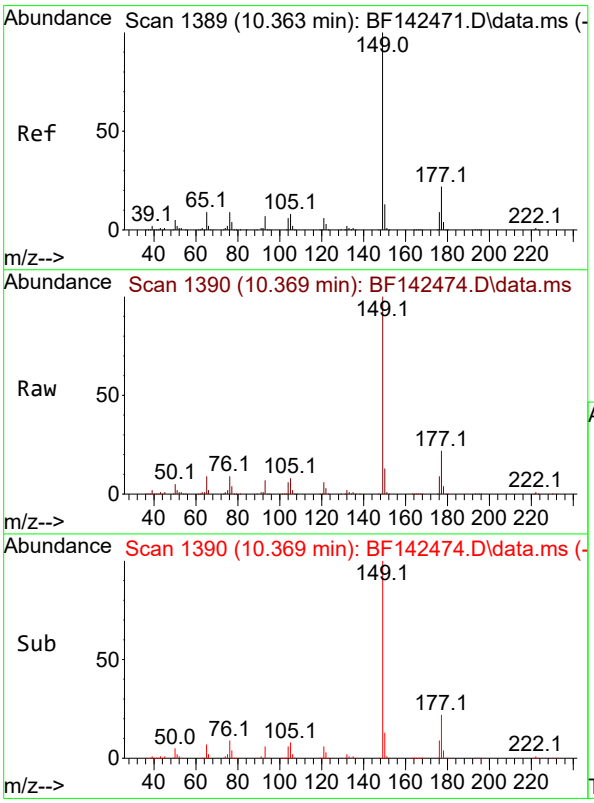
#59
2,3,4,6-Tetrachlorophenol
Concen: 74.324 ng
RT: 10.269 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:232 Resp: 238382

Ion	Ratio	Lower	Upper
232	100		
131	44.6	35.2	52.8
130	2.2	1.7	2.5
166	29.6	23.4	35.0

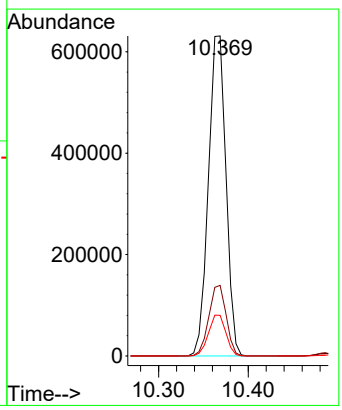


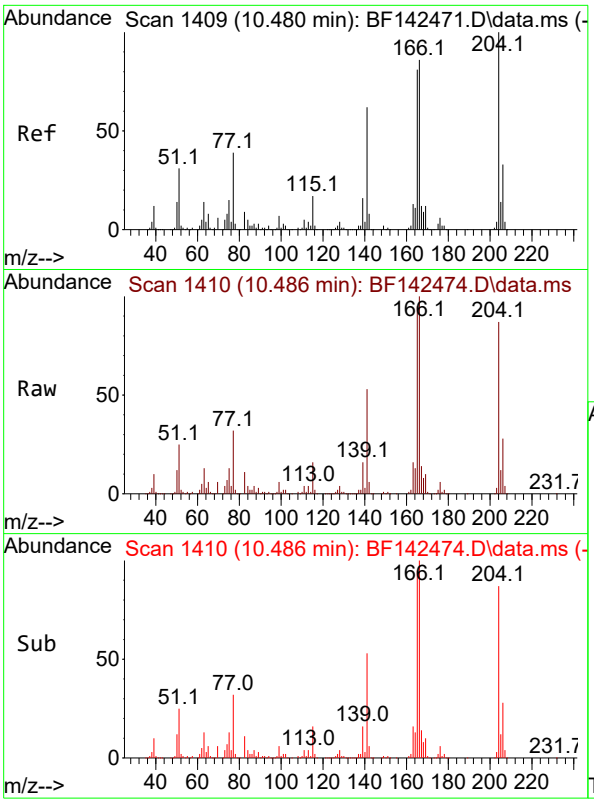


#60
Diethylphthalate
Concen: 70.773 ng
RT: 10.369 min Scan# 1390
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:149 Resp: 858326

Ion	Ratio	Lower	Upper
149	100		
177	22.1	17.6	26.4
150	12.7	10.1	15.1



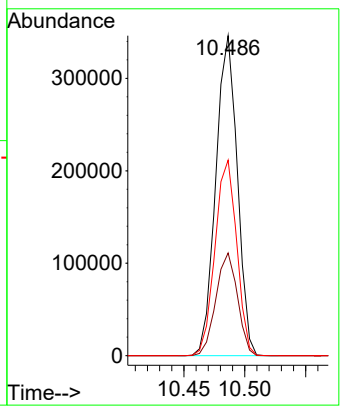


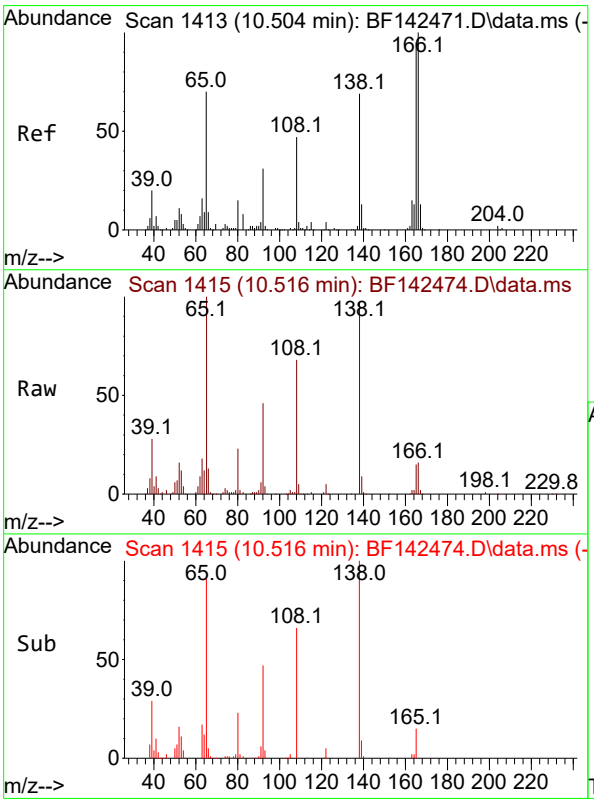
#61
4-Chlorophenyl-phenylether
Concen: 70.193 ng
RT: 10.486 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:204 Resp: 426386

Ion	Ratio	Lower	Upper
204	100		
206	32.1	26.3	39.5
141	61.1	49.5	74.3

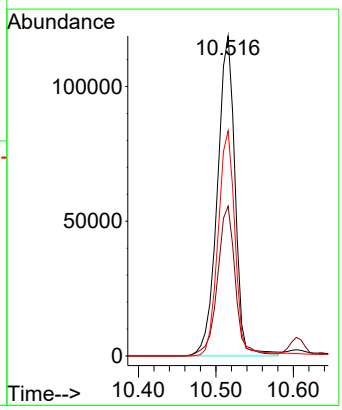


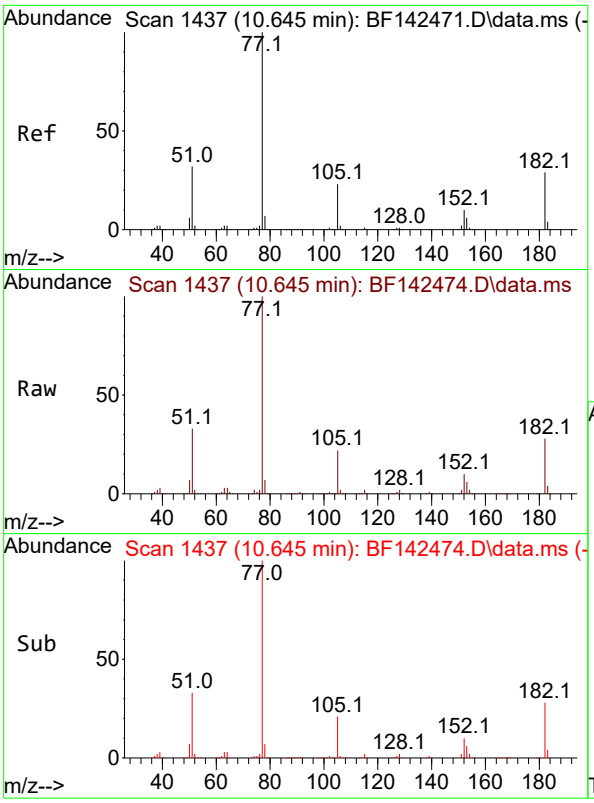


#62
4-Nitroaniline
Concen: 71.105 ng
RT: 10.516 min Scan# 1415
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:138 Resp: 188782

Ion	Ratio	Lower	Upper
138	100		
92	46.8	26.0	66.0
108	70.3	48.4	88.4



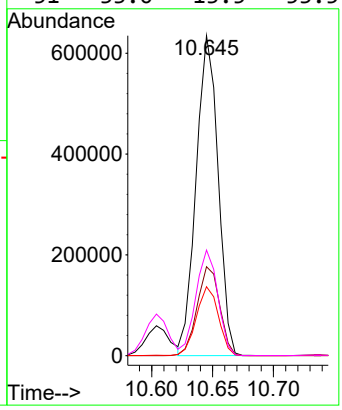


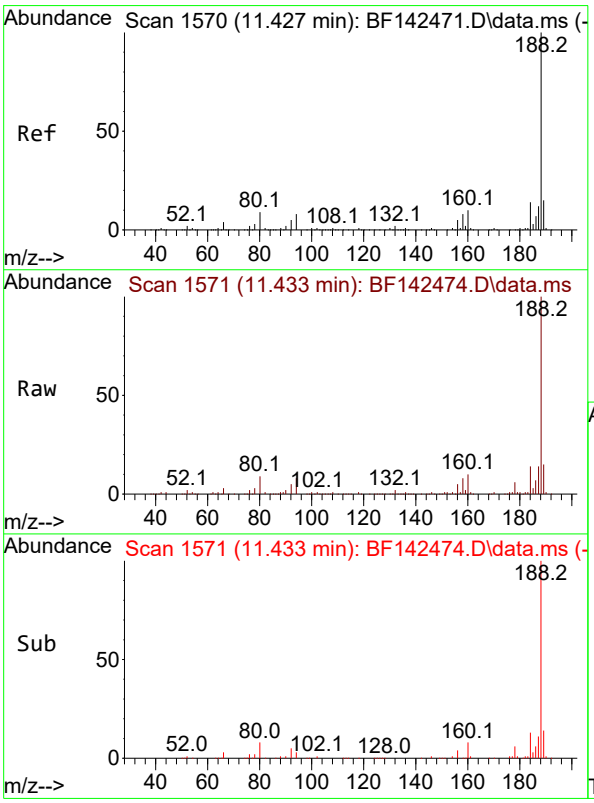
#63
Azobenzene
Concen: 72.893 ng
RT: 10.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion: 77 Resp: 794029

Ion	Ratio	Lower	Upper
77	100		
182	27.8	9.0	49.0
105	21.5	2.4	42.4
51	33.0	13.5	53.5

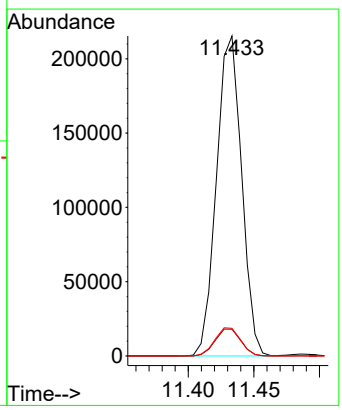


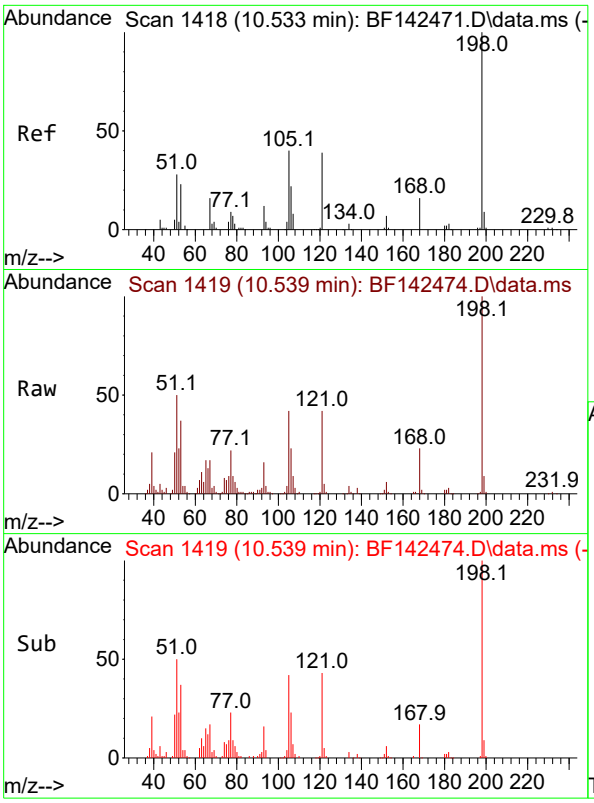


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.433 min Scan# 1571
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:188 Resp: 287337

Ion	Ratio	Lower	Upper
188	100		
94	8.3	6.6	10.0
80	8.6	7.4	11.0



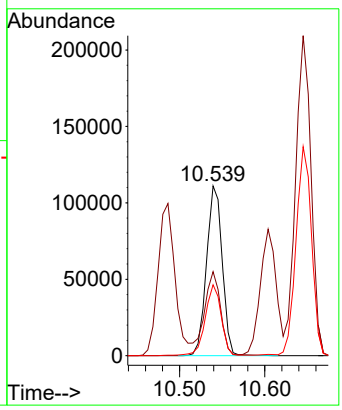


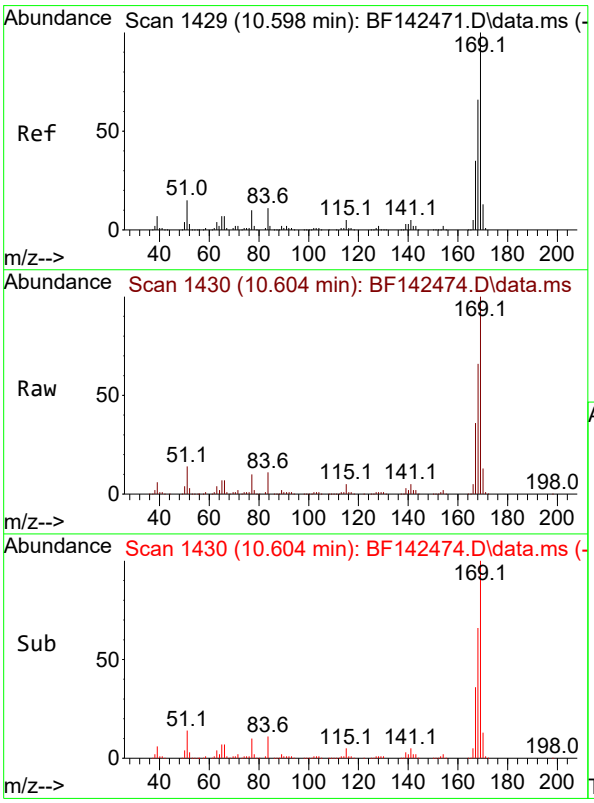
#65
4,6-Dinitro-2-methylphenol
Concen: 88.468 ng
RT: 10.539 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:198 Resp: 141863

Ion	Ratio	Lower	Upper
198	100		
51	49.5	28.3	68.3
105	41.7	21.3	61.3

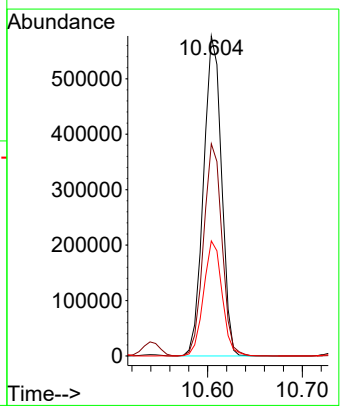


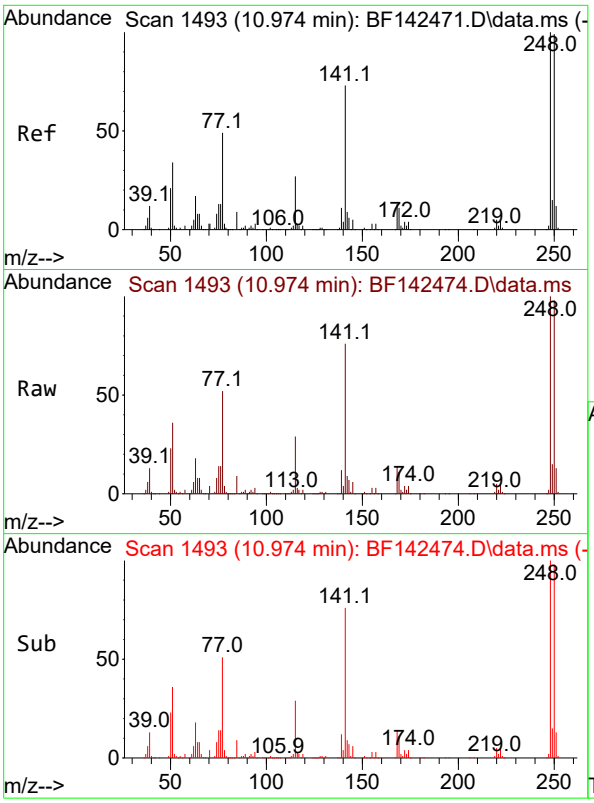


#66
n-Nitrosodiphenylamine
Concen: 77.145 ng
RT: 10.604 min Scan# 1430
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:169 Resp: 758366

Ion	Ratio	Lower	Upper
169	100		
168	66.3	52.7	79.1
167	35.9	28.3	42.5



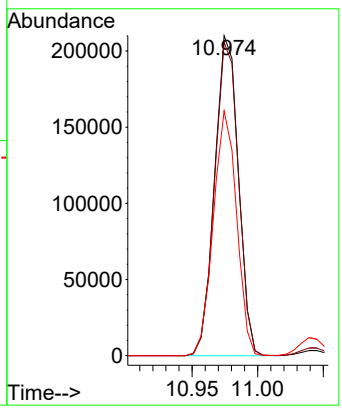


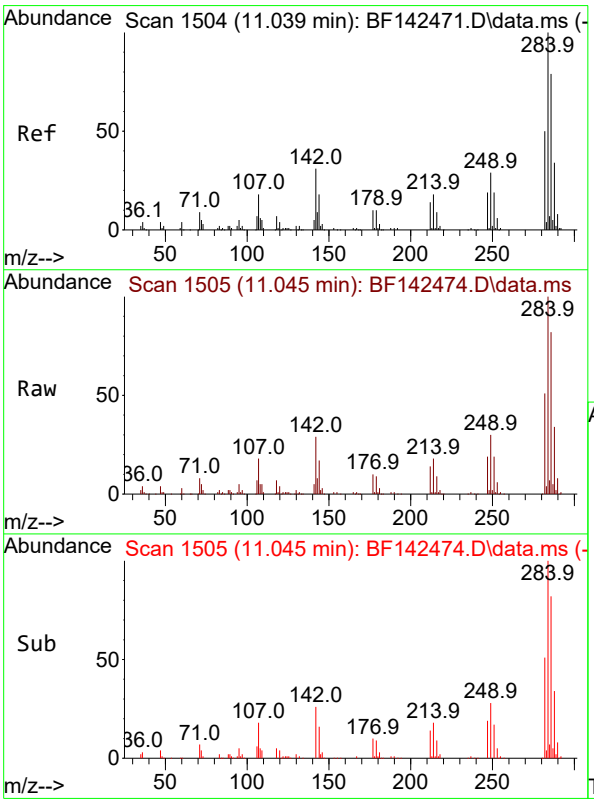
#67
4-Bromophenyl-phenylether
Concen: 77.920 ng
RT: 10.974 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:248 Resp: 264739

Ion	Ratio	Lower	Upper
248	100		
250	98.0	79.0	118.4
141	76.5	58.4	87.6

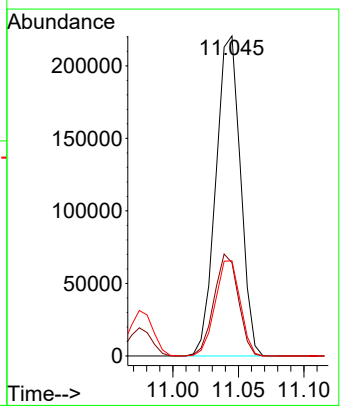


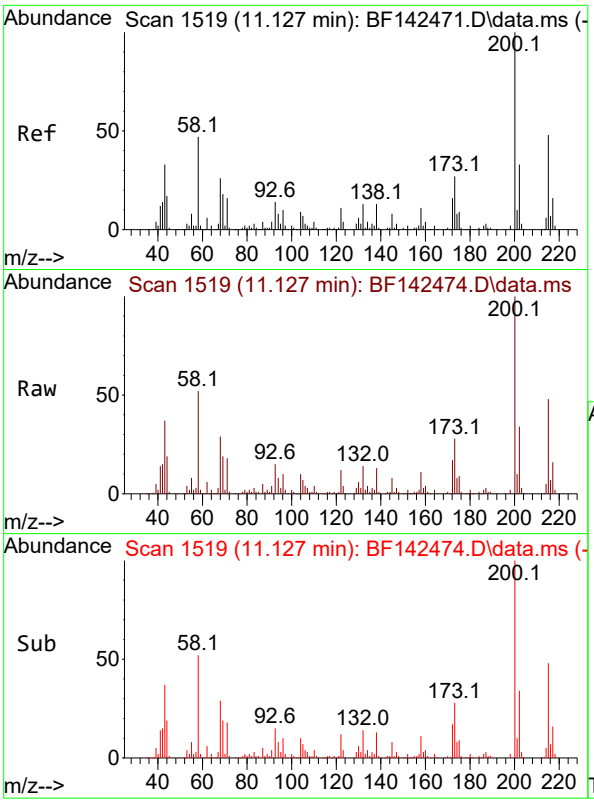


#68
Hexachlorobenzene
Concen: 76.555 ng
RT: 11.045 min Scan# 1505
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:284 Resp: 287676

Ion	Ratio	Lower	Upper
284	100		
142	29.1	24.8	37.2
249	29.8	23.6	35.4



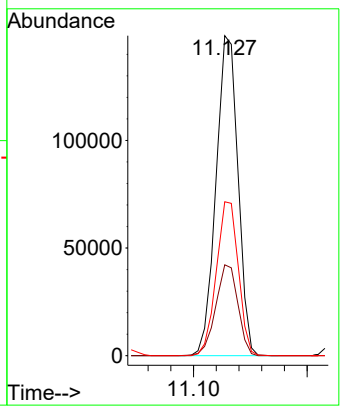


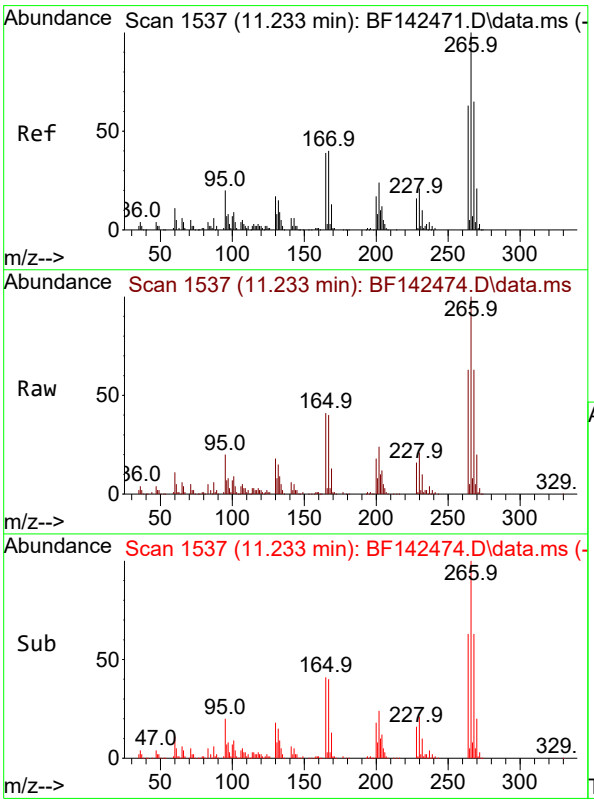
#69
Atrazine
Concen: 76.581 ng
RT: 11.127 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:200 Resp: 199929

Ion	Ratio	Lower	Upper
200	100		
173	28.4	7.4	47.4
215	48.1	28.5	68.5

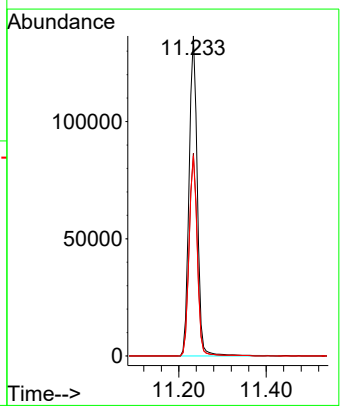


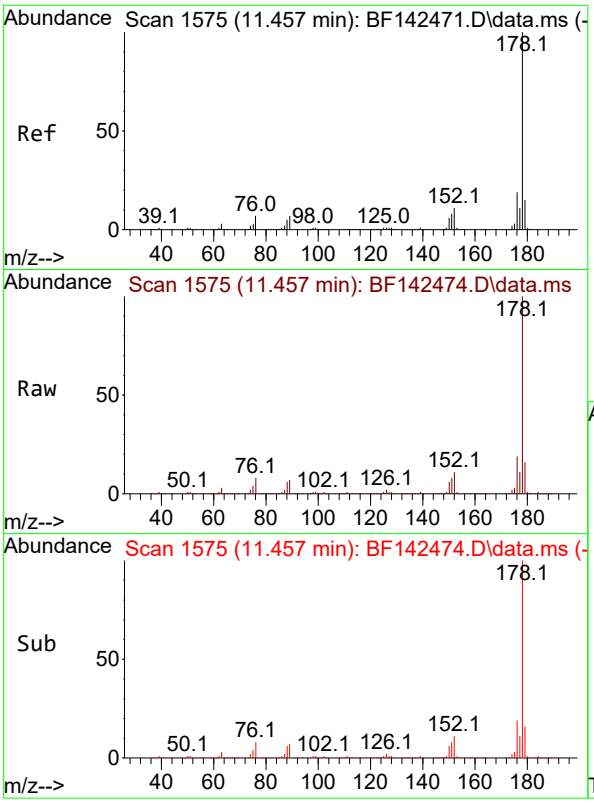


#70
Pentachlorophenol
Concen: 83.666 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:266 Resp: 177504

Ion	Ratio	Lower	Upper
266	100		
268	63.3	51.7	77.5
264	62.5	50.4	75.6



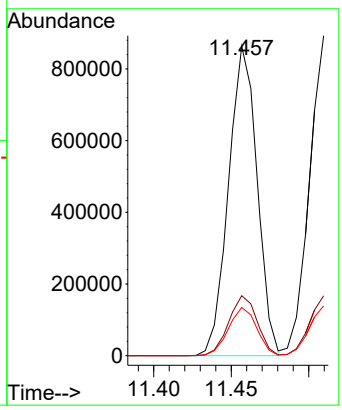


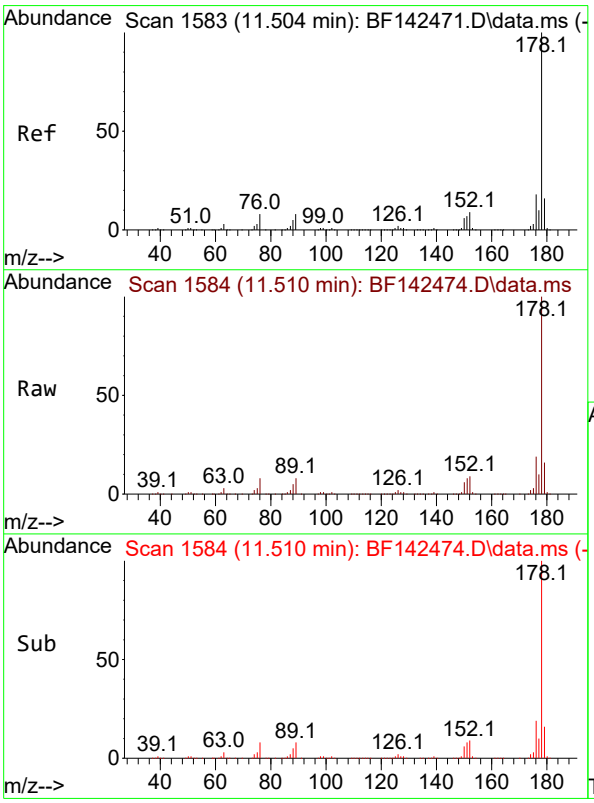
#71
Phenanthrene
Concen: 72.134 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:178 Resp: 1107683

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.0
179	15.5	12.3	18.5

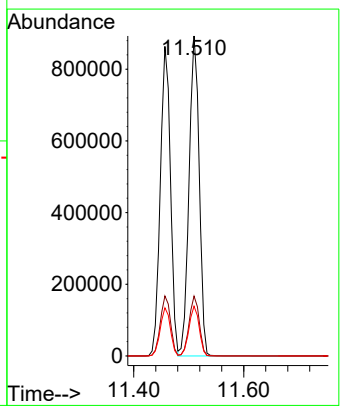


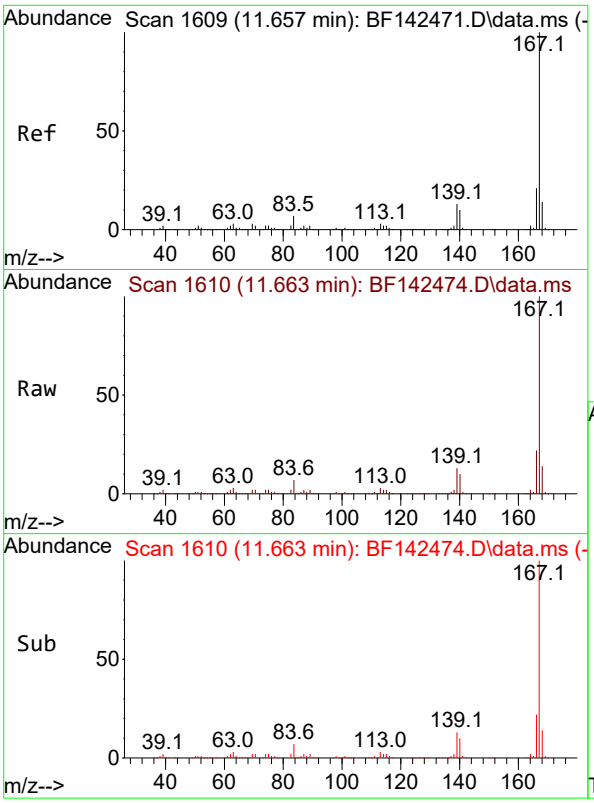


#72
Anthracene
Concen: 73.009 ng
RT: 11.510 min Scan# 1584
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:178 Resp: 1144182

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.6	21.8
179	15.5	12.4	18.6



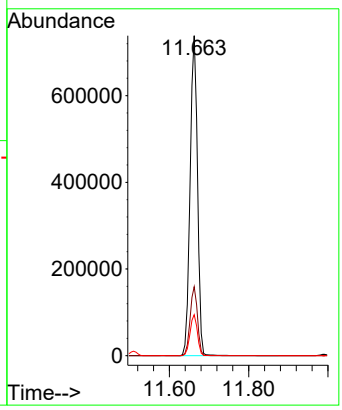


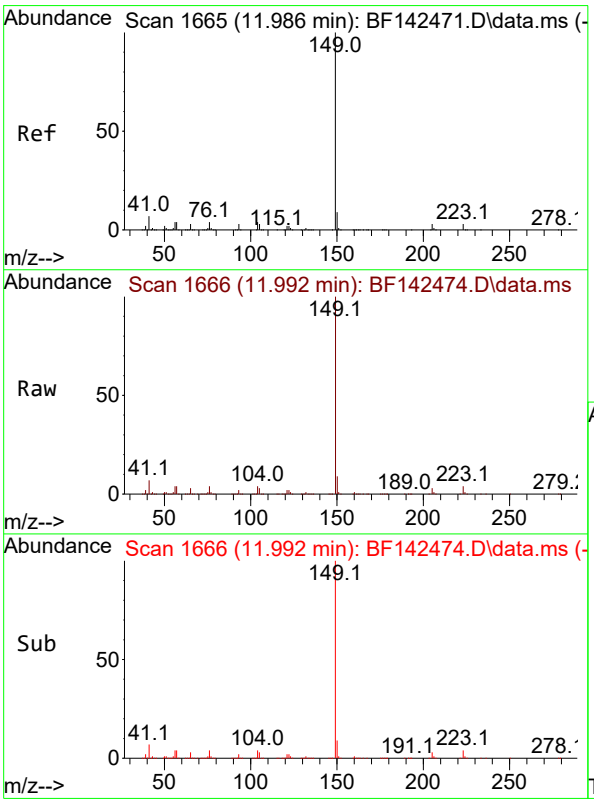
#73
Carbazole
Concen: 71.360 ng
RT: 11.663 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:167 Resp: 956069

Ion	Ratio	Lower	Upper
167	100		
166	21.6	16.9	25.3
139	12.8	10.2	15.4

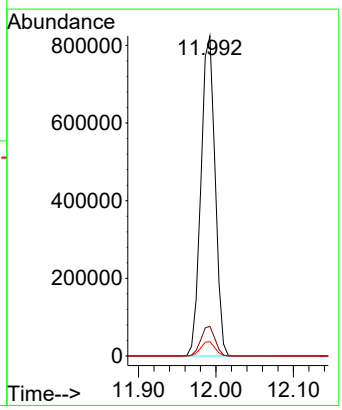


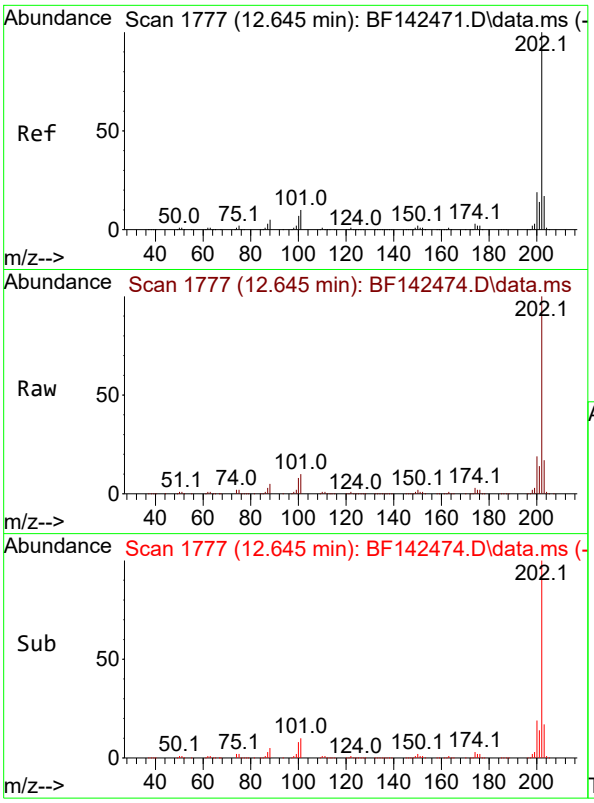


#74
Di-n-butylphthalate
Concen: 71.153 ng
RT: 11.992 min Scan# 1666
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:149 Resp: 1043468

Ion	Ratio	Lower	Upper
149	100		
150	9.2	7.3	10.9
104	4.4	3.6	5.4



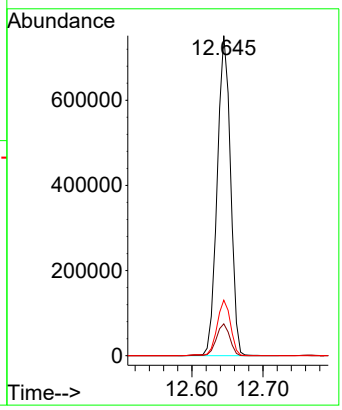


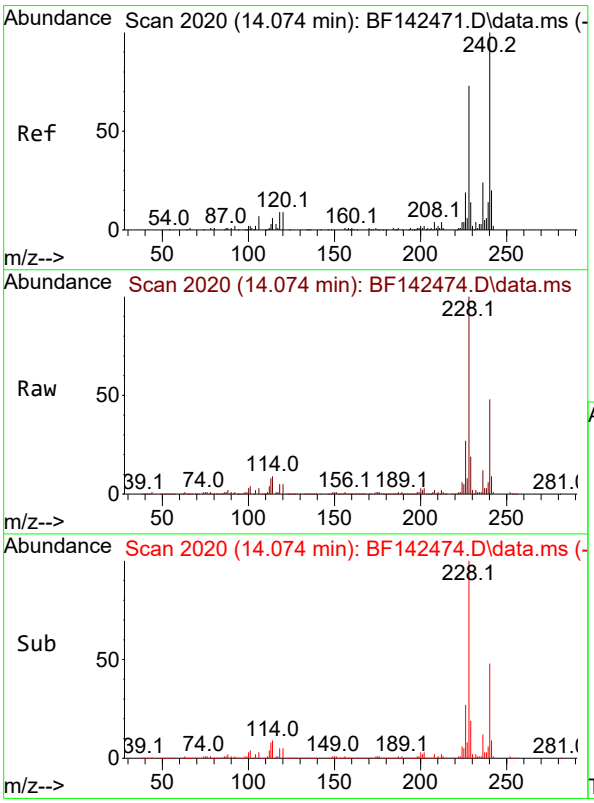
#75
Fluoranthene
Concen: 67.750 ng
RT: 12.645 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:202 Resp: 972105

Ion	Ratio	Lower	Upper
202	100		
101	10.0	0.0	29.6
203	17.4	0.0	37.2

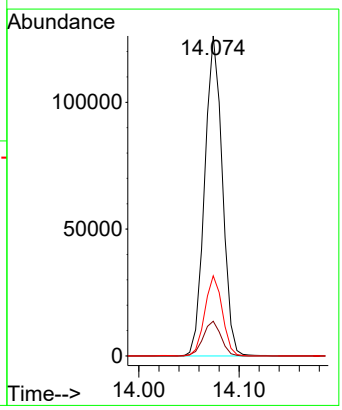


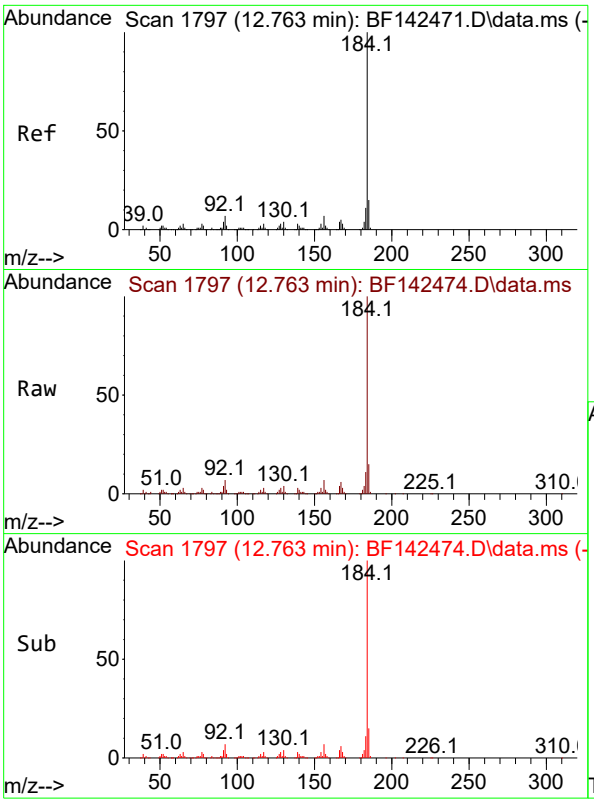


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:240 Resp: 154555

Ion	Ratio	Lower	Upper
240	100		
120	10.8	7.5	11.3
236	25.1	19.6	29.4



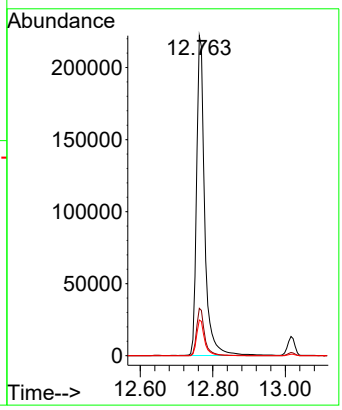


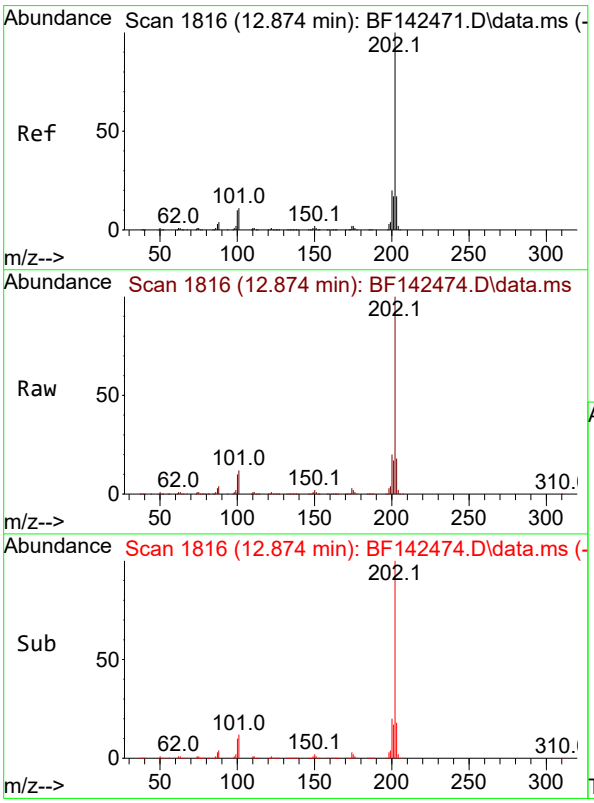
#77
Benzidine
Concen: 59.795 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:184 Resp: 343909

Ion	Ratio	Lower	Upper
184	100		
185	14.8	11.6	17.4
183	11.2	9.0	13.4

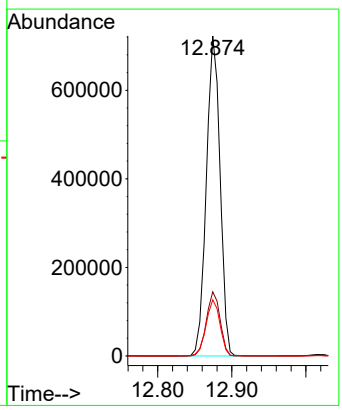


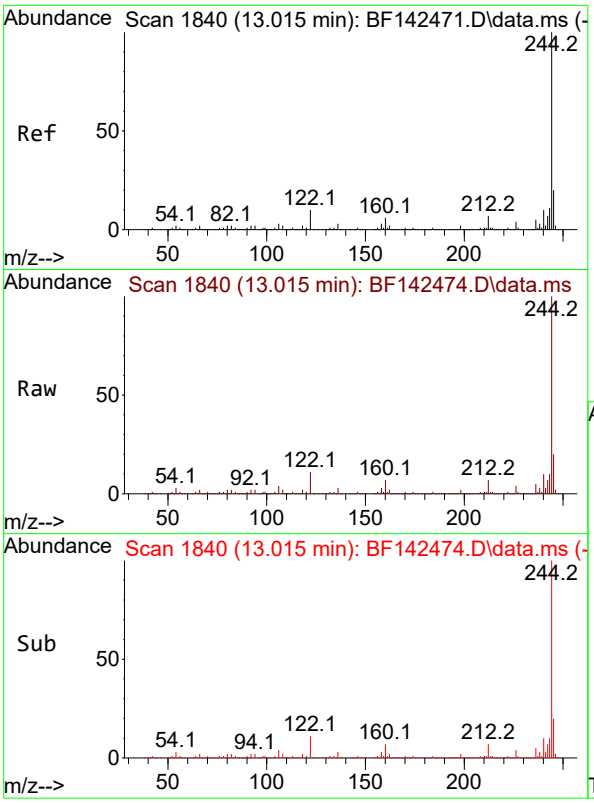


#78
Pyrene
Concen: 64.632 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:202 Resp: 931844

Ion	Ratio	Lower	Upper
202	100		
200	20.0	16.1	24.1
203	17.5	13.9	20.9



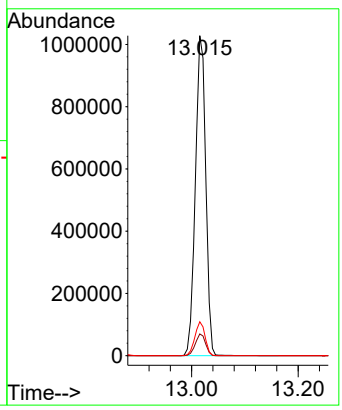


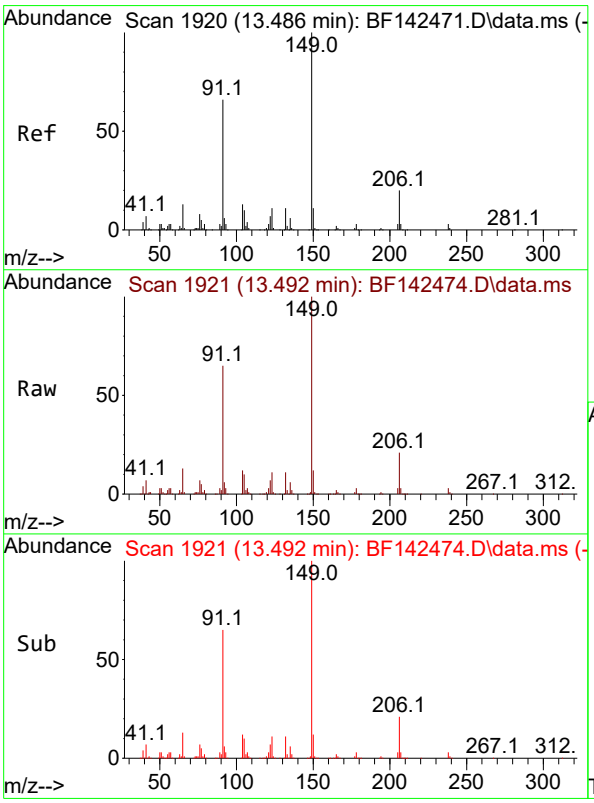
#79
Terphenyl-d14
Concen: 123.140 ng
RT: 13.015 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:244 Resp: 1392704

Ion	Ratio	Lower	Upper
244	100		
212	6.8	5.3	7.9
122	10.6	8.2	12.2

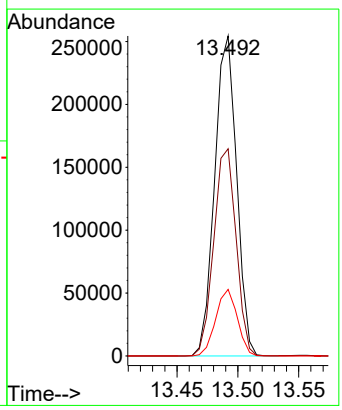


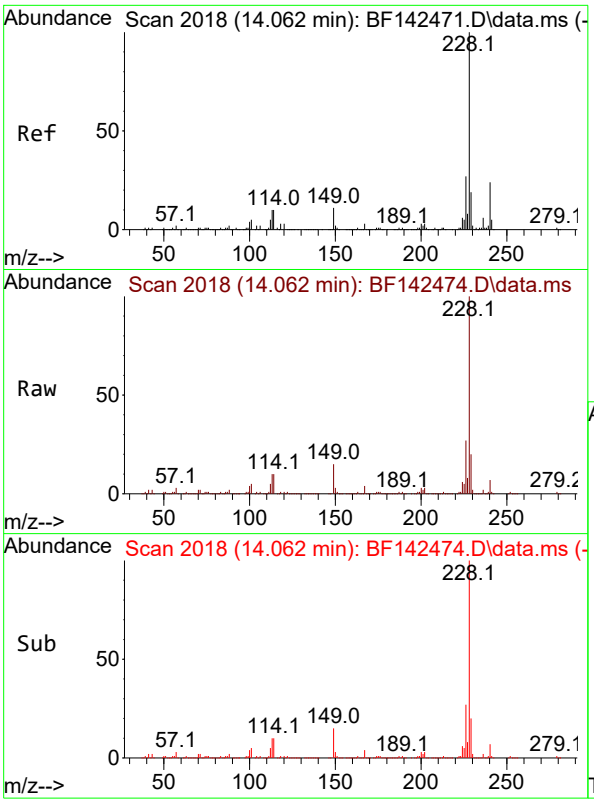


#80
Butylbenzylphthalate
Concen: 80.252 ng
RT: 13.492 min Scan# 1921
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:149 Resp: 319716

Ion	Ratio	Lower	Upper
149	100		
91	64.7	52.9	79.3
206	20.8	16.2	24.2



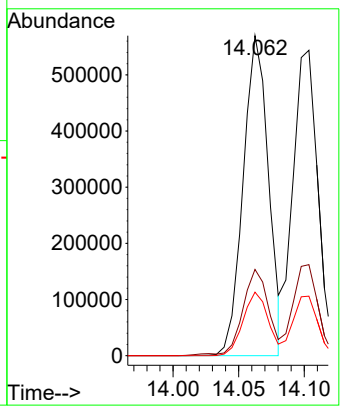


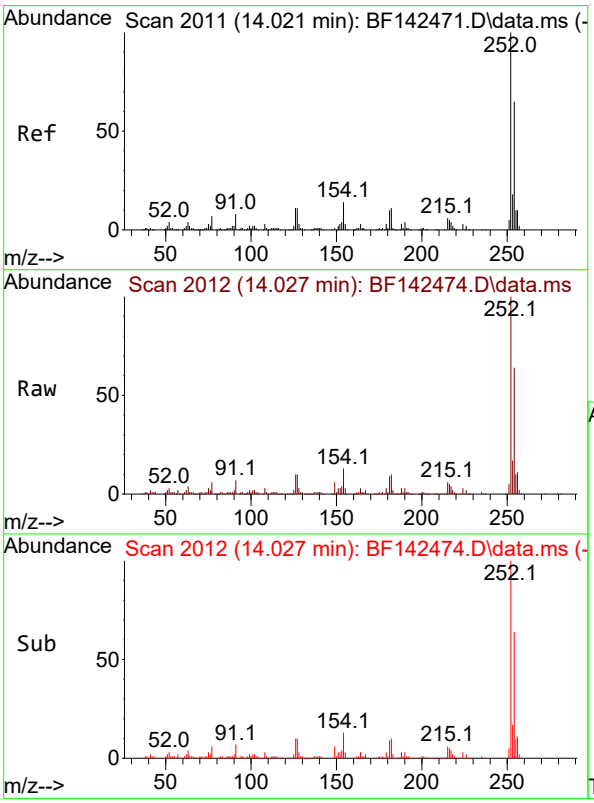
#81
Benzo(a)anthracene
Concen: 74.167 ng
RT: 14.062 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:228 Resp: 765441

Ion	Ratio	Lower	Upper
228	100		
226	27.0	21.2	31.8
229	19.9	15.5	23.3

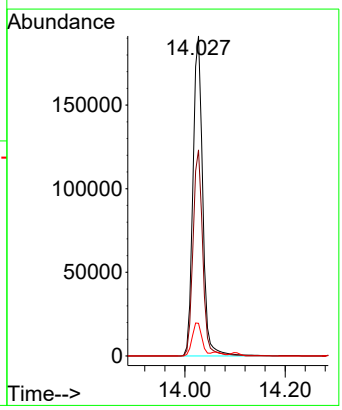


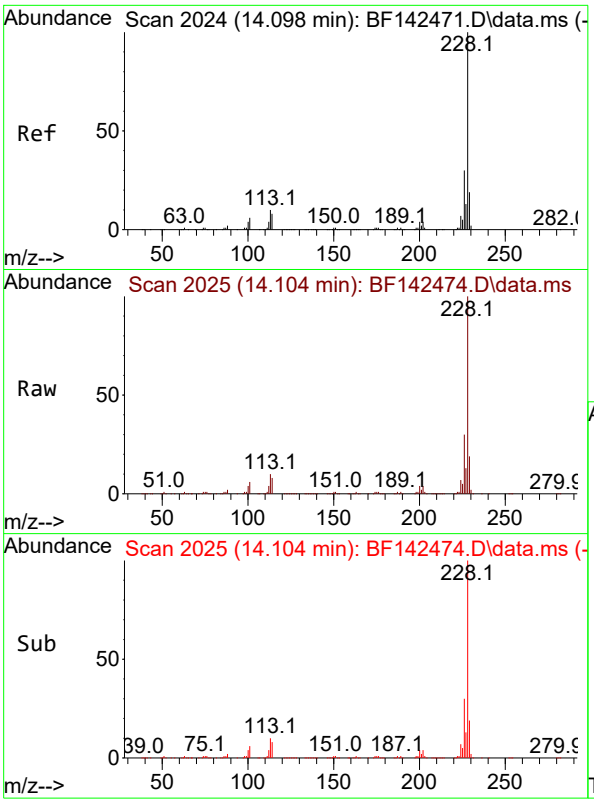


#82
3,3'-Dichlorobenzidine
Concen: 82.274 ng
RT: 14.027 min Scan# 2012
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:252 Resp: 257542

Ion	Ratio	Lower	Upper
252	100		
254	64.4	52.0	78.0
126	10.2	8.9	13.3



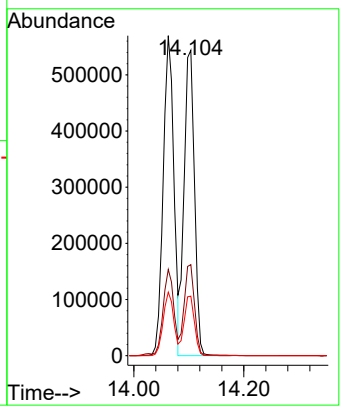


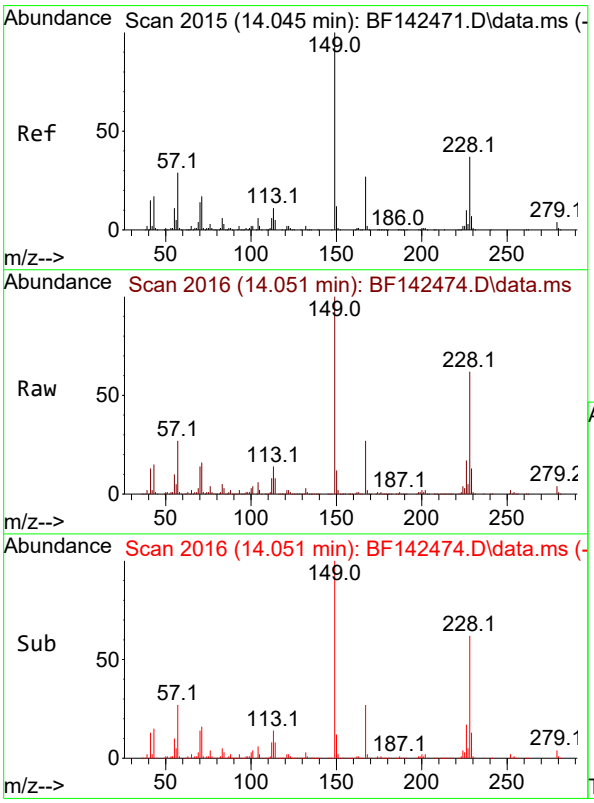
#83
Chrysene
Concen: 77.206 ng
RT: 14.104 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:228 Resp: 715970

Ion	Ratio	Lower	Upper
228	100		
226	29.8	23.8	35.6
229	19.5	15.4	23.2

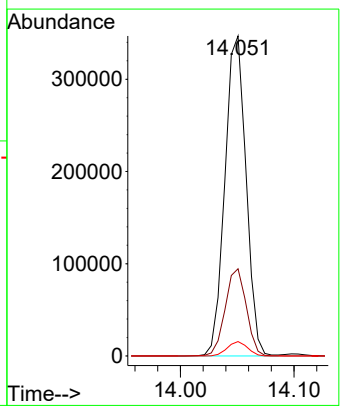


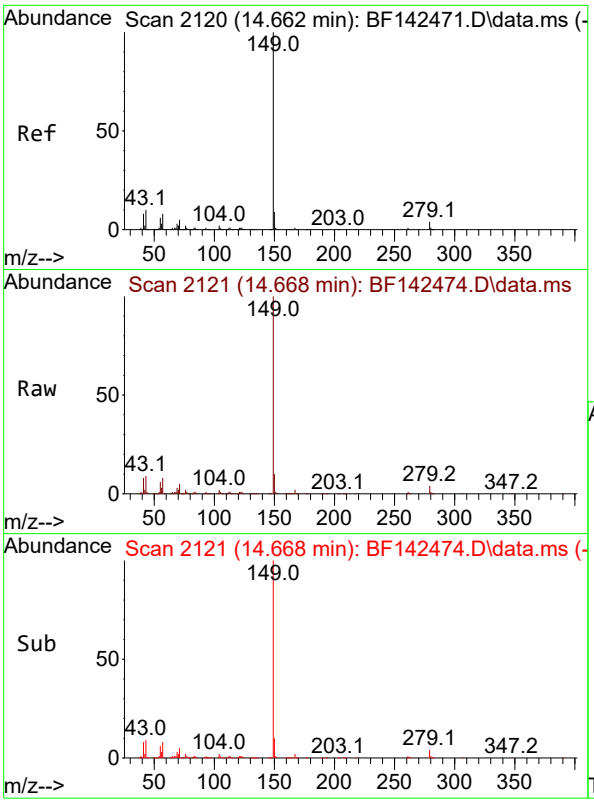


#84
Bis(2-ethylhexyl)phthalate
Concen: 88.168 ng
RT: 14.051 min Scan# 2016
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:149 Resp: 449654

Ion	Ratio	Lower	Upper
149	100		
167	27.3	21.5	32.3
279	4.5	3.2	4.8



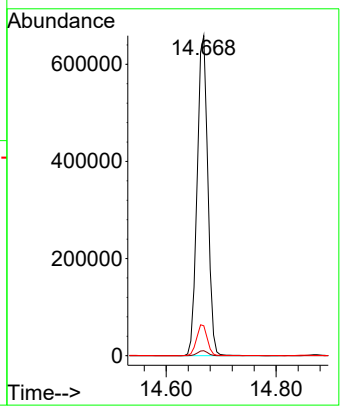


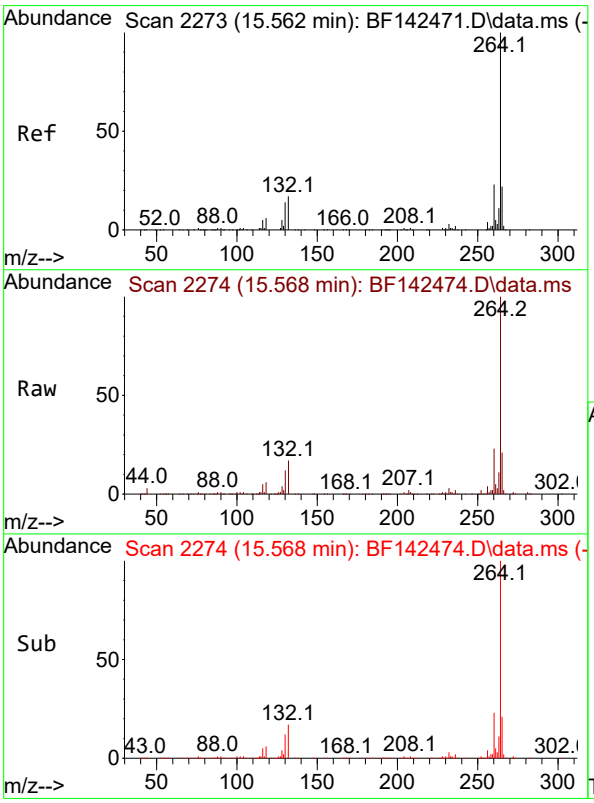
#85
Di-n-octyl phthalate
Concen: 89.073 ng
RT: 14.668 min Scan# 21
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:149 Resp: 888230

Ion	Ratio	Lower	Upper
149	100		
167	1.5	1.2	1.8
43	9.7	7.9	11.9

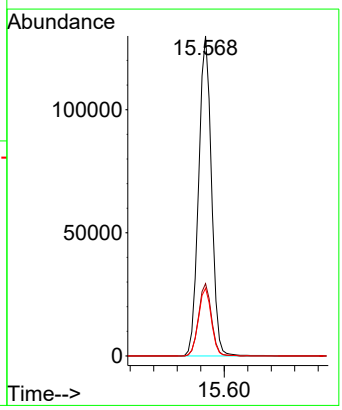


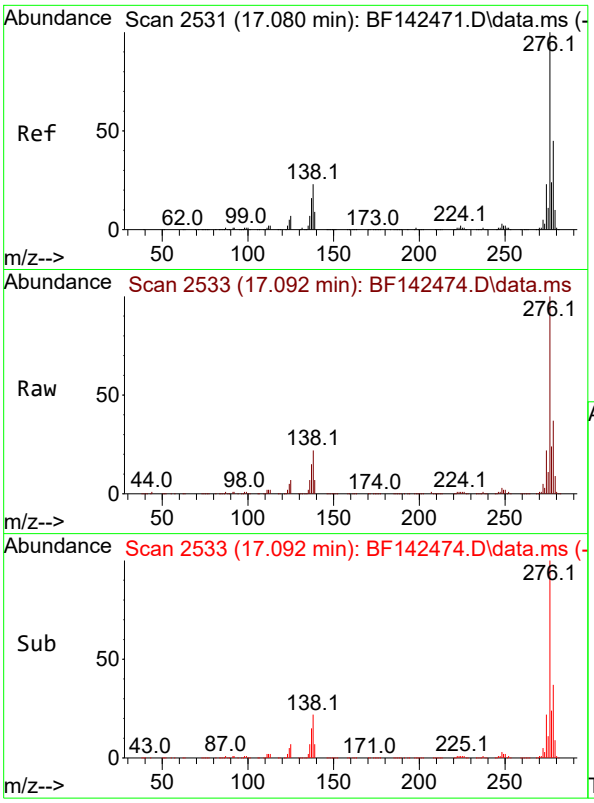


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2274
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:264 Resp: 196342

Ion	Ratio	Lower	Upper
264	100		
260	22.6	18.6	28.0
265	21.2	17.7	26.5



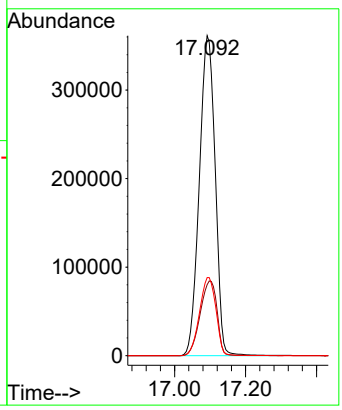


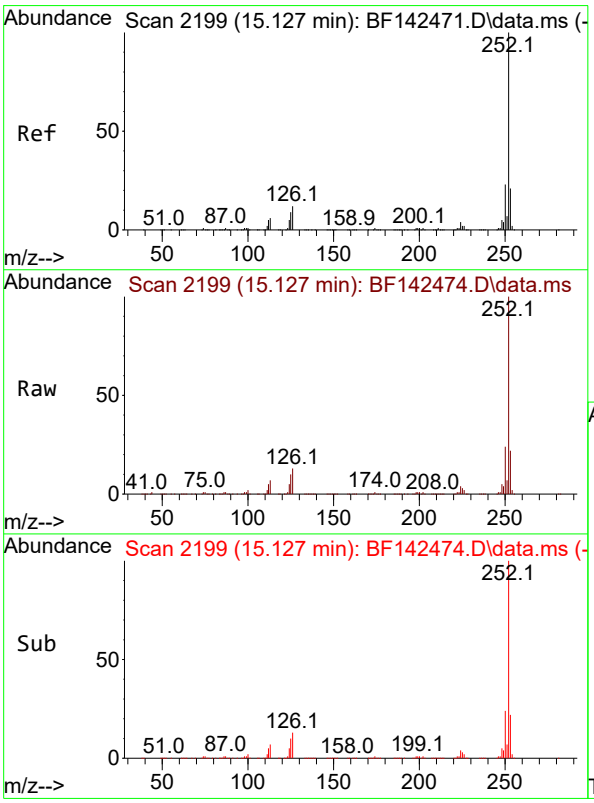
#87
Indeno(1,2,3-cd)pyrene
Concen: 76.417 ng
RT: 17.092 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:276 Resp: 1126401

Ion	Ratio	Lower	Upper
276	100		
138	24.8	19.9	29.9
277	25.2	20.2	30.2

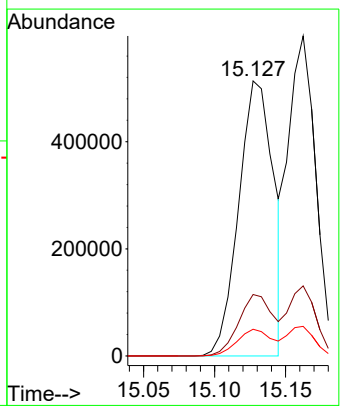


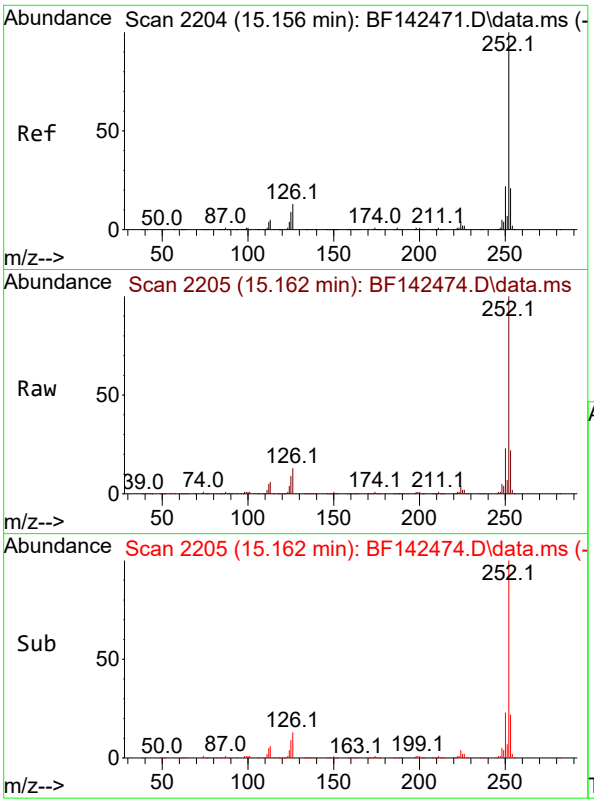


#88
Benzo(b)fluoranthene
Concen: 75.267 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:252 Resp: 874640

Ion	Ratio	Lower	Upper
252	100		
253	22.4	17.0	25.4
125	9.7	7.4	11.0



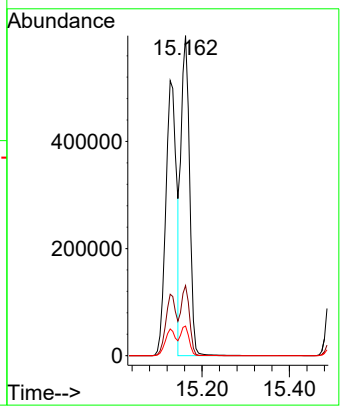


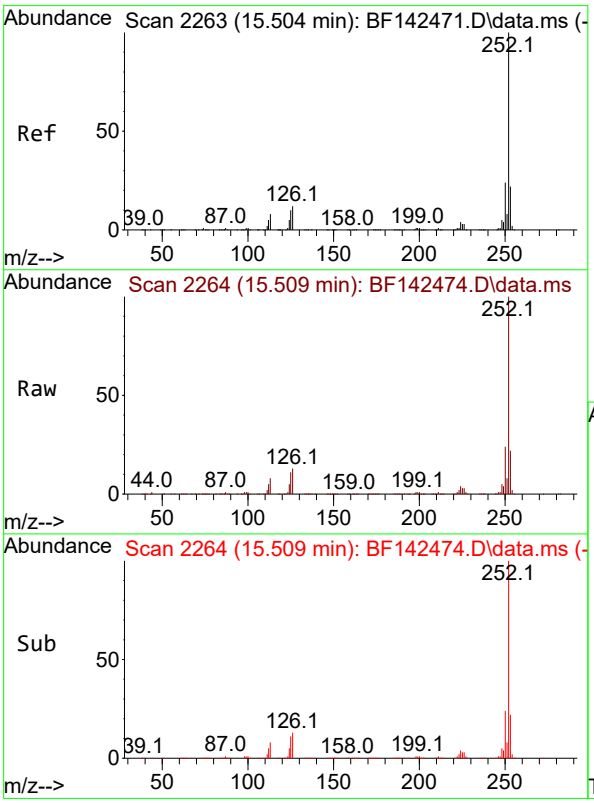
#89
Benzo(k)fluoranthene
Concen: 73.850 ng
RT: 15.162 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:252 Resp: 803775

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.0	25.4
125	9.2	7.3	10.9

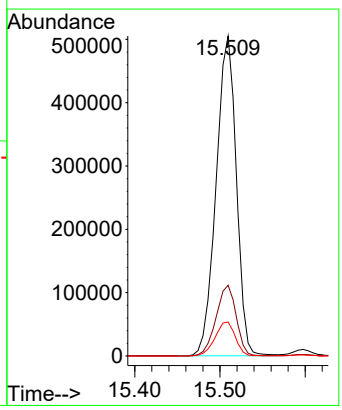


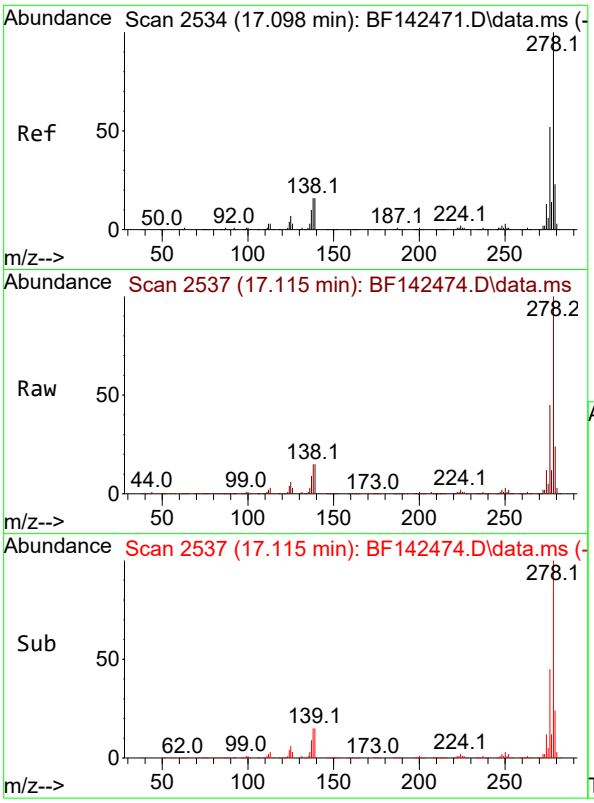


#90
Benzo(a)pyrene
Concen: 76.121 ng
RT: 15.509 min Scan# 2264
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:252 Resp: 833783

Ion	Ratio	Lower	Upper
252	100		
253	22.1	17.4	26.0
125	10.6	7.9	11.9



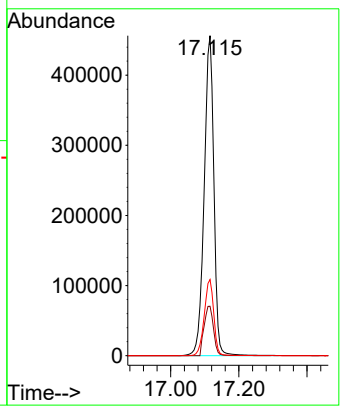


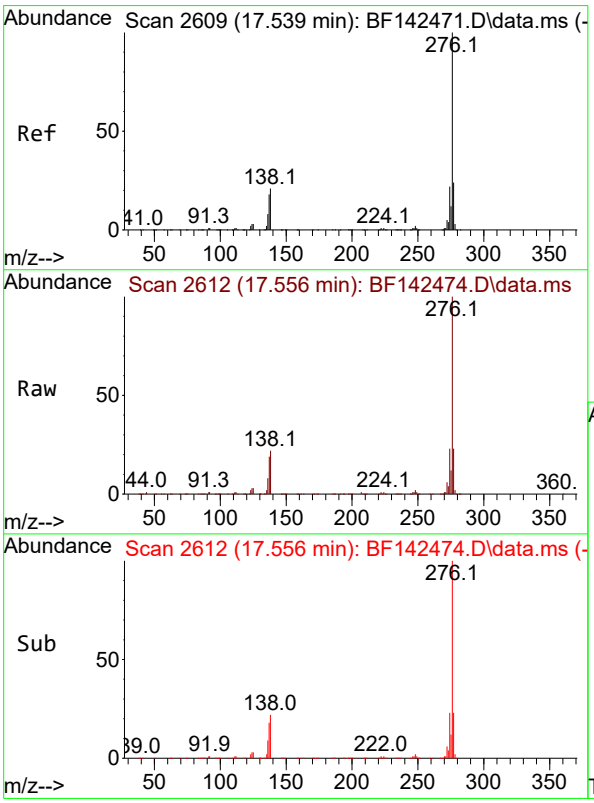
#91
Dibenzo(a,h)anthracene
Concen: 75.513 ng
RT: 17.115 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Tgt Ion:278 Resp: 902757

Ion	Ratio	Lower	Upper
278	100		
139	15.5	12.8	19.2
279	23.8	18.6	28.0

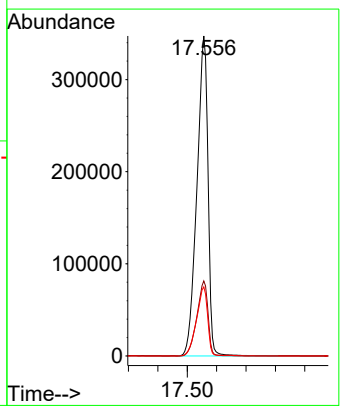




#92
Benzo(g,h,i)perylene
Concen: 76.073 ng
RT: 17.556 min Scan# 2612
Delta R.T. 0.000 min
Lab File: BF142474.D
Acq: 20 May 2025 15:31

Tgt Ion:276 Resp: 909649

Ion	Ratio	Lower	Upper
276	100		
277	23.4	19.2	28.8
138	21.6	16.8	25.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	99411	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	385222	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	213164	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	348749	20.000	ng	0.00
76) Chrysene-d12	14.074	240	171632	20.000	ng	0.00
86) Perylene-d12	15.562	264	195956	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	443470	75.157	ng	0.00
7) Phenol-d6	6.522	99	539999	76.025	ng	-0.01
23) Nitrobenzene-d5	7.463	82	545967	77.283	ng	-0.01
42) 2,4,6-Tribromophenol	10.733	330	179309	75.790	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	1152622	72.557	ng	0.00
79) Terphenyl-d14	13.016	244	976059	77.714	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.663	88	90159	38.184	ng	99
3) Pyridine	3.434	79	232139	38.607	ng	99
4) n-Nitrosodimethylamine	3.381	42	121742	38.995	ng	99
6) Aniline	6.563	93	366889	38.415	ng	99
8) 2-Chlorophenol	6.681	128	243599	37.902	ng	97
9) Benzaldehyde	6.451	77	165445	38.726	ng	98
10) Phenol	6.539	94	306601	38.362	ng	99
11) bis(2-Chloroethyl)ether	6.634	93	220228	38.280	ng	100
12) 1,3-Dichlorobenzene	6.839	146	269504	37.579	ng	100
13) 1,4-Dichlorobenzene	6.922	146	275076	38.078	ng	98
14) 1,2-Dichlorobenzene	7.069	146	260709	37.716	ng	100
15) Benzyl Alcohol	7.039	79	202944	38.663	ng	99
16) 2,2'-oxybis(1-Chloropr...	7.175	45	366430	37.927	ng	100
17) 2-Methylphenol	7.145	107	193190	38.500	ng	99
18) Hexachloroethane	7.416	117	96202	38.137	ng	99
19) n-Nitroso-di-n-propyla...	7.310	70	166542	37.833	ng	99
20) 3+4-Methylphenols	7.304	107	244310	38.020	ng	100
22) Acetophenone	7.310	105	325056	38.118	ng	100
24) Nitrobenzene	7.486	77	246818	38.737	ng	100
25) Isophorone	7.722	82	447723	37.906	ng	99
26) 2-Nitrophenol	7.798	139	136039	39.958	ng	99
27) 2,4-Dimethylphenol	7.833	122	233871	38.953	ng	99
28) bis(2-Chloroethoxy)met...	7.934	93	283379	38.407	ng	99
29) 2,4-Dichlorophenol	8.039	162	209040	38.285	ng	99
30) 1,2,4-Trichlorobenzene	8.128	180	226285	38.187	ng	98
31) Naphthalene	8.210	128	722913	38.112	ng	100
32) Benzoic acid	7.939	122	147981	40.490	ng	98
33) 4-Chloroaniline	8.251	127	299462	38.962	ng	99
34) Hexachlorobutadiene	8.322	225	142496	38.512	ng	99
35) Caprolactam	8.622	113	60055	39.162	ng	99
36) 4-Chloro-3-methylphenol	8.728	107	216299	38.654	ng	99
37) 2-Methylnaphthalene	8.898	142	454200	38.062	ng	100
38) 1-Methylnaphthalene	8.998	142	471880	38.229	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	229514	37.508	ng	99
41) Hexachlorocyclopentadiene	9.051	237	165077	39.991	ng	100
43) 2,4,6-Trichlorophenol	9.175	196	156603	37.954	ng	99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	164342	37.766	ng		99
46) 1,1'-Biphenyl	9.363	154	619947	37.487	ng		100
47) 2-Chloronaphthalene	9.386	162	461414	37.763	ng		99
48) 2-Nitroaniline	9.480	65	137268	38.867	ng		99
49) Acenaphthylene	9.804	152	776377	37.630	ng		100
50) Dimethylphthalate	9.663	163	523004	37.184	ng		100
51) 2,6-Dinitrotoluene	9.722	165	115938	38.191	ng		98
52) Acenaphthene	9.975	154	477197	37.877	ng		100
53) 3-Nitroaniline	9.892	138	126814	38.246	ng		98
54) 2,4-Dinitrophenol	9.992	184	65057	41.481	ng	#	35
55) Dibenzofuran	10.145	168	673871	37.170	ng		100
56) 4-Nitrophenol	10.045	139	96197	39.320	ng		98
57) 2,4-Dinitrotoluene	10.127	165	152488	38.463	ng		99
58) Fluorene	10.492	166	513487	36.662	ng		100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	138047	38.000	ng		98
60) Diethylphthalate	10.363	149	519861	37.844	ng		100
61) 4-Chlorophenyl-phenyle...	10.480	204	254467	36.985	ng		99
62) 4-Nitroaniline	10.504	138	114671	38.132	ng		100
63) Azobenzene	10.645	77	466131	37.780	ng		99
65) 4,6-Dinitro-2-methylph...	10.533	198	82393	42.334	ng		99
66) n-Nitrosodiphenylamine	10.598	169	454975	38.132	ng		99
67) 4-Bromophenyl-phenylether	10.974	248	157480	38.189	ng		99
68) Hexachlorobenzene	11.039	284	175840	38.554	ng		99
69) Atrazine	11.127	200	125293	39.541	ng		99
70) Pentachlorophenol	11.227	266	105232	40.866	ng		98
71) Phenanthrene	11.457	178	698503	37.478	ng		100
72) Anthracene	11.504	178	723416	38.032	ng		100
73) Carbazole	11.657	167	622812	38.300	ng		100
74) Di-n-butylphthalate	11.986	149	686988	38.596	ng		100
75) Fluoranthene	12.645	202	652697	37.479	ng		100
77) Benzidine	12.763	184	271606	42.525	ng		100
78) Pyrene	12.874	202	642163	40.108	ng		100
80) Butylbenzylphthalate	13.492	149	178179	40.275	ng		97
81) Benzo(a)anthracene	14.063	228	435297	37.981	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	135132	38.874	ng		100
83) Chrysene	14.098	228	388943	37.768	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	229915	40.596	ng		99
85) Di-n-octyl phthalate	14.662	149	443488	40.048	ng		100
87) Indeno(1,2,3-cd)pyrene	17.080	276	574771	39.070	ng		100
88) Benzo(b)fluoranthene	15.121	252	433704	37.396	ng		98
89) Benzo(k)fluoranthene	15.157	252	404679	37.255	ng		99
90) Benzo(a)pyrene	15.504	252	421730	38.578	ng		100
91) Dibenzo(a,h)anthracene	17.098	278	463752	38.868	ng		100
92) Benzo(g,h,i)perylene	17.539	276	457604	38.345	ng		99

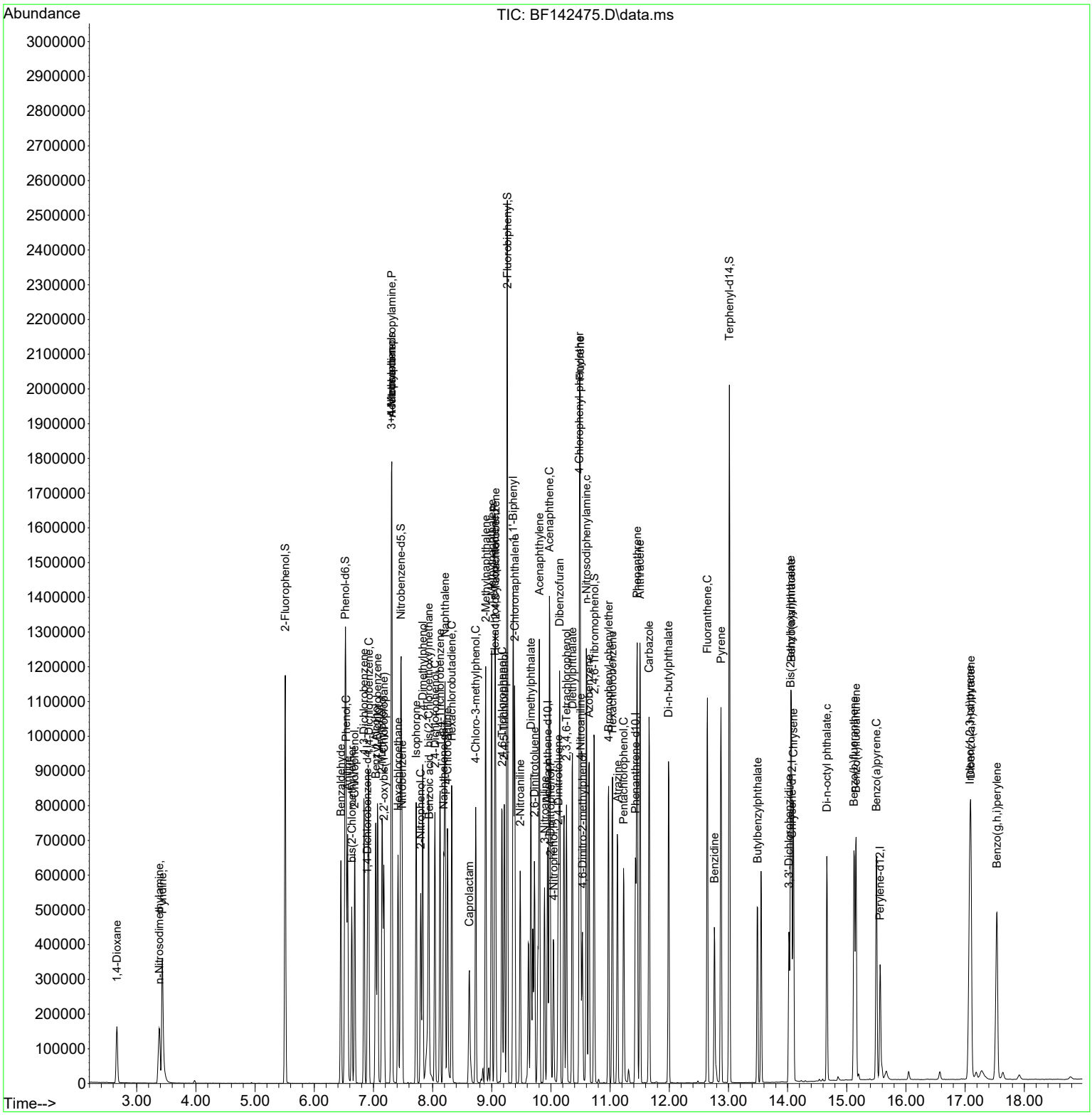
(#) = qualifier out of range (m) = manual integration (+) = signals summed

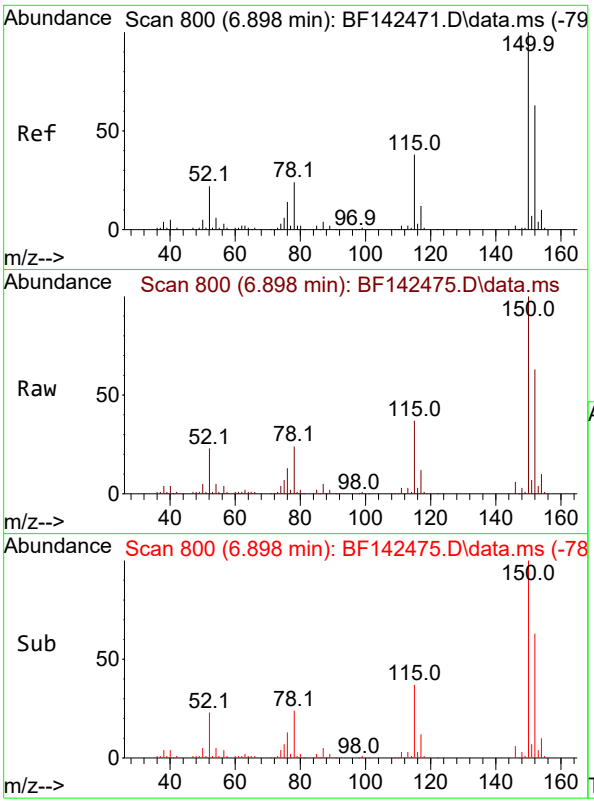
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



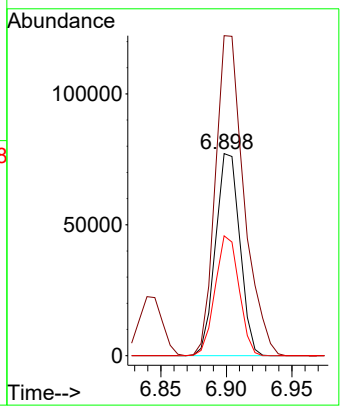


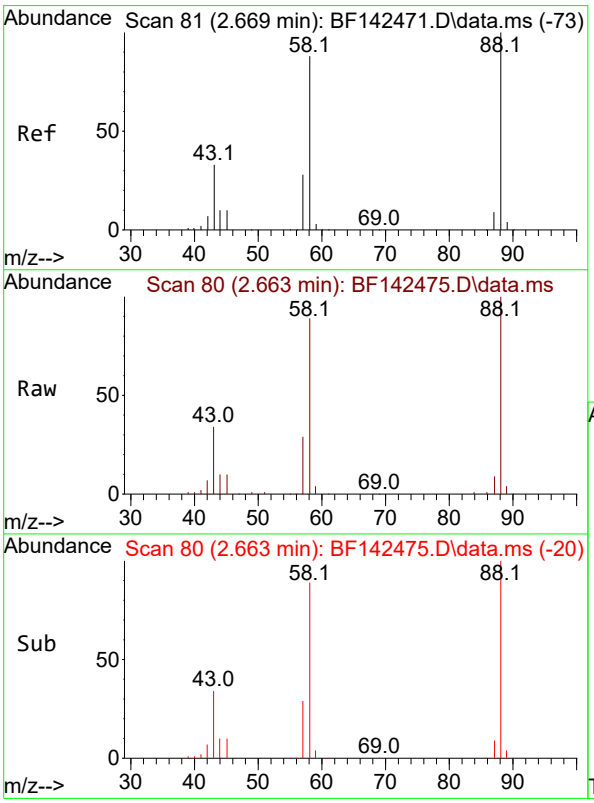
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:152 Resp: 99411

Ion	Ratio	Lower	Upper
152	100		
150	158.4	128.2	192.4
115	59.3	48.3	72.5

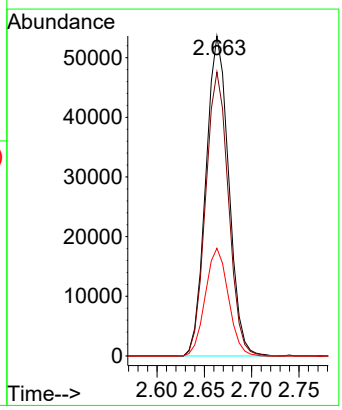


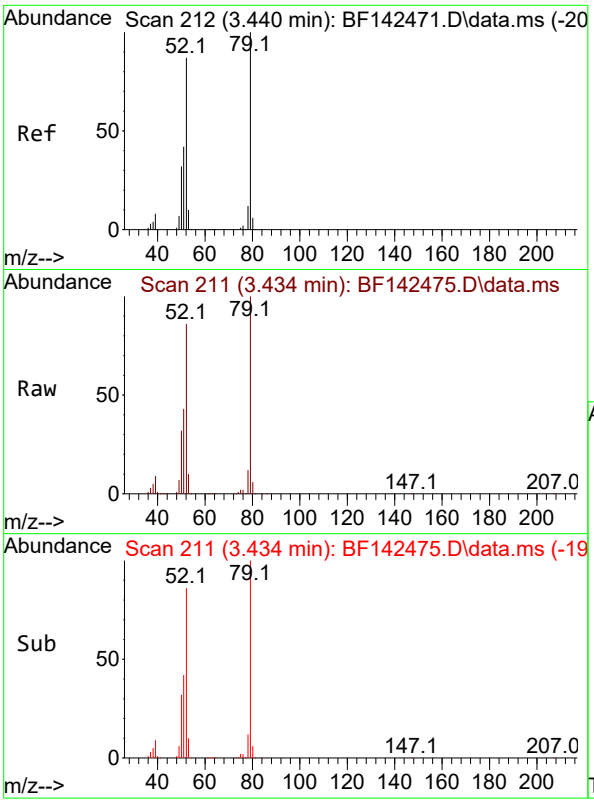


#2
1,4-Dioxane
Concen: 38.184 ng
RT: 2.663 min Scan# 80
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 88 Resp: 90159

Ion	Ratio	Lower	Upper
88	100		
58	88.1	70.8	106.2
43	33.9	26.6	40.0



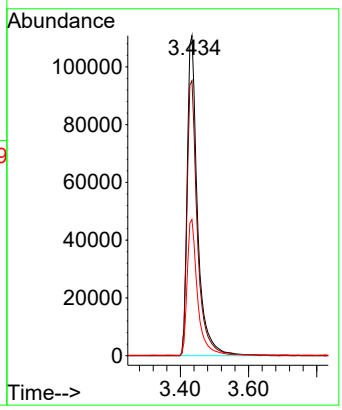


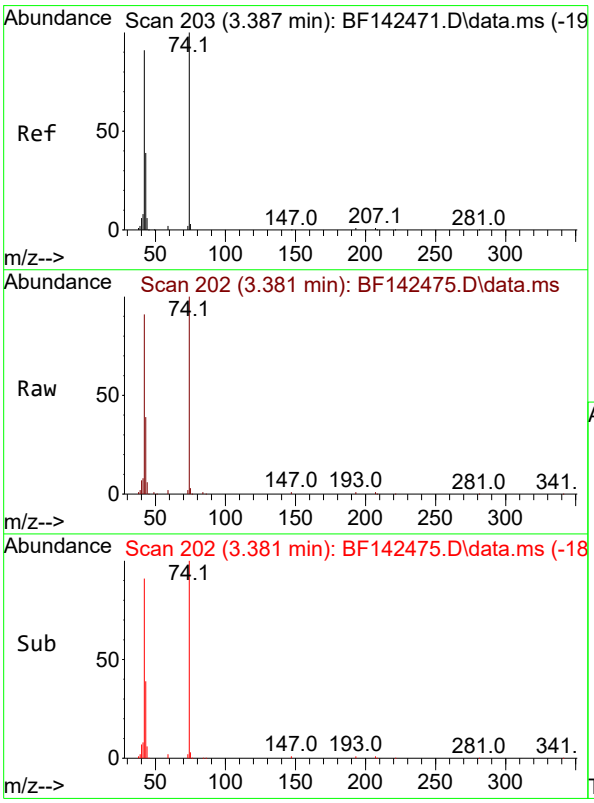
#3
Pyridine
Concen: 38.607 ng
RT: 3.434 min Scan# 21
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 79 Resp: 232139

Ion	Ratio	Lower	Upper
79	100		
52	85.9	69.2	103.8
51	42.6	33.3	49.9

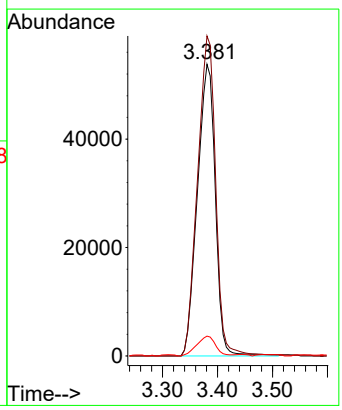


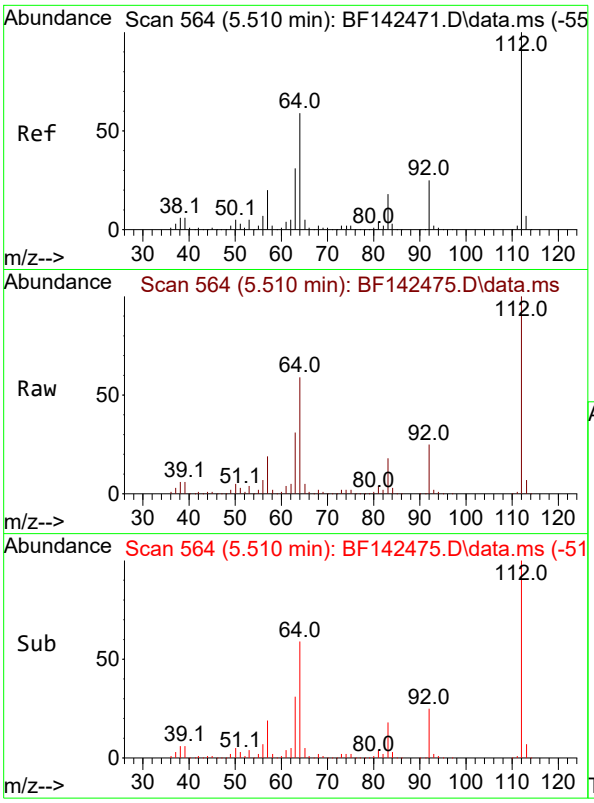


#4
n-Nitrosodimethylamine
Concen: 38.995 ng
RT: 3.381 min Scan# 202
Delta R.T. -0.023 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 42 Resp: 121742

Ion	Ratio	Lower	Upper
42	100		
74	109.7	88.2	132.4
44	6.8	5.4	8.2



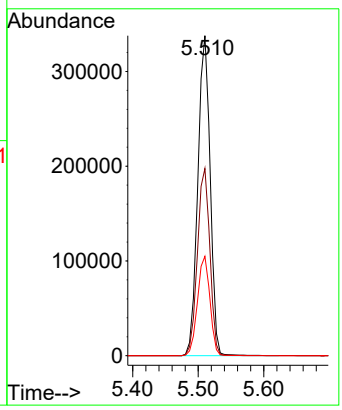


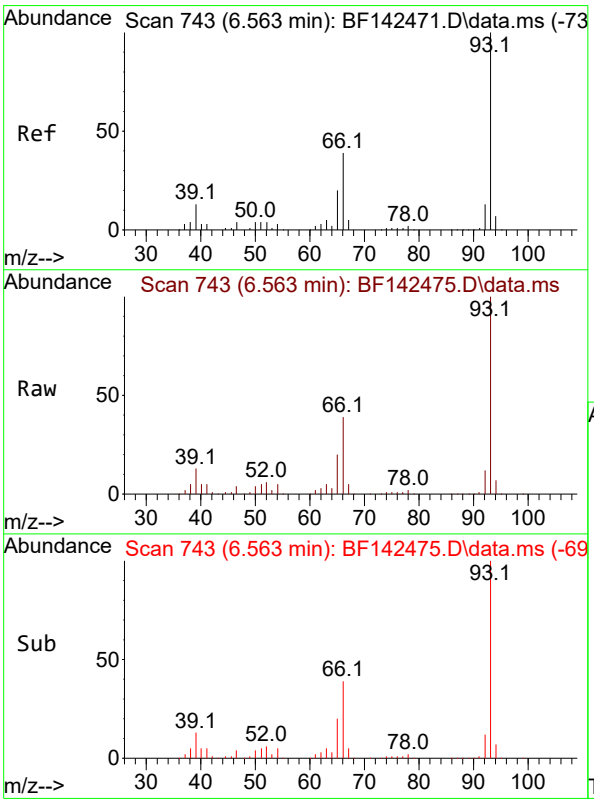
#5
2-Fluorophenol
Concen: 75.157 ng
RT: 5.510 min Scan# 5
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:112 Resp: 443470

Ion	Ratio	Lower	Upper
112	100		
64	58.5	47.5	71.3
63	31.1	24.9	37.3

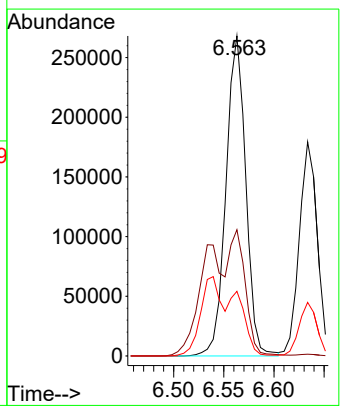


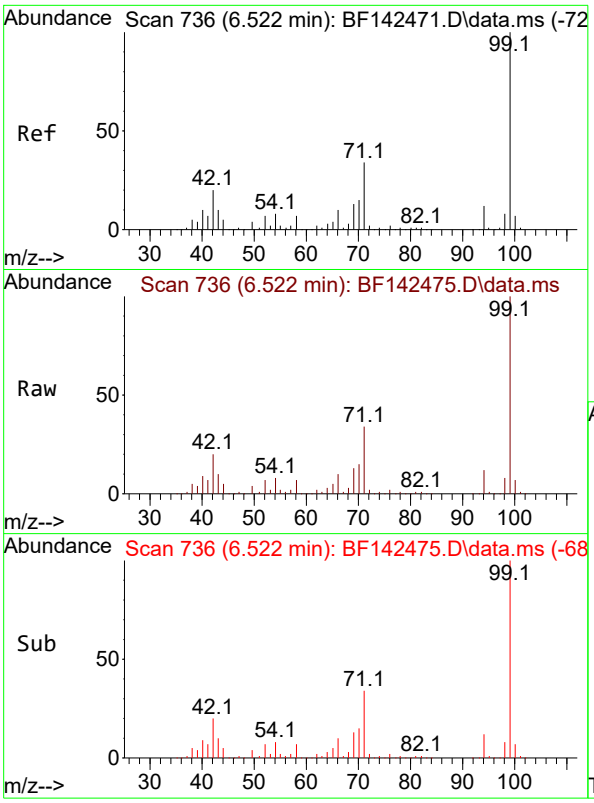


#6
Aniline
Concen: 38.415 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 93 Resp: 366889

Ion	Ratio	Lower	Upper
93	100		
66	39.5	32.0	48.0
65	20.2	16.1	24.1



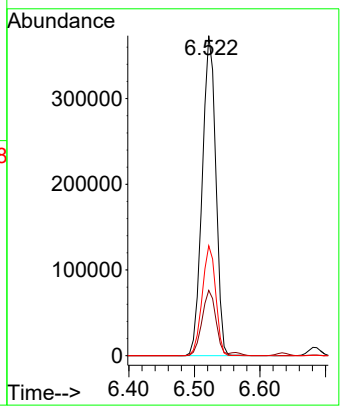


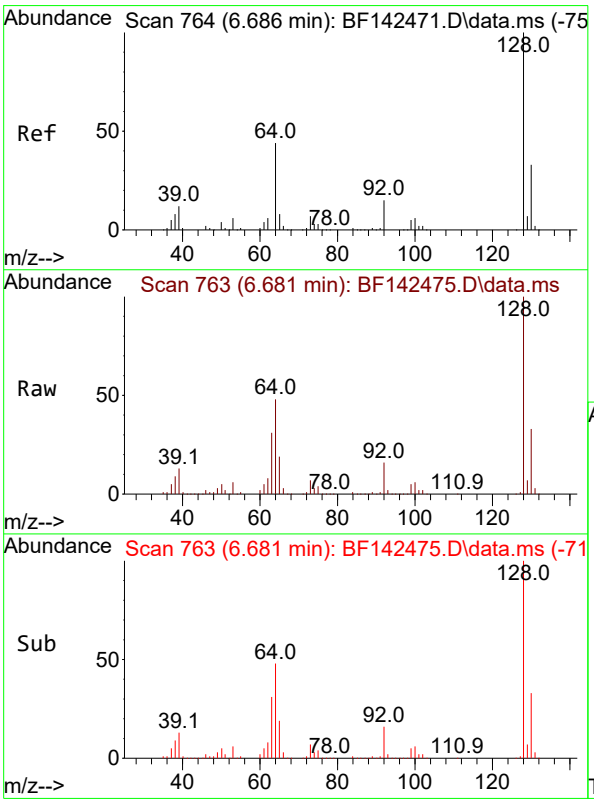
#7
Phenol-d6
Concen: 76.025 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 99 Resp: 539999

Ion	Ratio	Lower	Upper
99	100		
42	20.4	16.2	24.2
71	34.3	27.3	40.9

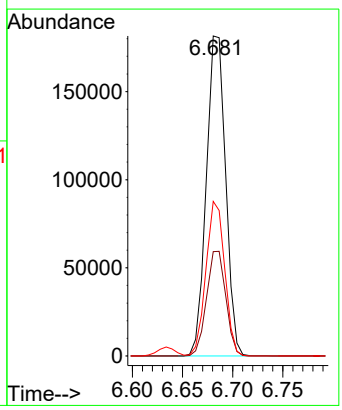


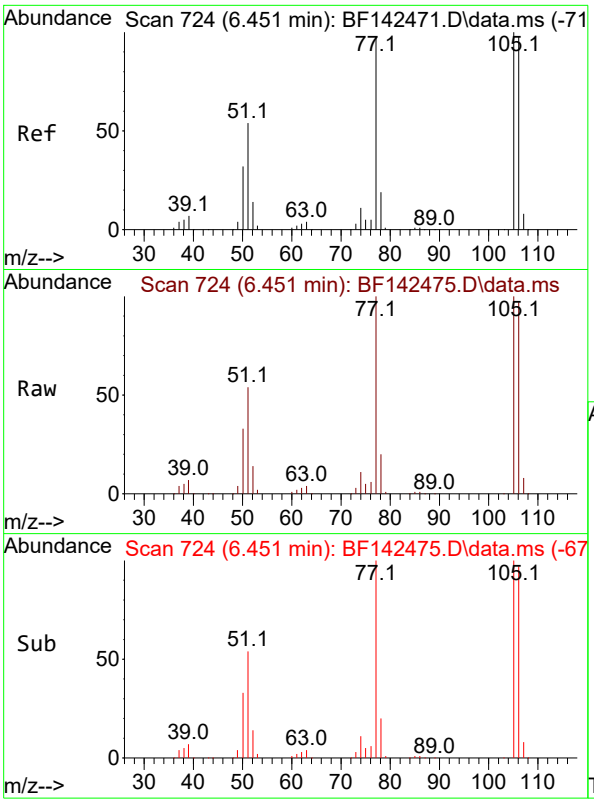


#8
2-Chlorophenol
Concen: 37.902 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:128 Resp: 243599

Ion	Ratio	Lower	Upper
128	100		
130	32.6	12.6	52.6
64	48.3	25.1	65.1



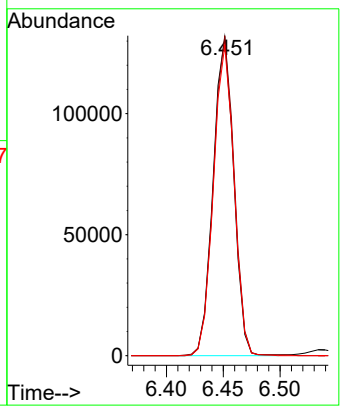


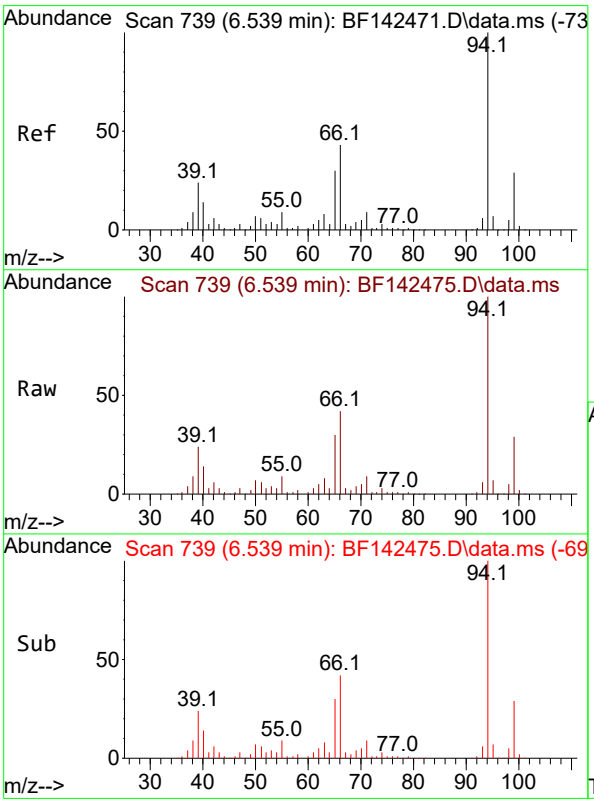
#9
Benzaldehyde
Concen: 38.726 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 77 Resp: 165445

Ion	Ratio	Lower	Upper
77	100		
105	100.5	82.5	122.5
106	97.4	80.0	120.0

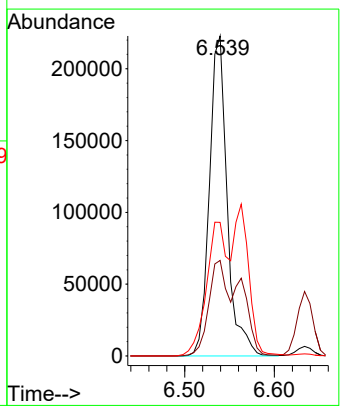


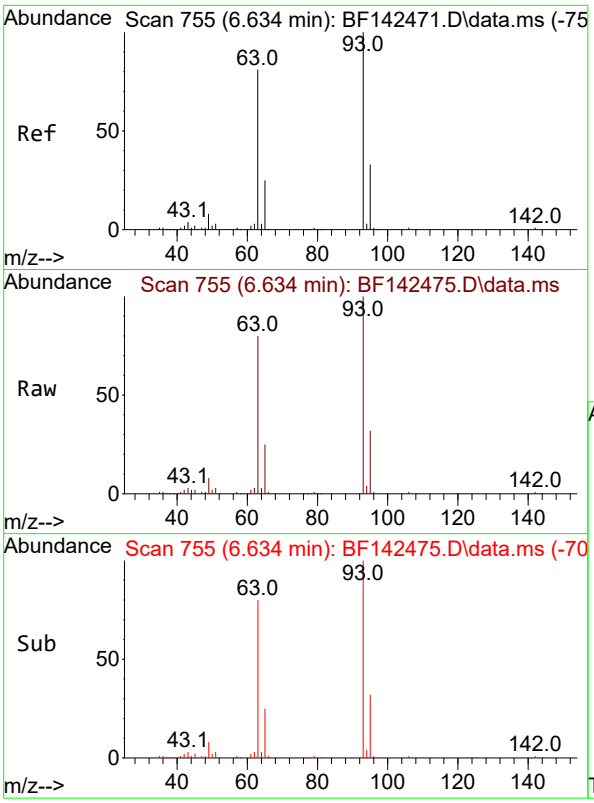


#10
Phenol
Concen: 38.362 ng
RT: 6.539 min Scan# 739
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 94 Resp: 306601

Ion	Ratio	Lower	Upper
94	100		
65	29.8	10.3	50.3
66	41.7	22.6	62.6



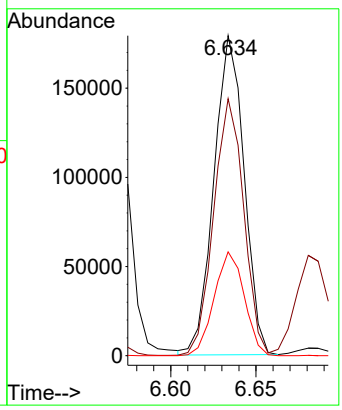


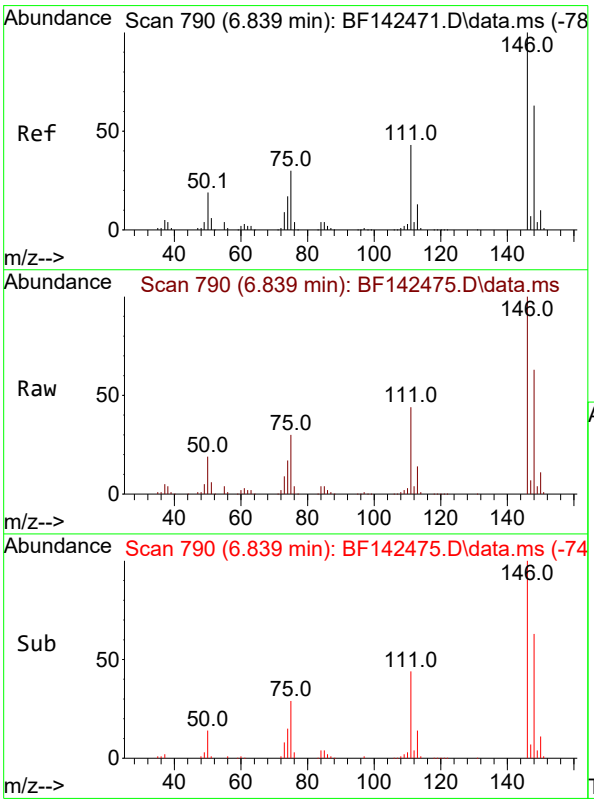
#11
bis(2-Chloroethyl)ether
Concen: 38.280 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 93 Resp: 220228

Ion	Ratio	Lower	Upper
93	100		
63	80.3	60.2	100.2
95	32.5	12.3	52.3

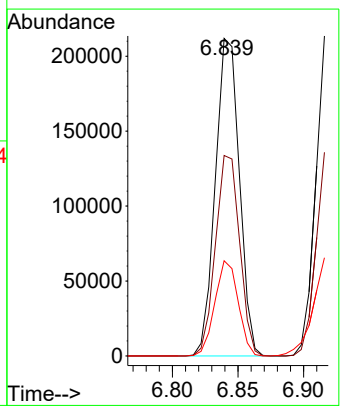


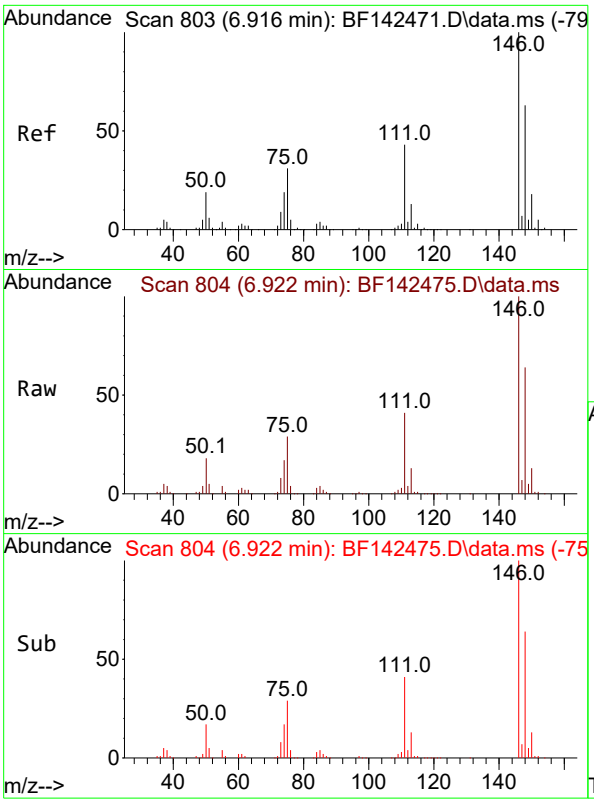


#12
1,3-Dichlorobenzene
Concen: 37.579 ng
RT: 6.839 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:146 Resp: 269504

Ion	Ratio	Lower	Upper
146	100		
148	63.1	50.6	75.8
75	30.0	23.8	35.6



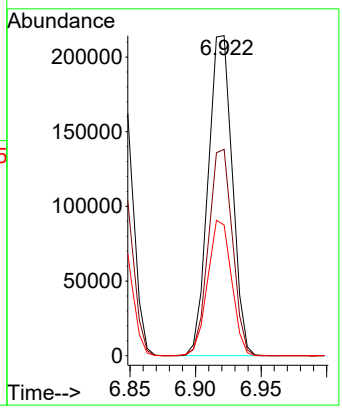


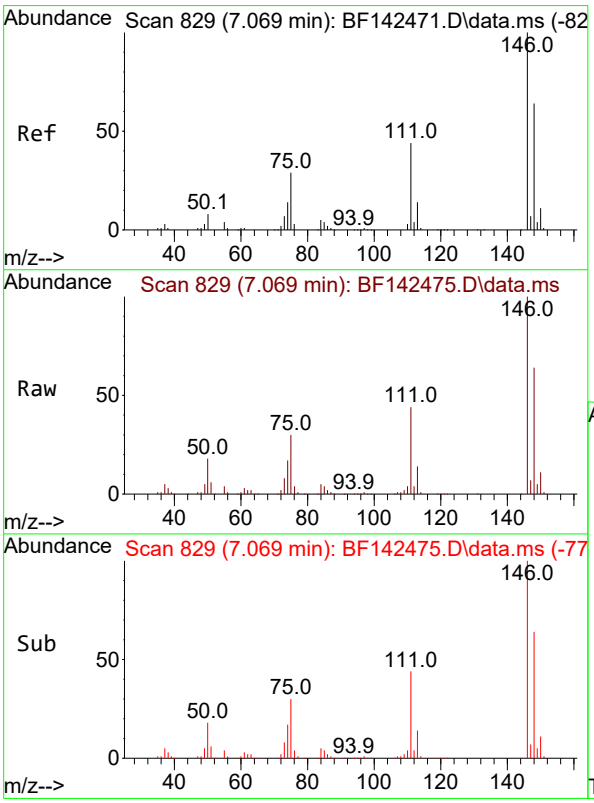
#13
1,4-Dichlorobenzene
Concen: 38.078 ng
RT: 6.922 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:146 Resp: 275076

Ion	Ratio	Lower	Upper
146	100		
148	64.5	50.4	75.6
111	40.9	34.1	51.1

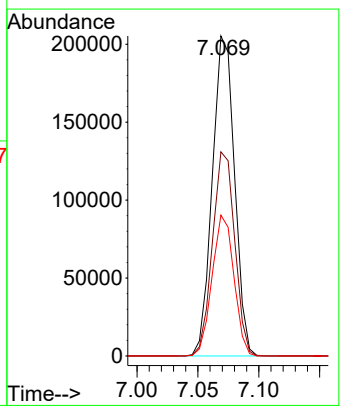


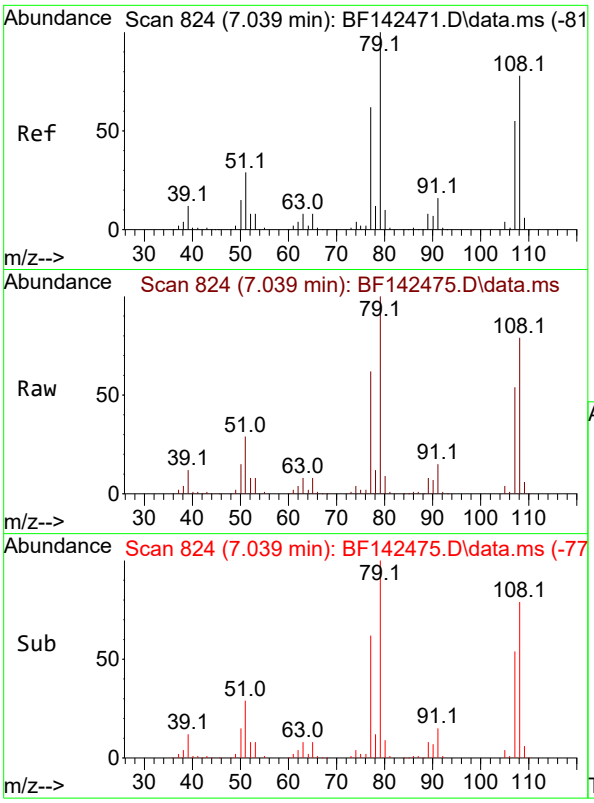


#14
1,2-Dichlorobenzene
Concen: 37.716 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:146 Resp: 260709

Ion	Ratio	Lower	Upper
146	100		
148	63.8	51.0	76.4
111	44.0	35.0	52.6



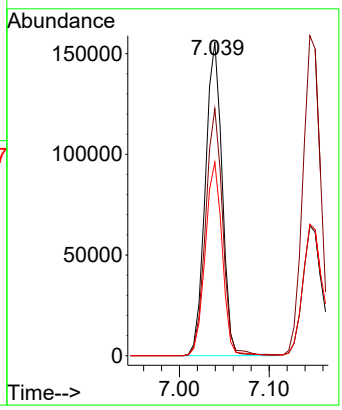


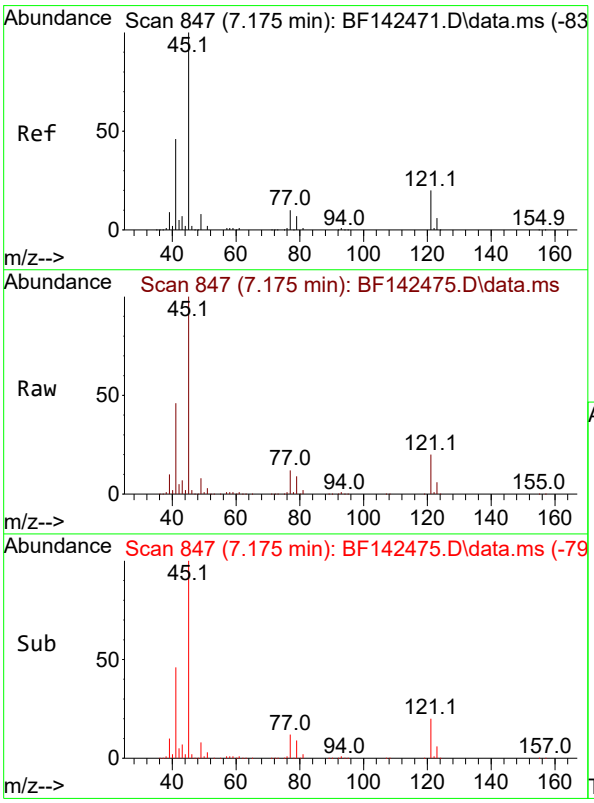
#15
Benzyl Alcohol
Concen: 38.663 ng
RT: 7.039 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 79 Resp: 202944

Ion	Ratio	Lower	Upper
79	100		
108	78.8	62.1	93.1
77	61.7	49.5	74.3

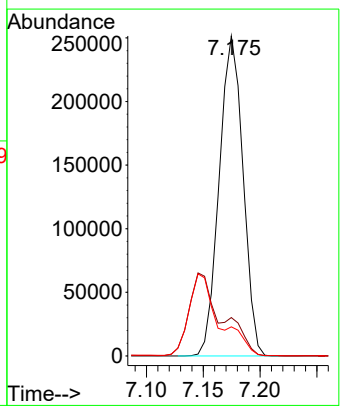


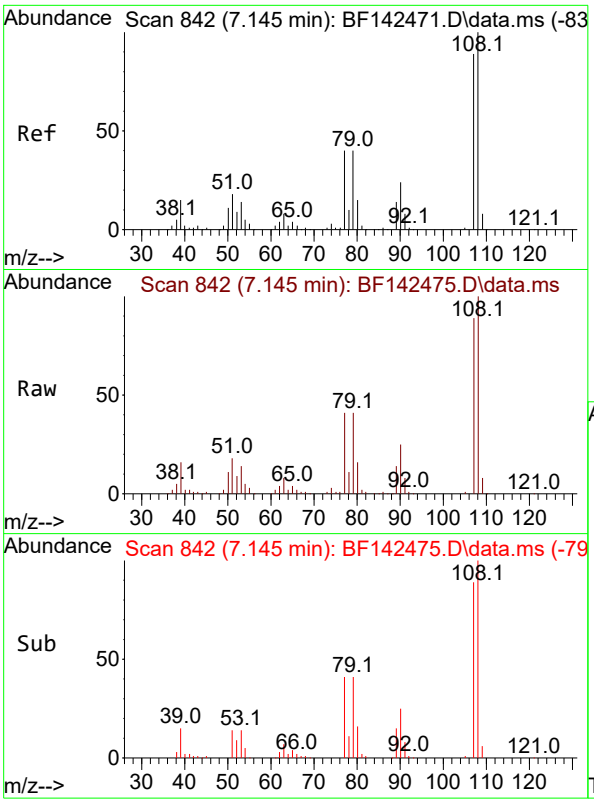


#16
2,2'-oxybis(1-Chloropropane)
Concen: 37.927 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 45 Resp: 366430

Ion	Ratio	Lower	Upper
45	100		
77	12.0	0.0	32.0
79	9.1	0.0	29.2



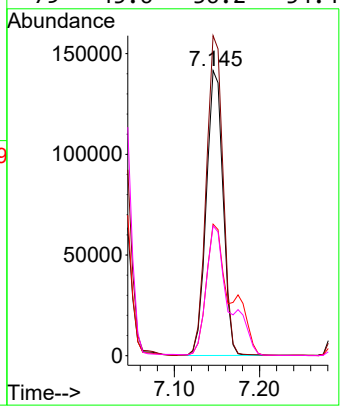


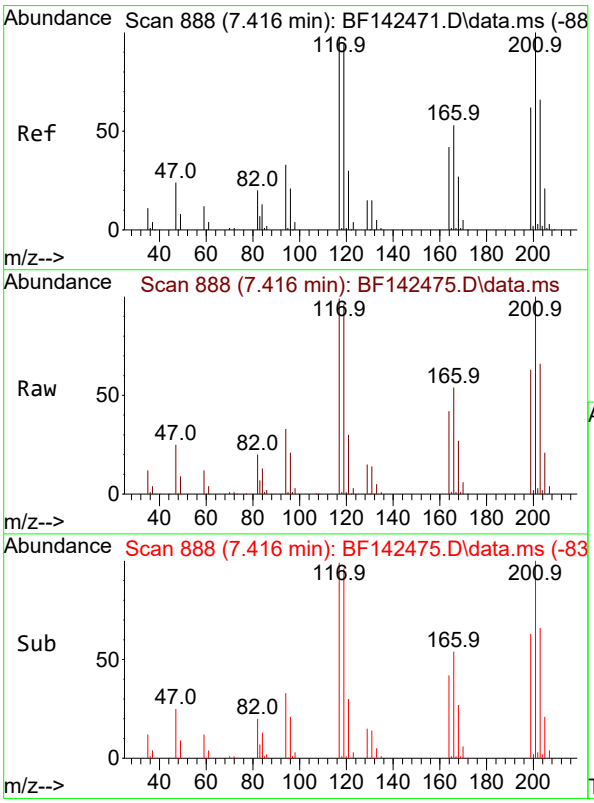
#17
2-Methylphenol
Concen: 38.500 ng
RT: 7.145 min Scan# 84
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:107 Resp: 193190

Ion	Ratio	Lower	Upper
107	100		
108	112.3	90.2	135.2
77	46.1	36.1	54.1
79	45.6	36.2	54.4

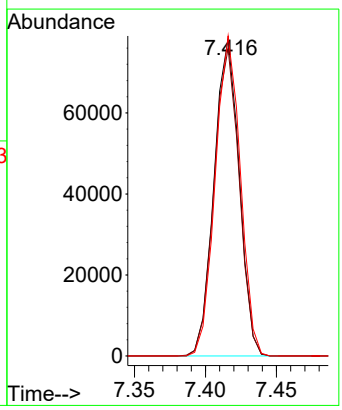


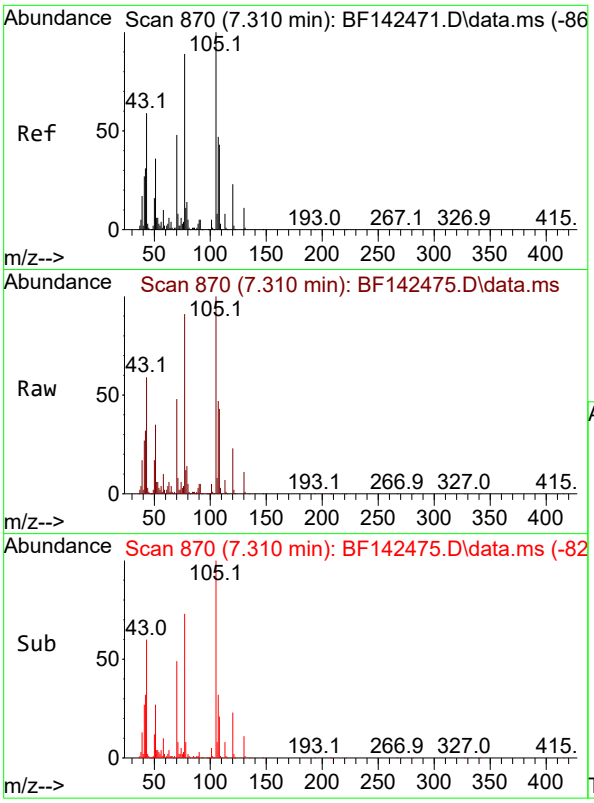


#18
Hexachloroethane
Concen: 38.137 ng
RT: 7.416 min Scan# 888
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:117 Resp: 96202

Ion	Ratio	Lower	Upper
117	100		
119	97.0	76.6	114.8
201	100.8	81.3	121.9



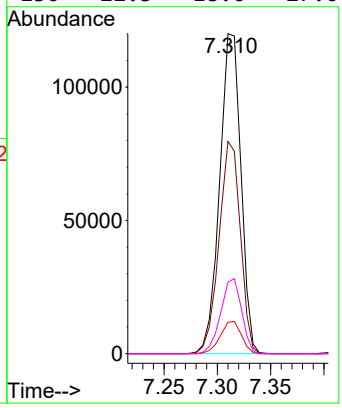


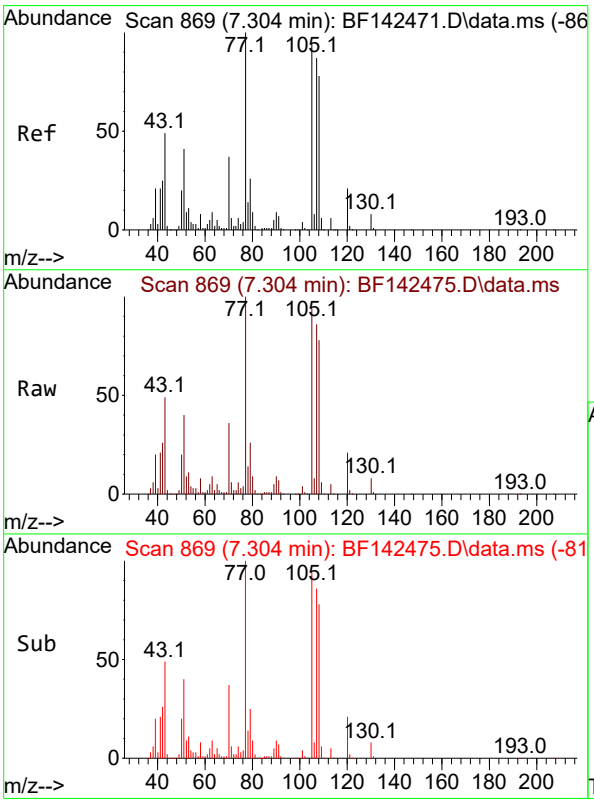
#19
n-Nitroso-di-n-propylamine
Concen: 37.833 ng
RT: 7.310 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 70 Resp: 166542

Ion	Ratio	Lower	Upper
70	100		
42	66.3	52.4	78.6
101	9.8	7.8	11.8
130	22.3	18.0	27.0

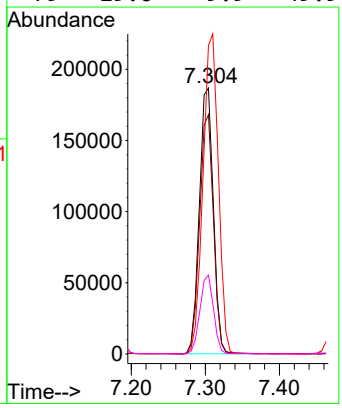


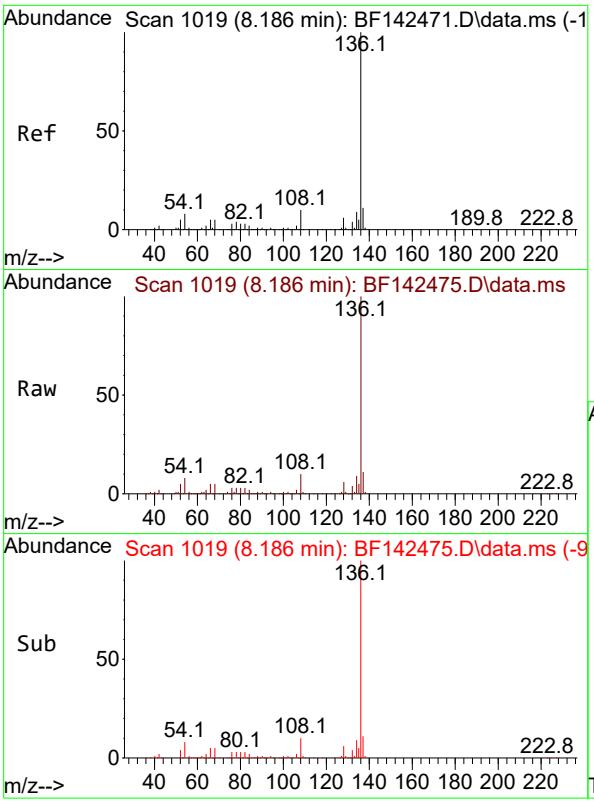


#20
3+4-Methylphenols
Concen: 38.020 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:107 Resp: 244310

Ion	Ratio	Lower	Upper
107	100		
108	90.0	70.4	110.4
77	115.9	95.4	135.4
79	29.6	9.9	49.9



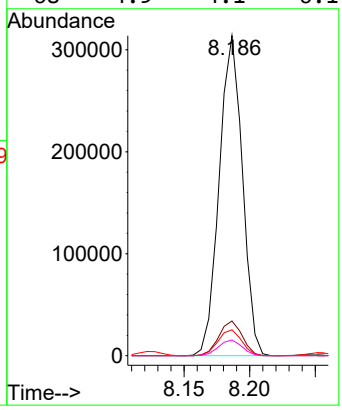


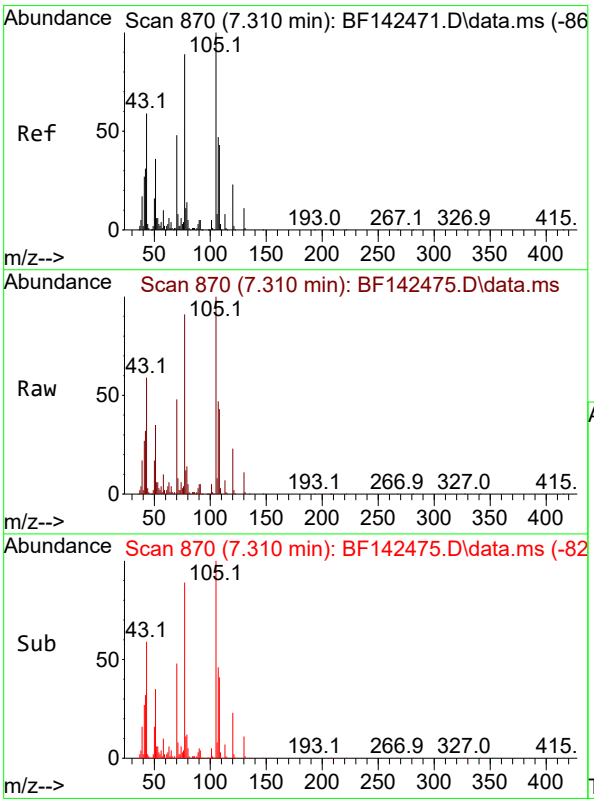
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:136 Resp: 385222

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	8.1	6.6	10.0
68	4.9	4.1	6.1

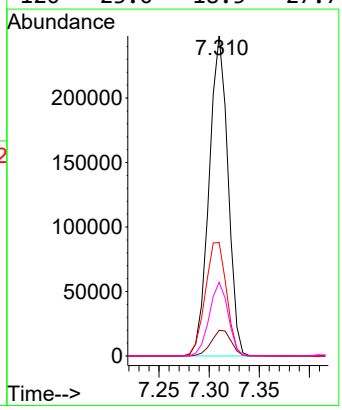


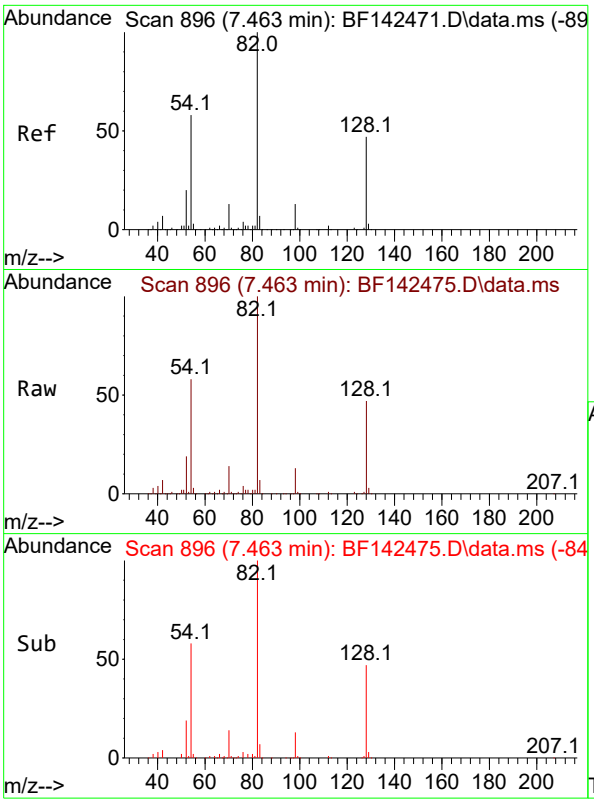


#22
Acetophenone
Concen: 38.118 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:105 Resp: 325056

Ion	Ratio	Lower	Upper
105	100		
71	8.0	6.4	9.6
51	35.4	28.6	42.8
120	23.0	18.5	27.7



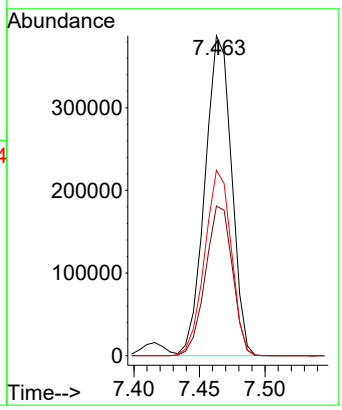


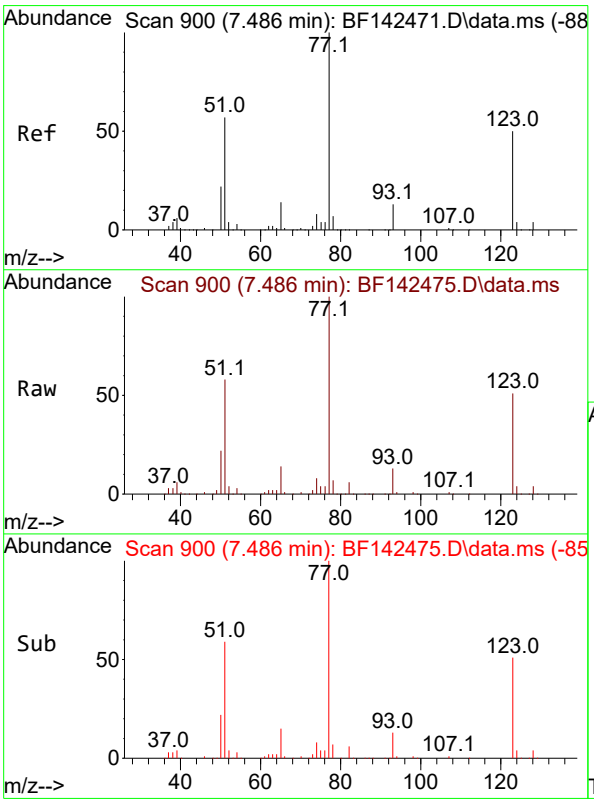
#23
Nitrobenzene-d5
Concen: 77.283 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 82 Resp: 545967

Ion	Ratio	Lower	Upper
82	100		
128	46.7	37.4	56.2
54	58.0	46.6	70.0

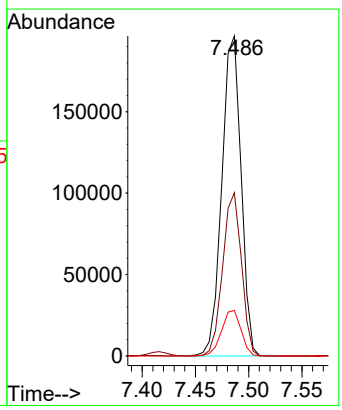


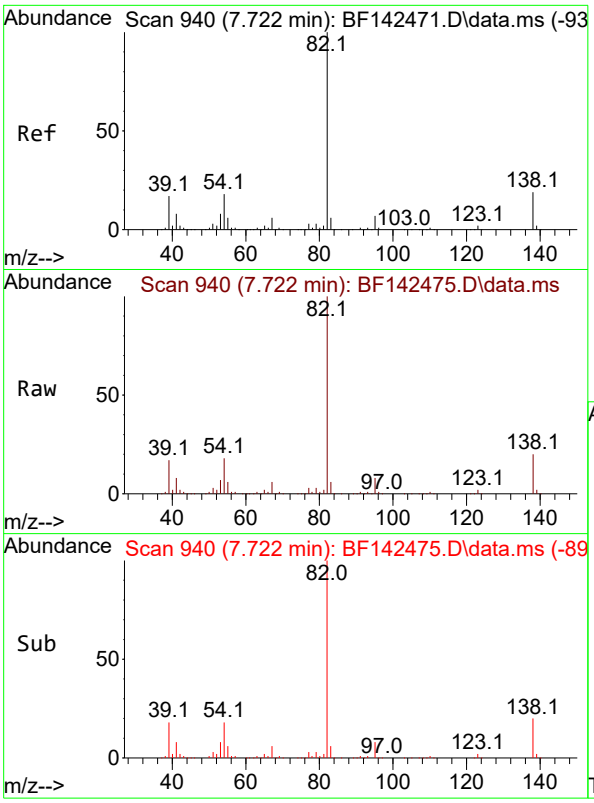


#24
Nitrobenzene
Concen: 38.737 ng
RT: 7.486 min Scan# 900
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 77 Resp: 246818

Ion	Ratio	Lower	Upper
77	100		
123	51.0	40.6	61.0
65	14.3	11.4	17.2



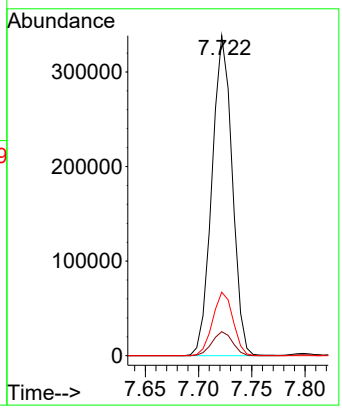


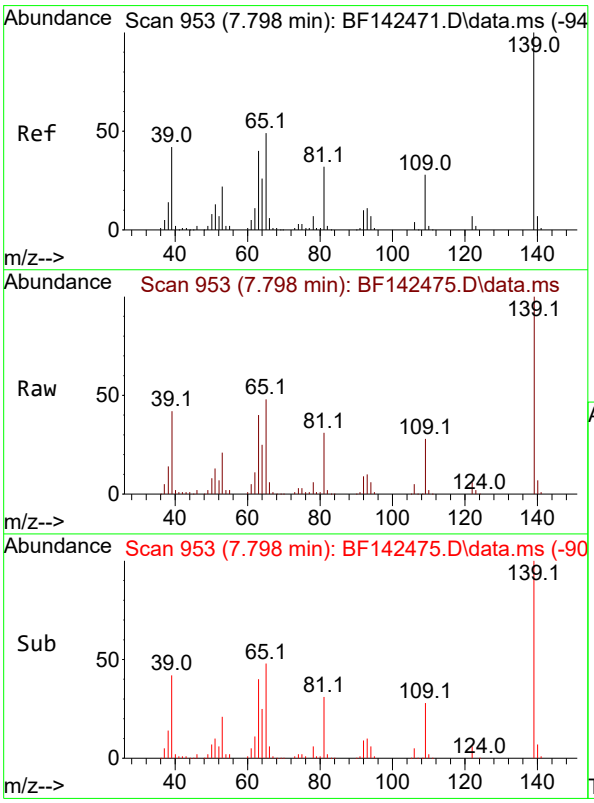
#25
Isophorone
Concen: 37.906 ng
RT: 7.722 min Scan# 94
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 82 Resp: 447723

Ion	Ratio	Lower	Upper
82	100		
95	7.5	6.0	9.0
138	19.9	15.5	23.3

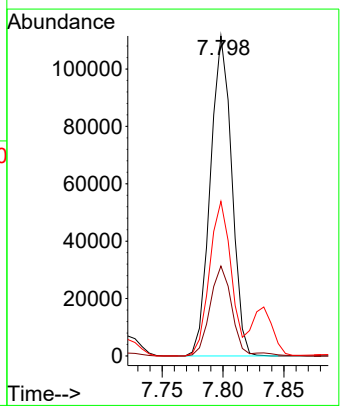


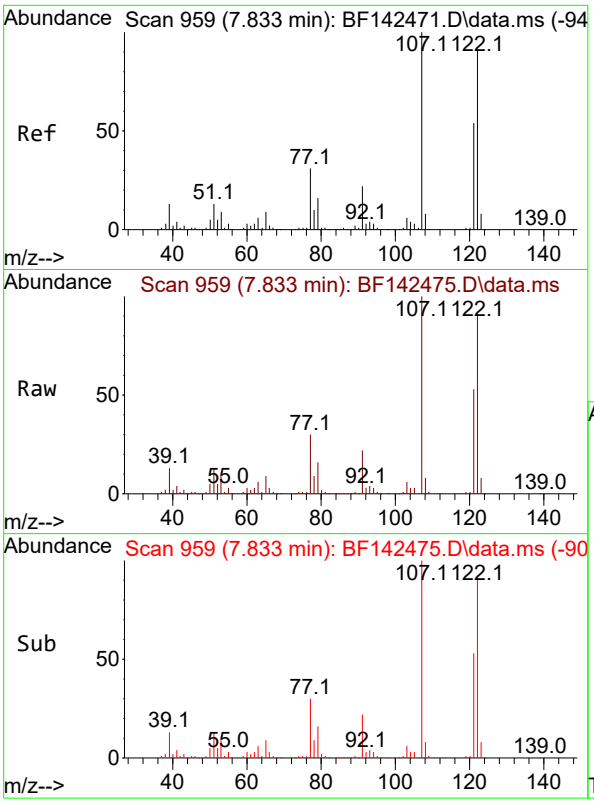


#26
2-Nitrophenol
Concen: 39.958 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:139 Resp: 136039

Ion	Ratio	Lower	Upper
139	100		
109	28.1	22.6	33.8
65	48.3	39.4	59.0



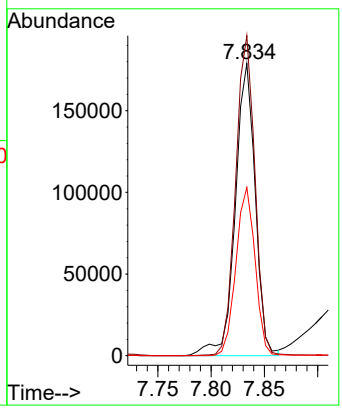


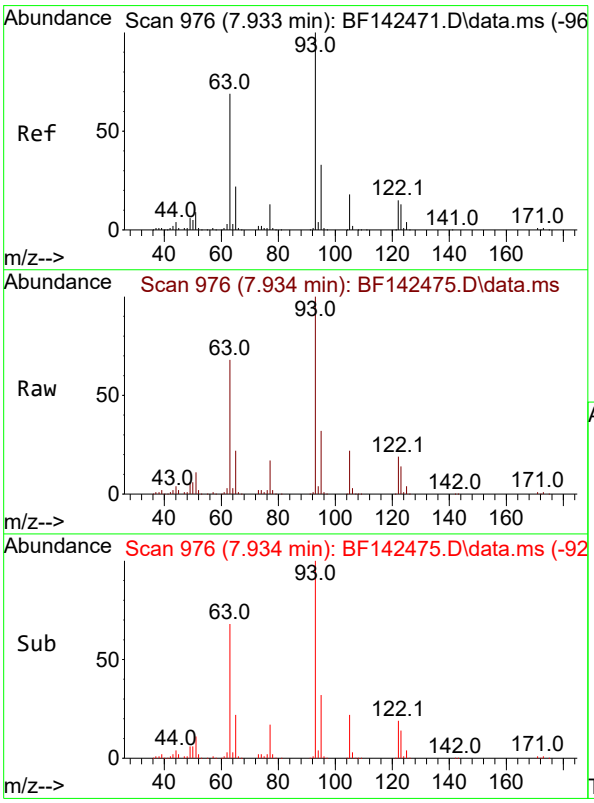
#27
2,4-Dimethylphenol
Concen: 38.953 ng
RT: 7.833 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:122 Resp: 233871

Ion	Ratio	Lower	Upper
122	100		
107	109.5	88.1	132.1
121	57.5	47.3	70.9

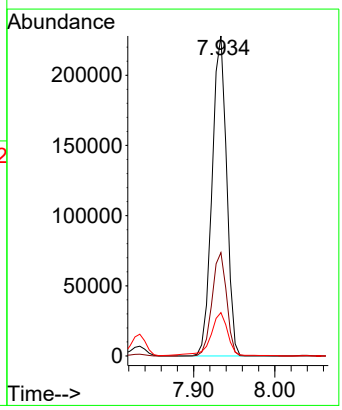


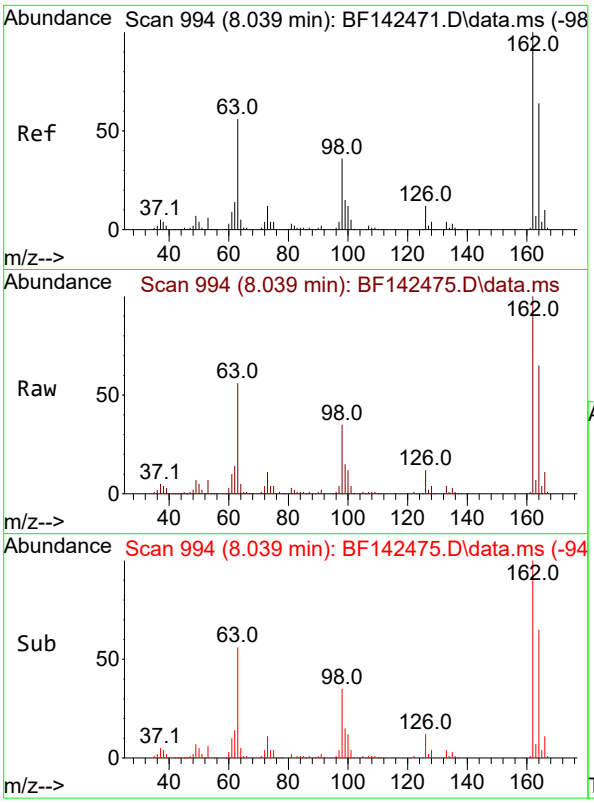


#28
bis(2-Chloroethoxy)methane
Concen: 38.407 ng
RT: 7.934 min Scan# 976
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 93 Resp: 283379

Ion	Ratio	Lower	Upper
93	100		
95	32.3	26.4	39.6
123	13.5	10.6	15.8



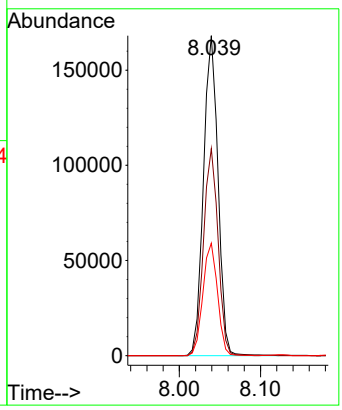


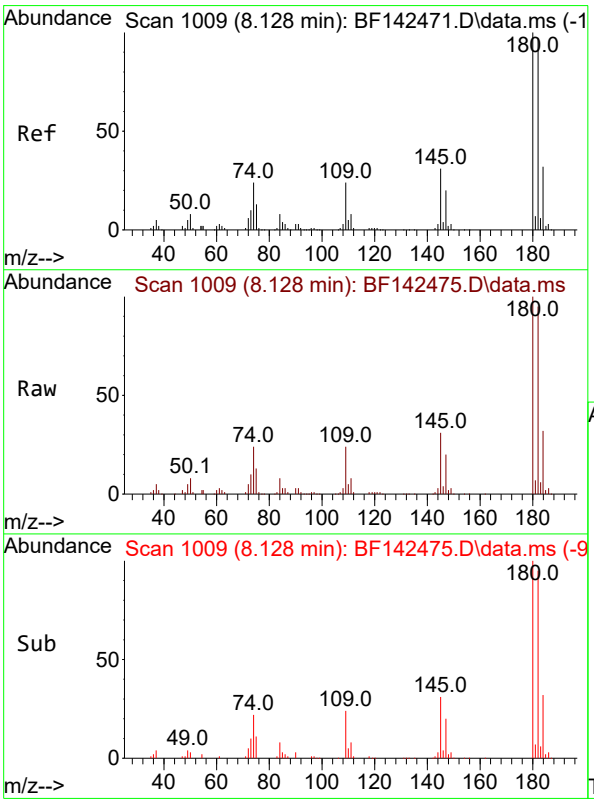
#29
2,4-Dichlorophenol
Concen: 38.285 ng
RT: 8.039 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:162 Resp: 209040

Ion	Ratio	Lower	Upper
162	100		
164	64.7	43.7	83.7
98	35.1	15.5	55.5

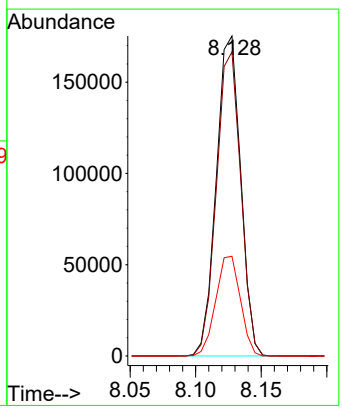


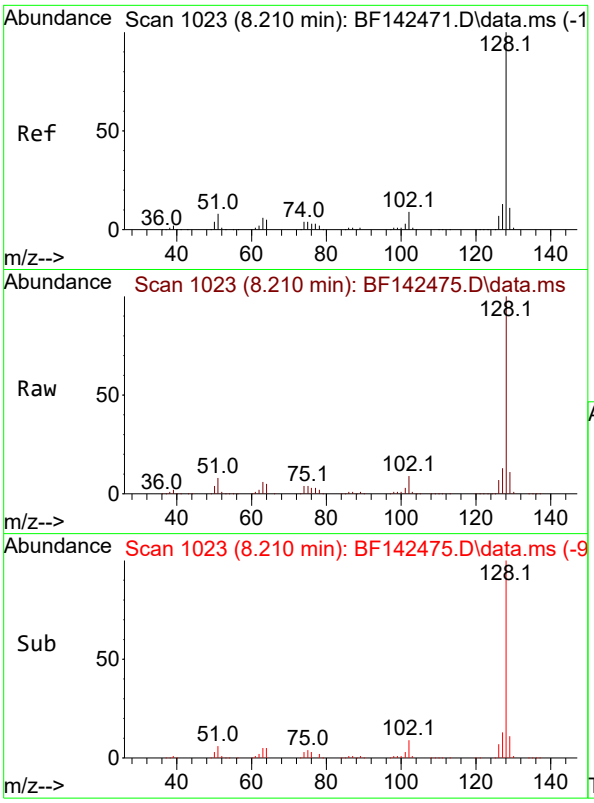


#30
1,2,4-Trichlorobenzene
Concen: 38.187 ng
RT: 8.128 min Scan# 1009
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:180 Resp: 226285

Ion	Ratio	Lower	Upper
180	100		
182	95.0	78.0	117.0
145	31.2	25.0	37.6



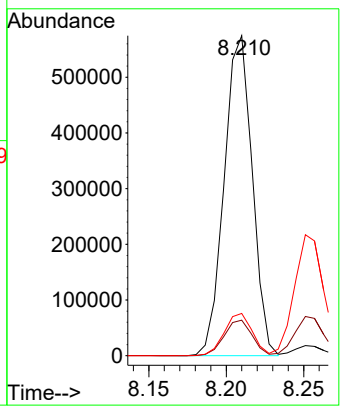


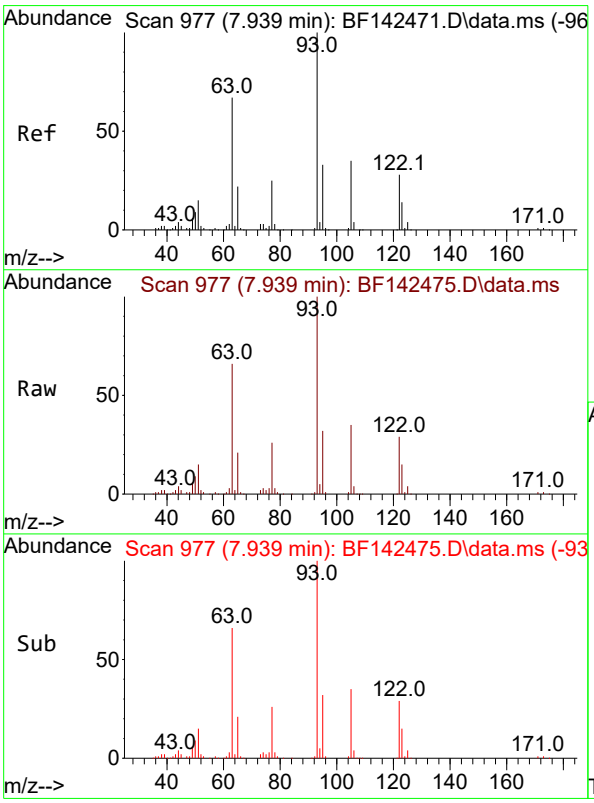
#31
Naphthalene
Concen: 38.112 ng
RT: 8.210 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:128 Resp: 722913

Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.9	13.3
127	13.2	10.5	15.7

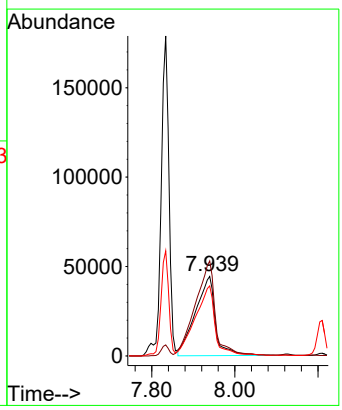


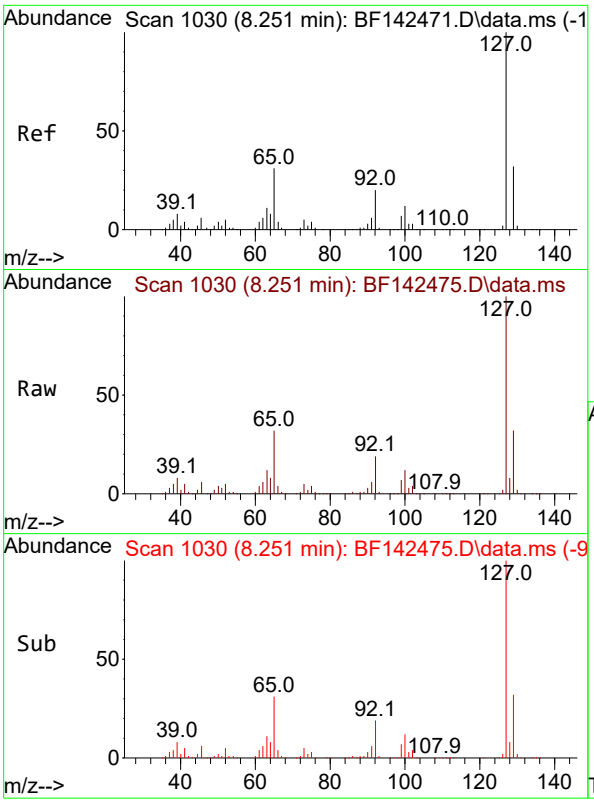


#32
Benzoic acid
Concen: 40.490 ng
RT: 7.939 min Scan# 977
Delta R.T. -0.036 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:122 Resp: 147981

Ion	Ratio	Lower	Upper
122	100		
105	119.5	101.7	141.7
77	88.1	69.5	109.5



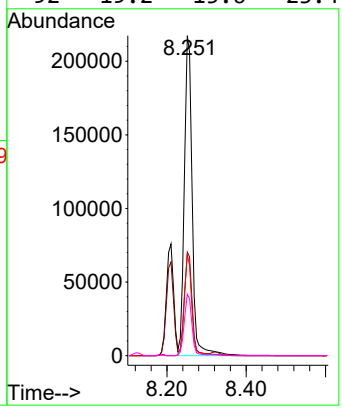


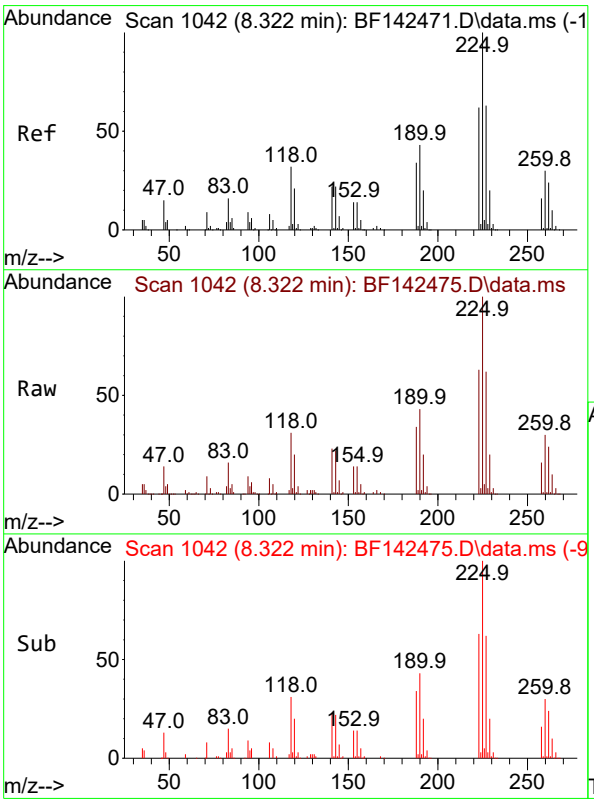
#33
4-Chloroaniline
Concen: 38.962 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:127 Resp: 299462

Ion	Ratio	Lower	Upper
127	100		
129	32.4	26.1	39.1
65	31.6	24.9	37.3
92	19.2	15.6	23.4

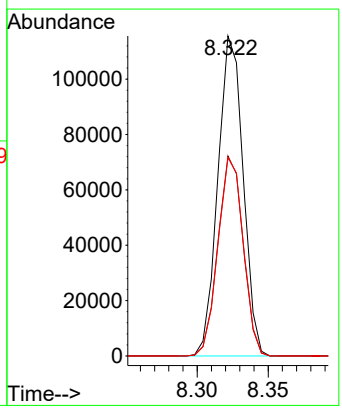


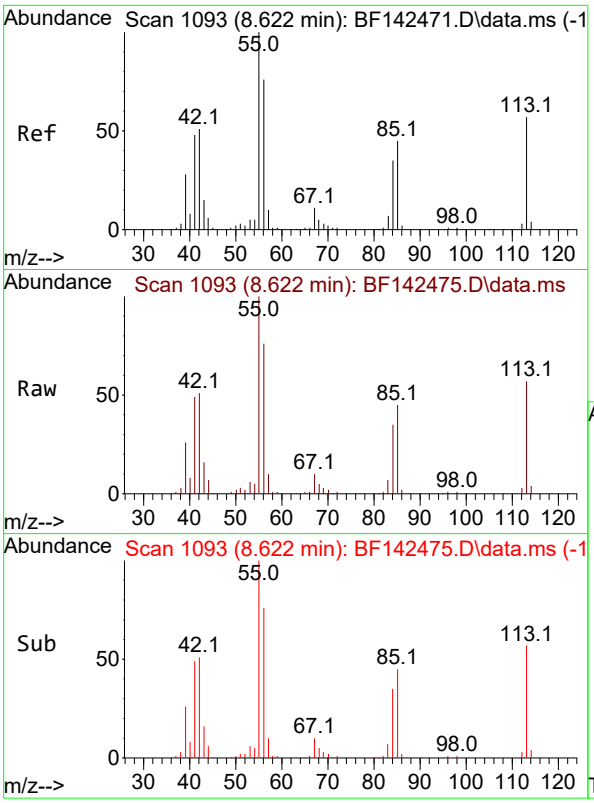


#34
Hexachlorobutadiene
Concen: 38.512 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:225 Resp: 142496

Ion	Ratio	Lower	Upper
225	100		
223	62.5	49.7	74.5
227	62.0	50.3	75.5



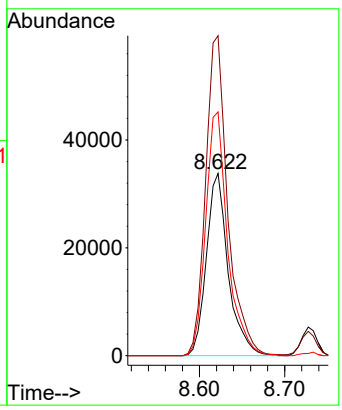


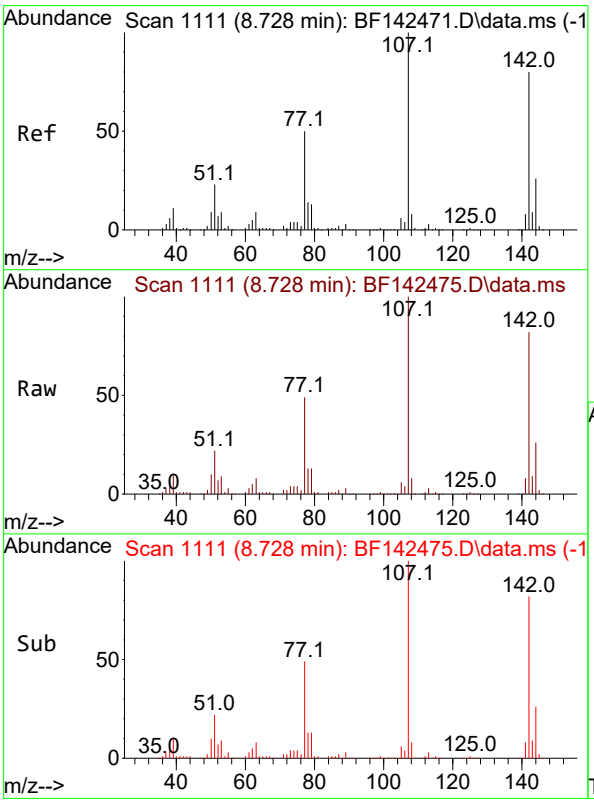
#35
Caprolactam
Concen: 39.162 ng
RT: 8.622 min Scan# 1
Delta R.T. -0.023 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:113 Resp: 60055

Ion	Ratio	Lower	Upper
113	100		
55	175.7	154.7	194.7
56	133.9	113.2	153.2

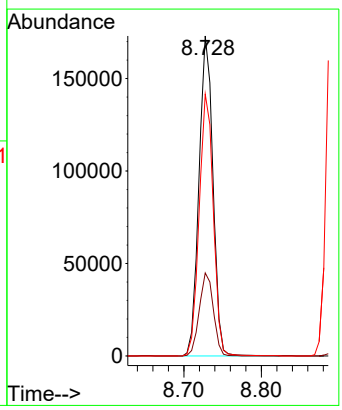


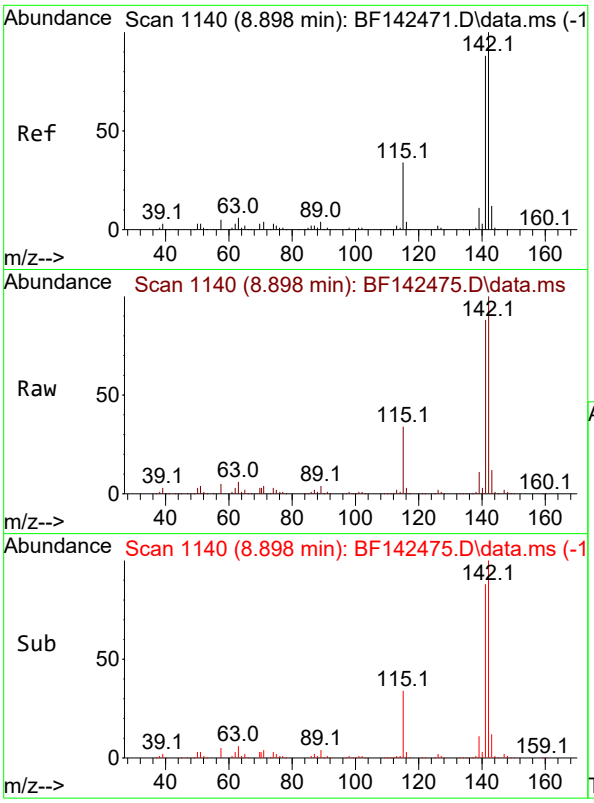


#36
4-Chloro-3-methylphenol
Concen: 38.654 ng
RT: 8.728 min Scan# 1111
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:107 Resp: 216299

Ion	Ratio	Lower	Upper
107	100		
144	25.9	20.9	31.3
142	81.8	64.2	96.2



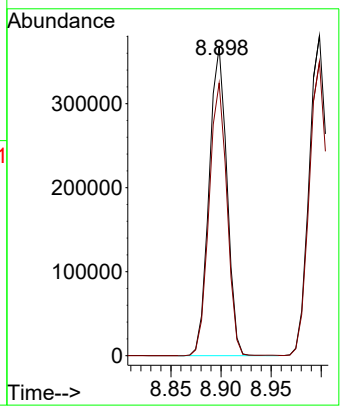


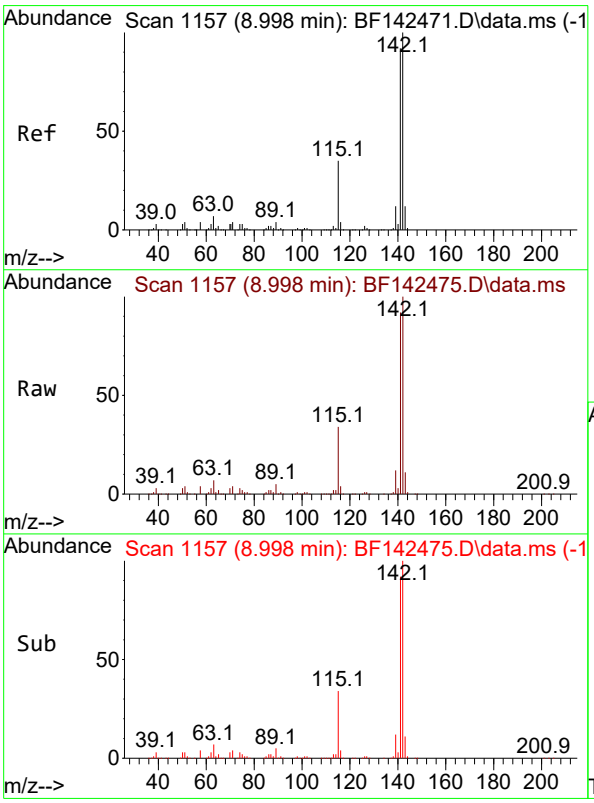
#37
2-Methylnaphthalene
Concen: 38.062 ng
RT: 8.898 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:142 Resp: 454200

Ion	Ratio	Lower	Upper
142	100		
141	88.3	70.7	106.1

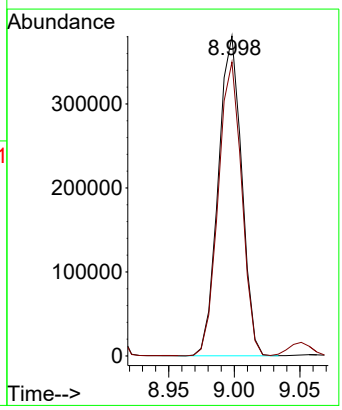


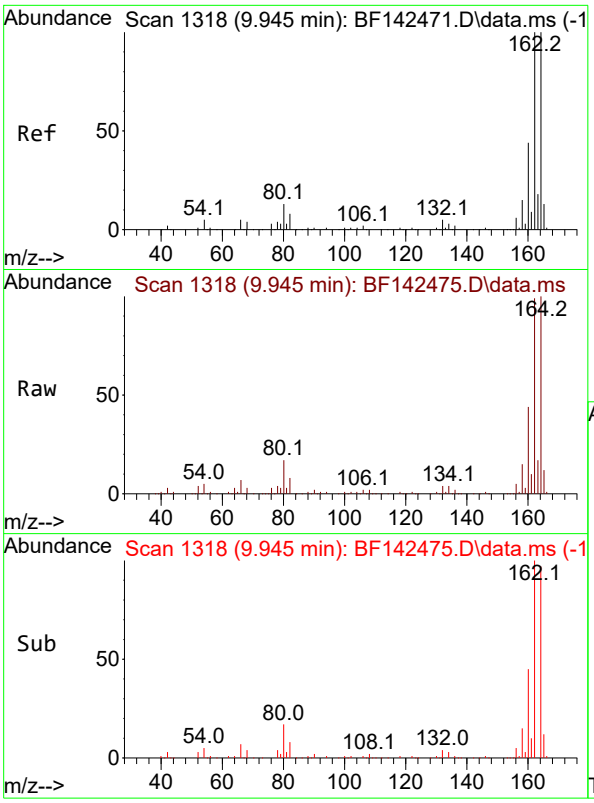


#38
1-Methylnaphthalene
Concen: 38.229 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:142 Resp: 471880

Ion	Ratio	Lower	Upper
142	100		
141	91.9	73.4	110.2



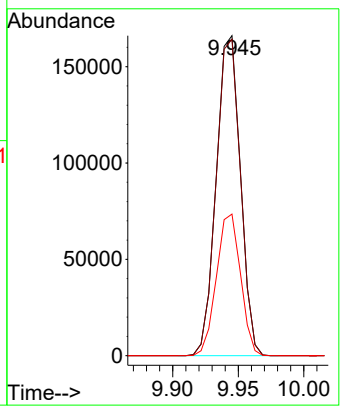


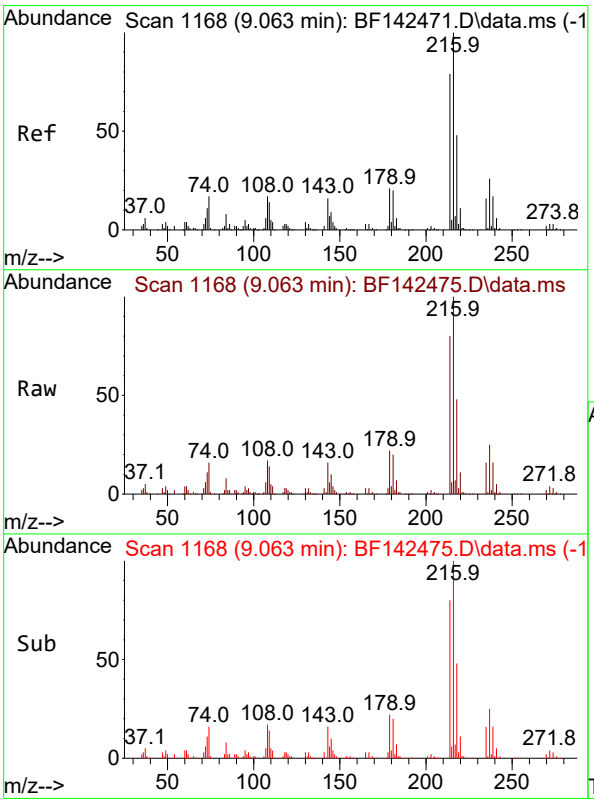
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.945 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:164 Resp: 213164

Ion	Ratio	Lower	Upper
164	100		
162	98.9	80.2	120.4
160	44.3	35.6	53.4

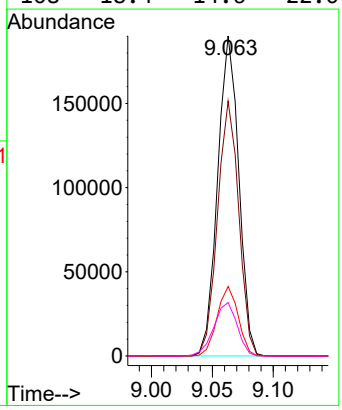


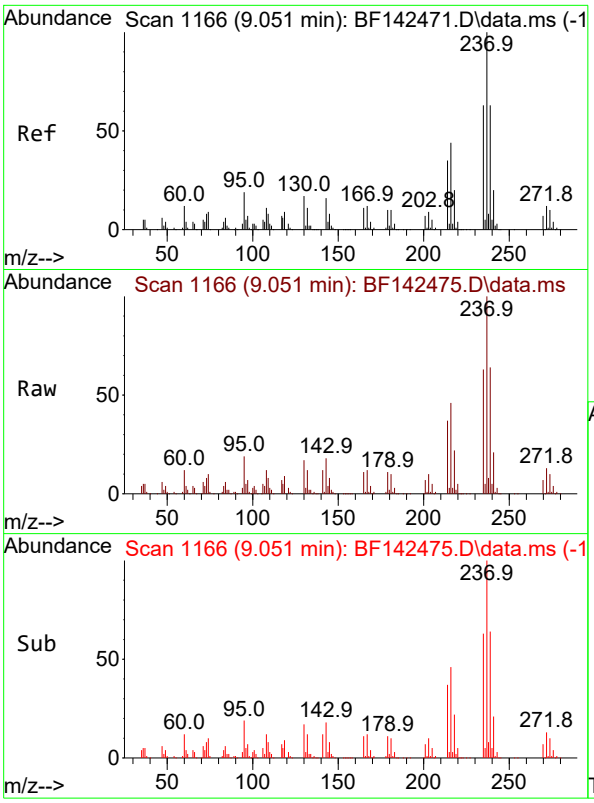


#40
1,2,4,5-Tetrachlorobenzene
Concen: 37.508 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:216 Resp: 229514

Ion	Ratio	Lower	Upper
216	100		
214	79.6	62.9	94.3
179	21.6	16.9	25.3
108	18.4	14.6	22.0



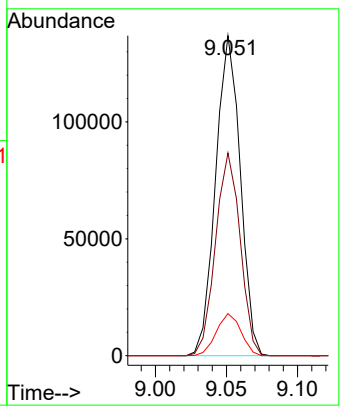


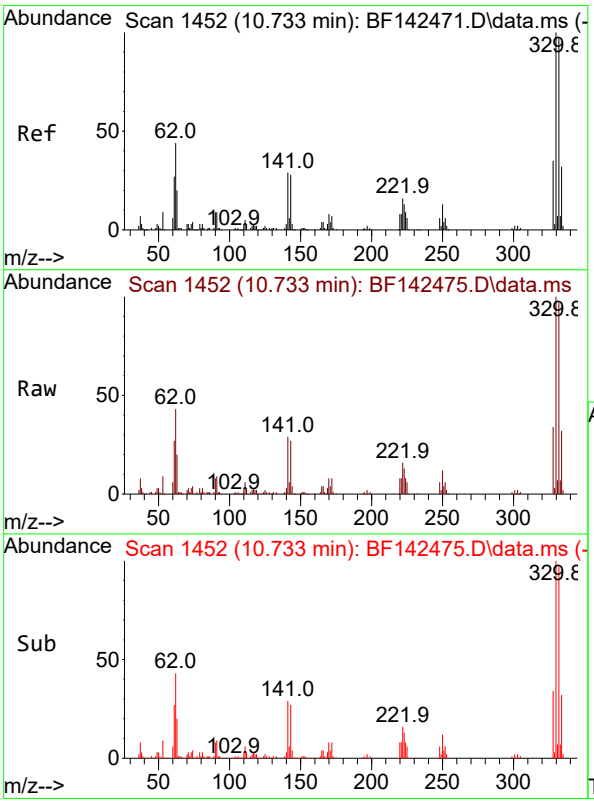
#41
Hexachlorocyclopentadiene
Concen: 39.991 ng
RT: 9.051 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:237 Resp: 165077

Ion	Ratio	Lower	Upper
237	100		
235	63.4	43.3	83.3
272	13.1	0.0	32.4

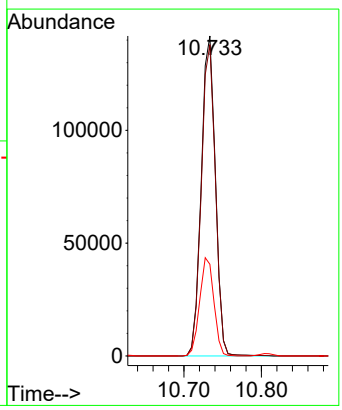


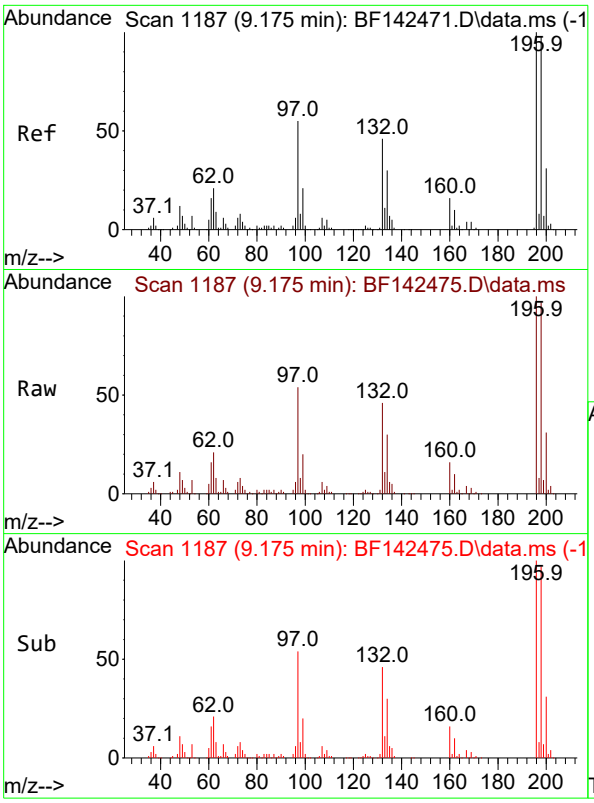


#42
2,4,6-Tribromophenol
Concen: 75.790 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:330 Resp: 179309

Ion	Ratio	Lower	Upper
330	100		
332	97.2	77.6	116.4
141	31.0	24.6	36.8



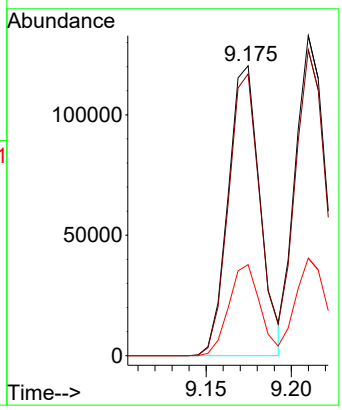


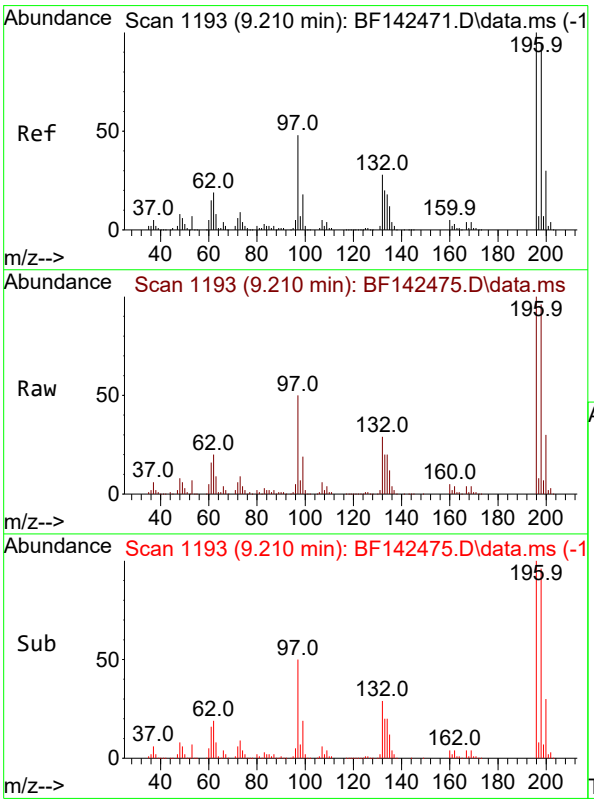
#43
2,4,6-Trichlorophenol
Concen: 37.954 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:196 Resp: 156603

Ion	Ratio	Lower	Upper
196	100		
198	97.1	78.8	118.2
200	31.4	24.9	37.3

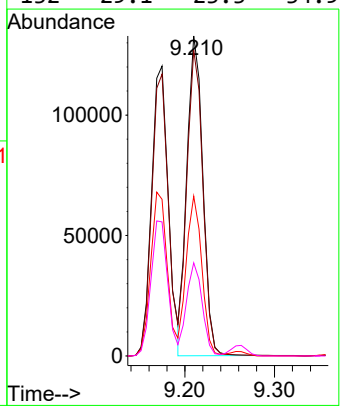


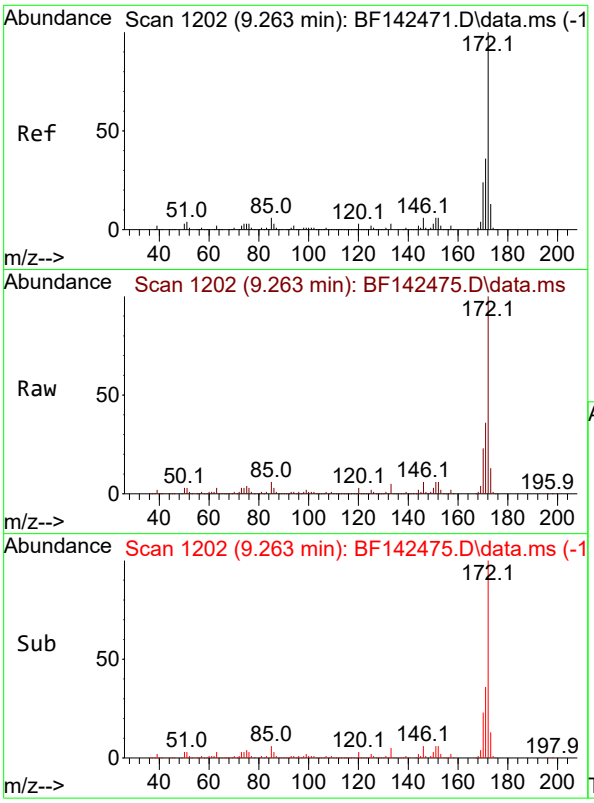


#44
2,4,5-Trichlorophenol
Concen: 37.766 ng
RT: 9.210 min Scan# 1193
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:196 Resp: 164342

Ion	Ratio	Lower	Upper
196	100		
198	95.6	75.5	113.3
97	49.9	39.3	58.9
132	29.1	23.3	34.9



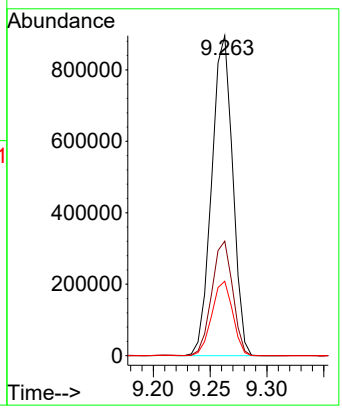


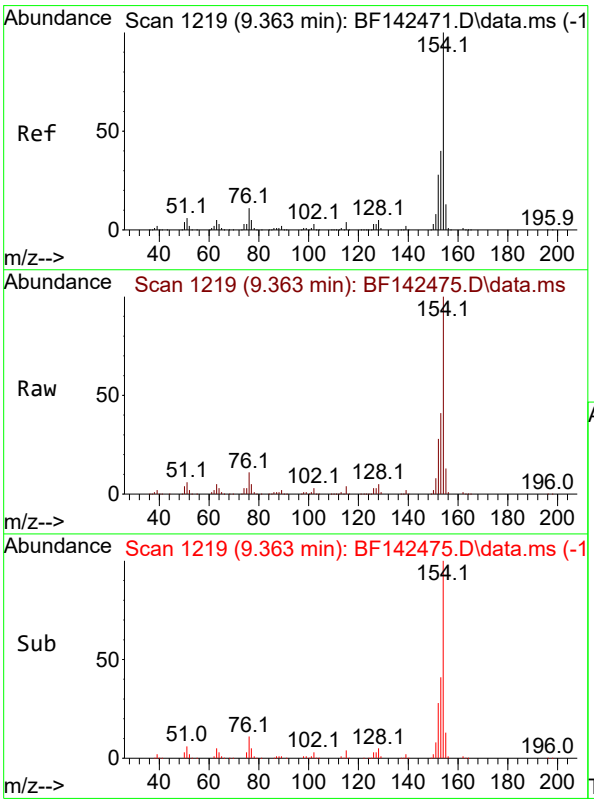
#45
2-Fluorobiphenyl
Concen: 72.557 ng
RT: 9.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:172 Resp: 1152622

Ion	Ratio	Lower	Upper
172	100		
171	35.8	28.6	42.8
170	23.3	18.9	28.3

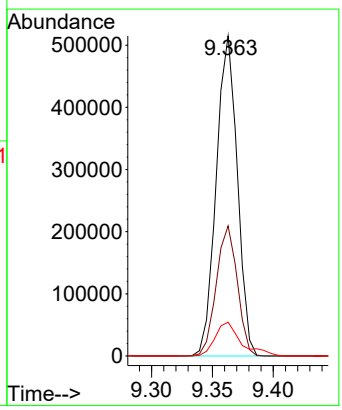


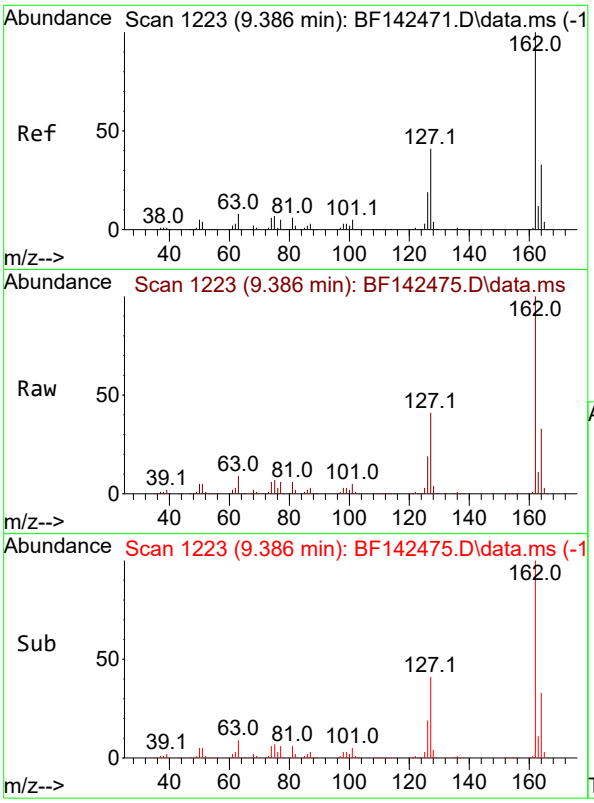


#46
1,1'-Biphenyl
Concen: 37.487 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:154 Resp: 619947

Ion	Ratio	Lower	Upper
154	100		
153	40.6	20.4	60.4
76	10.6	0.0	30.8



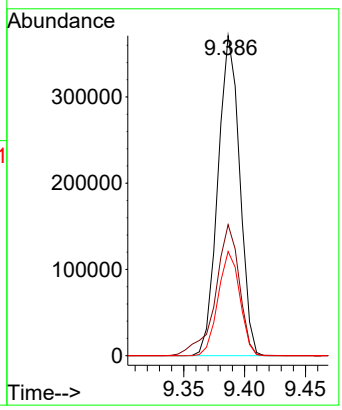


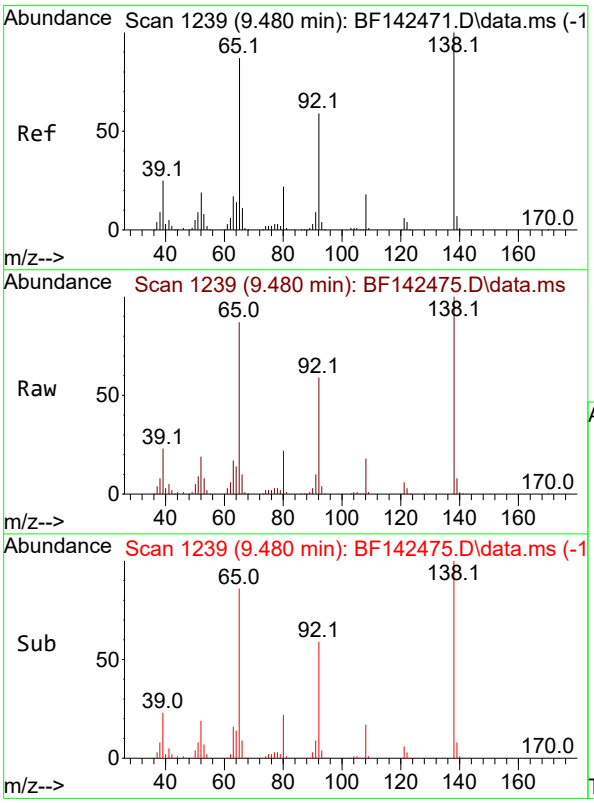
#47
2-Chloronaphthalene
Concen: 37.763 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:162 Resp: 461414

Ion	Ratio	Lower	Upper
162	100		
127	40.9	33.5	50.3
164	32.5	26.1	39.1

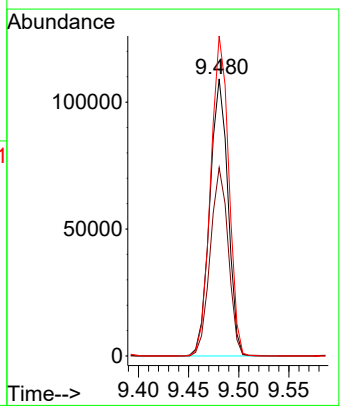


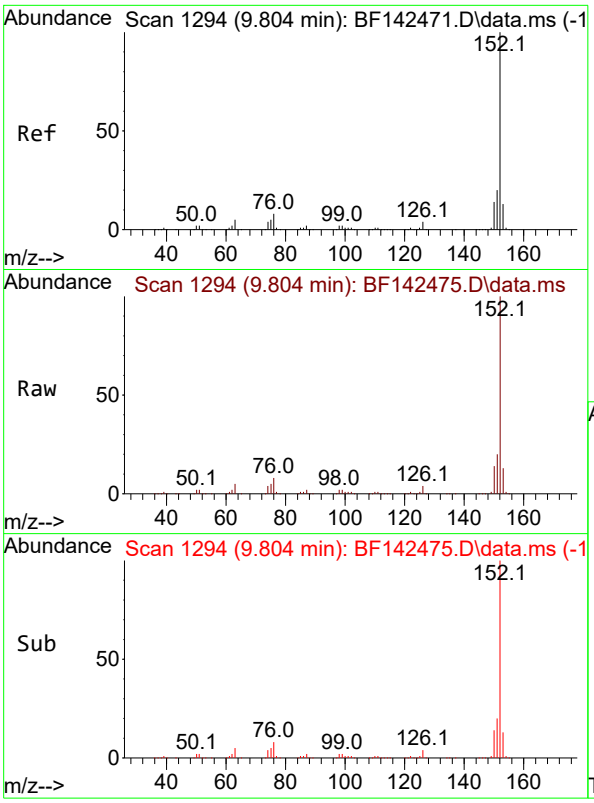


#48
2-Nitroaniline
Concen: 38.867 ng
RT: 9.480 min Scan# 1239
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion: 65 Resp: 137268

Ion	Ratio	Lower	Upper
65	100		
92	68.0	54.4	81.6
138	115.5	91.4	137.2



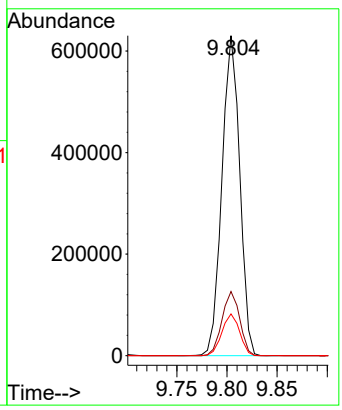


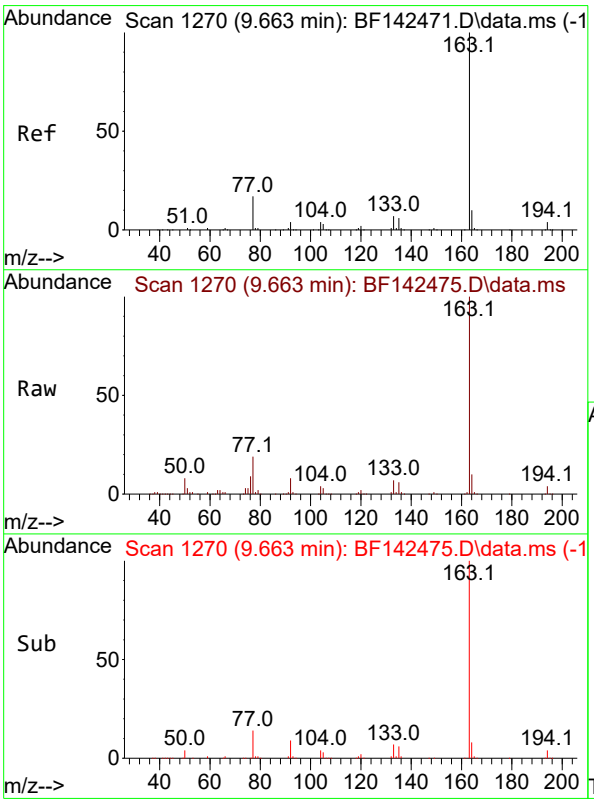
#49
Acenaphthylene
Concen: 37.630 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:152 Resp: 776377

Ion	Ratio	Lower	Upper
152	100		
151	20.0	15.8	23.8
153	13.0	10.6	15.8

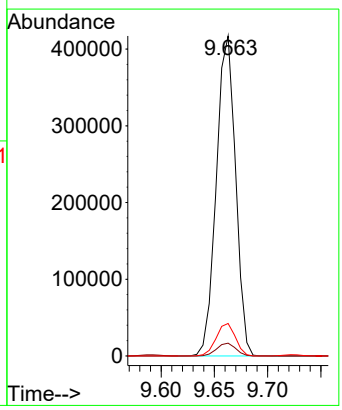


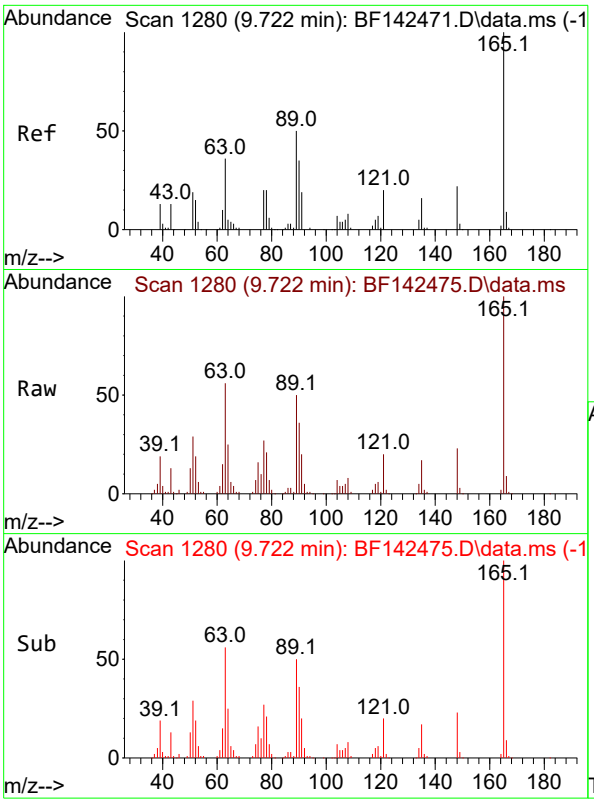


#50
Dimethylphthalate
Concen: 37.184 ng
RT: 9.663 min Scan# 1270
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:163 Resp: 523004

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.3	4.9
164	10.2	8.2	12.4



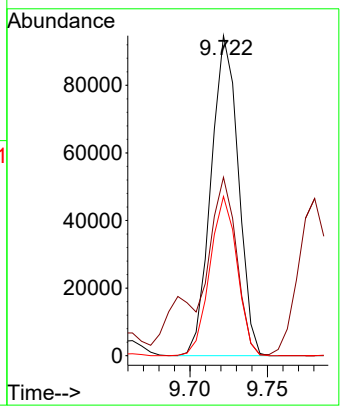


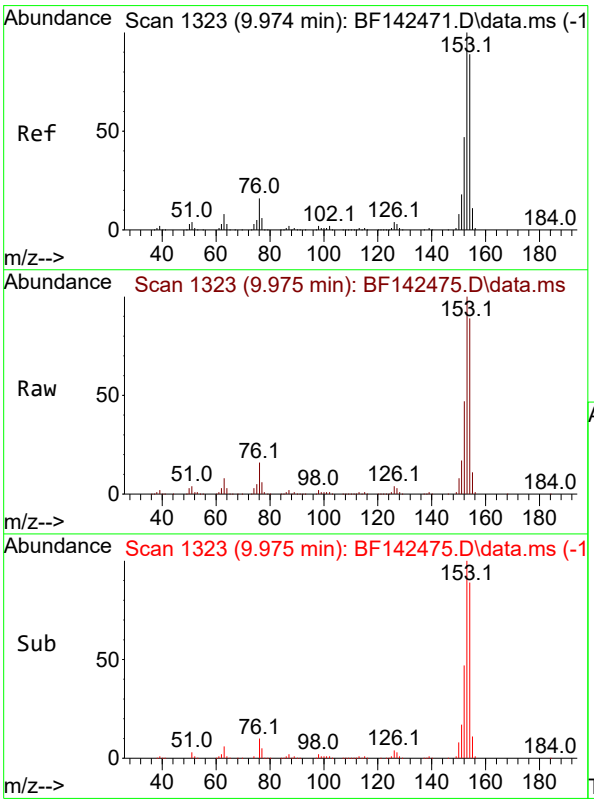
#51
2,6-Dinitrotoluene
Concen: 38.191 ng
RT: 9.722 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:165 Resp: 115938

Ion	Ratio	Lower	Upper
165	100		
63	55.8	42.9	64.3
89	49.8	40.2	60.4

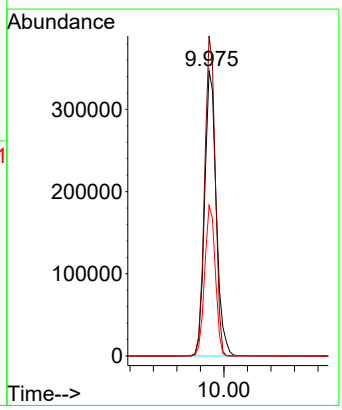


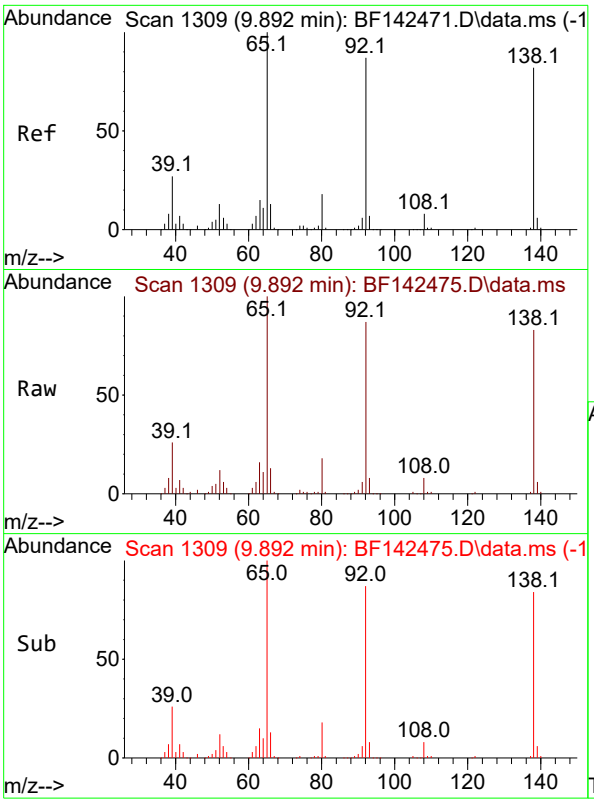


#52
Acenaphthene
Concen: 37.877 ng
RT: 9.975 min Scan# 1323
Delta R.T. -0.005 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:154 Resp: 477197

Ion	Ratio	Lower	Upper
154	100		
153	112.2	90.0	135.0
152	52.8	42.6	64.0



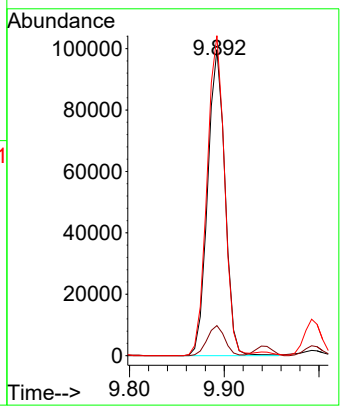


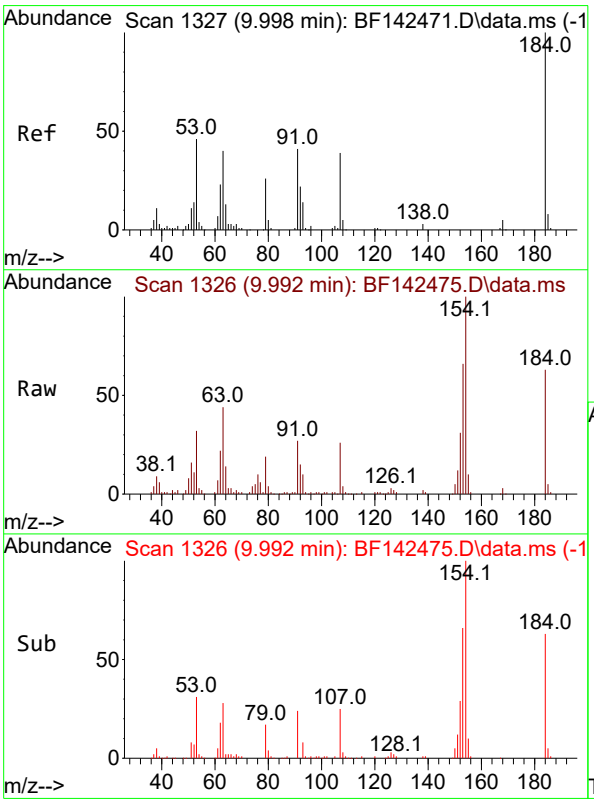
#53
3-Nitroaniline
Concen: 38.246 ng
RT: 9.892 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:138 Resp: 126814

Ion	Ratio	Lower	Upper
138	100		
108	9.9	8.1	12.1
92	104.6	85.2	127.8

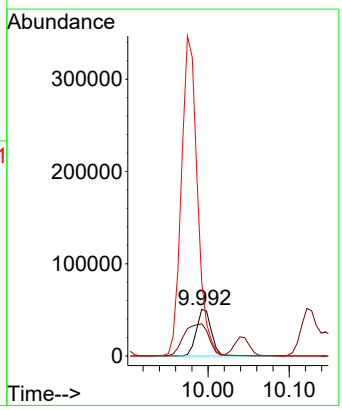


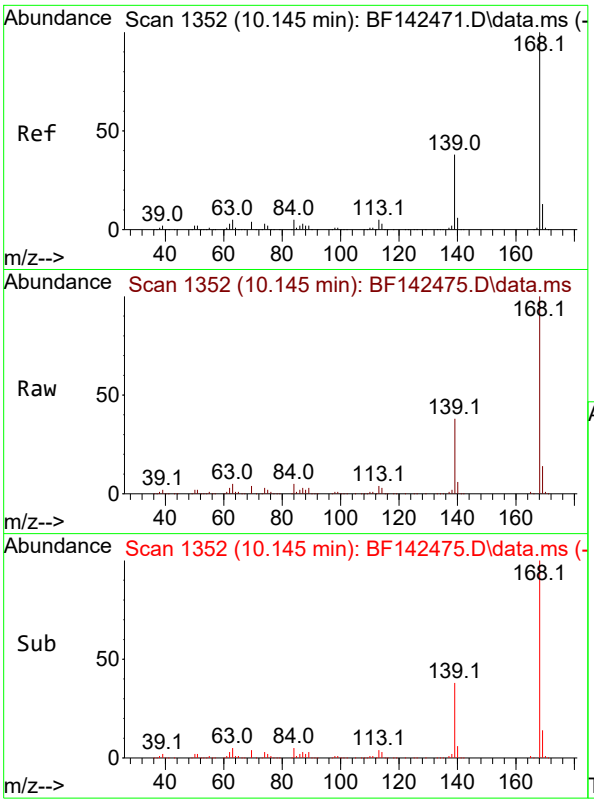


#54
2,4-Dinitrophenol
Concen: 41.481 ng
RT: 9.992 min Scan# 1326
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:184 Resp: 65057

Ion	Ratio	Lower	Upper
184	100		
63	69.3	46.3	69.5
154	158.8	56.8	85.2#



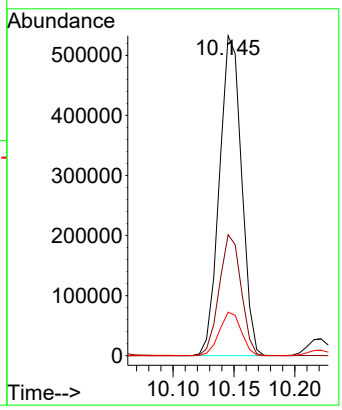


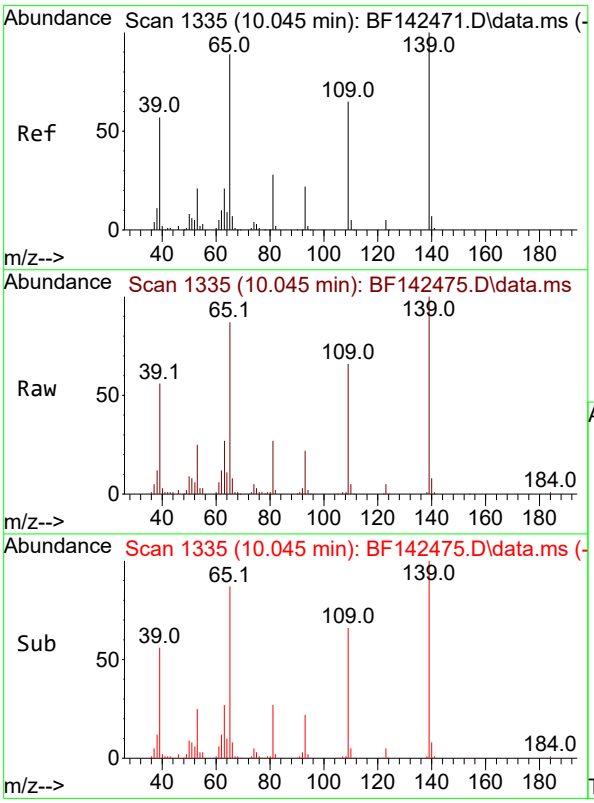
#55
Dibenzofuran
Concen: 37.170 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:168 Resp: 673871

Ion	Ratio	Lower	Upper
168	100		
139	37.8	30.2	45.2
169	13.6	10.7	16.1

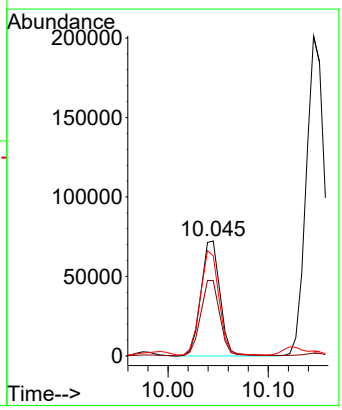


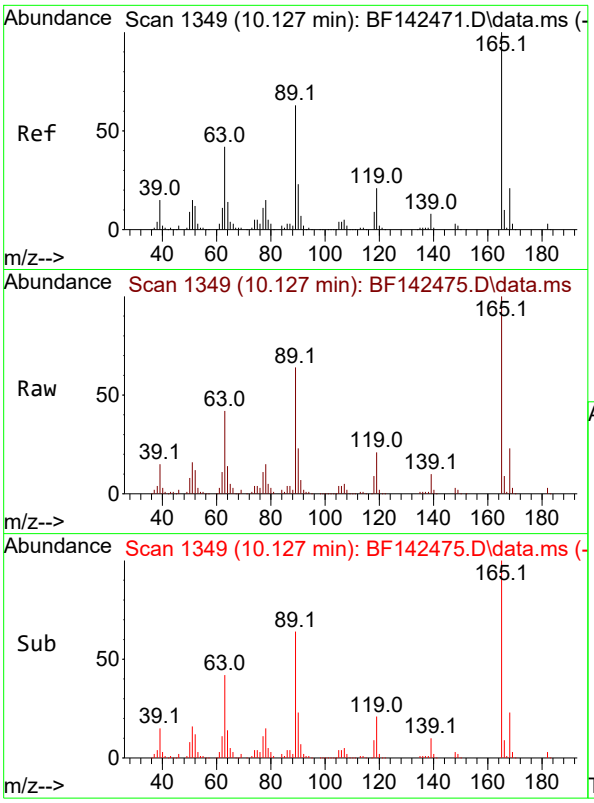


#56
4-Nitrophenol
Concen: 39.320 ng
RT: 10.045 min Scan# 1335
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:139 Resp: 96197

Ion	Ratio	Lower	Upper
139	100		
109	65.6	45.1	85.1
65	87.3	69.7	109.7



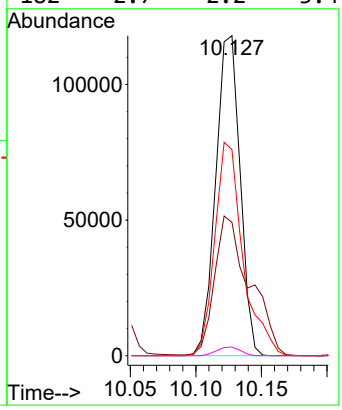


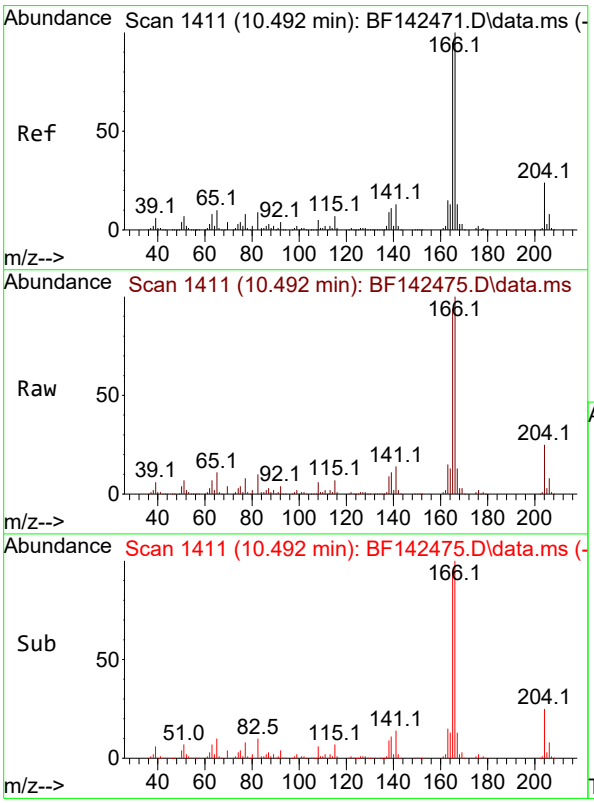
#57
2,4-Dinitrotoluene
Concen: 38.463 ng
RT: 10.127 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:165 Resp: 152488

Ion	Ratio	Lower	Upper
165	100		
63	41.6	33.6	50.4
89	64.4	50.2	75.4
182	2.7	2.2	3.4

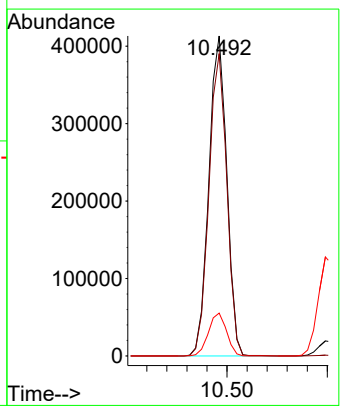


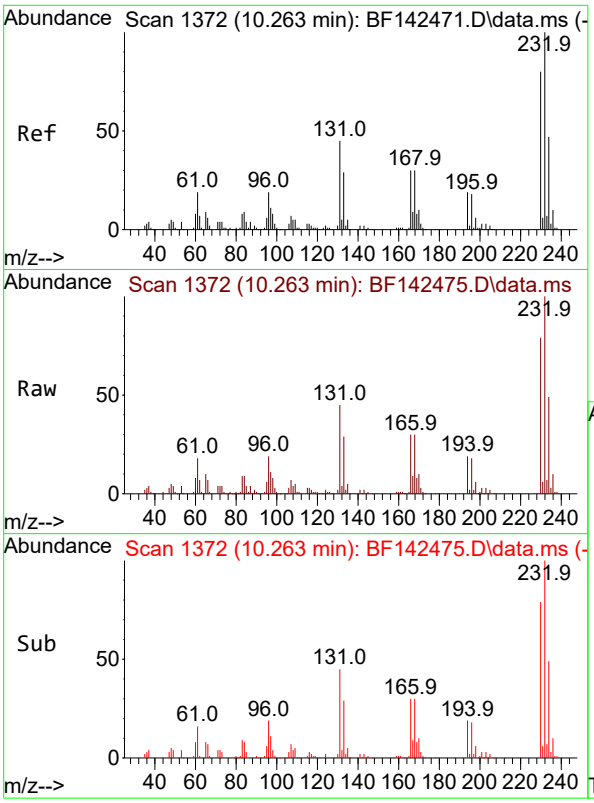


#58
Fluorene
Concen: 36.662 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:166 Resp: 513487

Ion	Ratio	Lower	Upper
166	100		
165	94.5	75.8	113.8
167	13.4	10.6	16.0



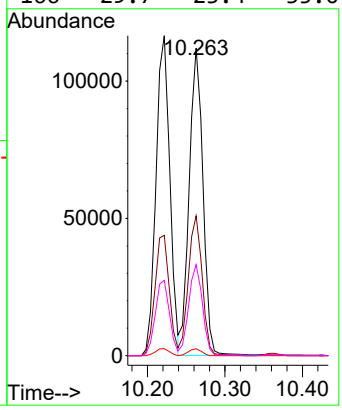


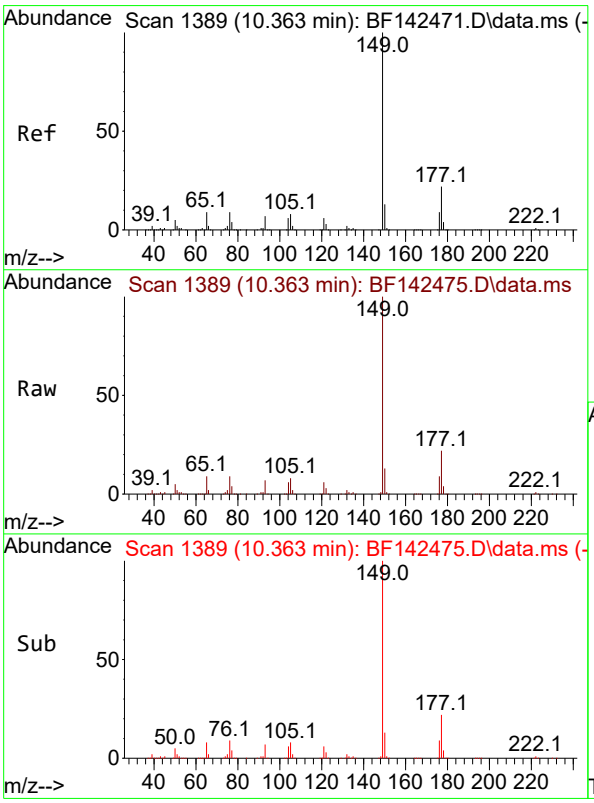
#59
2,3,4,6-Tetrachlorophenol
Concen: 38.000 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:232 Resp: 138047

Ion	Ratio	Lower	Upper
232	100		
131	45.7	35.2	52.8
130	2.1	1.7	2.5
166	29.7	23.4	35.0

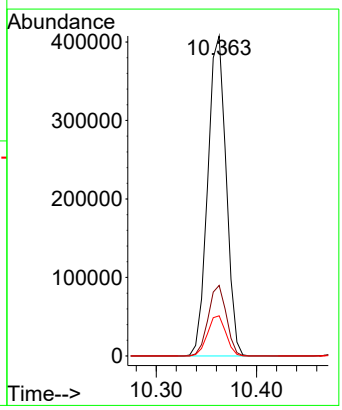


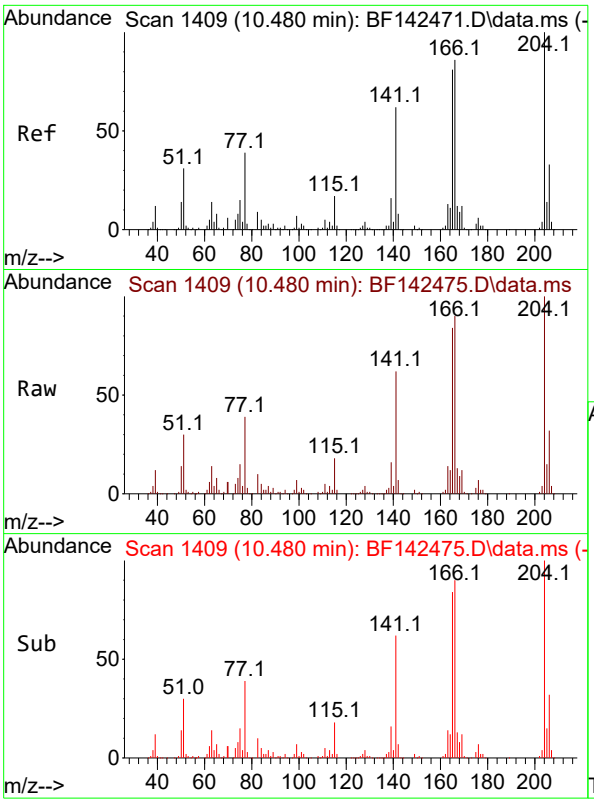


#60
Diethylphthalate
Concen: 37.844 ng
RT: 10.363 min Scan# 1389
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:149 Resp: 519861

Ion	Ratio	Lower	Upper
149	100		
177	22.1	17.6	26.4
150	12.5	10.1	15.1



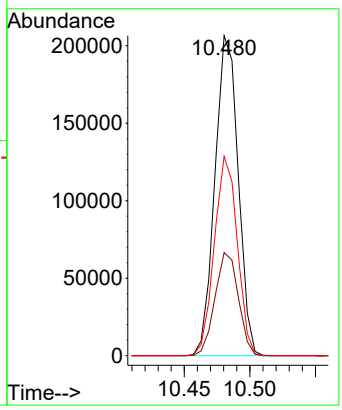


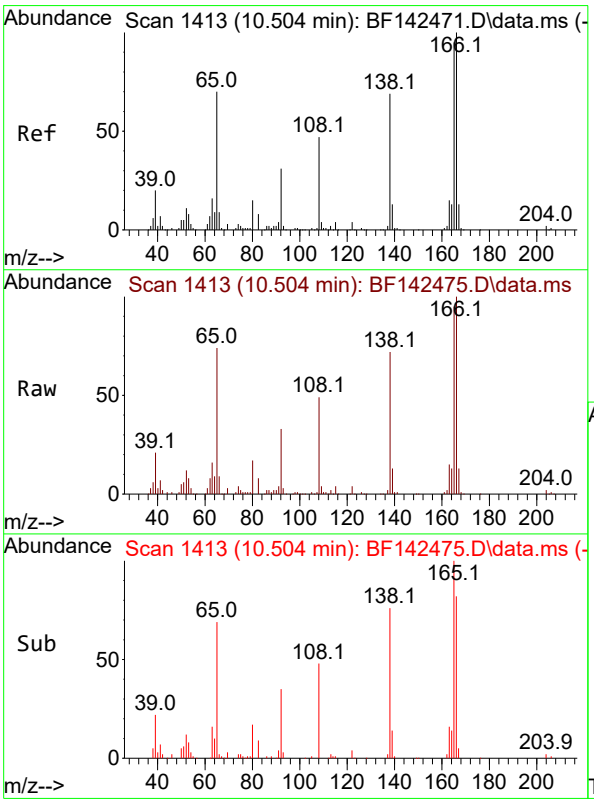
#61
4-Chlorophenyl-phenylether
Concen: 36.985 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:204 Resp: 254467

Ion	Ratio	Lower	Upper
204	100		
206	32.2	26.3	39.5
141	62.3	49.5	74.3

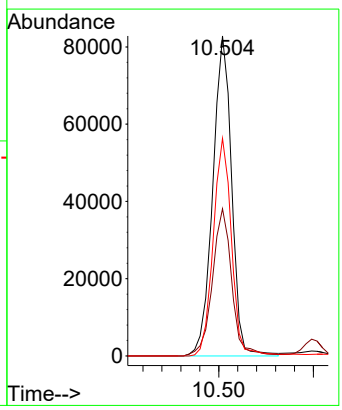


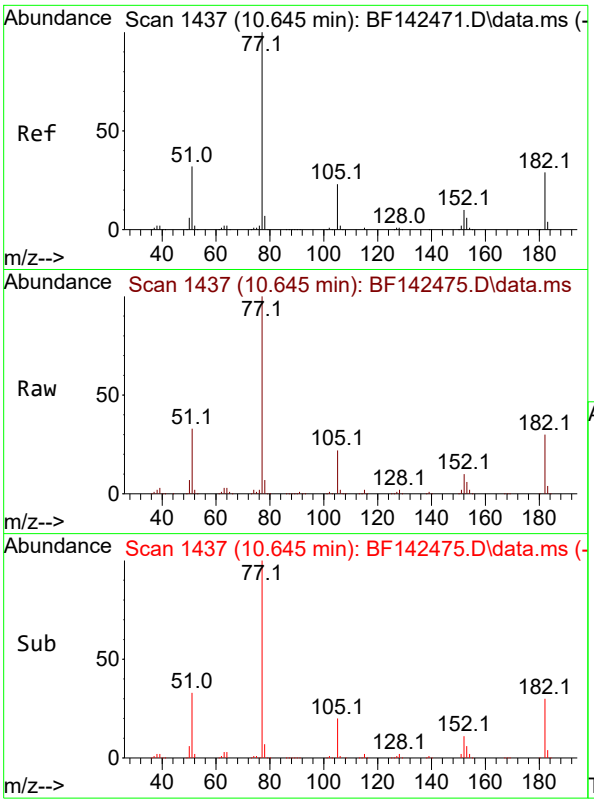


#62
4-Nitroaniline
Concen: 38.132 ng
RT: 10.504 min Scan# 1413
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:138 Resp: 114671

Ion	Ratio	Lower	Upper
138	100		
92	46.0	26.0	66.0
108	68.0	48.4	88.4



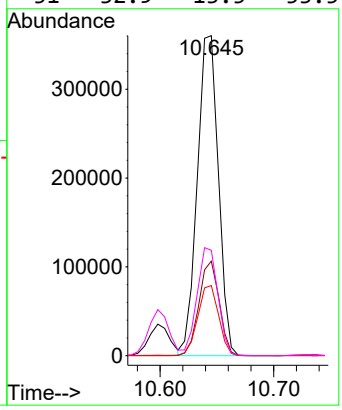


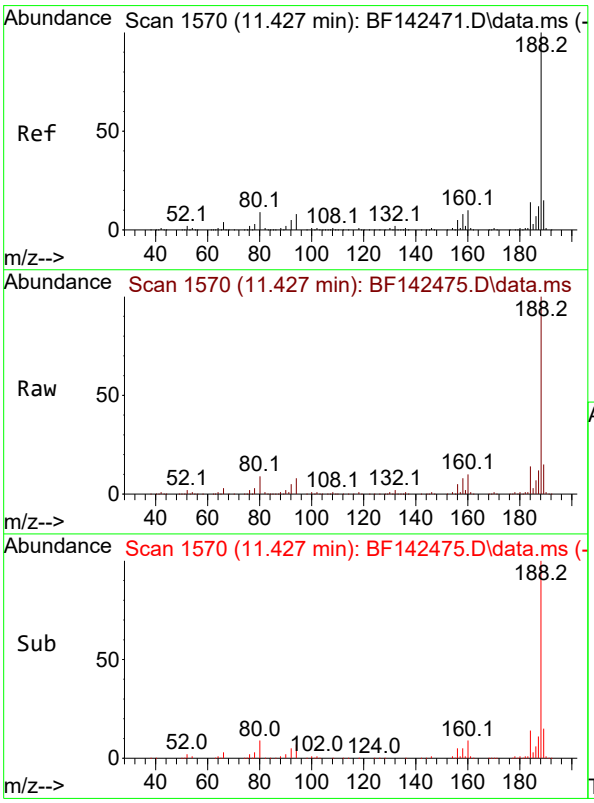
#63
Azobenzene
Concen: 37.780 ng
RT: 10.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion: 77 Resp: 466131

Ion	Ratio	Lower	Upper
77	100		
182	29.6	9.0	49.0
105	21.9	2.4	42.4
51	32.9	13.5	53.5

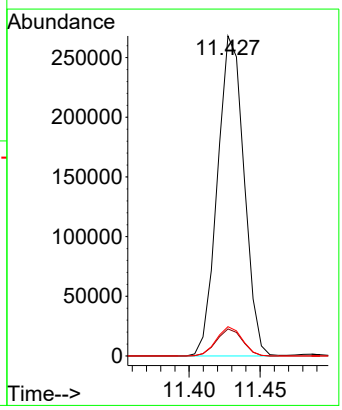


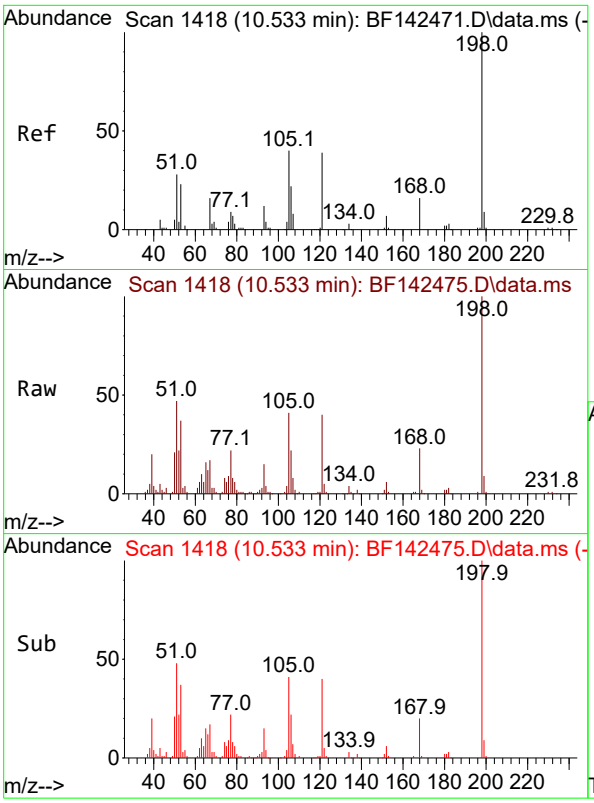


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:188 Resp: 348749

Ion	Ratio	Lower	Upper
188	100		
94	8.5	6.6	10.0
80	9.2	7.4	11.0



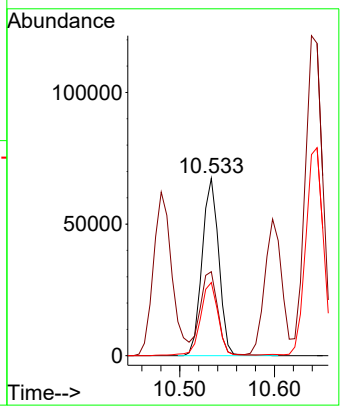


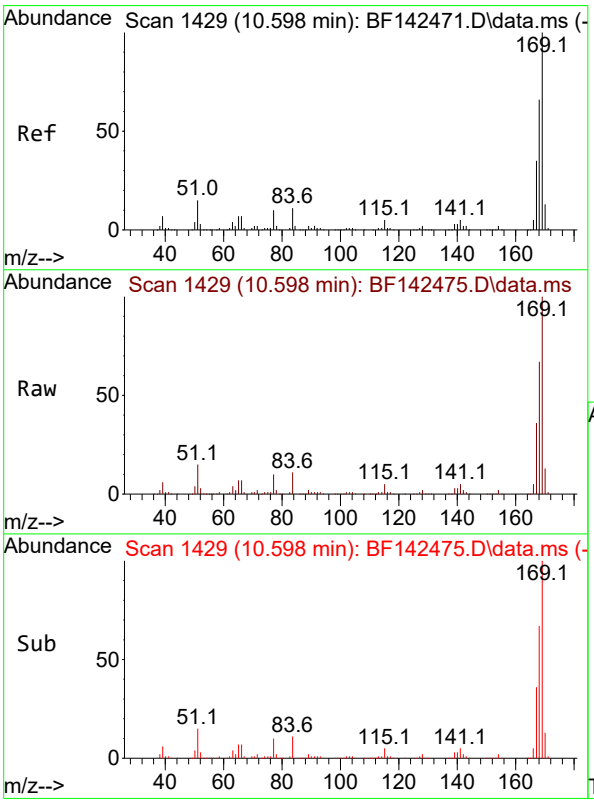
#65
4,6-Dinitro-2-methylphenol
Concen: 42.334 ng
RT: 10.533 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:198 Resp: 82393

Ion	Ratio	Lower	Upper
198	100		
51	47.3	28.3	68.3
105	41.2	21.3	61.3

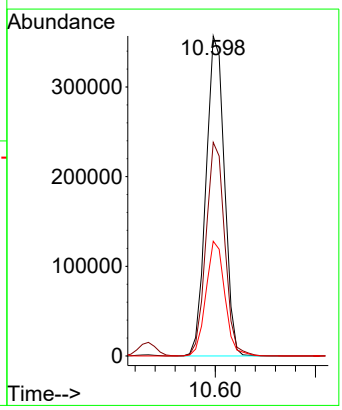


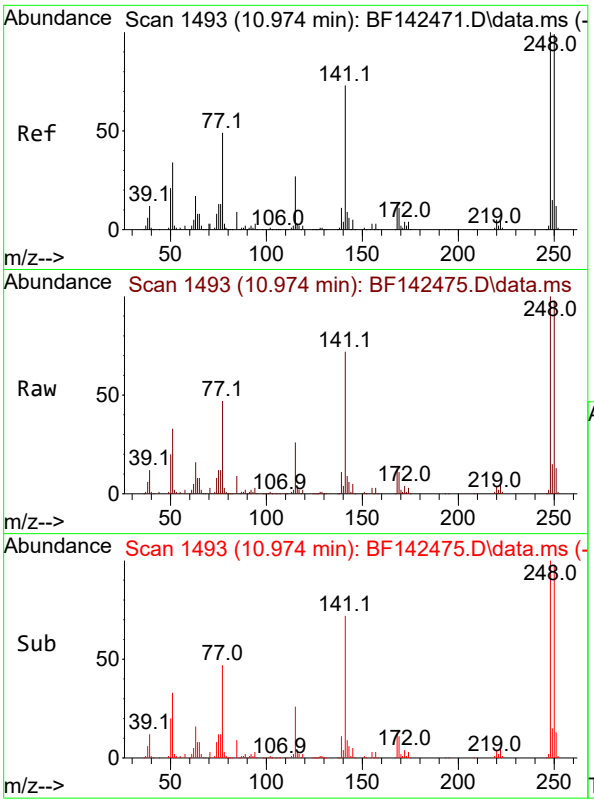


#66
n-Nitrosodiphenylamine
Concen: 38.132 ng
RT: 10.598 min Scan# 1429
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:169 Resp: 454975

Ion	Ratio	Lower	Upper
169	100		
168	66.7	52.7	79.1
167	35.8	28.3	42.5



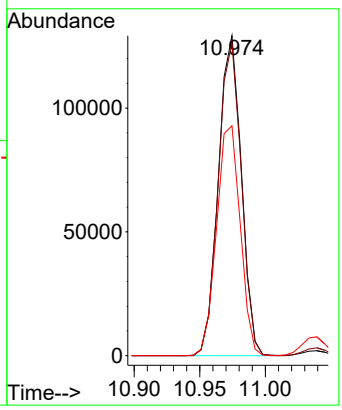


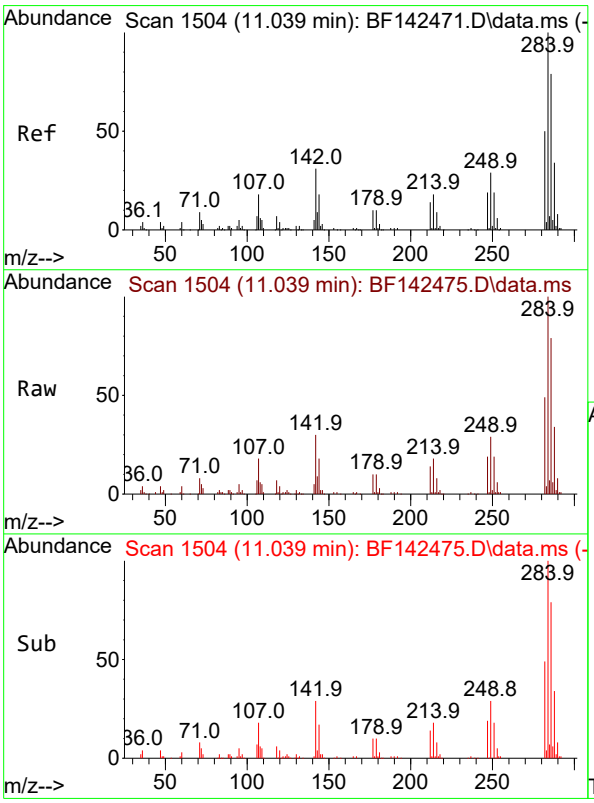
#67
4-Bromophenyl-phenylether
Concen: 38.189 ng
RT: 10.974 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:248 Resp: 157480

Ion	Ratio	Lower	Upper
248	100		
250	97.8	79.0	118.4
141	71.8	58.4	87.6

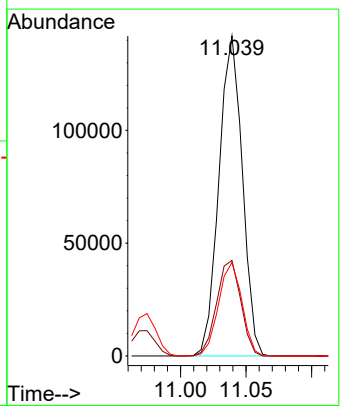


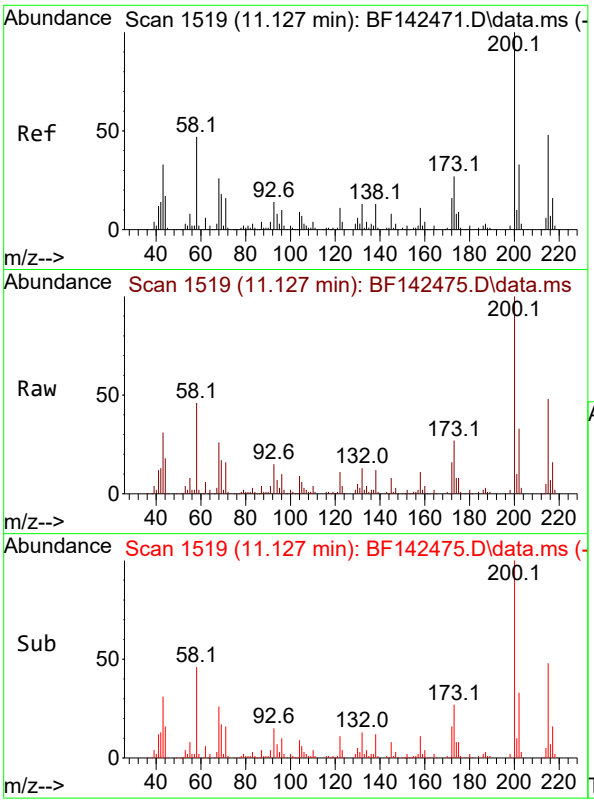


#68
Hexachlorobenzene
Concen: 38.554 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:284 Resp: 175840

Ion	Ratio	Lower	Upper
284	100		
142	29.9	24.8	37.2
249	29.2	23.6	35.4



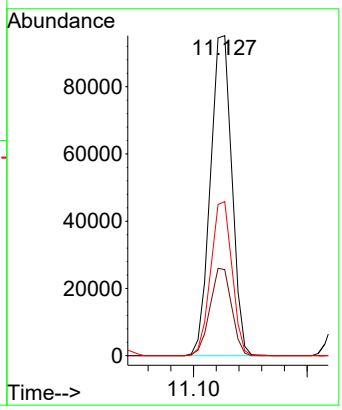


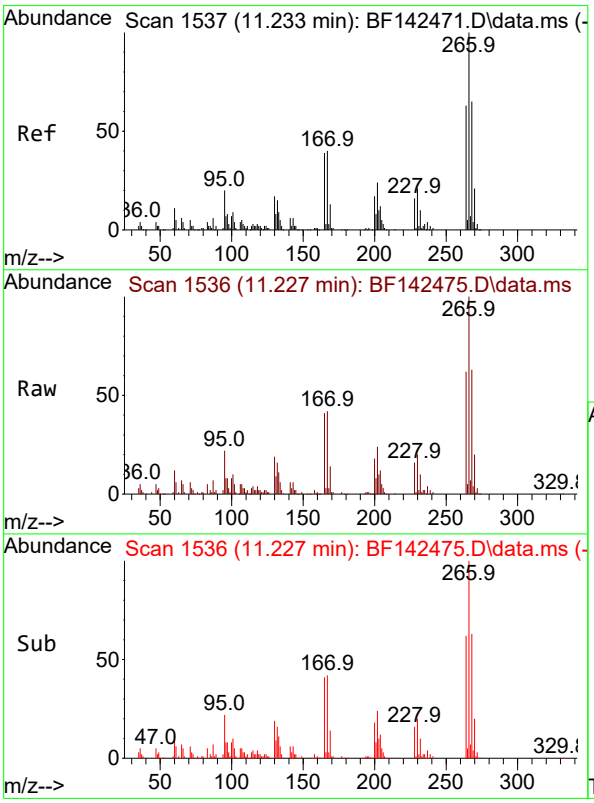
#69
Atrazine
Concen: 39.541 ng
RT: 11.127 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:200 Resp: 125293

Ion	Ratio	Lower	Upper
200	100		
173	26.9	7.4	47.4
215	48.1	28.5	68.5

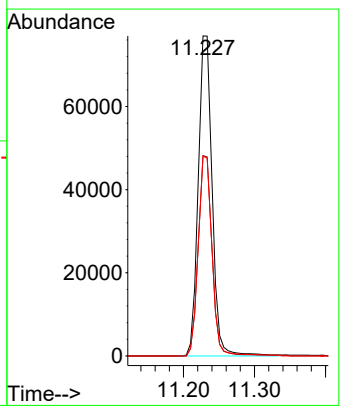


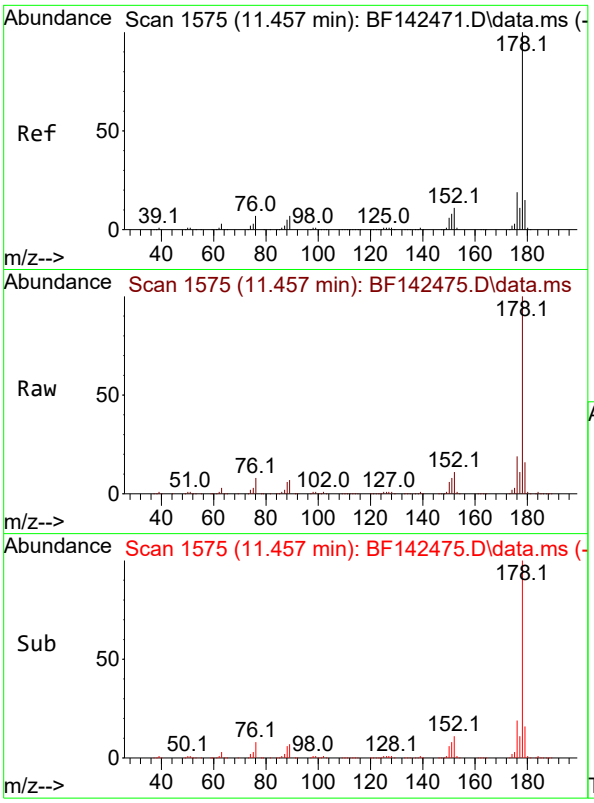


#70
Pentachlorophenol
Concen: 40.866 ng
RT: 11.227 min Scan# 1536
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:266 Resp: 105232

Ion	Ratio	Lower	Upper
266	100		
268	62.6	51.7	77.5
264	62.5	50.4	75.6



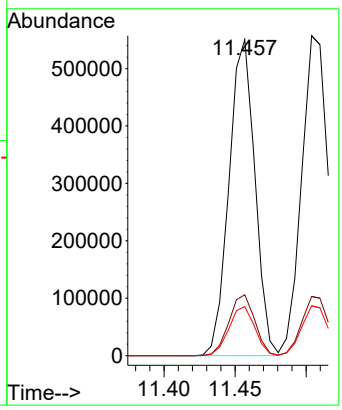


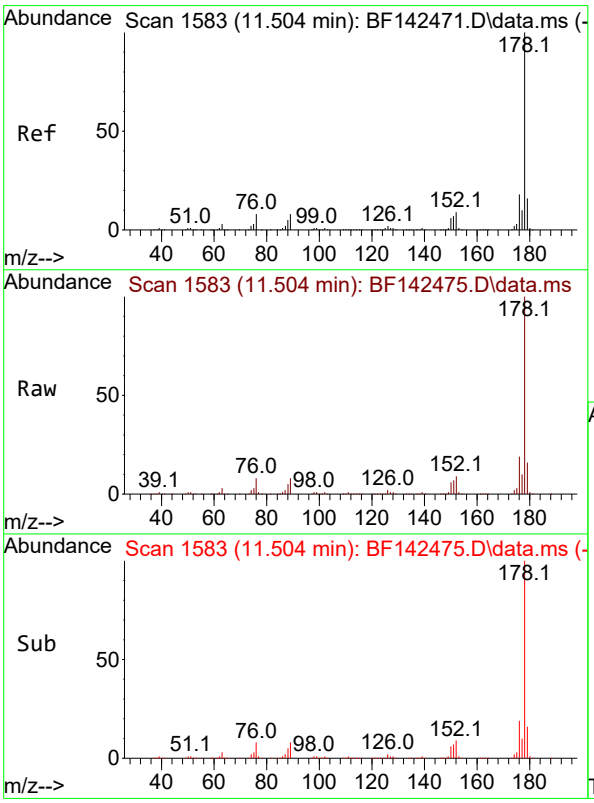
#71
Phenanthrene
Concen: 37.478 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:178 Resp: 698503

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.0
179	15.5	12.3	18.5

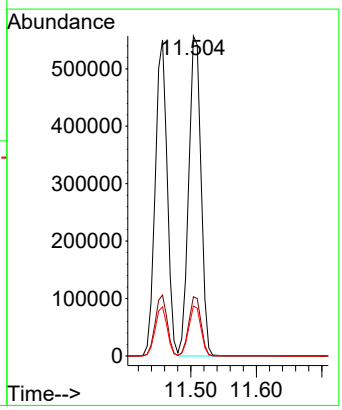


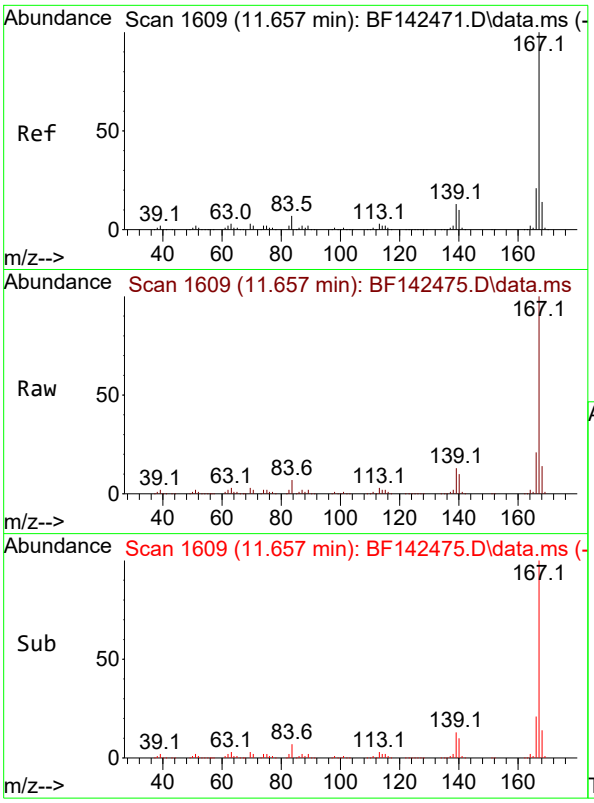


#72
Anthracene
Concen: 38.032 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:178 Resp: 723416

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.6	21.8
179	15.6	12.4	18.6



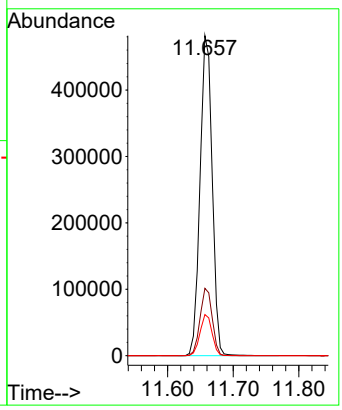


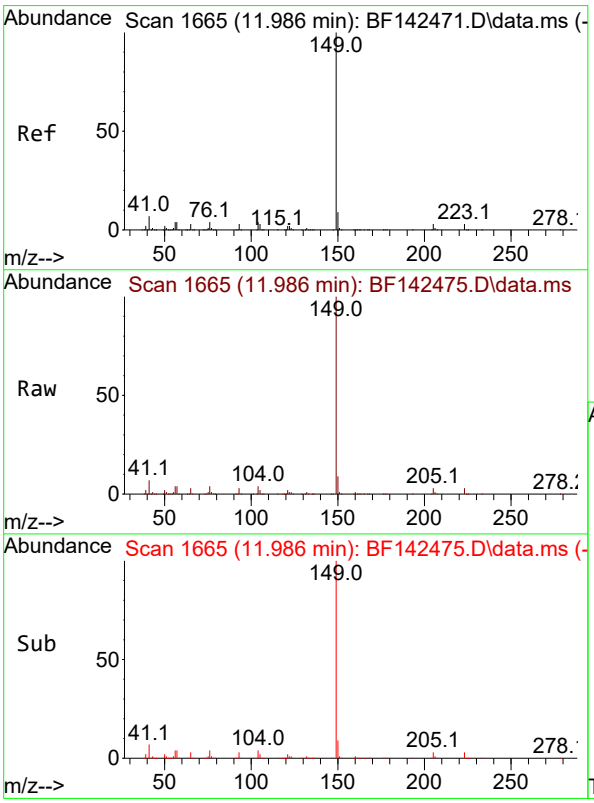
#73
Carbazole
Concen: 38.300 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:167 Resp: 622812

Ion	Ratio	Lower	Upper
167	100		
166	21.1	16.9	25.3
139	12.8	10.2	15.4

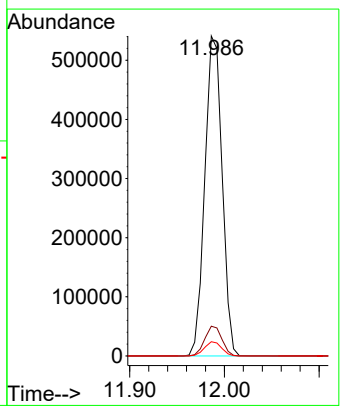


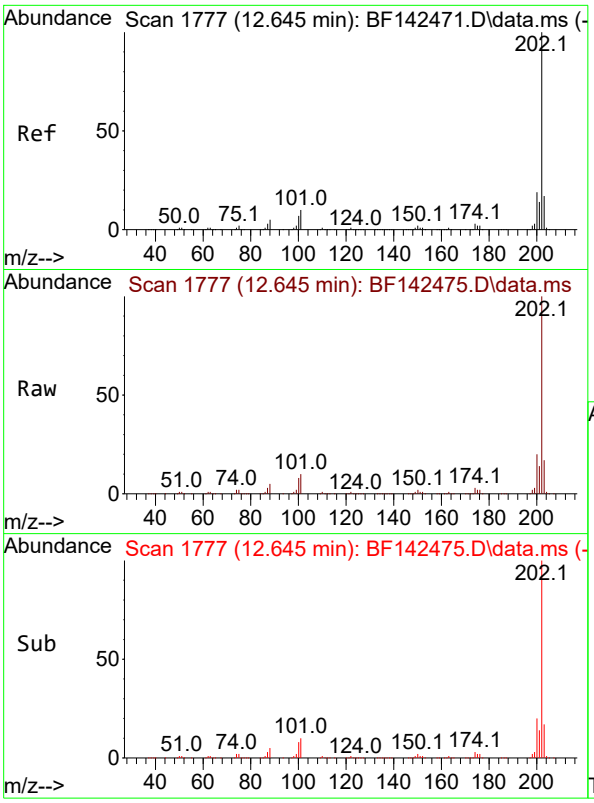


#74
Di-n-butylphthalate
Concen: 38.596 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:149 Resp: 686988

Ion	Ratio	Lower	Upper
149	100		
150	9.3	7.3	10.9
104	4.4	3.6	5.4



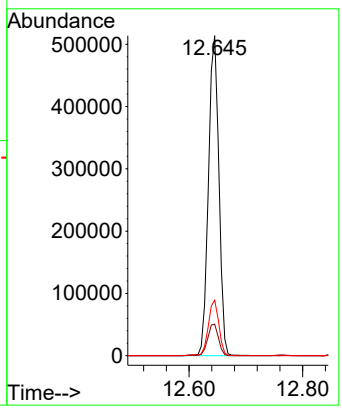


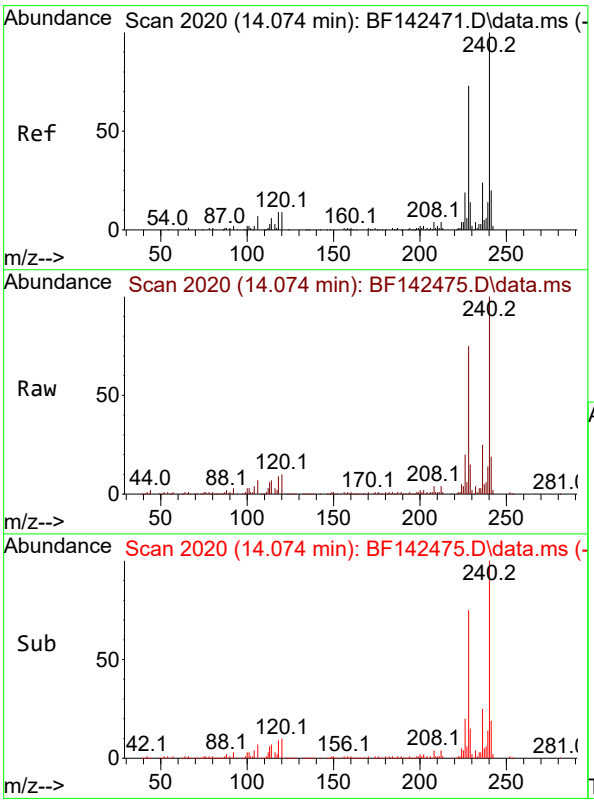
#75
Fluoranthene
Concen: 37.479 ng
RT: 12.645 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:202 Resp: 652697

Ion	Ratio	Lower	Upper
202	100		
101	9.9	0.0	29.6
203	17.3	0.0	37.2

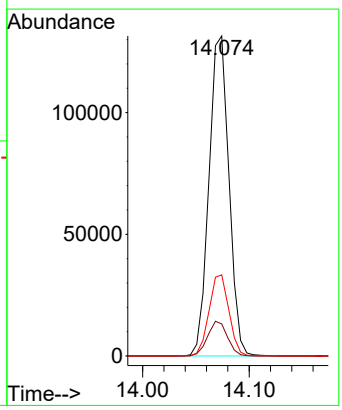


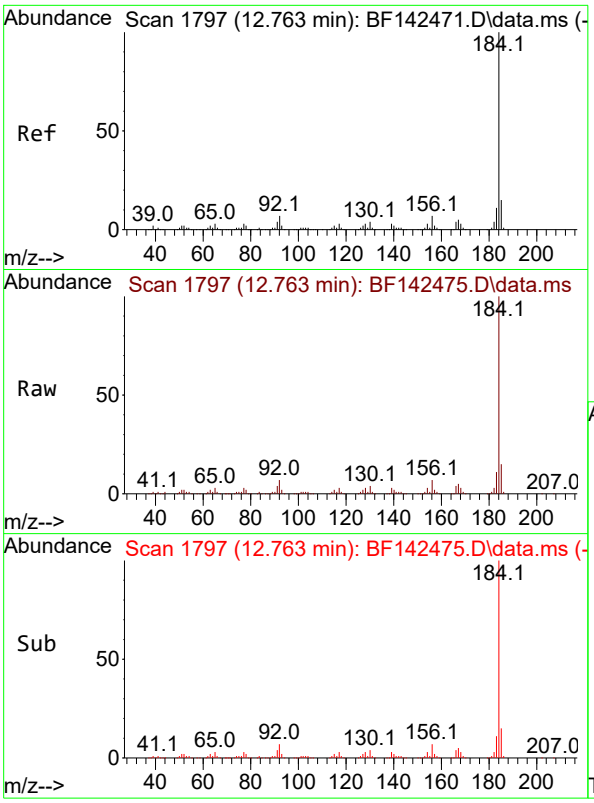


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:240 Resp: 171632

Ion	Ratio	Lower	Upper
240	100		
120	10.0	7.5	11.3
236	25.3	19.6	29.4



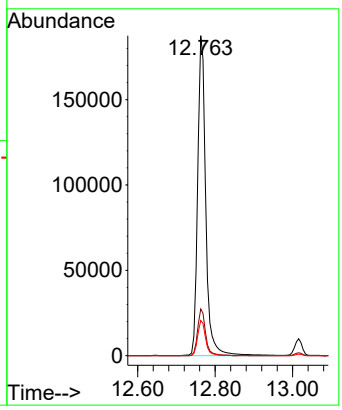


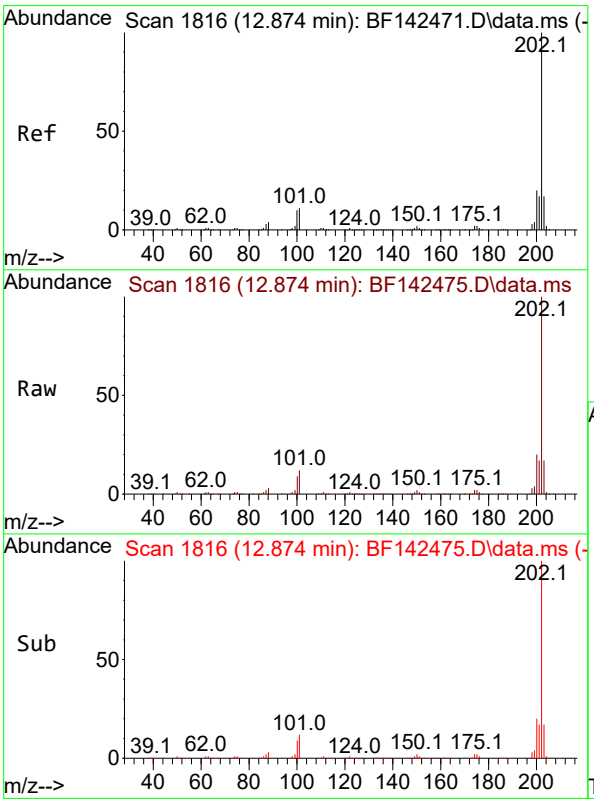
#77
Benzidine
Concen: 42.525 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:184 Resp: 271606

Ion	Ratio	Lower	Upper
184	100		
185	14.6	11.6	17.4
183	11.0	9.0	13.4

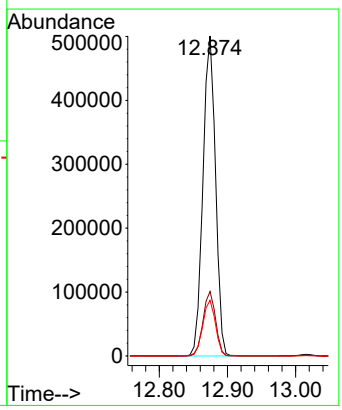


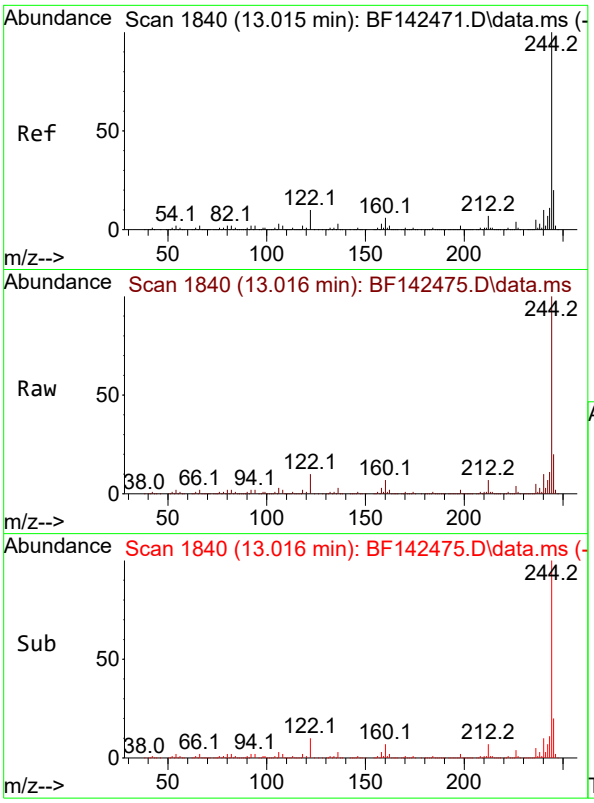


#78
Pyrene
Concen: 40.108 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:202 Resp: 642163

Ion	Ratio	Lower	Upper
202	100		
200	20.2	16.1	24.1
203	17.4	13.9	20.9



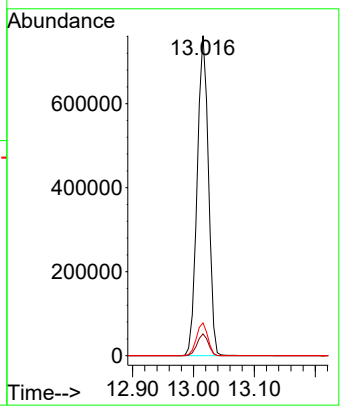


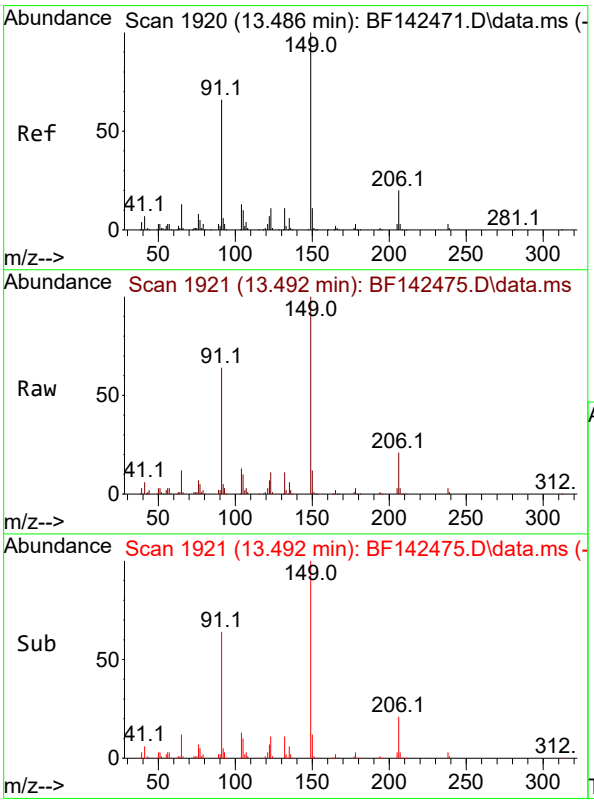
#79
Terphenyl-d14
Concen: 77.714 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:244 Resp: 976059

Ion	Ratio	Lower	Upper
244	100		
212	6.8	5.3	7.9
122	10.2	8.2	12.2

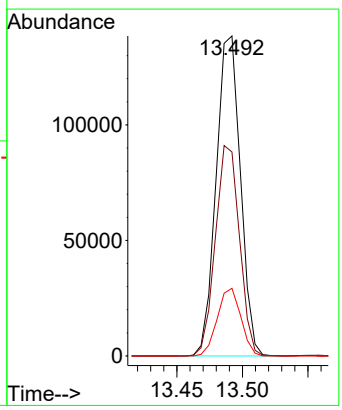


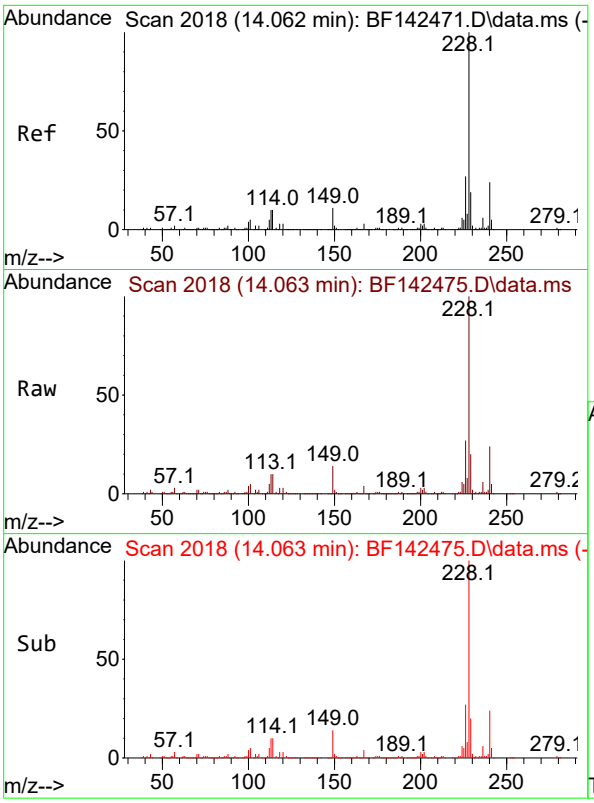


#80
Butylbenzylphthalate
Concen: 40.275 ng
RT: 13.492 min Scan# 1921
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:149 Resp: 178179

Ion	Ratio	Lower	Upper
149	100		
91	63.8	52.9	79.3
206	21.1	16.2	24.2



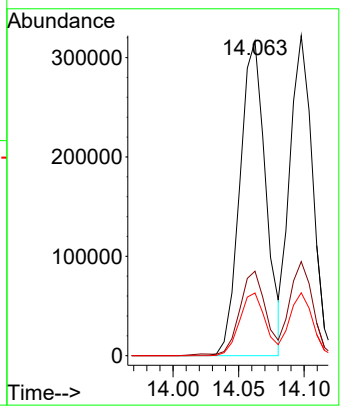


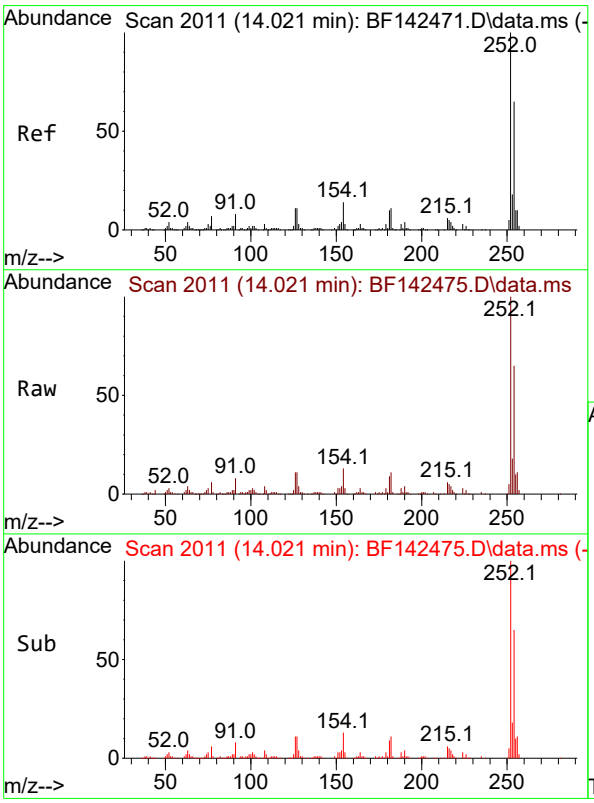
#81
Benzo(a)anthracene
Concen: 37.981 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:228 Resp: 435297

Ion	Ratio	Lower	Upper
228	100		
226	26.9	21.2	31.8
229	20.0	15.5	23.3

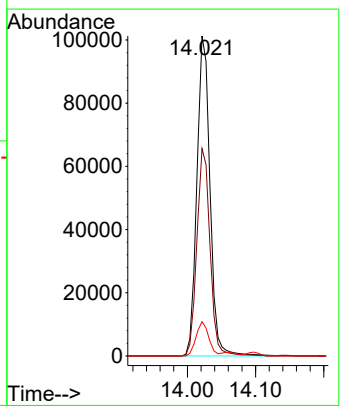


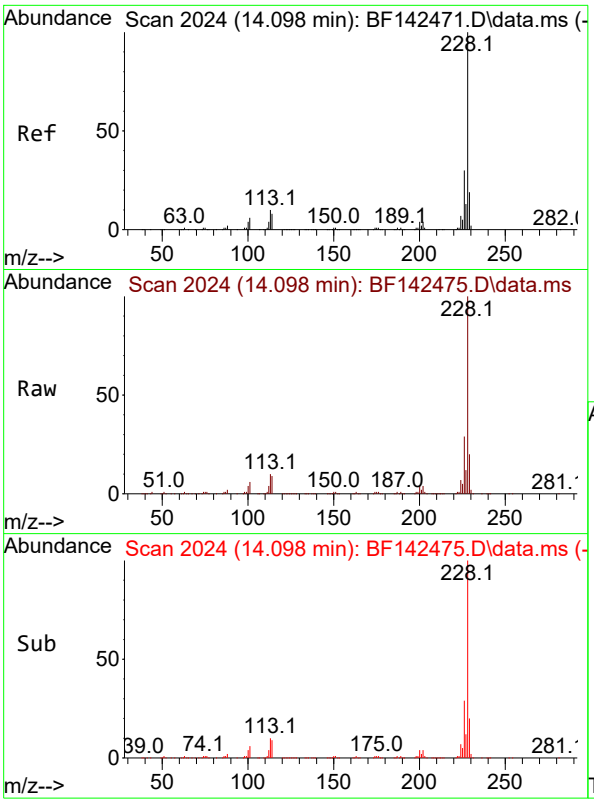


#82
3,3'-Dichlorobenzidine
Concen: 38.874 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:252 Resp: 135132

Ion	Ratio	Lower	Upper
252	100		
254	64.8	52.0	78.0
126	10.7	8.9	13.3



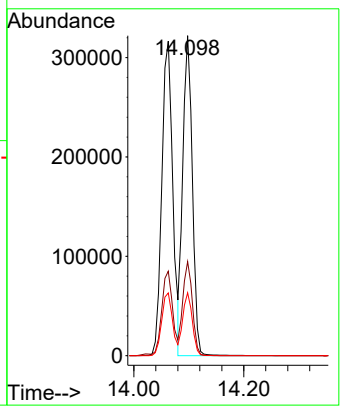


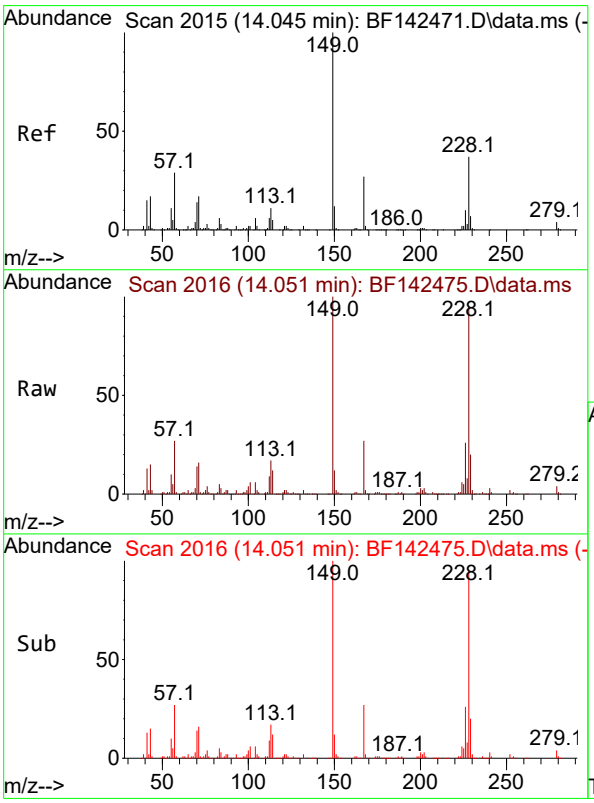
#83
Chrysene
Concen: 37.768 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:228 Resp: 388943

Ion	Ratio	Lower	Upper
228	100		
226	29.4	23.8	35.6
229	19.6	15.4	23.2

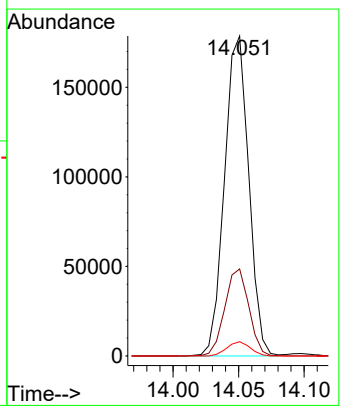


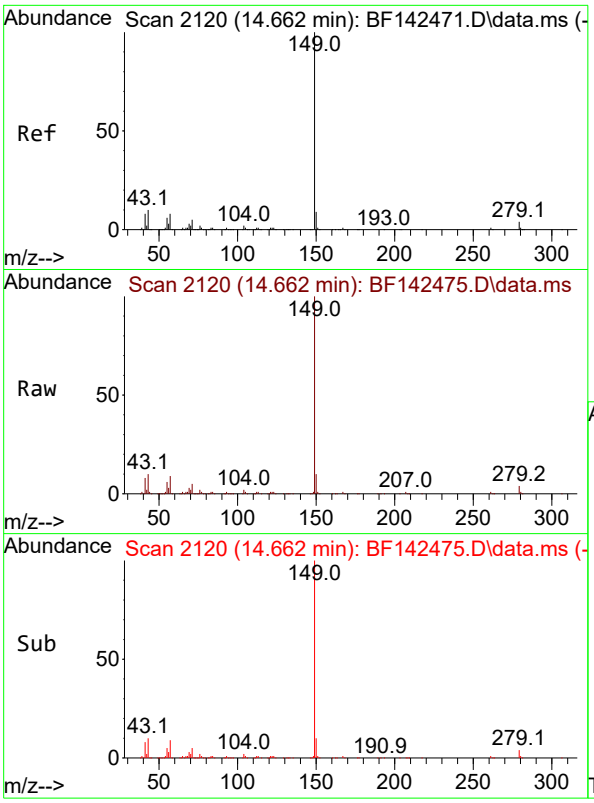


#84
Bis(2-ethylhexyl)phthalate
Concen: 40.596 ng
RT: 14.051 min Scan# 2016
Delta R.T. 0.000 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:149 Resp: 229915

Ion	Ratio	Lower	Upper
149	100		
167	27.2	21.5	32.3
279	4.4	3.2	4.8



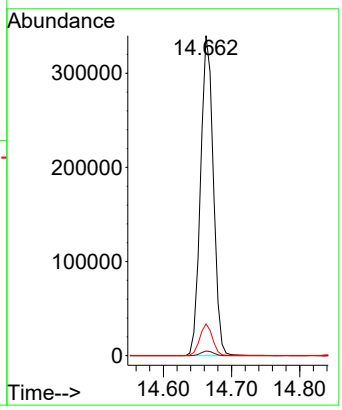


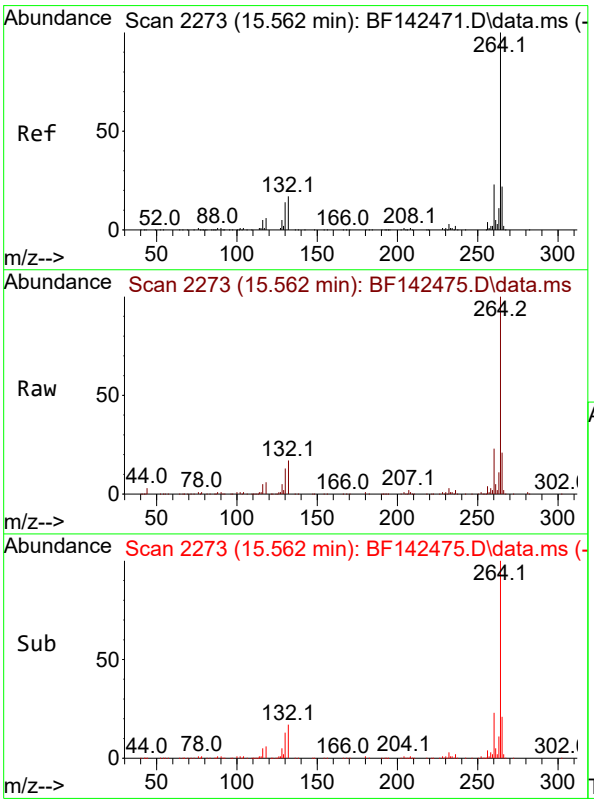
#85
Di-n-octyl phthalate
Concen: 40.048 ng
RT: 14.662 min Scan# 21
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:149 Resp: 443488

Ion	Ratio	Lower	Upper
149	100		
167	1.5	1.2	1.8
43	9.8	7.9	11.9

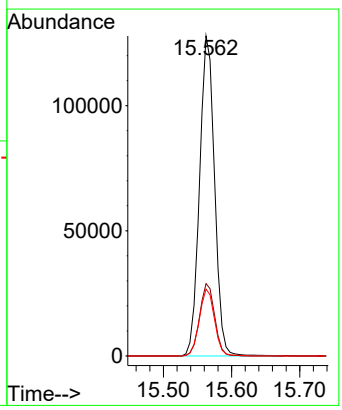


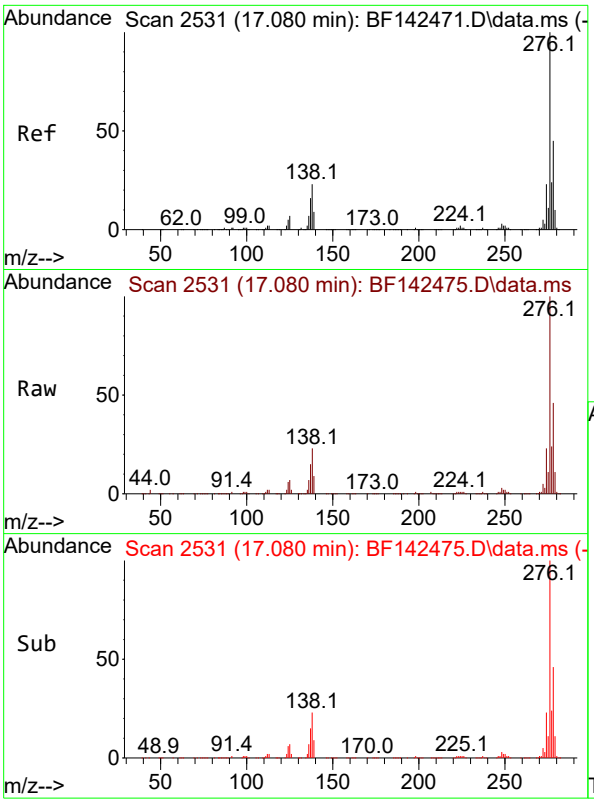


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.562 min Scan# 2273
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:264 Resp: 195956

Ion	Ratio	Lower	Upper
264	100		
260	22.6	18.6	28.0
265	20.9	17.7	26.5



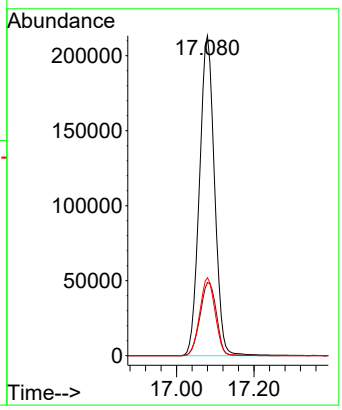


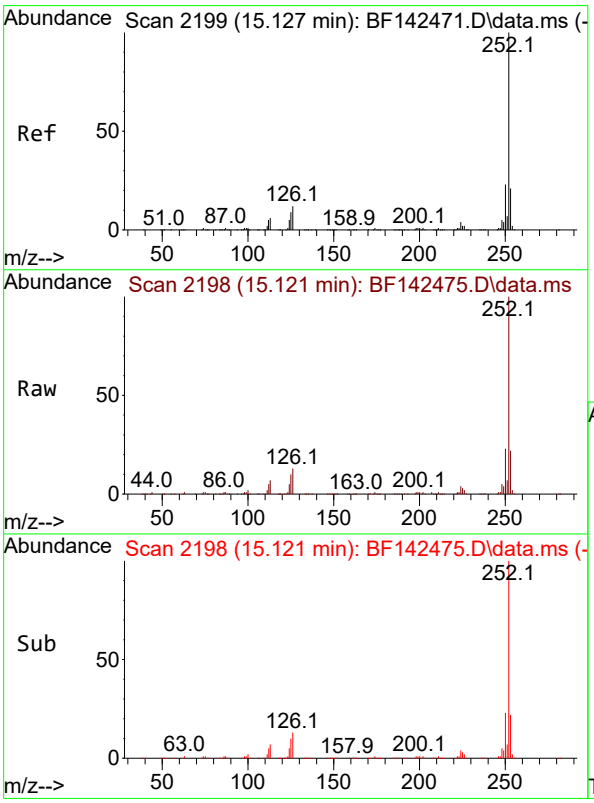
#87
Indeno(1,2,3-cd)pyrene
Concen: 39.070 ng
RT: 17.080 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:276 Resp: 574771

Ion	Ratio	Lower	Upper
276	100		
138	24.9	19.9	29.9
277	25.0	20.2	30.2

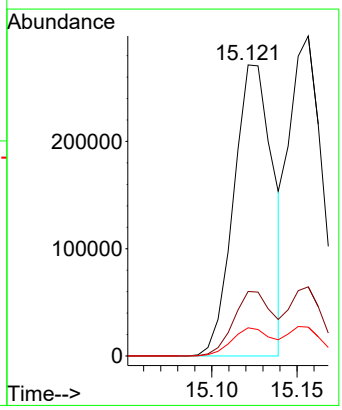


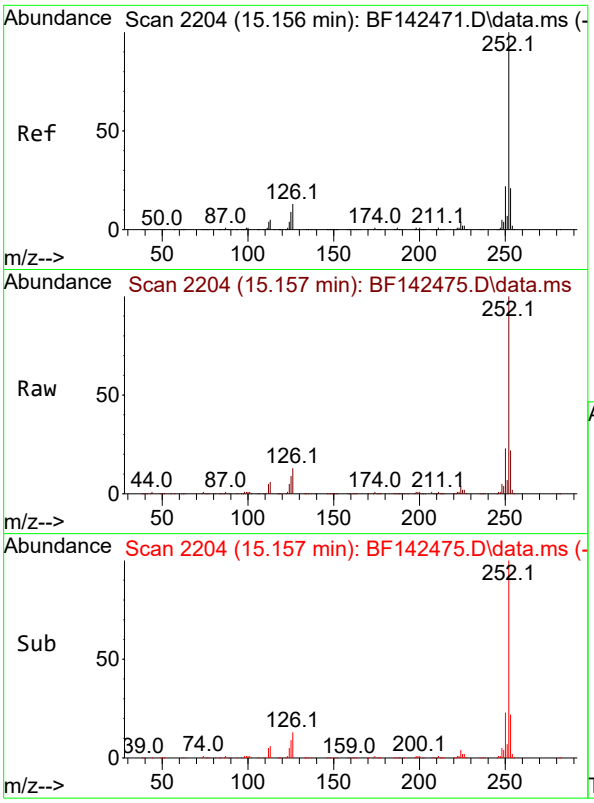


#88
Benzo(b)fluoranthene
Concen: 37.396 ng
RT: 15.121 min Scan# 2198
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:252 Resp: 433704

Ion	Ratio	Lower	Upper
252	100		
253	22.1	17.0	25.4
125	9.7	7.4	11.0



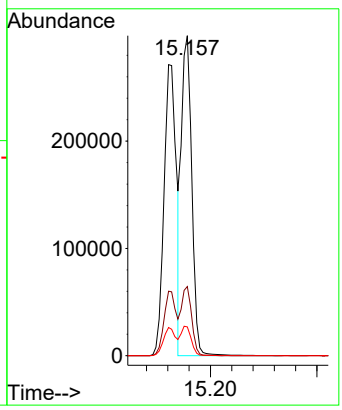


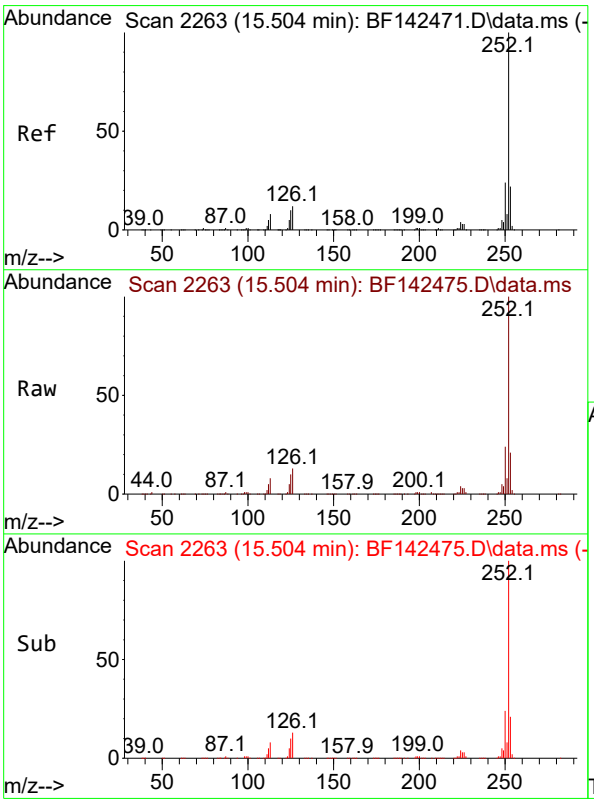
#89
Benzo(k)fluoranthene
Concen: 37.255 ng
RT: 15.157 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:252 Resp: 404679

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.0	25.4
125	9.0	7.3	10.9

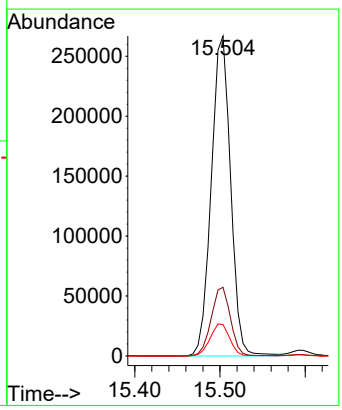


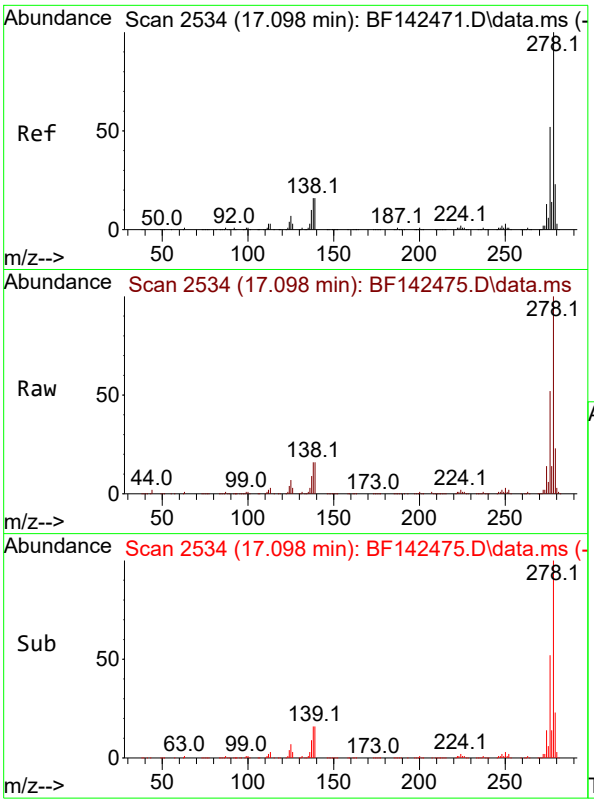


#90
Benzo(a)pyrene
Concen: 38.578 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:252 Resp: 421730

Ion	Ratio	Lower	Upper
252	100		
253	21.4	17.4	26.0
125	9.8	7.9	11.9



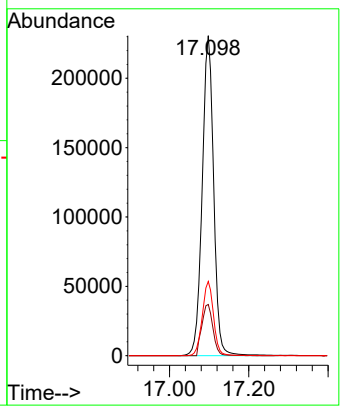


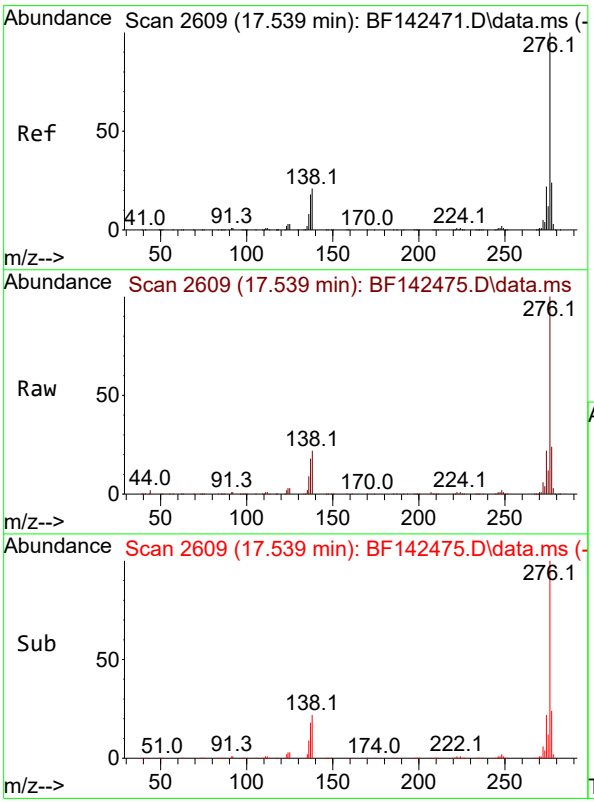
#91
Dibenzo(a,h)anthracene
Concen: 38.868 ng
RT: 17.098 min Scan# 2
Delta R.T. -0.018 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Tgt Ion:278 Resp: 463752

Ion	Ratio	Lower	Upper
278	100		
139	16.0	12.8	19.2
279	23.2	18.6	28.0

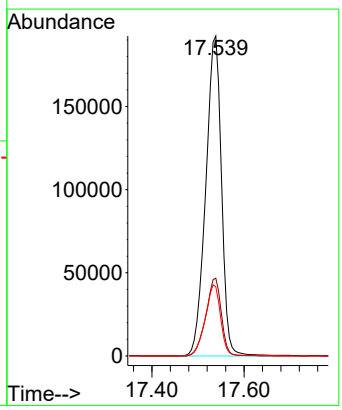




#92
Benzo(g,h,i)perylene
Concen: 38.345 ng
RT: 17.539 min Scan# 2609
Delta R.T. -0.018 min
Lab File: BF142475.D
Acq: 20 May 2025 16:31

Tgt Ion:276 Resp: 457604

Ion	Ratio	Lower	Upper
276	100		
277	24.3	19.2	28.8
138	21.6	16.8	25.2



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
2		1,4-Dioxane	0.475	0.453	4.6	101	0.00
3		Pyridine	1.210	1.168	3.5	102	0.00
4		n-Nitrosodimethylamine	0.628	0.612	2.5	101	-0.02
5	S	2-Fluorophenol	1.187	1.115	6.1	101	0.00
6		Aniline	1.921	1.845	4.0	102	0.00
7	S	Phenol-d6	1.429	1.358	5.0	101	-0.01
8		2-Chlorophenol	1.293	1.225	5.3	100	0.00
9		Benzaldehyde	0.859	0.832	3.1	104	0.00
10	C	Phenol	1.608	1.542	4.1	103	-0.01
11		bis(2-Chloroethyl)ether	1.157	1.108	4.2	102	0.00
12		1,3-Dichlorobenzene	1.443	1.356	6.0	99	0.00
13	C	1,4-Dichlorobenzene	1.453	1.384	4.7	100	0.00
14		1,2-Dichlorobenzene	1.391	1.311	5.8	101	0.00
15		Benzyl Alcohol	1.056	1.021	3.3	102	0.00
16		2,2'-oxybis(1-Chloropropane	1.944	1.843	5.2	101	0.00
17		2-Methylphenol	1.010	0.972	3.8	101	0.00
18		Hexachloroethane	0.507	0.484	4.5	101	0.00
19	P	n-Nitroso-di-n-propylamine	0.886	0.838	5.4	101	-0.02
20		3+4-Methylphenols	1.293	1.229	4.9	101	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
22		Acetophenone	0.443	0.422	4.7	100	0.00
23	S	Nitrobenzene-d5	0.367	0.354	3.5	102	-0.01
24		Nitrobenzene	0.331	0.320	3.3	101	0.00
25		Isophorone	0.613	0.581	5.2	100	-0.01
26	C	2-Nitrophenol	0.177	0.177	0.0	103	0.00
27		2,4-Dimethylphenol	0.312	0.304	2.6	102	0.00
28		bis(2-Chloroethoxy)methane	0.383	0.368	3.9	103	0.00
29	C	2,4-Dichlorophenol	0.283	0.271	4.2	100	0.00
30		1,2,4-Trichlorobenzene	0.308	0.294	4.5	102	0.00
31		Naphthalene	0.985	0.938	4.8	102	0.00
32		Benzoic acid	0.190	0.192	-1.1	104	-0.04
33		4-Chloroaniline	0.399	0.389	2.5	102	0.00
34	C	Hexachlorobutadiene	0.192	0.185	3.6	101	0.00
35		Caprolactam	0.080	0.078	2.5	101	-0.02
36	C	4-Chloro-3-methylphenol	0.291	0.281	3.4	102	-0.01
37		2-Methylnaphthalene	0.620	0.590	4.8	102	0.00
38		1-Methylnaphthalene	0.641	0.612	4.5	102	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	103	0.00
40		1,2,4,5-Tetrachlorobenzene	0.574	0.538	6.3	101	0.00
41	P	Hexachlorocyclopentadiene	0.387	0.387	0.0	102	0.00
42	S	2,4,6-Tribromophenol	0.222	0.210	5.4	103	0.00
43	C	2,4,6-Trichlorophenol	0.387	0.367	5.2	102	0.00
44		2,4,5-Trichlorophenol	0.408	0.385	5.6	101	0.00
45	S	2-Fluorobiphenyl	1.490	1.352	9.3	101	0.00
46		1,1'-Biphenyl	1.552	1.454	6.3	102	0.00
47		2-Chloronaphthalene	1.146	1.082	5.6	102	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)
48		2-Nitroaniline	0.331	0.322	2.7	103	0.00
49		Acenaphthylene	1.936	1.821	5.9	102	0.00
50		Dimethylphthalate	1.320	1.227	7.0	101	0.00
51		2,6-Dinitrotoluene	0.285	0.272	4.6	100	0.00
52	C	Acenaphthene	1.182	1.119	5.3	103	0.00
53		3-Nitroaniline	0.311	0.297	4.5	103	0.00
54	P	2,4-Dinitrophenol	0.147	0.153	-4.1	106	-0.01
55		Dibenzofuran	1.701	1.581	7.1	102	0.00
56	P	4-Nitrophenol	0.230	0.226	1.7	103	0.00
57		2,4-Dinitrotoluene	0.372	0.358	3.8	102	0.00
58		Fluorene	1.314	1.204	8.4	101	0.00
59		2,3,4,6-Tetrachlorophenol	0.341	0.324	5.0	101	0.00
60		Diethylphthalate	1.289	1.219	5.4	102	0.00
61		4-Chlorophenyl-phenylether	0.646	0.597	7.6	101	0.00
62		4-Nitroaniline	0.282	0.269	4.6	100	-0.01
63		Azobenzene	1.158	1.093	5.6	102	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00
65		4,6-Dinitro-2-methylphenol	0.112	0.118	-5.4	104	0.00
66	c	n-Nitrosodiphenylamine	0.684	0.652	4.7	102	0.00
67		4-Bromophenyl-phenylether	0.236	0.226	4.2	103	0.00
68		Hexachlorobenzene	0.262	0.252	3.8	102	0.00
69		Atrazine	0.182	0.180	1.1	103	0.00
70	C	Pentachlorophenol	0.148	0.151	-2.0	104	0.00
71		Phenanthrene	1.069	1.001	6.4	101	0.00
72		Anthracene	1.091	1.037	4.9	102	0.00
73		Carbazole	0.933	0.893	4.3	102	0.00
74		Di-n-butylphthalate	1.021	0.985	3.5	103	0.00
75	C	Fluoranthene	0.999	0.936	6.3	101	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	102	0.00
77		Benzidine	0.744	0.791	-6.3	101	0.00
78		Pyrene	1.866	1.871	-0.3	102	0.00
79	S	Terphenyl-d14	1.464	1.422	2.9	101	0.00
80		Butylbenzylphthalate	0.516	0.519	-0.6	100	0.00
81		Benzo(a)anthracene	1.336	1.268	5.1	101	0.00
82		3,3'-Dichlorobenzidine	0.405	0.394	2.7	98	0.00
83		Chrysene	1.200	1.133	5.6	100	0.00
84		Bis(2-ethylhexyl)phthalate	0.660	0.670	-1.5	101	0.00
85	c	Di-n-octyl phthalate	1.290	1.292	-0.2	104	0.00
86	I	Perylene-d12	1.000	1.000	0.0	104	0.00
87		Indeno(1,2,3-cd)pyrene	1.501	1.467	2.3	105	-0.01
88		Benzo(b)fluoranthene	1.184	1.107	6.5	102	0.00
89		Benzo(k)fluoranthene	1.109	1.033	6.9	103	0.00
90	C	Benzo(a)pyrene	1.116	1.076	3.6	103	0.00
91		Dibenzo(a,h)anthracene	1.218	1.183	2.9	103	-0.02
92		Benzo(g,h,i)perylene	1.218	1.168	4.1	102	-0.02

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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	20.000	20.000	0.0	102	0.00
2		1,4-Dioxane	40.000	38.184	4.5	101	0.00
3		Pyridine	40.000	38.607	3.5	102	0.00
4		n-Nitrosodimethylamine	40.000	38.995	2.5	101	-0.02
5	S	2-Fluorophenol	80.000	75.157	6.1	101	0.00
6		Aniline	40.000	38.415	4.0	102	0.00
7	S	Phenol-d6	80.000	76.025	5.0	101	-0.01
8		2-Chlorophenol	40.000	37.902	5.2	100	0.00
9		Benzaldehyde	40.000	38.726	3.2	104	0.00
10	C	Phenol	40.000	38.362	4.1	103	-0.01
11		bis(2-Chloroethyl)ether	40.000	38.280	4.3	102	0.00
12		1,3-Dichlorobenzene	40.000	37.579	6.1	99	0.00
13	C	1,4-Dichlorobenzene	40.000	38.078	4.8	100	0.00
14		1,2-Dichlorobenzene	40.000	37.716	5.7	101	0.00
15		Benzyl Alcohol	40.000	38.663	3.3	102	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	37.927	5.2	101	0.00
17		2-Methylphenol	40.000	38.500	3.8	101	0.00
18		Hexachloroethane	40.000	38.137	4.7	101	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	37.833	5.4	101	-0.02
20		3+4-Methylphenols	40.000	38.020	4.9	101	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	102	0.00
22		Acetophenone	40.000	38.118	4.7	100	0.00
23	S	Nitrobenzene-d5	80.000	77.283	3.4	102	-0.01
24		Nitrobenzene	40.000	38.737	3.2	101	0.00
25		Isophorone	40.000	37.906	5.2	100	-0.01
26	C	2-Nitrophenol	40.000	39.958	0.1	103	0.00
27		2,4-Dimethylphenol	40.000	38.953	2.6	102	0.00
28		bis(2-Chloroethoxy)methane	40.000	38.407	4.0	103	0.00
29	C	2,4-Dichlorophenol	40.000	38.285	4.3	100	0.00
30		1,2,4-Trichlorobenzene	40.000	38.187	4.5	102	0.00
31		Naphthalene	40.000	38.112	4.7	102	0.00
32		Benzoic acid	40.000	40.490	-1.2	104	-0.04
33		4-Chloroaniline	40.000	38.962	2.6	102	0.00
34	C	Hexachlorobutadiene	40.000	38.512	3.7	101	0.00
35		Caprolactam	40.000	39.162	2.1	101	-0.02
36	C	4-Chloro-3-methylphenol	40.000	38.654	3.4	102	-0.01
37		2-Methylnaphthalene	40.000	38.062	4.8	102	0.00
38		1-Methylnaphthalene	40.000	38.229	4.4	102	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	103	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	37.508	6.2	101	0.00
41	P	Hexachlorocyclopentadiene	40.000	39.991	0.0	102	0.00
42	S	2,4,6-Tribromophenol	80.000	75.790	5.3	103	0.00
43	C	2,4,6-Trichlorophenol	40.000	37.954	5.1	102	0.00
44		2,4,5-Trichlorophenol	40.000	37.766	5.6	101	0.00
45	S	2-Fluorobiphenyl	80.000	72.557	9.3	101	0.00
46		1,1'-Biphenyl	40.000	37.487	6.3	102	0.00
47		2-Chloronaphthalene	40.000	37.763	5.6	102	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)
48		2-Nitroaniline	40.000	38.867	2.8	103	0.00
49		Acenaphthylene	40.000	37.630	5.9	102	0.00
50		Dimethylphthalate	40.000	37.184	7.0	101	0.00
51		2,6-Dinitrotoluene	40.000	38.191	4.5	100	0.00
52	C	Acenaphthene	40.000	37.877	5.3	103	0.00
53		3-Nitroaniline	40.000	38.246	4.4	103	0.00
54	P	2,4-Dinitrophenol	40.000	41.481	-3.7	106	-0.01
55		Dibenzofuran	40.000	37.170	7.1	102	0.00
56	P	4-Nitrophenol	40.000	39.320	1.7	103	0.00
57		2,4-Dinitrotoluene	40.000	38.463	3.8	102	0.00
58		Fluorene	40.000	36.662	8.3	101	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	38.000	5.0	101	0.00
60		Diethylphthalate	40.000	37.844	5.4	102	0.00
61		4-Chlorophenyl-phenylether	40.000	36.985	7.5	101	0.00
62		4-Nitroaniline	40.000	38.132	4.7	100	-0.01
63		Azobenzene	40.000	37.780	5.5	102	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	102	0.00
65		4,6-Dinitro-2-methylphenol	40.000	42.334	-5.8	104	0.00
66	c	n-Nitrosodiphenylamine	40.000	38.132	4.7	102	0.00
67		4-Bromophenyl-phenylether	40.000	38.189	4.5	103	0.00
68		Hexachlorobenzene	40.000	38.554	3.6	102	0.00
69		Atrazine	40.000	39.541	1.1	103	0.00
70	C	Pentachlorophenol	40.000	40.866	-2.2	104	0.00
71		Phenanthrene	40.000	37.478	6.3	101	0.00
72		Anthracene	40.000	38.032	4.9	102	0.00
73		Carbazole	40.000	38.300	4.3	102	0.00
74		Di-n-butylphthalate	40.000	38.596	3.5	103	0.00
75	C	Fluoranthene	40.000	37.479	6.3	101	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	102	0.00
77		Benzidine	40.000	42.525	-6.3	101	0.00
78		Pyrene	40.000	40.108	-0.3	102	0.00
79	S	Terphenyl-d14	80.000	77.714	2.9	101	0.00
80		Butylbenzylphthalate	40.000	40.275	-0.7	100	0.00
81		Benzo(a)anthracene	40.000	37.981	5.0	101	0.00
82		3,3'-Dichlorobenzidine	40.000	38.874	2.8	98	0.00
83		Chrysene	40.000	37.768	5.6	100	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	40.596	-1.5	101	0.00
85	c	Di-n-octyl phthalate	40.000	40.048	-0.1	104	0.00
86	I	Perylene-d12	20.000	20.000	0.0	104	0.00
87		Indeno(1,2,3-cd)pyrene	40.000	39.070	2.3	105	-0.01
88		Benzo(b)fluoranthene	40.000	37.396	6.5	102	0.00
89		Benzo(k)fluoranthene	40.000	37.255	6.9	103	0.00
90	C	Benzo(a)pyrene	40.000	38.578	3.6	103	0.00
91		Dibenzo(a,h)anthracene	40.000	38.868	2.8	103	-0.02
92		Benzo(g,h,i)perylene	40.000	38.345	4.1	102	-0.02

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142475.D
Acq On : 20 May 2025 16:31
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF052025

Quant Time: May 20 17:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Raw Data: **BF142566.D**

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: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG No.: Q2150

Instrument ID: BNA_F Calibration Date/Time: 05/30/2025 13:20

Lab File ID: BF142566.D Init. Calib. Date(s): 05/20/2025 05/20/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:10 15:31

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.187	1.142		-3.8	
Benzaldehyde	0.859	0.818		-4.8	
Phenol-d6	1.429	1.395		-2.4	
Phenol	1.608	1.584		-1.5	20.0
bis(2-Chloroethyl)ether	1.157	1.123		-2.9	
2-Chlorophenol	1.293	1.256		-2.9	
2-Methylphenol	1.010	0.992		-1.8	
2,2-oxybis(1-Chloropropane)	1.944	1.881		-3.2	
Acetophenone	0.443	0.414		-6.5	
3+4-Methylphenols	1.293	1.261		-2.5	
n-Nitroso-di-n-propylamine	0.886	0.830	0.050	-6.3	
Nitrobenzene-d5	0.367	0.349		-4.9	
Hexachloroethane	0.507	0.479		-5.5	
Nitrobenzene	0.331	0.318		-3.9	
Isophorone	0.613	0.577		-5.9	
2-Nitrophenol	0.177	0.175		-1.1	20.0
2,4-Dimethylphenol	0.312	0.302		-3.2	
bis(2-Chloroethoxy)methane	0.383	0.367		-4.2	
2,4-Dichlorophenol	0.283	0.273		-3.5	20.0
Naphthalene	0.985	0.922		-6.4	
4-Chloroaniline	0.399	0.386		-3.3	
Hexachlorobutadiene	0.192	0.175		-8.9	20.0
Caprolactam	0.080	0.083		3.8	
4-Chloro-3-methylphenol	0.291	0.279		-4.1	20.0
2-Methylnaphthalene	0.620	0.583		-6.0	
Hexachlorocyclopentadiene	0.387	0.358	0.050	-7.5	
2,4,6-Trichlorophenol	0.387	0.373		-3.6	20.0
2-Fluorobiphenyl	1.490	1.348		-9.5	
2,4,5-Trichlorophenol	0.408	0.398		-2.5	
1,1-Biphenyl	1.552	1.466		-5.5	
2-Chloronaphthalene	1.146	1.087		-5.1	
2-Nitroaniline	0.331	0.326		-1.5	
Dimethylphthalate	1.320	1.261		-4.5	
Acenaphthylene	1.936	1.851		-4.4	
2,6-Dinitrotoluene	0.285	0.281		-1.4	
3-Nitroaniline	0.311	0.320		2.9	
Acenaphthene	1.182	1.133		-4.1	20.0
2,4-Dinitrophenol	0.147	0.156	0.050	6.1	
4-Nitrophenol	0.230	0.234	0.050	1.7	

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: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG No.: Q2150

Instrument ID: BNA_F Calibration Date/Time: 05/30/2025 13:20

Lab File ID: BF142566.D Init. Calib. Date(s): 05/20/2025 05/20/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:10 15:31

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.701	1.625		-4.5	
2,4-Dinitrotoluene	0.372	0.380		2.2	
Diethylphthalate	1.289	1.248		-3.2	
4-Chlorophenyl-phenylether	0.646	0.618		-4.3	
Fluorene	1.314	1.256		-4.4	
4-Nitroaniline	0.282	0.303		7.4	
4,6-Dinitro-2-methylphenol	0.112	0.117		4.5	
n-Nitrosodiphenylamine	0.684	0.624		-8.8	20.0
2,4,6-Tribromophenol	0.222	0.215		-3.2	
4-Bromophenyl-phenylether	0.236	0.217		-8.1	
Hexachlorobenzene	0.262	0.244		-6.9	
Atrazine	0.182	0.184		1.1	
Pentachlorophenol	0.148	0.139		-6.1	20.0
Phenanthrene	1.069	0.997		-6.7	
Anthracene	1.091	1.035		-5.1	
Carbazole	0.933	0.916		-1.8	
Di-n-butylphthalate	1.021	1.020		-0.1	
Fluoranthene	0.999	1.004		0.5	20.0
Pyrene	1.866	1.816		-2.7	
Terphenyl-d14	1.464	1.377		-5.9	
Butylbenzylphthalate	0.516	0.551		6.8	
3,3-Dichlorobenzidine	0.405	0.411		1.5	
Benzo(a)anthracene	1.336	1.270		-4.9	
Chrysene	1.200	1.171		-2.4	
Bis(2-ethylhexyl)phthalate	0.660	0.643		-2.6	
Di-n-octyl phthalate	1.290	1.047		-18.8	20.0
Benzo(b)fluoranthene	1.184	1.220		3.0	
Benzo(k)fluoranthene	1.109	1.007		-9.2	
Benzo(a)pyrene	1.116	1.095		-1.9	20.0
Indeno(1,2,3-cd)pyrene	1.501	1.407		-6.3	
Dibenzo(a,h)anthracene	1.218	1.143		-6.2	
Benzo(g,h,i)perylene	1.218	1.131		-7.1	
1,2,4,5-Tetrachlorobenzene	0.574	0.549		-4.4	
1,4-Dioxane	0.475	0.463		-2.5	20.0
2,3,4,6-Tetrachlorophenol	0.341	0.332		-2.6	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	109753	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	434666	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	234624	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	409802	20.000	ng	0.00
76) Chrysene-d12	14.074	240	223422	20.000	ng	0.00
86) Perylene-d12	15.568	264	206730	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	501324	76.955	ng	0.00
7) Phenol-d6	6.522	99	612585	78.117	ng	-0.01
23) Nitrobenzene-d5	7.463	82	606675	76.107	ng	-0.01
42) 2,4,6-Tribromophenol	10.733	330	201732	77.469	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	1264848	72.339	ng	0.00
79) Terphenyl-d14	13.016	244	1230505	75.263	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.663	88	101615	38.980	ng	99
3) Pyridine	3.440	79	265976	40.066	ng	98
4) n-Nitrosodimethylamine	3.387	42	131847	38.252	ng	92
6) Aniline	6.563	93	415610	39.416	ng	99
8) 2-Chlorophenol	6.681	128	275775	38.865	ng	98
9) Benzaldehyde	6.451	77	179637	38.086	ng	99
10) Phenol	6.540	94	347783	39.414	ng	99
11) bis(2-Chloroethyl)ether	6.634	93	246545	38.816	ng	100
12) 1,3-Dichlorobenzene	6.839	146	300831	37.995	ng	99
13) 1,4-Dichlorobenzene	6.916	146	307347	38.536	ng	99
14) 1,2-Dichlorobenzene	7.069	146	293302	38.432	ng	99
15) Benzyl Alcohol	7.039	79	225900	38.981	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.175	45	412827	38.703	ng	100
17) 2-Methylphenol	7.151	107	217808	39.316	ng	99
18) Hexachloroethane	7.410	117	105055	37.722	ng	97
19) n-Nitroso-di-n-propyla...	7.310	70	182225	37.494	ng	99
20) 3+4-Methylphenols	7.304	107	276765	39.012	ng	99
22) Acetophenone	7.310	105	359638	37.376	ng	99
24) Nitrobenzene	7.486	77	276705	38.488	ng	99
25) Isophorone	7.722	82	501781	37.650	ng	98
26) 2-Nitrophenol	7.798	139	152307	39.647	ng	98
27) 2,4-Dimethylphenol	7.834	122	262718	38.780	ng	98
28) bis(2-Chloroethoxy)met...	7.928	93	318773	38.289	ng	99
29) 2,4-Dichlorophenol	8.039	162	237437	38.539	ng	99
30) 1,2,4-Trichlorobenzene	8.128	180	252442	37.755	ng	99
31) Naphthalene	8.210	128	801463	37.447	ng	100
32) Benzoic acid	7.939	122	162361	39.371	ng	96
33) 4-Chloroaniline	8.251	127	335533	38.689	ng	99
34) Hexachlorobutadiene	8.322	225	152271	36.473	ng	99
35) Caprolactam	8.622	113	72337	41.805	ng	98
36) 4-Chloro-3-methylphenol	8.728	107	242785	38.452	ng	100
37) 2-Methylnaphthalene	8.898	142	506841	37.642	ng	99
38) 1-Methylnaphthalene	8.998	142	519985	37.334	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	257455	38.226	ng	100
41) Hexachlorocyclopentadiene	9.051	237	167761	36.924	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	175160	38.568	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

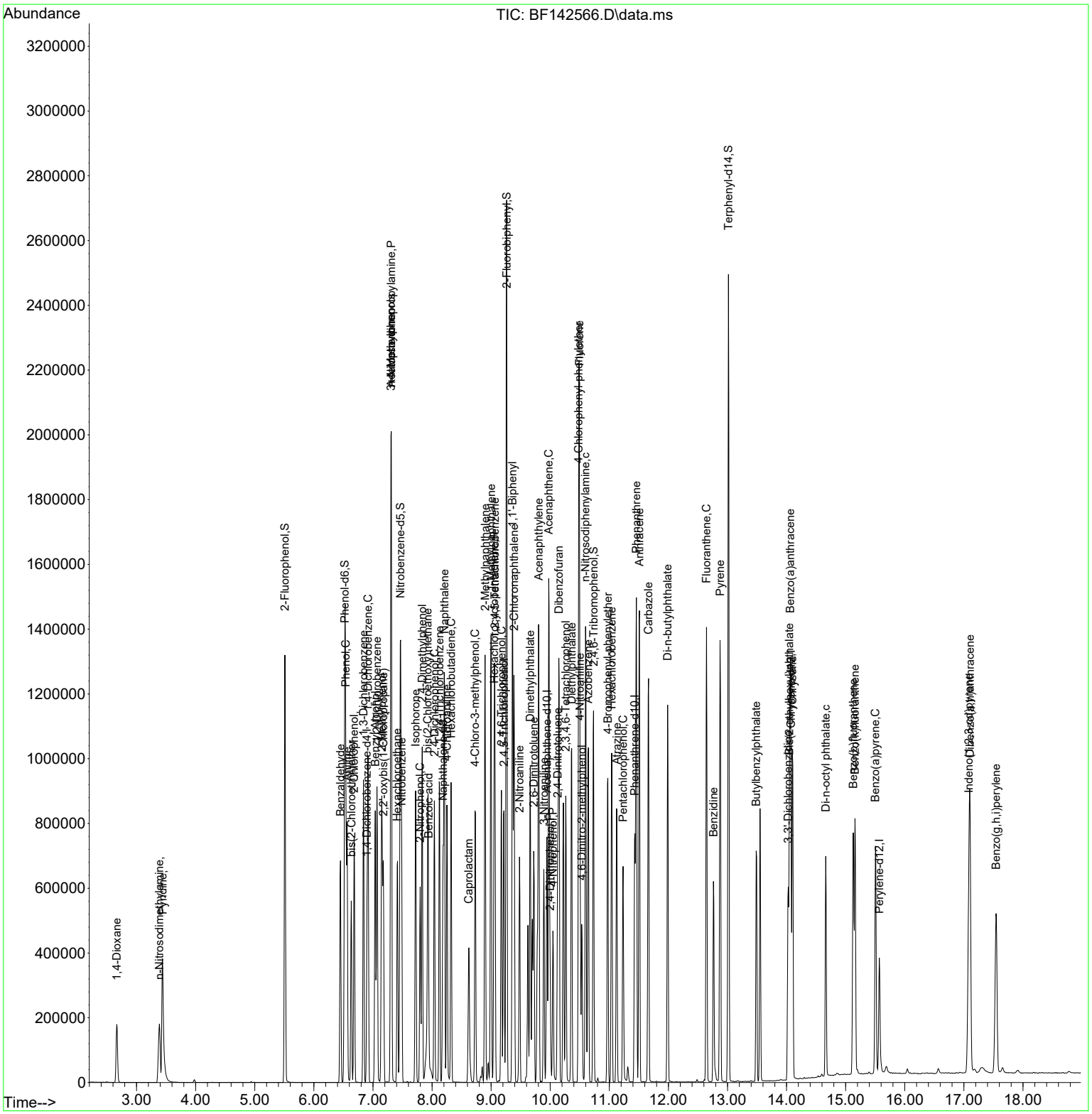
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	186877	39.016	ng	97
46) 1,1'-Biphenyl	9.363	154	687867	37.790	ng	99
47) 2-Chloronaphthalene	9.386	162	510025	37.924	ng	99
48) 2-Nitroaniline	9.480	65	153168	39.403	ng	97
49) Acenaphthylene	9.804	152	868771	38.256	ng	100
50) Dimethylphthalate	9.663	163	591715	38.221	ng	100
51) 2,6-Dinitrotoluene	9.722	165	131661	39.404	ng	98
52) Acenaphthene	9.975	154	531545	38.332	ng	100
53) 3-Nitroaniline	9.892	138	150151	41.142	ng	100
54) 2,4-Dinitrophenol	9.998	184	73435	42.540	ng	97
55) Dibenzofuran	10.145	168	762353	38.204	ng	99
56) 4-Nitrophenol	10.045	139	109735	40.751	ng	99
57) 2,4-Dinitrotoluene	10.128	165	178400	40.883	ng	100
58) Fluorene	10.492	166	589250	38.224	ng	99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	155965	39.005	ng	99
60) Diethylphthalate	10.363	149	585735	38.740	ng	99
61) 4-Chlorophenyl-phenyle...	10.480	204	289995	38.294	ng	98
62) 4-Nitroaniline	10.504	138	142403	43.023	ng	97
63) Azobenzene	10.645	77	522525	38.477	ng	99
65) 4,6-Dinitro-2-methylph...	10.533	198	95823	41.899	ng	98
66) n-Nitrosodiphenylamine	10.598	169	511834	36.507	ng	99
67) 4-Bromophenyl-phenylether	10.975	248	178142	36.764	ng	98
68) Hexachlorobenzene	11.039	284	200364	37.386	ng	100
69) Atrazine	11.127	200	150686	40.470	ng	99
70) Pentachlorophenol	11.233	266	114176	37.734	ng	99
71) Phenanthrene	11.457	178	816768	37.294	ng	100
72) Anthracene	11.510	178	848131	37.945	ng	99
73) Carbazole	11.663	167	750647	39.284	ng	99
74) Di-n-butylphthalate	11.986	149	835811	39.961	ng	99
75) Fluoranthene	12.645	202	823167	40.225	ng	99
77) Benzidine	12.763	184	361003	43.420	ng	100
78) Pyrene	12.874	202	811528	38.937	ng	100
80) Butylbenzylphthalate	13.486	149	246083	42.730	ng	100
81) Benzo(a)anthracene	14.063	228	567490	38.038	ng	100
82) 3,3'-Dichlorobenzidine	14.027	252	183460	40.543	ng	98
83) Chrysene	14.098	228	523334	39.038	ng	99
84) Bis(2-ethylhexyl)phtha...	14.045	149	287264	38.965	ng	99
85) Di-n-octyl phthalate	14.663	149	467708	32.445	ng	100
87) Indeno(1,2,3-cd)pyrene	17.086	276	581571	37.472	ng	99
88) Benzo(b)fluoranthene	15.127	252	504365	41.222	ng	99
89) Benzo(k)fluoranthene	15.157	252	416465	36.342	ng	98
90) Benzo(a)pyrene	15.504	252	452604	39.244	ng	98
91) Dibenzo(a,h)anthracene	17.104	278	472596	37.545	ng	98
92) Benzo(g,h,i)perylene	17.545	276	467824	37.158	ng	98

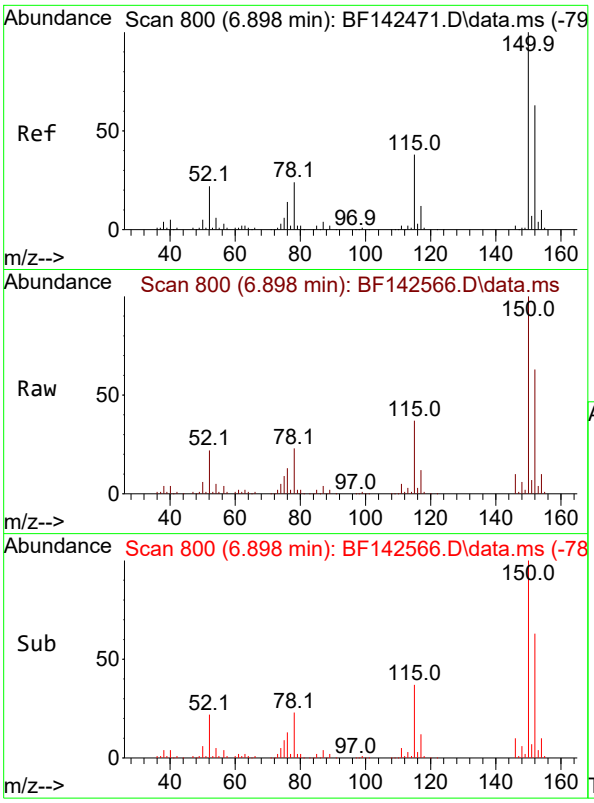
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



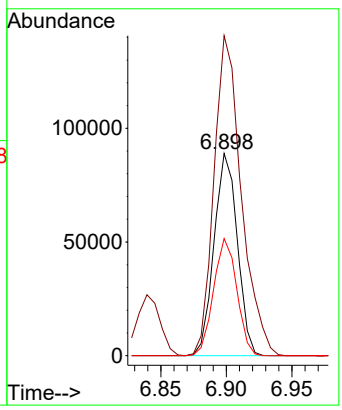


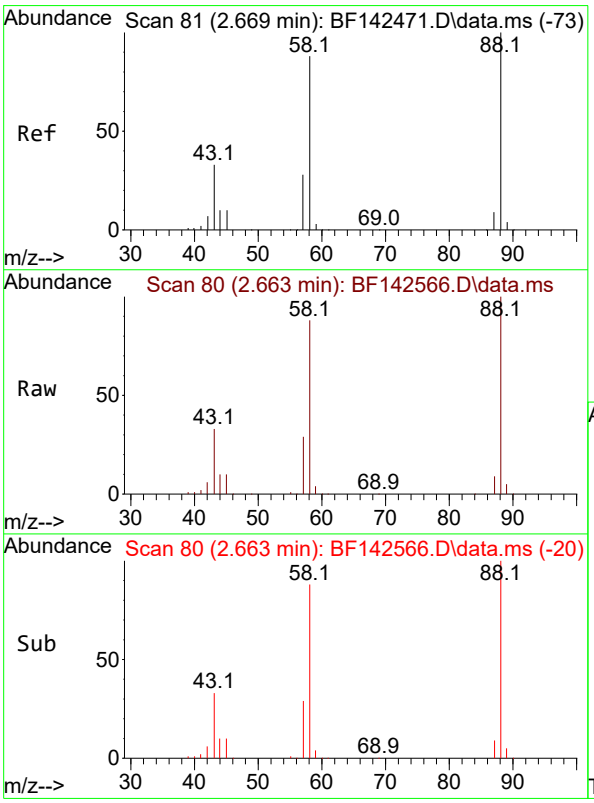
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:152 Resp: 109753

Ion	Ratio	Lower	Upper
152	100		
150	158.2	128.2	192.4
115	57.9	48.3	72.5

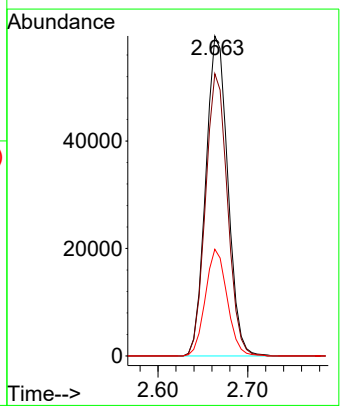


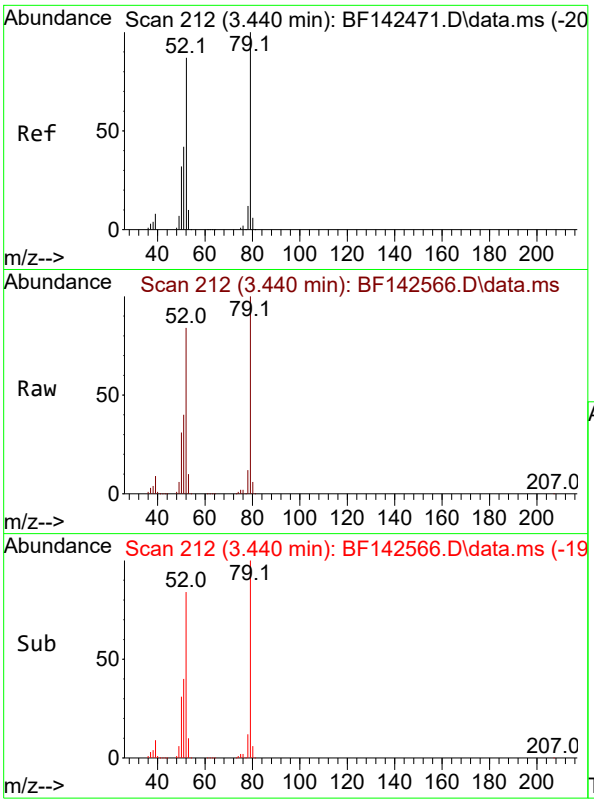


#2
1,4-Dioxane
Concen: 38.980 ng
RT: 2.663 min Scan# 80
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 88 Resp: 101615

Ion	Ratio	Lower	Upper
88	100		
58	87.6	70.8	106.2
43	32.9	26.6	40.0



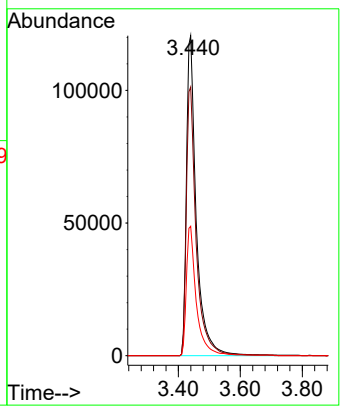


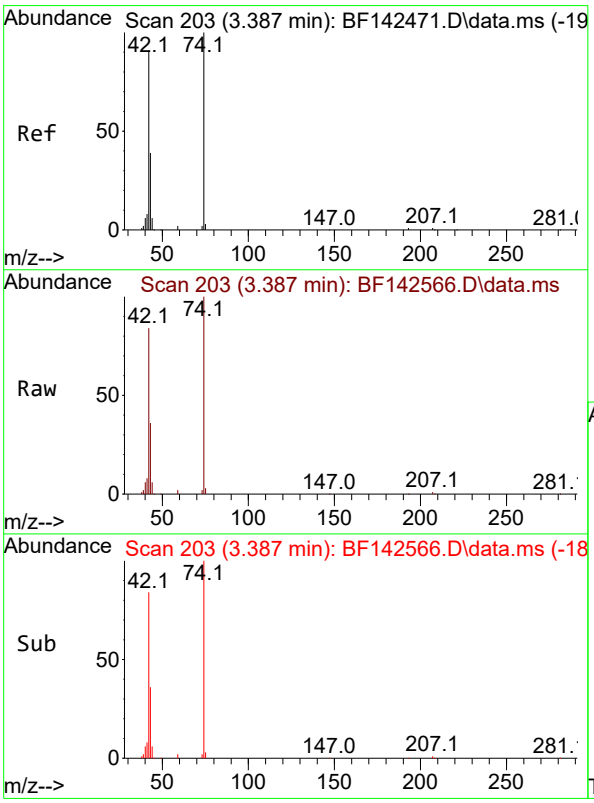
#3
Pyridine
Concen: 40.066 ng
RT: 3.440 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 79 Resp: 265976

Ion	Ratio	Lower	Upper
79	100		
52	83.9	69.2	103.8
51	40.5	33.3	49.9

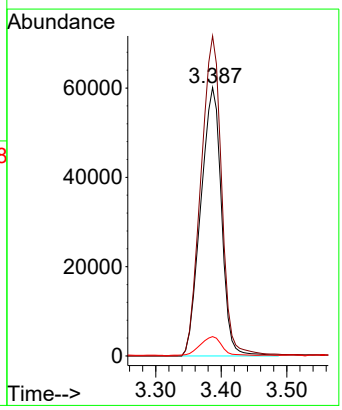


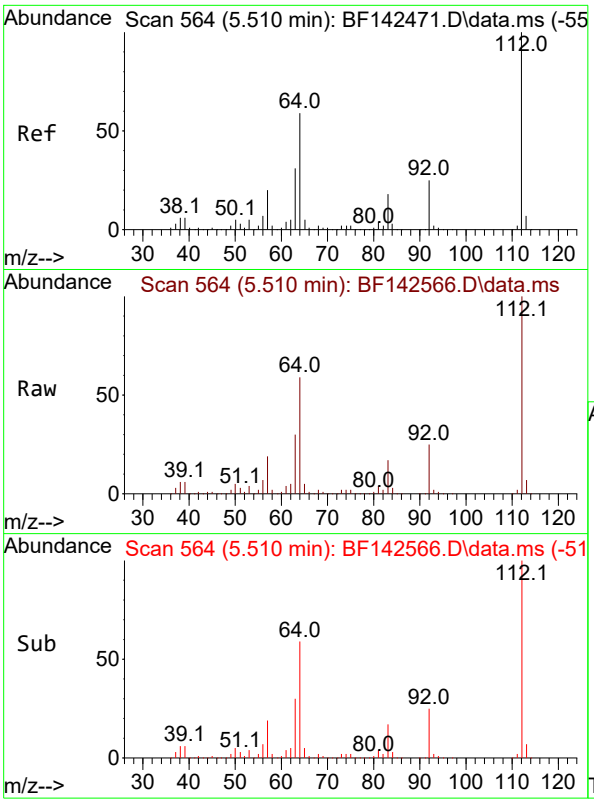


#4
n-Nitrosodimethylamine
Concen: 38.252 ng
RT: 3.387 min Scan# 203
Delta R.T. -0.018 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 42 Resp: 131847

Ion	Ratio	Lower	Upper
42	100		
74	119.2	88.2	132.4
44	7.2	5.4	8.2



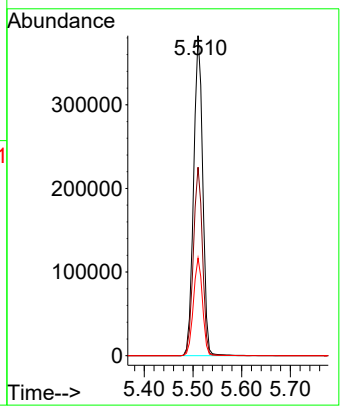


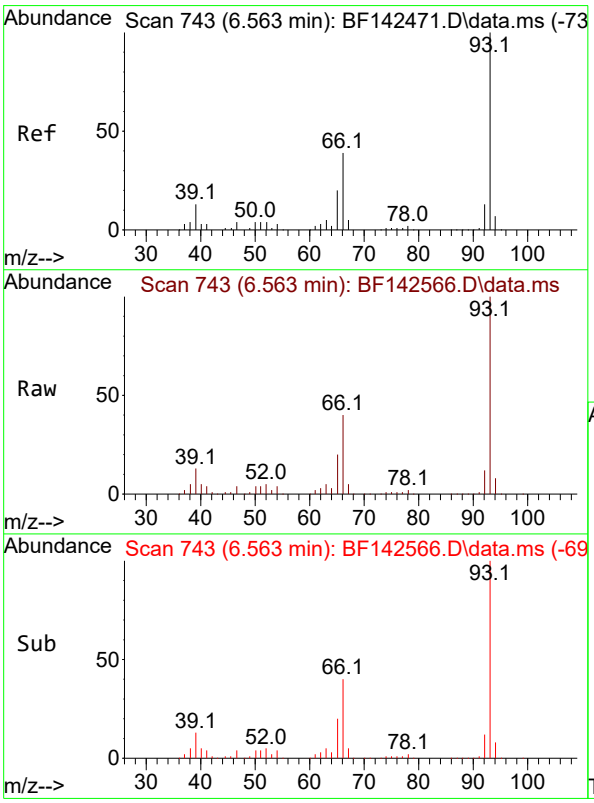
#5
2-Fluorophenol
Concen: 76.955 ng
RT: 5.510 min Scan# 5
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:112 Resp: 501324

Ion	Ratio	Lower	Upper
112	100		
64	58.9	47.5	71.3
63	30.5	24.9	37.3

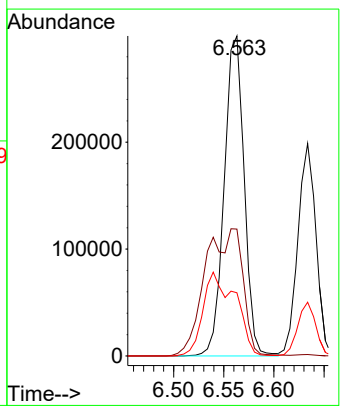


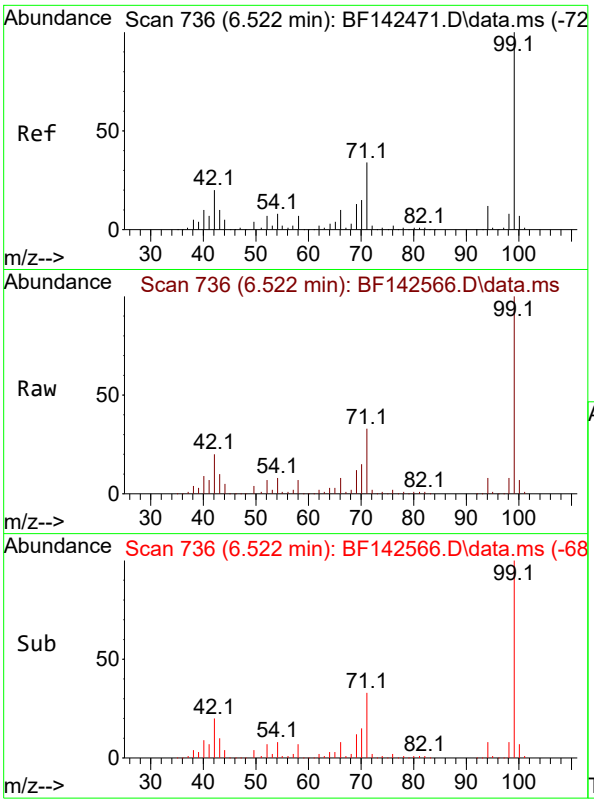


#6
Aniline
Concen: 39.416 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 93 Resp: 415610

Ion	Ratio	Lower	Upper
93	100		
66	39.7	32.0	48.0
65	19.7	16.1	24.1



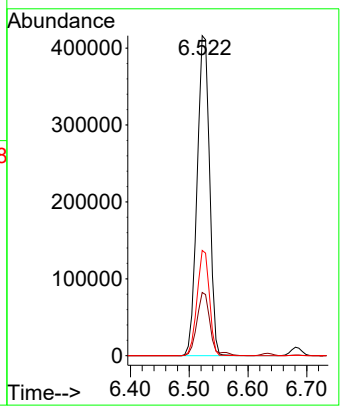


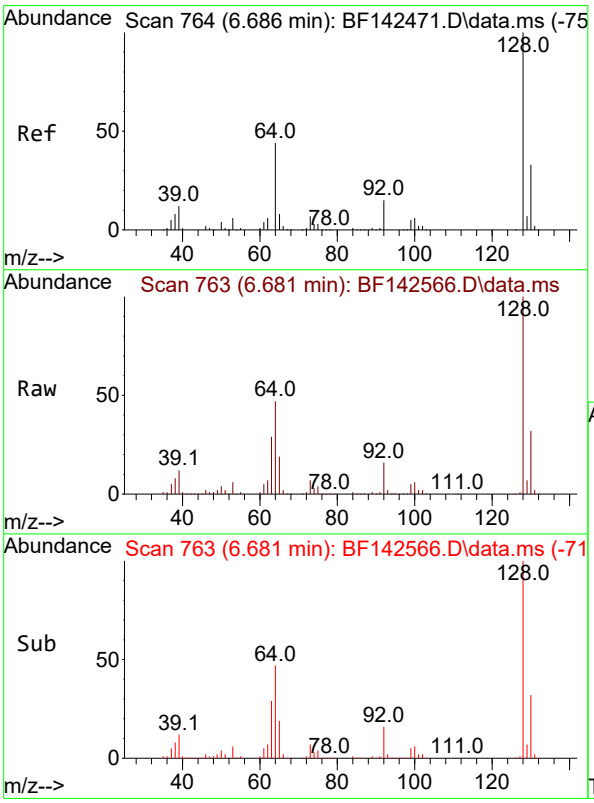
#7
Phenol-d6
Concen: 78.117 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 99 Resp: 612585

Ion	Ratio	Lower	Upper
99	100		
42	19.8	16.2	24.2
71	32.9	27.3	40.9

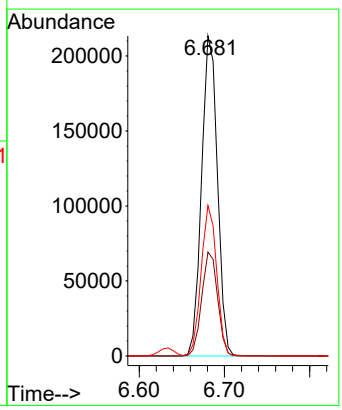


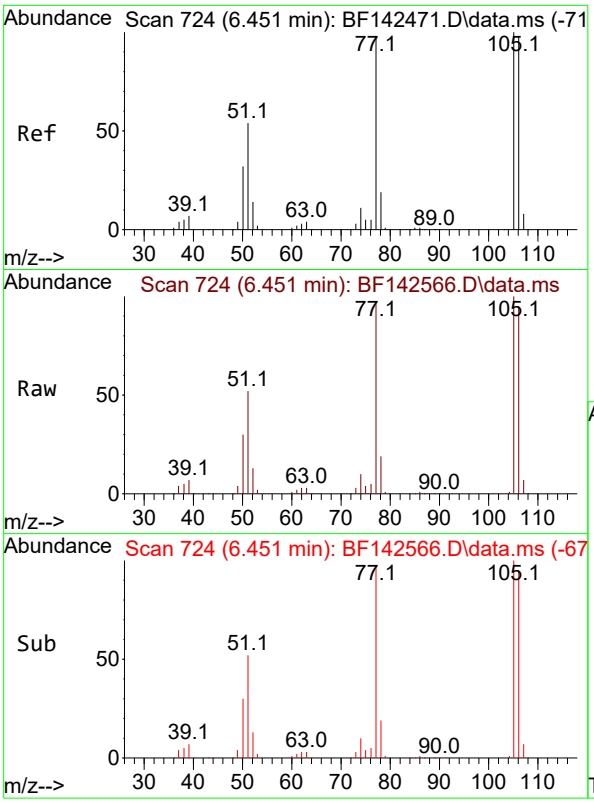


#8
2-Chlorophenol
Concen: 38.865 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:128 Resp: 275775

Ion	Ratio	Lower	Upper
128	100		
130	32.4	12.6	52.6
64	47.0	25.1	65.1



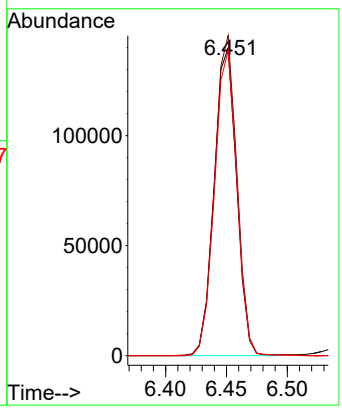


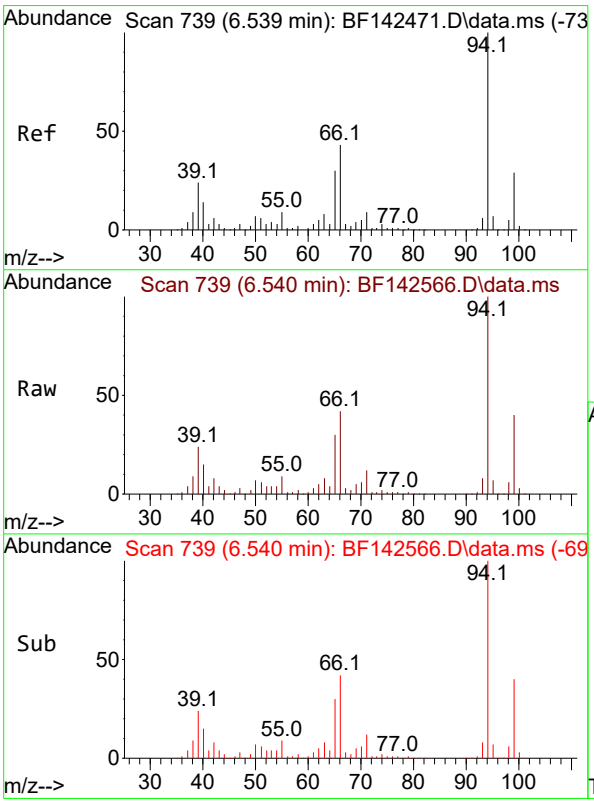
#9
Benzaldehyde
Concen: 38.086 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 77 Resp: 179637

Ion	Ratio	Lower	Upper
77	100		
105	104.0	82.5	122.5
106	99.0	80.0	120.0

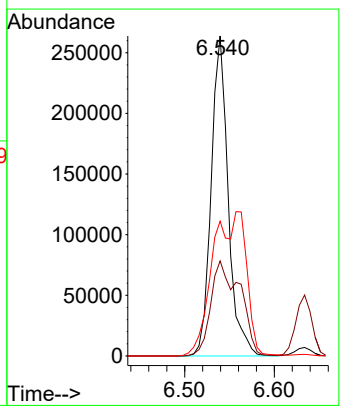


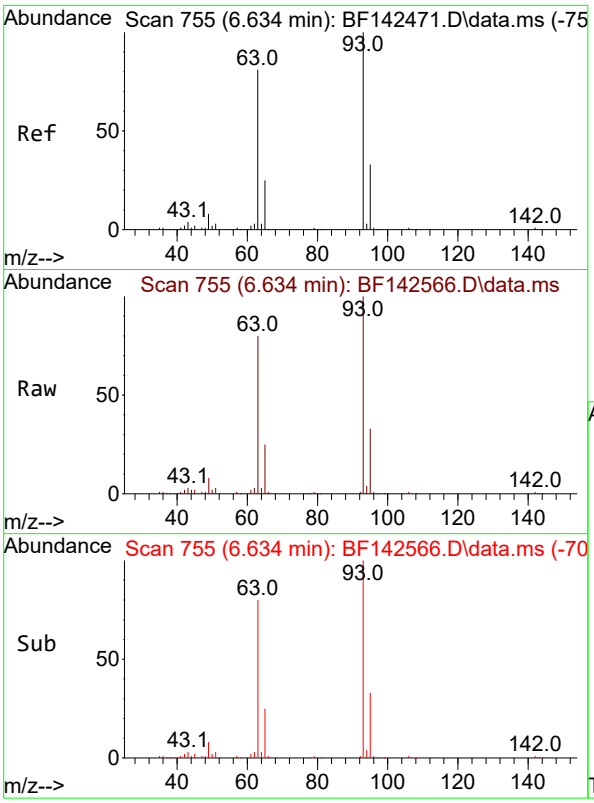


#10
Phenol
Concen: 39.414 ng
RT: 6.540 min Scan# 739
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 94 Resp: 347783

Ion	Ratio	Lower	Upper
94	100		
65	29.7	10.3	50.3
66	42.1	22.6	62.6



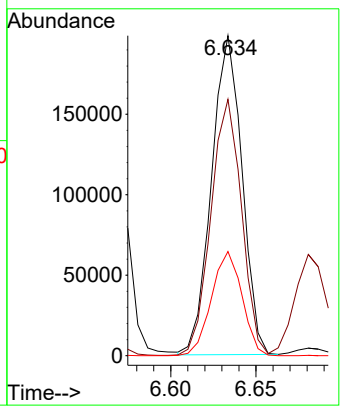


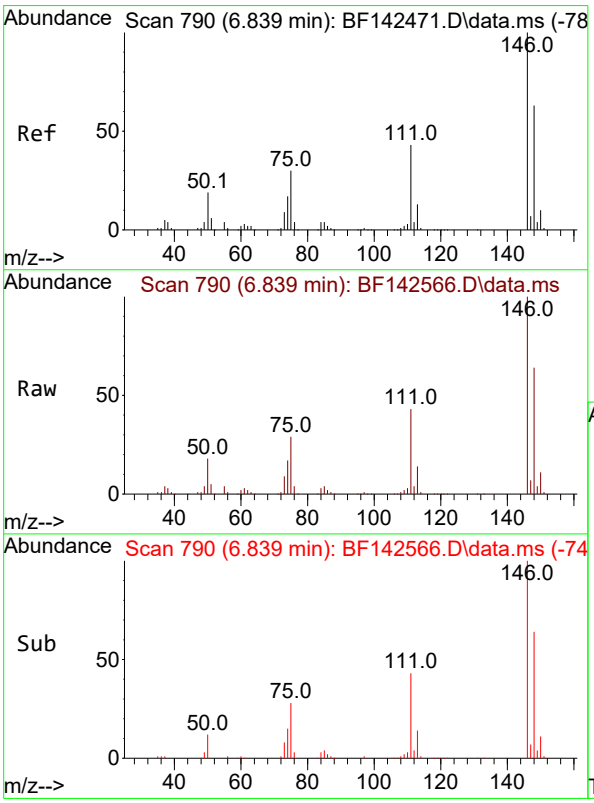
#11
bis(2-Chloroethyl)ether
Concen: 38.816 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 93 Resp: 246545

Ion	Ratio	Lower	Upper
93	100		
63	80.1	60.2	100.2
95	32.5	12.3	52.3

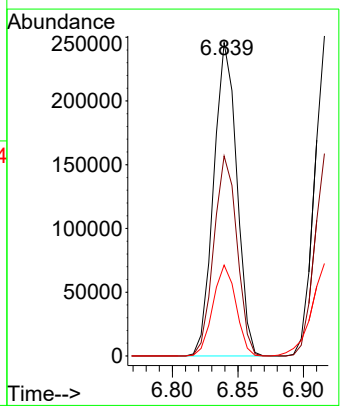


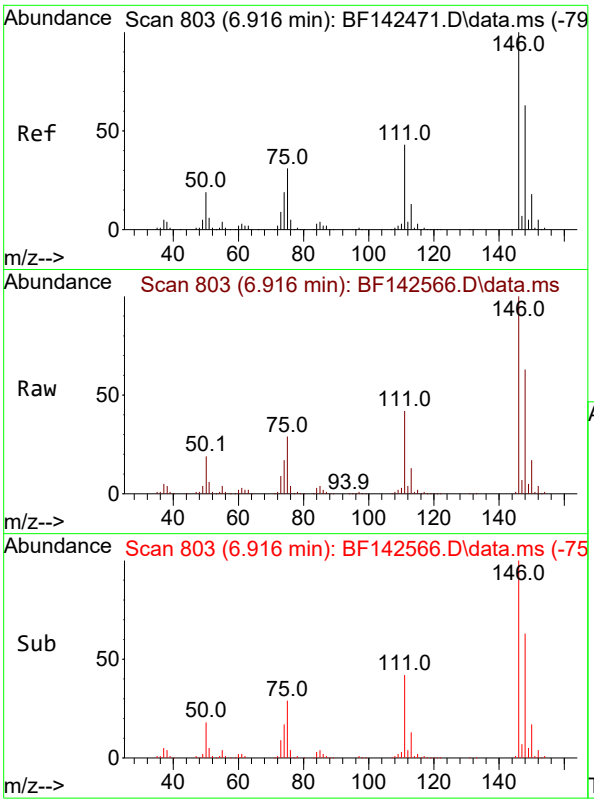


#12
1,3-Dichlorobenzene
Concen: 37.995 ng
RT: 6.839 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:146 Resp: 300831

Ion	Ratio	Lower	Upper
146	100		
148	63.9	50.6	75.8
75	29.0	23.8	35.6



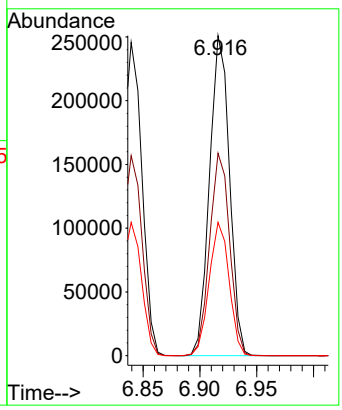


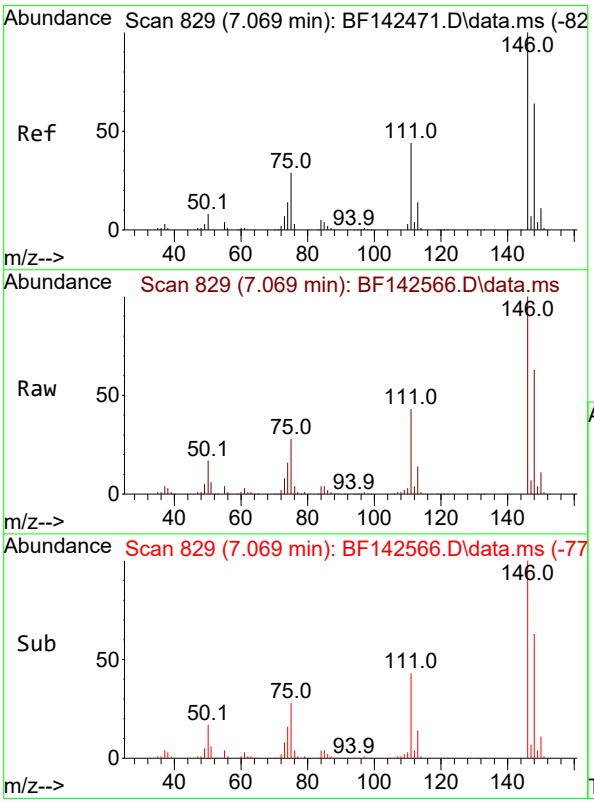
#13
1,4-Dichlorobenzene
Concen: 38.536 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:146 Resp: 307347

Ion	Ratio	Lower	Upper
146	100		
148	63.2	50.4	75.6
111	41.7	34.1	51.1

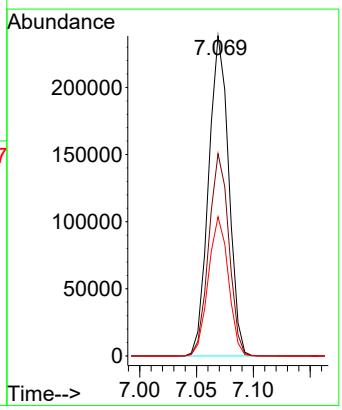


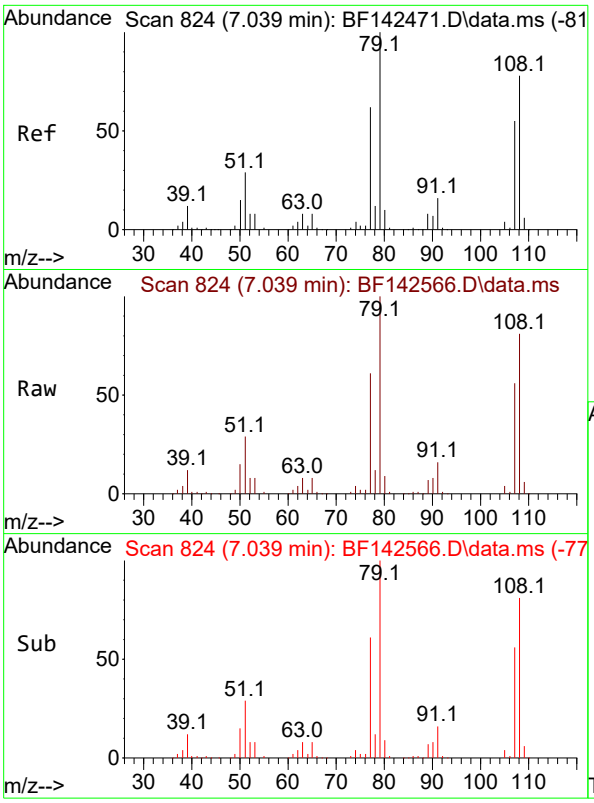


#14
1,2-Dichlorobenzene
Concen: 38.432 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:146 Resp: 293302

Ion	Ratio	Lower	Upper
146	100		
148	63.2	51.0	76.4
111	43.5	35.0	52.6



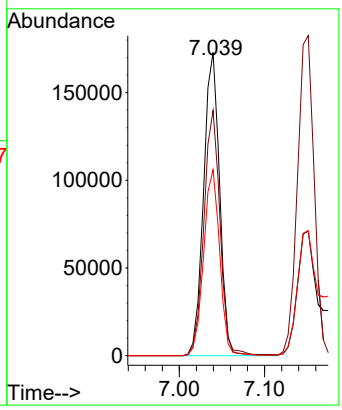


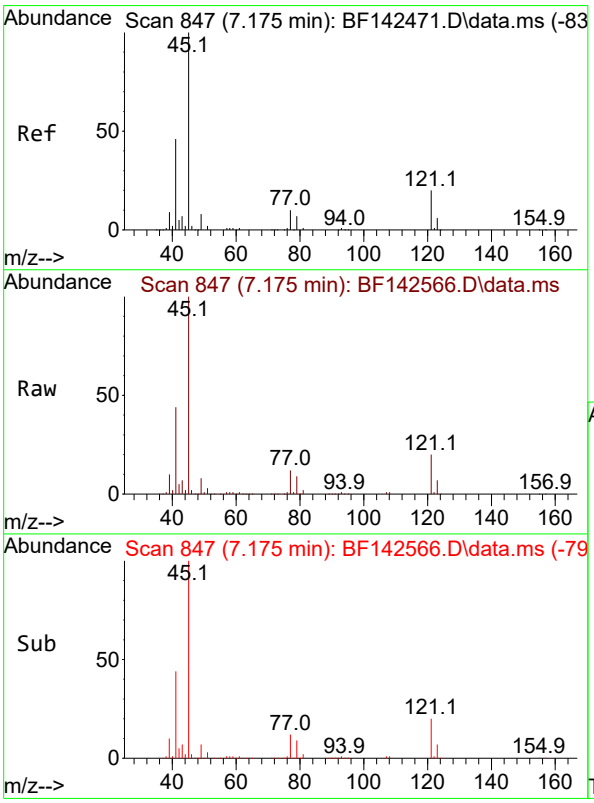
#15
Benzyl Alcohol
Concen: 38.981 ng
RT: 7.039 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 79 Resp: 225900

Ion	Ratio	Lower	Upper
79	100		
108	80.9	62.1	93.1
77	61.3	49.5	74.3

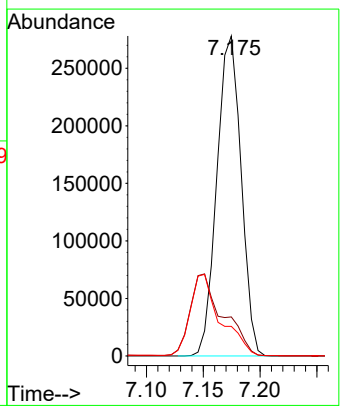


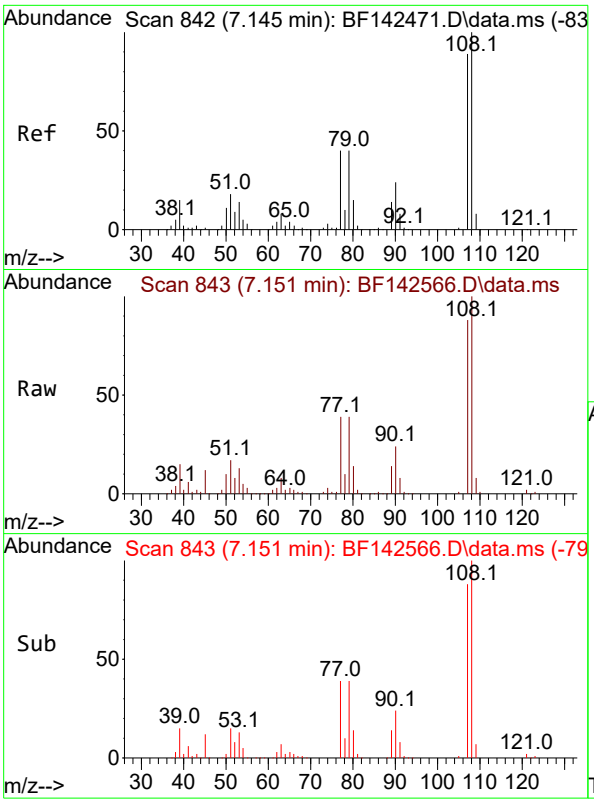


#16
2,2'-oxybis(1-Chloropropane)
Concen: 38.703 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 45 Resp: 412827

Ion	Ratio	Lower	Upper
45	100		
77	12.2	0.0	32.0
79	9.3	0.0	29.2



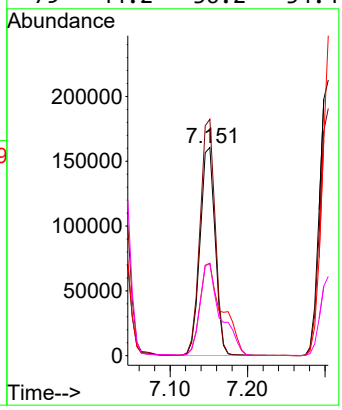


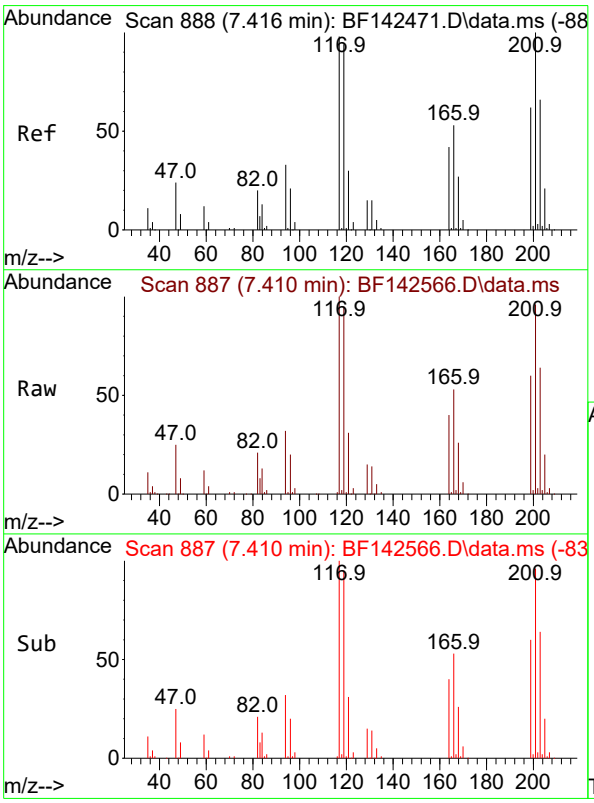
#17
2-Methylphenol
Concen: 39.316 ng
RT: 7.151 min Scan# 84
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:107 Resp: 217808

Ion	Ratio	Lower	Upper
107	100		
108	113.6	90.2	135.2
77	44.4	36.1	54.1
79	44.2	36.2	54.4

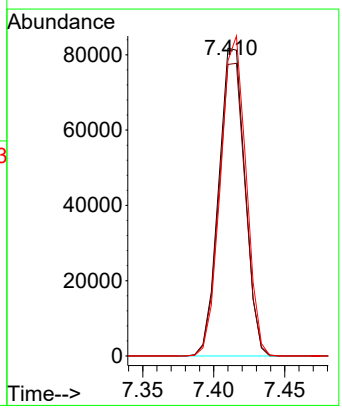


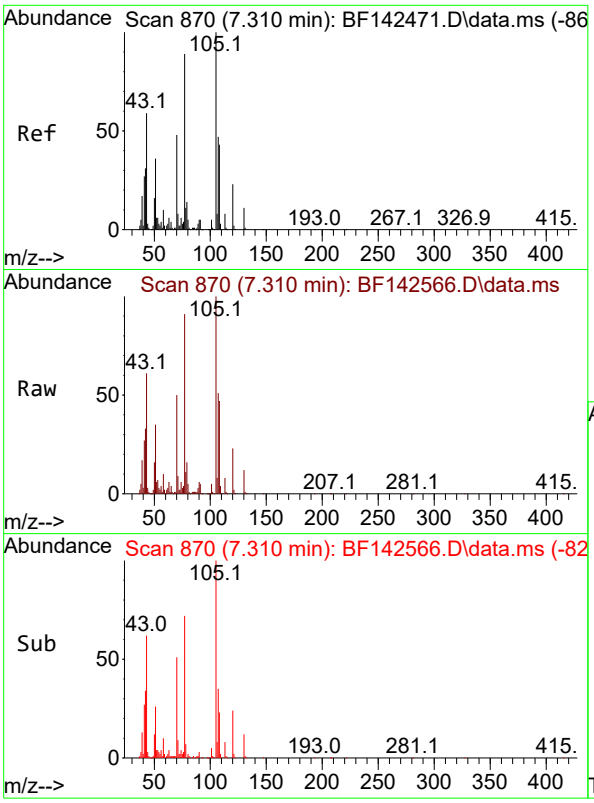


#18
Hexachloroethane
Concen: 37.722 ng
RT: 7.410 min Scan# 887
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:117 Resp: 105055

Ion	Ratio	Lower	Upper
117	100		
119	94.8	76.6	114.8
201	96.0	81.3	121.9



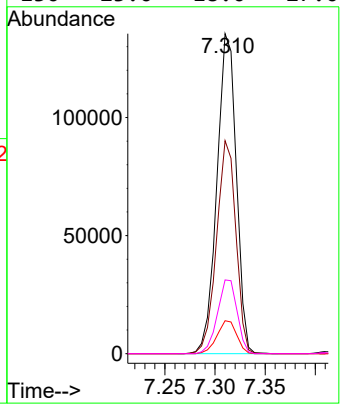


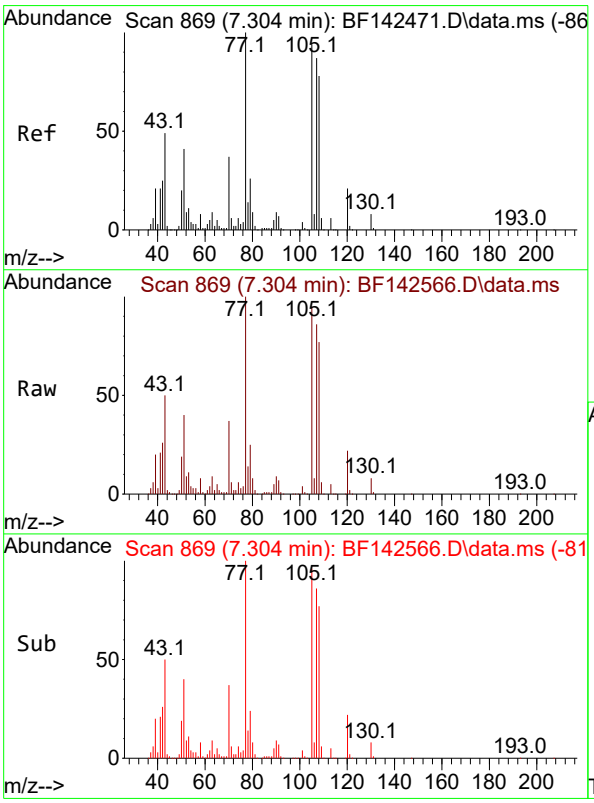
#19
n-Nitroso-di-n-propylamine
Concen: 37.494 ng
RT: 7.310 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 70 Resp: 182225

Ion	Ratio	Lower	Upper
70	100		
42	66.6	52.4	78.6
101	10.3	7.8	11.8
130	23.0	18.0	27.0

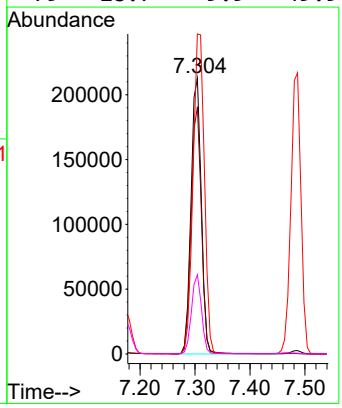


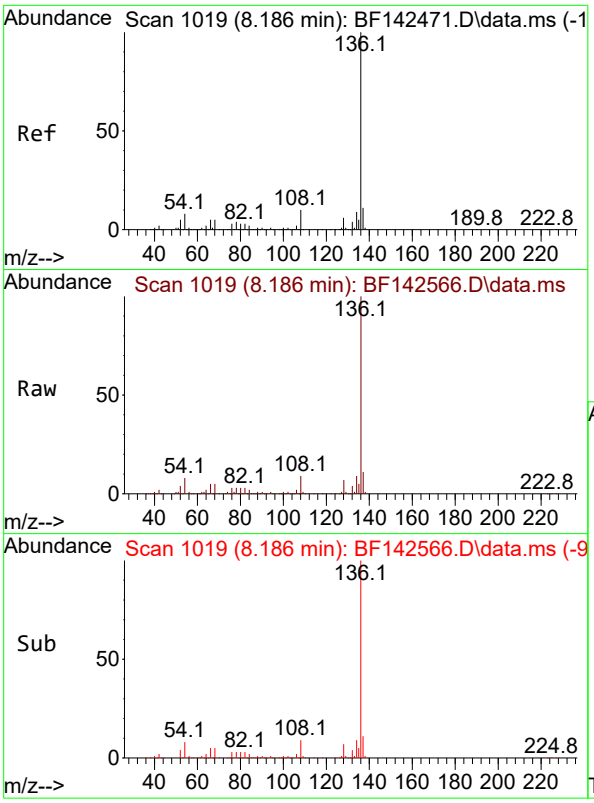


#20
3+4-Methylphenols
Concen: 39.012 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:107 Resp: 276765

Ion	Ratio	Lower	Upper
107	100		
108	89.7	70.4	110.4
77	116.1	95.4	135.4
79	28.7	9.9	49.9



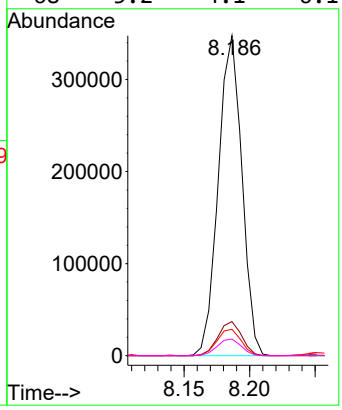


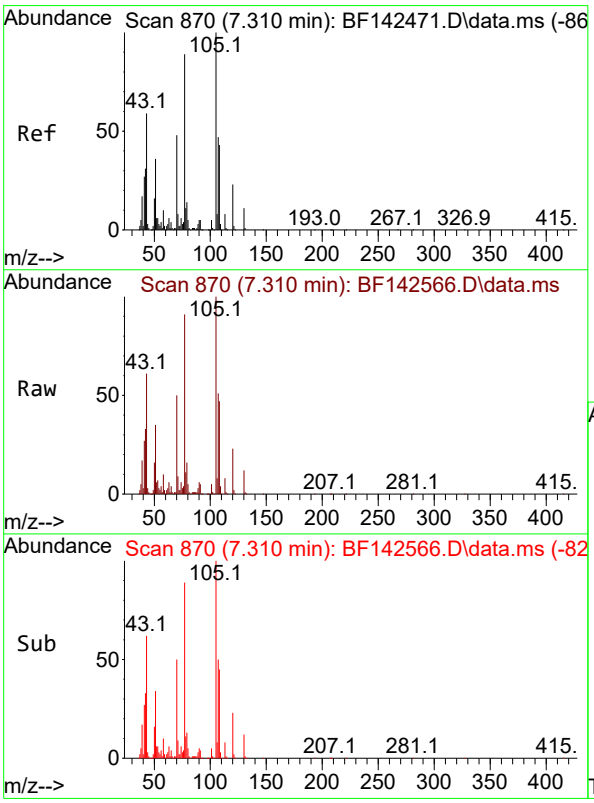
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:136 Resp: 434666

Ion	Ratio	Lower	Upper
136	100		
137	10.7	8.6	13.0
54	8.2	6.6	10.0
68	5.2	4.1	6.1

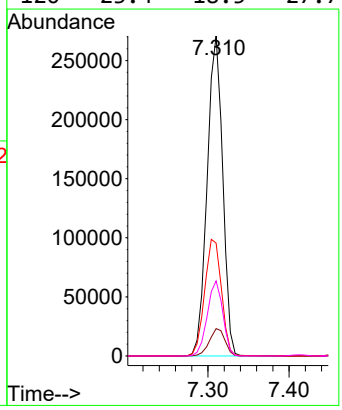


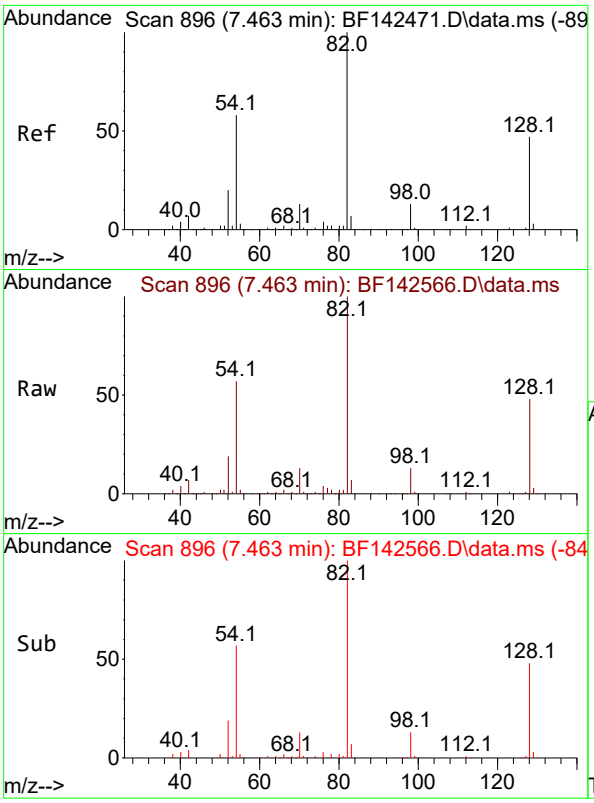


#22
Acetophenone
Concen: 37.376 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:105 Resp: 359638

Ion	Ratio	Lower	Upper
105	100		
71	8.5	6.4	9.6
51	35.3	28.6	42.8
120	23.4	18.5	27.7



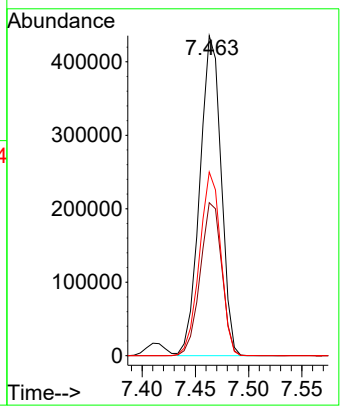


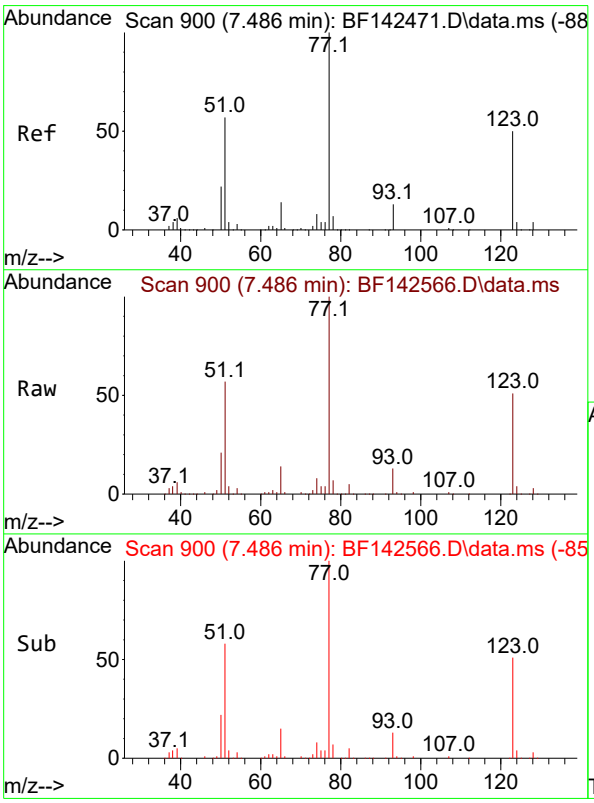
#23
Nitrobenzene-d5
Concen: 76.107 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 82 Resp: 606675

Ion	Ratio	Lower	Upper
82	100		
128	47.8	37.4	56.2
54	57.4	46.6	70.0

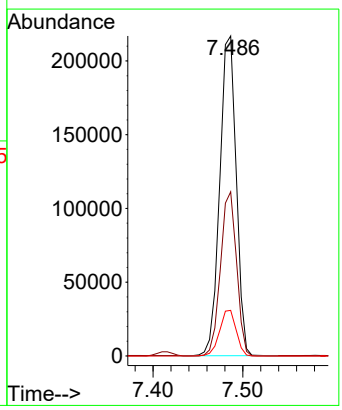


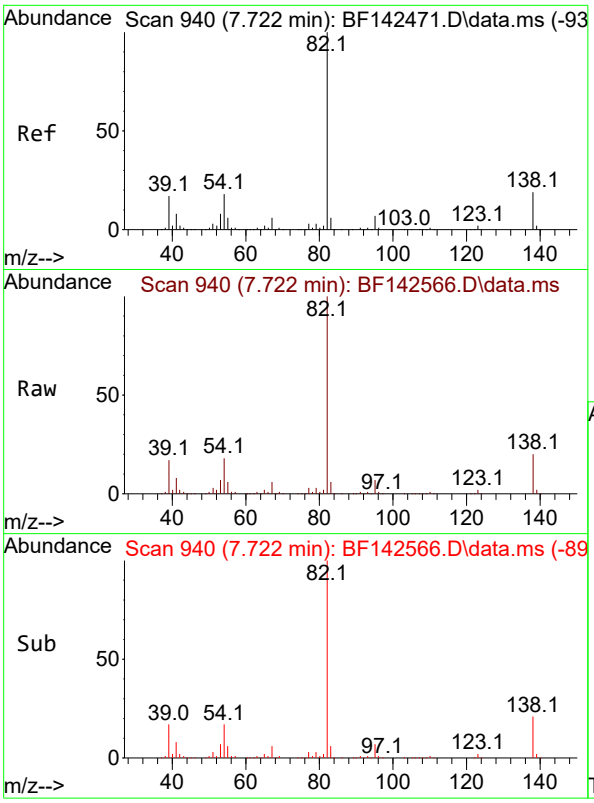


#24
Nitrobenzene
Concen: 38.488 ng
RT: 7.486 min Scan# 900
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 77 Resp: 276705

Ion	Ratio	Lower	Upper
77	100		
123	51.3	40.6	61.0
65	14.3	11.4	17.2



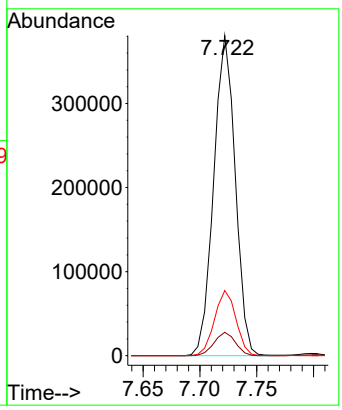


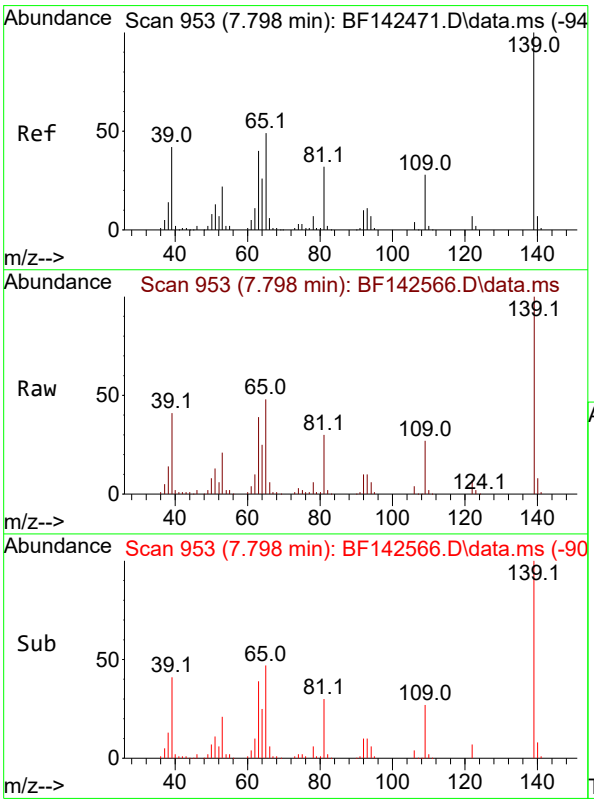
#25
Isophorone
Concen: 37.650 ng
RT: 7.722 min Scan# 94
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 82 Resp: 501781

Ion	Ratio	Lower	Upper
82	100		
95	7.3	6.0	9.0
138	20.4	15.5	23.3

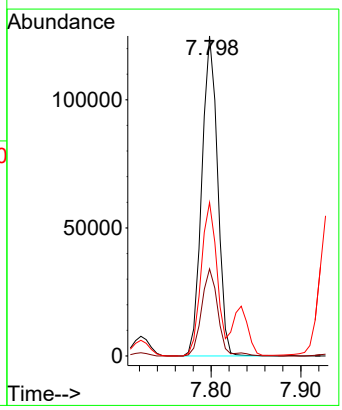


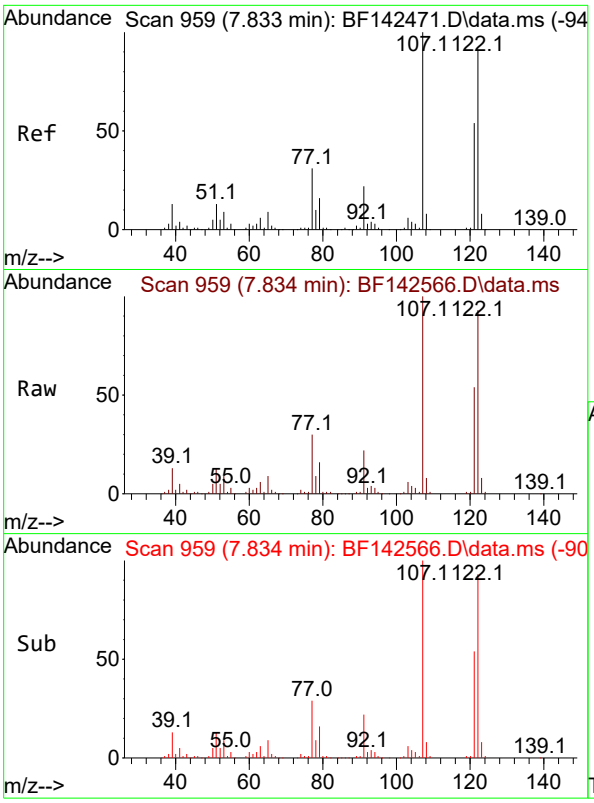


#26
2-Nitrophenol
Concen: 39.647 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:139 Resp: 152307

Ion	Ratio	Lower	Upper
139	100		
109	27.2	22.6	33.8
65	48.0	39.4	59.0



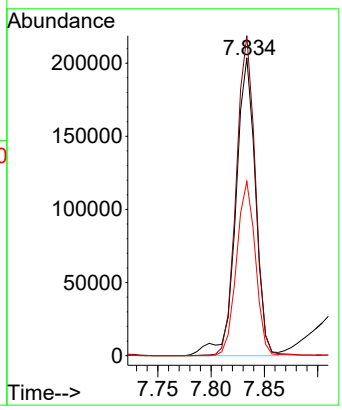


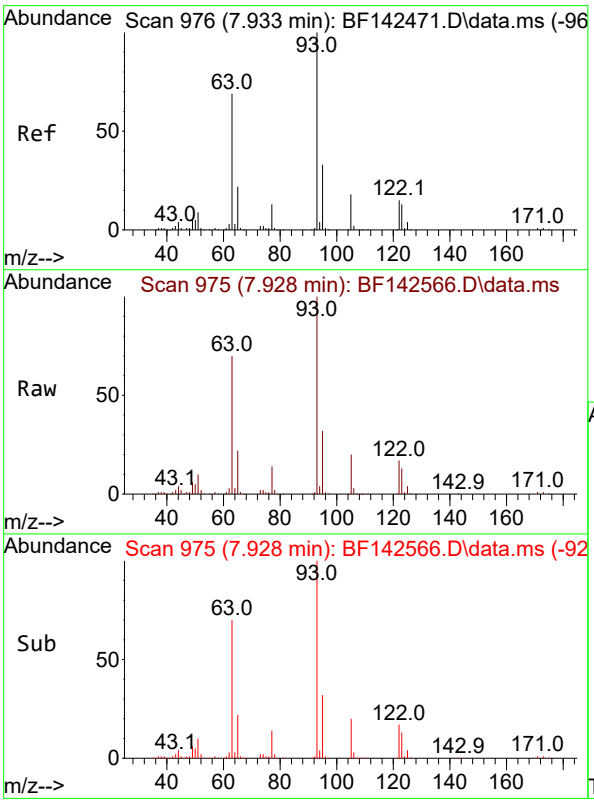
#27
2,4-Dimethylphenol
Concen: 38.780 ng
RT: 7.834 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:122 Resp: 262718

Ion	Ratio	Lower	Upper
122	100		
107	107.4	88.1	132.1
121	58.5	47.3	70.9

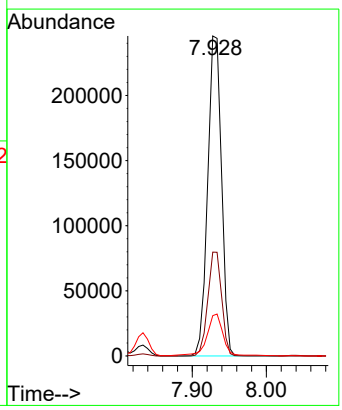


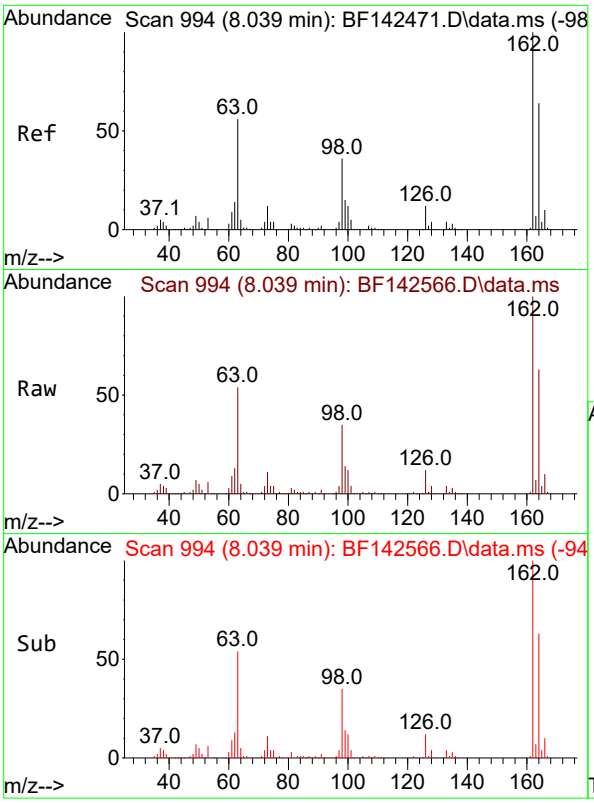


#28
bis(2-Chloroethoxy)methane
Concen: 38.289 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 93 Resp: 318773

Ion	Ratio	Lower	Upper
93	100		
95	32.5	26.4	39.6
123	12.6	10.6	15.8



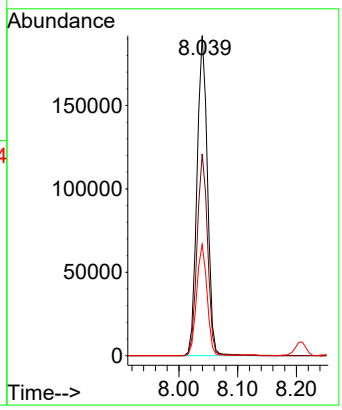


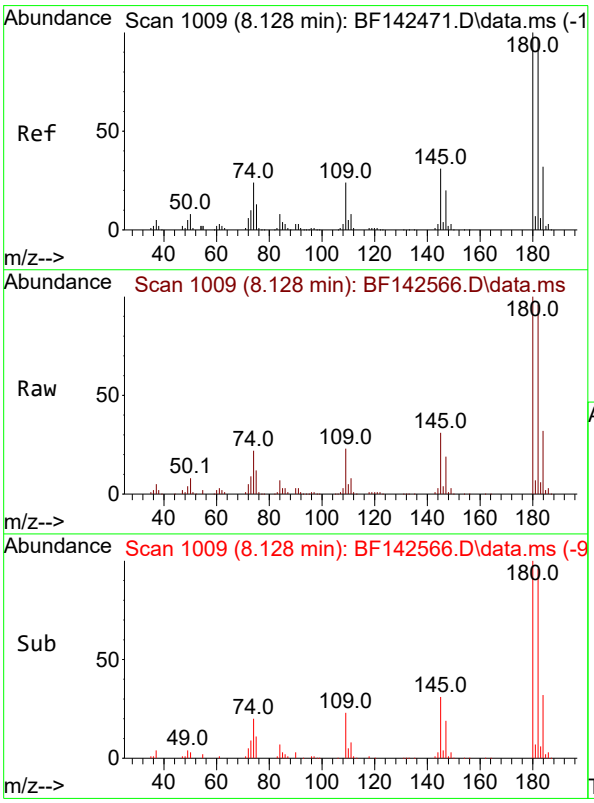
#29
2,4-Dichlorophenol
Concen: 38.539 ng
RT: 8.039 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:162 Resp: 237437

Ion	Ratio	Lower	Upper
162	100		
164	63.1	43.7	83.7
98	34.8	15.5	55.5

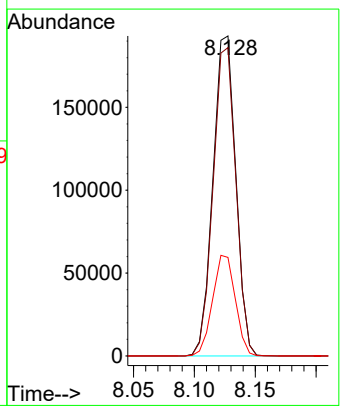


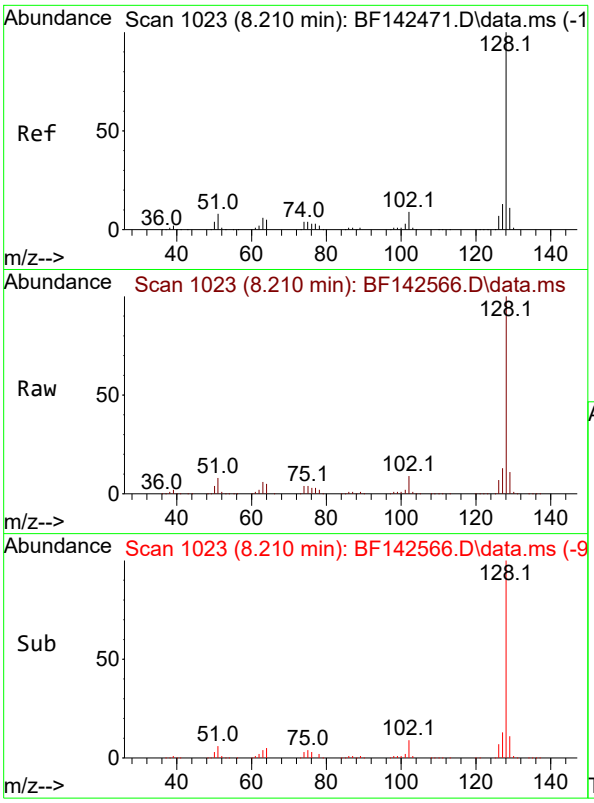


#30
1,2,4-Trichlorobenzene
Concen: 37.755 ng
RT: 8.128 min Scan# 1009
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:180 Resp: 252442

Ion	Ratio	Lower	Upper
180	100		
182	96.4	78.0	117.0
145	30.8	25.0	37.6



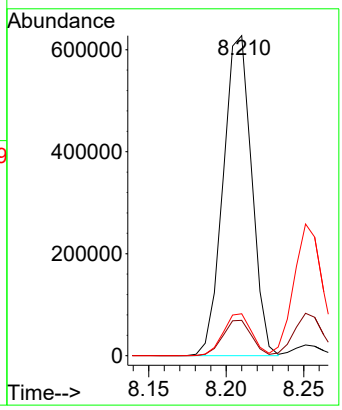


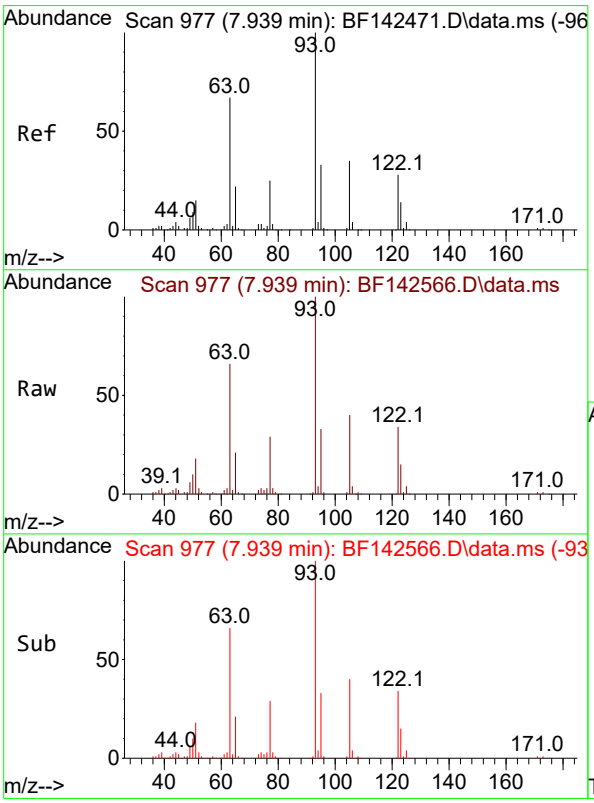
#31
Naphthalene
Concen: 37.447 ng
RT: 8.210 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:128 Resp: 801463

Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.9	13.3
127	13.1	10.5	15.7

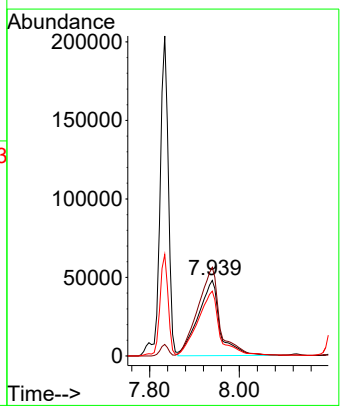


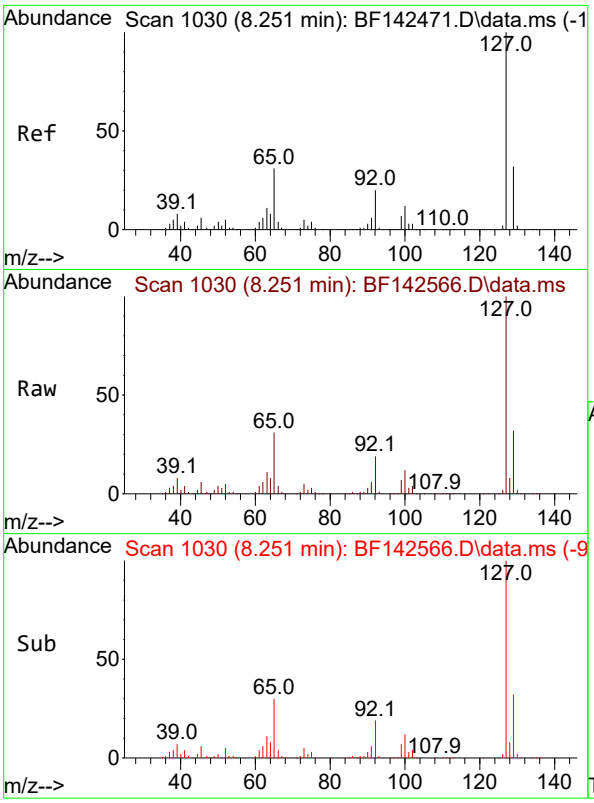


#32
Benzoic acid
Concen: 39.371 ng
RT: 7.939 min Scan# 977
Delta R.T. -0.036 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:122 Resp: 162361

Ion	Ratio	Lower	Upper
122	100		
105	117.3	101.7	141.7
77	85.7	69.5	109.5



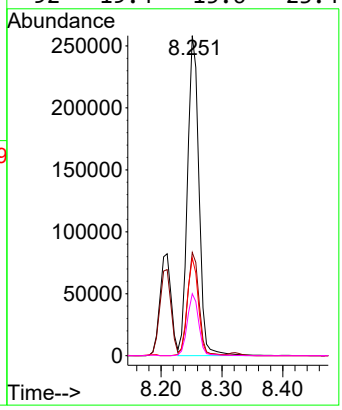


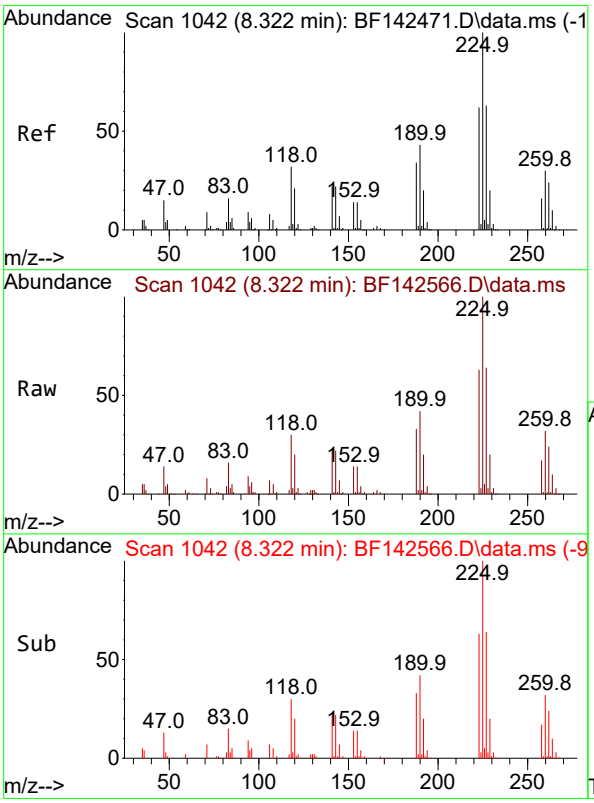
#33
4-Chloroaniline
Concen: 38.689 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:127 Resp: 335533

Ion	Ratio	Lower	Upper
127	100		
129	32.2	26.1	39.1
65	30.5	24.9	37.3
92	19.4	15.6	23.4

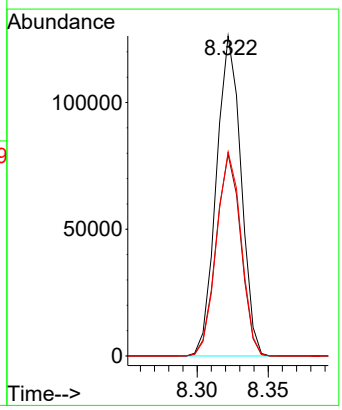


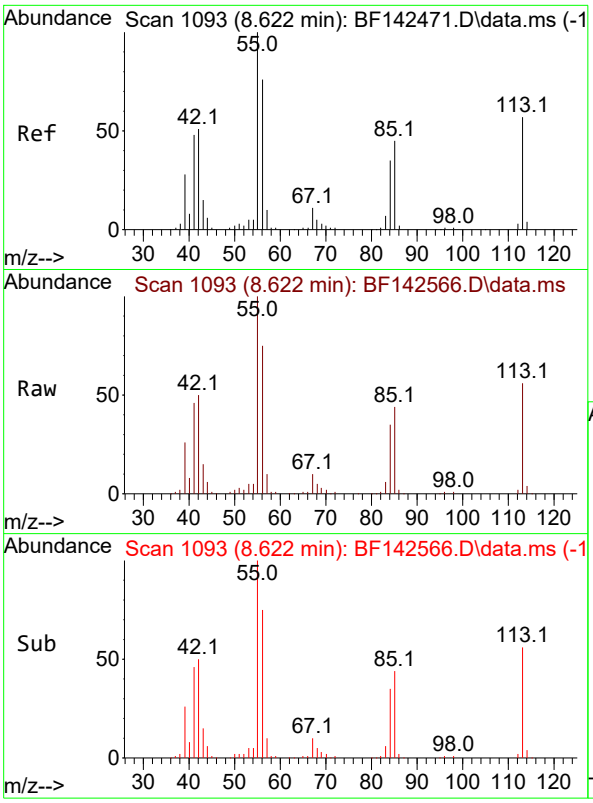


#34
Hexachlorobutadiene
Concen: 36.473 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:225 Resp: 152271

Ion	Ratio	Lower	Upper
225	100		
223	63.0	49.7	74.5
227	63.8	50.3	75.5



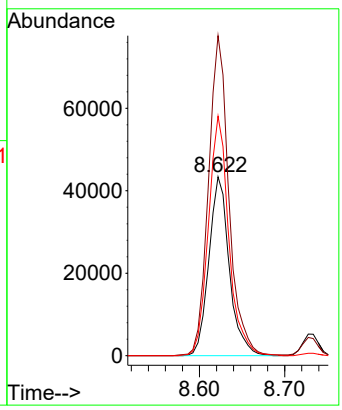


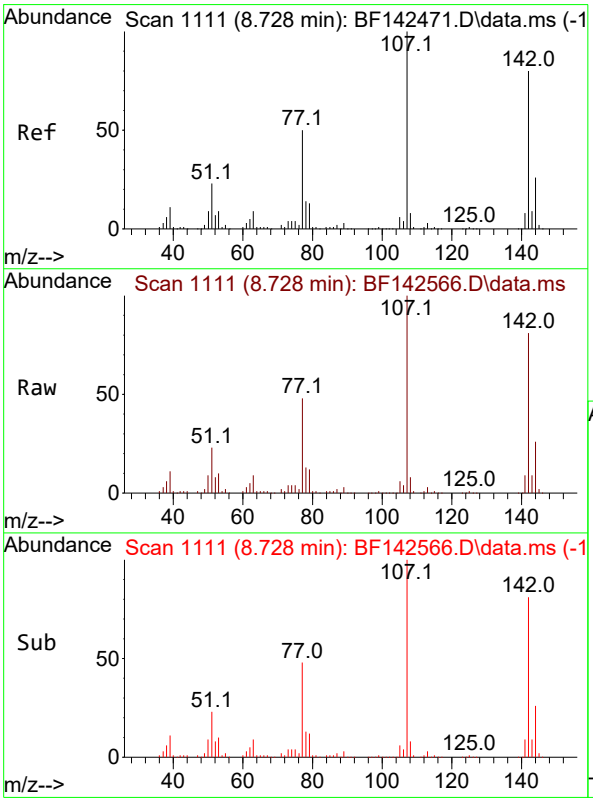
#35
Caprolactam
Concen: 41.805 ng
RT: 8.622 min Scan# 1
Delta R.T. -0.023 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:113 Resp: 72337

Ion	Ratio	Lower	Upper
113	100		
55	178.8	154.7	194.7
56	133.8	113.2	153.2

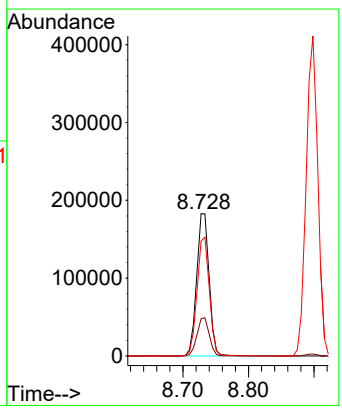


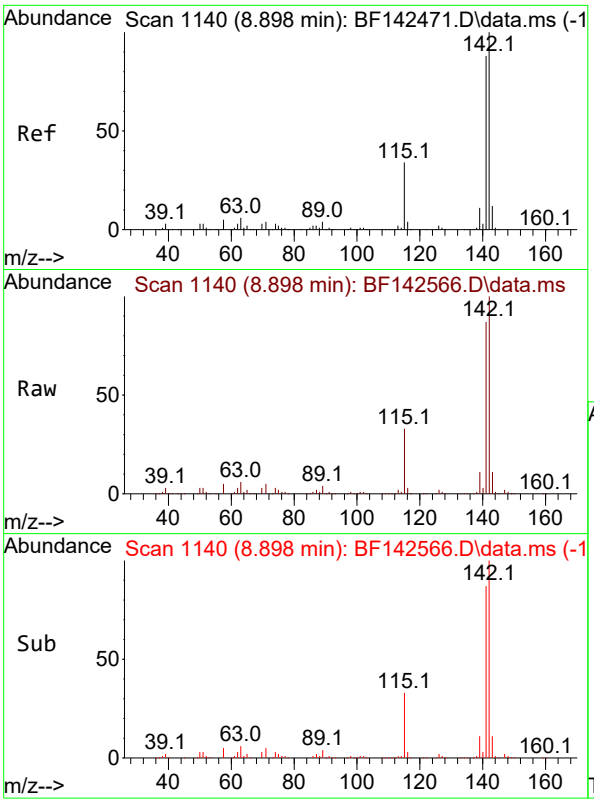


#36
4-Chloro-3-methylphenol
Concen: 38.452 ng
RT: 8.728 min Scan# 1111
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:107 Resp: 242785

Ion	Ratio	Lower	Upper
107	100		
144	26.1	20.9	31.3
142	80.7	64.2	96.2



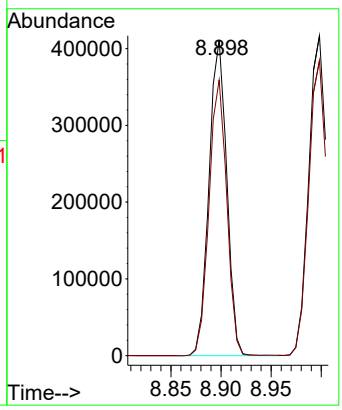


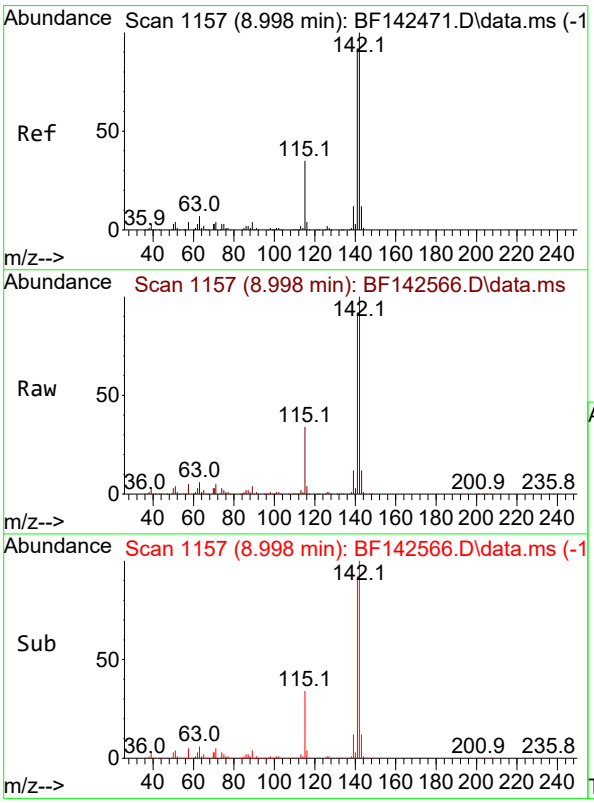
#37
2-Methylnaphthalene
Concen: 37.642 ng
RT: 8.898 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:142 Resp: 506841

Ion	Ratio	Lower	Upper
142	100		
141	87.3	70.7	106.1

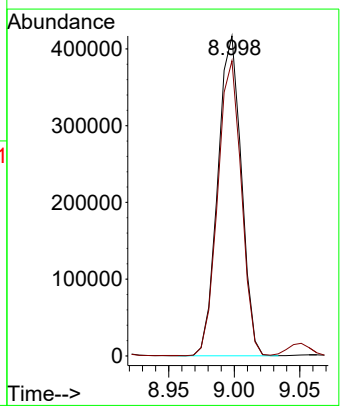


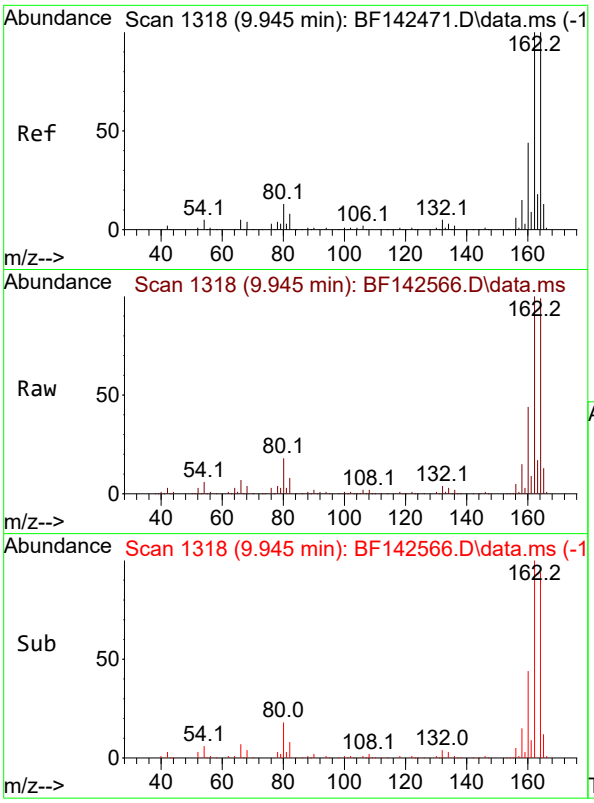


#38
1-Methylnaphthalene
Concen: 37.334 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:142 Resp: 519985

Ion	Ratio	Lower	Upper
142	100		
141	92.2	73.4	110.2



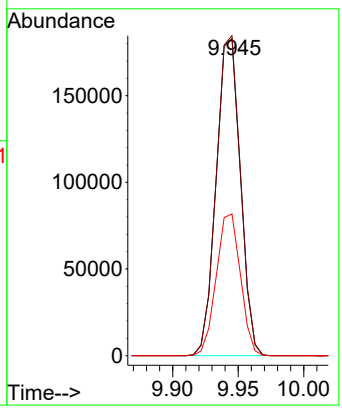


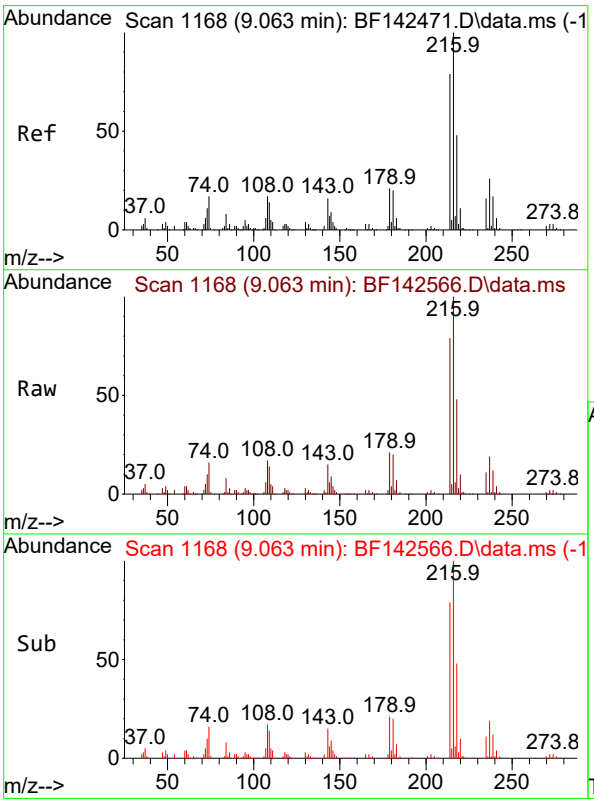
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.945 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:164 Resp: 234624

Ion	Ratio	Lower	Upper
164	100		
162	100.9	80.2	120.4
160	44.7	35.6	53.4

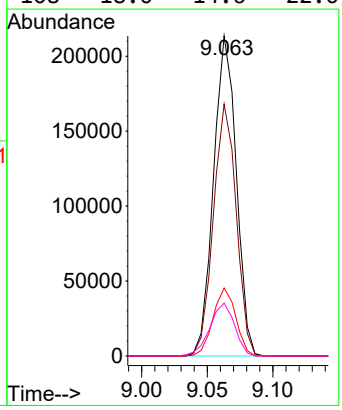


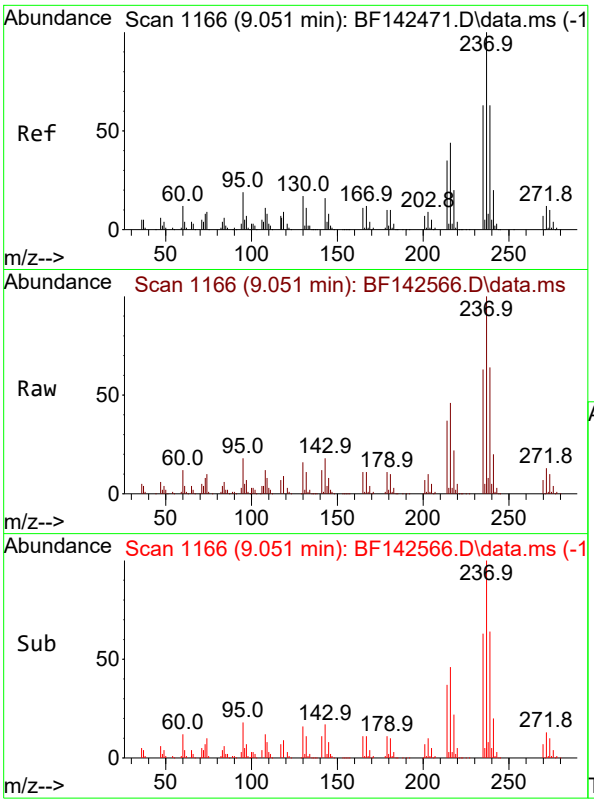


#40
1,2,4,5-Tetrachlorobenzene
Concen: 38.226 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:216 Resp: 257455

Ion	Ratio	Lower	Upper
216	100		
214	78.8	62.9	94.3
179	21.1	16.9	25.3
108	18.0	14.6	22.0



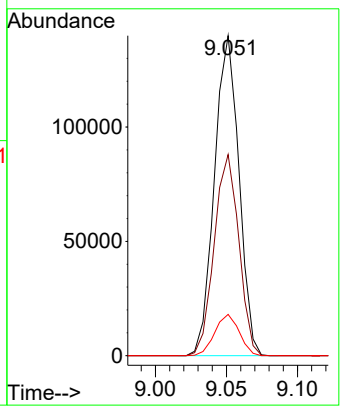


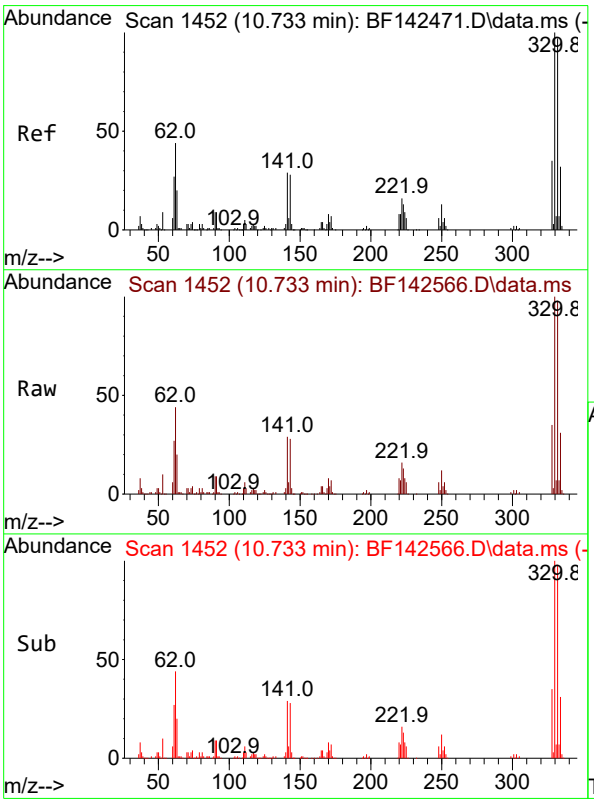
#41
Hexachlorocyclopentadiene
Concen: 36.924 ng
RT: 9.051 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:237 Resp: 167761

Ion	Ratio	Lower	Upper
237	100		
235	62.8	43.3	83.3
272	12.9	0.0	32.4

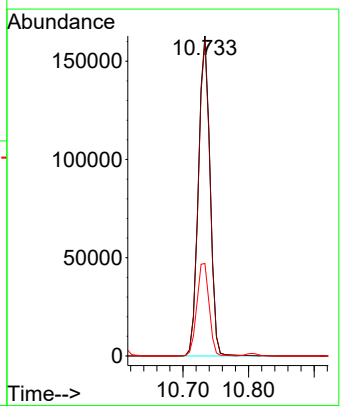


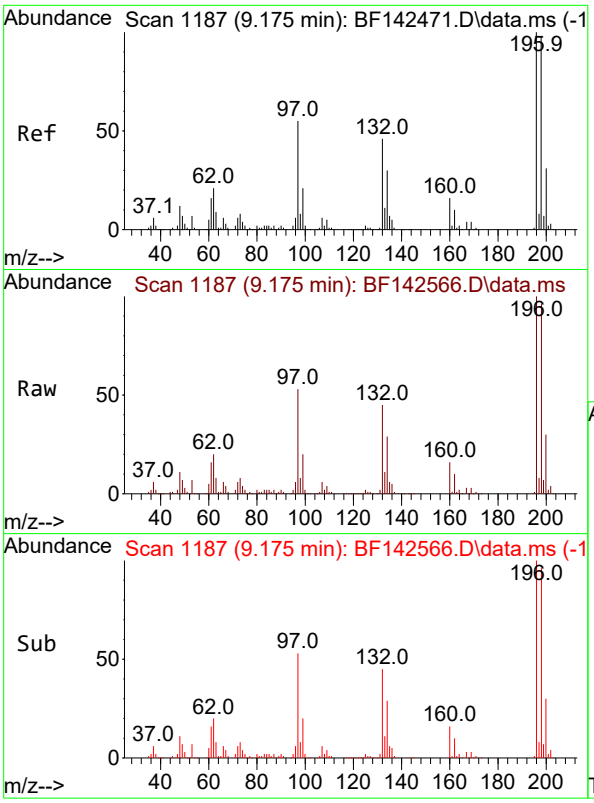


#42
2,4,6-Tribromophenol
Concen: 77.469 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:330 Resp: 201732

Ion	Ratio	Lower	Upper
330	100		
332	98.1	77.6	116.4
141	30.4	24.6	36.8



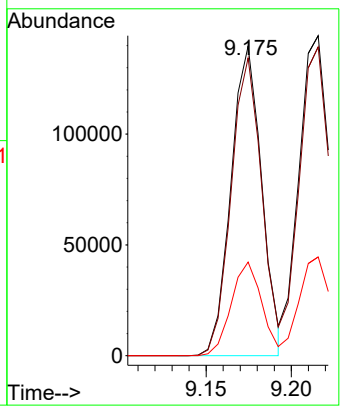


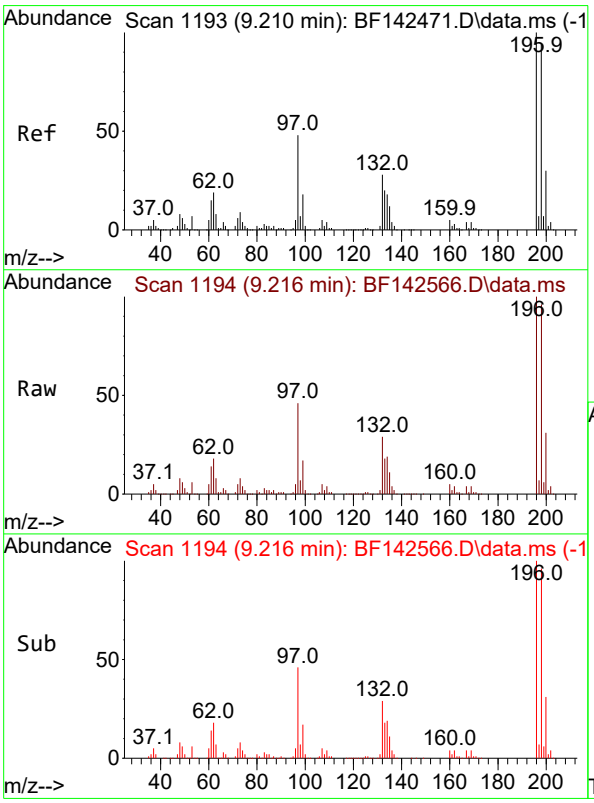
#43
2,4,6-Trichlorophenol
Concen: 38.568 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:196 Resp: 175160

Ion	Ratio	Lower	Upper
196	100		
198	96.2	78.8	118.2
200	30.2	24.9	37.3

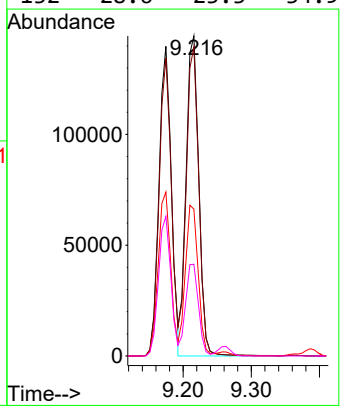


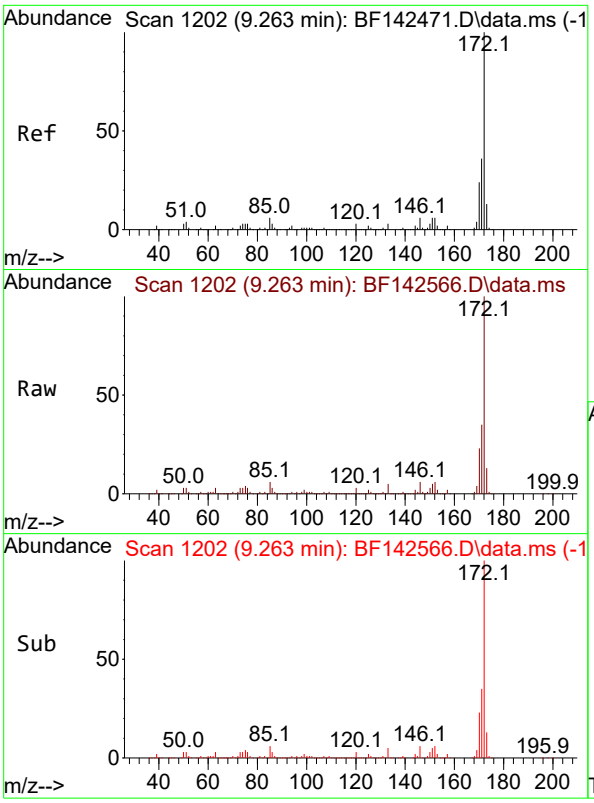


#44
2,4,5-Trichlorophenol
Concen: 39.016 ng
RT: 9.216 min Scan# 1194
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:196 Resp: 186877

Ion	Ratio	Lower	Upper
196	100		
198	96.5	75.5	113.3
97	45.9	39.3	58.9
132	28.6	23.3	34.9



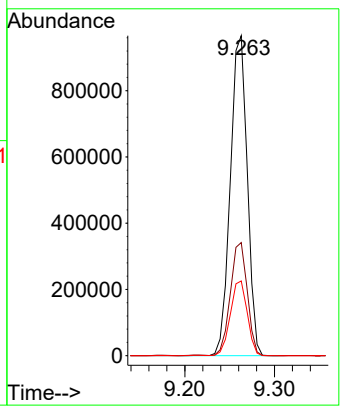


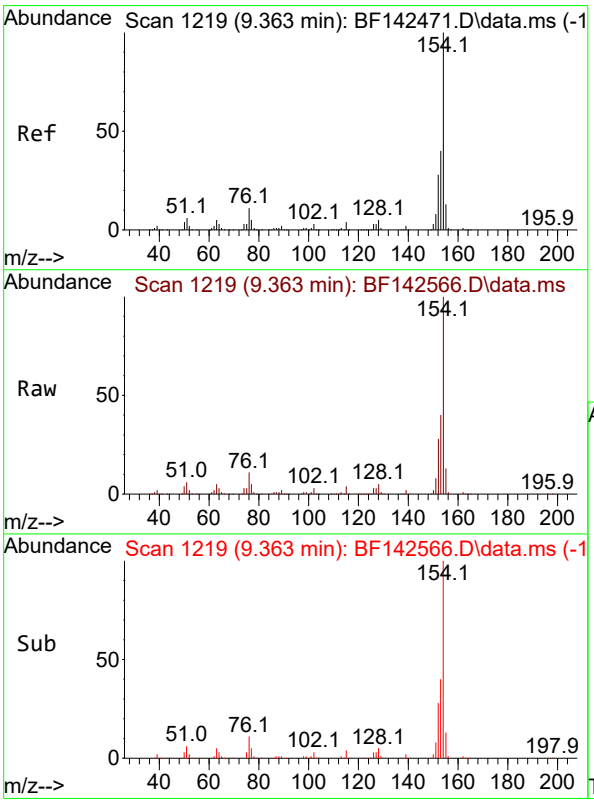
#45
2-Fluorobiphenyl
Concen: 72.339 ng
RT: 9.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:172 Resp: 1264848

Ion	Ratio	Lower	Upper
172	100		
171	35.4	28.6	42.8
170	23.4	18.9	28.3

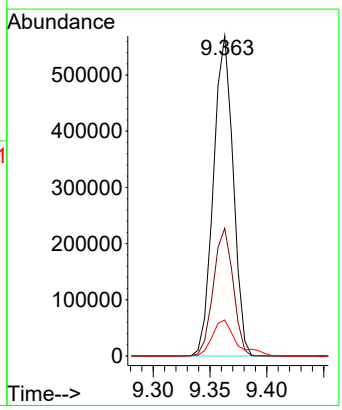


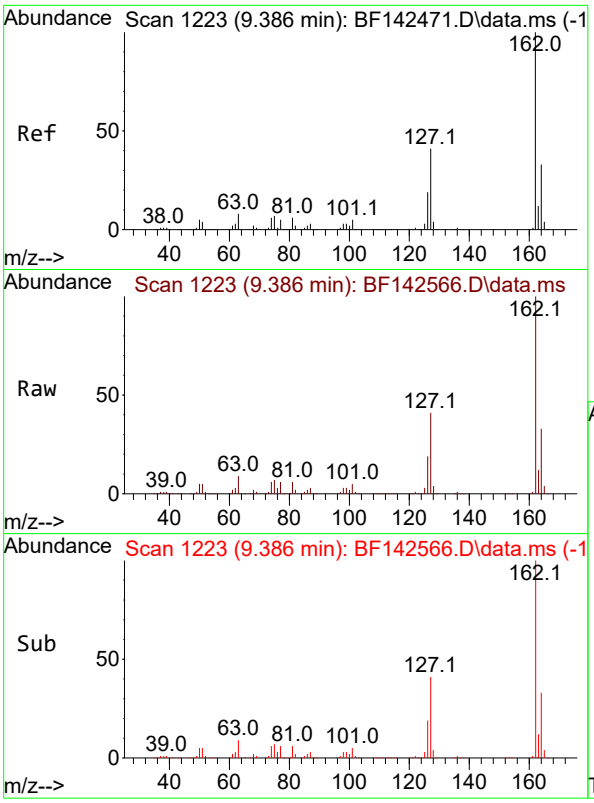


#46
1,1'-Biphenyl
Concen: 37.790 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:154 Resp: 687867

Ion	Ratio	Lower	Upper
154	100		
153	39.9	20.4	60.4
76	11.3	0.0	30.8



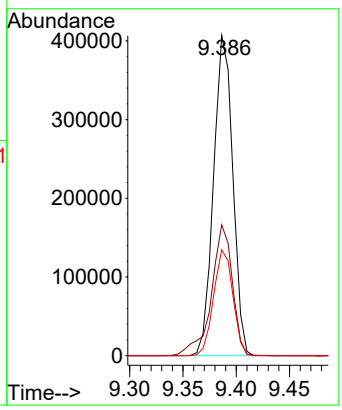


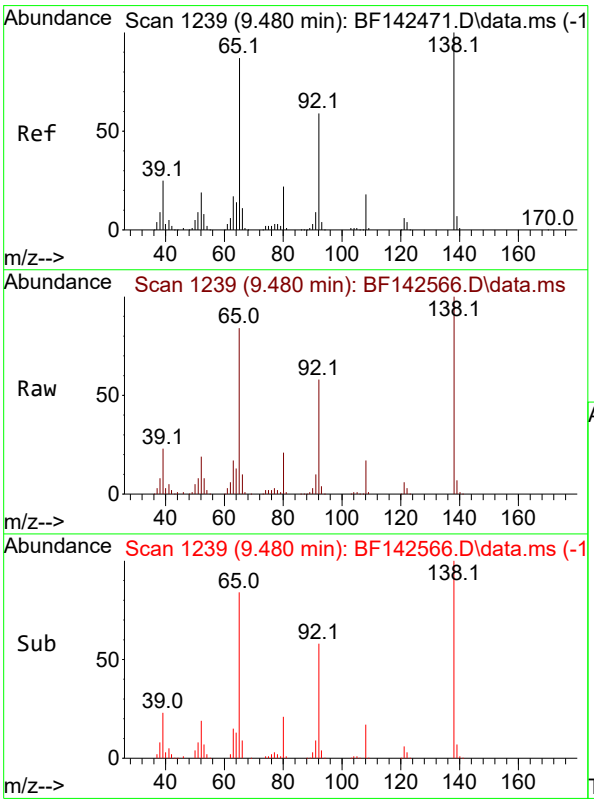
#47
2-Chloronaphthalene
Concen: 37.924 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:162 Resp: 510025

Ion	Ratio	Lower	Upper
162	100		
127	40.9	33.5	50.3
164	33.1	26.1	39.1

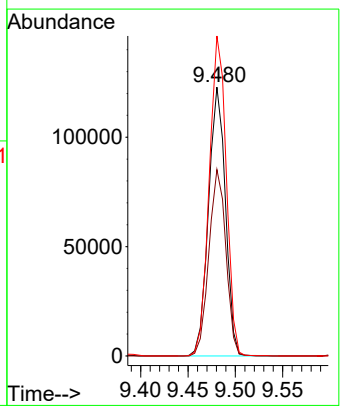


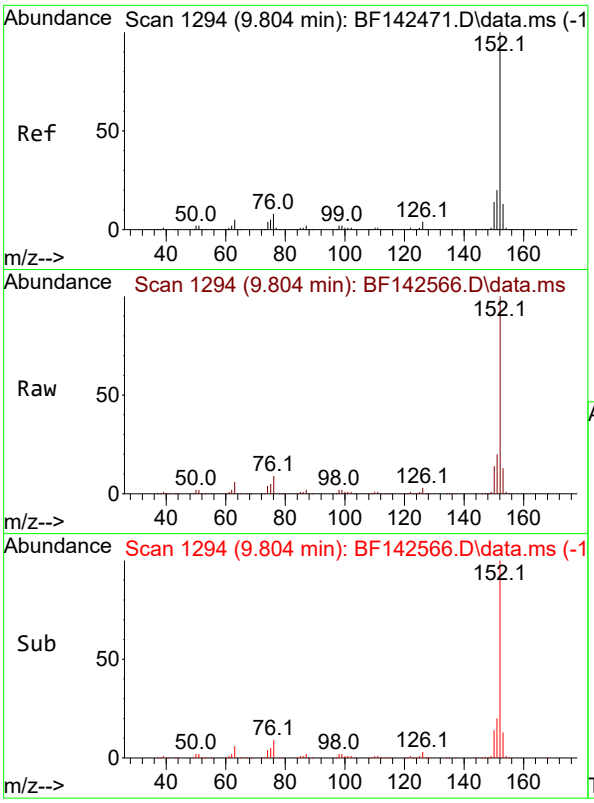


#48
2-Nitroaniline
Concen: 39.403 ng
RT: 9.480 min Scan# 1239
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion: 65 Resp: 153168

Ion	Ratio	Lower	Upper
65	100		
92	69.4	54.4	81.6
138	119.1	91.4	137.2



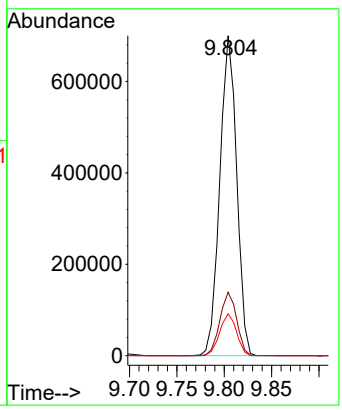


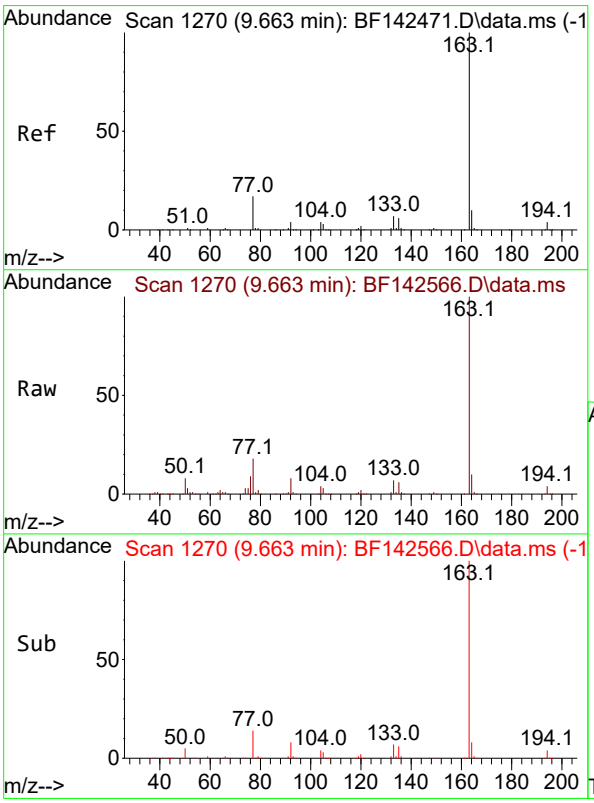
#49
Acenaphthylene
Concen: 38.256 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:152 Resp: 868771

Ion	Ratio	Lower	Upper
152	100		
151	19.8	15.8	23.8
153	13.1	10.6	15.8

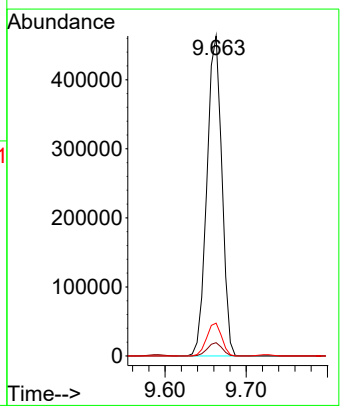


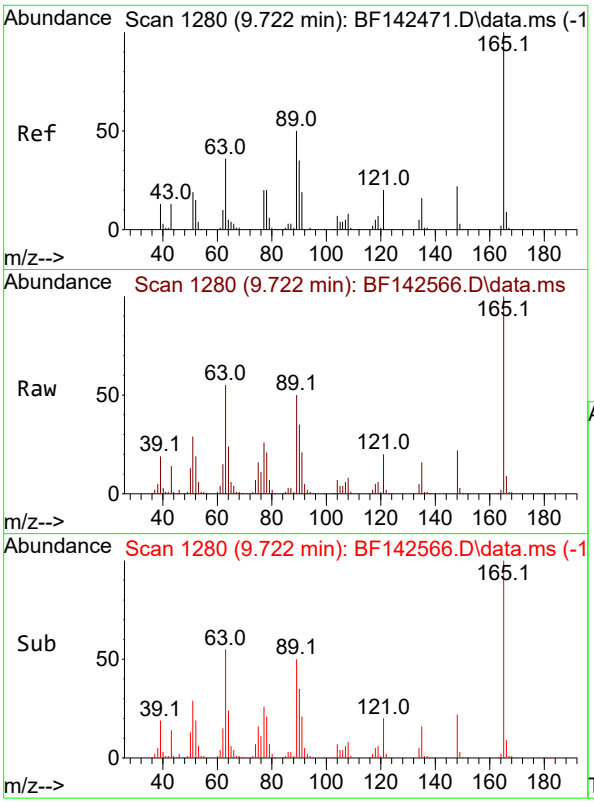


#50
Dimethylphthalate
Concen: 38.221 ng
RT: 9.663 min Scan# 1270
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:163 Resp: 591715

Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.3	4.9
164	10.3	8.2	12.4



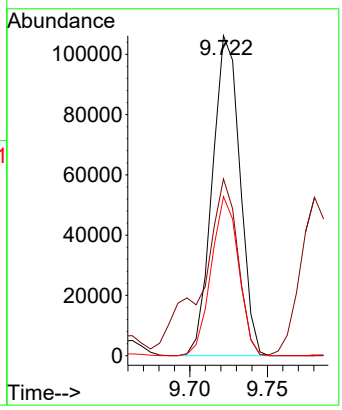


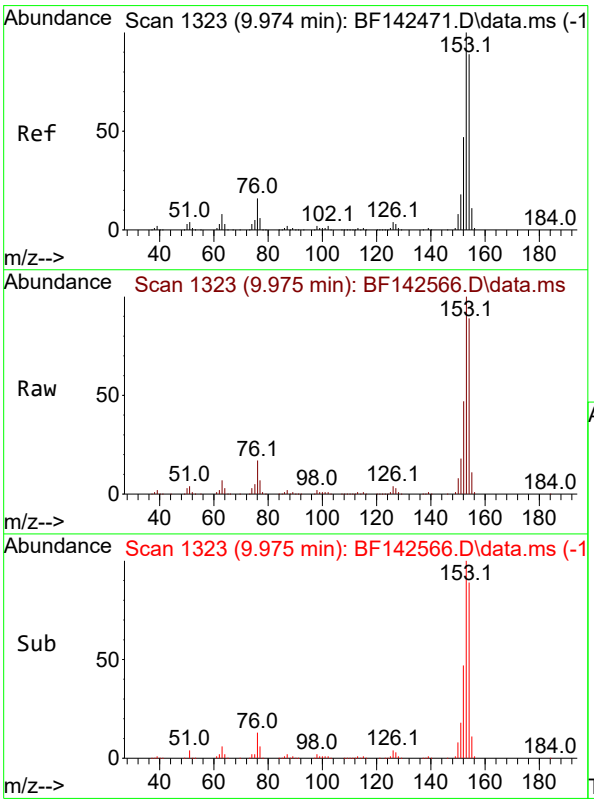
#51
2,6-Dinitrotoluene
Concen: 39.404 ng
RT: 9.722 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:165 Resp: 131661

Ion	Ratio	Lower	Upper
165	100		
63	55.3	42.9	64.3
89	49.7	40.2	60.4

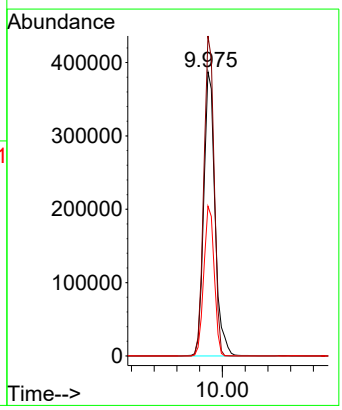


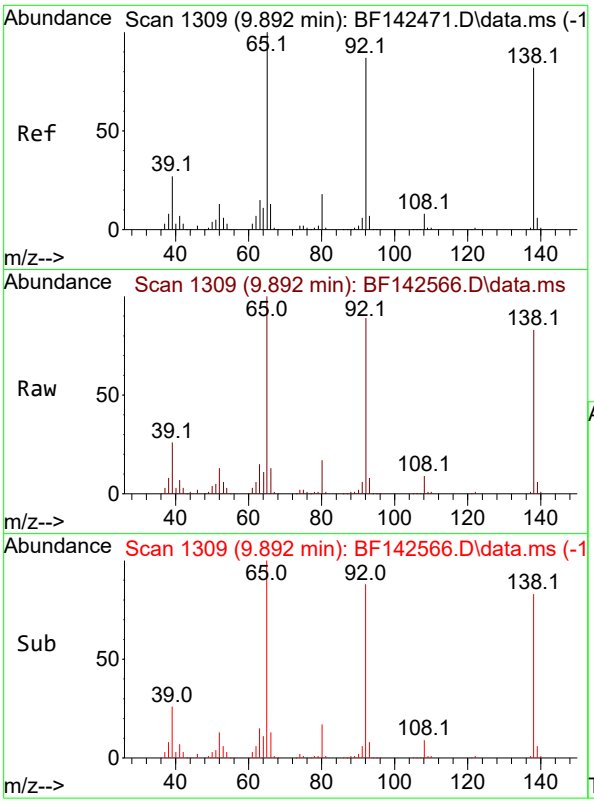


#52
Acenaphthene
Concen: 38.332 ng
RT: 9.975 min Scan# 1323
Delta R.T. -0.005 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:154 Resp: 531545

Ion	Ratio	Lower	Upper
154	100		
153	112.6	90.0	135.0
152	52.7	42.6	64.0



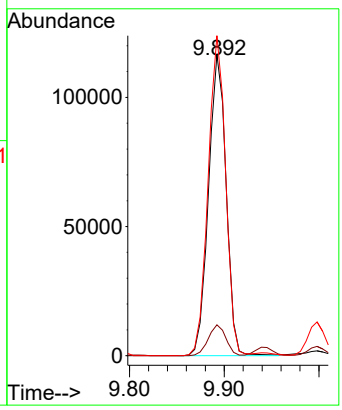


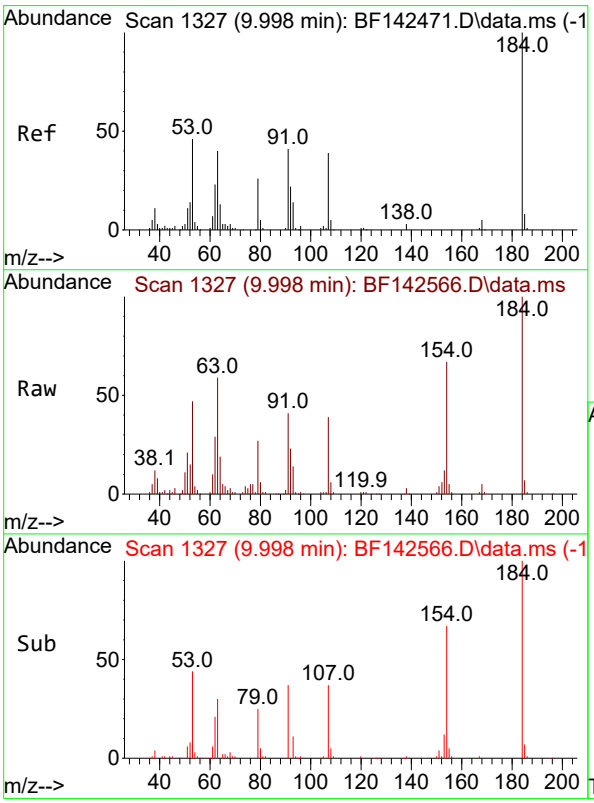
#53
3-Nitroaniline
Concen: 41.142 ng
RT: 9.892 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:138 Resp: 150151

Ion	Ratio	Lower	Upper
138	100		
108	10.3	8.1	12.1
92	106.3	85.2	127.8

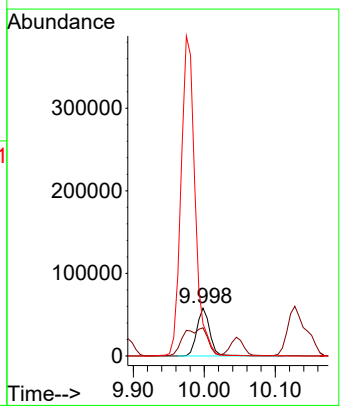


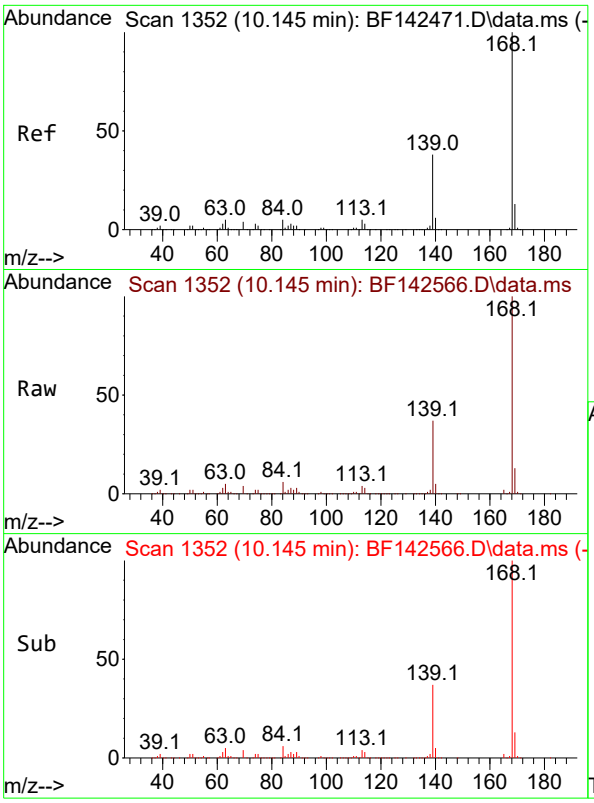


#54
2,4-Dinitrophenol
Concen: 42.540 ng
RT: 9.998 min Scan# 1327
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:184 Resp: 73435

Ion	Ratio	Lower	Upper
184	100		
63	58.9	46.3	69.5
154	67.5	56.8	85.2



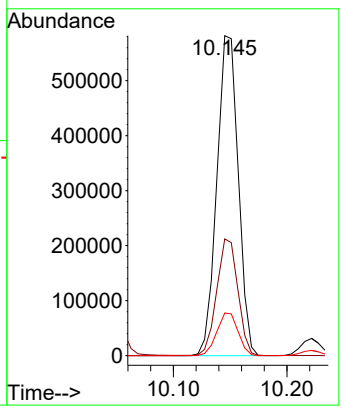


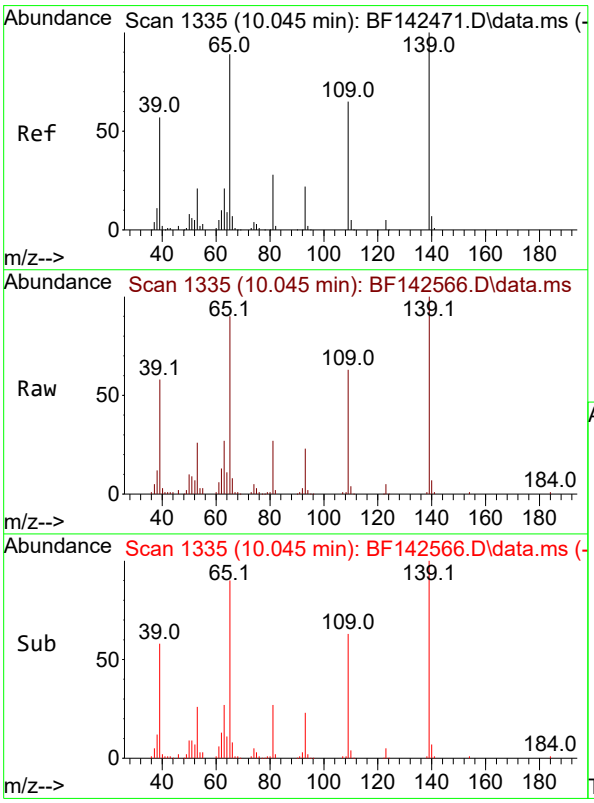
#55
Dibenzofuran
Concen: 38.204 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:168 Resp: 762353

Ion	Ratio	Lower	Upper
168	100		
139	36.5	30.2	45.2
169	13.4	10.7	16.1

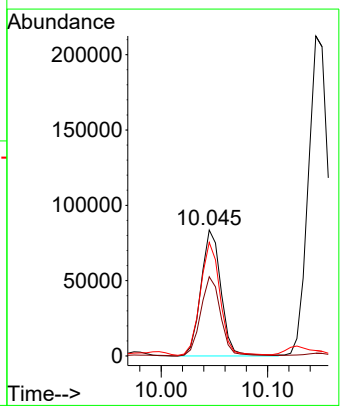


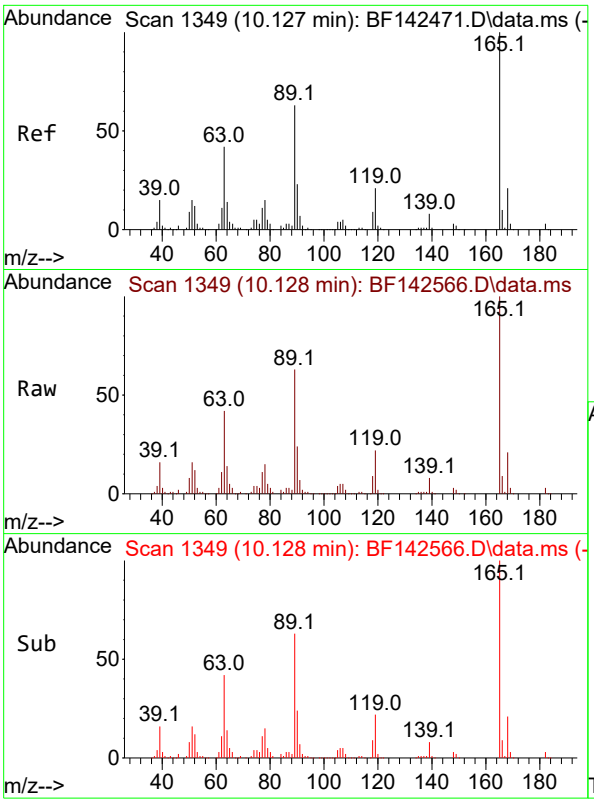


#56
4-Nitrophenol
Concen: 40.751 ng
RT: 10.045 min Scan# 1335
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:139 Resp: 109735

Ion	Ratio	Lower	Upper
139	100		
109	62.9	45.1	85.1
65	90.2	69.7	109.7



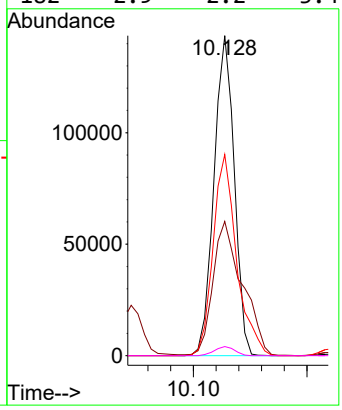


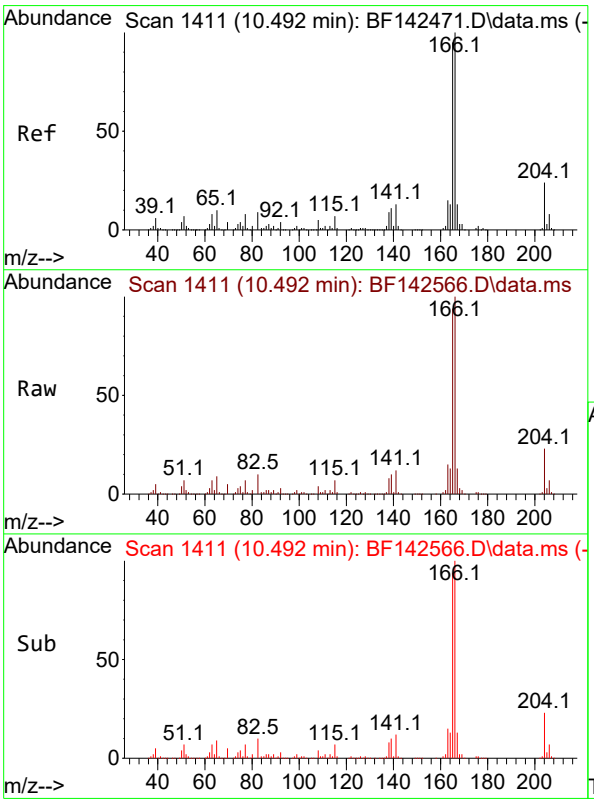
#57
2,4-Dinitrotoluene
Concen: 40.883 ng
RT: 10.128 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:165 Resp: 178400

Ion	Ratio	Lower	Upper
165	100		
63	42.0	33.6	50.4
89	62.9	50.2	75.4
182	2.9	2.2	3.4

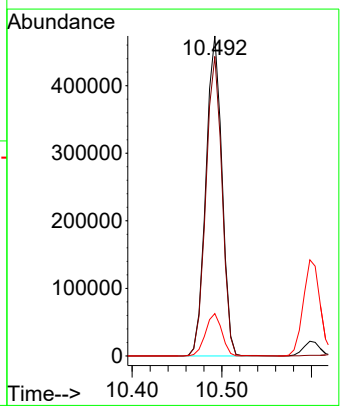


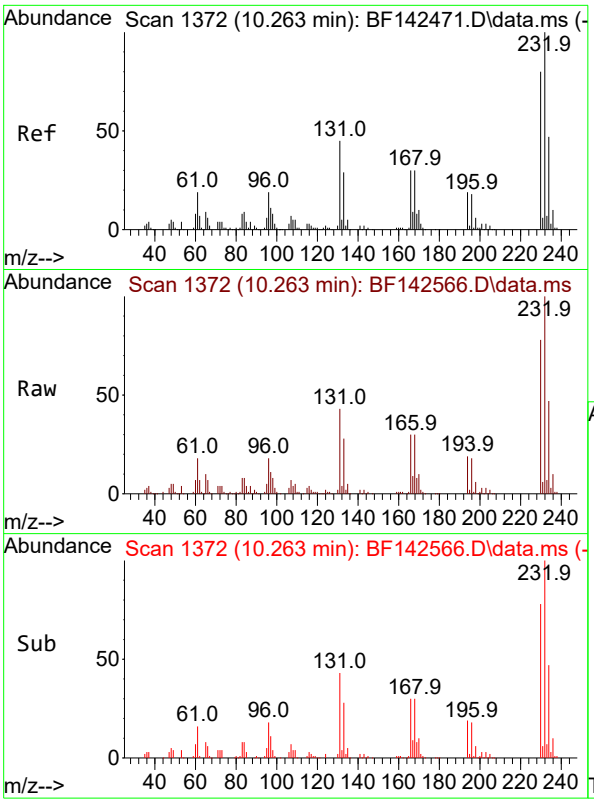


#58
Fluorene
Concen: 38.224 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:166 Resp: 589250

Ion	Ratio	Lower	Upper
166	100		
165	93.6	75.8	113.8
167	13.2	10.6	16.0



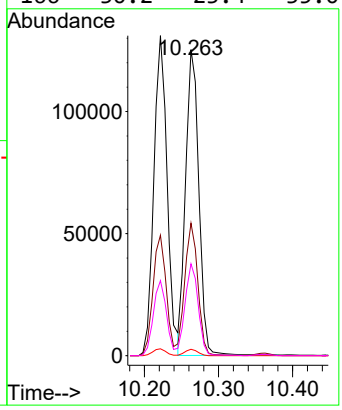


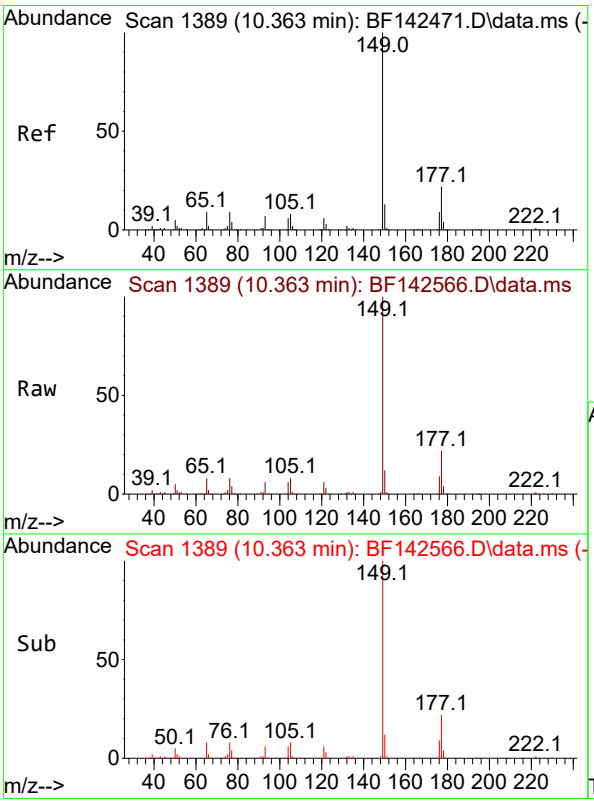
#59
2,3,4,6-Tetrachlorophenol
Concen: 39.005 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:232 Resp: 155965

Ion	Ratio	Lower	Upper
232	100		
131	43.3	35.2	52.8
130	2.1	1.7	2.5
166	30.2	23.4	35.0

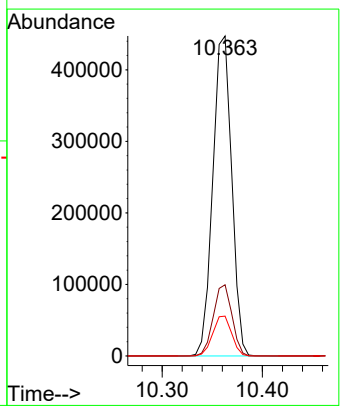


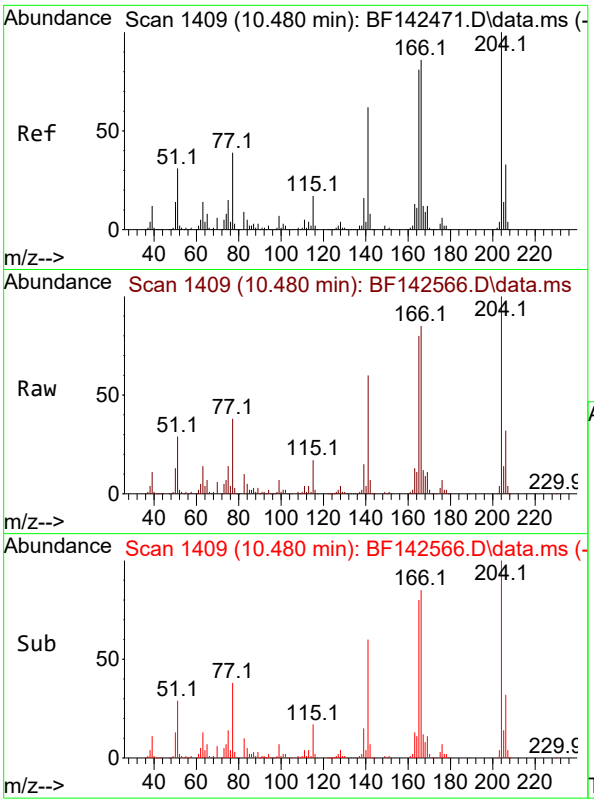


#60
Diethylphthalate
Concen: 38.740 ng
RT: 10.363 min Scan# 1389
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:149 Resp: 585735

Ion	Ratio	Lower	Upper
149	100		
177	22.3	17.6	26.4
150	12.4	10.1	15.1



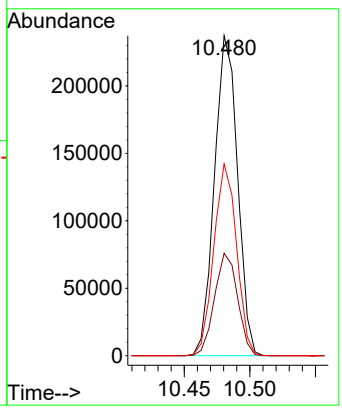


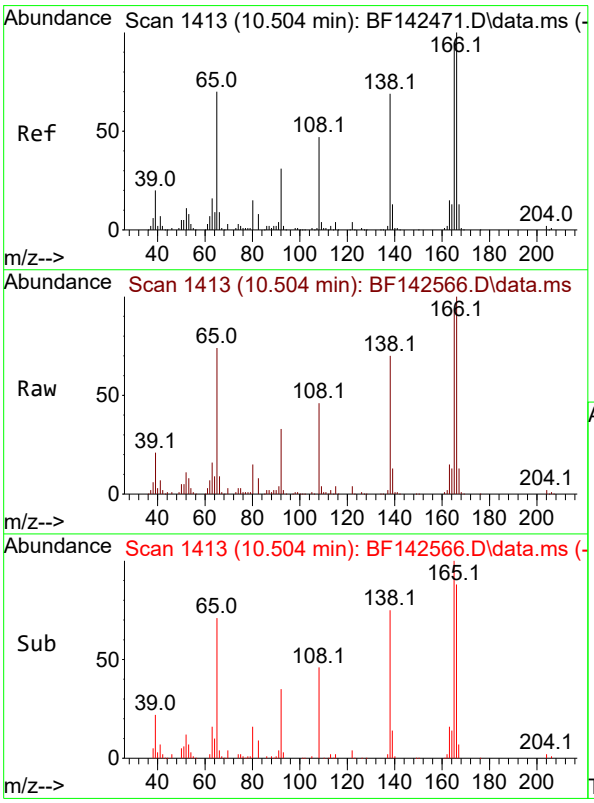
#61
4-Chlorophenyl-phenylether
Concen: 38.294 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:204 Resp: 289995

Ion	Ratio	Lower	Upper
204	100		
206	32.0	26.3	39.5
141	59.9	49.5	74.3

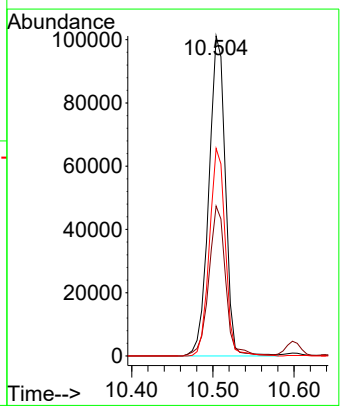


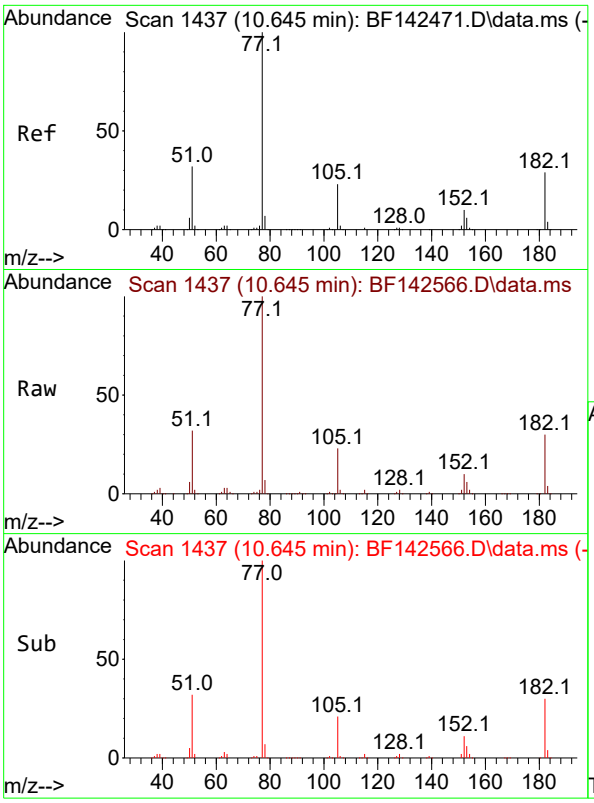


#62
4-Nitroaniline
Concen: 43.023 ng
RT: 10.504 min Scan# 1413
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:138 Resp: 142403

Ion	Ratio	Lower	Upper
138	100		
92	46.8	26.0	66.0
108	64.9	48.4	88.4



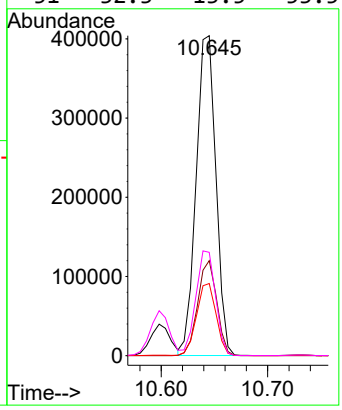


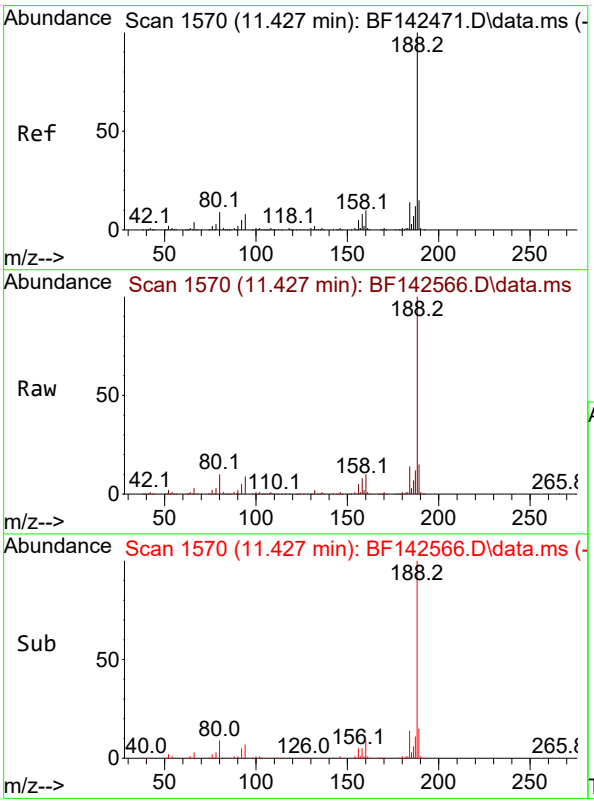
#63
Azobenzene
Concen: 38.477 ng
RT: 10.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 77 Resp: 522525

Ion	Ratio	Lower	Upper
77	100		
182	29.7	9.0	49.0
105	22.6	2.4	42.4
51	32.3	13.5	53.5

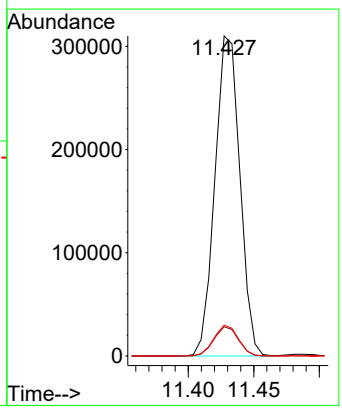


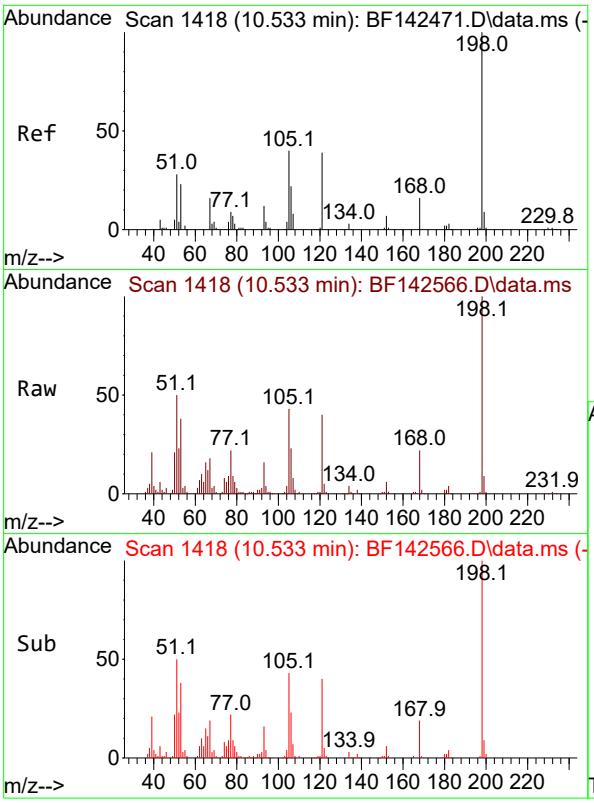


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:188 Resp: 409802

Ion	Ratio	Lower	Upper
188	100		
94	9.2	6.6	10.0
80	9.7	7.4	11.0



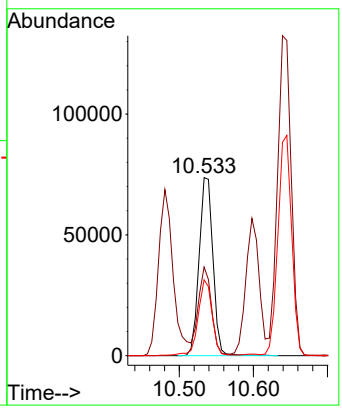


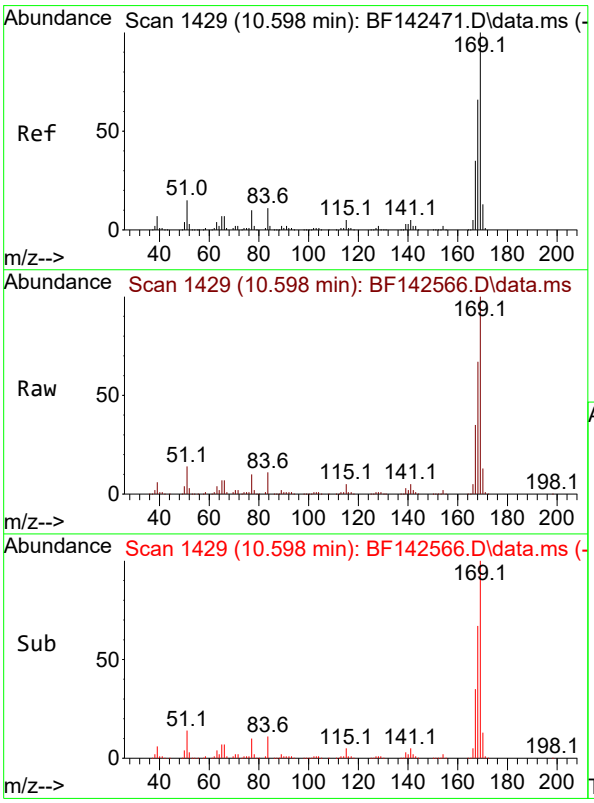
#65
4,6-Dinitro-2-methylphenol
Concen: 41.899 ng
RT: 10.533 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:198 Resp: 95823

Ion	Ratio	Lower	Upper
198	100		
51	49.8	28.3	68.3
105	42.6	21.3	61.3

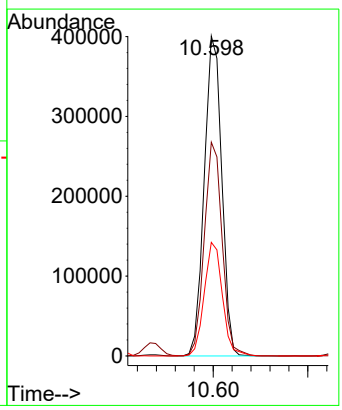


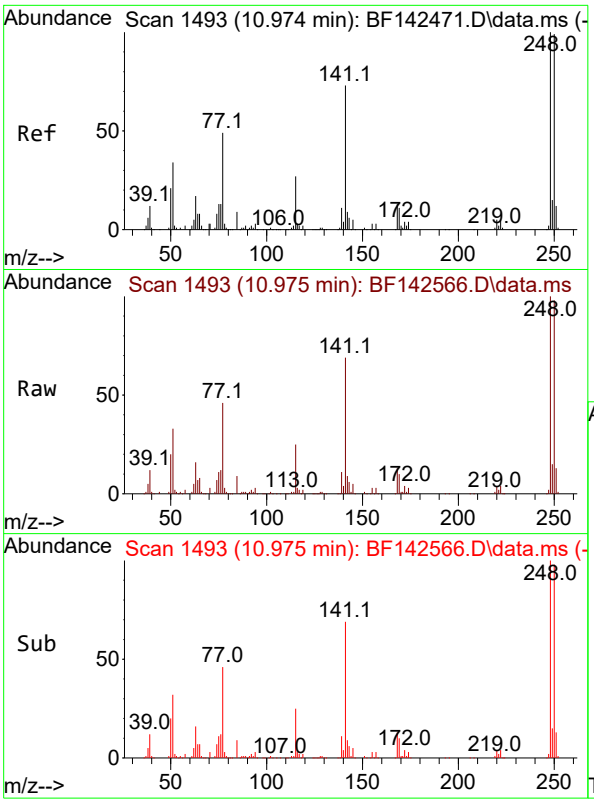


#66
n-Nitrosodiphenylamine
Concen: 36.507 ng
RT: 10.598 min Scan# 1429
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:169 Resp: 511834

Ion	Ratio	Lower	Upper
169	100		
168	66.8	52.7	79.1
167	35.5	28.3	42.5



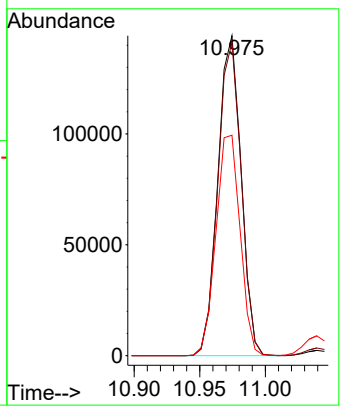


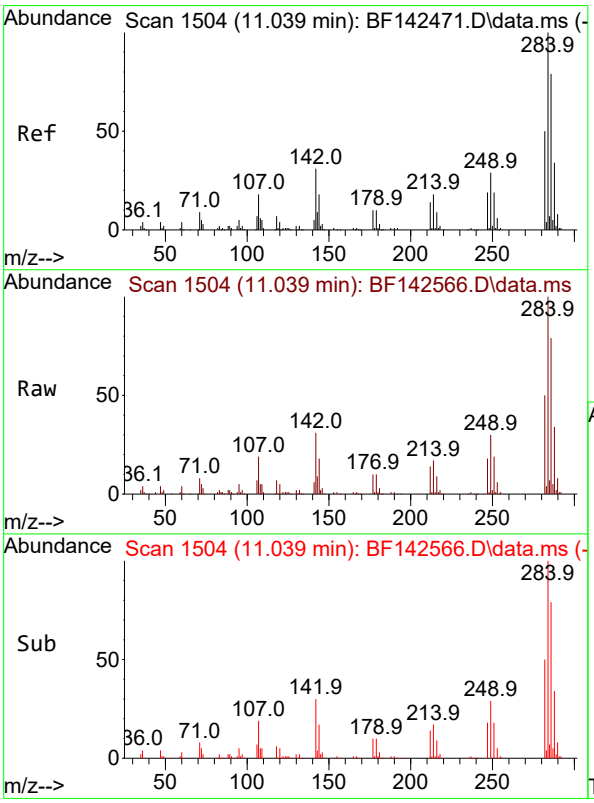
#67
4-Bromophenyl-phenylether
Concen: 36.764 ng
RT: 10.975 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:248 Resp: 178142

Ion	Ratio	Lower	Upper
248	100		
250	98.0	79.0	118.4
141	68.9	58.4	87.6

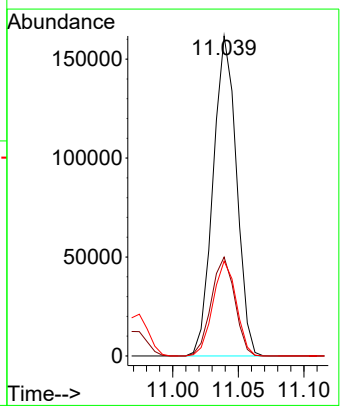


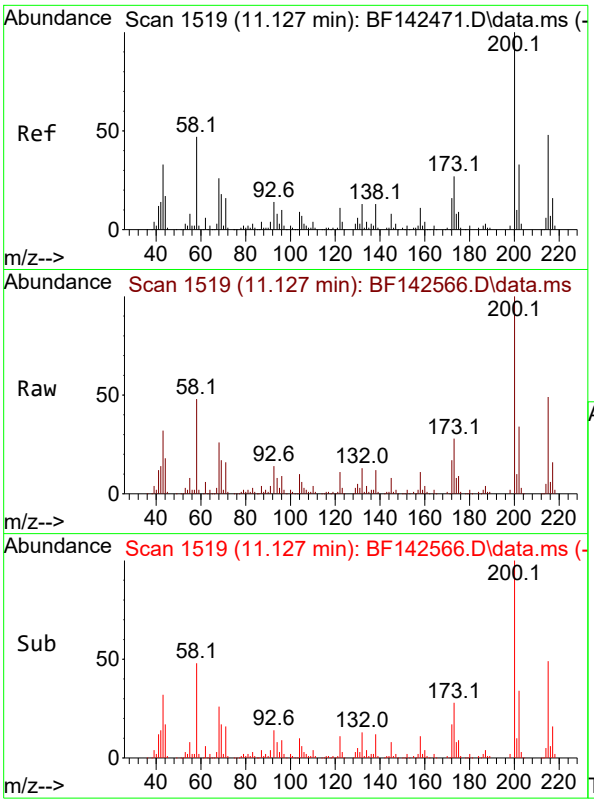


#68
Hexachlorobenzene
Concen: 37.386 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:284 Resp: 200364

Ion	Ratio	Lower	Upper
284	100		
142	30.9	24.8	37.2
249	29.7	23.6	35.4



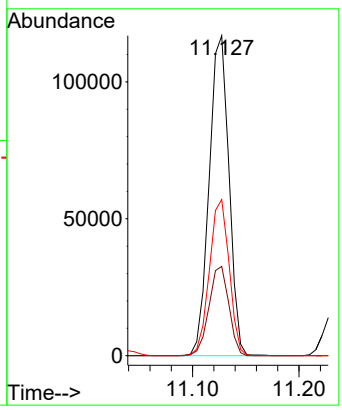


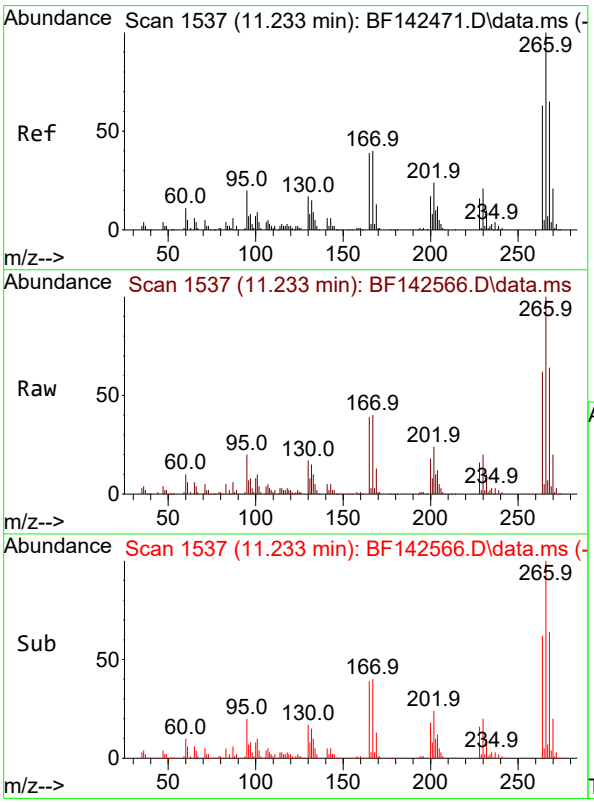
#69
Atrazine
Concen: 40.470 ng
RT: 11.127 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:200 Resp: 150686

Ion	Ratio	Lower	Upper
200	100		
173	27.9	7.4	47.4
215	48.8	28.5	68.5

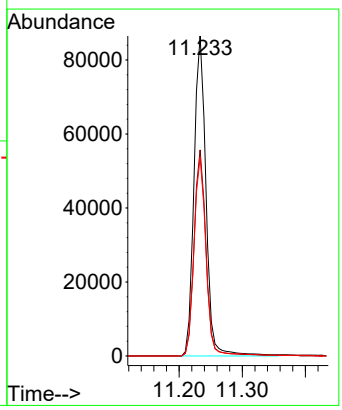


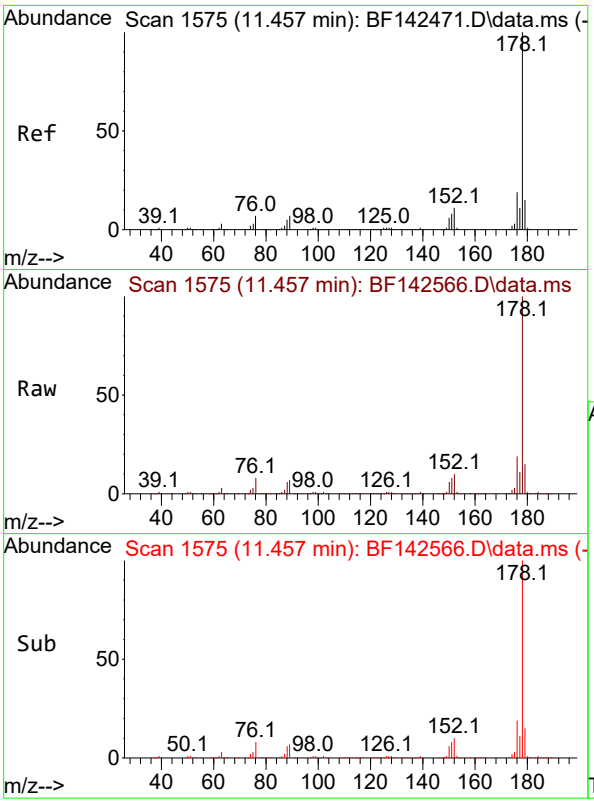


#70
Pentachlorophenol
Concen: 37.734 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:266 Resp: 114176

Ion	Ratio	Lower	Upper
266	100		
268	64.4	51.7	77.5
264	62.1	50.4	75.6



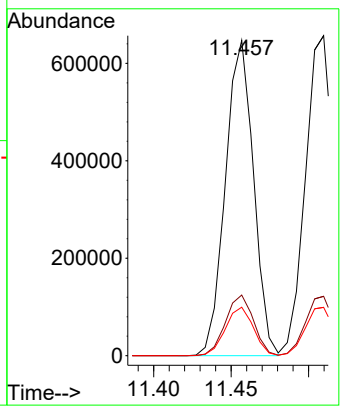


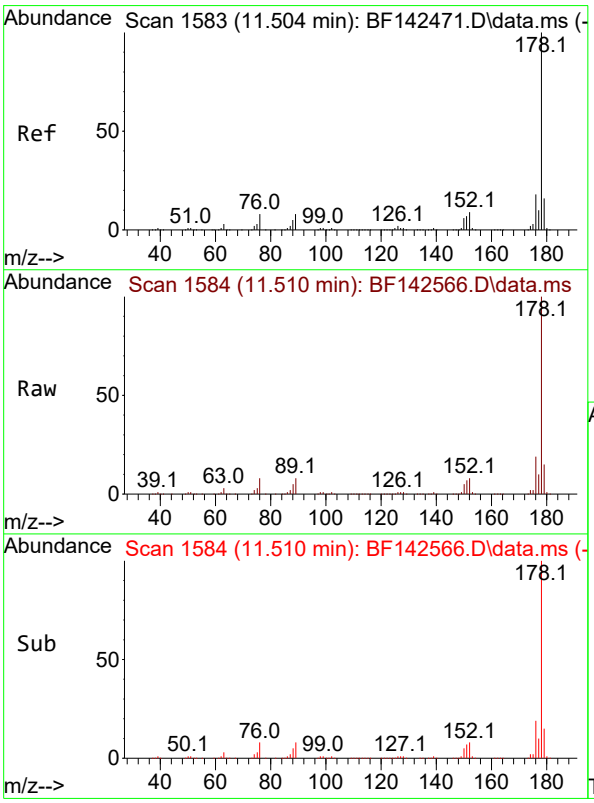
#71
Phenanthrene
Concen: 37.294 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:178 Resp: 816768

Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.0
179	15.4	12.3	18.5

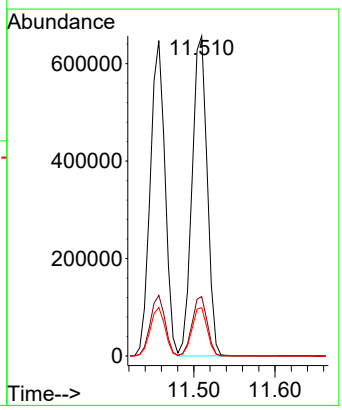


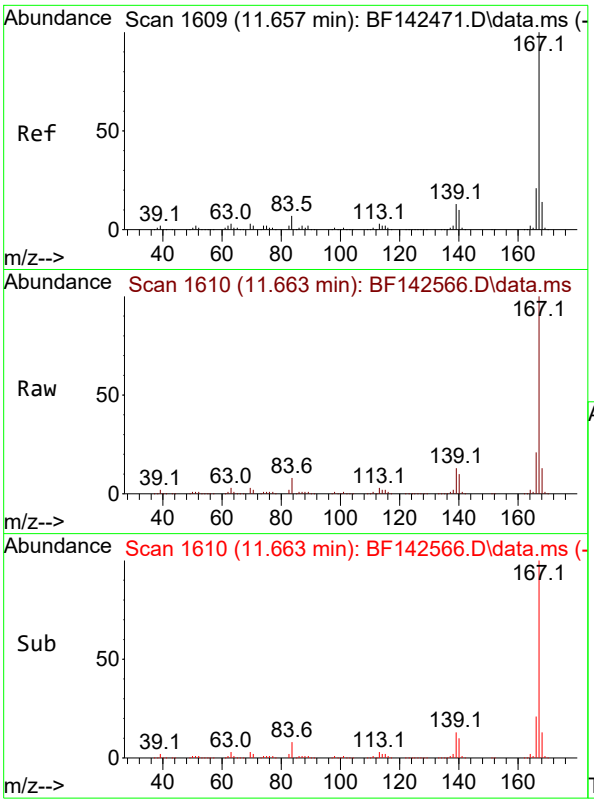


#72
Anthracene
Concen: 37.945 ng
RT: 11.510 min Scan# 1584
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:178 Resp: 848131

Ion	Ratio	Lower	Upper
178	100		
176	18.6	14.6	21.8
179	15.1	12.4	18.6



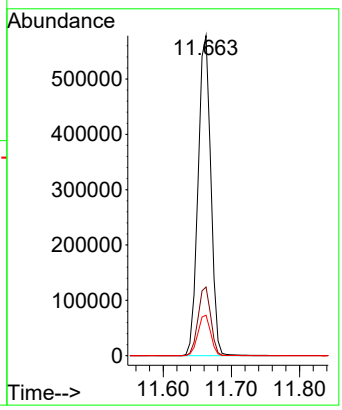


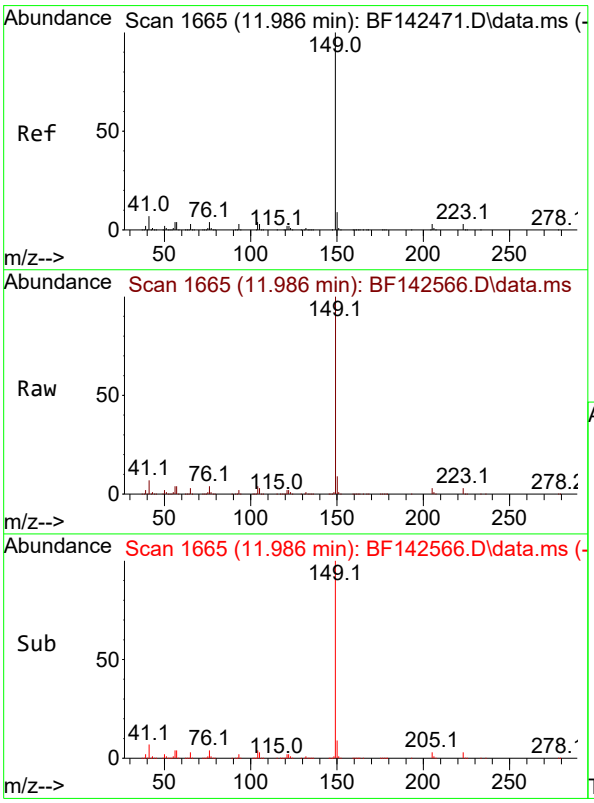
#73
Carbazole
Concen: 39.284 ng
RT: 11.663 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:167 Resp: 750647

Ion	Ratio	Lower	Upper
167	100		
166	21.5	16.9	25.3
139	12.6	10.2	15.4

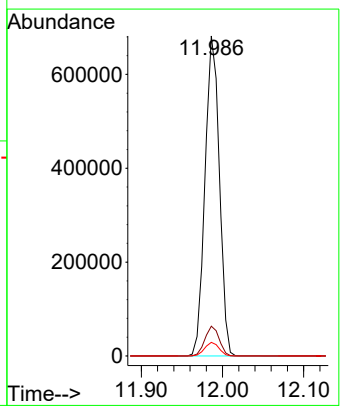


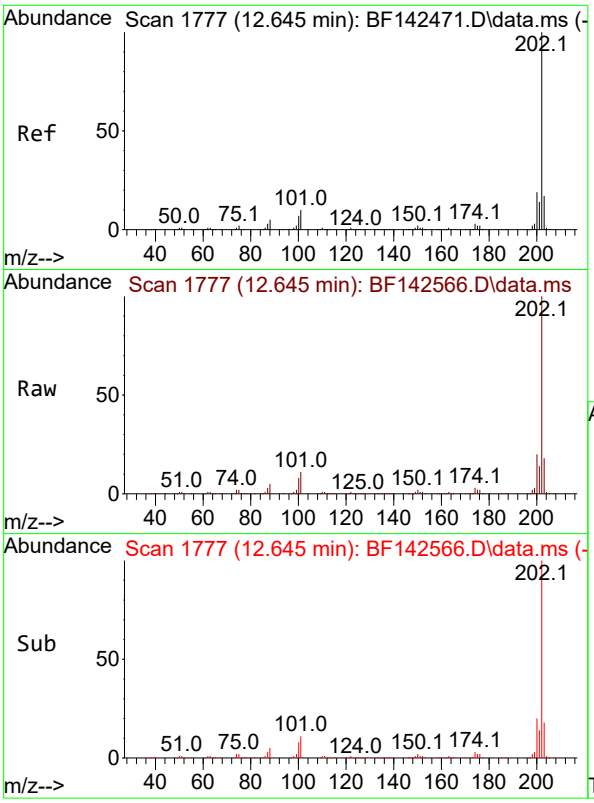


#74
Di-n-butylphthalate
Concen: 39.961 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:149 Resp: 835811

Ion	Ratio	Lower	Upper
149	100		
150	9.3	7.3	10.9
104	4.3	3.6	5.4



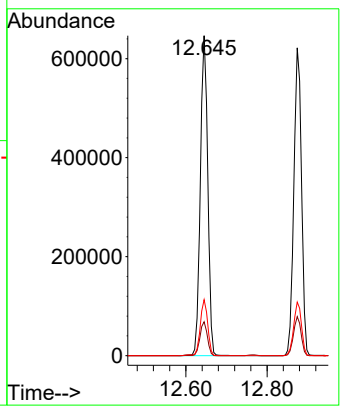


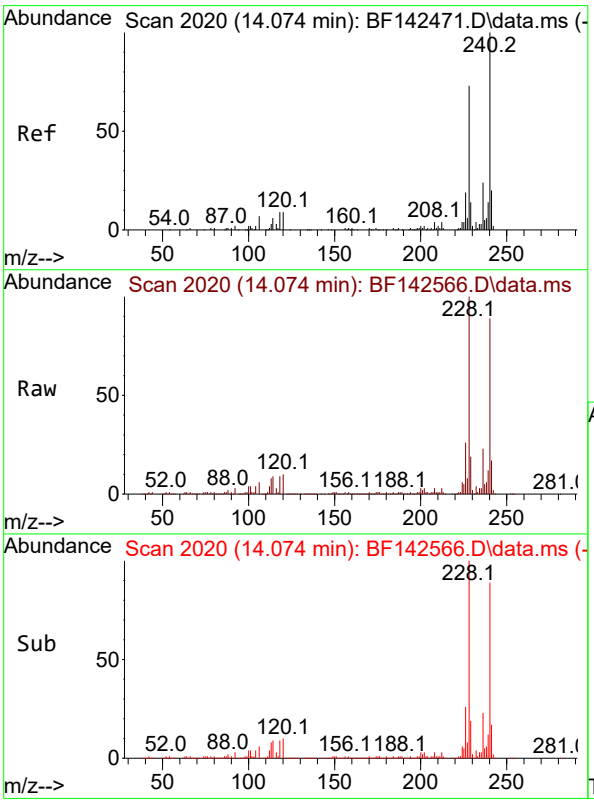
#75
Fluoranthene
Concen: 40.225 ng
RT: 12.645 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:202 Resp: 823167

Ion	Ratio	Lower	Upper
202	100		
101	10.6	0.0	29.6
203	17.5	0.0	37.2

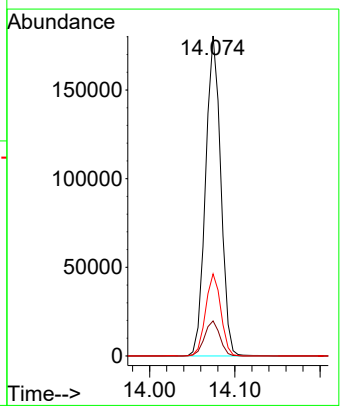


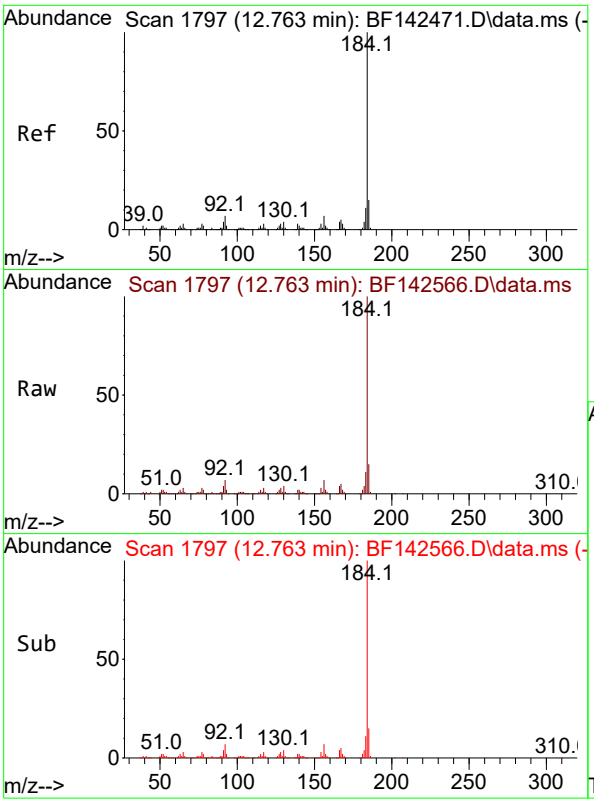


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:240 Resp: 223422

Ion	Ratio	Lower	Upper
240	100		
120	10.9	7.5	11.3
236	25.7	19.6	29.4



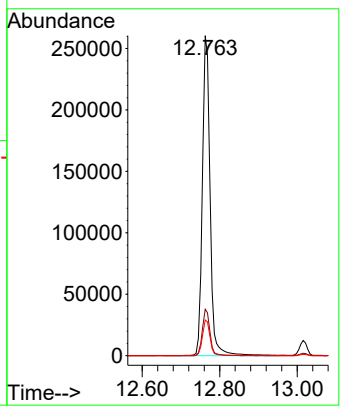


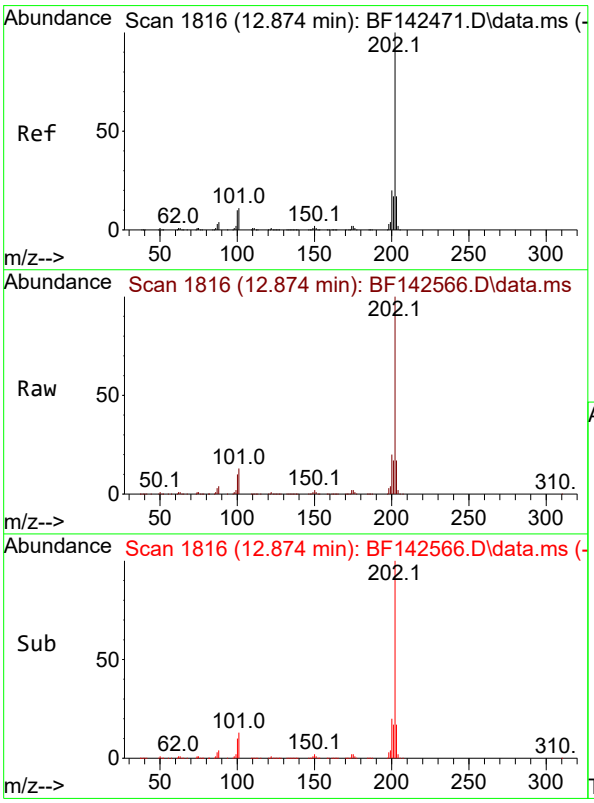
#77
Benzidine
Concen: 43.420 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:184 Resp: 361003

Ion	Ratio	Lower	Upper
184	100		
185	14.5	11.6	17.4
183	11.2	9.0	13.4

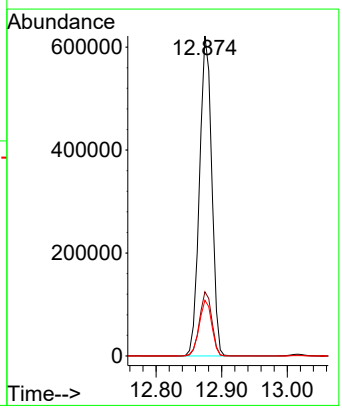


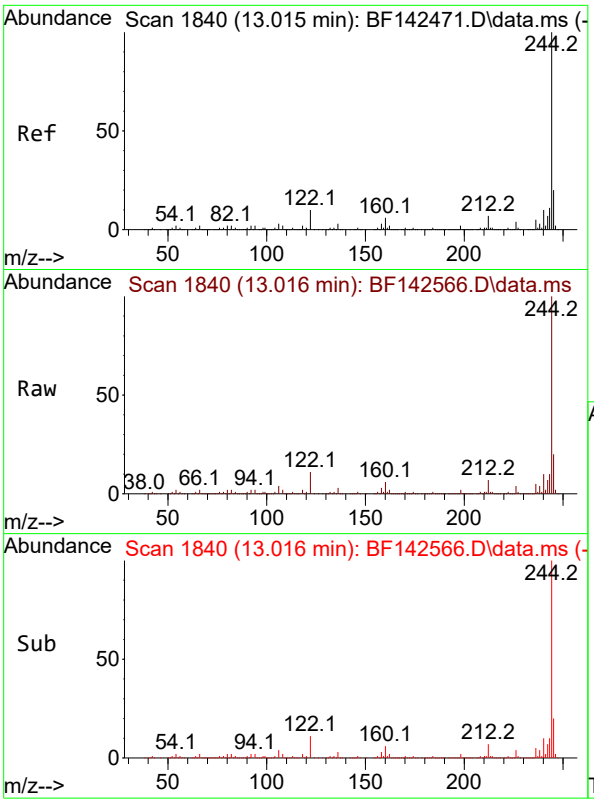


#78
Pyrene
Concen: 38.937 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:202 Resp: 811528

Ion	Ratio	Lower	Upper
202	100		
200	20.0	16.1	24.1
203	17.4	13.9	20.9



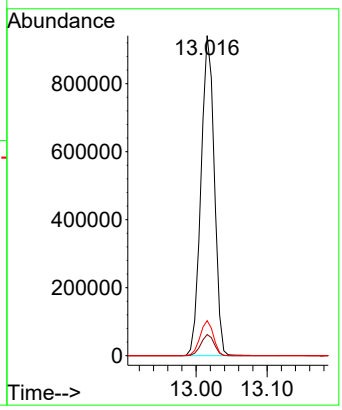


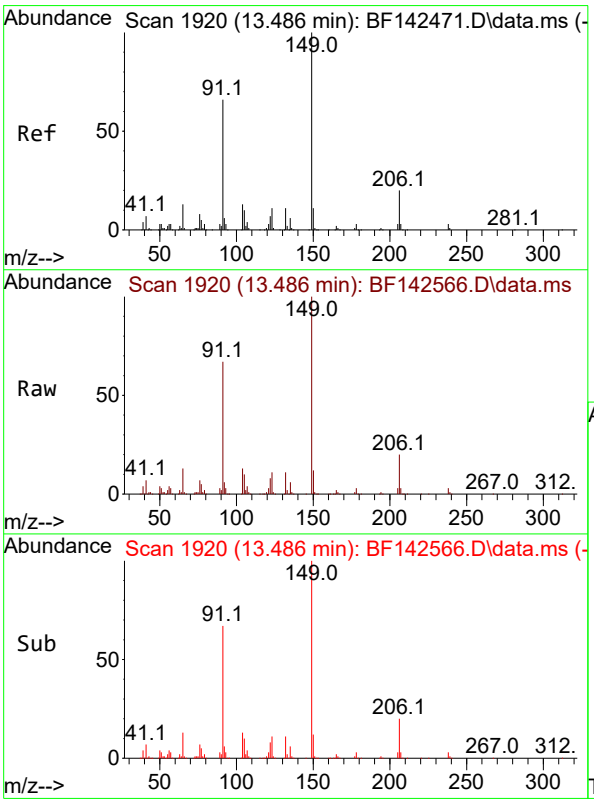
#79
Terphenyl-d14
Concen: 75.263 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:244 Resp: 1230505

Ion	Ratio	Lower	Upper
244	100		
212	6.6	5.3	7.9
122	11.0	8.2	12.2

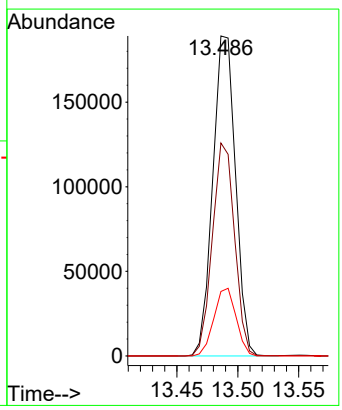


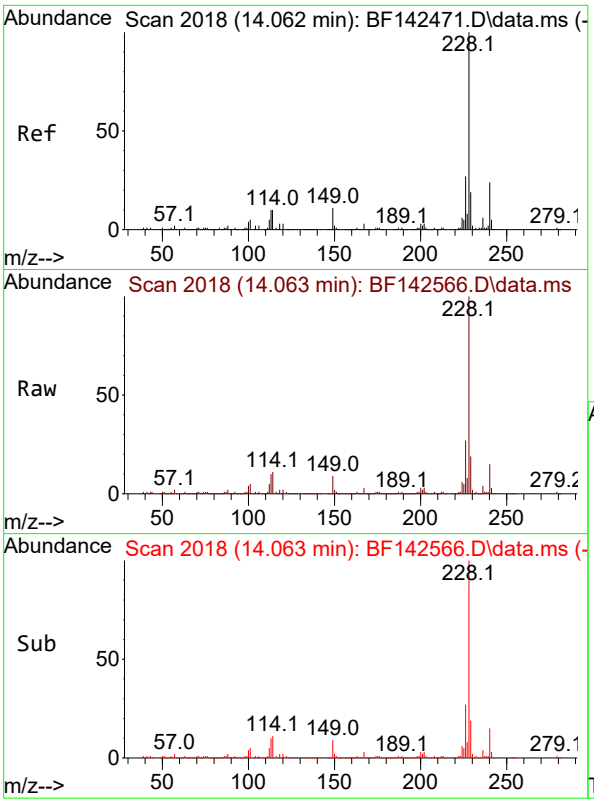


#80
Butylbenzylphthalate
Concen: 42.730 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:149 Resp: 246083

Ion	Ratio	Lower	Upper
149	100		
91	66.6	52.9	79.3
206	20.2	16.2	24.2



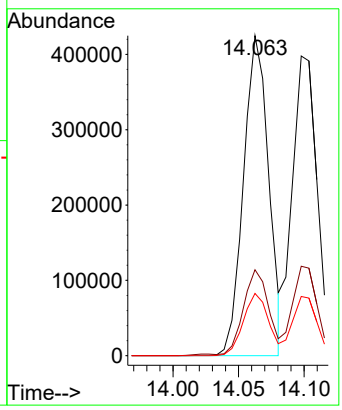


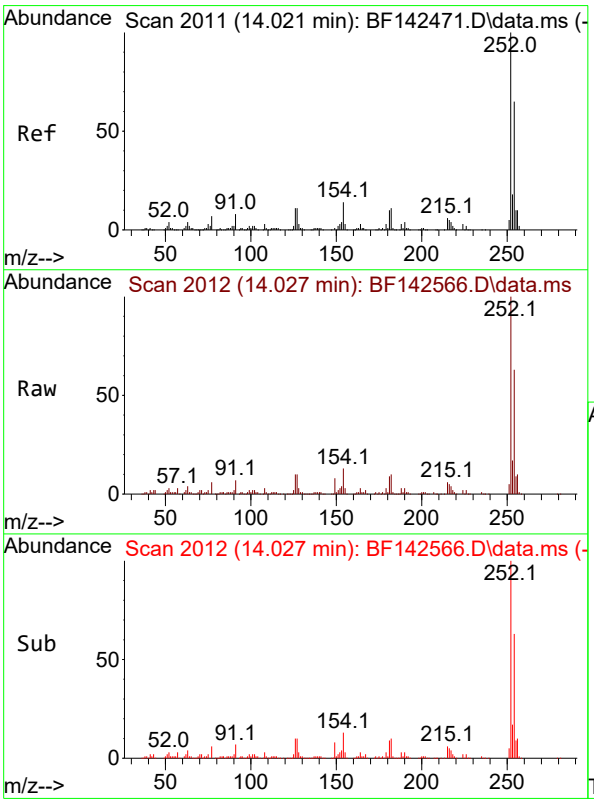
#81
Benzo(a)anthracene
Concen: 38.038 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:228 Resp: 567490

Ion	Ratio	Lower	Upper
228	100		
226	26.9	21.2	31.8
229	19.4	15.5	23.3

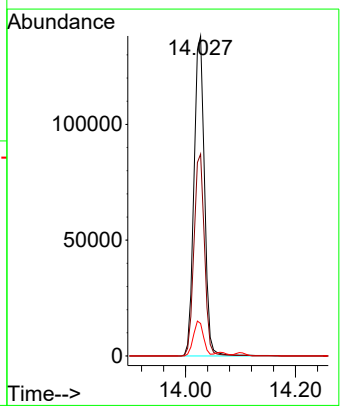


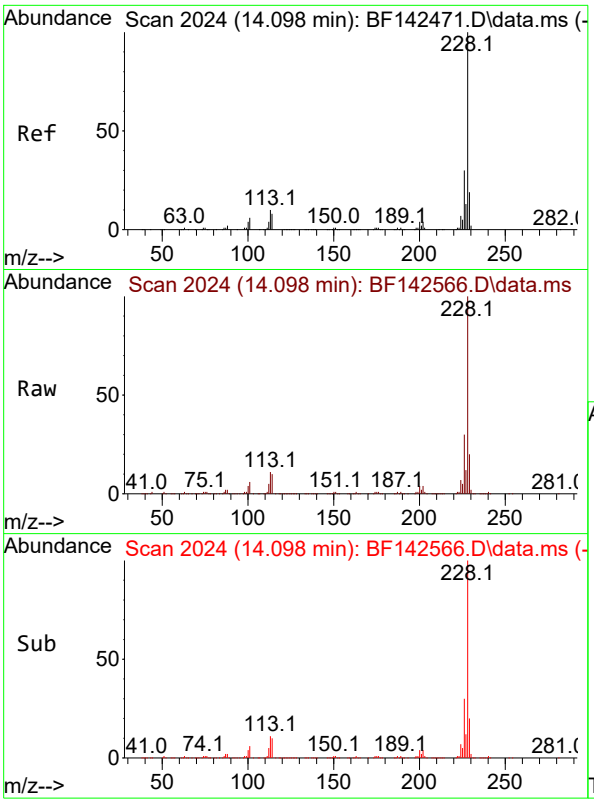


#82
3,3'-Dichlorobenzidine
Concen: 40.543 ng
RT: 14.027 min Scan# 2012
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:252 Resp: 183460

Ion	Ratio	Lower	Upper
252	100		
254	63.1	52.0	78.0
126	10.2	8.9	13.3



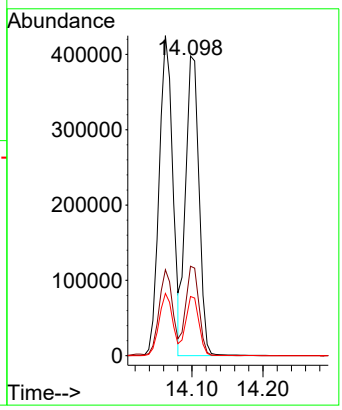


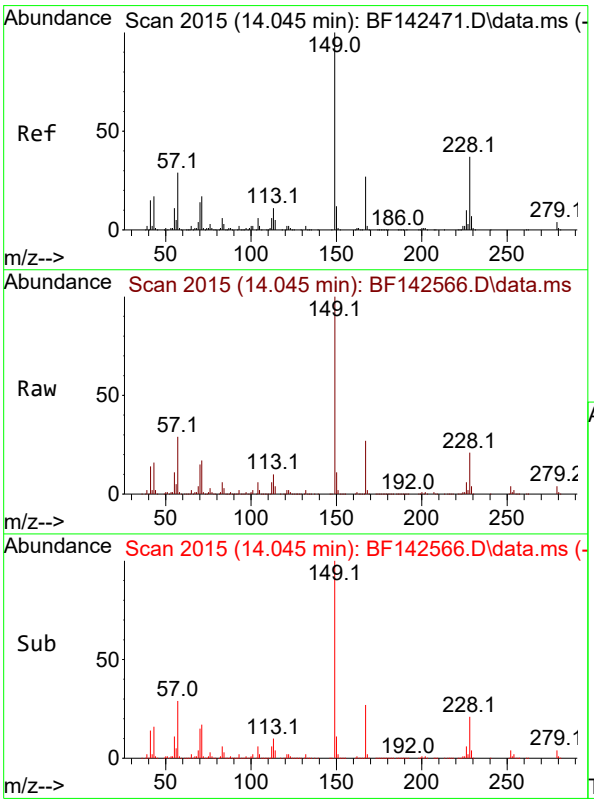
#83
Chrysene
Concen: 39.038 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:228 Resp: 523334

Ion	Ratio	Lower	Upper
228	100		
226	29.9	23.8	35.6
229	19.8	15.4	23.2

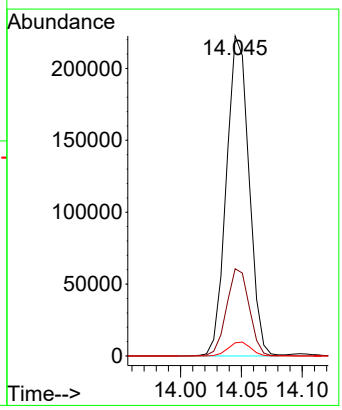


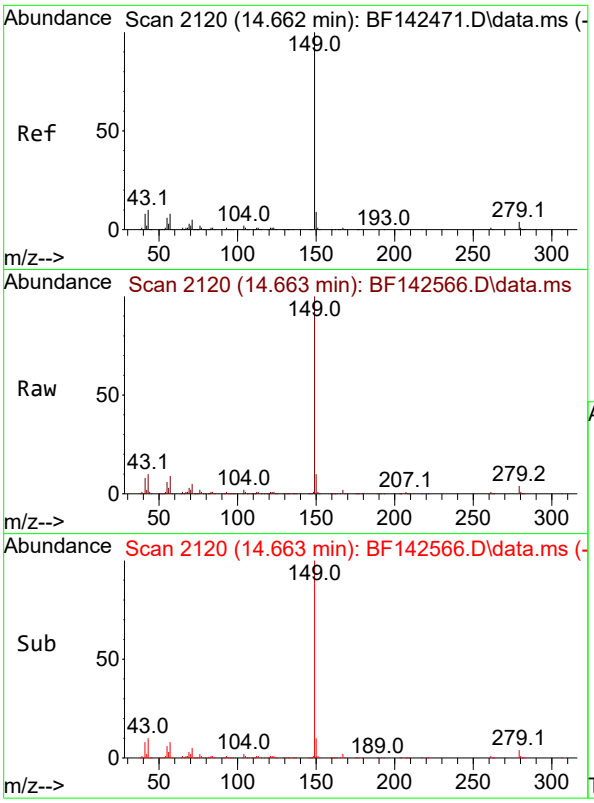


#84
Bis(2-ethylhexyl)phthalate
Concen: 38.965 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:149 Resp: 287264

Ion	Ratio	Lower	Upper
149	100		
167	27.2	21.5	32.3
279	4.1	3.2	4.8



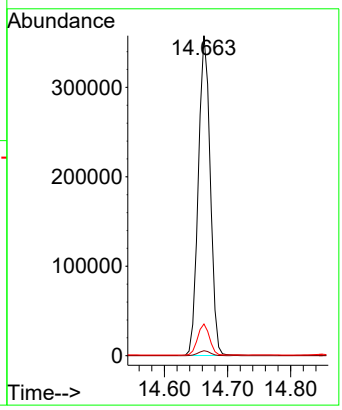


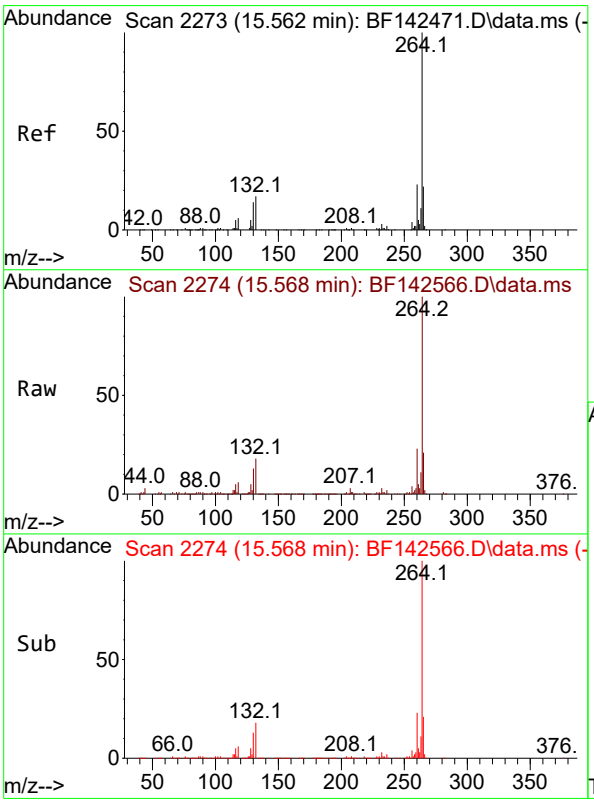
#85
Di-n-octyl phthalate
Concen: 32.445 ng
RT: 14.663 min Scan# 21
Delta R.T. -0.005 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:149 Resp: 467708

Ion	Ratio	Lower	Upper
149	100		
167	1.6	1.2	1.8
43	9.7	7.9	11.9

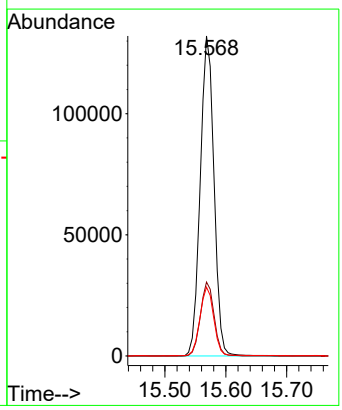


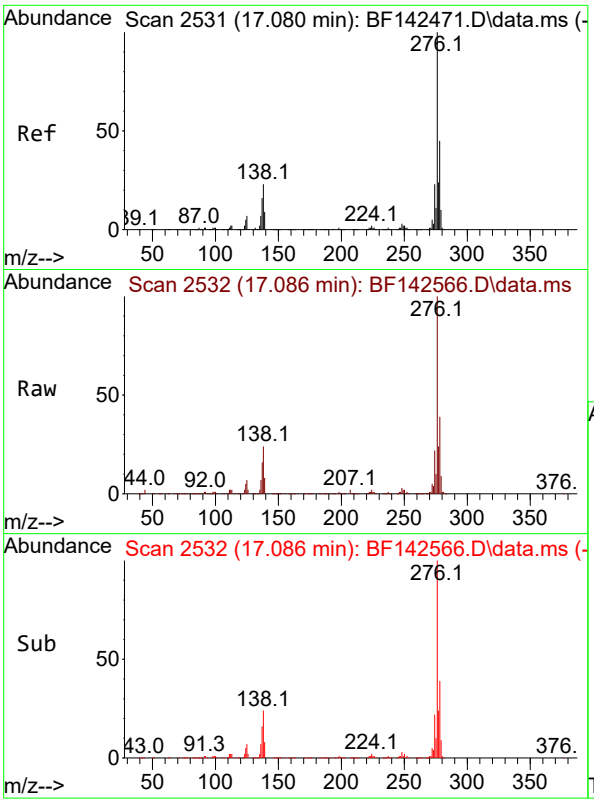


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2274
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:264 Resp: 206730

Ion	Ratio	Lower	Upper
264	100		
260	23.1	18.6	28.0
265	21.5	17.7	26.5



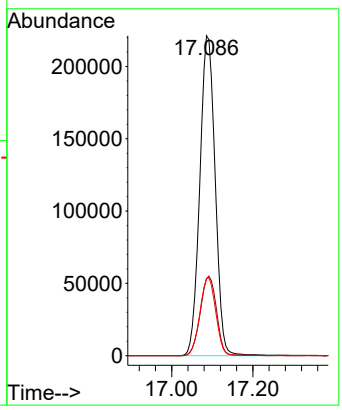


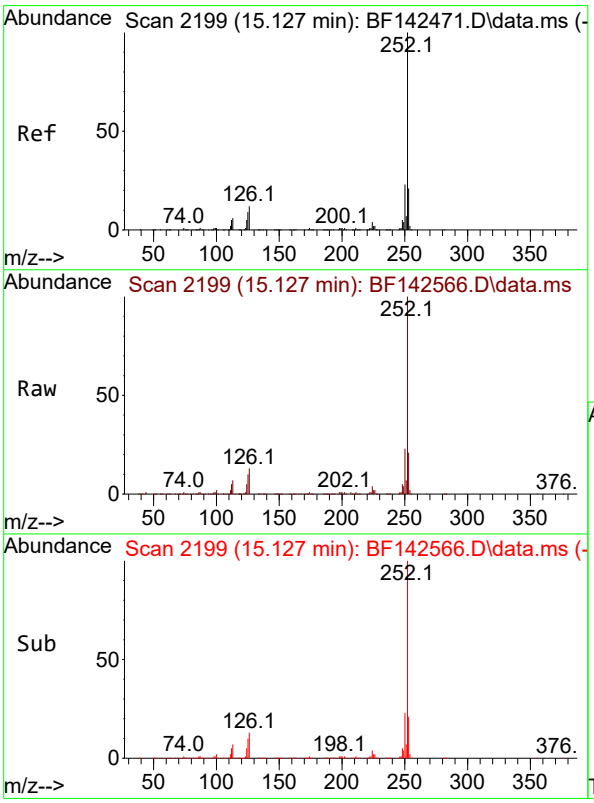
#87
Indeno(1,2,3-cd)pyrene
Concen: 37.472 ng
RT: 17.086 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:276 Resp: 581571

Ion	Ratio	Lower	Upper
276	100		
138	26.2	19.9	29.9
277	25.1	20.2	30.2

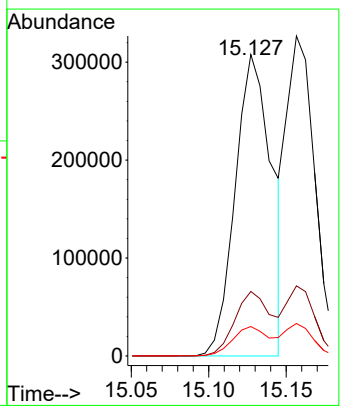


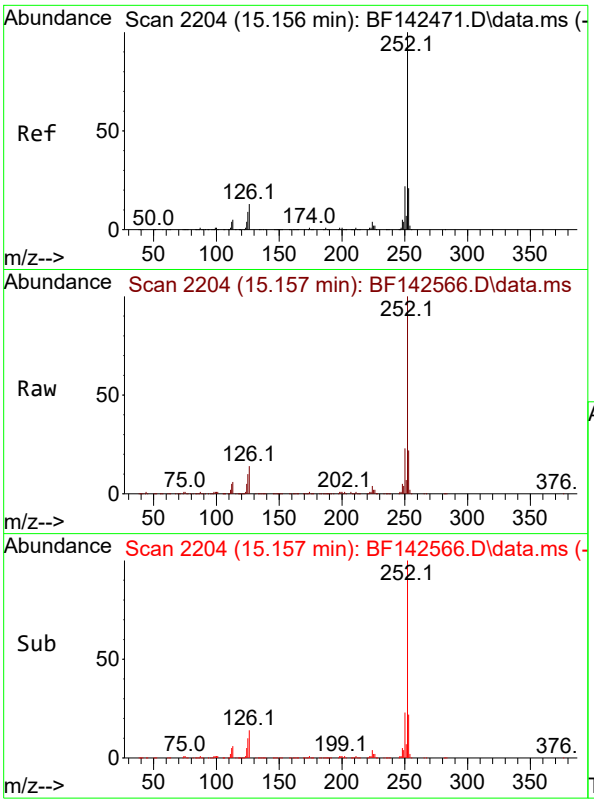


#88
Benzo(b)fluoranthene
Concen: 41.222 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:252 Resp: 504365

Ion	Ratio	Lower	Upper
252	100		
253	21.4	17.0	25.4
125	9.8	7.4	11.0



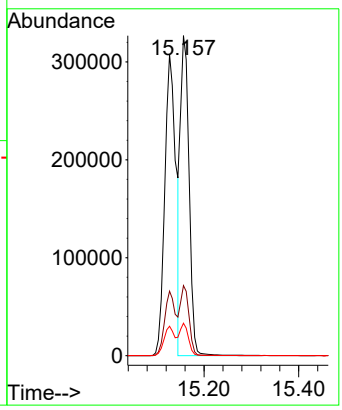


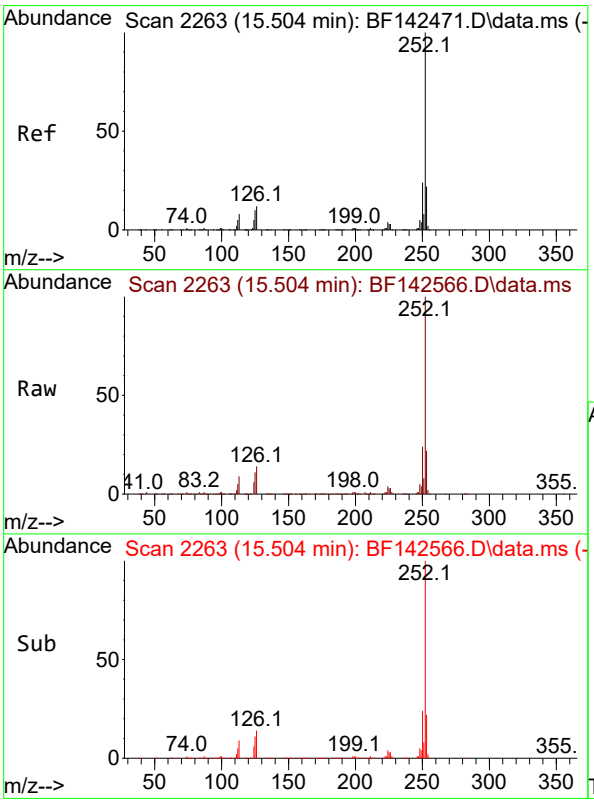
#89
Benzo(k)fluoranthene
Concen: 36.342 ng
RT: 15.157 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:252 Resp: 416465

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.0	25.4
125	10.1	7.3	10.9

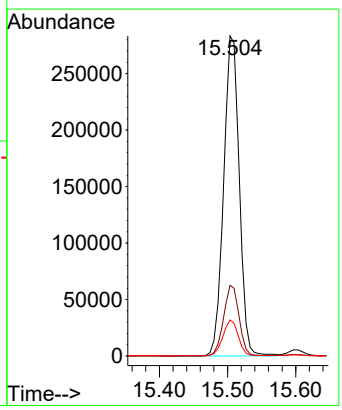


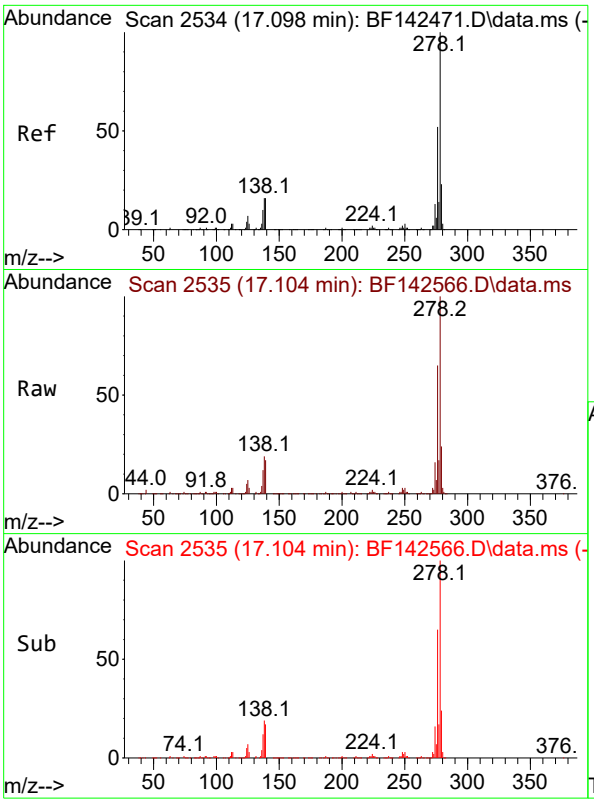


#90
Benzo(a)pyrene
Concen: 39.244 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:252 Resp: 452604

Ion	Ratio	Lower	Upper
252	100		
253	22.1	17.4	26.0
125	11.2	7.9	11.9



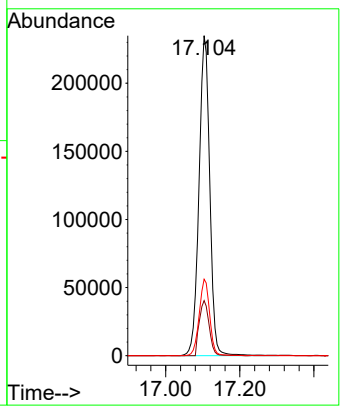


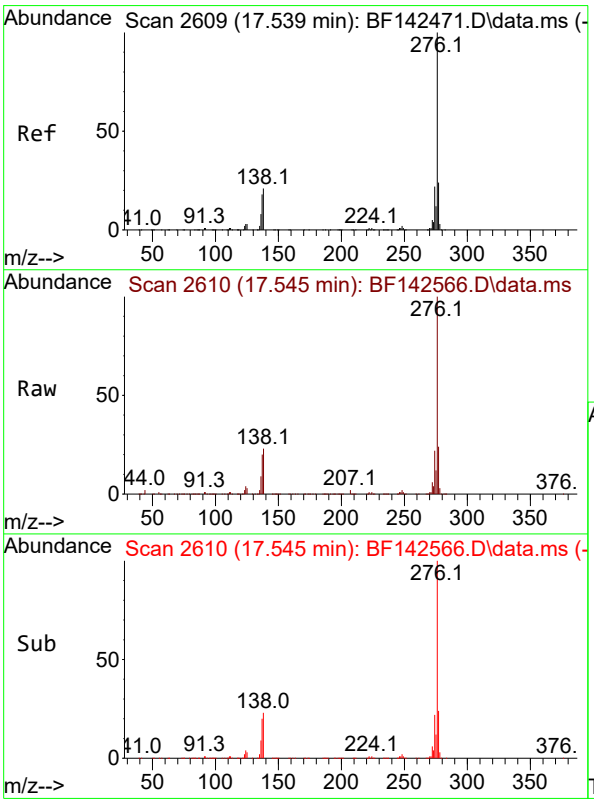
#91
Dibenzo(a,h)anthracene
Concen: 37.545 ng
RT: 17.104 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:278 Resp: 472596

Ion	Ratio	Lower	Upper
278	100		
139	17.2	12.8	19.2
279	23.9	18.6	28.0

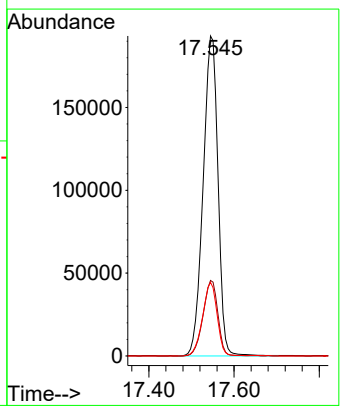




#92
Benzo(g,h,i)perylene
Concen: 37.158 ng
RT: 17.545 min Scan# 2610
Delta R.T. -0.012 min
Lab File: BF142566.D
Acq: 30 May 2025 13:20

Tgt Ion:276 Resp: 467824

Ion	Ratio	Lower	Upper
276	100		
277	23.6	19.2	28.8
138	23.0	16.8	25.2



Sample Results: **BF142566.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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	112	0.00
2		1,4-Dioxane	0.475	0.463	2.5	114	0.00
3		Pyridine	1.210	1.212	-0.2	116	0.00
4		n-Nitrosodimethylamine	0.628	0.601	4.3	109	-0.02
5	S	2-Fluorophenol	1.187	1.142	3.8	114	0.00
6		Aniline	1.921	1.893	1.5	116	0.00
7	S	Phenol-d6	1.429	1.395	2.4	115	-0.01
8		2-Chlorophenol	1.293	1.256	2.9	113	0.00
9		Benzaldehyde	0.859	0.818	4.8	113	0.00
10	C	Phenol	1.608	1.584	1.5	116	-0.01
11		bis(2-Chloroethyl)ether	1.157	1.123	2.9	114	0.00
12		1,3-Dichlorobenzene	1.443	1.370	5.1	111	0.00
13	C	1,4-Dichlorobenzene	1.453	1.400	3.6	112	0.00
14		1,2-Dichlorobenzene	1.391	1.336	4.0	113	0.00
15		Benzyl Alcohol	1.056	1.029	2.6	113	0.00
16		2,2'-oxybis(1-Chloropropane	1.944	1.881	3.2	113	0.00
17		2-Methylphenol	1.010	0.992	1.8	114	0.00
18		Hexachloroethane	0.507	0.479	5.5	110	0.00
19	P	n-Nitroso-di-n-propylamine	0.886	0.830	6.3	111	-0.02
20		3+4-Methylphenols	1.293	1.261	2.5	114	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00
22		Acetophenone	0.443	0.414	6.5	111	0.00
23	S	Nitrobenzene-d5	0.367	0.349	4.9	113	-0.01
24		Nitrobenzene	0.331	0.318	3.9	114	0.00
25		Isophorone	0.613	0.577	5.9	112	-0.01
26	C	2-Nitrophenol	0.177	0.175	1.1	115	0.00
27		2,4-Dimethylphenol	0.312	0.302	3.2	115	0.00
28		bis(2-Chloroethoxy)methane	0.383	0.367	4.2	116	-0.01
29	C	2,4-Dichlorophenol	0.283	0.273	3.5	114	0.00
30		1,2,4-Trichlorobenzene	0.308	0.290	5.8	113	0.00
31		Naphthalene	0.985	0.922	6.4	113	0.00
32		Benzoic acid	0.190	0.187	1.6	114	-0.04
33		4-Chloroaniline	0.399	0.386	3.3	114	0.00
34	C	Hexachlorobutadiene	0.192	0.175	8.9	108	0.00
35		Caprolactam	0.080	0.083	-3.8	122	-0.02
36	C	4-Chloro-3-methylphenol	0.291	0.279	4.1	114	-0.01
37		2-Methylnaphthalene	0.620	0.583	6.0	114	0.00
38		1-Methylnaphthalene	0.641	0.598	6.7	112	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	114	0.00
40		1,2,4,5-Tetrachlorobenzene	0.574	0.549	4.4	113	0.00
41	P	Hexachlorocyclopentadiene	0.387	0.358	7.5	103	0.00
42	S	2,4,6-Tribromophenol	0.222	0.215	3.2	116	0.00
43	C	2,4,6-Trichlorophenol	0.387	0.373	3.6	114	0.00
44		2,4,5-Trichlorophenol	0.408	0.398	2.5	115	0.00
45	S	2-Fluorobiphenyl	1.490	1.348	9.5	110	0.00
46		1,1'-Biphenyl	1.552	1.466	5.5	113	0.00
47		2-Chloronaphthalene	1.146	1.087	5.1	113	0.00

Sample Results: **BF142566.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)
48		2-Nitroaniline	0.331	0.326	1.5	115	0.00
49		Acenaphthylene	1.936	1.851	4.4	114	0.00
50		Dimethylphthalate	1.320	1.261	4.5	114	0.00
51		2,6-Dinitrotoluene	0.285	0.281	1.4	114	0.00
52	C	Acenaphthene	1.182	1.133	4.1	115	0.00
53		3-Nitroaniline	0.311	0.320	-2.9	122	0.00
54	P	2,4-Dinitrophenol	0.147	0.156	-6.1	119	0.00
55		Dibenzofuran	1.701	1.625	4.5	115	0.00
56	P	4-Nitrophenol	0.230	0.234	-1.7	117	0.00
57		2,4-Dinitrotoluene	0.372	0.380	-2.2	119	0.00
58		Fluorene	1.314	1.256	4.4	116	0.00
59		2,3,4,6-Tetrachlorophenol	0.341	0.332	2.6	114	0.00
60		Diethylphthalate	1.289	1.248	3.2	115	0.00
61		4-Chlorophenyl-phenylether	0.646	0.618	4.3	115	0.00
62		4-Nitroaniline	0.282	0.303	-7.4	125	-0.01
63		Azobenzene	1.158	1.114	3.8	114	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	119	0.00
65		4,6-Dinitro-2-methylphenol	0.112	0.117	-4.5	121	0.00
66	c	n-Nitrosodiphenylamine	0.684	0.624	8.8	115	0.00
67		4-Bromophenyl-phenylether	0.236	0.217	8.1	117	0.00
68		Hexachlorobenzene	0.262	0.244	6.9	117	0.00
69		Atrazine	0.182	0.184	-1.1	124	0.00
70	C	Pentachlorophenol	0.148	0.139	6.1	113	0.00
71		Phenanthrene	1.069	0.997	6.7	118	0.00
72		Anthracene	1.091	1.035	5.1	119	0.00
73		Carbazole	0.933	0.916	1.8	123	0.00
74		Di-n-butylphthalate	1.021	1.020	0.1	125	0.00
75	C	Fluoranthene	0.999	1.004	-0.5	128	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	132	0.00
77		Benzidine	0.744	0.808	-8.6	134	0.00
78		Pyrene	1.866	1.816	2.7	129	0.00
79	S	Terphenyl-d14	1.464	1.377	5.9	128	0.00
80		Butylbenzylphthalate	0.516	0.551	-6.8	138	0.00
81		Benzo(a)anthracene	1.336	1.270	4.9	131	0.00
82		3,3'-Dichlorobenzidine	0.405	0.411	-1.5	133	0.00
83		Chrysene	1.200	1.171	2.4	135	0.00
84		Bis(2-ethylhexyl)phthalate	0.660	0.643	2.6	126	0.00
85	c	Di-n-octyl phthalate	1.290	1.047	18.8	109	0.00
86	I	Perylene-d12	1.000	1.000	0.0	109	0.00
87		Indeno(1,2,3-cd)pyrene	1.501	1.407	6.3	106	0.00
88		Benzo(b)fluoranthene	1.184	1.220	-3.0	118	0.00
89		Benzo(k)fluoranthene	1.109	1.007	9.2	106	0.00
90	C	Benzo(a)pyrene	1.116	1.095	1.9	111	0.00
91		Dibenzo(a,h)anthracene	1.218	1.143	6.2	105	-0.01
92		Benzo(g,h,i)perylene	1.218	1.131	7.1	105	-0.01

Sample Results: **BF142566.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **BF142566.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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	20.000	20.000	0.0	112	0.00
2		1,4-Dioxane	40.000	38.980	2.6	114	0.00
3		Pyridine	40.000	40.066	-0.2	116	0.00
4		n-Nitrosodimethylamine	40.000	38.252	4.4	109	-0.02
5	S	2-Fluorophenol	80.000	76.955	3.8	114	0.00
6		Aniline	40.000	39.416	1.5	116	0.00
7	S	Phenol-d6	80.000	78.117	2.4	115	-0.01
8		2-Chlorophenol	40.000	38.865	2.8	113	0.00
9		Benzaldehyde	40.000	38.086	4.8	113	0.00
10	C	Phenol	40.000	39.414	1.5	116	-0.01
11		bis(2-Chloroethyl)ether	40.000	38.816	3.0	114	0.00
12		1,3-Dichlorobenzene	40.000	37.995	5.0	111	0.00
13	C	1,4-Dichlorobenzene	40.000	38.536	3.7	112	0.00
14		1,2-Dichlorobenzene	40.000	38.432	3.9	113	0.00
15		Benzyl Alcohol	40.000	38.981	2.5	113	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	38.703	3.2	113	0.00
17		2-Methylphenol	40.000	39.316	1.7	114	0.00
18		Hexachloroethane	40.000	37.722	5.7	110	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	37.494	6.3	111	-0.02
20		3+4-Methylphenols	40.000	39.012	2.5	114	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	115	0.00
22		Acetophenone	40.000	37.376	6.6	111	0.00
23	S	Nitrobenzene-d5	80.000	76.107	4.9	113	-0.01
24		Nitrobenzene	40.000	38.488	3.8	114	0.00
25		Isophorone	40.000	37.650	5.9	112	-0.01
26	C	2-Nitrophenol	40.000	39.647	0.9	115	0.00
27		2,4-Dimethylphenol	40.000	38.780	3.0	115	0.00
28		bis(2-Chloroethoxy)methane	40.000	38.289	4.3	116	-0.01
29	C	2,4-Dichlorophenol	40.000	38.539	3.7	114	0.00
30		1,2,4-Trichlorobenzene	40.000	37.755	5.6	113	0.00
31		Naphthalene	40.000	37.447	6.4	113	0.00
32		Benzoic acid	40.000	39.371	1.6	114	-0.04
33		4-Chloroaniline	40.000	38.689	3.3	114	0.00
34	C	Hexachlorobutadiene	40.000	36.473	8.8	108	0.00
35		Caprolactam	40.000	41.805	-4.5	122	-0.02
36	C	4-Chloro-3-methylphenol	40.000	38.452	3.9	114	-0.01
37		2-Methylnaphthalene	40.000	37.642	5.9	114	0.00
38		1-Methylnaphthalene	40.000	37.334	6.7	112	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	114	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	38.226	4.4	113	0.00
41	P	Hexachlorocyclopentadiene	40.000	36.924	7.7	103	0.00
42	S	2,4,6-Tribromophenol	80.000	77.469	3.2	116	0.00
43	C	2,4,6-Trichlorophenol	40.000	38.568	3.6	114	0.00
44		2,4,5-Trichlorophenol	40.000	39.016	2.5	115	0.00
45	S	2-Fluorobiphenyl	80.000	72.339	9.6	110	0.00
46		1,1'-Biphenyl	40.000	37.790	5.5	113	0.00
47		2-Chloronaphthalene	40.000	37.924	5.2	113	0.00

Sample Results: **BF142566.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)
48		2-Nitroaniline	40.000	39.403	1.5	115	0.00
49		Acenaphthylene	40.000	38.256	4.4	114	0.00
50		Dimethylphthalate	40.000	38.221	4.4	114	0.00
51		2,6-Dinitrotoluene	40.000	39.404	1.5	114	0.00
52	C	Acenaphthene	40.000	38.332	4.2	115	0.00
53		3-Nitroaniline	40.000	41.142	-2.9	122	0.00
54	P	2,4-Dinitrophenol	40.000	42.540	-6.3	119	0.00
55		Dibenzofuran	40.000	38.204	4.5	115	0.00
56	P	4-Nitrophenol	40.000	40.751	-1.9	117	0.00
57		2,4-Dinitrotoluene	40.000	40.883	-2.2	119	0.00
58		Fluorene	40.000	38.224	4.4	116	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	39.005	2.5	114	0.00
60		Diethylphthalate	40.000	38.740	3.1	115	0.00
61		4-Chlorophenyl-phenylether	40.000	38.294	4.3	115	0.00
62		4-Nitroaniline	40.000	43.023	-7.6	125	-0.01
63		Azobenzene	40.000	38.477	3.8	114	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	119	0.00
65		4,6-Dinitro-2-methylphenol	40.000	41.899	-4.7	121	0.00
66	c	n-Nitrosodiphenylamine	40.000	36.507	8.7	115	0.00
67		4-Bromophenyl-phenylether	40.000	36.764	8.1	117	0.00
68		Hexachlorobenzene	40.000	37.386	6.5	117	0.00
69		Atrazine	40.000	40.470	-1.2	124	0.00
70	C	Pentachlorophenol	40.000	37.734	5.7	113	0.00
71		Phenanthrene	40.000	37.294	6.8	118	0.00
72		Anthracene	40.000	37.945	5.1	119	0.00
73		Carbazole	40.000	39.284	1.8	123	0.00
74		Di-n-butylphthalate	40.000	39.961	0.1	125	0.00
75	C	Fluoranthene	40.000	40.225	-0.6	128	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	132	0.00
77		Benzidine	40.000	43.420	-8.6	134	0.00
78		Pyrene	40.000	38.937	2.7	129	0.00
79	S	Terphenyl-d14	80.000	75.263	5.9	128	0.00
80		Butylbenzylphthalate	40.000	42.730	-6.8	138	0.00
81		Benzo(a)anthracene	40.000	38.038	4.9	131	0.00
82		3,3'-Dichlorobenzidine	40.000	40.543	-1.4	133	0.00
83		Chrysene	40.000	39.038	2.4	135	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	38.965	2.6	126	0.00
85	c	Di-n-octyl phthalate	40.000	32.445	18.9	109	0.00
86	I	Perylene-d12	20.000	20.000	0.0	109	0.00
87		Indeno(1,2,3-cd)pyrene	40.000	37.472	6.3	106	0.00
88		Benzo(b)fluoranthene	40.000	41.222	-3.1	118	0.00
89		Benzo(k)fluoranthene	40.000	36.342	9.1	106	0.00
90	C	Benzo(a)pyrene	40.000	39.244	1.9	111	0.00
91		Dibenzo(a,h)anthracene	40.000	37.545	6.1	105	-0.01
92		Benzo(g,h,i)perylene	40.000	37.158	7.1	105	-0.01

Sample Results: **BF142566.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142566.D
Acq On : 30 May 2025 13:20
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 30 13:42:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Raw Data: **BF142590.D**

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: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG No.: Q2150

Instrument ID: BNA_F Calibration Date/Time: 06/02/2025 11:30

Lab File ID: BF142590.D Init. Calib. Date(s): 05/20/2025 05/20/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:10 15:31

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.187	1.153		-2.9	
Benzaldehyde	0.859	0.802		-6.6	
Phenol-d6	1.429	1.385		-3.1	
Phenol	1.608	1.558		-3.1	20.0
bis(2-Chloroethyl)ether	1.157	1.124		-2.9	
2-Chlorophenol	1.293	1.260		-2.6	
2-Methylphenol	1.010	0.984		-2.6	
2,2-oxybis(1-Chloropropane)	1.944	1.872		-3.7	
Acetophenone	0.443	0.417		-5.9	
3+4-Methylphenols	1.293	1.242		-3.9	
n-Nitroso-di-n-propylamine	0.886	0.829	0.050	-6.4	
Nitrobenzene-d5	0.367	0.347		-5.4	
Hexachloroethane	0.507	0.483		-4.7	
Nitrobenzene	0.331	0.314		-5.1	
Isophorone	0.613	0.575		-6.2	
2-Nitrophenol	0.177	0.176		-0.6	20.0
2,4-Dimethylphenol	0.312	0.299		-4.2	
bis(2-Chloroethoxy)methane	0.383	0.365		-4.7	
2,4-Dichlorophenol	0.283	0.275		-2.8	20.0
Naphthalene	0.985	0.939		-4.7	
4-Chloroaniline	0.399	0.389		-2.5	
Hexachlorobutadiene	0.192	0.175		-8.9	20.0
Caprolactam	0.080	0.084		5.0	
4-Chloro-3-methylphenol	0.291	0.275		-5.5	20.0
2-Methylnaphthalene	0.620	0.581		-6.3	
Hexachlorocyclopentadiene	0.387	0.340	0.050	-12.1	
2,4,6-Trichlorophenol	0.387	0.366		-5.4	20.0
2-Fluorobiphenyl	1.490	1.341		-10.0	
2,4,5-Trichlorophenol	0.408	0.396		-2.9	
1,1-Biphenyl	1.552	1.455		-6.3	
2-Chloronaphthalene	1.146	1.080		-5.8	
2-Nitroaniline	0.331	0.325		-1.8	
Dimethylphthalate	1.320	1.263		-4.3	
Acenaphthylene	1.936	1.830		-5.5	
2,6-Dinitrotoluene	0.285	0.279		-2.1	
3-Nitroaniline	0.311	0.315		1.3	
Acenaphthene	1.182	1.118		-5.4	20.0
2,4-Dinitrophenol	0.147	0.143	0.050	-2.7	
4-Nitrophenol	0.230	0.227	0.050	-1.3	

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: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2150 SAS No.: Q2150 SDG No.: Q2150

Instrument ID: BNA_F Calibration Date/Time: 06/02/2025 11:30

Lab File ID: BF142590.D Init. Calib. Date(s): 05/20/2025 05/20/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:10 15:31

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.701	1.606		-5.6	
2,4-Dinitrotoluene	0.372	0.374		0.5	
Diethylphthalate	1.289	1.226		-4.9	
4-Chlorophenyl-phenylether	0.646	0.612		-5.3	
Fluorene	1.314	1.257		-4.3	
4-Nitroaniline	0.282	0.295		4.6	
4,6-Dinitro-2-methylphenol	0.112	0.113		0.9	
n-Nitrosodiphenylamine	0.684	0.641		-6.3	20.0
2,4,6-Tribromophenol	0.222	0.212		-4.5	
4-Bromophenyl-phenylether	0.236	0.220		-6.8	
Hexachlorobenzene	0.262	0.246		-6.1	
Atrazine	0.182	0.184		1.1	
Pentachlorophenol	0.148	0.139		-6.1	20.0
Phenanthrene	1.069	1.016		-5.0	
Anthracene	1.091	1.045		-4.2	
Carbazole	0.933	0.918		-1.6	
Di-n-butylphthalate	1.021	1.018		-0.3	
Fluoranthene	0.999	0.991		-0.8	20.0
Pyrene	1.866	1.760		-5.7	
Terphenyl-d14	1.464	1.327		-9.4	
Butylbenzylphthalate	0.516	0.546		5.8	
3,3-Dichlorobenzidine	0.405	0.425		4.9	
Benzo(a)anthracene	1.336	1.272		-4.8	
Chrysene	1.200	1.136		-5.3	
Bis(2-ethylhexyl)phthalate	0.660	0.694		5.2	
Di-n-octyl phthalate	1.290	1.195		-7.4	20.0
Benzo(b)fluoranthene	1.184	1.126		-4.9	
Benzo(k)fluoranthene	1.109	1.039		-6.3	
Benzo(a)pyrene	1.116	1.071		-4.0	20.0
Indeno(1,2,3-cd)pyrene	1.501	1.368		-8.9	
Dibenzo(a,h)anthracene	1.218	1.126		-7.6	
Benzo(g,h,i)perylene	1.218	1.105		-9.3	
1,2,4,5-Tetrachlorobenzene	0.574	0.542		-5.6	
1,4-Dioxane	0.475	0.464		-2.3	20.0
2,3,4,6-Tetrachlorophenol	0.341	0.334		-2.1	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	112830	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	441878	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	241388	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	415282	20.000	ng	0.00
76) Chrysene-d12	14.074	240	230387	20.000	ng	0.00
86) Perylene-d12	15.568	264	238851	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	520453	77.713	ng	0.00
7) Phenol-d6	6.522	99	624999	77.527	ng	-0.01
23) Nitrobenzene-d5	7.463	82	614193	75.793	ng	-0.01
42) 2,4,6-Tribromophenol	10.733	330	204924	76.490	ng	0.00
45) 2-Fluorobiphenyl	9.257	172	1294863	71.981	ng	-0.01
79) Terphenyl-d14	13.016	244	1222487	72.512	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.657	88	104787	39.101	ng	99
3) Pyridine	3.434	79	273075	40.014	ng	98
4) n-Nitrosodimethylamine	3.381	42	134236	37.883	ng	92
6) Aniline	6.563	93	426917	39.384	ng	99
8) 2-Chlorophenol	6.681	128	284430	38.992	ng	99
9) Benzaldehyde	6.451	77	181042	37.337	ng	99
10) Phenol	6.540	94	351528	38.752	ng	99
11) bis(2-Chloroethyl)ether	6.634	93	253577	38.834	ng	100
12) 1,3-Dichlorobenzene	6.839	146	312463	38.387	ng	99
13) 1,4-Dichlorobenzene	6.916	146	318681	38.867	ng	99
14) 1,2-Dichlorobenzene	7.069	146	302583	38.567	ng	99
15) Benzyl Alcohol	7.039	79	229225	38.476	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.175	45	422408	38.521	ng	99
17) 2-Methylphenol	7.151	107	222036	38.986	ng	99
18) Hexachloroethane	7.410	117	108916	38.042	ng	97
19) n-Nitroso-di-n-propyla...	7.310	70	187037	37.435	ng	99
20) 3+4-Methylphenols	7.304	107	280371	38.443	ng	98
22) Acetophenone	7.310	105	368253	37.647	ng	98
24) Nitrobenzene	7.481	77	277591	37.981	ng	99
25) Isophorone	7.722	82	508065	37.499	ng	98
26) 2-Nitrophenol	7.798	139	155595	39.842	ng	96
27) 2,4-Dimethylphenol	7.834	122	264387	38.389	ng	99
28) bis(2-Chloroethoxy)met...	7.928	93	322678	38.126	ng	99
29) 2,4-Dichlorophenol	8.039	162	243024	38.802	ng	100
30) 1,2,4-Trichlorobenzene	8.122	180	261489	38.470	ng	98
31) Naphthalene	8.204	128	830285	38.160	ng	100
32) Benzoic acid	7.939	122	160260	38.227	ng	98
33) 4-Chloroaniline	8.251	127	343825	38.998	ng	99
34) Hexachlorobutadiene	8.322	225	154741	36.459	ng	98
35) Caprolactam	8.622	113	73834	41.974	ng	99
36) 4-Chloro-3-methylphenol	8.728	107	243211	37.891	ng	98
37) 2-Methylnaphthalene	8.898	142	513490	37.513	ng	99
38) 1-Methylnaphthalene	8.998	142	530617	37.476	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	261475	37.735	ng	100
41) Hexachlorocyclopentadiene	9.051	237	164068	35.099	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	176717	37.821	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

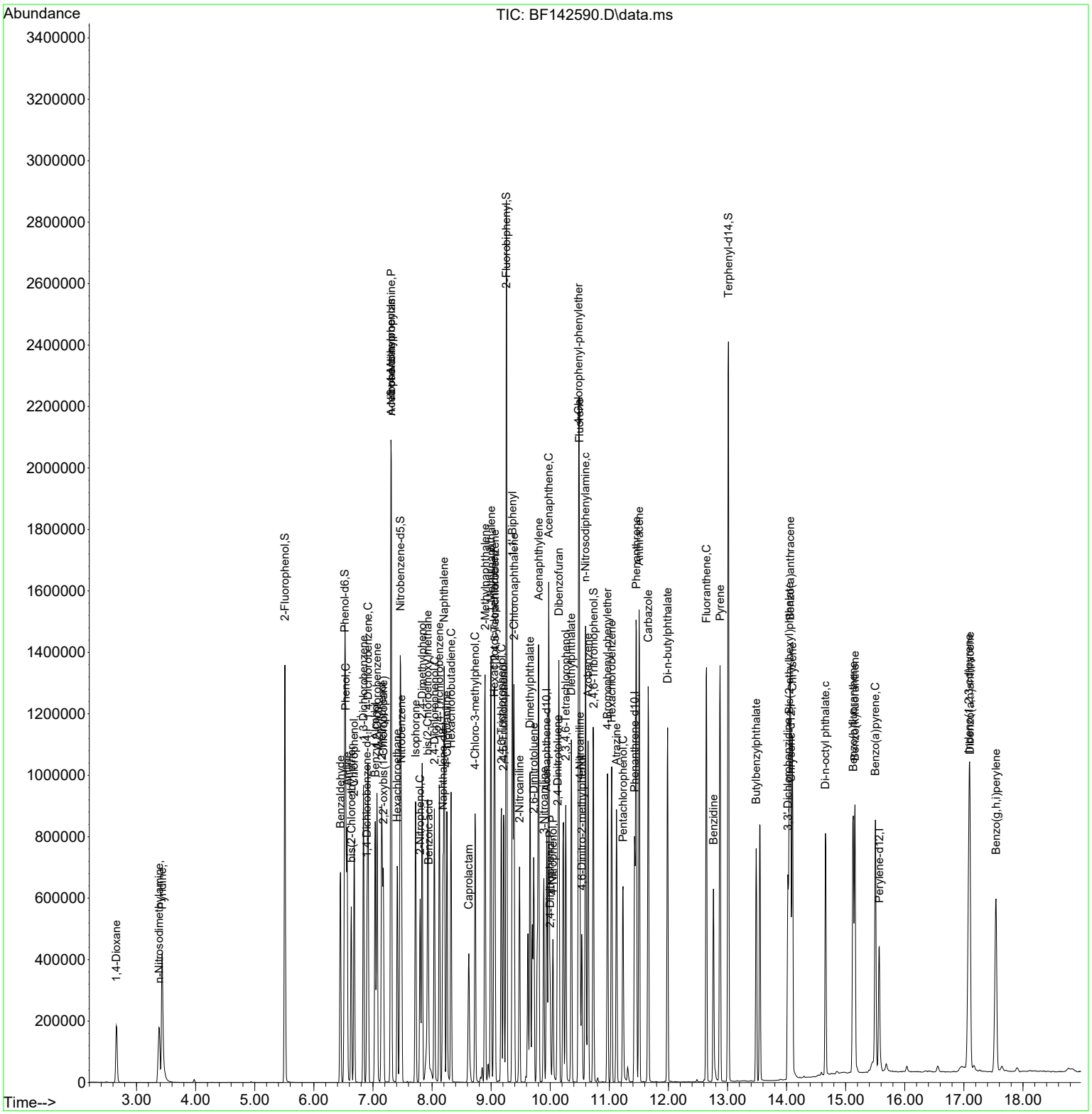
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	191168	38.794	ng	99
46) 1,1'-Biphenyl	9.363	154	702351	37.504	ng	100
47) 2-Chloronaphthalene	9.386	162	521535	37.693	ng	99
48) 2-Nitroaniline	9.480	65	156771	39.199	ng	98
49) Acenaphthylene	9.804	152	883436	37.812	ng	100
50) Dimethylphthalate	9.657	163	609673	38.278	ng	100
51) 2,6-Dinitrotoluene	9.722	165	134489	39.122	ng	97
52) Acenaphthene	9.975	154	539520	37.817	ng	99
53) 3-Nitroaniline	9.892	138	151962	40.472	ng	99
54) 2,4-Dinitrophenol	9.998	184	68903	38.796	ng	94
55) Dibenzofuran	10.145	168	775550	37.777	ng	98
56) 4-Nitrophenol	10.045	139	109452	39.507	ng	97
57) 2,4-Dinitrotoluene	10.128	165	180640	40.236	ng	99
58) Fluorene	10.492	166	606801	38.259	ng	99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	161231	39.192	ng	99
60) Diethylphthalate	10.357	149	591746	38.041	ng	100
61) 4-Chlorophenyl-phenyle...	10.480	204	295424	37.917	ng	97
62) 4-Nitroaniline	10.504	138	142644	41.888	ng	96
63) Azobenzene	10.639	77	534537	38.258	ng	98
65) 4,6-Dinitro-2-methylph...	10.533	198	94020	40.568	ng	99
66) n-Nitrosodiphenylamine	10.598	169	532389	37.472	ng	100
67) 4-Bromophenyl-phenylether	10.969	248	182475	37.161	ng	100
68) Hexachlorobenzene	11.039	284	204259	37.610	ng	99
69) Atrazine	11.122	200	152871	40.515	ng	99
70) Pentachlorophenol	11.233	266	115580	37.694	ng	99
71) Phenanthrene	11.457	178	843782	38.019	ng	100
72) Anthracene	11.504	178	868050	38.324	ng	100
73) Carbazole	11.657	167	762565	39.382	ng	100
74) Di-n-butylphthalate	11.986	149	845566	39.894	ng	100
75) Fluoranthene	12.645	202	822707	39.672	ng	99
77) Benzidine	12.763	184	372760	43.479	ng	99
78) Pyrene	12.874	202	811108	37.740	ng	100
80) Butylbenzylphthalate	13.486	149	251441	42.340	ng	98
81) Benzo(a)anthracene	14.063	228	586045	38.094	ng	99
82) 3,3'-Dichlorobenzidine	14.021	252	195614	41.922	ng	98
83) Chrysene	14.098	228	523222	37.850	ng	100
84) Bis(2-ethylhexyl)phtha...	14.045	149	319802	42.067	ng	99
85) Di-n-octyl phthalate	14.657	149	550609	37.041	ng	99
87) Indeno(1,2,3-cd)pyrene	17.086	276	653334	36.435	ng	99
88) Benzo(b)fluoranthene	15.127	252	537758	38.041	ng	99
89) Benzo(k)fluoranthene	15.157	252	496143	37.472	ng	98
90) Benzo(a)pyrene	15.504	252	511548	38.390	ng	98
91) Dibenzo(a,h)anthracene	17.104	278	537907	36.987	ng	100
92) Benzo(g,h,i)perylene	17.545	276	528096	36.304	ng	98

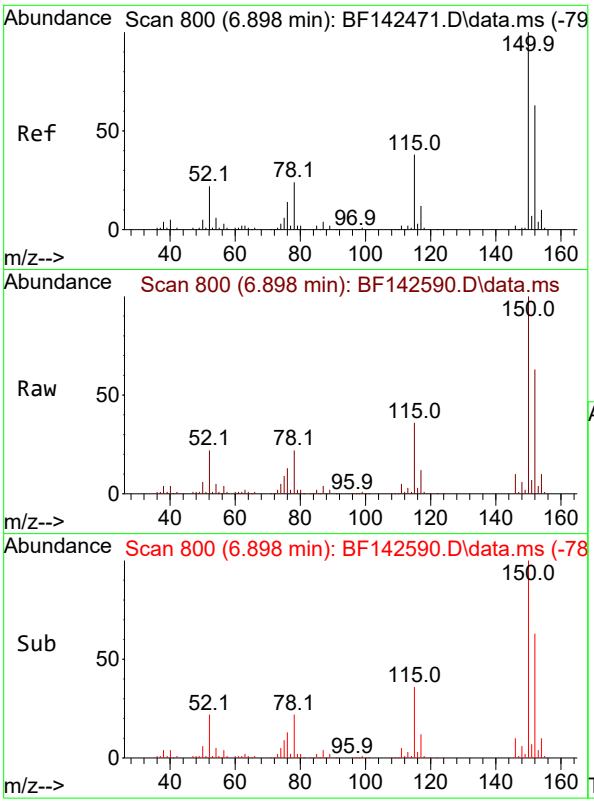
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



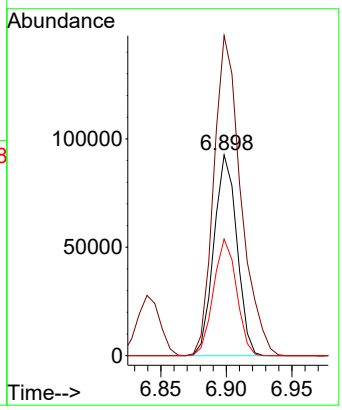


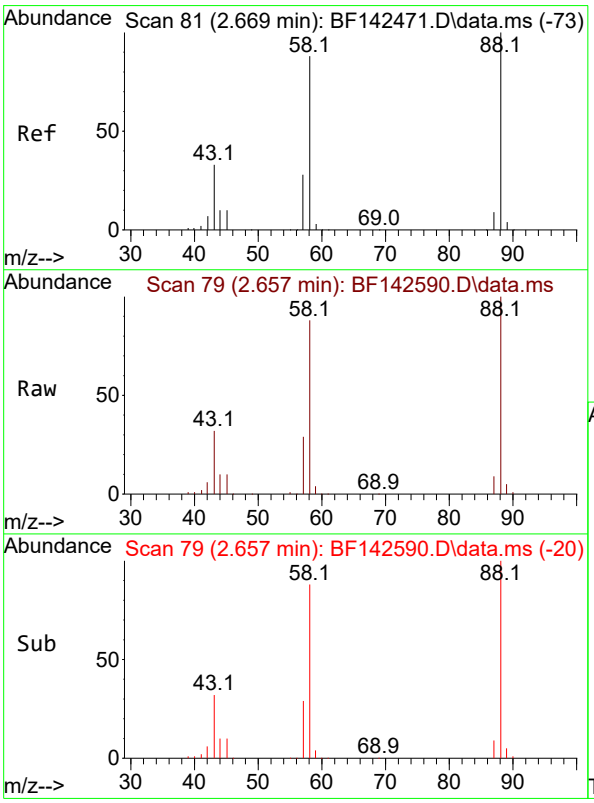
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:152 Resp: 112830

Ion	Ratio	Lower	Upper
152	100		
150	159.4	128.2	192.4
115	58.1	48.3	72.5

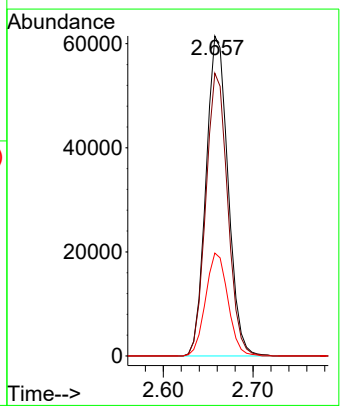


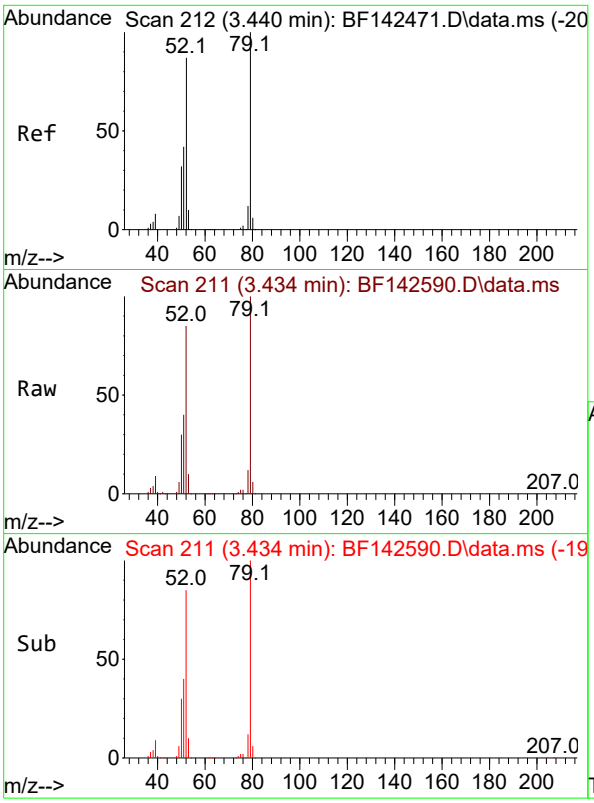


#2
1,4-Dioxane
Concen: 39.101 ng
RT: 2.657 min Scan# 79
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 88 Resp: 104787

Ion	Ratio	Lower	Upper
88	100		
58	87.4	70.8	106.2
43	32.6	26.6	40.0



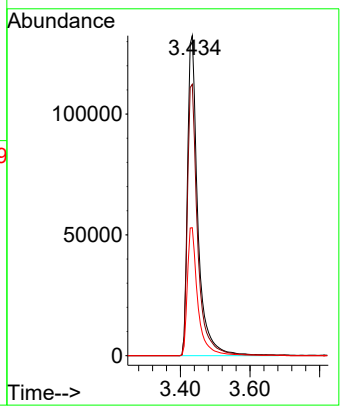


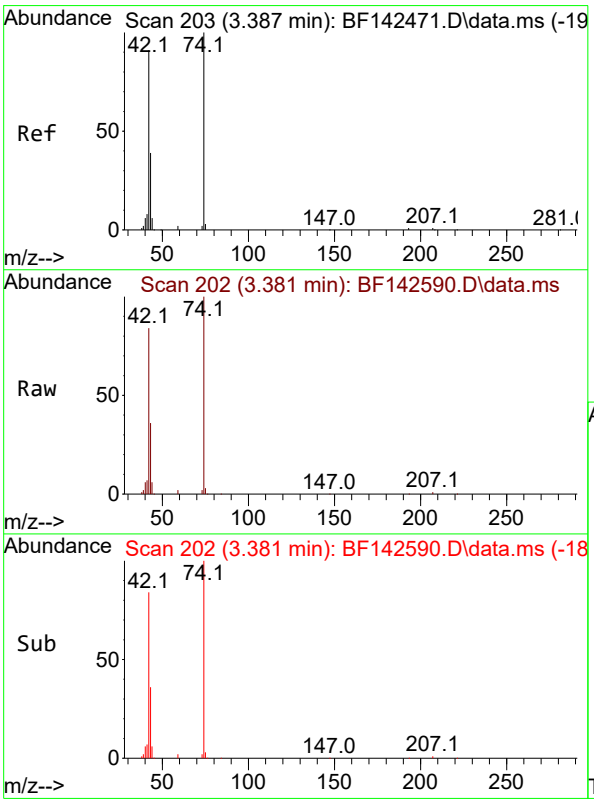
#3
Pyridine
Concen: 40.014 ng
RT: 3.434 min Scan# 21
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 79 Resp: 273075

Ion	Ratio	Lower	Upper
79	100		
52	84.8	69.2	103.8
51	40.0	33.3	49.9

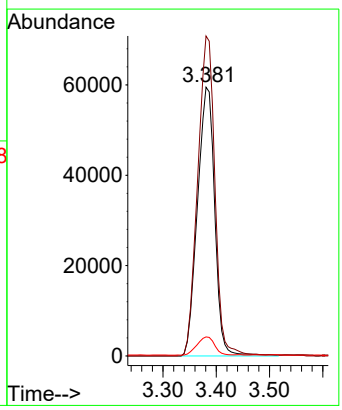


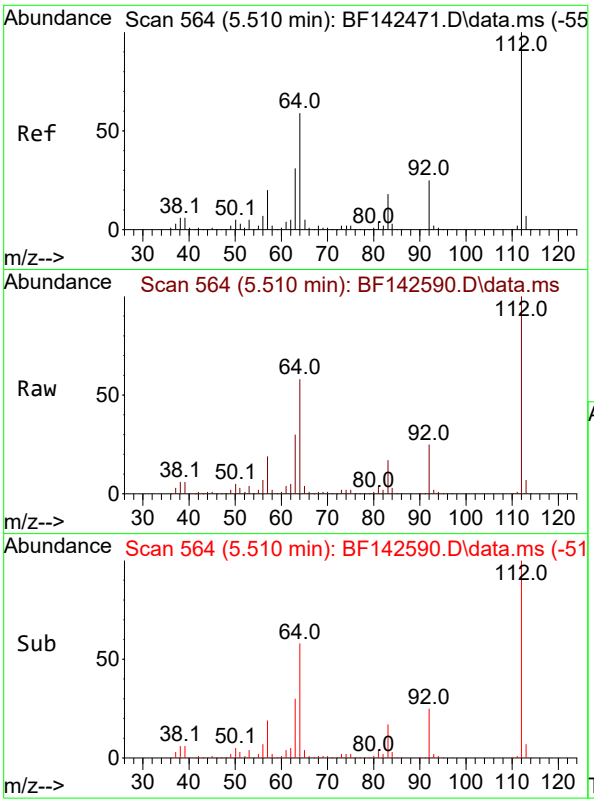


#4
n-Nitrosodimethylamine
Concen: 37.883 ng
RT: 3.381 min Scan# 202
Delta R.T. -0.023 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 42 Resp: 134236

Ion	Ratio	Lower	Upper
42	100		
74	119.1	88.2	132.4
44	7.1	5.4	8.2



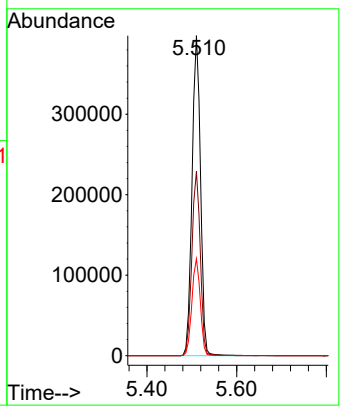


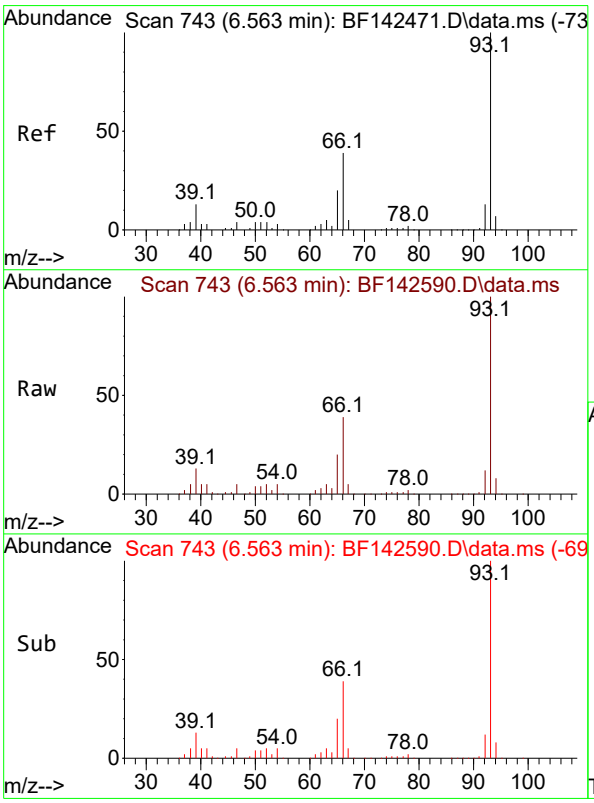
#5
2-Fluorophenol
Concen: 77.713 ng
RT: 5.510 min Scan# 5
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:112 Resp: 520453

Ion	Ratio	Lower	Upper
112	100		
64	57.6	47.5	71.3
63	30.3	24.9	37.3

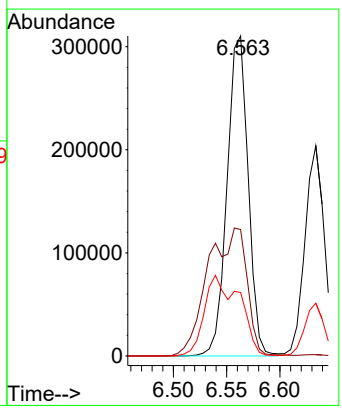


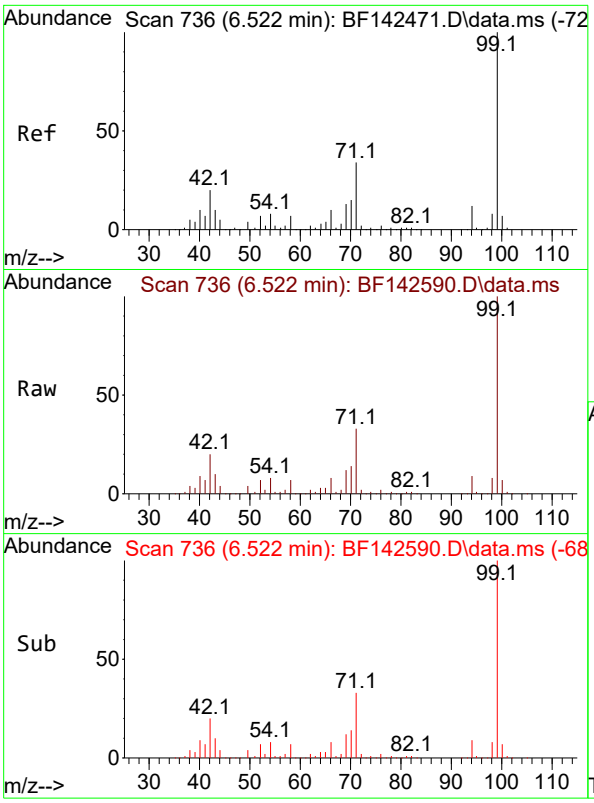


#6
Aniline
Concen: 39.384 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 93 Resp: 426917

Ion	Ratio	Lower	Upper
93	100		
66	39.5	32.0	48.0
65	19.8	16.1	24.1



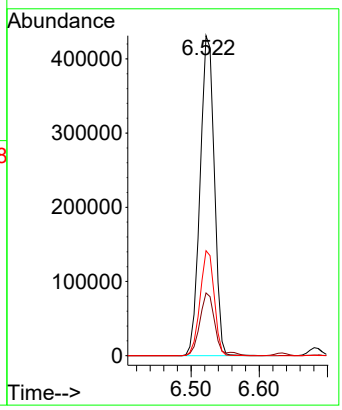


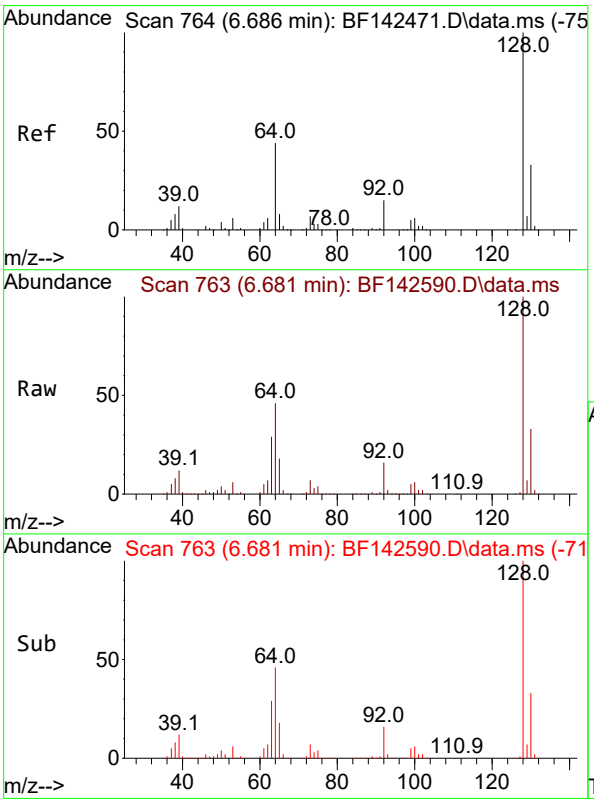
#7
Phenol-d6
Concen: 77.527 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 99 Resp: 624999

Ion	Ratio	Lower	Upper
99	100		
42	19.6	16.2	24.2
71	32.8	27.3	40.9

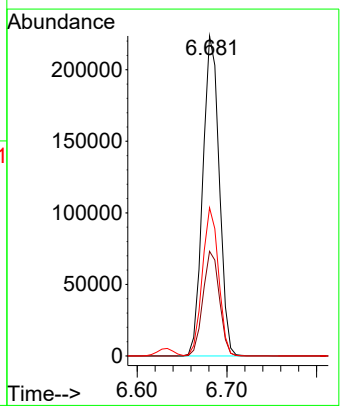


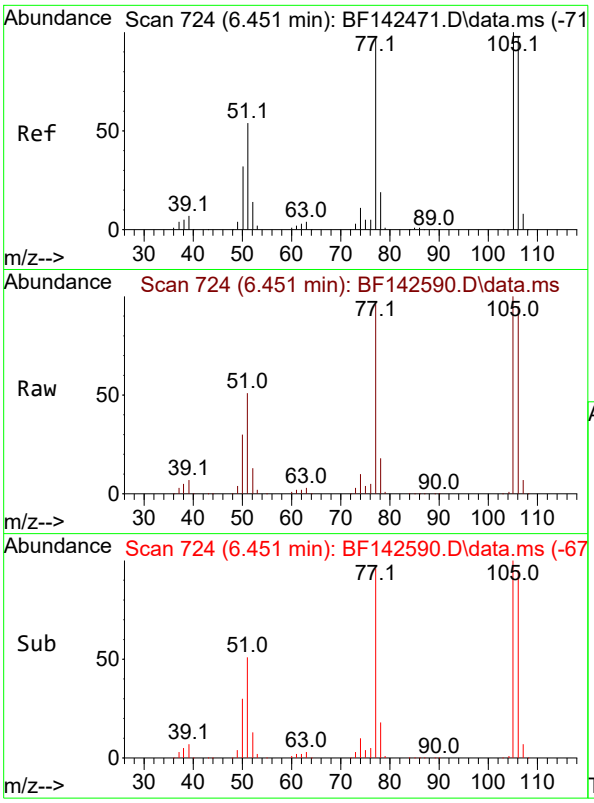


#8
2-Chlorophenol
Concen: 38.992 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:128 Resp: 284430

Ion	Ratio	Lower	Upper
128	100		
130	32.7	12.6	52.6
64	46.3	25.1	65.1



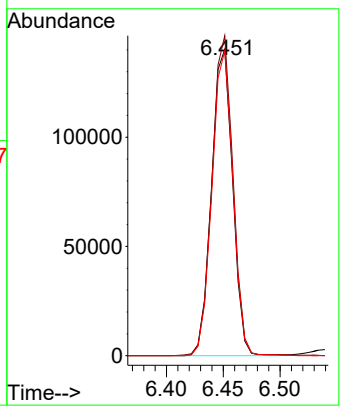


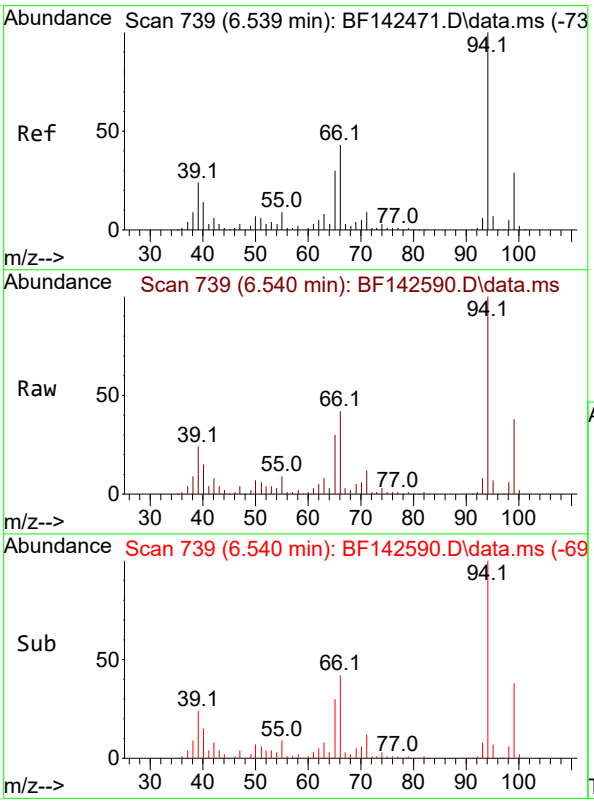
#9
Benzaldehyde
Concen: 37.337 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 77 Resp: 181042

Ion	Ratio	Lower	Upper
77	100		
105	104.4	82.5	122.5
106	99.5	80.0	120.0

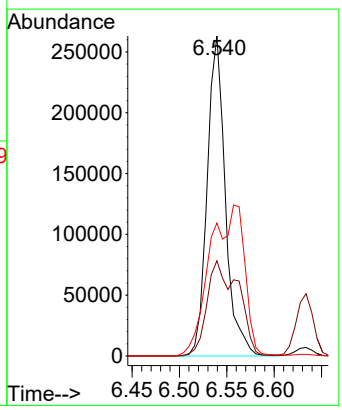


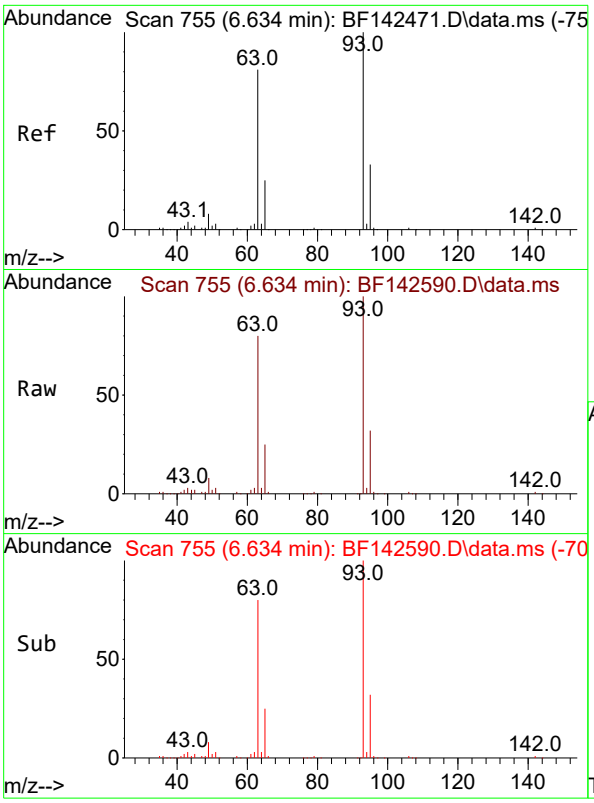


#10
Phenol
Concen: 38.752 ng
RT: 6.540 min Scan# 739
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 94 Resp: 351528

Ion	Ratio	Lower	Upper
94	100		
65	29.8	10.3	50.3
66	41.6	22.6	62.6



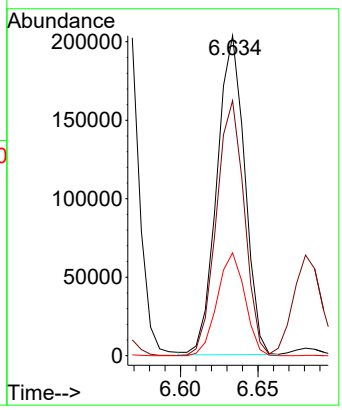


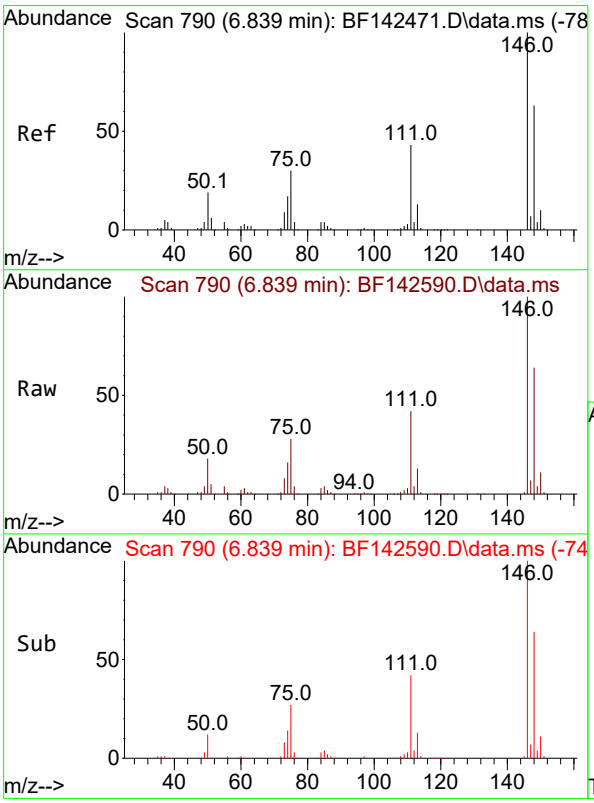
#11
bis(2-Chloroethyl)ether
Concen: 38.834 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 93 Resp: 253577

Ion	Ratio	Lower	Upper
93	100		
63	79.7	60.2	100.2
95	32.1	12.3	52.3

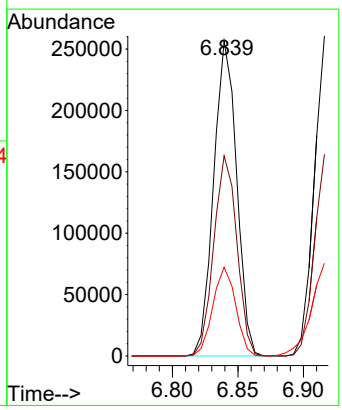


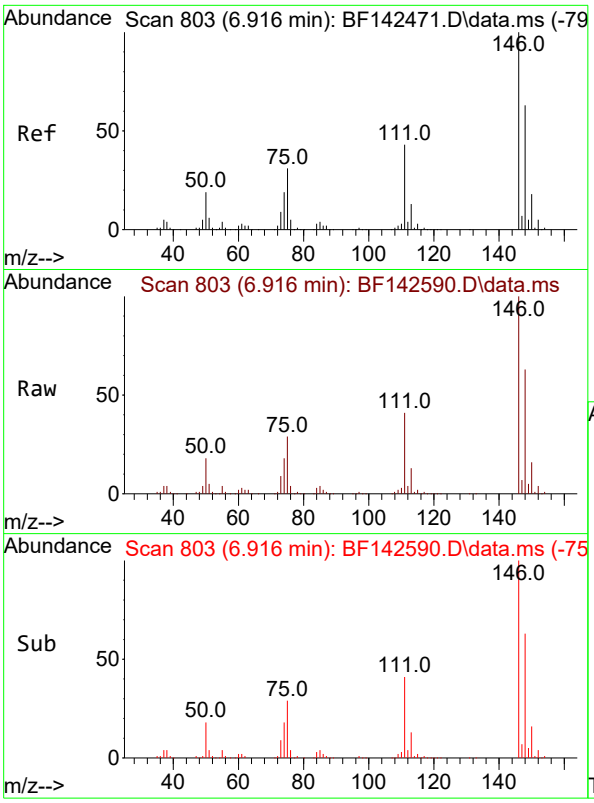


#12
1,3-Dichlorobenzene
Concen: 38.387 ng
RT: 6.839 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:146 Resp: 312463

Ion	Ratio	Lower	Upper
146	100		
148	63.5	50.6	75.8
75	28.2	23.8	35.6



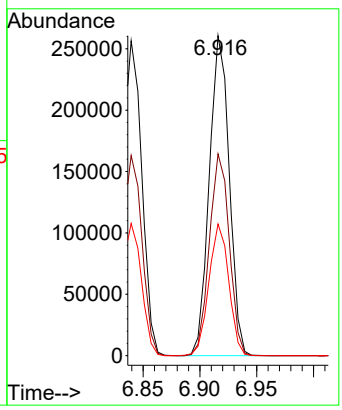


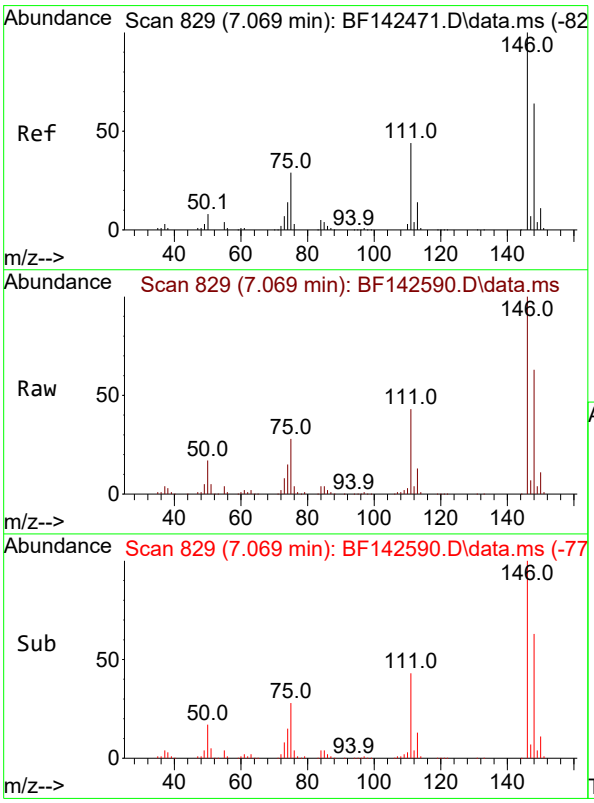
#13
1,4-Dichlorobenzene
Concen: 38.867 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:146 Resp: 318681

Ion	Ratio	Lower	Upper
146	100		
148	63.0	50.4	75.6
111	41.1	34.1	51.1

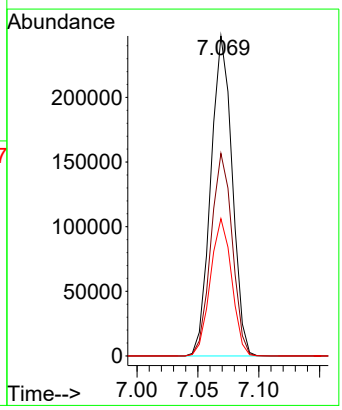


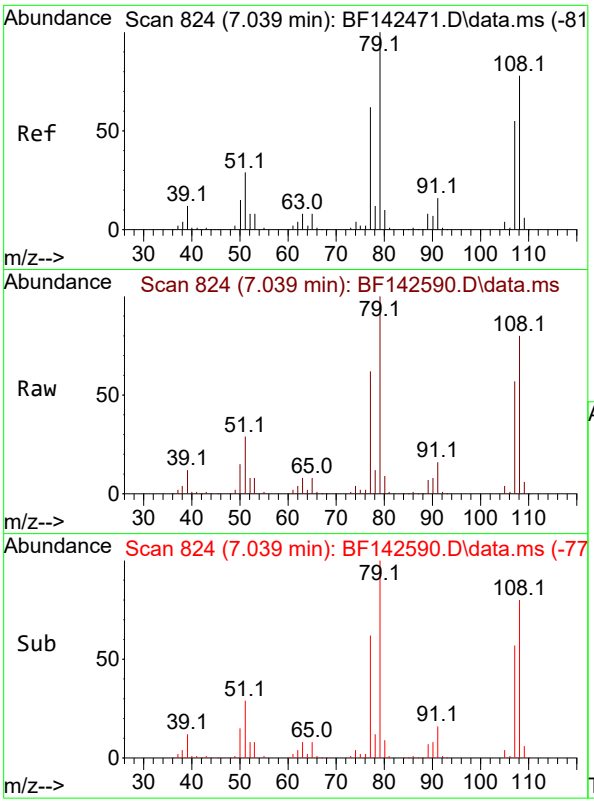


#14
1,2-Dichlorobenzene
Concen: 38.567 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:146 Resp: 302583

Ion	Ratio	Lower	Upper
146	100		
148	63.3	51.0	76.4
111	42.9	35.0	52.6



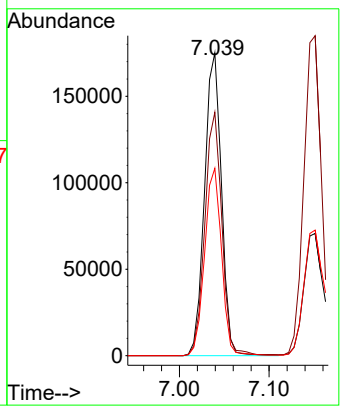


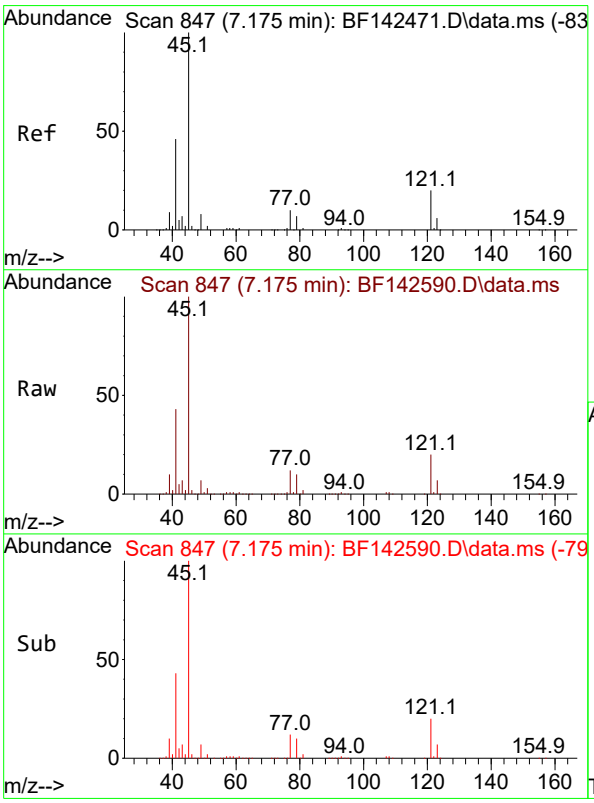
#15
Benzyl Alcohol
Concen: 38.476 ng
RT: 7.039 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 79 Resp: 229225

Ion	Ratio	Lower	Upper
79	100		
108	80.3	62.1	93.1
77	61.9	49.5	74.3

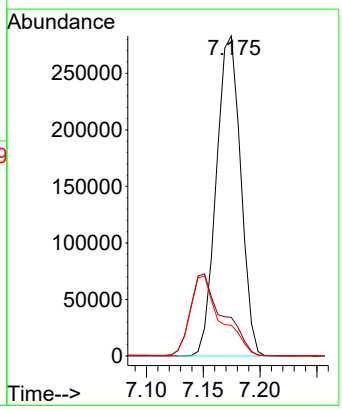


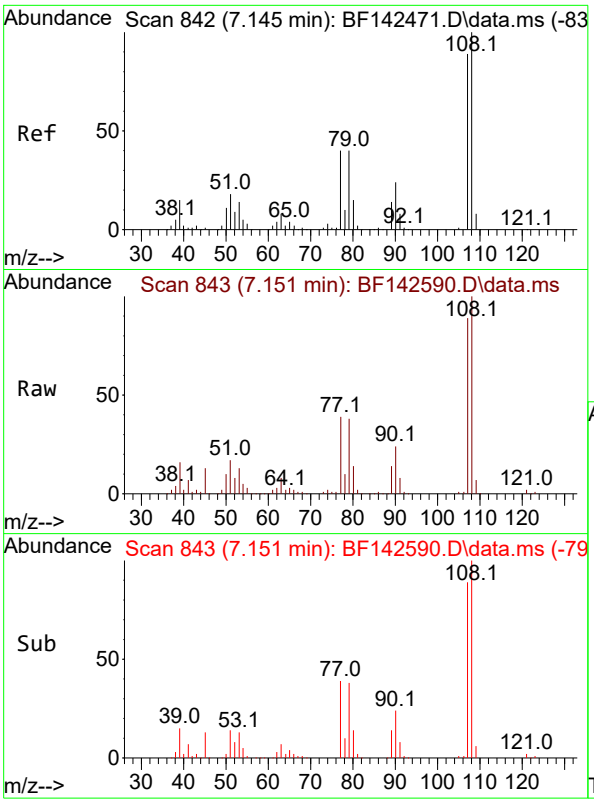


#16
2,2'-oxybis(1-Chloropropane)
Concen: 38.521 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 45 Resp: 422408

Ion	Ratio	Lower	Upper
45	100		
77	12.0	0.0	32.0
79	9.6	0.0	29.2



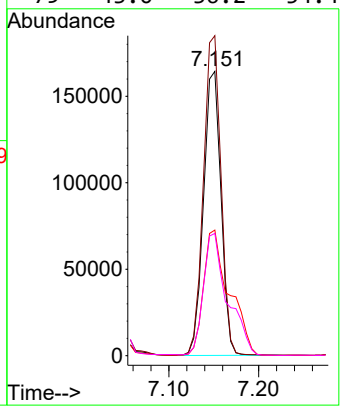


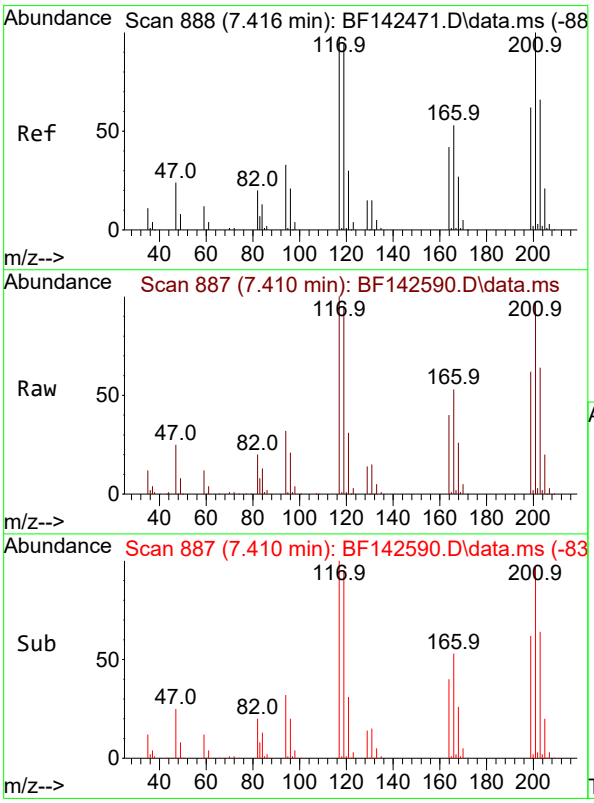
#17
2-Methylphenol
Concen: 38.986 ng
RT: 7.151 min Scan# 84
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:107 Resp: 222036

Ion	Ratio	Lower	Upper
107	100		
108	112.5	90.2	135.2
77	44.2	36.1	54.1
79	43.0	36.2	54.4

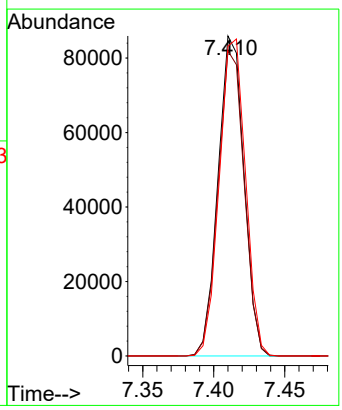


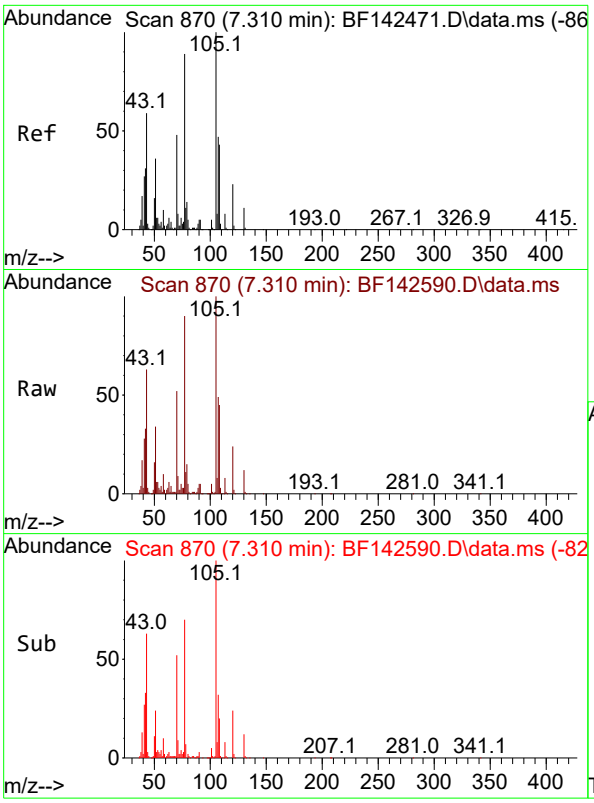


#18
Hexachloroethane
Concen: 38.042 ng
RT: 7.410 min Scan# 887
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:117 Resp: 108916

Ion	Ratio	Lower	Upper
117	100		
119	95.3	76.6	114.8
201	96.8	81.3	121.9



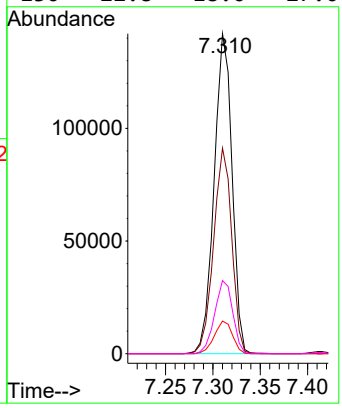


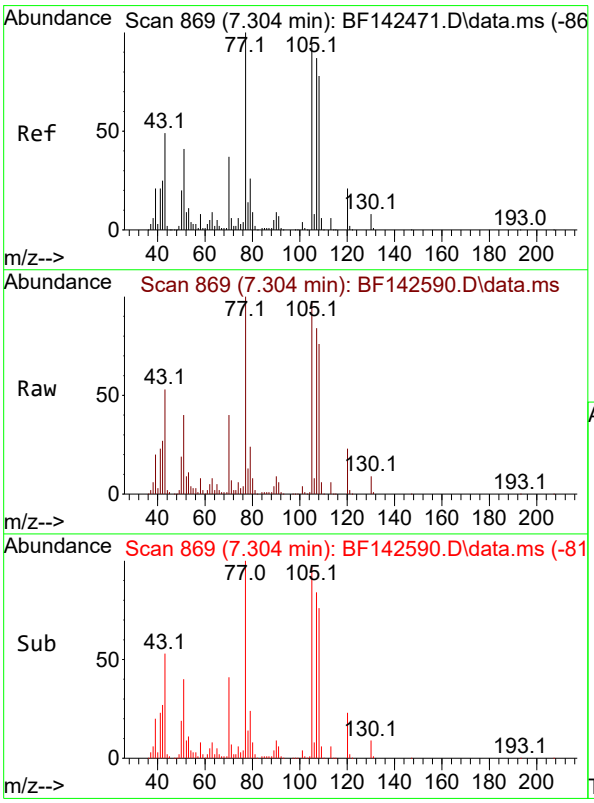
#19
n-Nitroso-di-n-propylamine
Concen: 37.435 ng
RT: 7.310 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 70 Resp: 187037

Ion	Ratio	Lower	Upper
70	100		
42	64.3	52.4	78.6
101	10.2	7.8	11.8
130	22.8	18.0	27.0

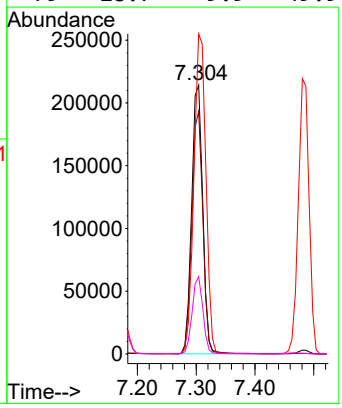


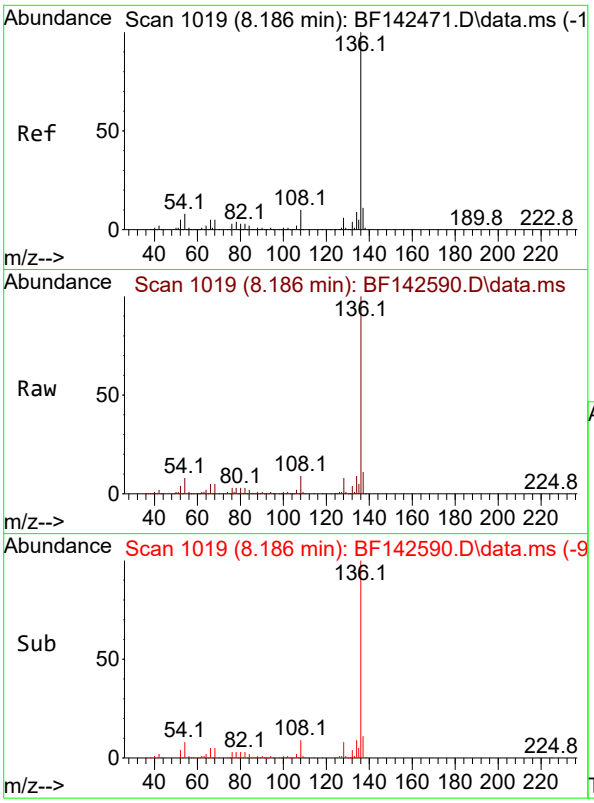


#20
3+4-Methylphenols
Concen: 38.443 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:107 Resp: 280371

Ion	Ratio	Lower	Upper
107	100		
108	90.2	70.4	110.4
77	119.0	95.4	135.4
79	28.7	9.9	49.9



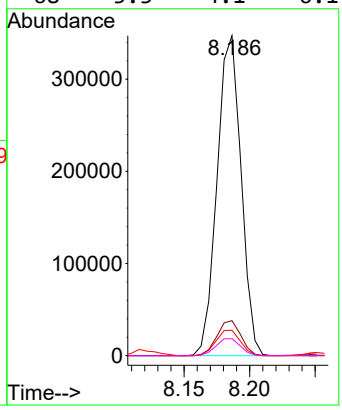


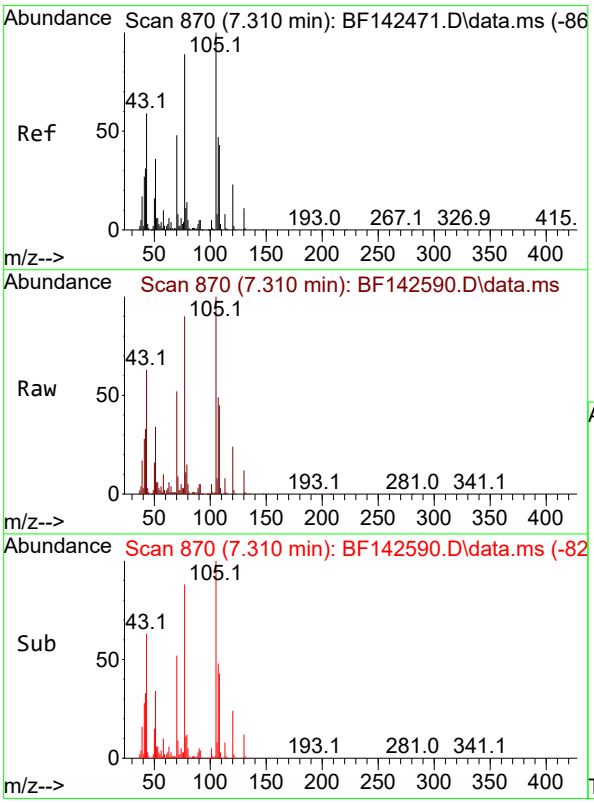
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:136 Resp: 441878

Ion	Ratio	Lower	Upper
136	100		
137	11.0	8.6	13.0
54	8.0	6.6	10.0
68	5.3	4.1	6.1

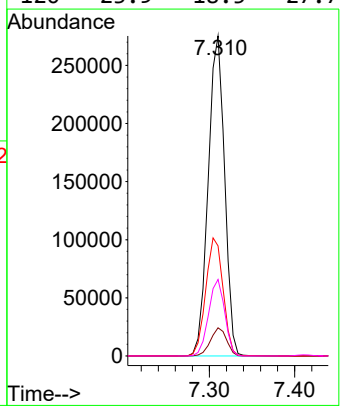


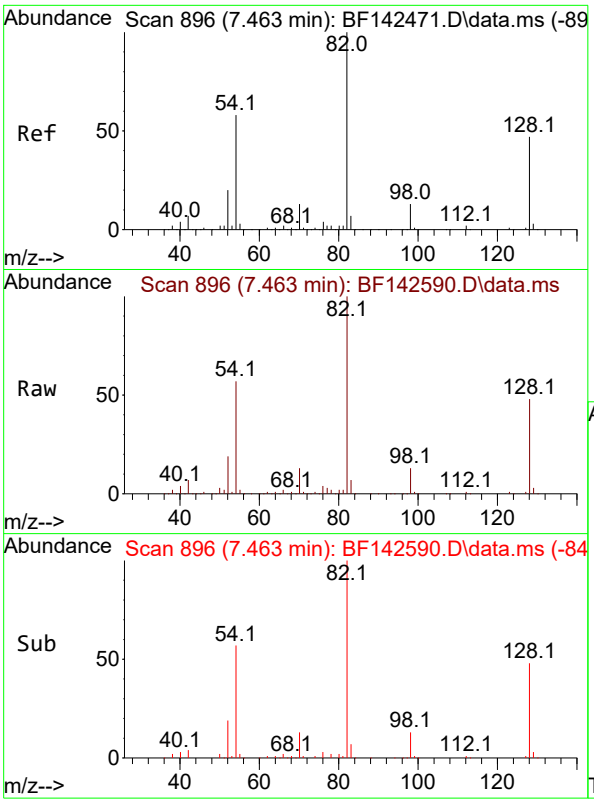


#22
Acetophenone
Concen: 37.647 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:105 Resp: 368253

Ion	Ratio	Lower	Upper
105	100		
71	8.8	6.4	9.6
51	34.4	28.6	42.8
120	23.9	18.5	27.7



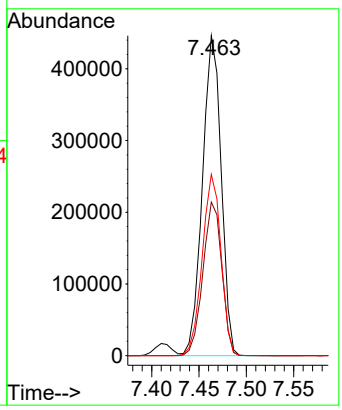


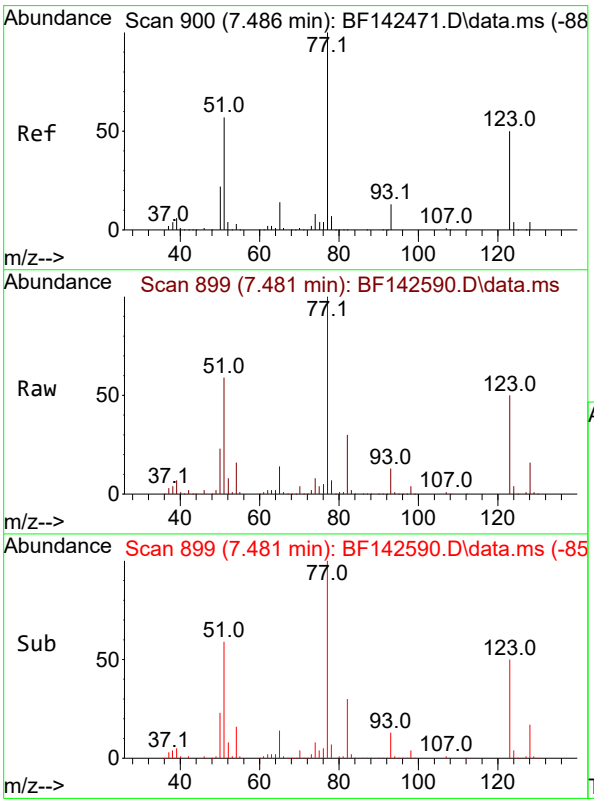
#23
Nitrobenzene-d5
Concen: 75.793 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 82 Resp: 614193

Ion	Ratio	Lower	Upper
82	100		
128	48.0	37.4	56.2
54	56.7	46.6	70.0

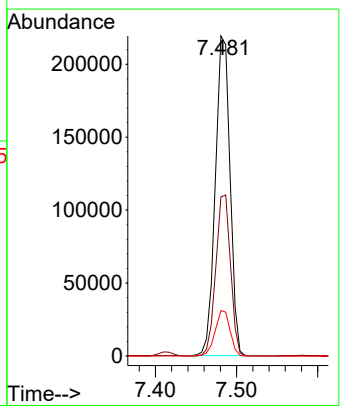


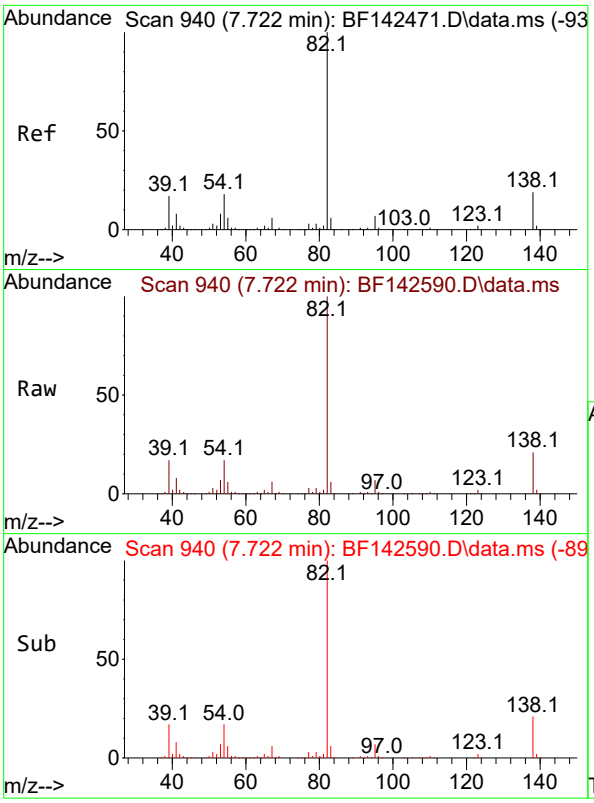


#24
Nitrobenzene
Concen: 37.981 ng
RT: 7.481 min Scan# 899
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 77 Resp: 277591

Ion	Ratio	Lower	Upper
77	100		
123	49.7	40.6	61.0
65	14.2	11.4	17.2



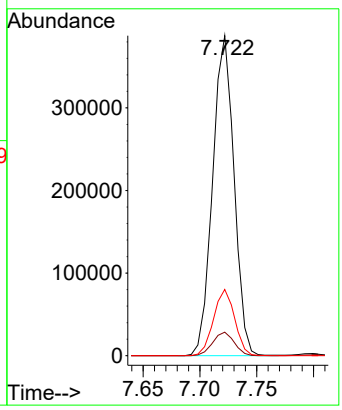


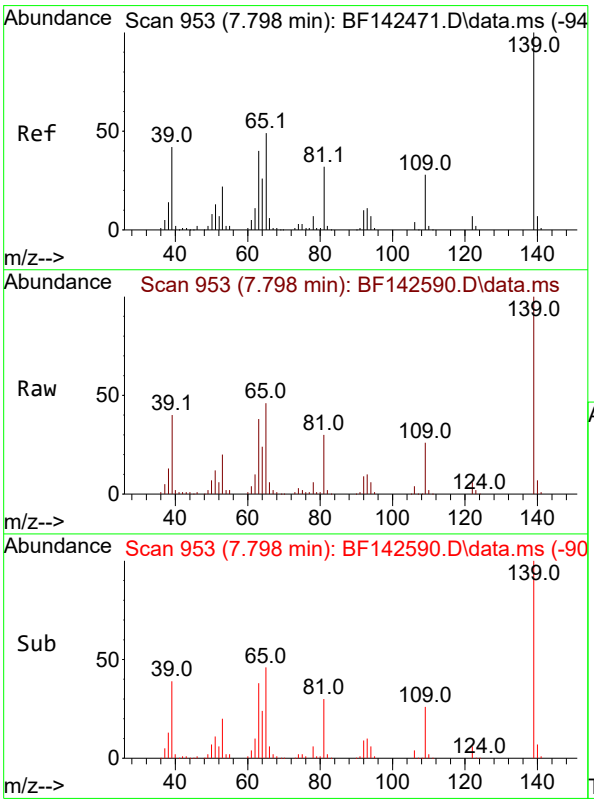
#25
Isophorone
Concen: 37.499 ng
RT: 7.722 min Scan# 94
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 82 Resp: 508065

Ion	Ratio	Lower	Upper
82	100		
95	7.4	6.0	9.0
138	20.7	15.5	23.3

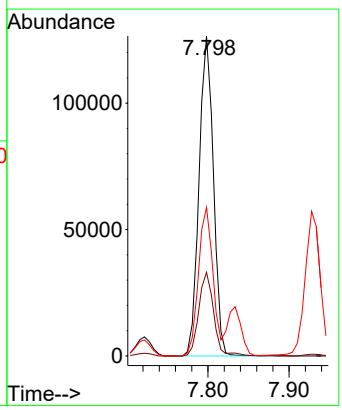


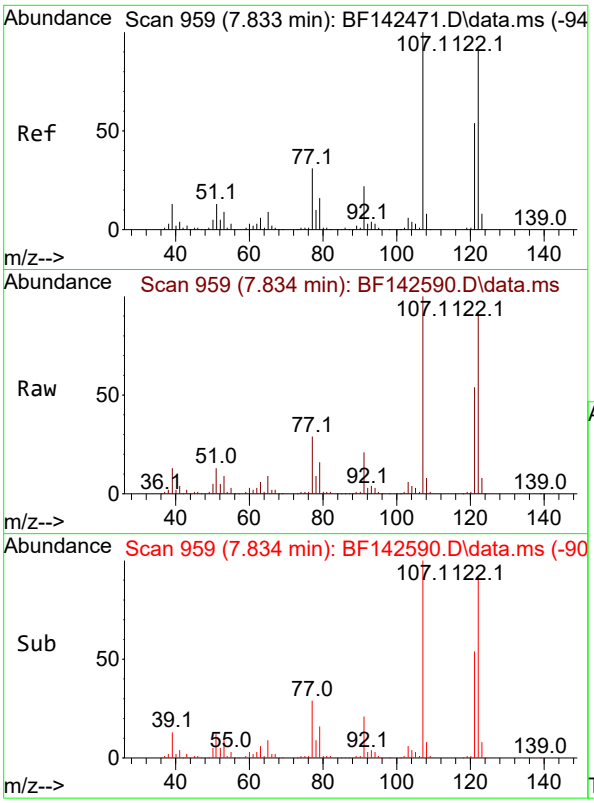


#26
2-Nitrophenol
Concen: 39.842 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:139 Resp: 155595

Ion	Ratio	Lower	Upper
139	100		
109	26.1	22.6	33.8
65	46.5	39.4	59.0



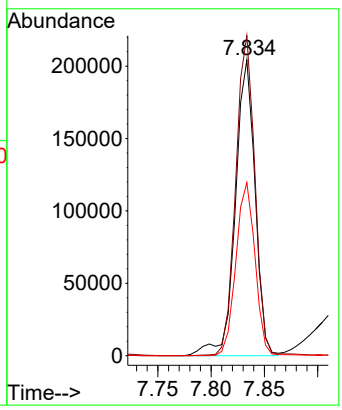


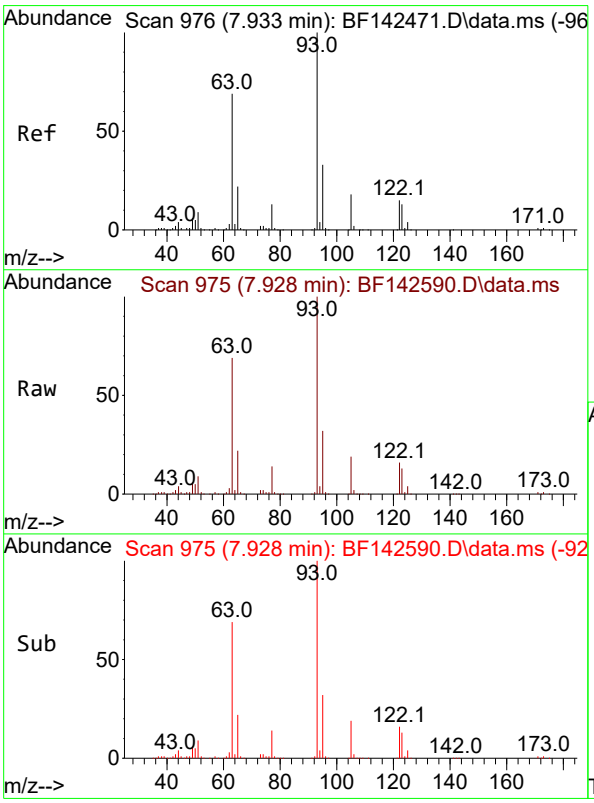
#27
2,4-Dimethylphenol
Concen: 38.389 ng
RT: 7.834 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:122 Resp: 264387

Ion	Ratio	Lower	Upper
122	100		
107	108.2	88.1	132.1
121	58.5	47.3	70.9

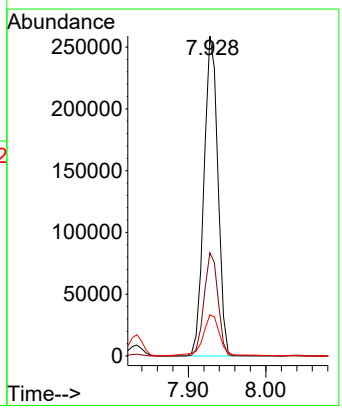


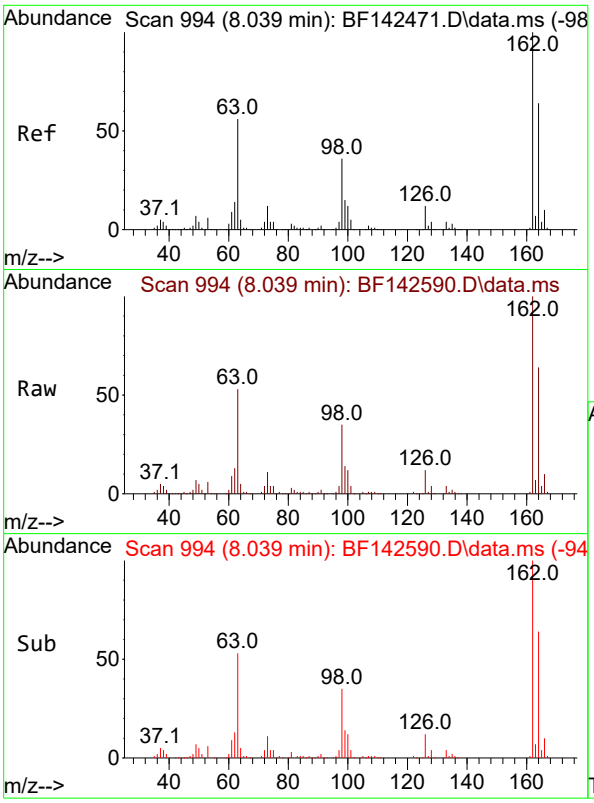


#28
bis(2-Chloroethoxy)methane
Concen: 38.126 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 93 Resp: 322678

Ion	Ratio	Lower	Upper
93	100		
95	32.3	26.4	39.6
123	12.8	10.6	15.8



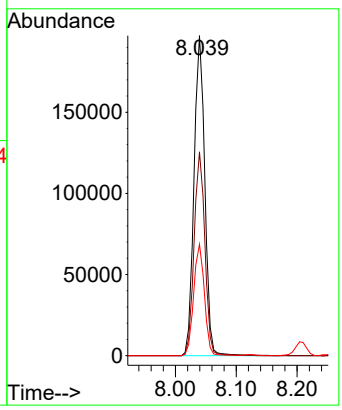


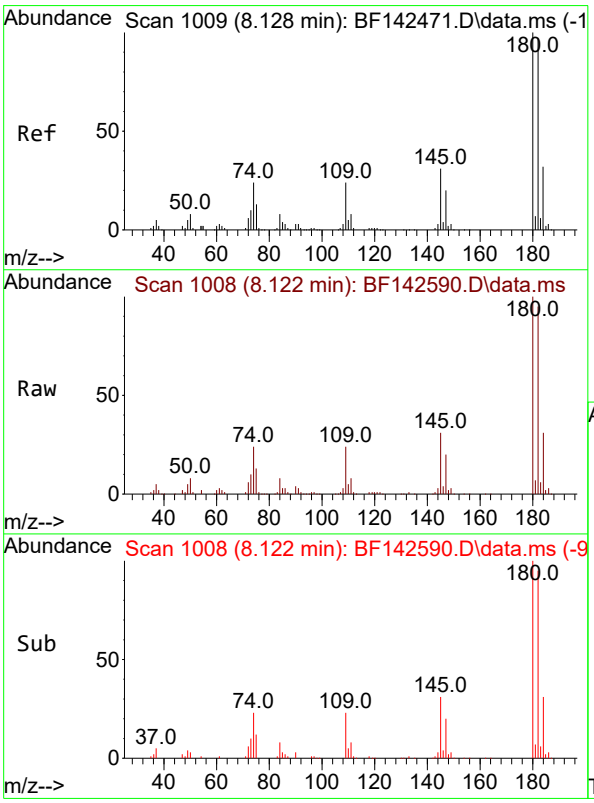
#29
2,4-Dichlorophenol
Concen: 38.802 ng
RT: 8.039 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:162 Resp: 243024

Ion	Ratio	Lower	Upper
162	100		
164	63.7	43.7	83.7
98	34.8	15.5	55.5

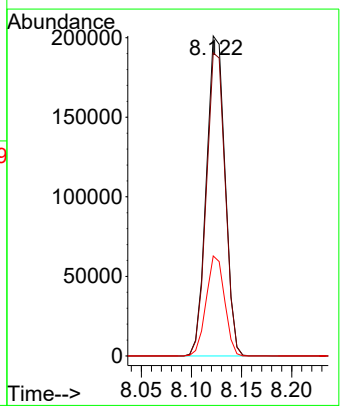


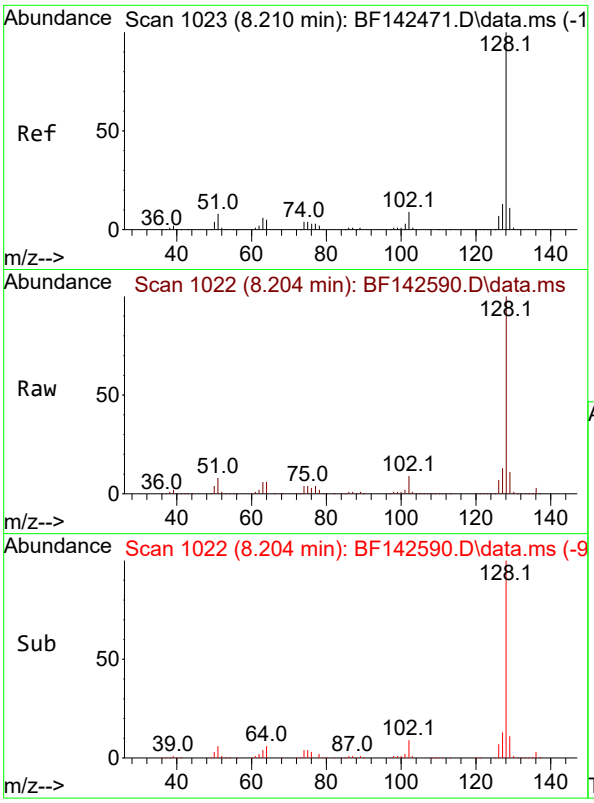


#30
1,2,4-Trichlorobenzene
Concen: 38.470 ng
RT: 8.122 min Scan# 1008
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:180 Resp: 261489

Ion	Ratio	Lower	Upper
180	100		
182	94.7	78.0	117.0
145	31.3	25.0	37.6



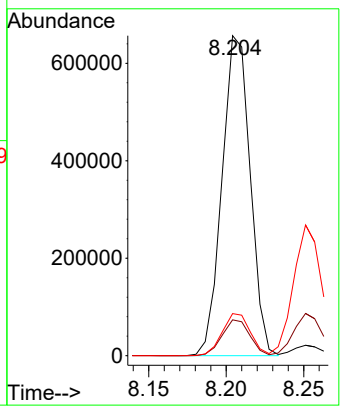


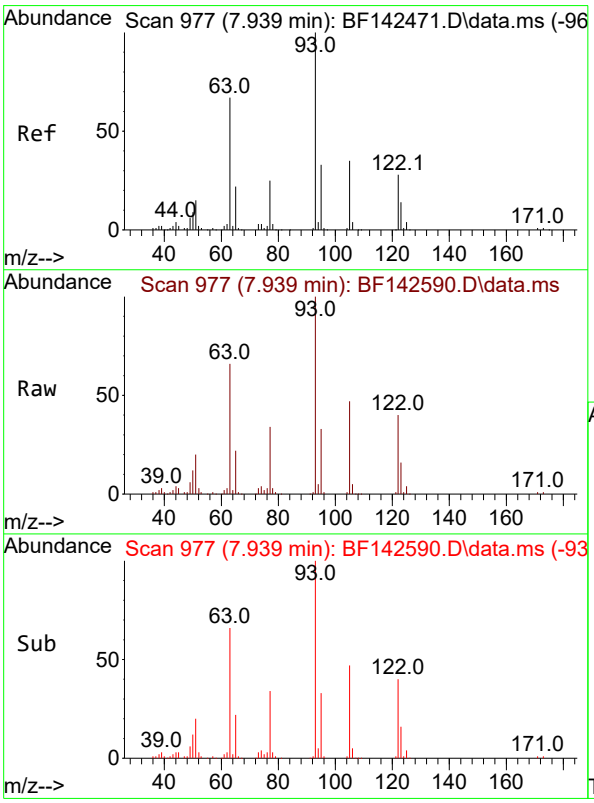
#31
Naphthalene
Concen: 38.160 ng
RT: 8.204 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:128 Resp: 830285

Ion	Ratio	Lower	Upper
128	100		
129	11.2	8.9	13.3
127	13.1	10.5	15.7

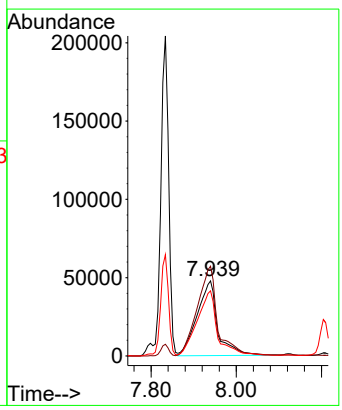


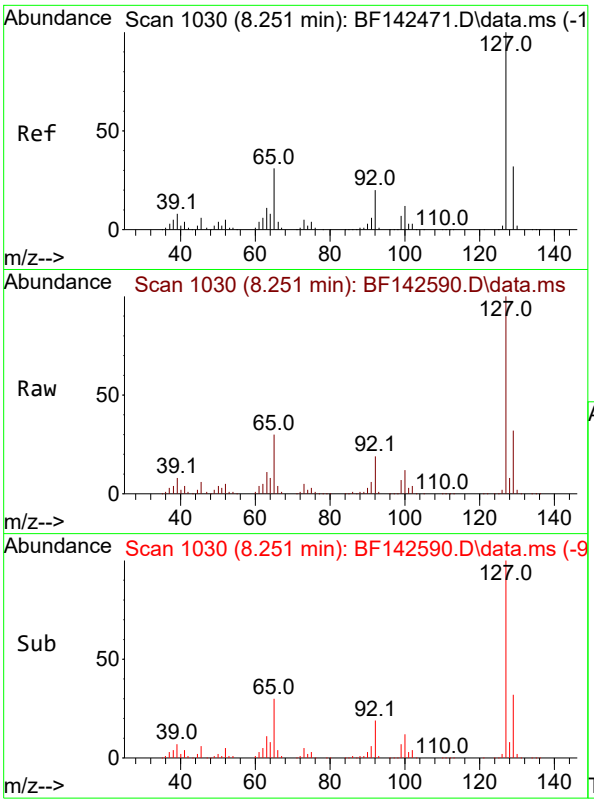


#32
Benzoic acid
Concen: 38.227 ng
RT: 7.939 min Scan# 977
Delta R.T. -0.036 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:122 Resp: 160260

Ion	Ratio	Lower	Upper
122	100		
105	119.5	101.7	141.7
77	86.6	69.5	109.5



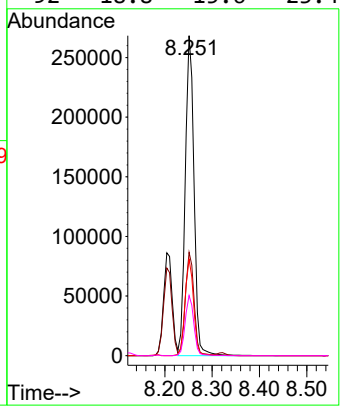


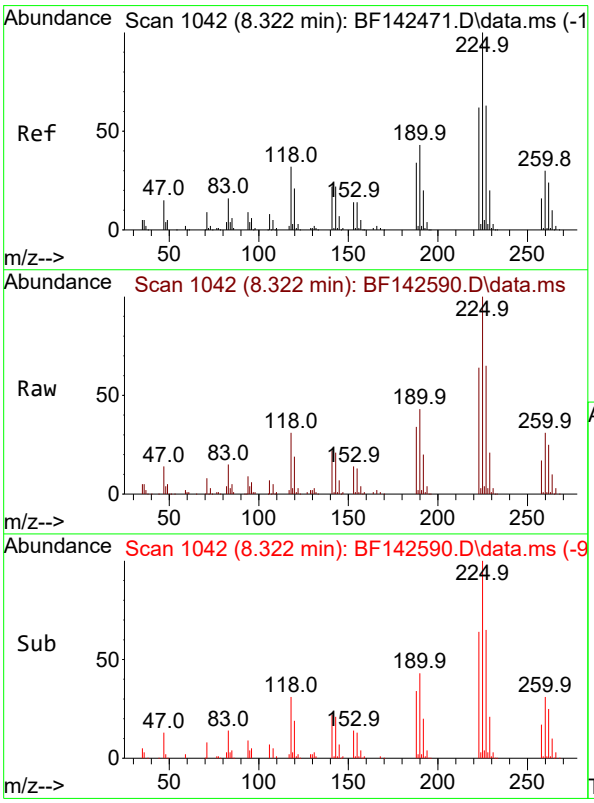
#33
4-Chloroaniline
Concen: 38.998 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:127 Resp: 343825

Ion	Ratio	Lower	Upper
127	100		
129	32.3	26.1	39.1
65	30.2	24.9	37.3
92	18.8	15.6	23.4

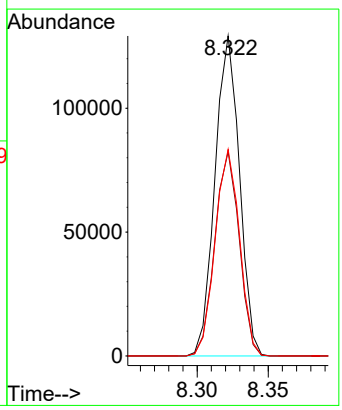


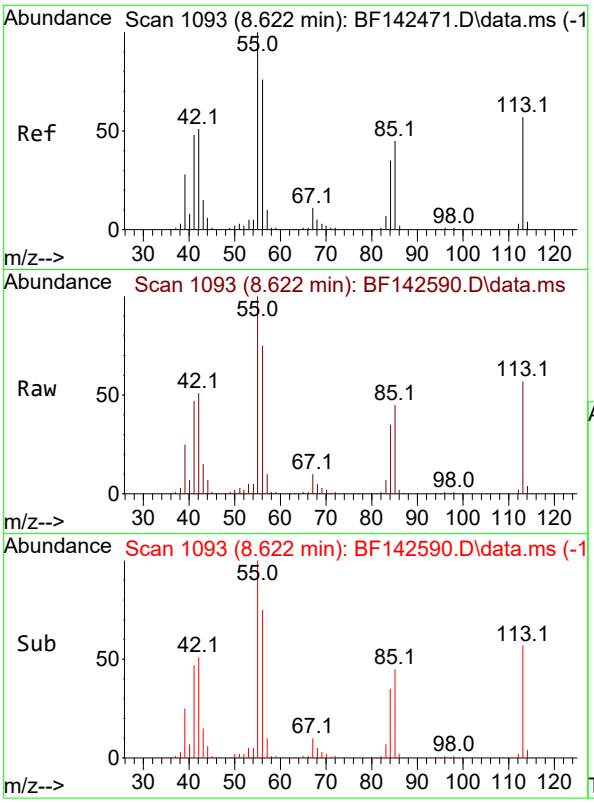


#34
Hexachlorobutadiene
Concen: 36.459 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:225 Resp: 154741

Ion	Ratio	Lower	Upper
225	100		
223	63.8	49.7	74.5
227	64.6	50.3	75.5



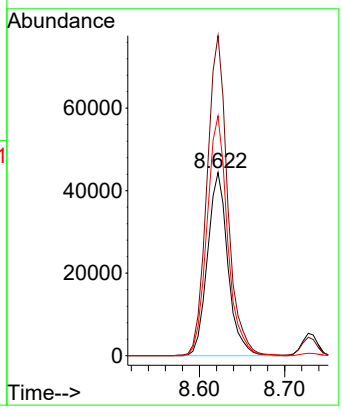


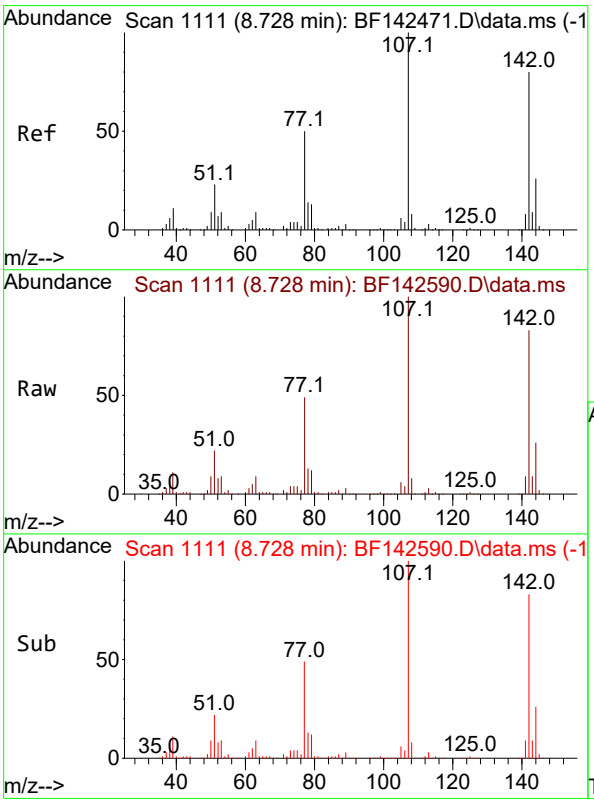
#35
Caprolactam
Concen: 41.974 ng
RT: 8.622 min Scan# 1
Delta R.T. -0.023 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:113 Resp: 73834

Ion	Ratio	Lower	Upper
113	100		
55	174.6	154.7	194.7
56	130.9	113.2	153.2

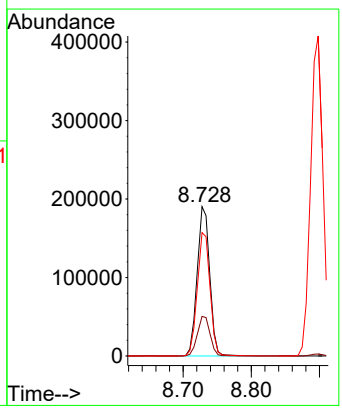


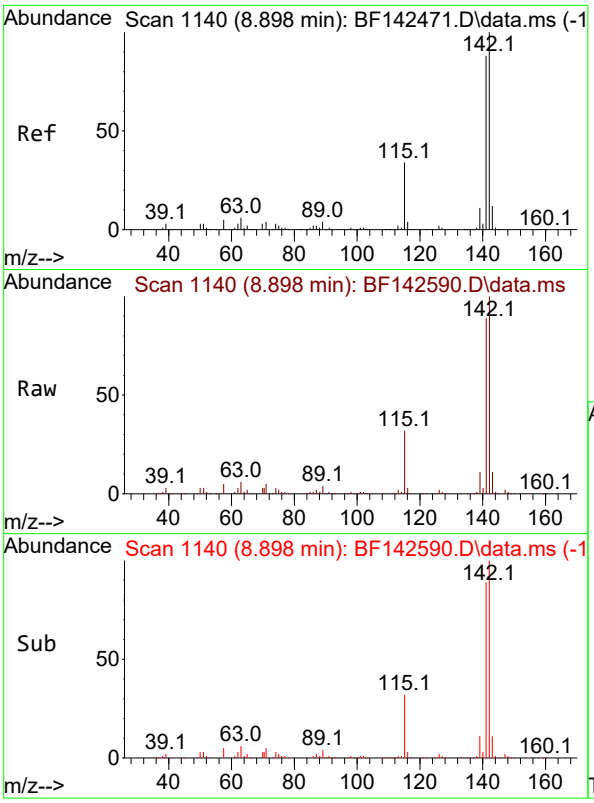


#36
4-Chloro-3-methylphenol
Concen: 37.891 ng
RT: 8.728 min Scan# 1111
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:107 Resp: 243211

Ion	Ratio	Lower	Upper
107	100		
144	26.4	20.9	31.3
142	82.6	64.2	96.2



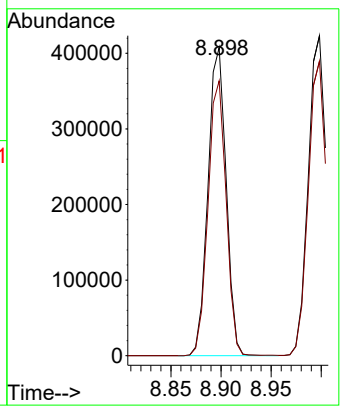


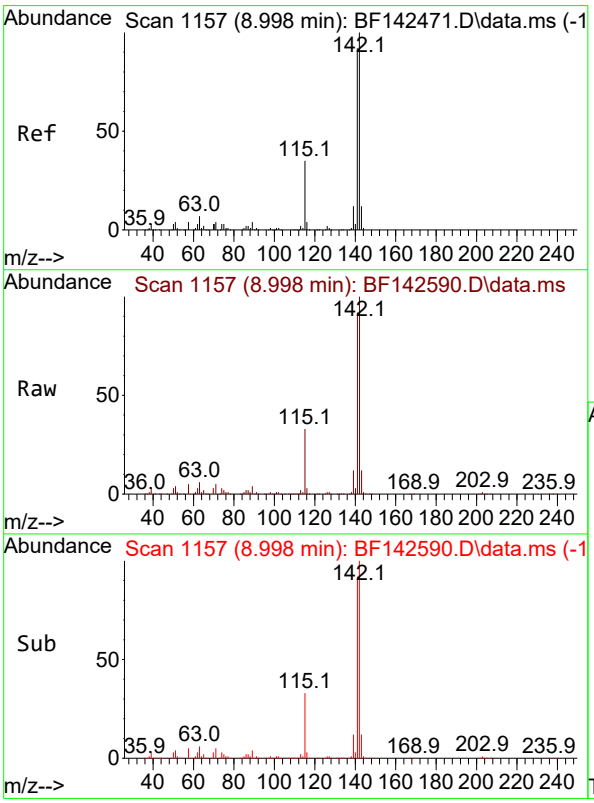
#37
2-Methylnaphthalene
Concen: 37.513 ng
RT: 8.898 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:142 Resp: 513490

Ion	Ratio	Lower	Upper
142	100		
141	89.2	70.7	106.1

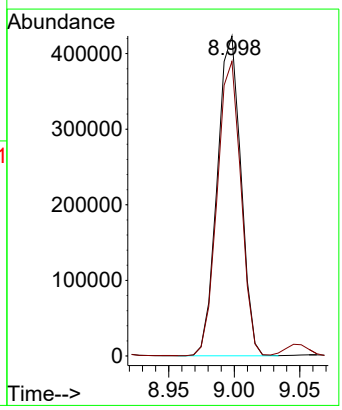


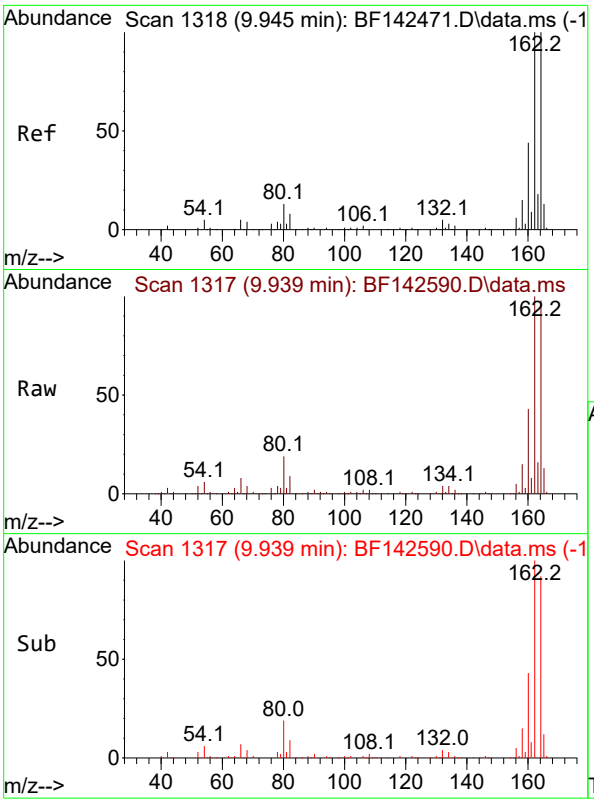


#38
1-Methylnaphthalene
Concen: 37.476 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:142 Resp: 530617

Ion	Ratio	Lower	Upper
142	100		
141	92.0	73.4	110.2



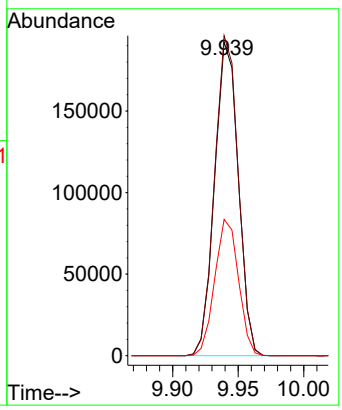


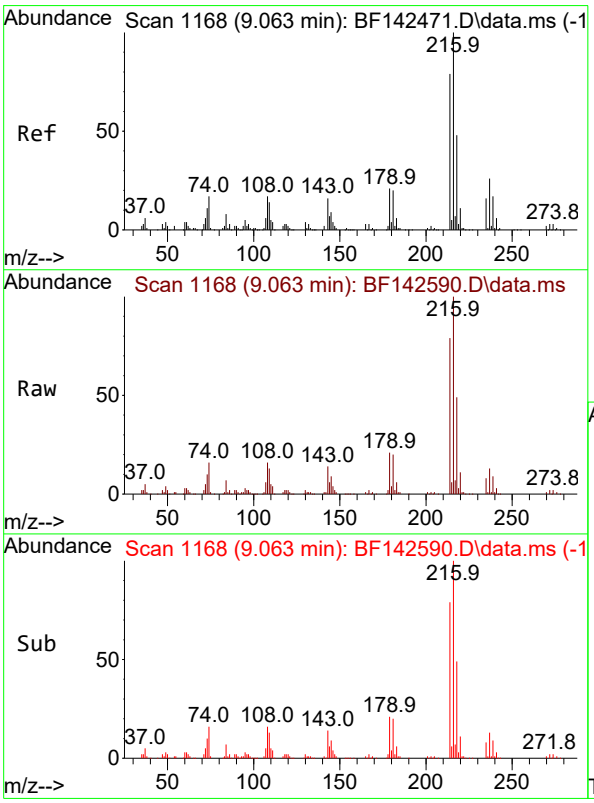
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:164 Resp: 241388

Ion	Ratio	Lower	Upper
164	100		
162	102.0	80.2	120.4
160	43.4	35.6	53.4

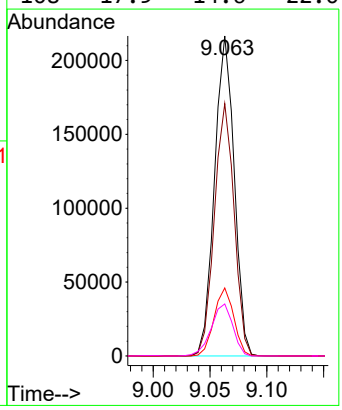


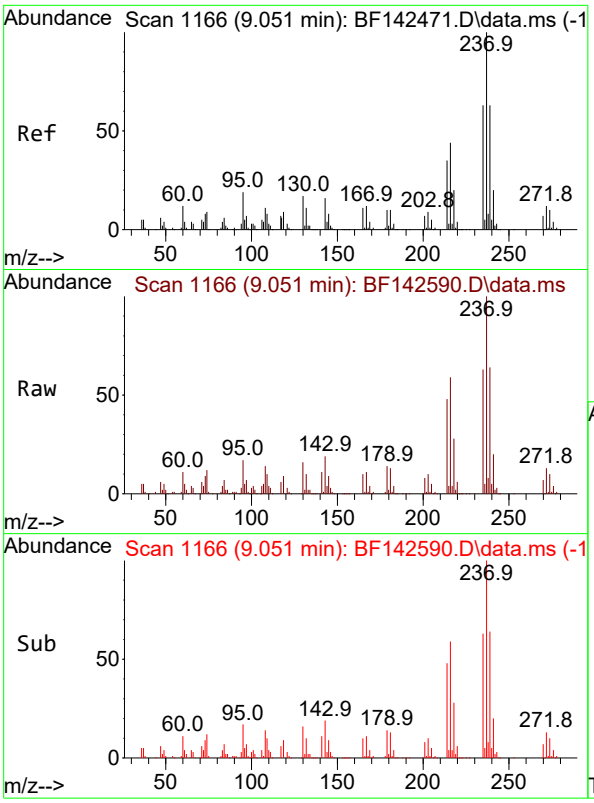


#40
1,2,4,5-Tetrachlorobenzene
Concen: 37.735 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:216 Resp: 261475

Ion	Ratio	Lower	Upper
216	100		
214	78.8	62.9	94.3
179	21.2	16.9	25.3
108	17.9	14.6	22.0



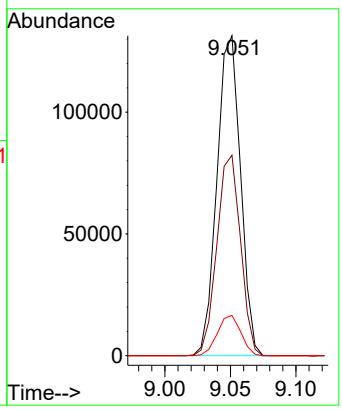


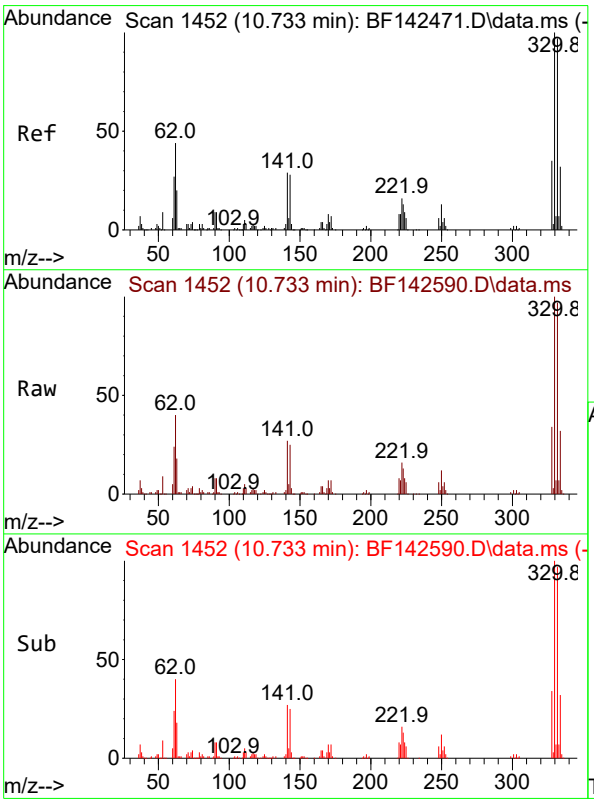
#41
Hexachlorocyclopentadiene
Concen: 35.099 ng
RT: 9.051 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:237 Resp: 164068

Ion	Ratio	Lower	Upper
237	100		
235	62.7	43.3	83.3
272	12.6	0.0	32.4

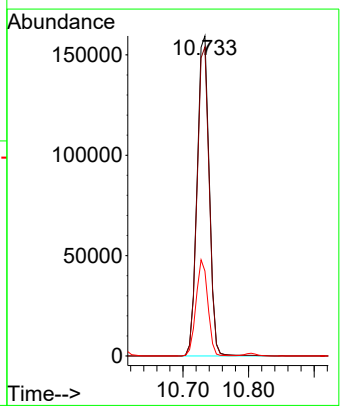


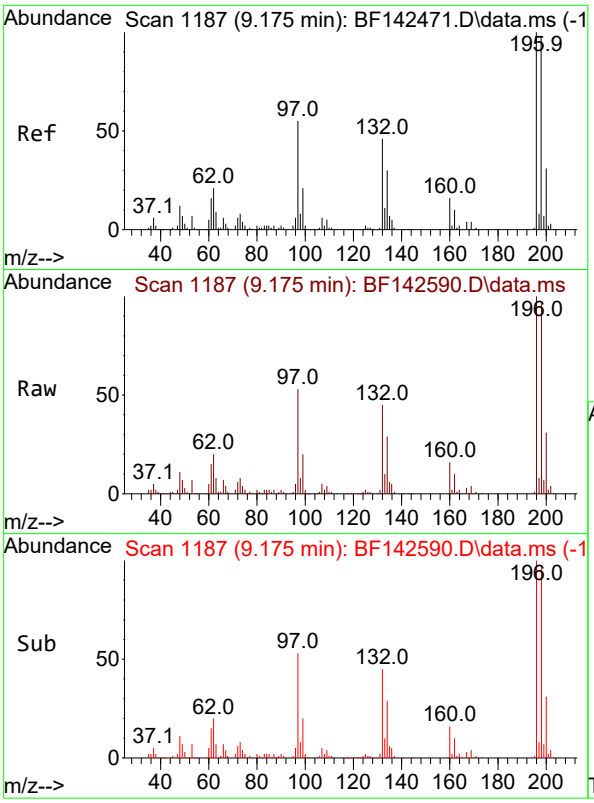


#42
2,4,6-Tribromophenol
Concen: 76.490 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:330 Resp: 204924

Ion	Ratio	Lower	Upper
330	100		
332	96.6	77.6	116.4
141	29.4	24.6	36.8



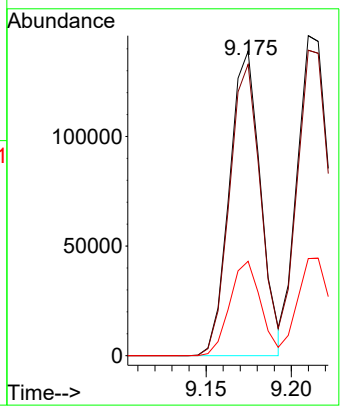


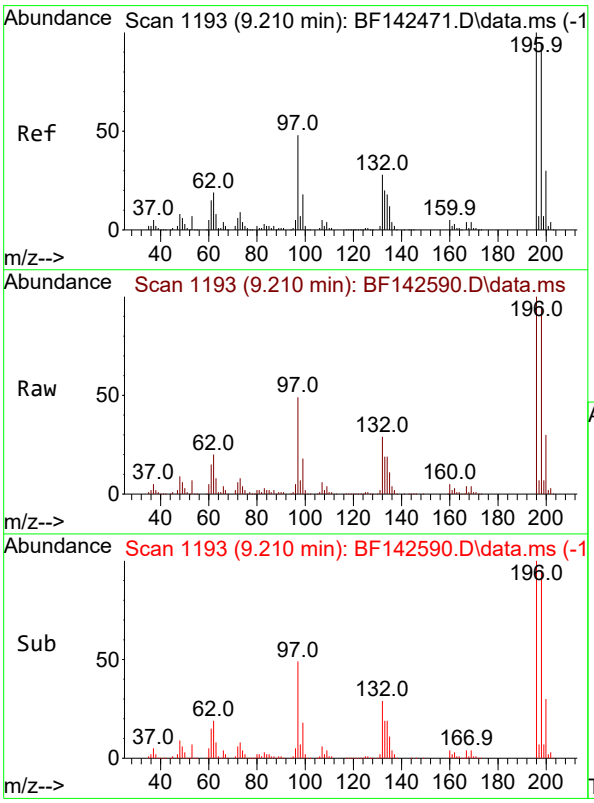
#43
2,4,6-Trichlorophenol
Concen: 37.821 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:196 Resp: 176717

Ion	Ratio	Lower	Upper
196	100		
198	95.7	78.8	118.2
200	31.0	24.9	37.3

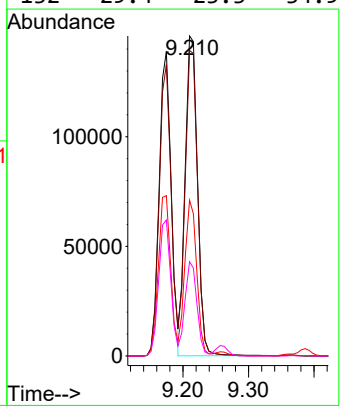


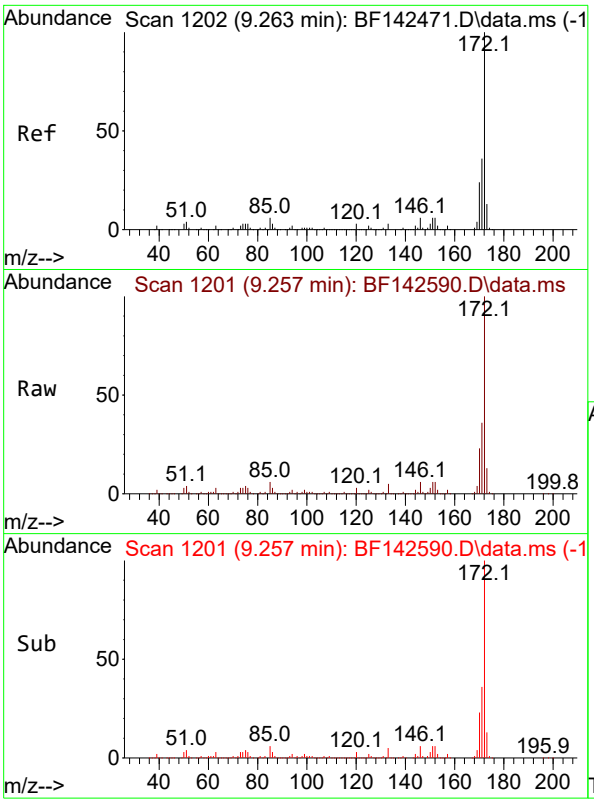


#44
2,4,5-Trichlorophenol
Concen: 38.794 ng
RT: 9.210 min Scan# 1193
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:196 Resp: 191168

Ion	Ratio	Lower	Upper
196	100		
198	95.4	75.5	113.3
97	48.7	39.3	58.9
132	29.4	23.3	34.9



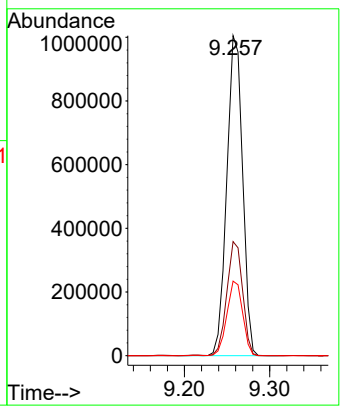


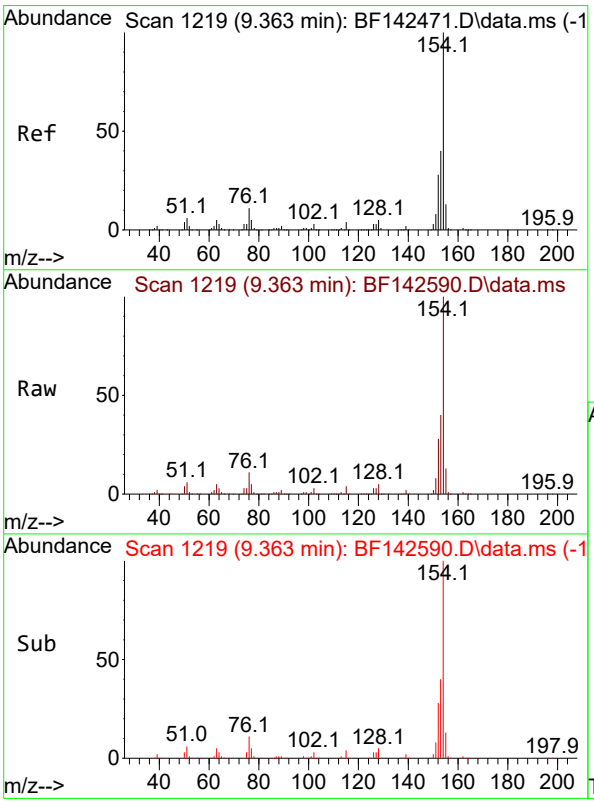
#45
2-Fluorobiphenyl
Concen: 71.981 ng
RT: 9.257 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:172 Resp: 1294863

Ion	Ratio	Lower	Upper
172	100		
171	35.6	28.6	42.8
170	23.3	18.9	28.3

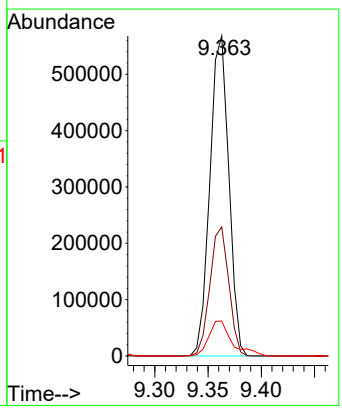


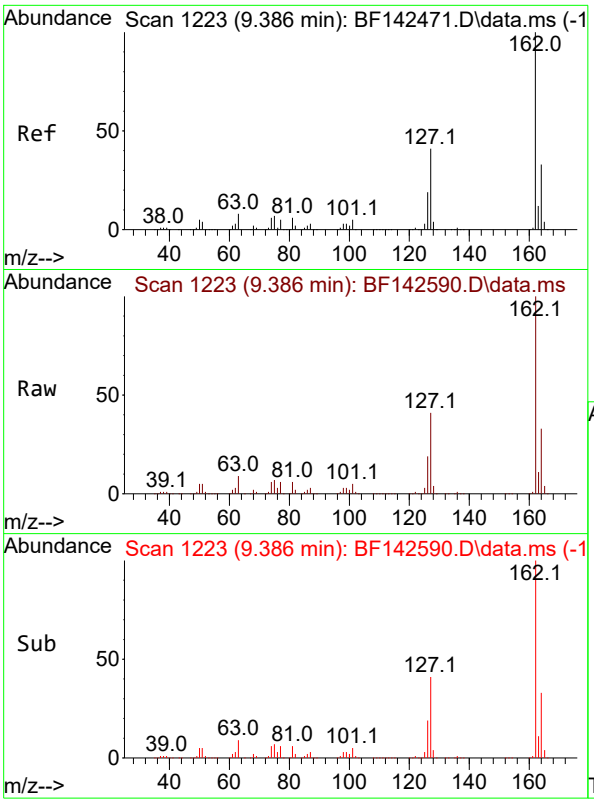


#46
1,1'-Biphenyl
Concen: 37.504 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:154 Resp: 702351

Ion	Ratio	Lower	Upper
154	100		
153	40.3	20.4	60.4
76	10.9	0.0	30.8



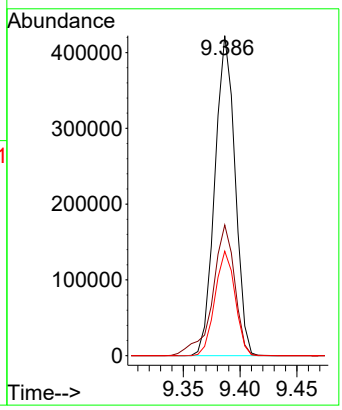


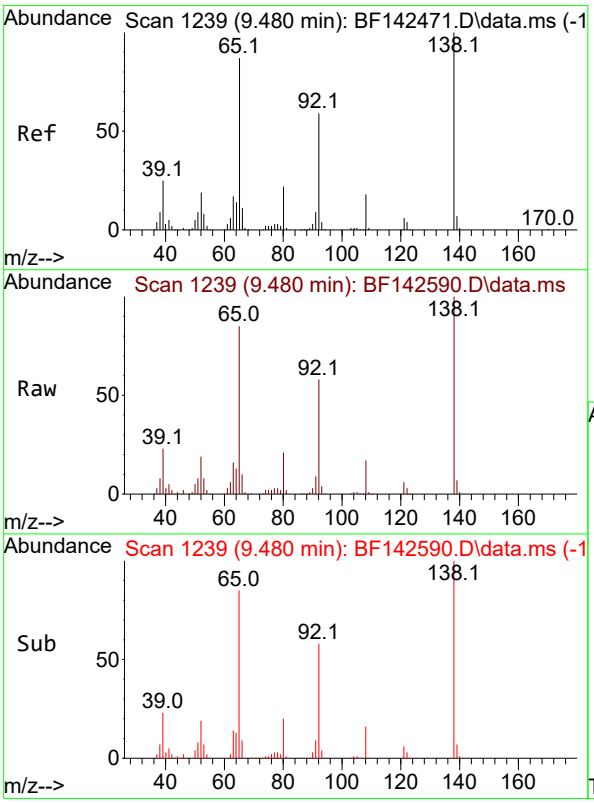
#47
2-Chloronaphthalene
Concen: 37.693 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:162 Resp: 521535

Ion	Ratio	Lower	Upper
162	100		
127	40.8	33.5	50.3
164	32.6	26.1	39.1

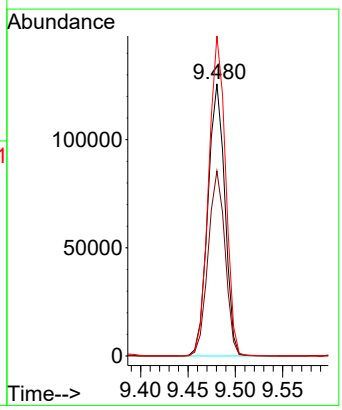


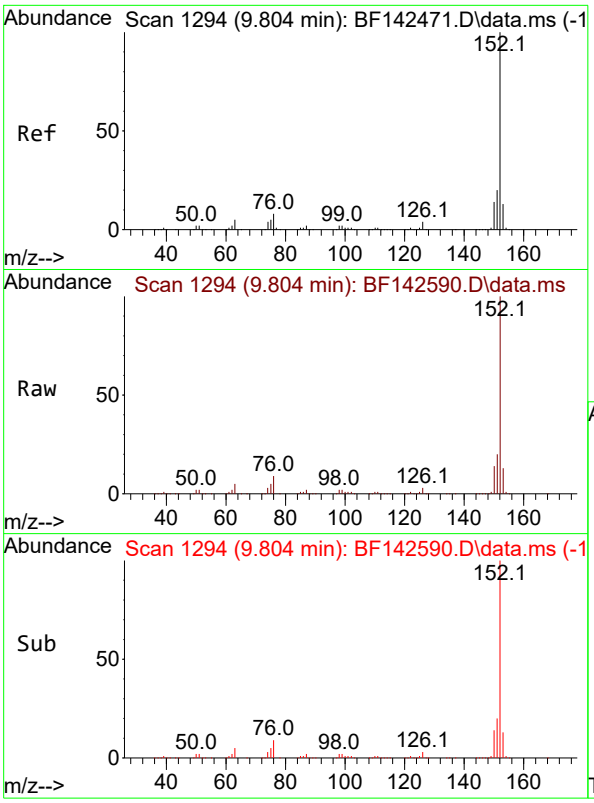


#48
2-Nitroaniline
Concen: 39.199 ng
RT: 9.480 min Scan# 1239
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion: 65 Resp: 156771

Ion	Ratio	Lower	Upper
65	100		
92	68.0	54.4	81.6
138	117.6	91.4	137.2



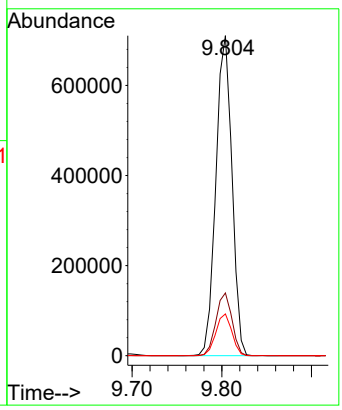


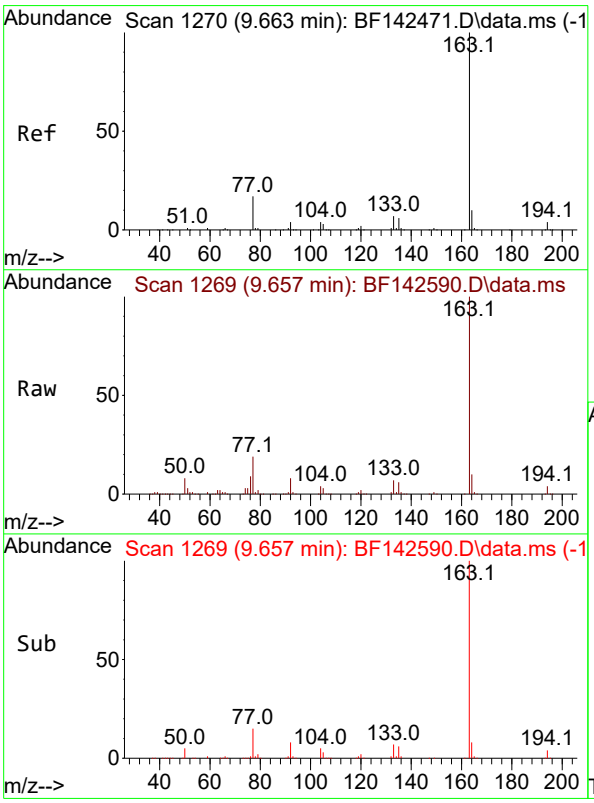
#49
Acenaphthylene
Concen: 37.812 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:152 Resp: 883436

Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.8	23.8
153	13.0	10.6	15.8

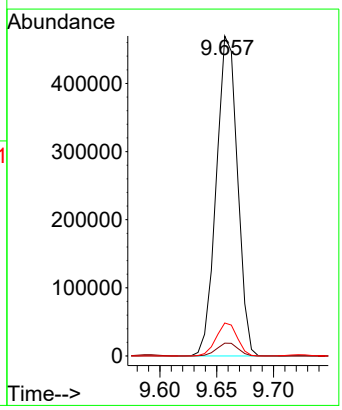


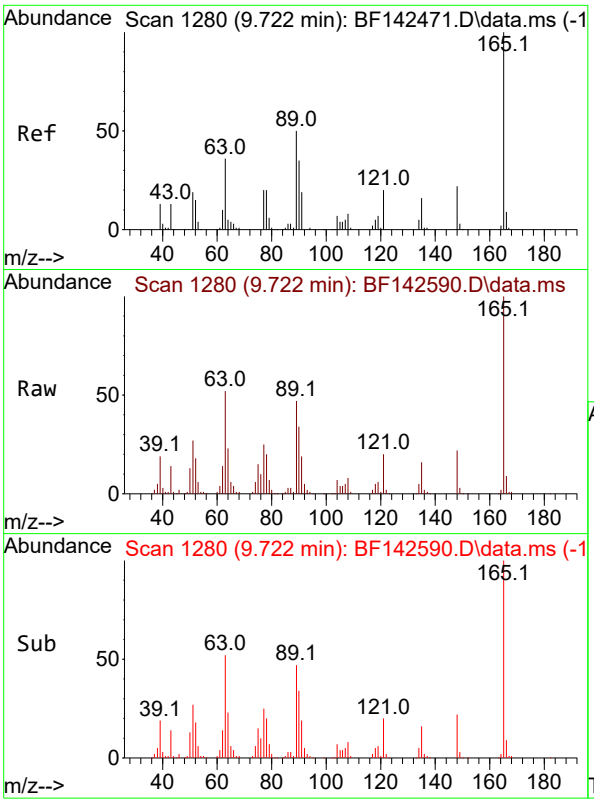


#50
Dimethylphthalate
Concen: 38.278 ng
RT: 9.657 min Scan# 1269
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:163 Resp: 609673

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.3	4.9
164	10.3	8.2	12.4



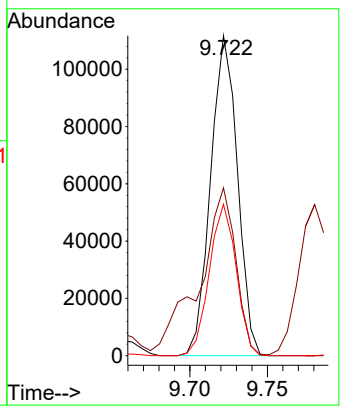


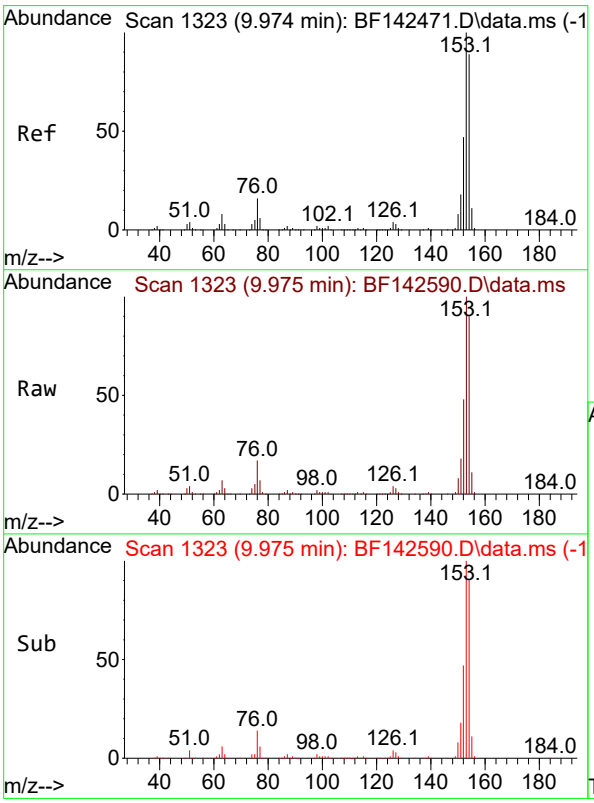
#51
2,6-Dinitrotoluene
Concen: 39.122 ng
RT: 9.722 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:165 Resp: 134489

Ion	Ratio	Lower	Upper
165	100		
63	52.4	42.9	64.3
89	47.3	40.2	60.4

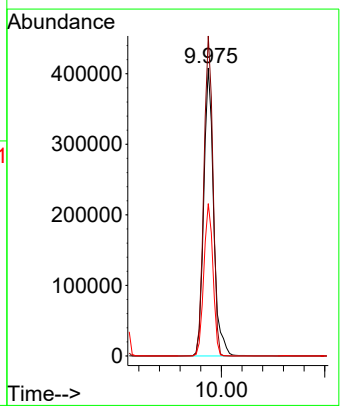


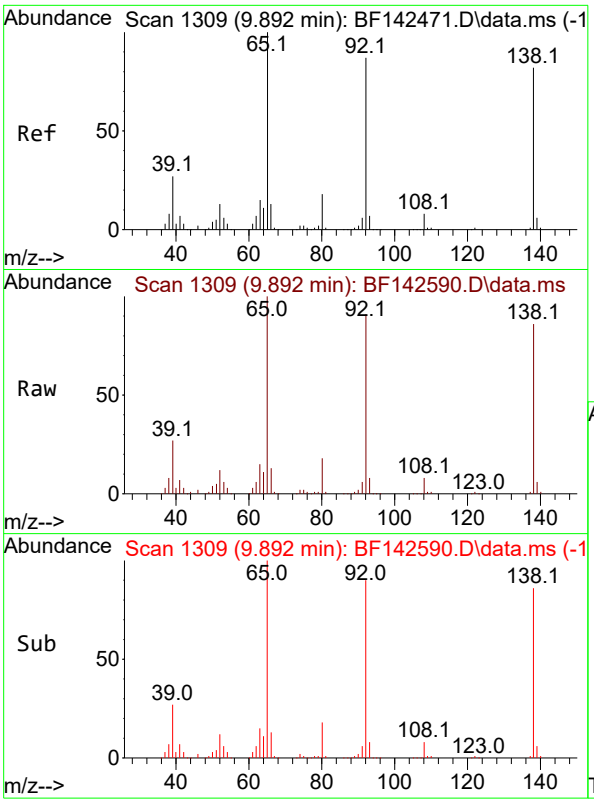


#52
Acenaphthene
Concen: 37.817 ng
RT: 9.975 min Scan# 1323
Delta R.T. -0.005 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:154 Resp: 539520

Ion	Ratio	Lower	Upper
154	100		
153	111.1	90.0	135.0
152	52.9	42.6	64.0



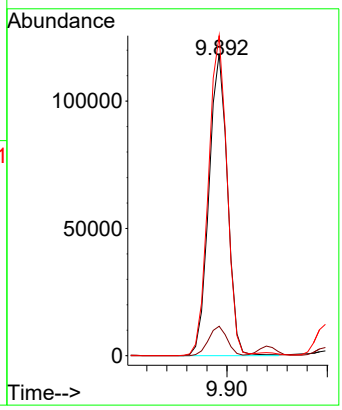


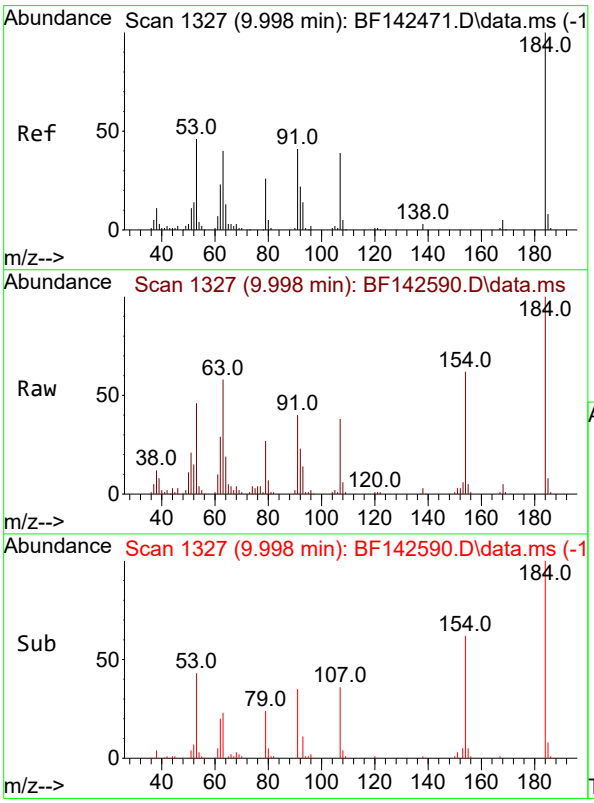
#53
3-Nitroaniline
Concen: 40.472 ng
RT: 9.892 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:138 Resp: 151962

Ion	Ratio	Lower	Upper
138	100		
108	9.7	8.1	12.1
92	106.0	85.2	127.8

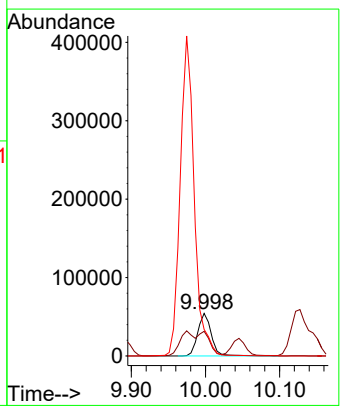


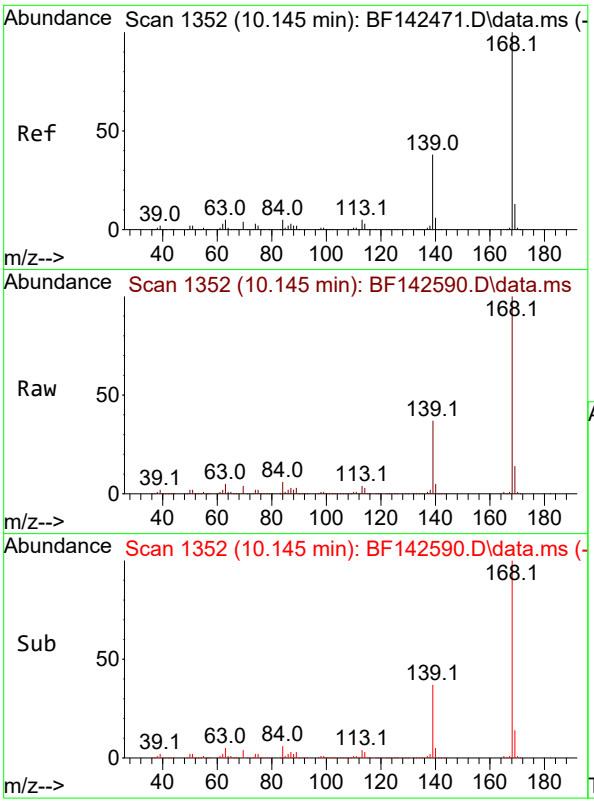


#54
2,4-Dinitrophenol
Concen: 38.796 ng
RT: 9.998 min Scan# 1327
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:184 Resp: 68903

Ion	Ratio	Lower	Upper
184	100		
63	57.9	46.3	69.5
154	62.3	56.8	85.2



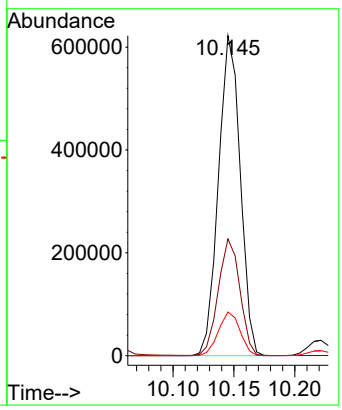


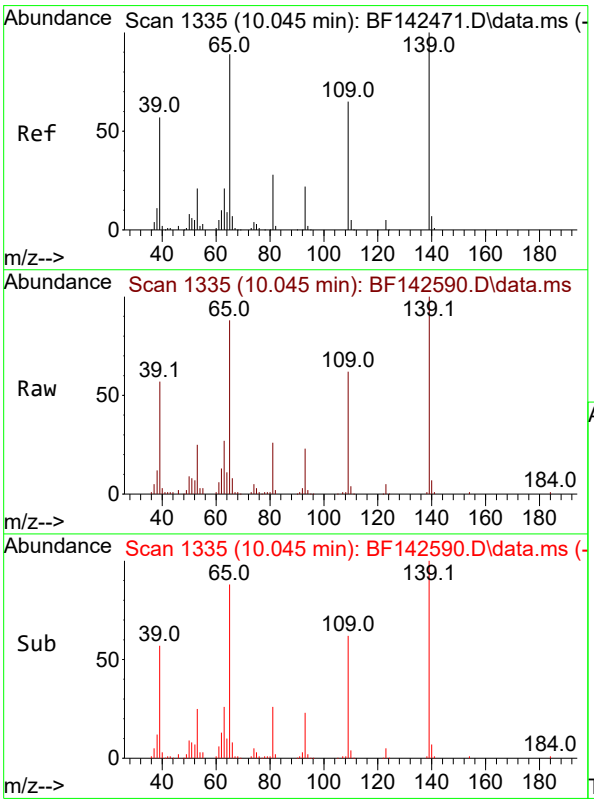
#55
Dibenzofuran
Concen: 37.777 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:168 Resp: 775550

Ion	Ratio	Lower	Upper
168	100		
139	36.5	30.2	45.2
169	13.7	10.7	16.1

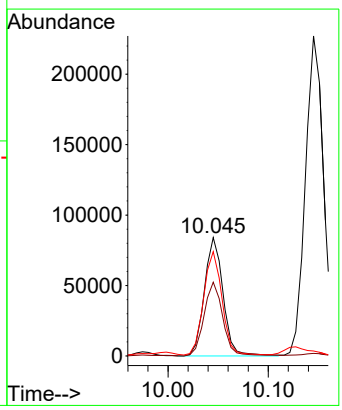


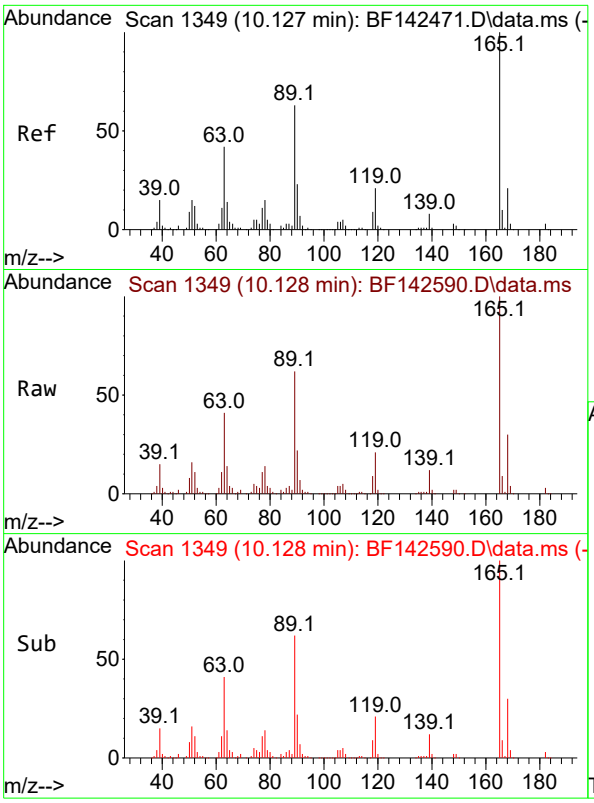


#56
4-Nitrophenol
Concen: 39.507 ng
RT: 10.045 min Scan# 1335
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:139 Resp: 109452

Ion	Ratio	Lower	Upper
139	100		
109	62.3	45.1	85.1
65	88.1	69.7	109.7



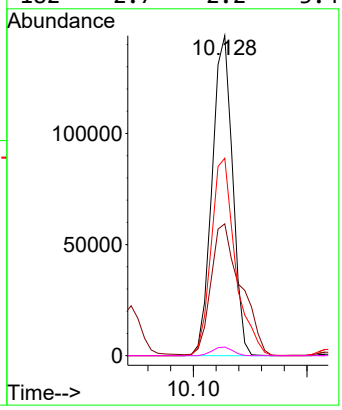


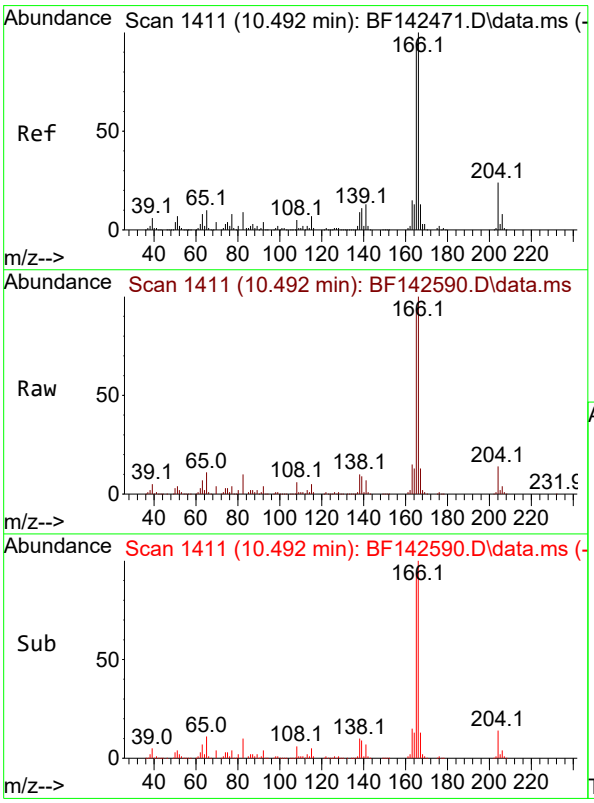
#57
2,4-Dinitrotoluene
Concen: 40.236 ng
RT: 10.128 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:165 Resp: 180640

Ion	Ratio	Lower	Upper
165	100		
63	41.2	33.6	50.4
89	61.7	50.2	75.4
182	2.7	2.2	3.4

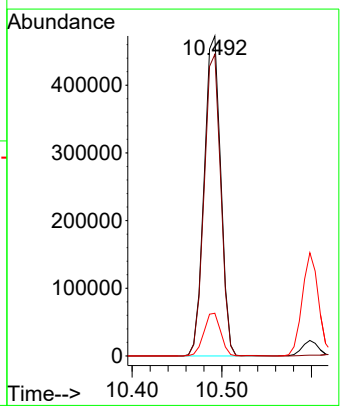


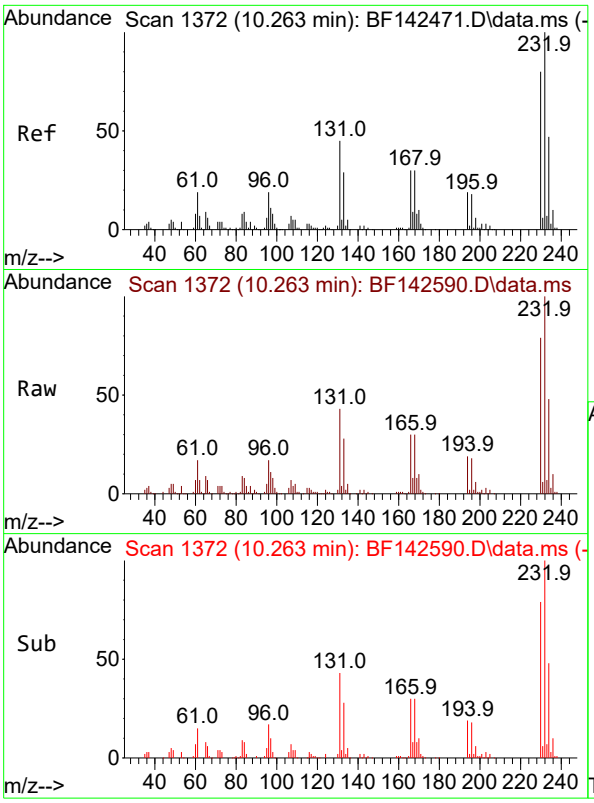


#58
Fluorene
Concen: 38.259 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:166 Resp: 606801

Ion	Ratio	Lower	Upper
166	100		
165	94.2	75.8	113.8
167	13.3	10.6	16.0



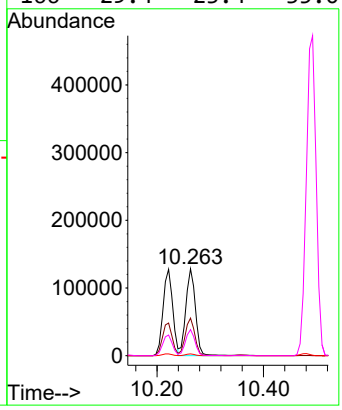


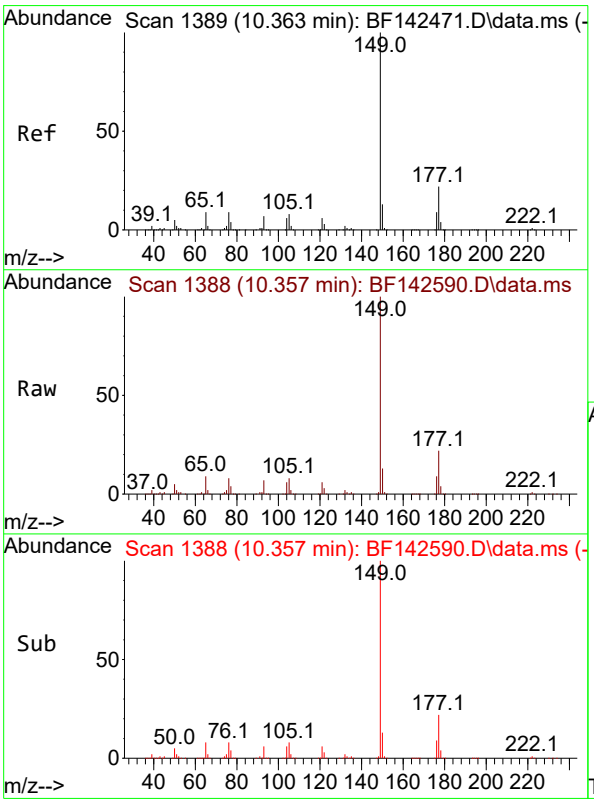
#59
2,3,4,6-Tetrachlorophenol
Concen: 39.192 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:232 Resp: 161231

Ion	Ratio	Lower	Upper
232	100		
131	43.1	35.2	52.8
130	2.0	1.7	2.5
166	29.4	23.4	35.0

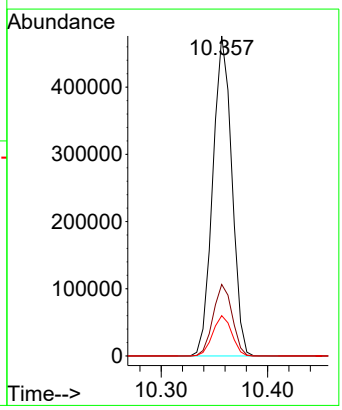


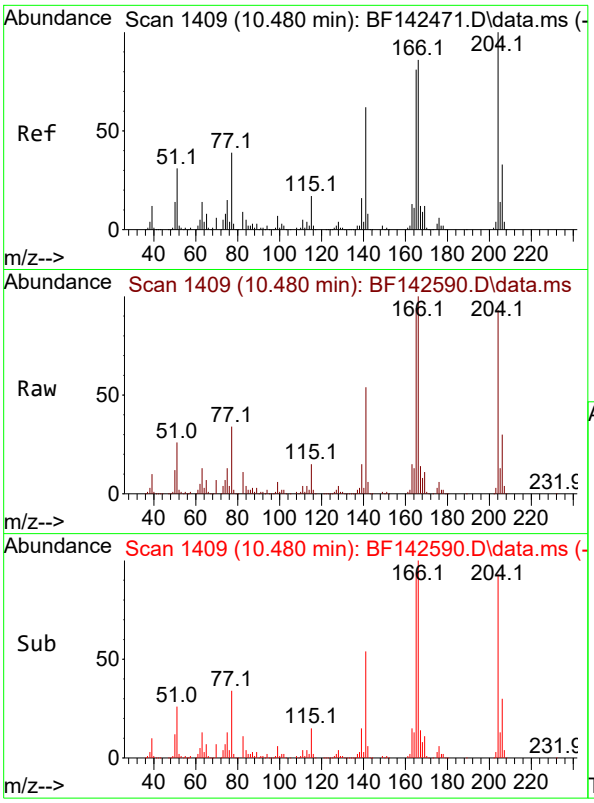


#60
Diethylphthalate
Concen: 38.041 ng
RT: 10.357 min Scan# 1388
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:149 Resp: 591746

Ion	Ratio	Lower	Upper
149	100		
177	22.3	17.6	26.4
150	12.6	10.1	15.1



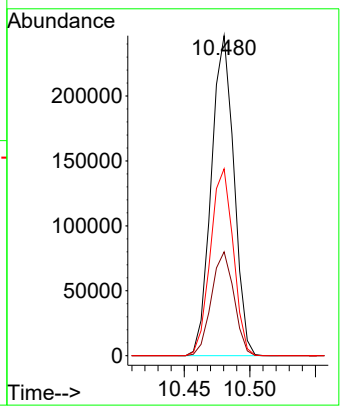


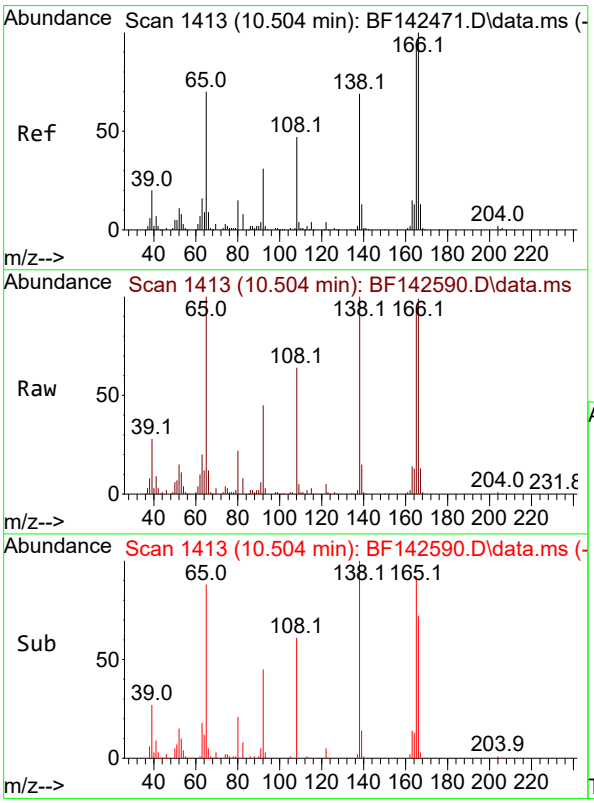
#61
4-Chlorophenyl-phenylether
Concen: 37.917 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:204 Resp: 295424

Ion	Ratio	Lower	Upper
204	100		
206	32.5	26.3	39.5
141	58.4	49.5	74.3

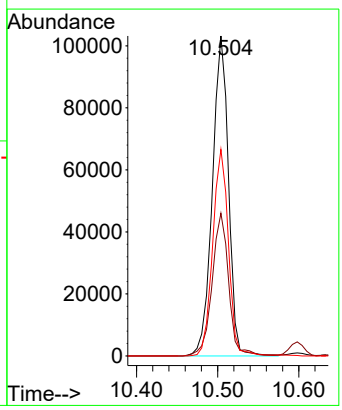


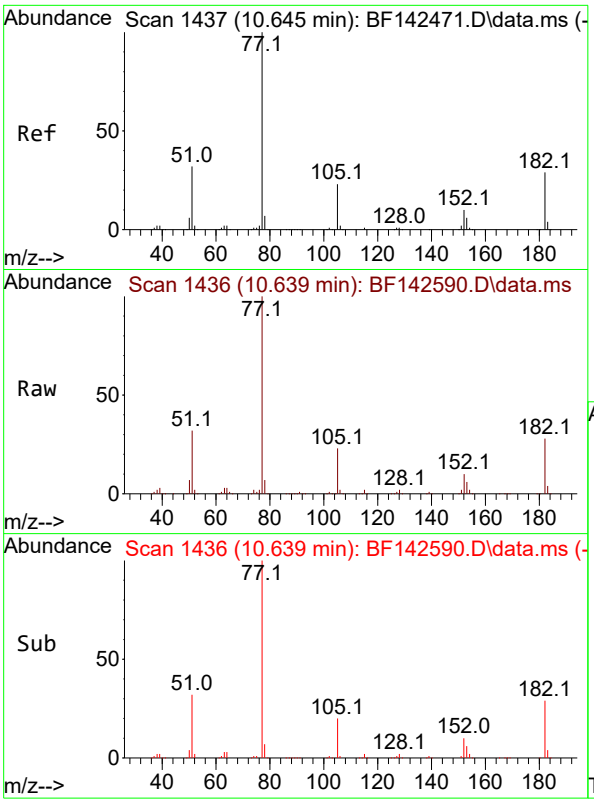


#62
4-Nitroaniline
Concen: 41.888 ng
RT: 10.504 min Scan# 1413
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:138 Resp: 142644

Ion	Ratio	Lower	Upper
138	100		
92	44.6	26.0	66.0
108	64.5	48.4	88.4



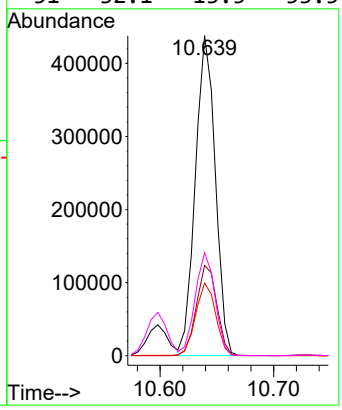


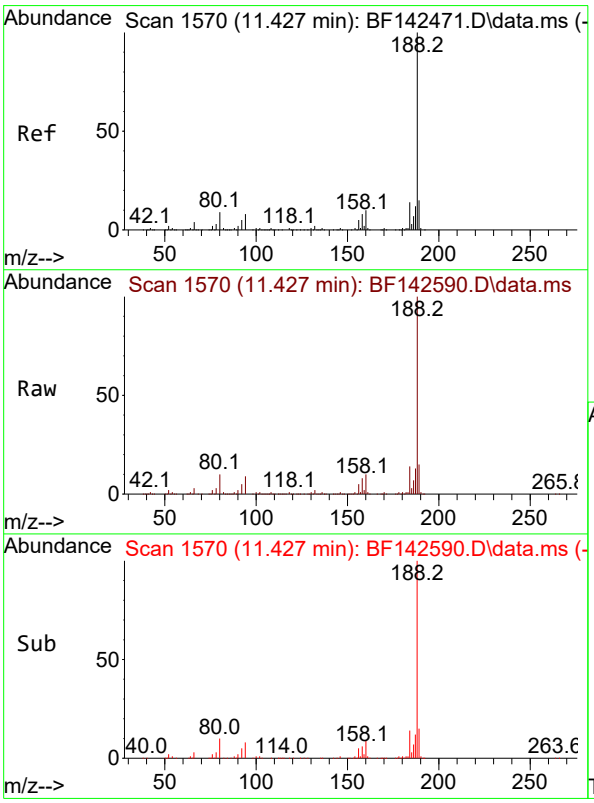
#63
Azobenzene
Concen: 38.258 ng
RT: 10.639 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion: 77 Resp: 534537

Ion	Ratio	Lower	Upper
77	100		
182	28.2	9.0	49.0
105	22.6	2.4	42.4
51	32.1	13.5	53.5

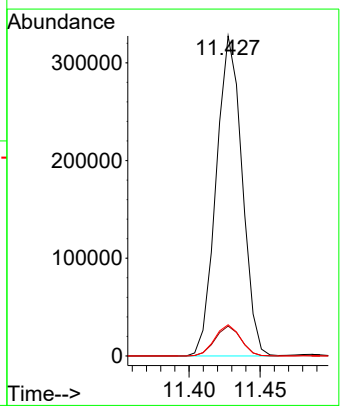


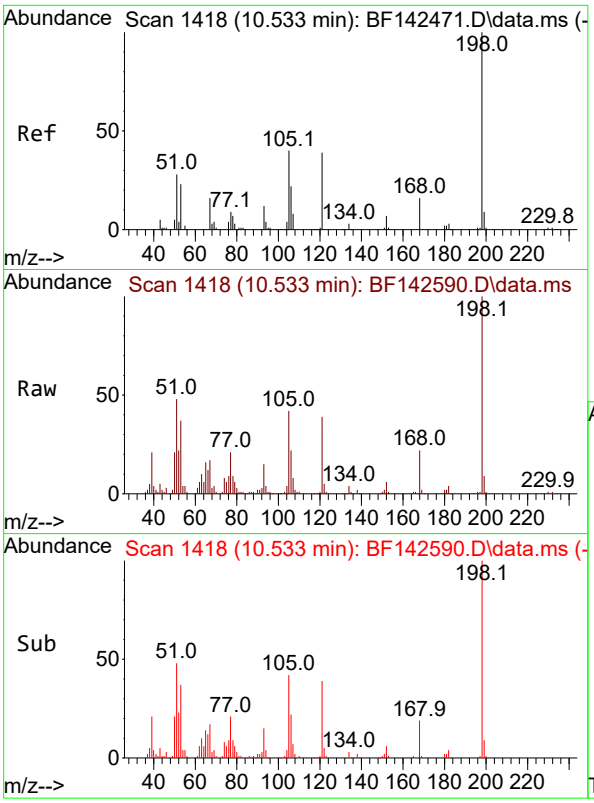


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:188 Resp: 415282

Ion	Ratio	Lower	Upper
188	100		
94	9.3	6.6	10.0
80	9.8	7.4	11.0



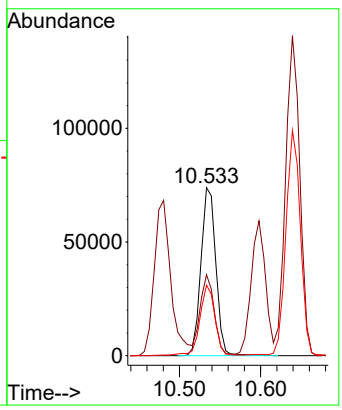


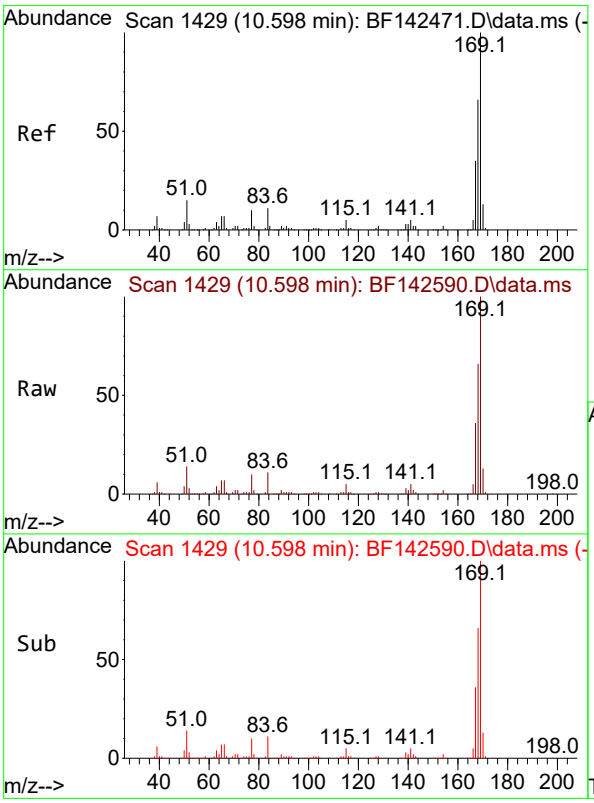
#65
4,6-Dinitro-2-methylphenol
Concen: 40.568 ng
RT: 10.533 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:198 Resp: 94020

Ion	Ratio	Lower	Upper
198	100		
51	48.1	28.3	68.3
105	42.0	21.3	61.3

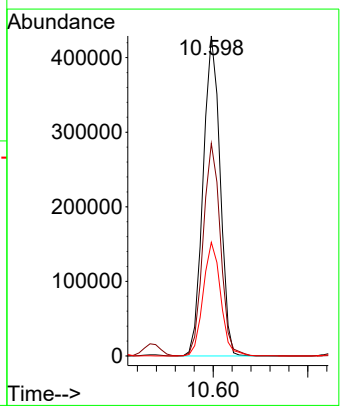


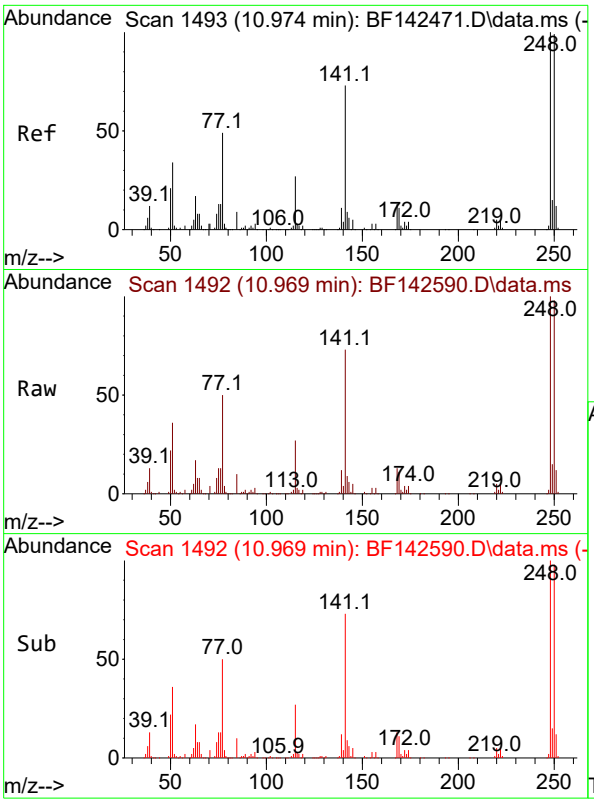


#66
n-Nitrosodiphenylamine
Concen: 37.472 ng
RT: 10.598 min Scan# 1429
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:169 Resp: 532389

Ion	Ratio	Lower	Upper
169	100		
168	66.4	52.7	79.1
167	35.5	28.3	42.5



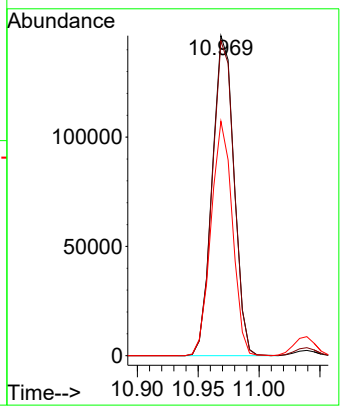


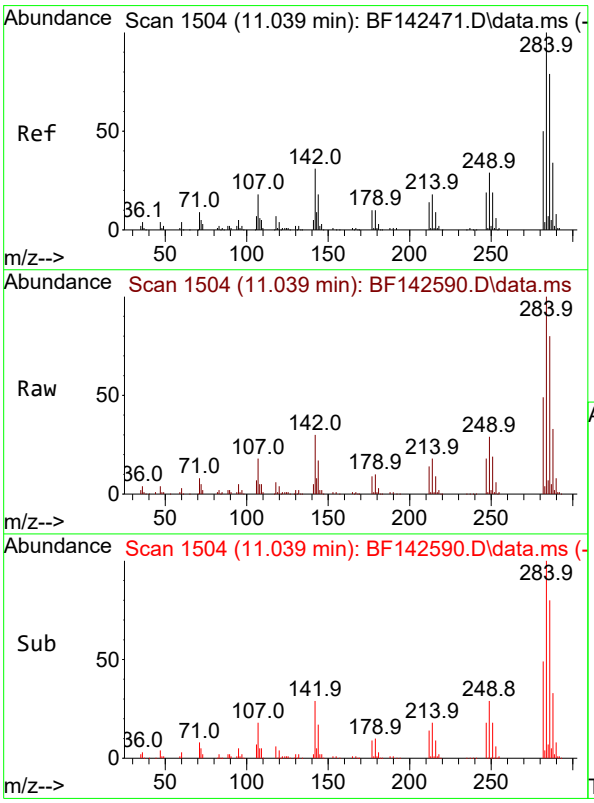
#67
4-Bromophenyl-phenylether
Concen: 37.161 ng
RT: 10.969 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:248 Resp: 182475

Ion	Ratio	Lower	Upper
248	100		
250	98.3	79.0	118.4
141	73.3	58.4	87.6

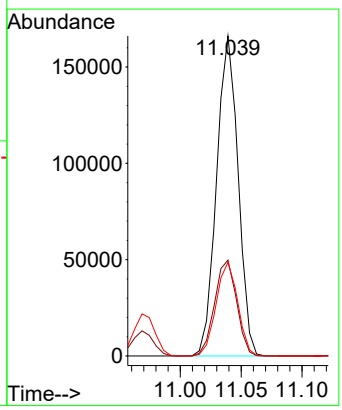


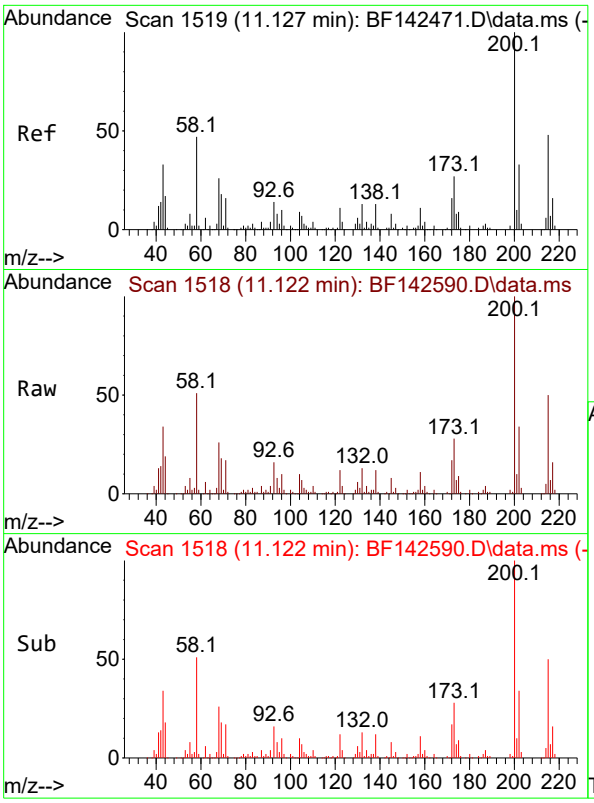


#68
Hexachlorobenzene
Concen: 37.610 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:284 Resp: 204259

Ion	Ratio	Lower	Upper
284	100		
142	29.9	24.8	37.2
249	29.3	23.6	35.4



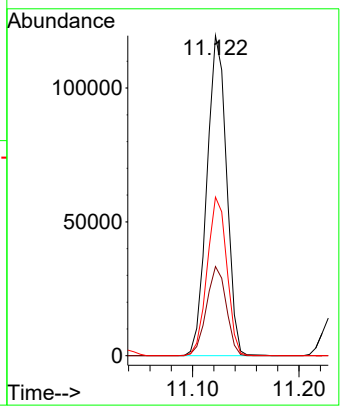


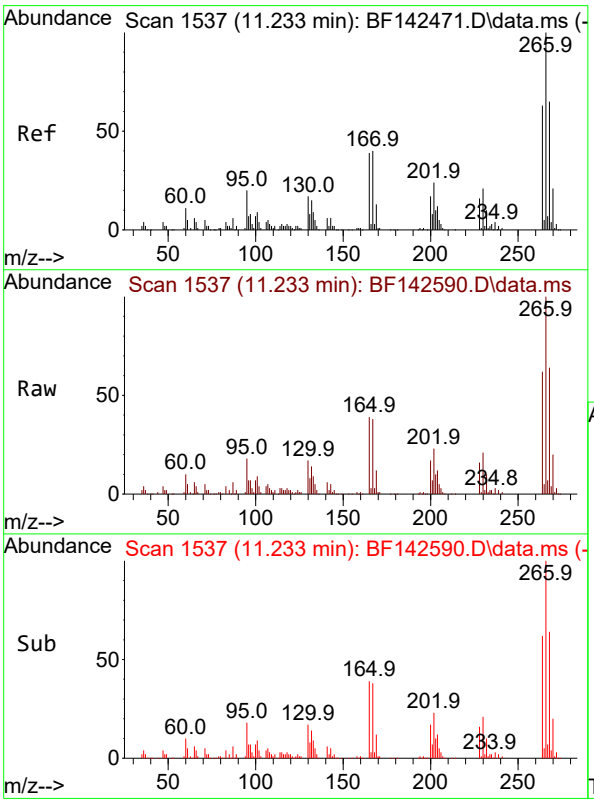
#69
Atrazine
Concen: 40.515 ng
RT: 11.122 min Scan# 1
Delta R.T. -0.005 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:200 Resp: 152871

Ion	Ratio	Lower	Upper
200	100		
173	27.9	7.4	47.4
215	49.5	28.5	68.5

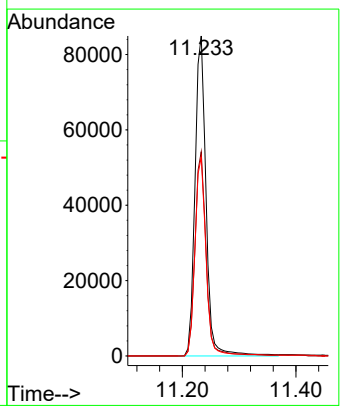


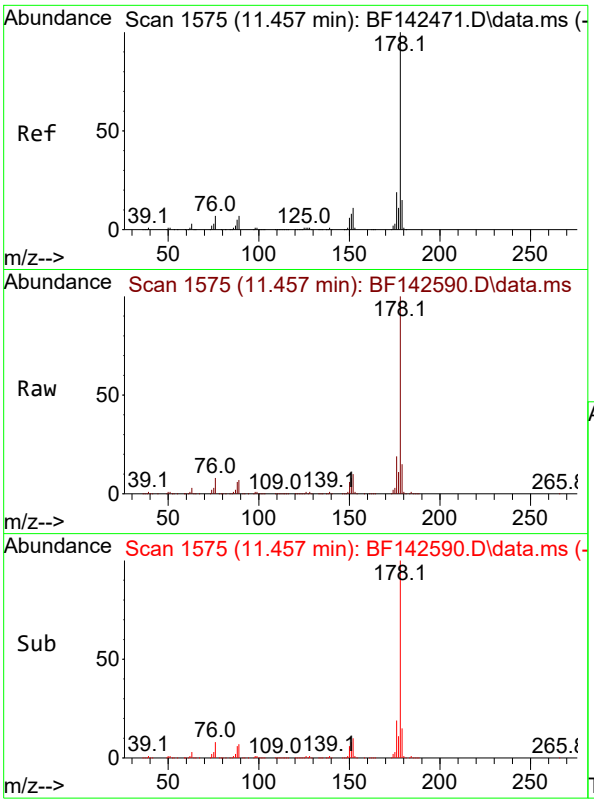


#70
Pentachlorophenol
Concen: 37.694 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:266 Resp: 115580

Ion	Ratio	Lower	Upper
266	100		
268	63.8	51.7	77.5
264	62.1	50.4	75.6



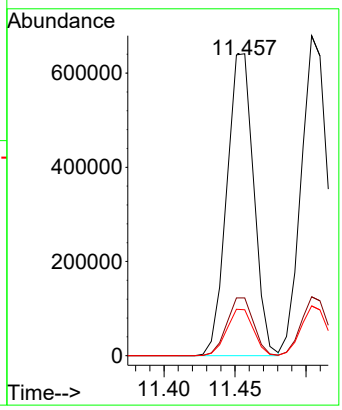


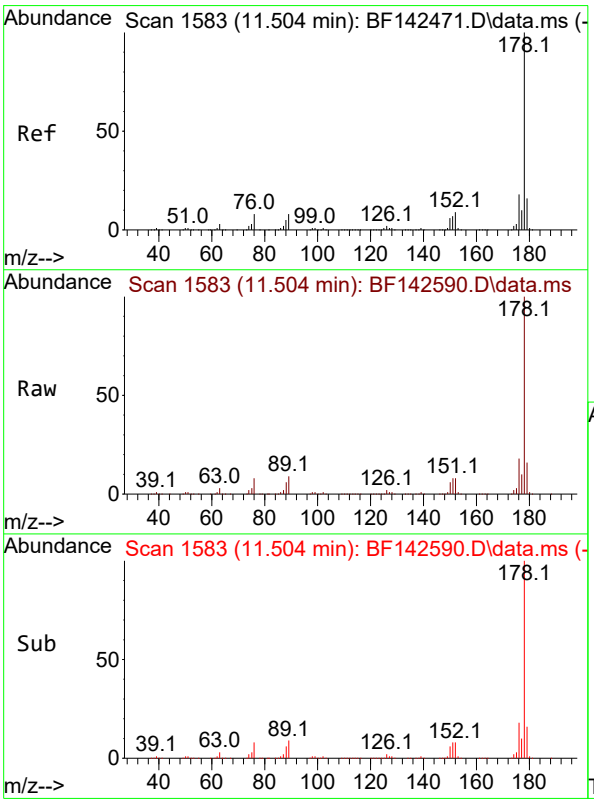
#71
Phenanthrene
Concen: 38.019 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:178 Resp: 843782

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.0
179	15.2	12.3	18.5

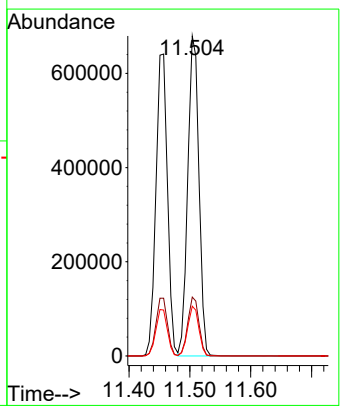


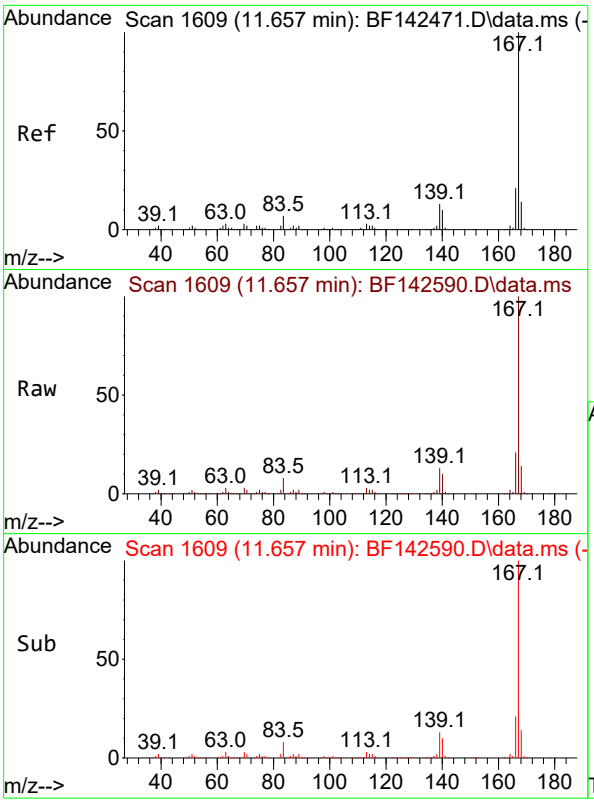


#72
Anthracene
Concen: 38.324 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:178 Resp: 868050

Ion	Ratio	Lower	Upper
178	100		
176	18.4	14.6	21.8
179	15.5	12.4	18.6



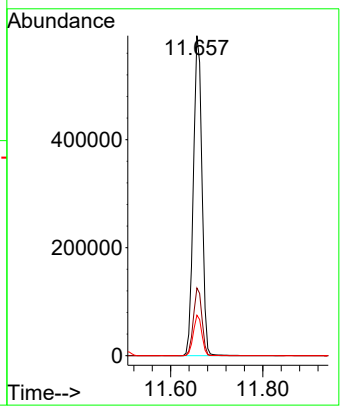


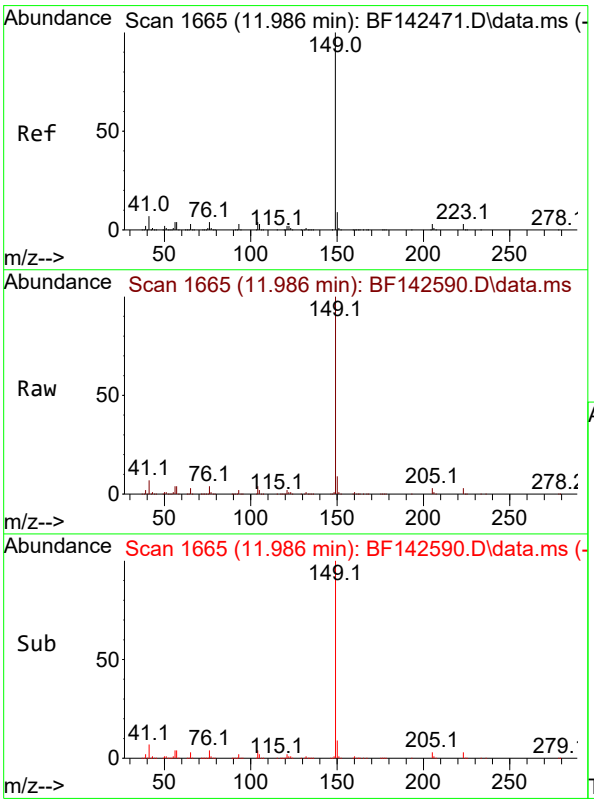
#73
Carbazole
Concen: 39.382 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:167 Resp: 762565

Ion	Ratio	Lower	Upper
167	100		
166	21.1	16.9	25.3
139	12.6	10.2	15.4

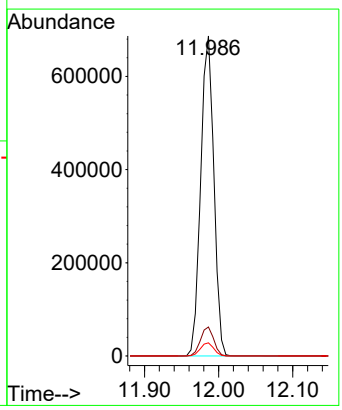


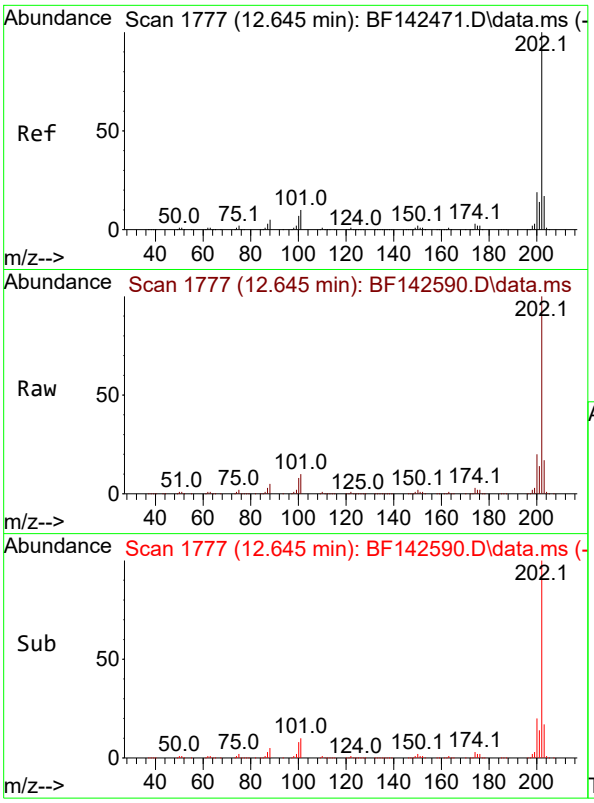


#74
Di-n-butylphthalate
Concen: 39.894 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:149 Resp: 845566

Ion	Ratio	Lower	Upper
149	100		
150	9.1	7.3	10.9
104	4.1	3.6	5.4



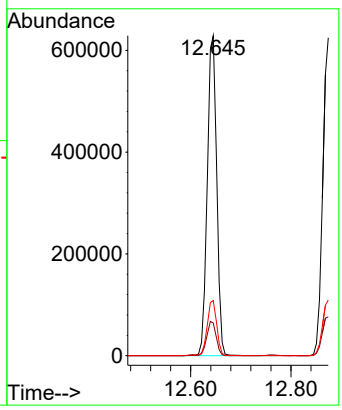


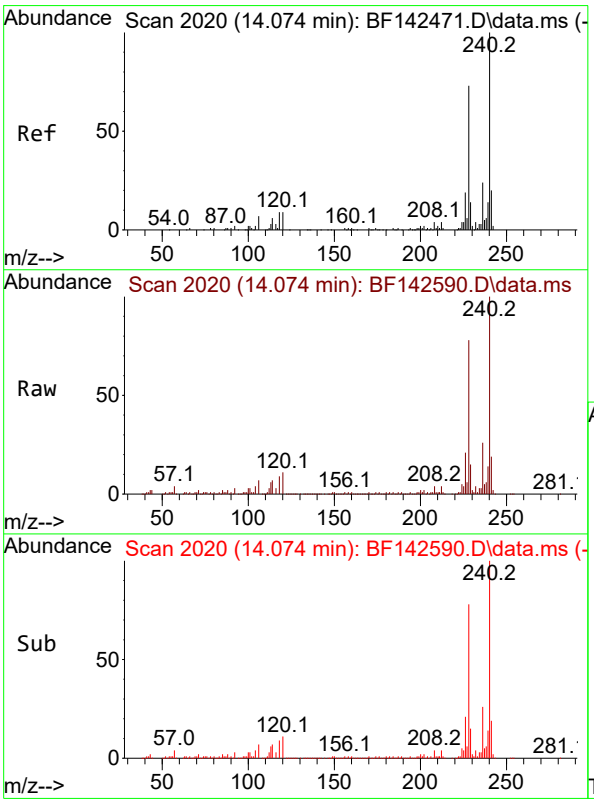
#75
Fluoranthene
Concen: 39.672 ng
RT: 12.645 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:202 Resp: 822707

Ion	Ratio	Lower	Upper
202	100		
101	10.3	0.0	29.6
203	17.3	0.0	37.2

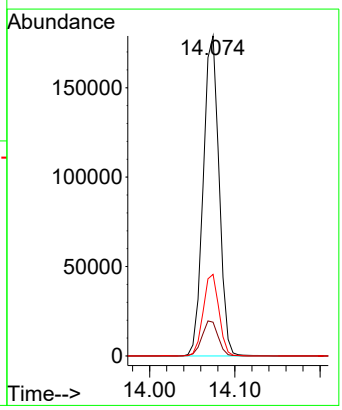


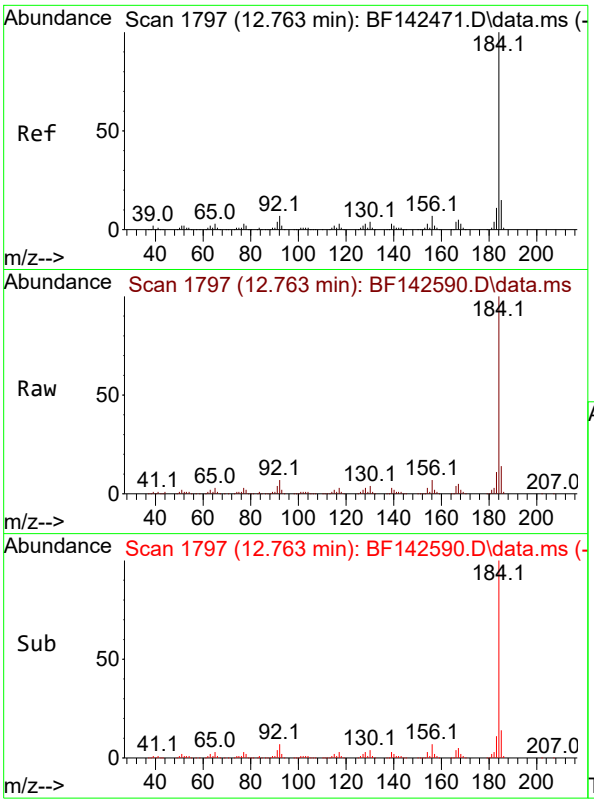


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:240 Resp: 230387

Ion	Ratio	Lower	Upper
240	100		
120	10.6	7.5	11.3
236	25.5	19.6	29.4



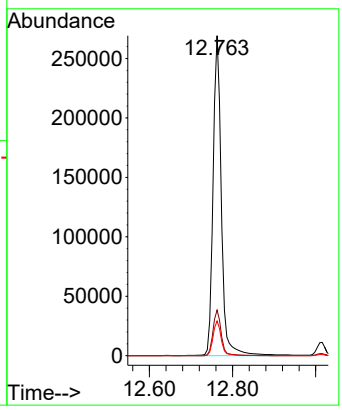


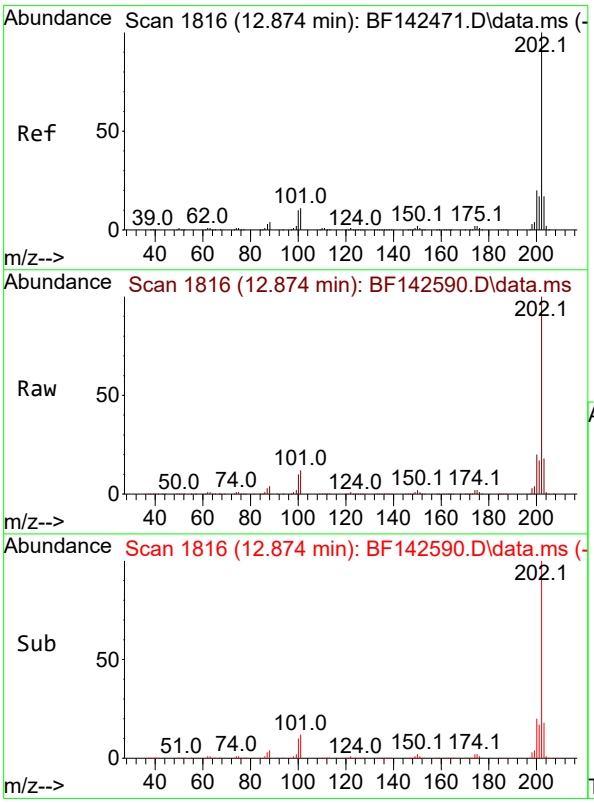
#77
Benzidine
Concen: 43.479 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:184 Resp: 372760

Ion	Ratio	Lower	Upper
184	100		
185	14.3	11.6	17.4
183	10.8	9.0	13.4

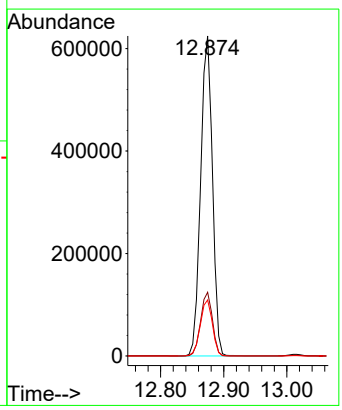


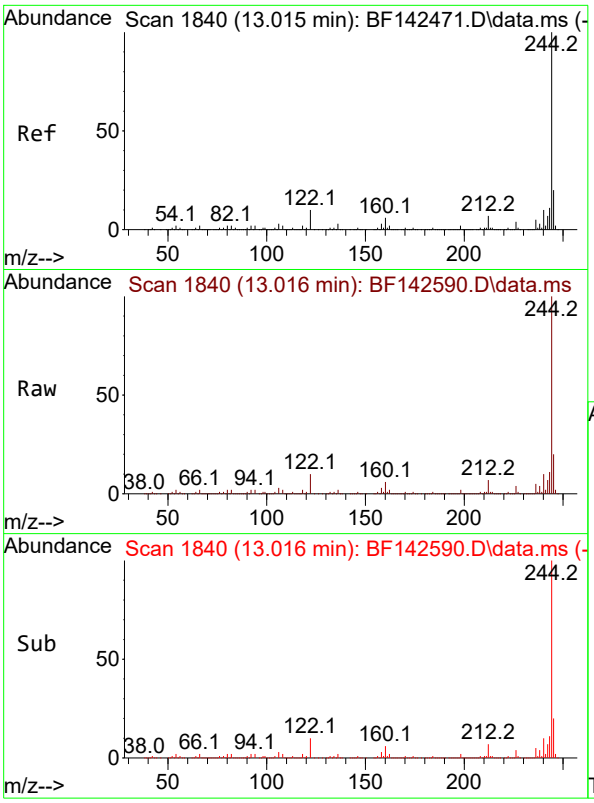


#78
Pyrene
Concen: 37.740 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:202 Resp: 811108

Ion	Ratio	Lower	Upper
202	100		
200	19.9	16.1	24.1
203	17.5	13.9	20.9



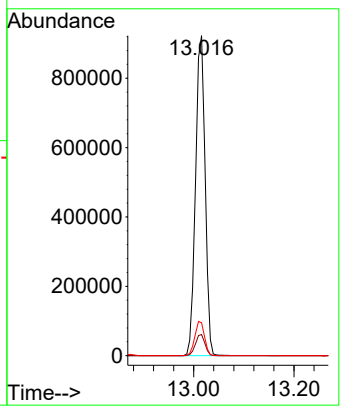


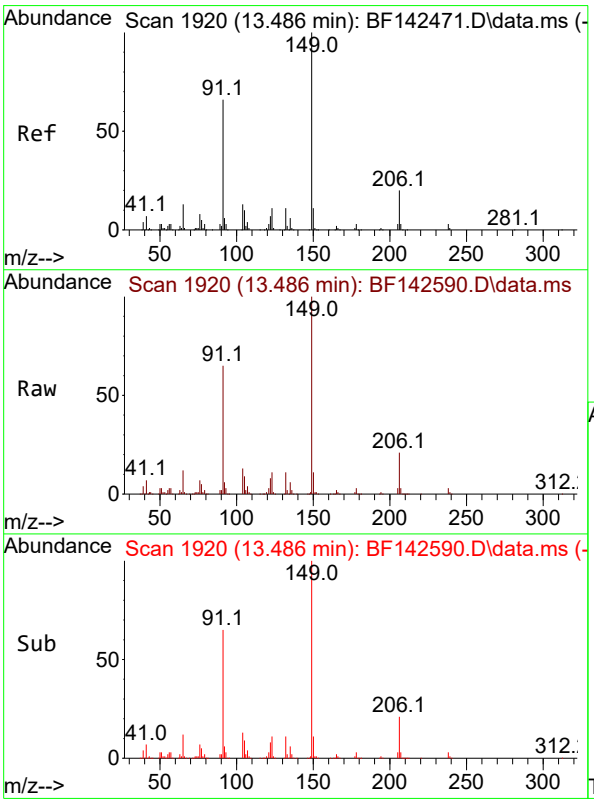
#79
Terphenyl-d14
Concen: 72.512 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:244 Resp: 1222487

Ion	Ratio	Lower	Upper
244	100		
212	6.6	5.3	7.9
122	10.3	8.2	12.2

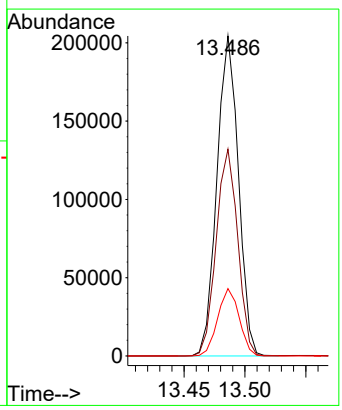


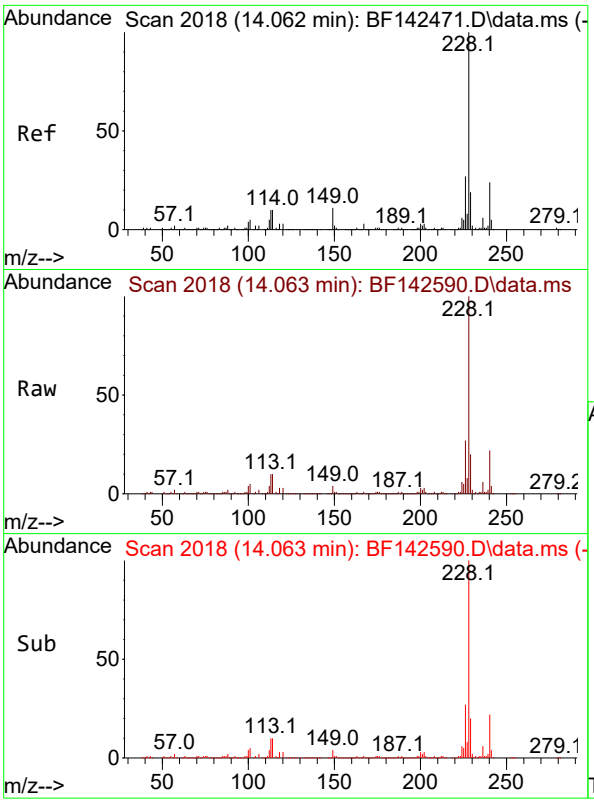


#80
Butylbenzylphthalate
Concen: 42.340 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:149 Resp: 251441

Ion	Ratio	Lower	Upper
149	100		
91	64.6	52.9	79.3
206	21.0	16.2	24.2



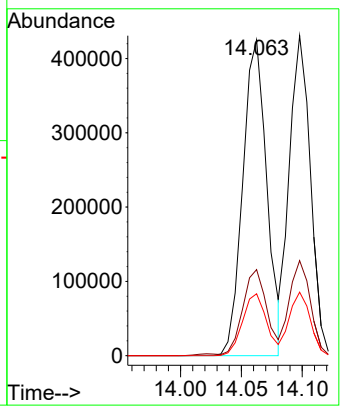


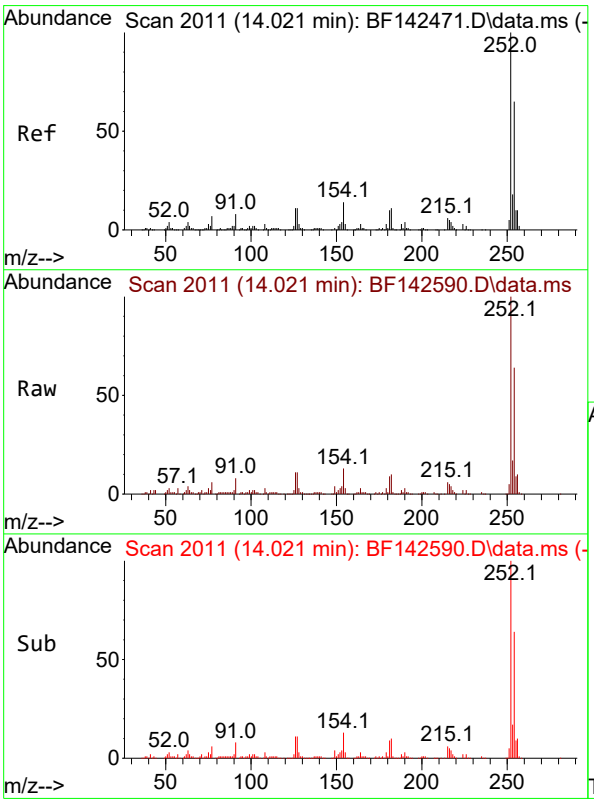
#81
Benzo(a)anthracene
Concen: 38.094 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:228 Resp: 586045

Ion	Ratio	Lower	Upper
228	100		
226	27.3	21.2	31.8
229	19.6	15.5	23.3

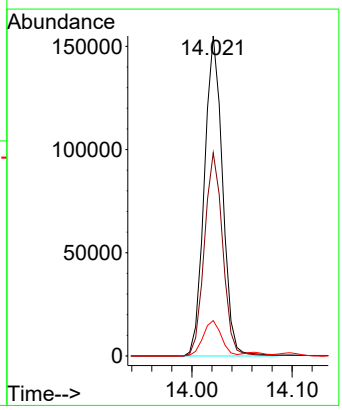


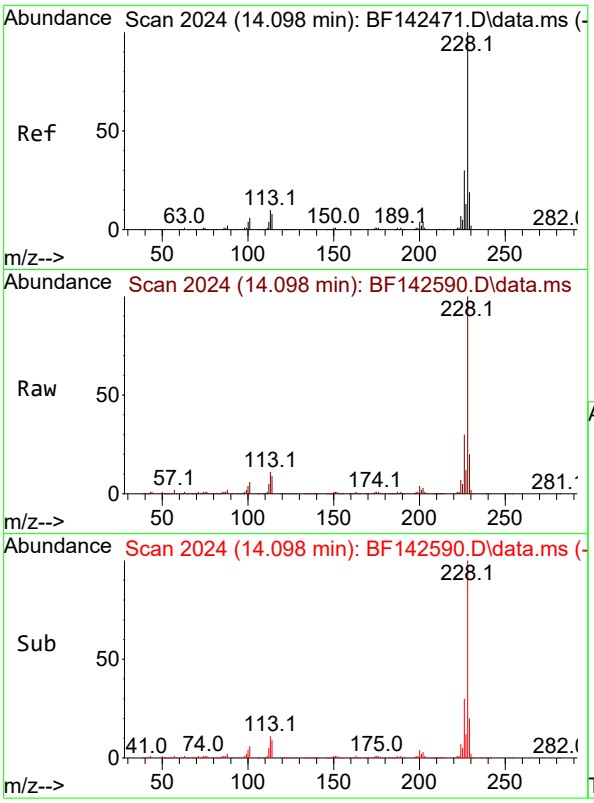


#82
3,3'-Dichlorobenzidine
Concen: 41.922 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:252 Resp: 195614

Ion	Ratio	Lower	Upper
252	100		
254	63.5	52.0	78.0
126	11.1	8.9	13.3



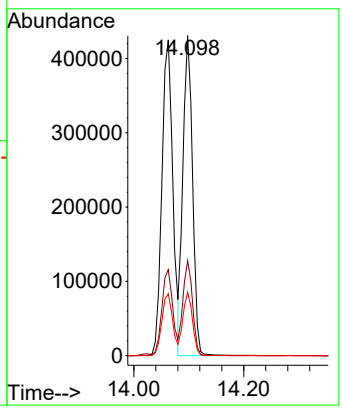


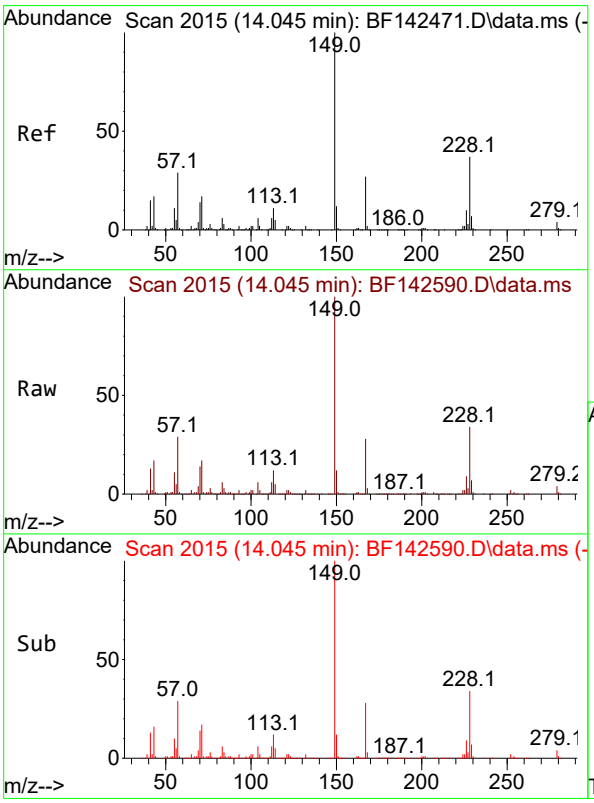
#83
Chrysene
Concen: 37.850 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:228 Resp: 523222

Ion	Ratio	Lower	Upper
228	100		
226	29.7	23.8	35.6
229	19.8	15.4	23.2

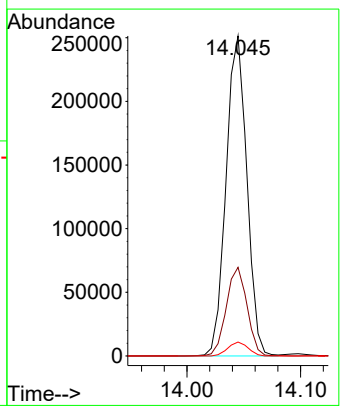


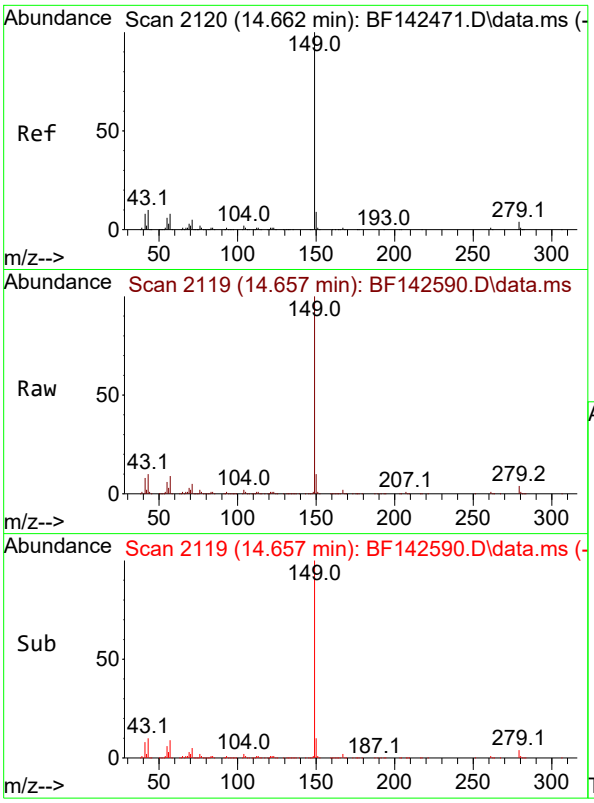


#84
Bis(2-ethylhexyl)phthalate
Concen: 42.067 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:149 Resp: 319802

Ion	Ratio	Lower	Upper
149	100		
167	27.7	21.5	32.3
279	4.3	3.2	4.8



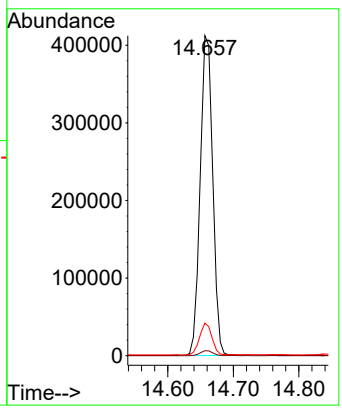


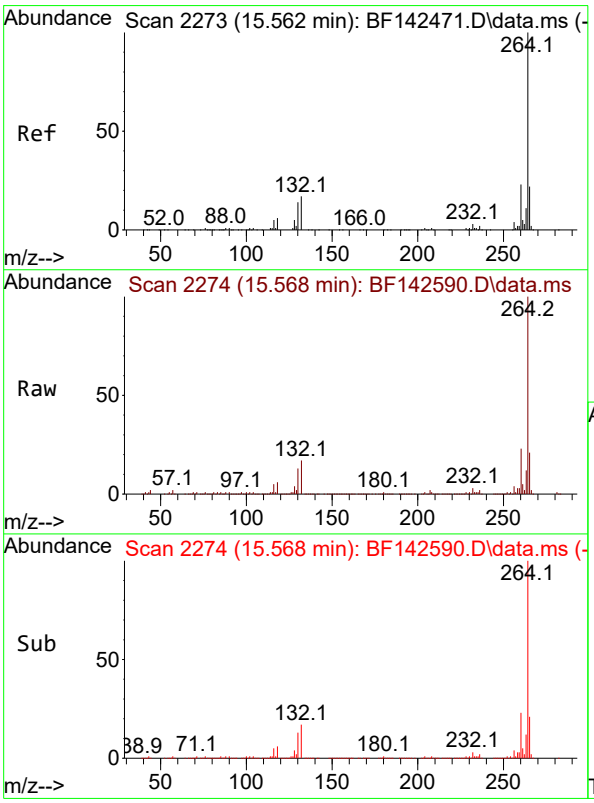
#85
Di-n-octyl phthalate
Concen: 37.041 ng
RT: 14.657 min Scan# 21
Delta R.T. -0.011 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:149 Resp: 550609

Ion	Ratio	Lower	Upper
149	100		
167	1.6	1.2	1.8
43	9.7	7.9	11.9

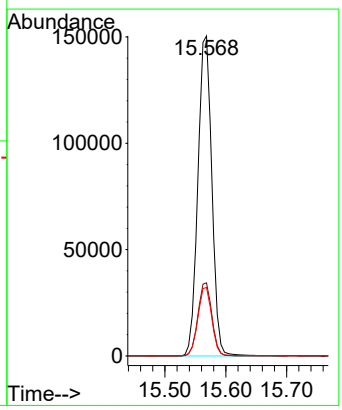


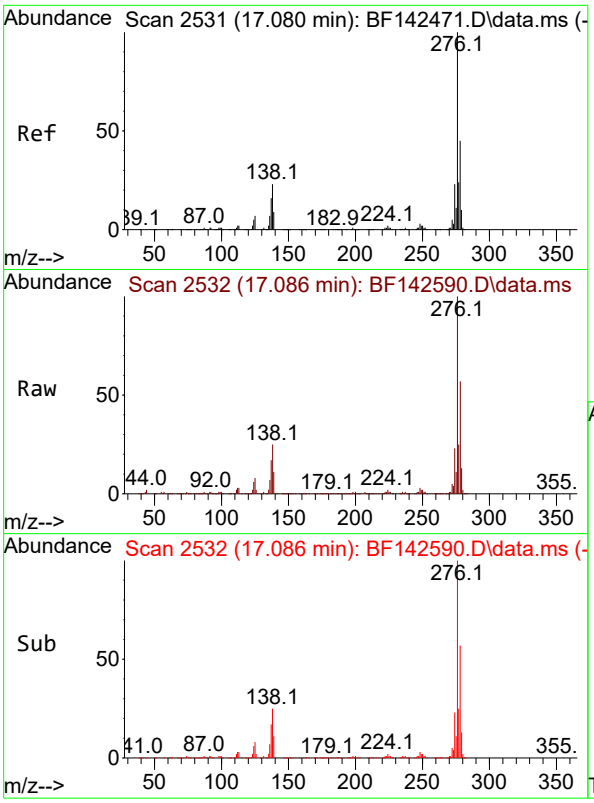


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2274
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:264 Resp: 238851

Ion	Ratio	Lower	Upper
264	100		
260	22.9	18.6	28.0
265	21.4	17.7	26.5



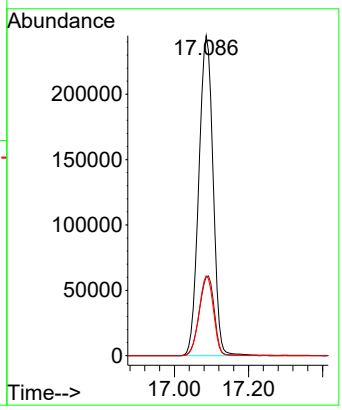


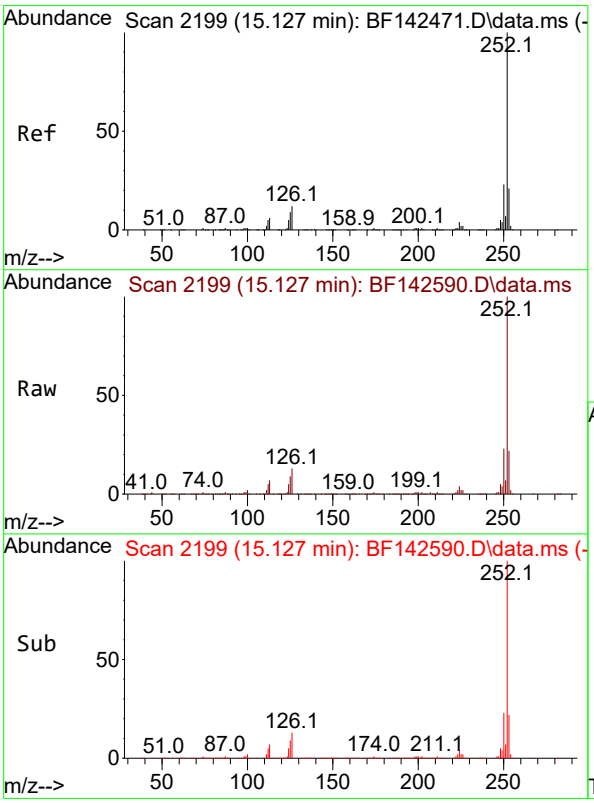
#87
Indeno(1,2,3-cd)pyrene
Concen: 36.435 ng
RT: 17.086 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:276 Resp: 653334

Ion	Ratio	Lower	Upper
276	100		
138	26.2	19.9	29.9
277	25.2	20.2	30.2

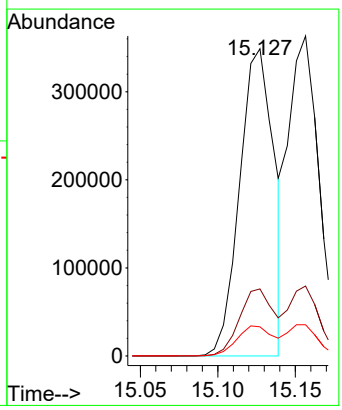


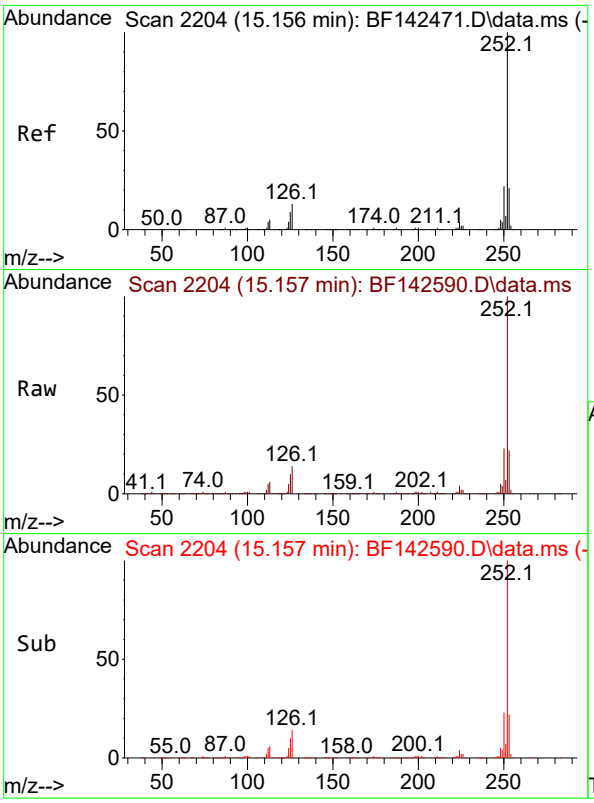


#88
Benzo(b)fluoranthene
Concen: 38.041 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:252 Resp: 537758

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.0	25.4
125	9.5	7.4	11.0



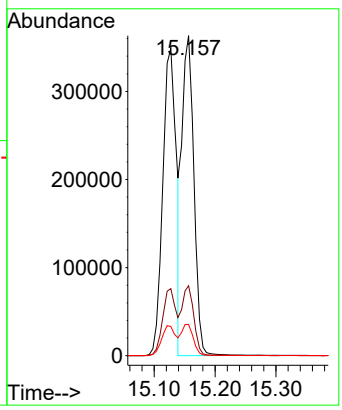


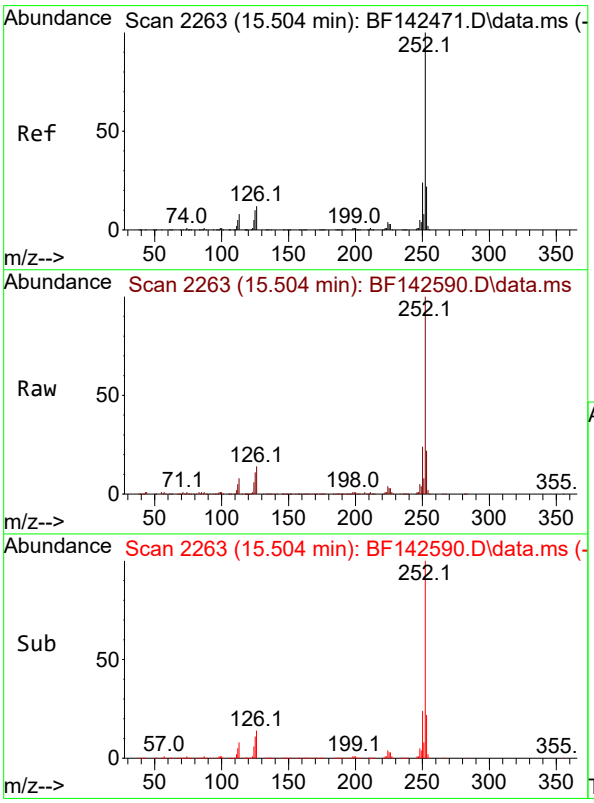
#89
Benzo(k)fluoranthene
Concen: 37.472 ng
RT: 15.157 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:252 Resp: 496143

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.0	25.4
125	9.8	7.3	10.9

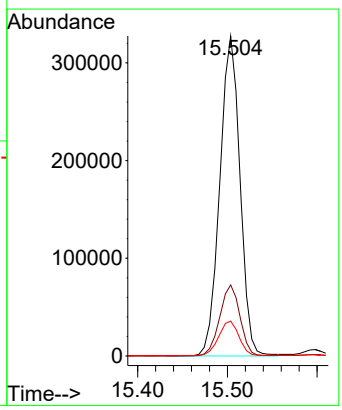


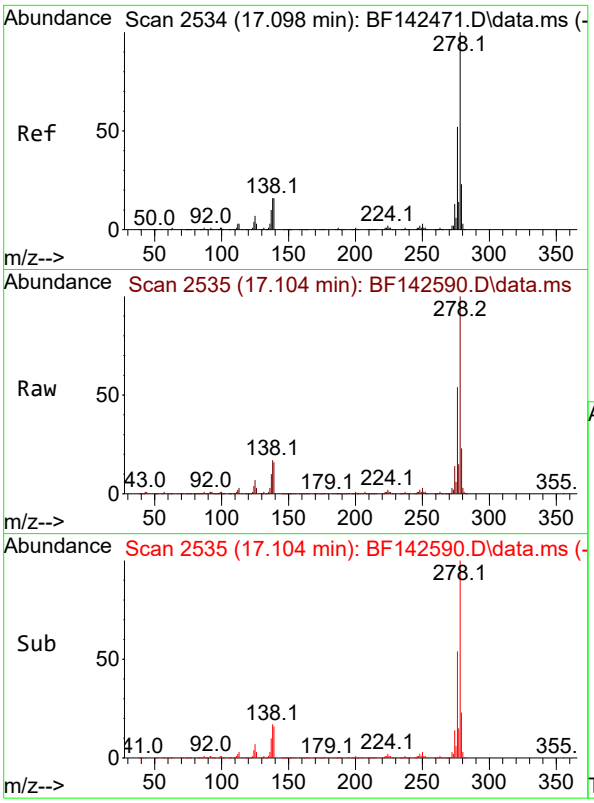


#90
Benzo(a)pyrene
Concen: 38.390 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:252 Resp: 511548

Ion	Ratio	Lower	Upper
252	100		
253	22.2	17.4	26.0
125	10.9	7.9	11.9



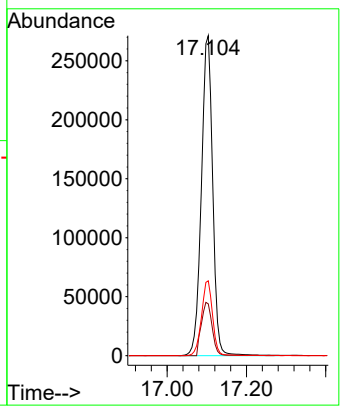


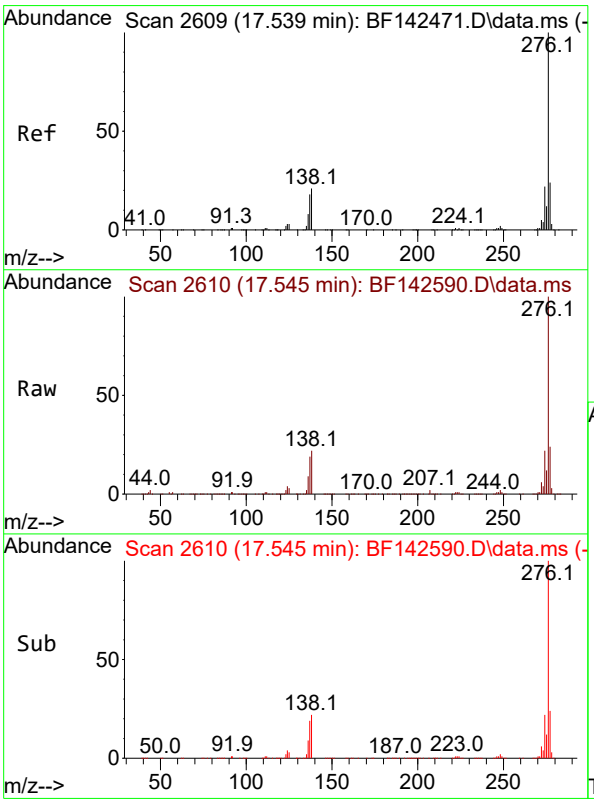
#91
Dibenzo(a,h)anthracene
Concen: 36.987 ng
RT: 17.104 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Tgt Ion:278 Resp: 537907

Ion	Ratio	Lower	Upper
278	100		
139	16.2	12.8	19.2
279	23.4	18.6	28.0

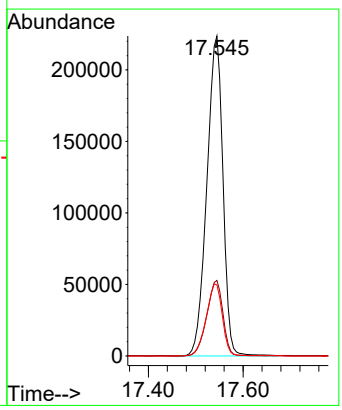




#92
Benzo(g,h,i)perylene
Concen: 36.304 ng
RT: 17.545 min Scan# 2610
Delta R.T. -0.012 min
Lab File: BF142590.D
Acq: 02 Jun 2025 11:30

Tgt Ion:276 Resp: 528096

Ion	Ratio	Lower	Upper
276	100		
277	23.6	19.2	28.8
138	22.3	16.8	25.2



Sample Results: **BF142590.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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	116	0.00
2		1,4-Dioxane	0.475	0.464	2.3	117	0.00
3		Pyridine	1.210	1.210	0.0	120	0.00
4		n-Nitrosodimethylamine	0.628	0.595	5.3	111	-0.02
5	S	2-Fluorophenol	1.187	1.153	2.9	118	0.00
6		Aniline	1.921	1.892	1.5	119	0.00
7	S	Phenol-d6	1.429	1.385	3.1	117	-0.01
8		2-Chlorophenol	1.293	1.260	2.6	116	0.00
9		Benzaldehyde	0.859	0.802	6.6	114	0.00
10	C	Phenol	1.608	1.558	3.1	118	-0.01
11		bis(2-Chloroethyl)ether	1.157	1.124	2.9	117	0.00
12		1,3-Dichlorobenzene	1.443	1.385	4.0	115	0.00
13	C	1,4-Dichlorobenzene	1.453	1.412	2.8	116	0.00
14		1,2-Dichlorobenzene	1.391	1.341	3.6	117	0.00
15		Benzyl Alcohol	1.056	1.016	3.8	115	0.00
16		2,2'-oxybis(1-Chloropropane	1.944	1.872	3.7	116	0.00
17		2-Methylphenol	1.010	0.984	2.6	117	0.00
18		Hexachloroethane	0.507	0.483	4.7	114	0.00
19	P	n-Nitroso-di-n-propylamine	0.886	0.829	6.4	114	-0.02
20		3+4-Methylphenols	1.293	1.242	3.9	115	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	117	0.00
22		Acetophenone	0.443	0.417	5.9	114	0.00
23	S	Nitrobenzene-d5	0.367	0.347	5.4	114	-0.01
24		Nitrobenzene	0.331	0.314	5.1	114	-0.01
25		Isophorone	0.613	0.575	6.2	114	-0.01
26	C	2-Nitrophenol	0.177	0.176	0.6	118	0.00
27		2,4-Dimethylphenol	0.312	0.299	4.2	116	0.00
28		bis(2-Chloroethoxy)methane	0.383	0.365	4.7	117	-0.01
29	C	2,4-Dichlorophenol	0.283	0.275	2.8	117	0.00
30		1,2,4-Trichlorobenzene	0.308	0.296	3.9	117	0.00
31		Naphthalene	0.985	0.939	4.7	117	0.00
32		Benzoic acid	0.190	0.181	4.7	113	-0.04
33		4-Chloroaniline	0.399	0.389	2.5	117	0.00
34	C	Hexachlorobutadiene	0.192	0.175	8.9	110	0.00
35		Caprolactam	0.080	0.084	-5.0	124	-0.02
36	C	4-Chloro-3-methylphenol	0.291	0.275	5.5	114	-0.01
37		2-Methylnaphthalene	0.620	0.581	6.3	115	0.00
38		1-Methylnaphthalene	0.641	0.600	6.4	114	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	117	0.00
40		1,2,4,5-Tetrachlorobenzene	0.574	0.542	5.6	115	0.00
41	P	Hexachlorocyclopentadiene	0.387	0.340	12.1	101	0.00
42	S	2,4,6-Tribromophenol	0.222	0.212	4.5	117	0.00
43	C	2,4,6-Trichlorophenol	0.387	0.366	5.4	115	0.00
44		2,4,5-Trichlorophenol	0.408	0.396	2.9	117	0.00
45	S	2-Fluorobiphenyl	1.490	1.341	10.0	113	-0.01
46		1,1'-Biphenyl	1.552	1.455	6.2	115	0.00
47		2-Chloronaphthalene	1.146	1.080	5.8	115	0.00

Sample Results: **BF142590.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)
48		2-Nitroaniline	0.331	0.325	1.8	117	0.00
49		Acenaphthylene	1.936	1.830	5.5	116	0.00
50		Dimethylphthalate	1.320	1.263	4.3	118	-0.01
51		2,6-Dinitrotoluene	0.285	0.279	2.1	116	0.00
52	C	Acenaphthene	1.182	1.118	5.4	117	0.00
53		3-Nitroaniline	0.311	0.315	-1.3	123	0.00
54	P	2,4-Dinitrophenol	0.147	0.143	2.7	112	0.00
55		Dibenzofuran	1.701	1.606	5.6	117	0.00
56	P	4-Nitrophenol	0.230	0.227	1.3	117	0.00
57		2,4-Dinitrotoluene	0.372	0.374	-0.5	120	0.00
58		Fluorene	1.314	1.257	4.3	119	0.00
59		2,3,4,6-Tetrachlorophenol	0.341	0.334	2.1	117	0.00
60		Diethylphthalate	1.289	1.226	4.9	116	-0.01
61		4-Chlorophenyl-phenylether	0.646	0.612	5.3	118	0.00
62		4-Nitroaniline	0.282	0.295	-4.6	125	-0.01
63		Azobenzene	1.158	1.107	4.4	117	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	121	0.00
65		4,6-Dinitro-2-methylphenol	0.112	0.113	-0.9	119	0.00
66	c	n-Nitrosodiphenylamine	0.684	0.641	6.3	120	0.00
67		4-Bromophenyl-phenylether	0.236	0.220	6.8	120	0.00
68		Hexachlorobenzene	0.262	0.246	6.1	119	0.00
69		Atrazine	0.182	0.184	-1.1	126	0.00
70	C	Pentachlorophenol	0.148	0.139	6.1	115	0.00
71		Phenanthrene	1.069	1.016	5.0	122	0.00
72		Anthracene	1.091	1.045	4.2	122	0.00
73		Carbazole	0.933	0.918	1.6	125	0.00
74		Di-n-butylphthalate	1.021	1.018	0.3	126	0.00
75	C	Fluoranthene	0.999	0.991	0.8	128	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	136	0.00
77		Benzidine	0.744	0.809	-8.7	138	0.00
78		Pyrene	1.866	1.760	5.7	129	0.00
79	S	Terphenyl-d14	1.464	1.327	9.4	127	0.00
80		Butylbenzylphthalate	0.516	0.546	-5.8	141	0.00
81		Benzo(a)anthracene	1.336	1.272	4.8	136	0.00
82		3,3'-Dichlorobenzidine	0.405	0.425	-4.9	142	0.00
83		Chrysene	1.200	1.136	5.3	135	0.00
84		Bis(2-ethylhexyl)phthalate	0.660	0.694	-5.2	141	0.00
85	c	Di-n-octyl phthalate	1.290	1.195	7.4	129	-0.01
86	I	Perylene-d12	1.000	1.000	0.0	126	0.00
87		Indeno(1,2,3-cd)pyrene	1.501	1.368	8.9	119	0.00
88		Benzo(b)fluoranthene	1.184	1.126	4.9	126	0.00
89		Benzo(k)fluoranthene	1.109	1.039	6.3	126	0.00
90	C	Benzo(a)pyrene	1.116	1.071	4.0	125	0.00
91		Dibenzo(a,h)anthracene	1.218	1.126	7.6	120	-0.01
92		Benzo(g,h,i)perylene	1.218	1.105	9.3	118	-0.01

Sample Results: **BF142590.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **BF142590.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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	20.000	20.000	0.0	116	0.00
2		1,4-Dioxane	40.000	39.101	2.2	117	0.00
3		Pyridine	40.000	40.014	-0.0	120	0.00
4		n-Nitrosodimethylamine	40.000	37.883	5.3	111	-0.02
5	S	2-Fluorophenol	80.000	77.713	2.9	118	0.00
6		Aniline	40.000	39.384	1.5	119	0.00
7	S	Phenol-d6	80.000	77.527	3.1	117	-0.01
8		2-Chlorophenol	40.000	38.992	2.5	116	0.00
9		Benzaldehyde	40.000	37.337	6.7	114	0.00
10	C	Phenol	40.000	38.752	3.1	118	-0.01
11		bis(2-Chloroethyl)ether	40.000	38.834	2.9	117	0.00
12		1,3-Dichlorobenzene	40.000	38.387	4.0	115	0.00
13	C	1,4-Dichlorobenzene	40.000	38.867	2.8	116	0.00
14		1,2-Dichlorobenzene	40.000	38.567	3.6	117	0.00
15		Benzyl Alcohol	40.000	38.476	3.8	115	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	38.521	3.7	116	0.00
17		2-Methylphenol	40.000	38.986	2.5	117	0.00
18		Hexachloroethane	40.000	38.042	4.9	114	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	37.435	6.4	114	-0.02
20		3+4-Methylphenols	40.000	38.443	3.9	115	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	117	0.00
22		Acetophenone	40.000	37.647	5.9	114	0.00
23	S	Nitrobenzene-d5	80.000	75.793	5.3	114	-0.01
24		Nitrobenzene	40.000	37.981	5.0	114	-0.01
25		Isophorone	40.000	37.499	6.3	114	-0.01
26	C	2-Nitrophenol	40.000	39.842	0.4	118	0.00
27		2,4-Dimethylphenol	40.000	38.389	4.0	116	0.00
28		bis(2-Chloroethoxy)methane	40.000	38.126	4.7	117	-0.01
29	C	2,4-Dichlorophenol	40.000	38.802	3.0	117	0.00
30		1,2,4-Trichlorobenzene	40.000	38.470	3.8	117	0.00
31		Naphthalene	40.000	38.160	4.6	117	0.00
32		Benzoic acid	40.000	38.227	4.4	113	-0.04
33		4-Chloroaniline	40.000	38.998	2.5	117	0.00
34	C	Hexachlorobutadiene	40.000	36.459	8.9	110	0.00
35		Caprolactam	40.000	41.974	-4.9	124	-0.02
36	C	4-Chloro-3-methylphenol	40.000	37.891	5.3	114	-0.01
37		2-Methylnaphthalene	40.000	37.513	6.2	115	0.00
38		1-Methylnaphthalene	40.000	37.476	6.3	114	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	117	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	37.735	5.7	115	0.00
41	P	Hexachlorocyclopentadiene	40.000	35.099	12.3	101	0.00
42	S	2,4,6-Tribromophenol	80.000	76.490	4.4	117	0.00
43	C	2,4,6-Trichlorophenol	40.000	37.821	5.4	115	0.00
44		2,4,5-Trichlorophenol	40.000	38.794	3.0	117	0.00
45	S	2-Fluorobiphenyl	80.000	71.981	10.0	113	-0.01
46		1,1'-Biphenyl	40.000	37.504	6.2	115	0.00
47		2-Chloronaphthalene	40.000	37.693	5.8	115	0.00

Sample Results: **BF142590.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)
48		2-Nitroaniline	40.000	39.199	2.0	117	0.00
49		Acenaphthylene	40.000	37.812	5.5	116	0.00
50		Dimethylphthalate	40.000	38.278	4.3	118	-0.01
51		2,6-Dinitrotoluene	40.000	39.122	2.2	116	0.00
52	C	Acenaphthene	40.000	37.817	5.5	117	0.00
53		3-Nitroaniline	40.000	40.472	-1.2	123	0.00
54	P	2,4-Dinitrophenol	40.000	38.796	3.0	112	0.00
55		Dibenzofuran	40.000	37.777	5.6	117	0.00
56	P	4-Nitrophenol	40.000	39.507	1.2	117	0.00
57		2,4-Dinitrotoluene	40.000	40.236	-0.6	120	0.00
58		Fluorene	40.000	38.259	4.4	119	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	39.192	2.0	117	0.00
60		Diethylphthalate	40.000	38.041	4.9	116	-0.01
61		4-Chlorophenyl-phenylether	40.000	37.917	5.2	118	0.00
62		4-Nitroaniline	40.000	41.888	-4.7	125	-0.01
63		Azobenzene	40.000	38.258	4.4	117	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	121	0.00
65		4,6-Dinitro-2-methylphenol	40.000	40.568	-1.4	119	0.00
66	c	n-Nitrosodiphenylamine	40.000	37.472	6.3	120	0.00
67		4-Bromophenyl-phenylether	40.000	37.161	7.1	120	0.00
68		Hexachlorobenzene	40.000	37.610	6.0	119	0.00
69		Atrazine	40.000	40.515	-1.3	126	0.00
70	C	Pentachlorophenol	40.000	37.694	5.8	115	0.00
71		Phenanthrene	40.000	38.019	5.0	122	0.00
72		Anthracene	40.000	38.324	4.2	122	0.00
73		Carbazole	40.000	39.382	1.5	125	0.00
74		Di-n-butylphthalate	40.000	39.894	0.3	126	0.00
75	C	Fluoranthene	40.000	39.672	0.8	128	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	136	0.00
77		Benzidine	40.000	43.479	-8.7	138	0.00
78		Pyrene	40.000	37.740	5.6	129	0.00
79	S	Terphenyl-d14	80.000	72.512	9.4	127	0.00
80		Butylbenzylphthalate	40.000	42.340	-5.9	141	0.00
81		Benzo(a)anthracene	40.000	38.094	4.8	136	0.00
82		3,3'-Dichlorobenzidine	40.000	41.922	-4.8	142	0.00
83		Chrysene	40.000	37.850	5.4	135	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	42.067	-5.2	141	0.00
85	c	Di-n-octyl phthalate	40.000	37.041	7.4	129	-0.01
86	I	Perylene-d12	20.000	20.000	0.0	126	0.00
87		Indeno(1,2,3-cd)pyrene	40.000	36.435	8.9	119	0.00
88		Benzo(b)fluoranthene	40.000	38.041	4.9	126	0.00
89		Benzo(k)fluoranthene	40.000	37.472	6.3	126	0.00
90	C	Benzo(a)pyrene	40.000	38.390	4.0	125	0.00
91		Dibenzo(a,h)anthracene	40.000	36.987	7.5	120	-0.01
92		Benzo(g,h,i)perylene	40.000	36.304	9.2	118	-0.01

Sample Results: **BF142590.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142590.D
Acq On : 02 Jun 2025 11:30
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Jun 02 11:53:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QC SAMPLE DATA

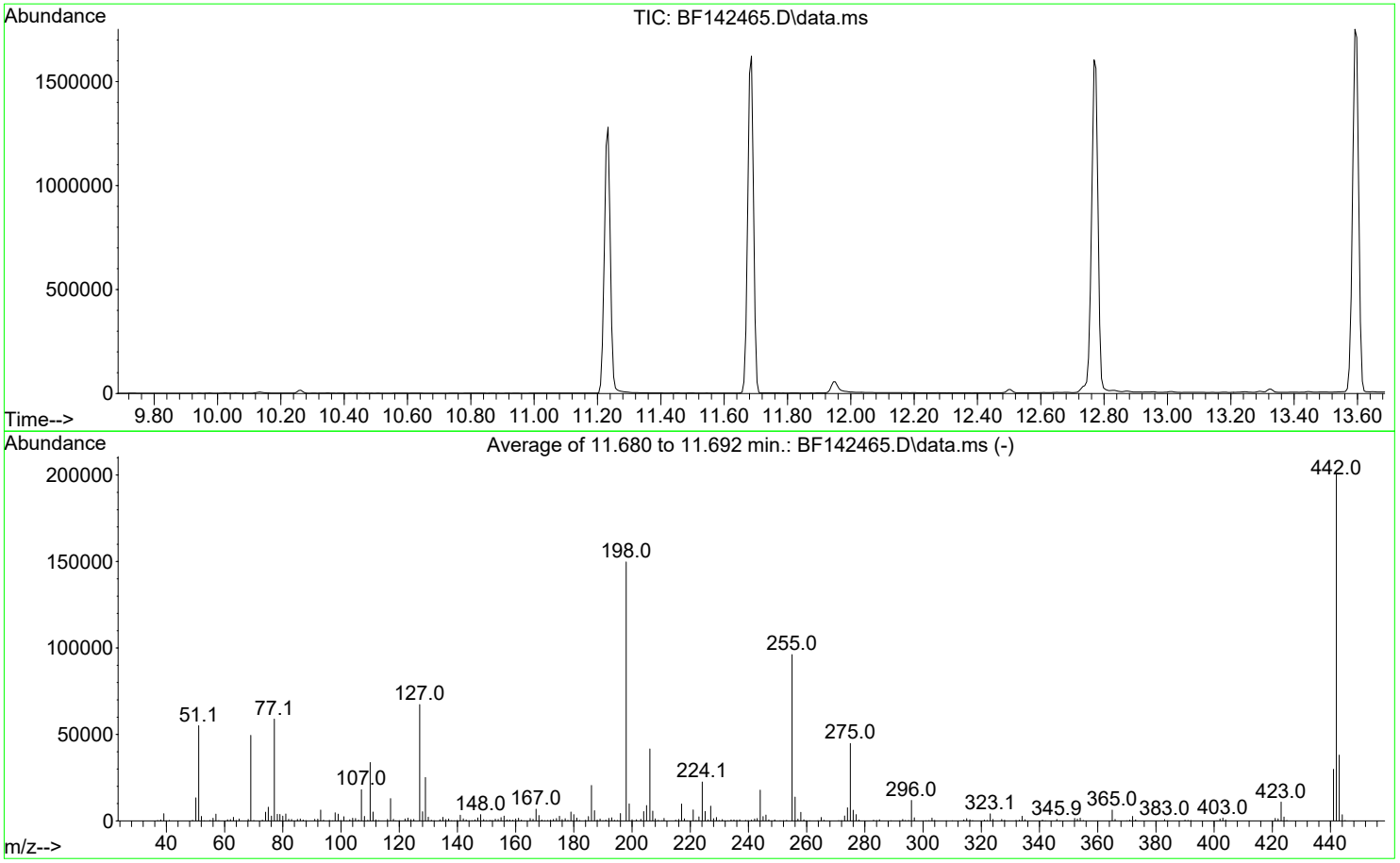
Sample Results: **BF142465.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142465.D
Acq On : 20 May 2025 11:13
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue May 20 16:26:47 2025



AutoFind: Scans 1613, 1614, 1615; Background Corrected with Scan 1606

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.8	55035	PASS
68	69	0.00	2	1.9	918	PASS
69	198	0.00	100	33.1	49499	PASS
70	69	0.00	2	0.5	254	PASS
127	198	10	80	44.9	67277	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	149731	PASS
199	198	5	9	6.6	9853	PASS
275	198	10	60	29.9	44779	PASS
365	198	1	100	4.2	6269	PASS
441	198	0.01	100	19.9	29837	PASS
442	442	50	100	100.0	200661	PASS
443	442	15	24	19.0	38045	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
5/20/2025	BNA_F	BF142465.D
Compound Name	**Response**	**Retention Time**
DDT	467874	13.598
DDD	6363	13.327
DDE	709	12.957
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
7072	474946	1.49

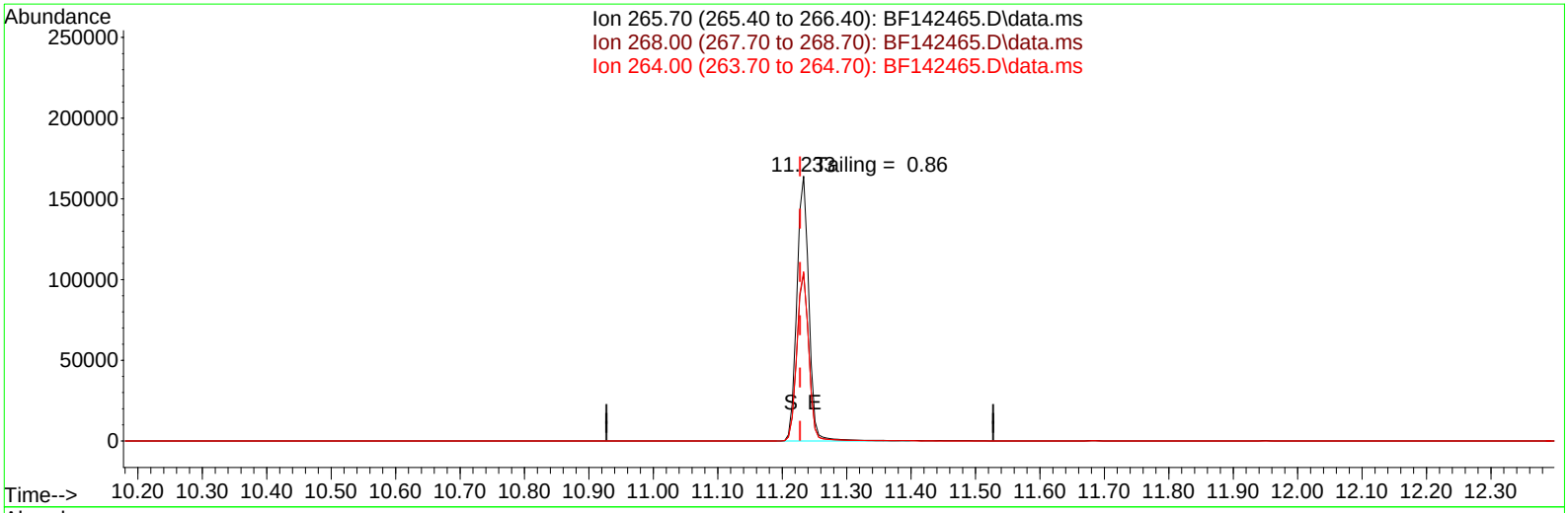
Instrument :
BNA_F
ClientSampleId :
DFTPP

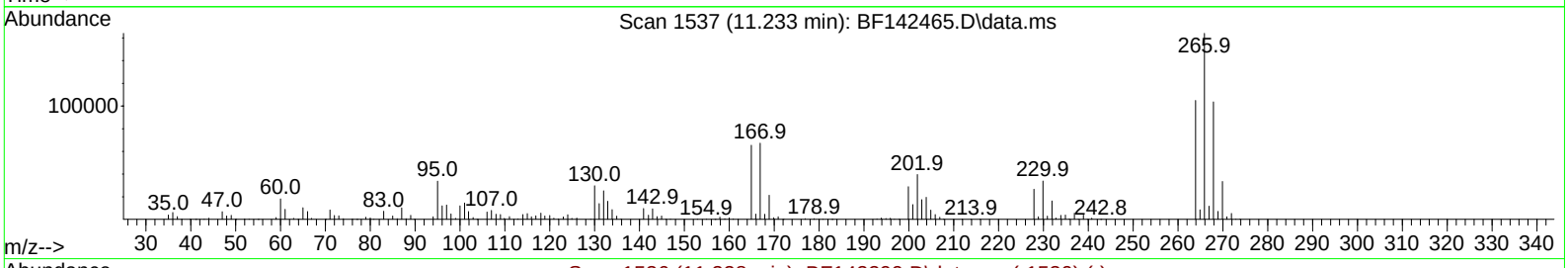
Sample Results: **BF142465.D**

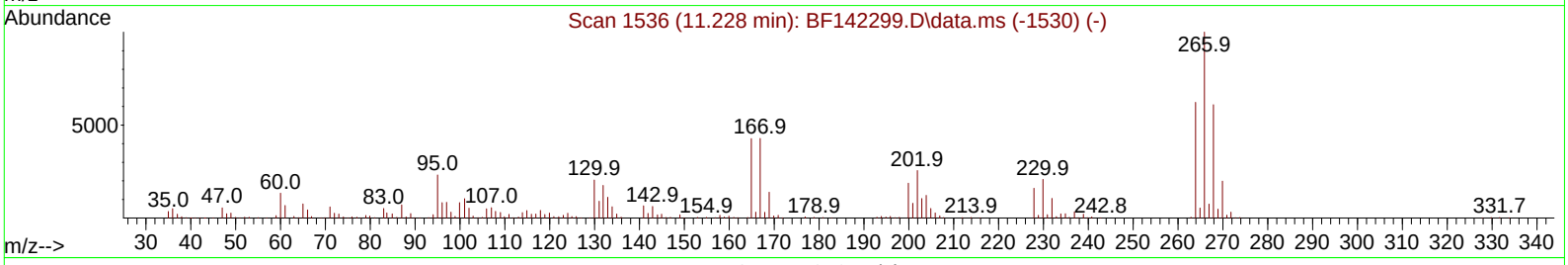
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142465.D
Acq On : 20 May 2025 11:13
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 20 14:09:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration







TIC: BF142465.D\data.ms

(70) Pentachlorophenol (C)

11.233min (+ 0.006) 45340.77 ng

response 213501

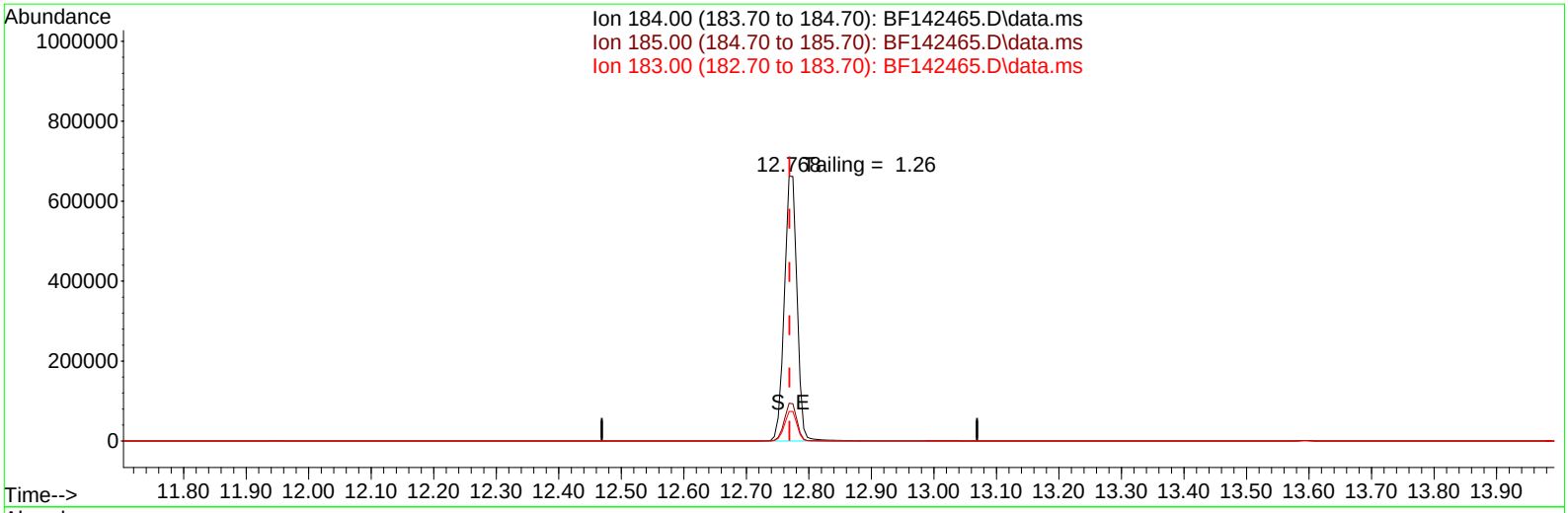
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	60.90	63.21
264.00	62.20	63.93
0.00	0.00	0.00

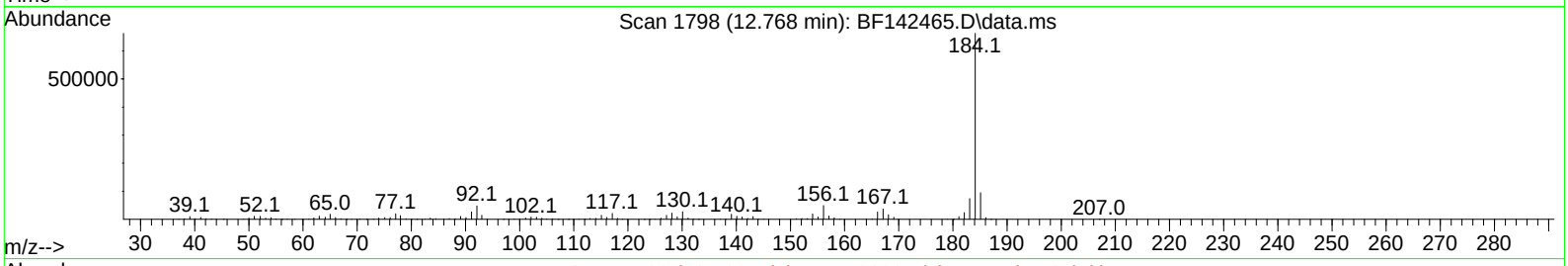
Sample Results: **BF142465.D**

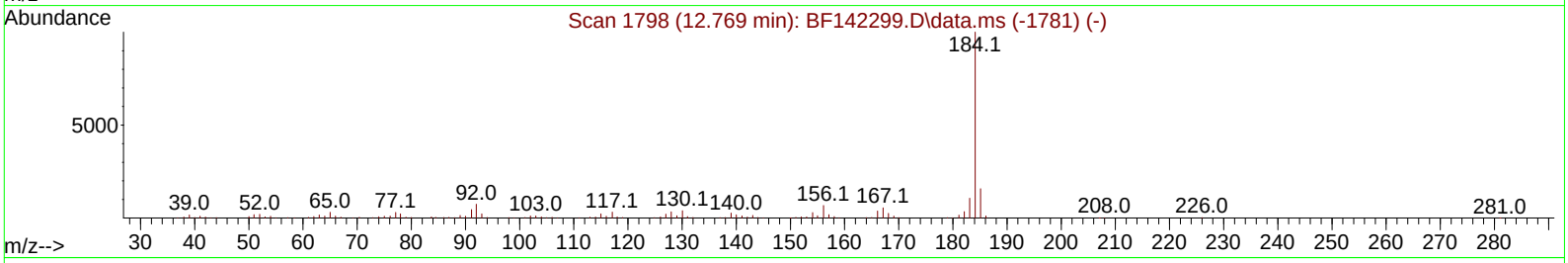
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF052025\
Data File : BF142465.D
Acq On : 20 May 2025 11:13
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 20 14:09:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration







TIC: BF142465.D\data.ms

(77) Benzidine

12.768min (-0.001) 0.00 ng

response 942414

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.70	14.29
183.00	10.70	11.15
0.00	0.00	0.00

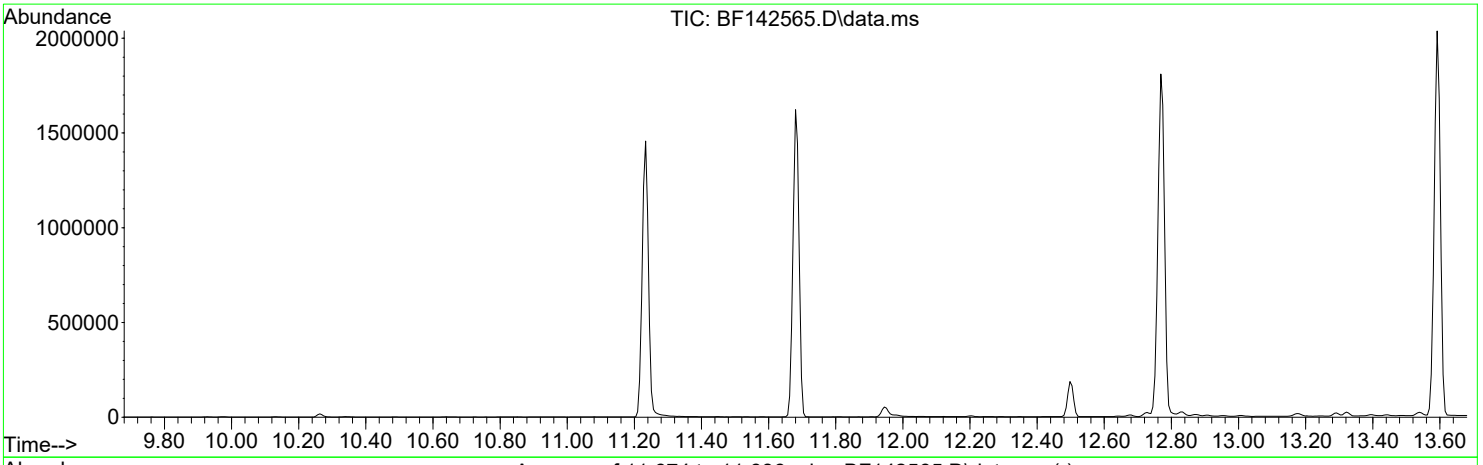
Sample Results: **BF142565.D**

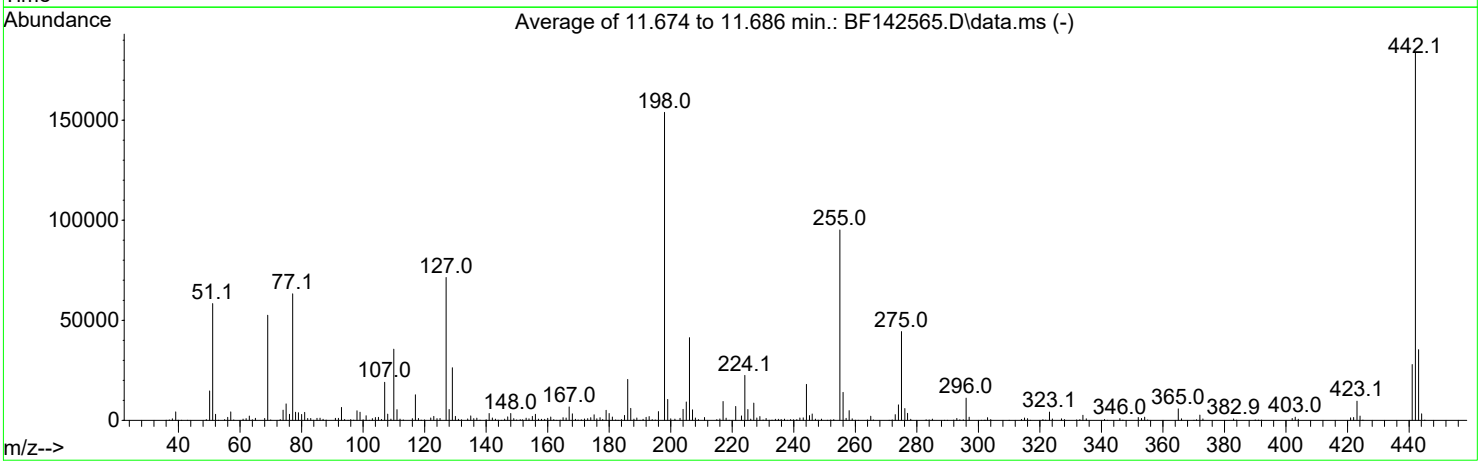
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142565.D
Acq On : 30 May 2025 12:23
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue May 20 16:26:47 2025





AutoFind: Scans 1612, 1613, 1614; Background Corrected with Scan 1606

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	37.9	58331	PASS
68	69	0.00	2	1.8	964	PASS
69	198	0.00	100	34.2	52549	PASS
70	69	0.00	2	0.5	281	PASS
127	198	10	80	46.4	71373	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	153872	PASS
199	198	5	9	6.8	10478	PASS
275	198	10	60	28.8	44389	PASS
365	198	1	100	3.8	5787	PASS
441	198	0.01	100	18.2	27936	PASS
442	442	50	100	100.0	183816	PASS
443	442	15	24	19.2	35315	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
5/30/2025	BNA_F	BF142565.D
Compound Name	**Response**	**Retention Time**
DDT	529591	13.592
DDD	11584	13.321
DDE	806	12.957
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
12390	541981	2.29

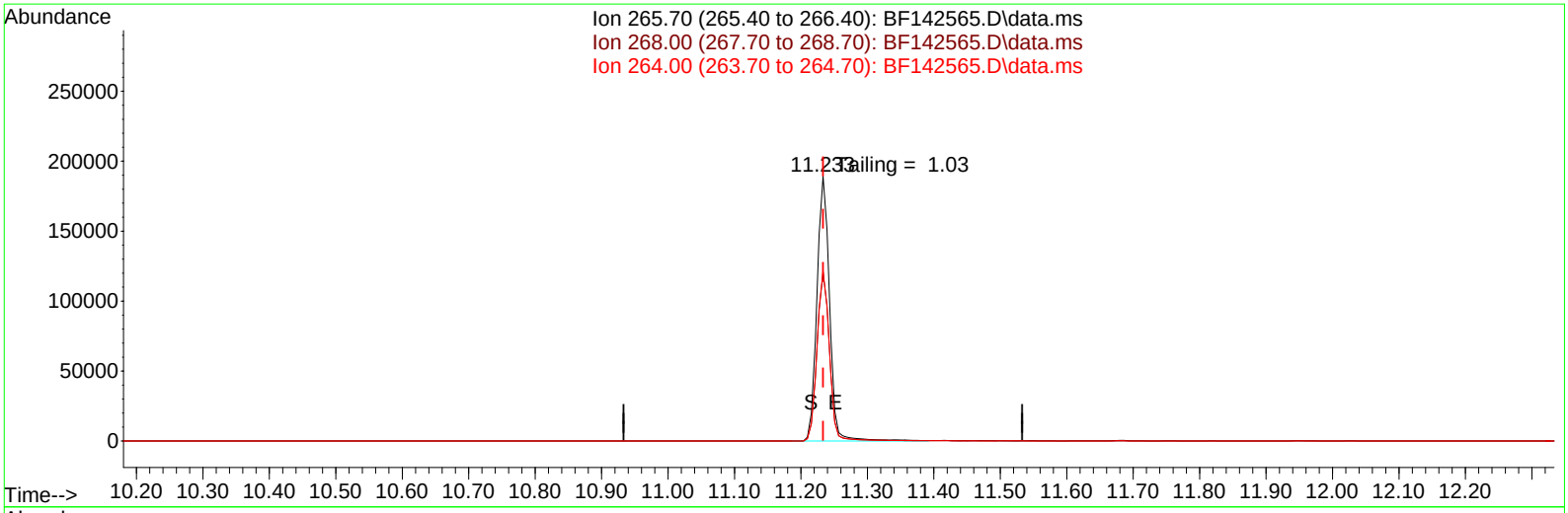
Instrument :
BNA_F
ClientSampleId :
DFTPP

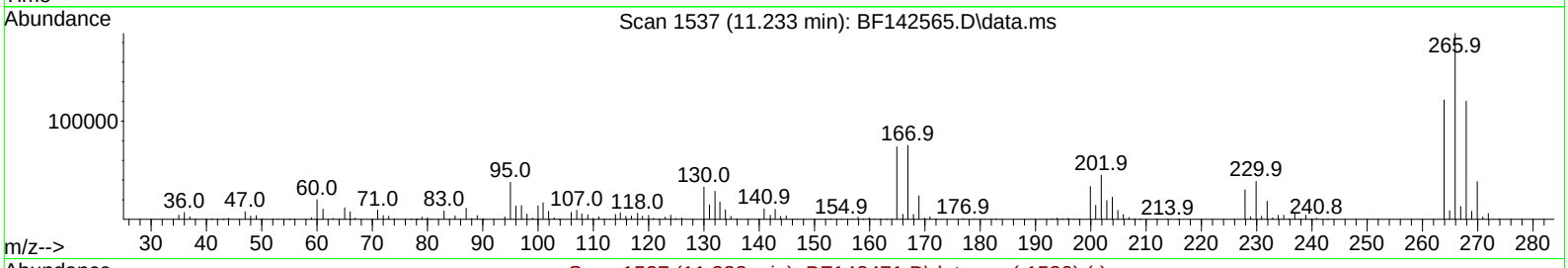
Sample Results: **BF142565.D**

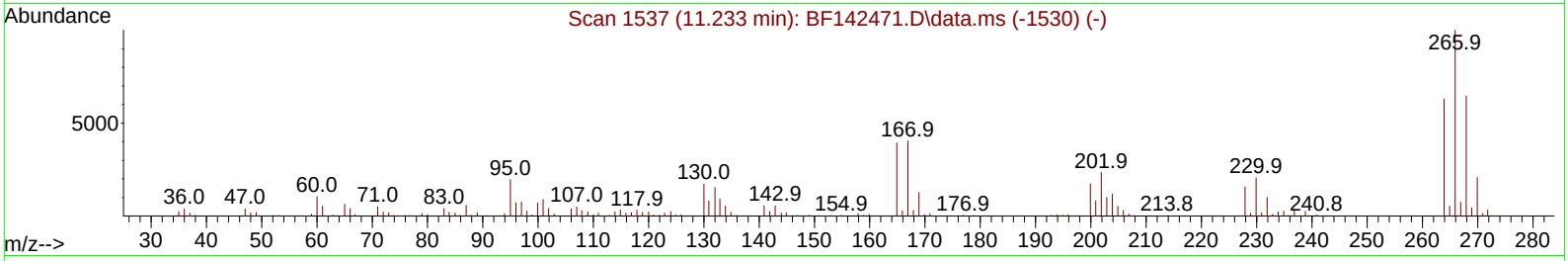
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142565.D
Acq On : 30 May 2025 12:23
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 30 13:07:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration







TIC: BF142565.D\data.ms

(70) Pentachlorophenol (C)

11.233min (+ 0.000) 56283.72 ng

response 248099

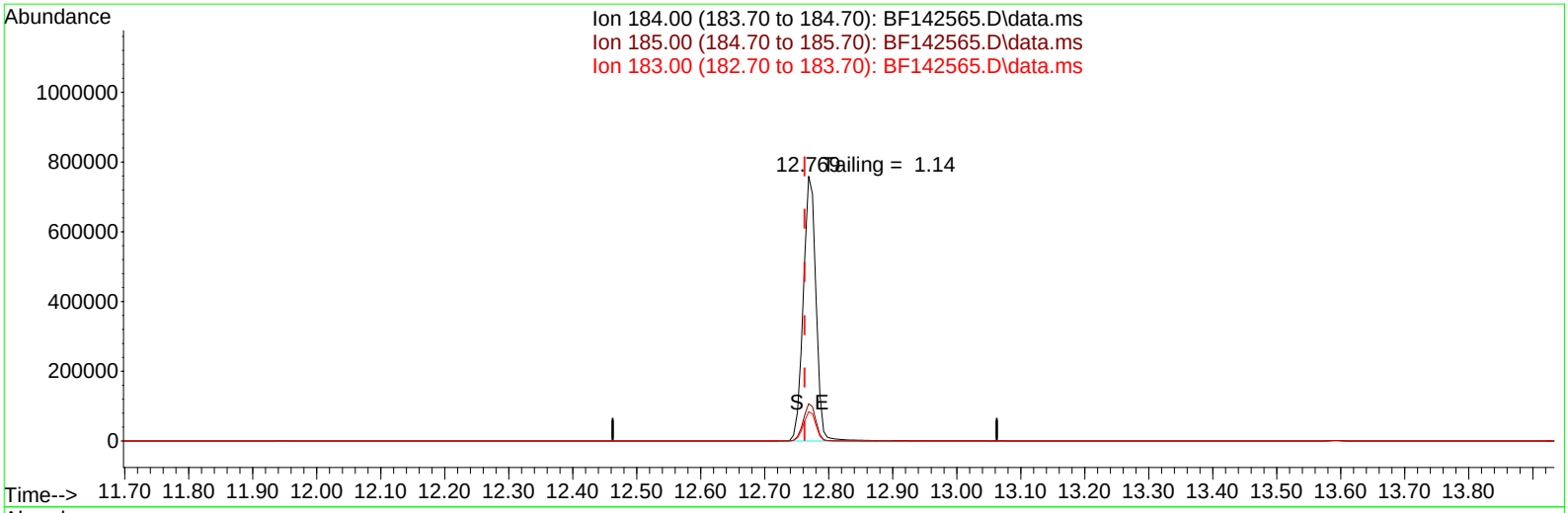
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.60	63.62
264.00	63.00	64.21
0.00	0.00	0.00

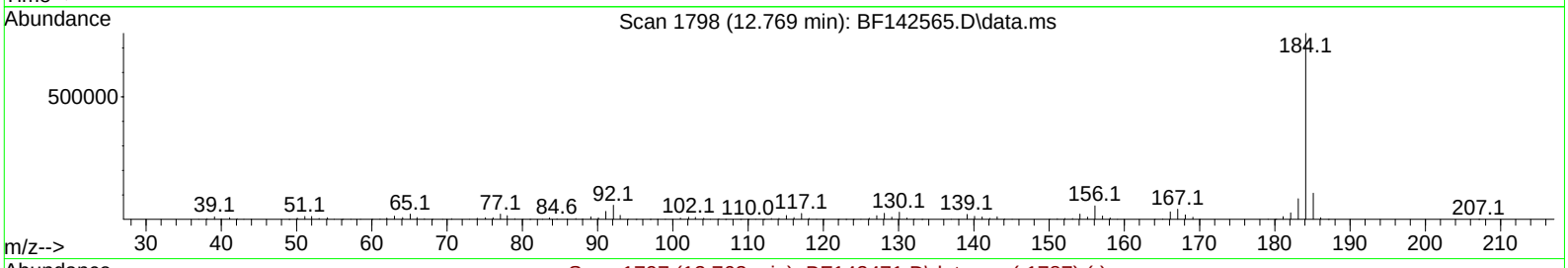
Sample Results: **BF142565.D**

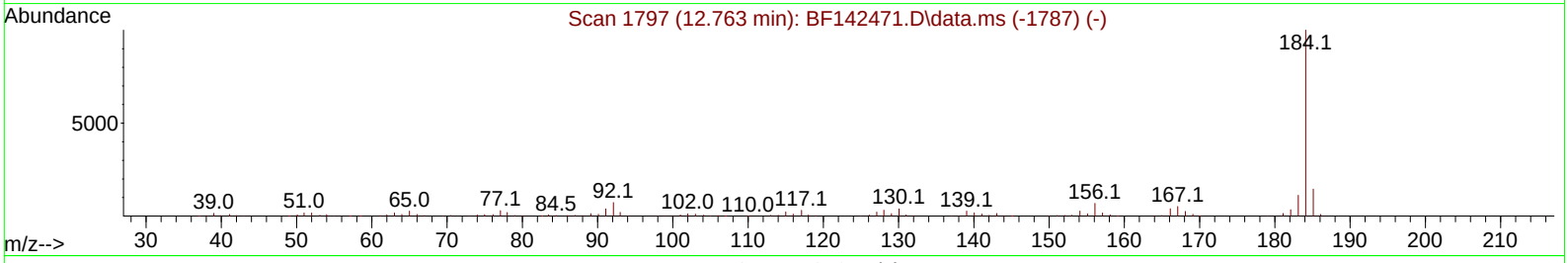
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142565.D
Acq On : 30 May 2025 12:23
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 30 13:07:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration







TIC: BF142565.D\data.ms

(77) Benzidine

12.769min (+ 0.006) 59056.94 ng

response 1057087

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.50	14.09
183.00	11.20	11.08
0.00	0.00	0.00

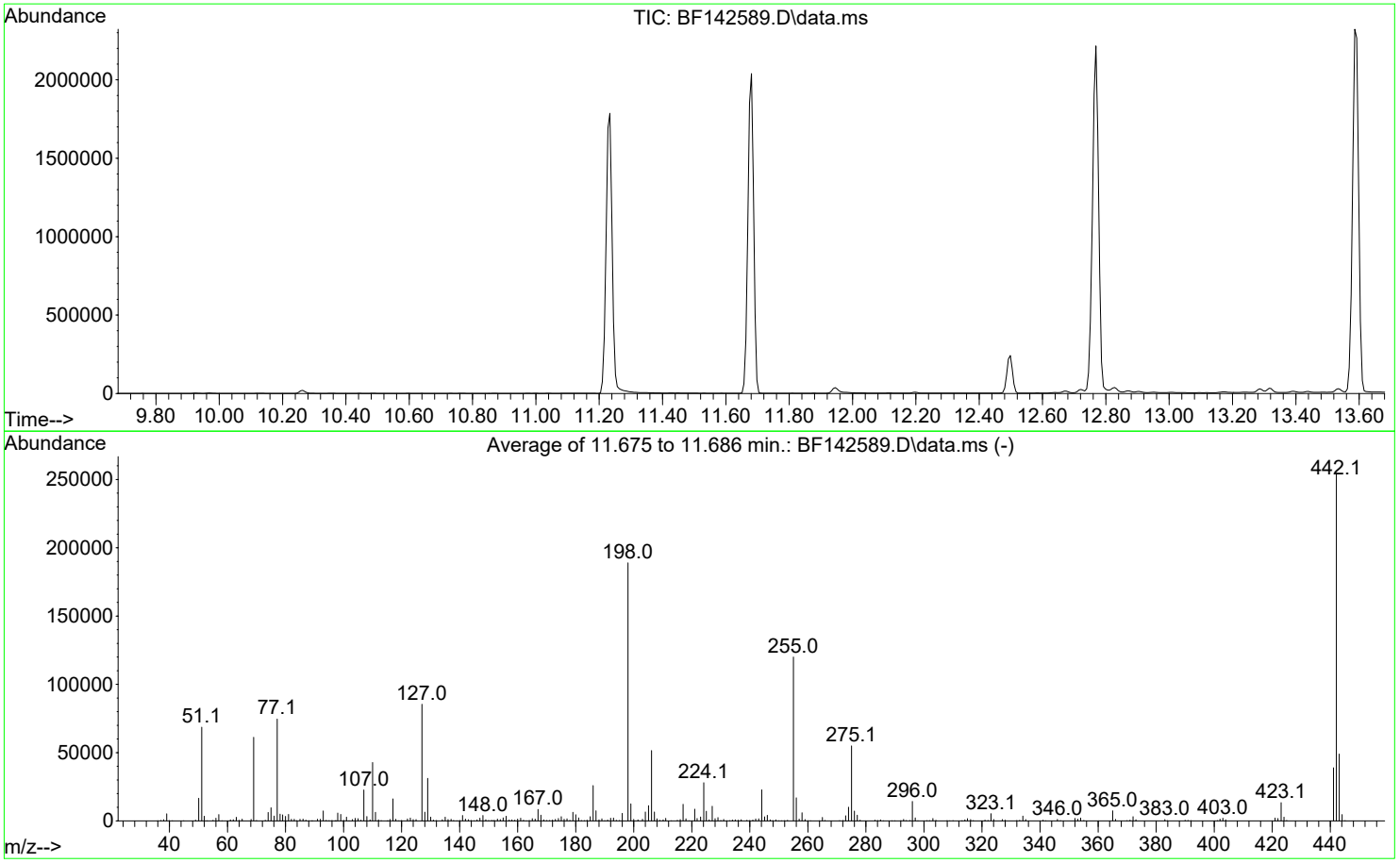
Sample Results: **BF142589.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142589.D
Acq On : 02 Jun 2025 11:01
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue May 20 16:26:47 2025



AutoFind: Scans 1612, 1613, 1614; Background Corrected with Scan 1605

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.3	68579	PASS
68	69	0.00	2	1.8	1095	PASS
69	198	0.00	100	32.4	61195	PASS
70	69	0.00	2	0.6	380	PASS
127	198	10	80	45.2	85403	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	188992	PASS
199	198	5	9	6.6	12531	PASS
275	198	10	60	29.1	54928	PASS
365	198	1	100	3.9	7435	PASS
441	198	0.01	100	20.6	38853	PASS
442	442	50	100	100.0	254059	PASS
443	442	15	24	19.3	49003	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
6/2/2025	BNA_F	BF142589.D
Compound Name	**Response**	**Retention Time**
DDT	635948	13.592
DDD	13787	13.316
DDE	1005	12.951
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
14792	650740	2.27

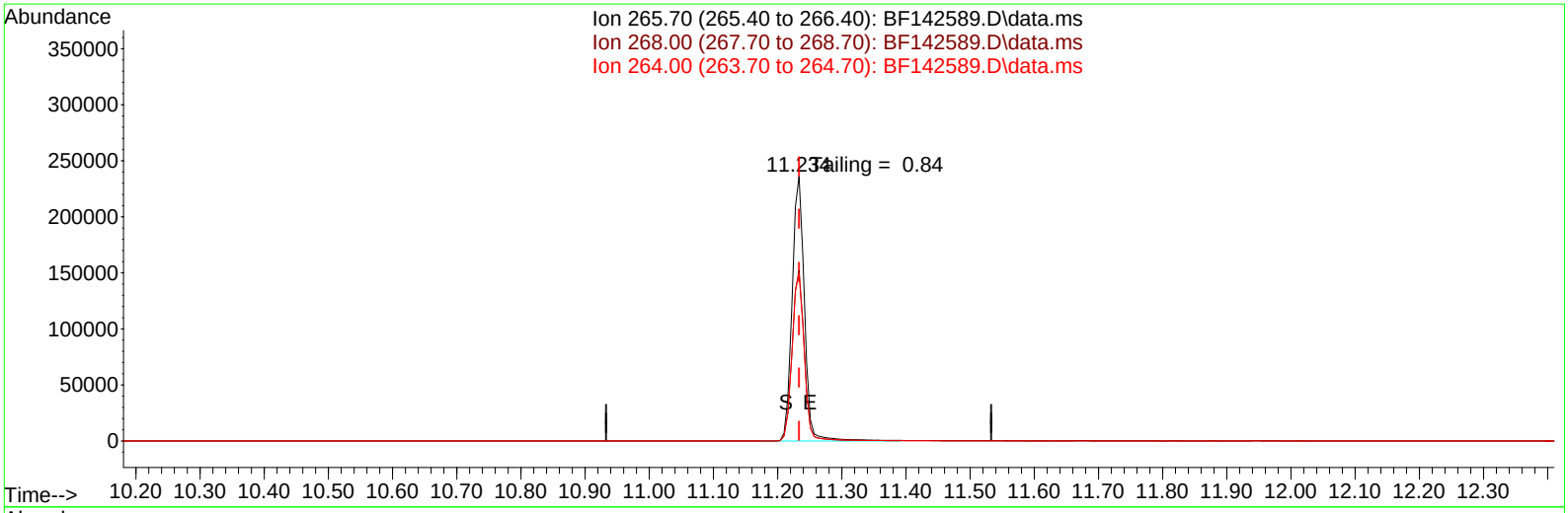
Instrument :
BNA_F
ClientSampleId :
DFTPP

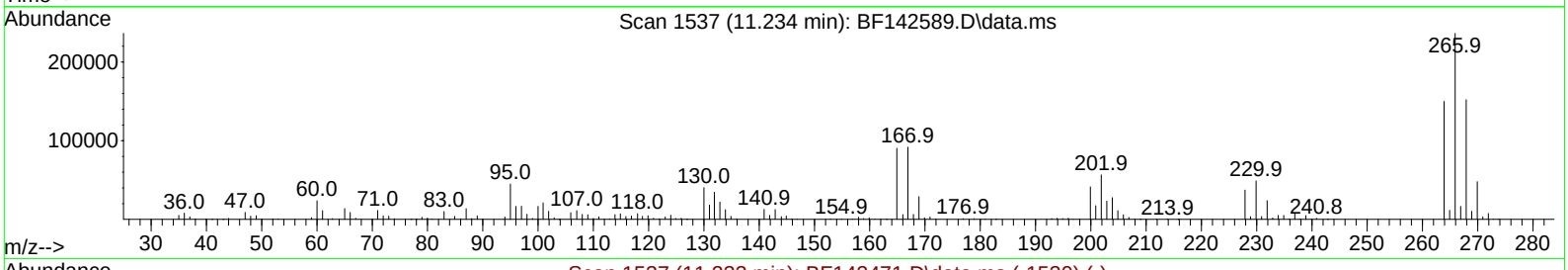
Sample Results: **BF142589.D**

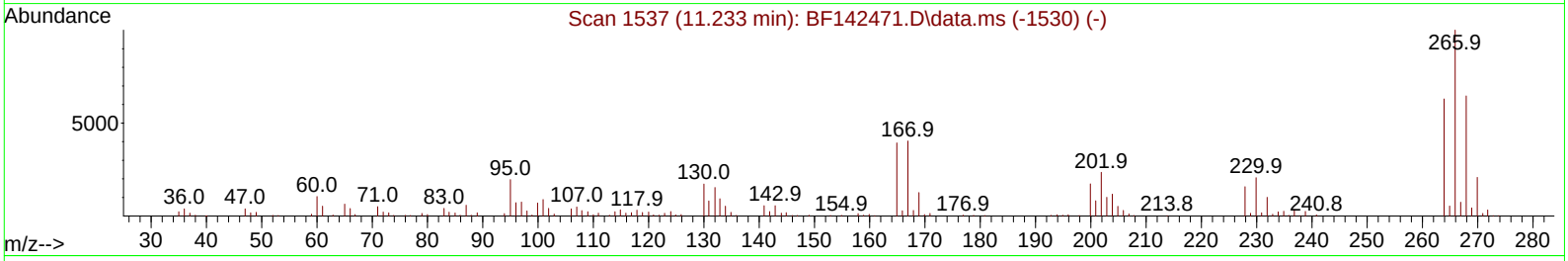
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142589.D
Acq On : 02 Jun 2025 11:01
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: Jun 02 12:45:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration







TIC: BF142589.D\data.ms

(70) Pentachlorophenol (C)

11.234min (+ 0.000) 81847.51 ng m

response 317877

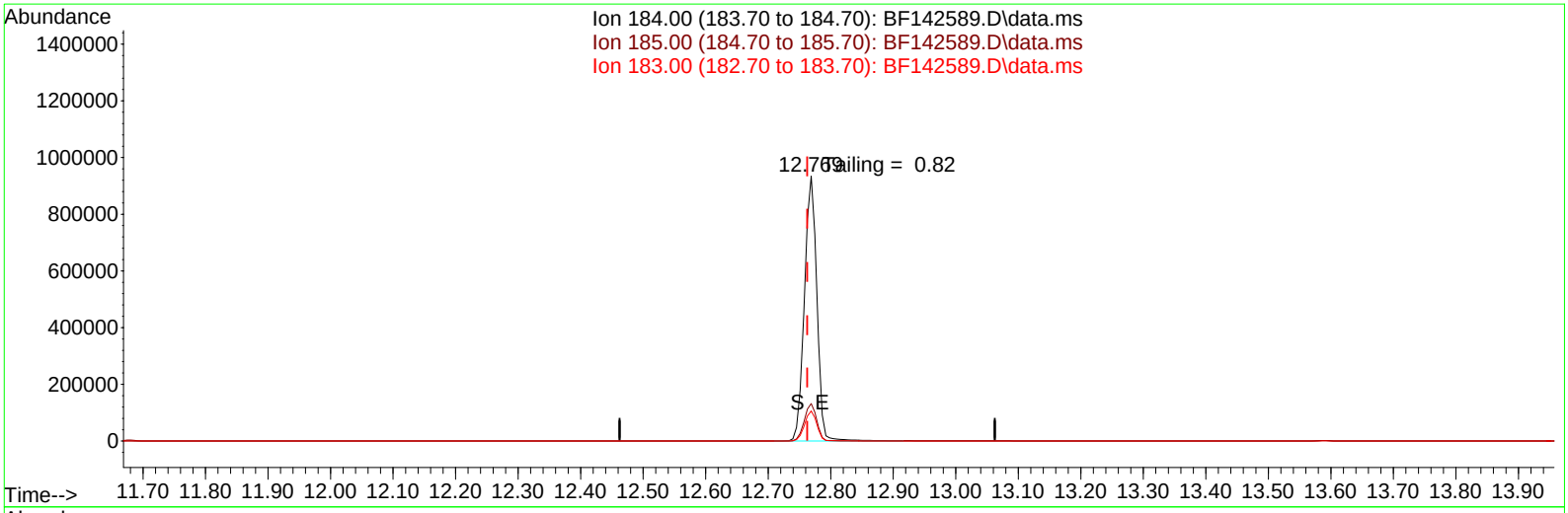
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.60	64.41
264.00	63.00	63.41
0.00	0.00	0.00

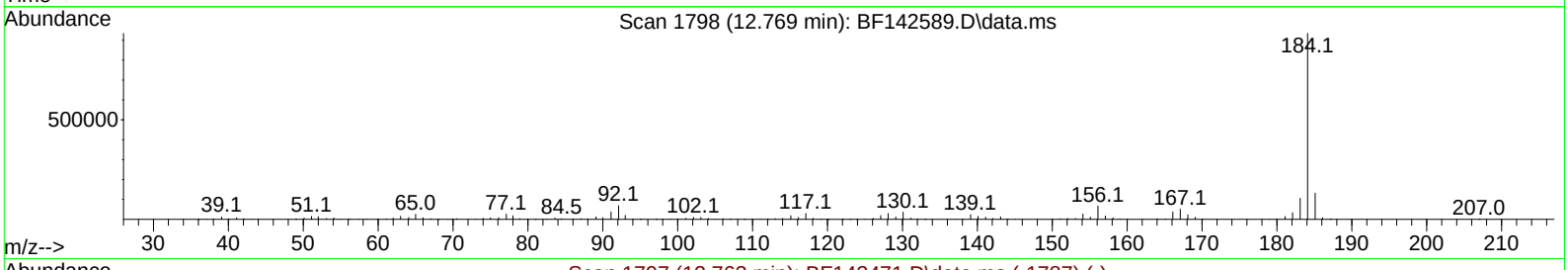
Sample Results: **BF142589.D**

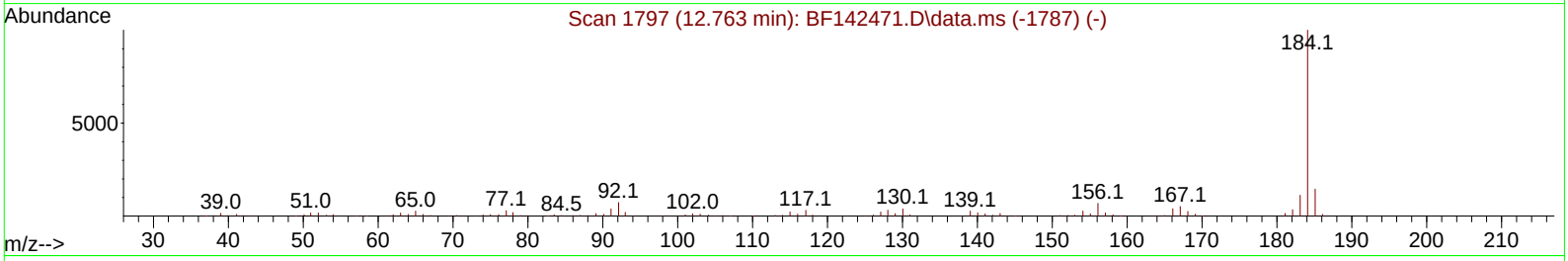
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF060225\
Data File : BF142589.D
Acq On : 02 Jun 2025 11:01
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: Jun 02 12:45:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration







TIC: BF142589.D\data.ms

(77) Benzidine

12.769min (+ 0.006) 63416.49 ng

response 1295595

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.50	14.12
183.00	11.20	11.33
0.00	0.00	0.00

Raw Data: **BF142567.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168211BL	SDG No.:	Q2150
Lab Sample ID:	PB168211BL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142567.D	1	05/30/25 09:50	05/30/25 13:49	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	160	U	160	330	ug/Kg
108-95-2	Phenol	22.1	U	22.1	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	24.3	U	24.3	170	ug/Kg
95-57-8	2-Chlorophenol	24.4	U	24.4	170	ug/Kg
95-48-7	2-Methylphenol	29.9	U	29.9	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	37.5	U	37.5	170	ug/Kg
98-86-2	Acetophenone	29.5	U	29.5	170	ug/Kg
65794-96-9	3+4-Methylphenols	41.1	U	41.1	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	47.4	U	47.4	79.9	ug/Kg
67-72-1	Hexachloroethane	17.6	U	17.6	170	ug/Kg
98-95-3	Nitrobenzene	18.3	U	18.3	170	ug/Kg
78-59-1	Isophorone	32.8	U	32.8	170	ug/Kg
88-75-5	2-Nitrophenol	58.2	U	58.2	170	ug/Kg
105-67-9	2,4-Dimethylphenol	64.8	U	64.8	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	30.8	U	30.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	28.3	U	28.3	170	ug/Kg
91-20-3	Naphthalene	22.7	U	22.7	170	ug/Kg
106-47-8	4-Chloroaniline	35.4	U	35.4	170	ug/Kg
87-68-3	Hexachlorobutadiene	25.3	U	25.3	170	ug/Kg
105-60-2	Caprolactam	52.1	U	52.1	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	28.7	U	28.7	170	ug/Kg
91-57-6	2-Methylnaphthalene	25.6	U	25.6	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	120	U	120	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	19.8	U	19.8	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	29.1	U	29.1	170	ug/Kg
92-52-4	1,1-Biphenyl	21.8	U	21.8	170	ug/Kg
91-58-7	2-Chloronaphthalene	22.5	U	22.5	170	ug/Kg
88-74-4	2-Nitroaniline	48.1	U	48.1	170	ug/Kg
131-11-3	Dimethylphthalate	27.1	U	27.1	170	ug/Kg

Raw Data: **BF142567.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168211BL	SDG No.:	Q2150
Lab Sample ID:	PB168211BL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142567.D	1	05/30/25 09:50	05/30/25 13:49	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	28.9	U	28.9	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.6	U	33.6	170	ug/Kg
99-09-2	3-Nitroaniline	46.0	U	46.0	170	ug/Kg
83-32-9	Acenaphthene	21.3	U	21.3	170	ug/Kg
51-28-5	2,4-Dinitrophenol	230	U	230	330	ug/Kg
100-02-7	4-Nitrophenol	110	U	110	330	ug/Kg
132-64-9	Dibenzofuran	22.7	U	22.7	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	50.1	U	50.1	170	ug/Kg
84-66-2	Diethylphthalate	28.3	U	28.3	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	26.7	U	26.7	170	ug/Kg
86-73-7	Fluorene	25.3	U	25.3	170	ug/Kg
100-01-6	4-Nitroaniline	64.2	U	64.2	170	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	100	U	100	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	32.9	U	32.9	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	27.8	U	27.8	170	ug/Kg
118-74-1	Hexachlorobenzene	25.3	U	25.3	170	ug/Kg
1912-24-9	Atrazine	34.0	U	34.0	170	ug/Kg
87-86-5	Pentachlorophenol	51.3	U	51.3	330	ug/Kg
85-01-8	Phenanthrene	20.9	U	20.9	170	ug/Kg
120-12-7	Anthracene	33.3	U	33.3	170	ug/Kg
86-74-8	Carbazole	31.2	U	31.2	170	ug/Kg
84-74-2	Di-n-butylphthalate	47.9	U	47.9	170	ug/Kg
206-44-0	Fluoranthene	30.0	U	30.0	170	ug/Kg
129-00-0	Pyrene	36.0	U	36.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	71.4	U	71.4	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	36.7	U	36.7	330	ug/Kg
56-55-3	Benzo(a)anthracene	23.0	U	23.0	170	ug/Kg
218-01-9	Chrysene	19.9	U	19.9	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	59.2	U	59.2	170	ug/Kg
117-84-0	Di-n-octyl phthalate	86.7	U	86.7	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	19.0	U	19.0	170	ug/Kg

Raw Data: **BF142567.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168211BL	SDG No.:	Q2150
Lab Sample ID:	PB168211BL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142567.D	1	05/30/25 09:50	05/30/25 13:49	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	22.4	U	22.4	170	ug/Kg
50-32-8	Benzo(a)pyrene	29.5	U	29.5	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	29.1	U	29.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	27.4	U	27.4	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	25.7	U	25.7	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	25.6	U	25.6	170	ug/Kg
123-91-1	1,4-Dioxane	45.2	U	45.2	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	27.4	U	27.4	170	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	120		18 - 112	80%	SPK: 150
13127-88-3	Phenol-d6	121		15 - 107	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	74.3		18 - 107	74%	SPK: 100
321-60-8	2-Fluorobiphenyl	71.1		20 - 109	71%	SPK: 100
118-79-6	2,4,6-Tribromophenol	124		10 - 116	83%	SPK: 150
1718-51-0	Terphenyl-d14	68.4		10 - 105	68%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	120000	6.898			
1146-65-2	Naphthalene-d8	466000	8.181			
15067-26-2	Acenaphthene-d10	260000	9.939			
1517-22-2	Phenanthrene-d10	480000	11.428			
1719-03-5	Chrysene-d12	319000	14.069			
1520-96-3	Perylene-d12	249000	15.568			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	320	A		5.13	ug/Kg

Raw Data: **BF142567.D**

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

Report of Analysis

Client:	CDM Smith			Date Collected:	
Project:	South River WM Replacement			Date Received:	
Client Sample ID:	PB168211BL			SDG No.:	Q2150
Lab Sample ID:	PB168211BL			Matrix:	SOIL
Analytical Method:	8270E			% Solid:	100
Sample Wt/Vol:	30.02	Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOC-TCL BNA -20
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142567.D	1	05/30/25 09:50	05/30/25 13:49	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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_F\Data\BF053025\
Data File : BF142567.D
Acq On : 30 May 2025 13:49
Operator : RC/JU
Sample : PB168211BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Quant Time: May 30 14:21:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

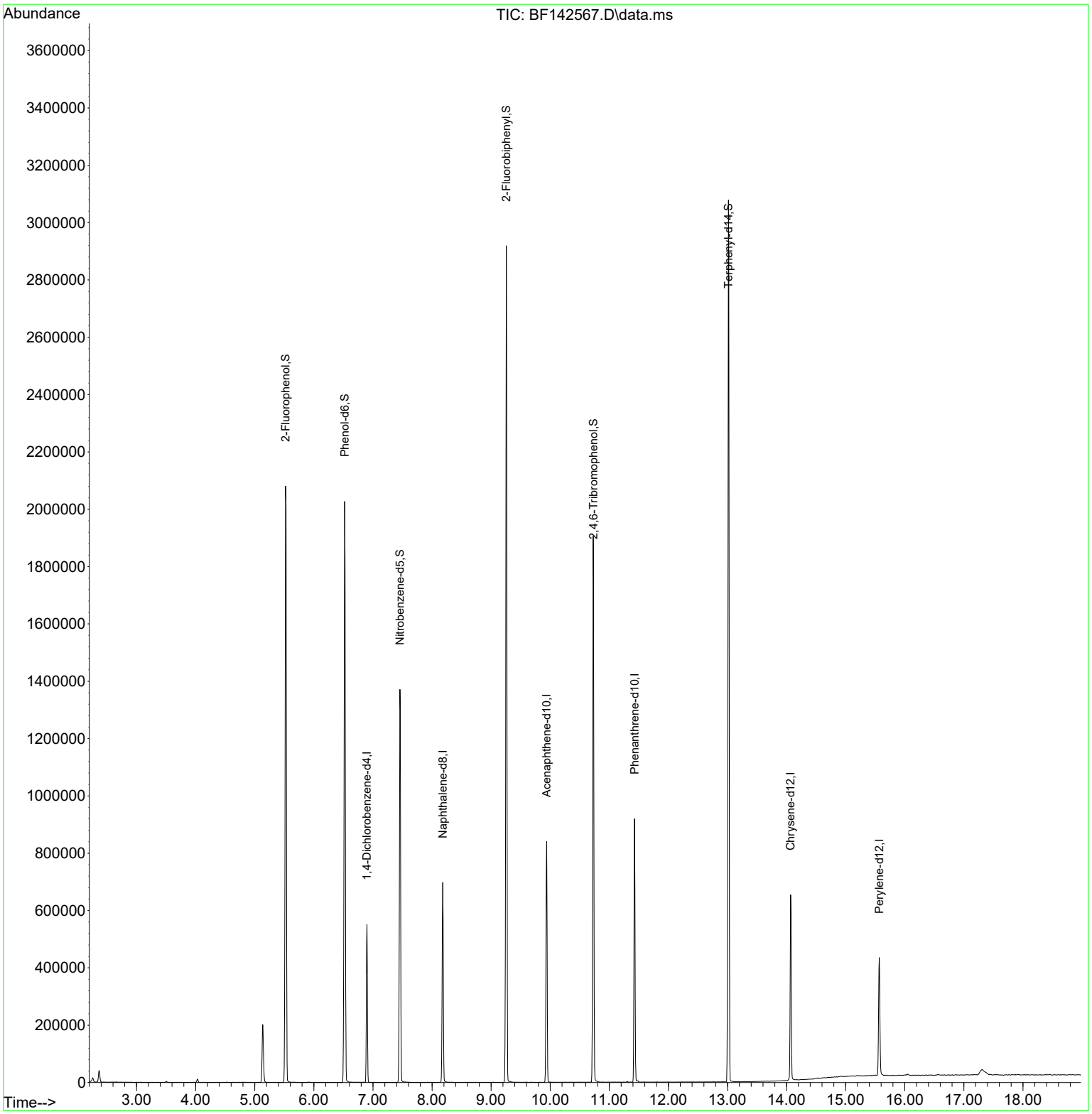
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	120363	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	465933	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	259895	20.000	ng	0.00
64) Phenanthrene-d10	11.428	188	480220	20.000	ng	0.00
76) Chrysene-d12	14.069	240	319274	20.000	ng	# 0.00
86) Perylene-d12	15.568	264	249124	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.522	112	858655	120.188	ng	0.00
7) Phenol-d6	6.522	99	1042703	121.245	ng	-0.01
23) Nitrobenzene-d5	7.457	82	634450	74.251	ng	-0.02
42) 2,4,6-Tribromophenol	10.733	330	359050	124.475	ng	0.00
45) 2-Fluorobiphenyl	9.257	172	1376467	71.068	ng	-0.01
79) Terphenyl-d14	13.016	244	1598136	68.403	ng	0.00
Target Compounds						Qvalue

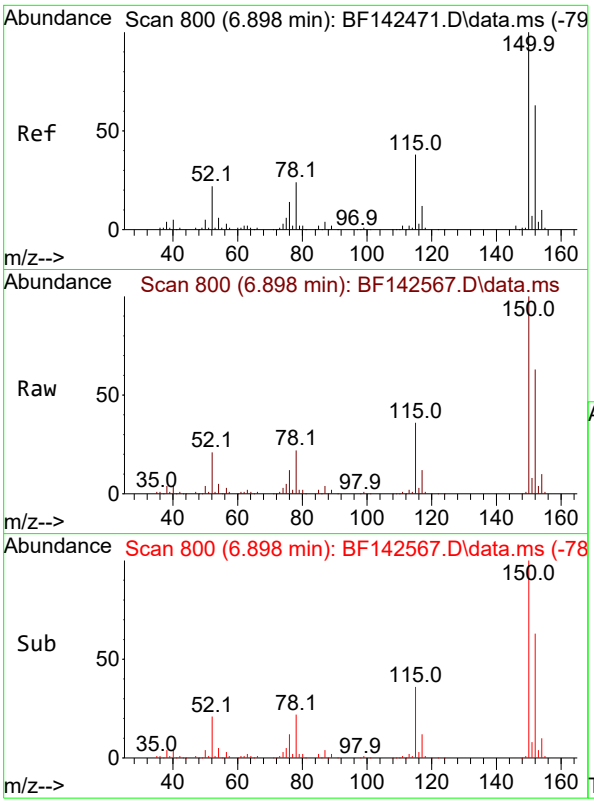
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142567.D
Acq On : 30 May 2025 13:49
Operator : RC/JU
Sample : PB168211BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Quant Time: May 30 14:21:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



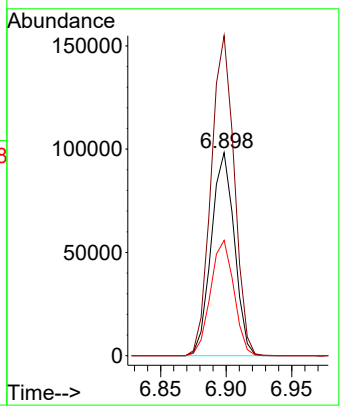


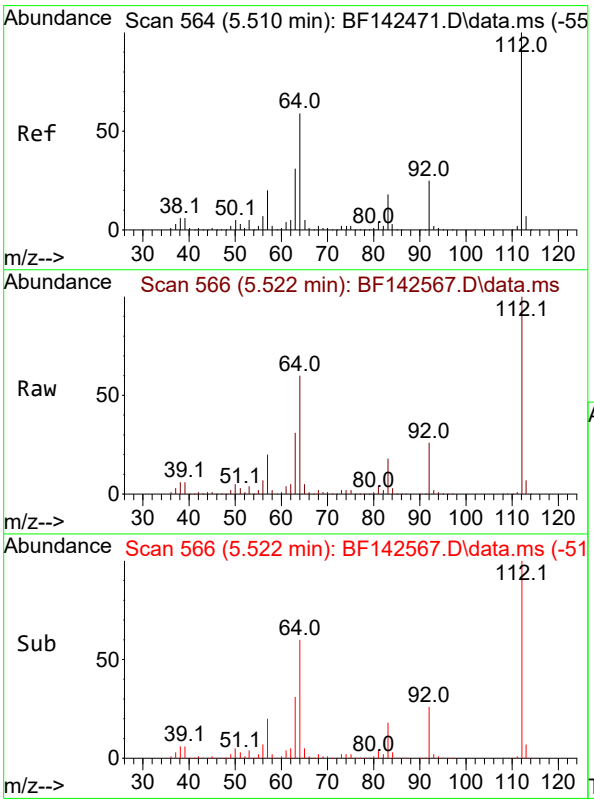
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Tgt Ion:152 Resp: 120363

Ion	Ratio	Lower	Upper
152	100		
150	157.6	128.2	192.4
115	56.8	48.3	72.5

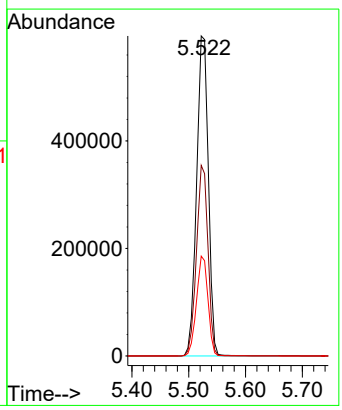


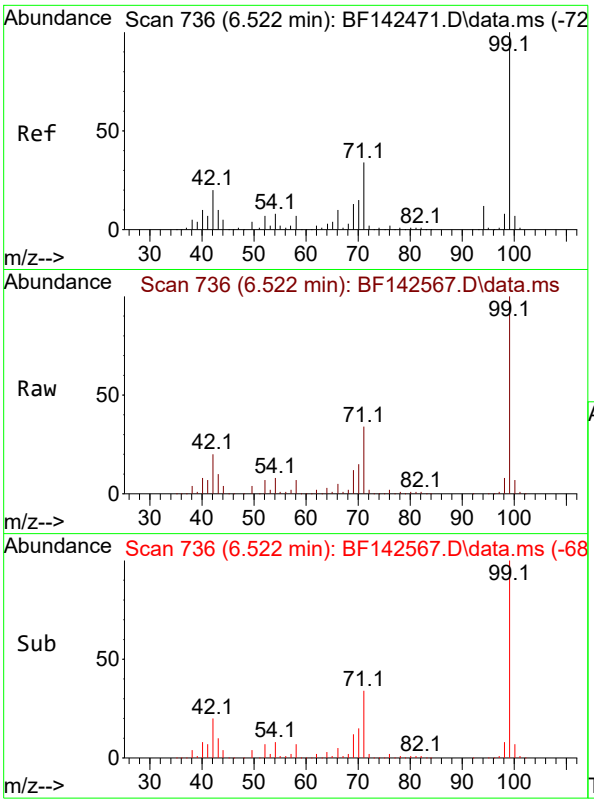


#5
2-Fluorophenol
Concen: 120.188 ng
RT: 5.522 min Scan# 566
Delta R.T. 0.006 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Tgt Ion:112 Resp: 858655

Ion	Ratio	Lower	Upper
112	100		
64	59.6	47.5	71.3
63	31.2	24.9	37.3



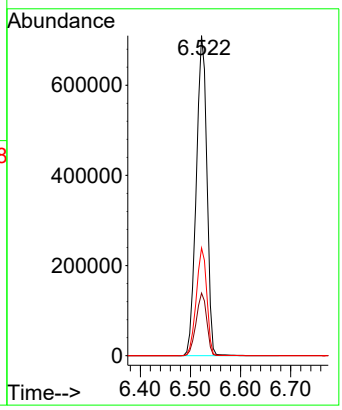


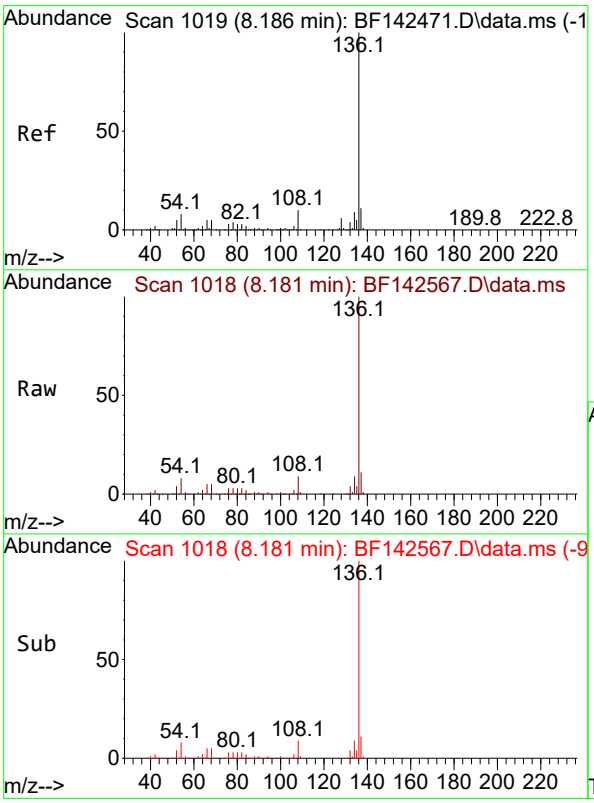
#7
Phenol-d6
Concen: 121.245 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.012 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Tgt Ion: 99 Resp: 1042703

Ion	Ratio	Lower	Upper
99	100		
42	19.5	16.2	24.2
71	33.7	27.3	40.9

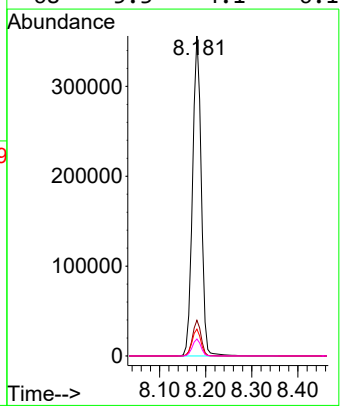


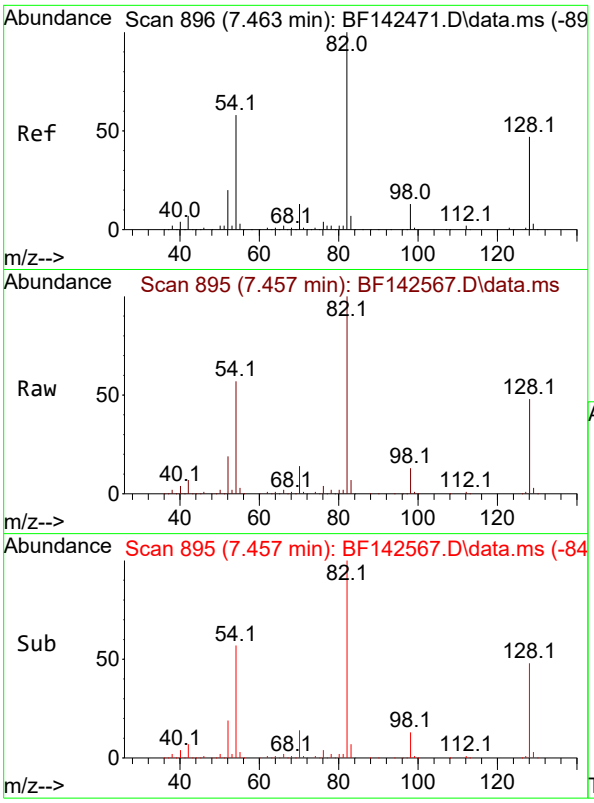


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1018
Delta R.T. -0.006 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Tgt Ion:136 Resp: 465933

Ion	Ratio	Lower	Upper
136	100		
137	11.1	8.6	13.0
54	8.4	6.6	10.0
68	5.3	4.1	6.1



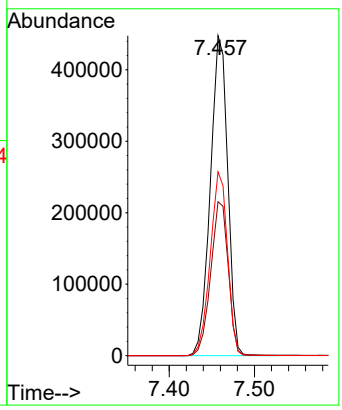


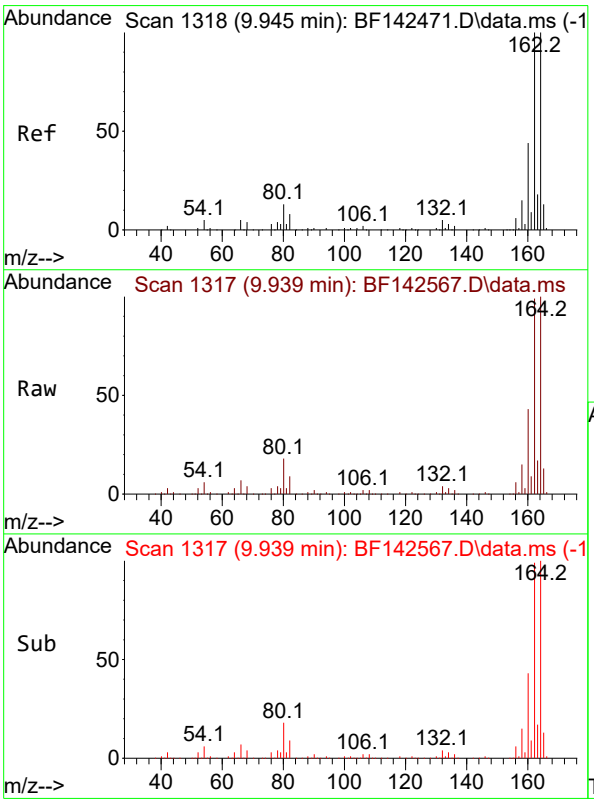
#23
Nitrobenzene-d5
Concen: 74.251 ng
RT: 7.457 min Scan# 8
Delta R.T. -0.017 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Tgt Ion: 82 Resp: 634450

Ion	Ratio	Lower	Upper
82	100		
128	48.1	37.4	56.2
54	57.4	46.6	70.0

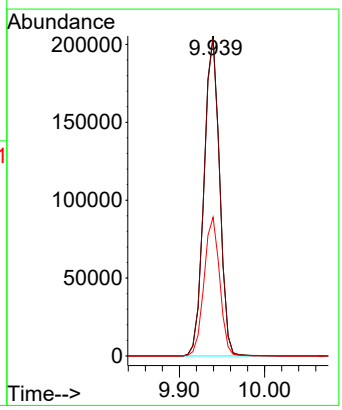


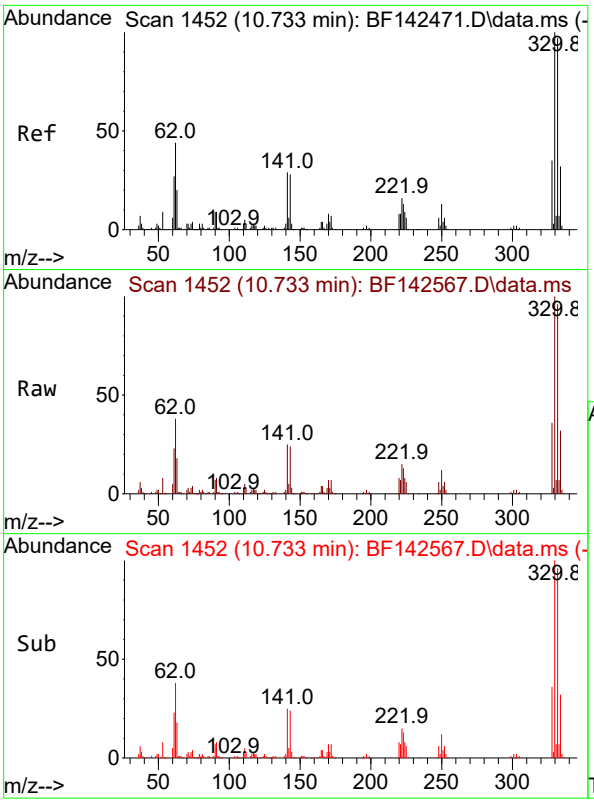


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Tgt Ion:164 Resp: 259895

Ion	Ratio	Lower	Upper
164	100		
162	99.2	80.2	120.4
160	43.4	35.6	53.4



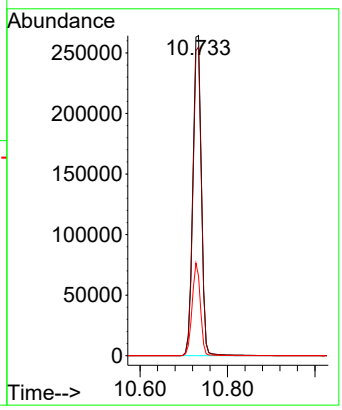


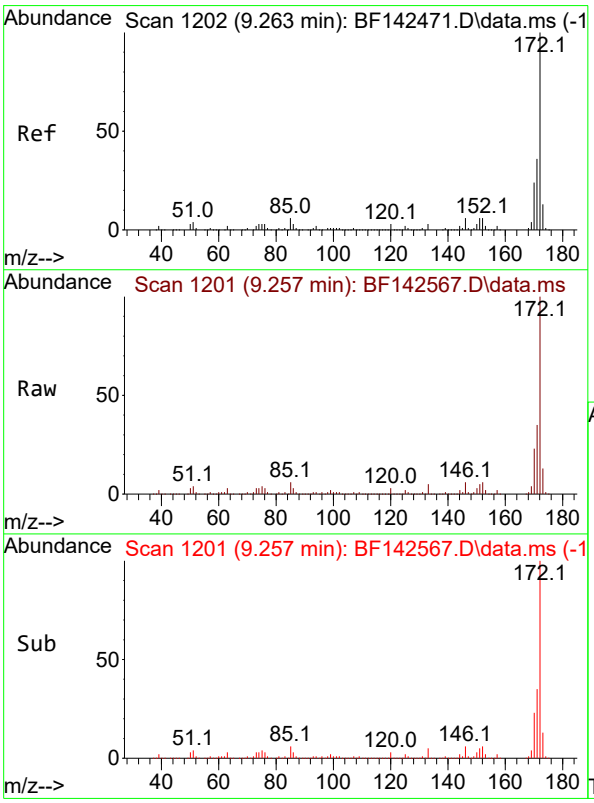
#42
2,4,6-Tribromophenol
Concen: 124.475 ng
RT: 10.733 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Tgt Ion:330 Resp: 359050

Ion	Ratio	Lower	Upper
330	100		
332	95.8	77.6	116.4
141	27.9	24.6	36.8

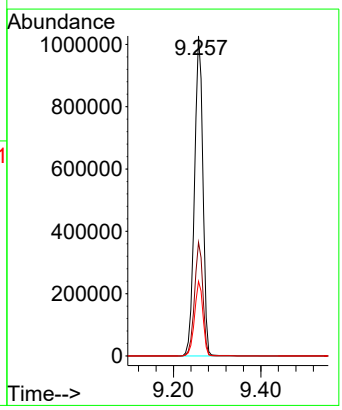


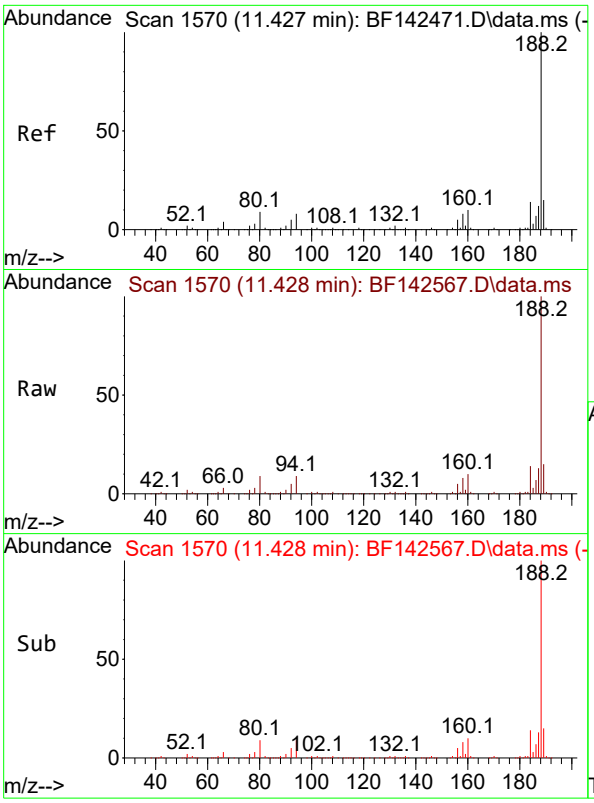


#45
2-Fluorobiphenyl
Concen: 71.068 ng
RT: 9.257 min Scan# 1201
Delta R.T. -0.012 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Tgt Ion:172 Resp: 1376467

Ion	Ratio	Lower	Upper
172	100		
171	35.5	28.6	42.8
170	23.3	18.9	28.3



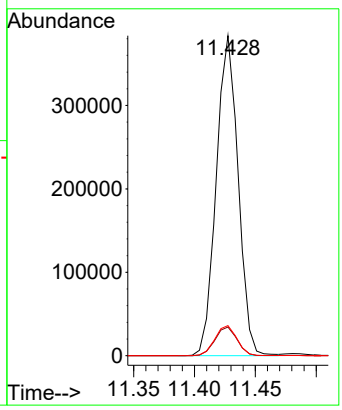


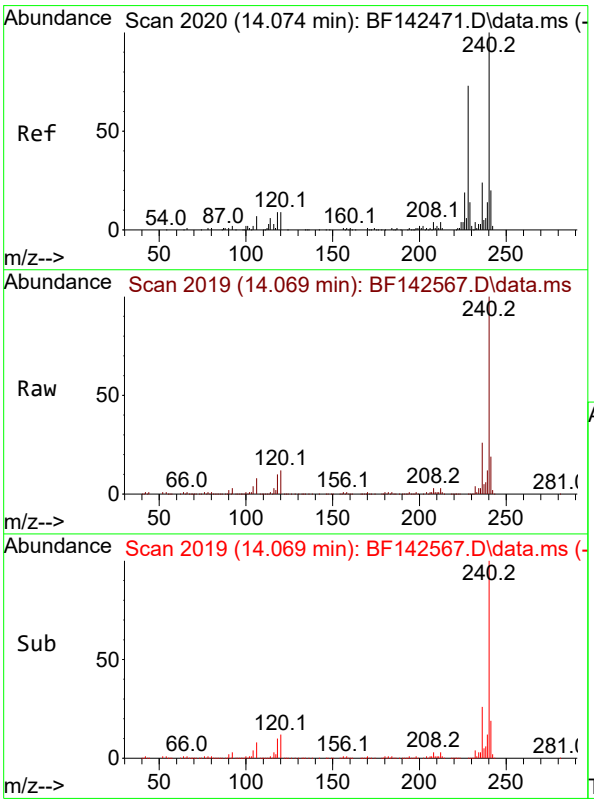
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.428 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Tgt Ion:188 Resp: 480220

Ion	Ratio	Lower	Upper
188	100		
94	9.0	6.6	10.0
80	9.4	7.4	11.0

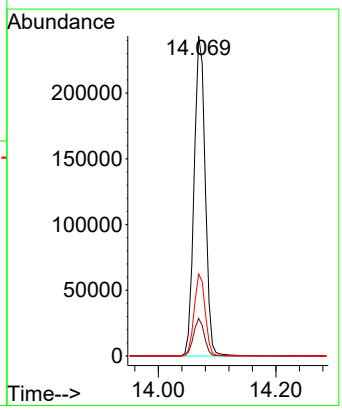


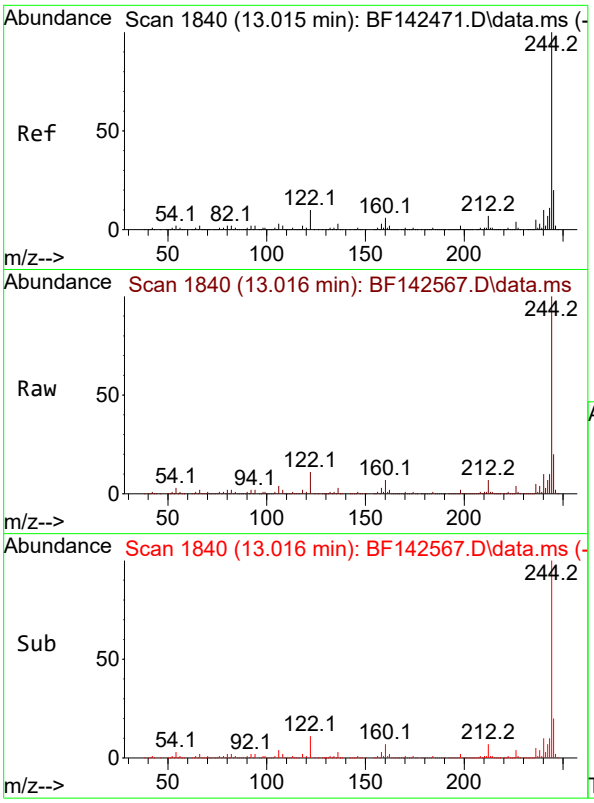


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.069 min Scan# 2019
Delta R.T. -0.006 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Tgt Ion:240 Resp: 319274

Ion	Ratio	Lower	Upper
240	100		
120	11.7	7.5	11.3#
236	25.6	19.6	29.4



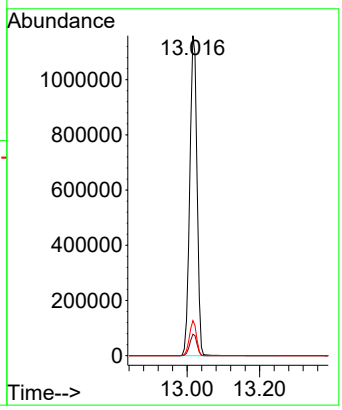


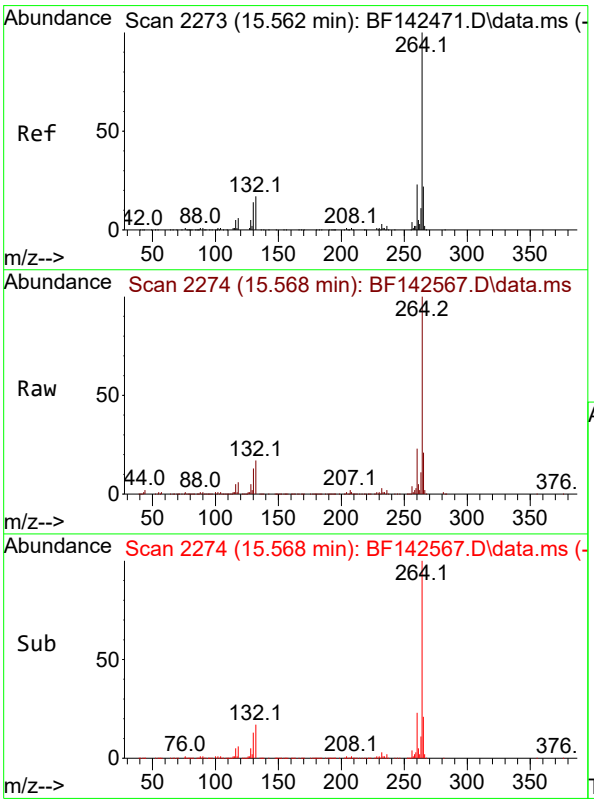
#79
Terphenyl-d14
Concen: 68.403 ng
RT: 13.016 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Tgt Ion:244 Resp: 1598136

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.3	7.9
122	10.9	8.2	12.2

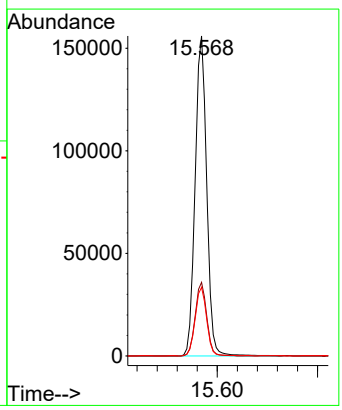




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2274
Delta R.T. 0.000 min
Lab File: BF142567.D
Acq: 30 May 2025 13:49

Tgt Ion:264 Resp: 249124

Ion	Ratio	Lower	Upper
264	100		
260	23.0	18.6	28.0
265	21.5	17.7	26.5



Sample Results: **BF142567.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142567.D
Acq On : 30 May 2025 13:49
Operator : RC/JU
Sample : PB168211BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BF142567.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.363	20	29	39	rVB	39739	67676	1.62%	0.280%
2	5.134	494	500	517	rBV	201442	323138	7.72%	1.338%
3	5.522	560	566	572	rBV	2080786	2950934	70.48%	12.220%
4	6.522	729	736	742	rBV	2027286	2972206	70.99%	12.308%
5	6.898	795	800	805	rBV	551358	678646	16.21%	2.810%
6	7.457	888	895	901	rBV	1371044	1941005	46.36%	8.038%
7	8.181	1012	1018	1032	rBV	698181	904610	21.61%	3.746%
8	9.257	1194	1201	1206	rBV	2918803	3862734	92.26%	15.996%
9	9.939	1311	1317	1322	rBV	840683	1064988	25.44%	4.410%
10	10.728	1445	1451	1467	rBV	1905522	2525588	60.32%	10.458%
11	11.428	1564	1570	1575	rBV	919013	1145953	27.37%	4.745%
12	13.016	1834	1840	1846	rBV	3076276	4186924	100.00%	17.338%
13	14.069	2010	2019	2032	rBV	648148	864665	20.65%	3.581%
14	15.568	2267	2274	2287	rBV	411807	659691	15.76%	2.732%

Sum of corrected areas: 24148758

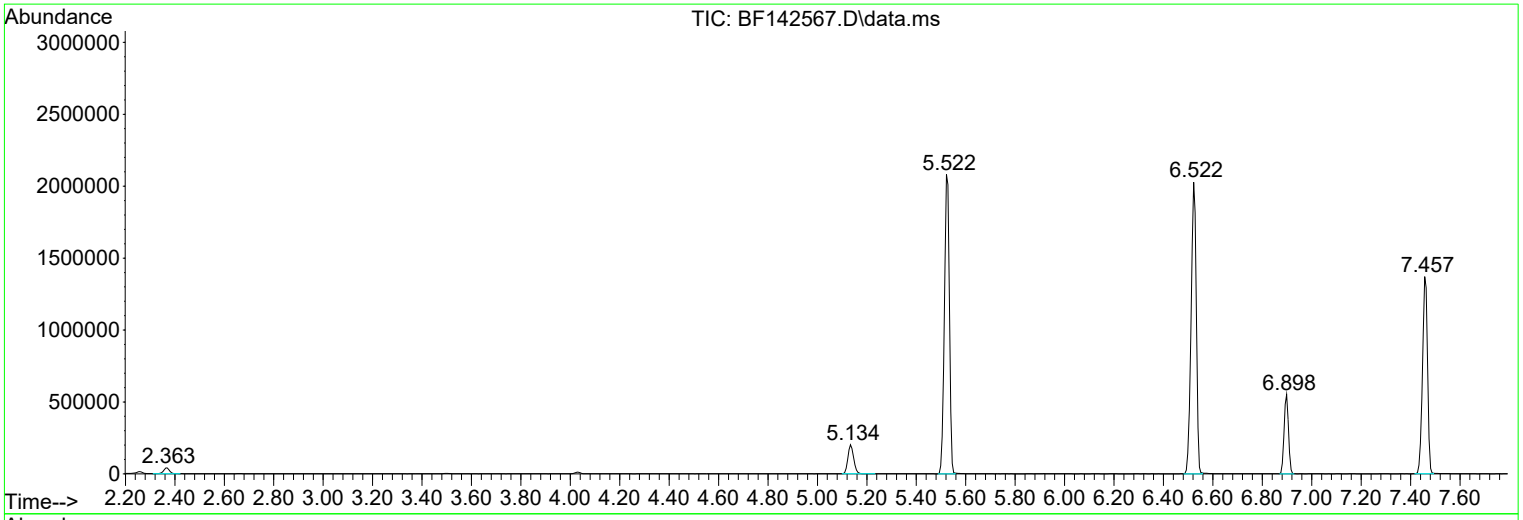
Sample Results: **BF142567.D**

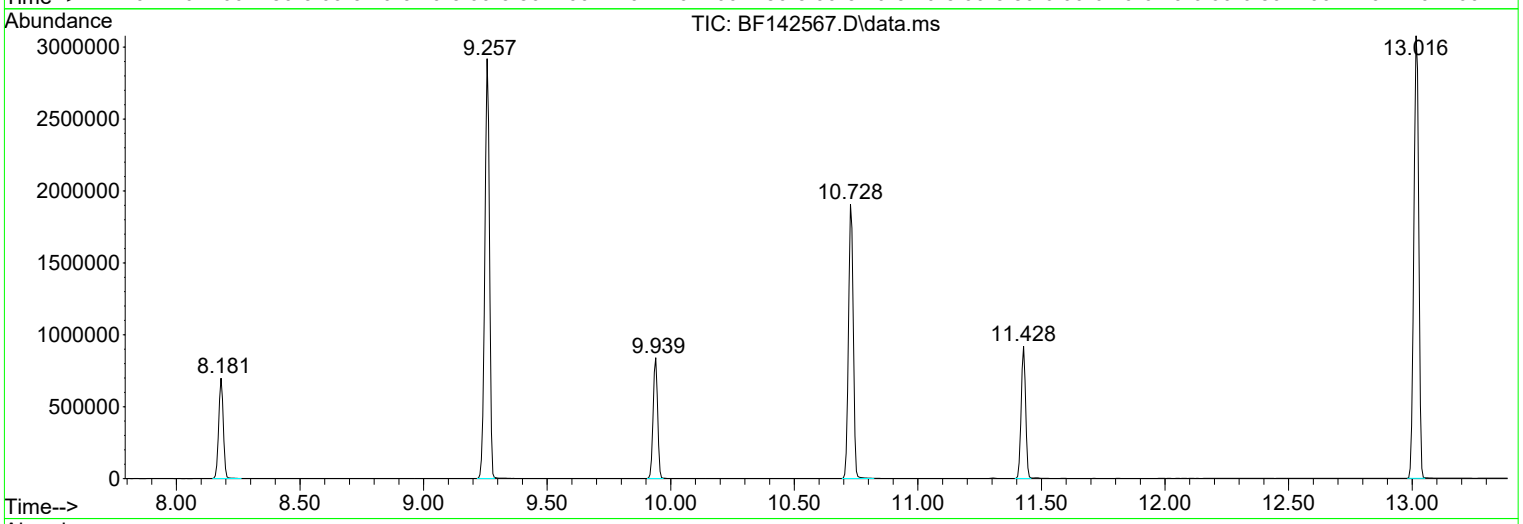
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142567.D
Acq On : 30 May 2025 13:49
Operator : RC/JU
Sample : PB168211BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

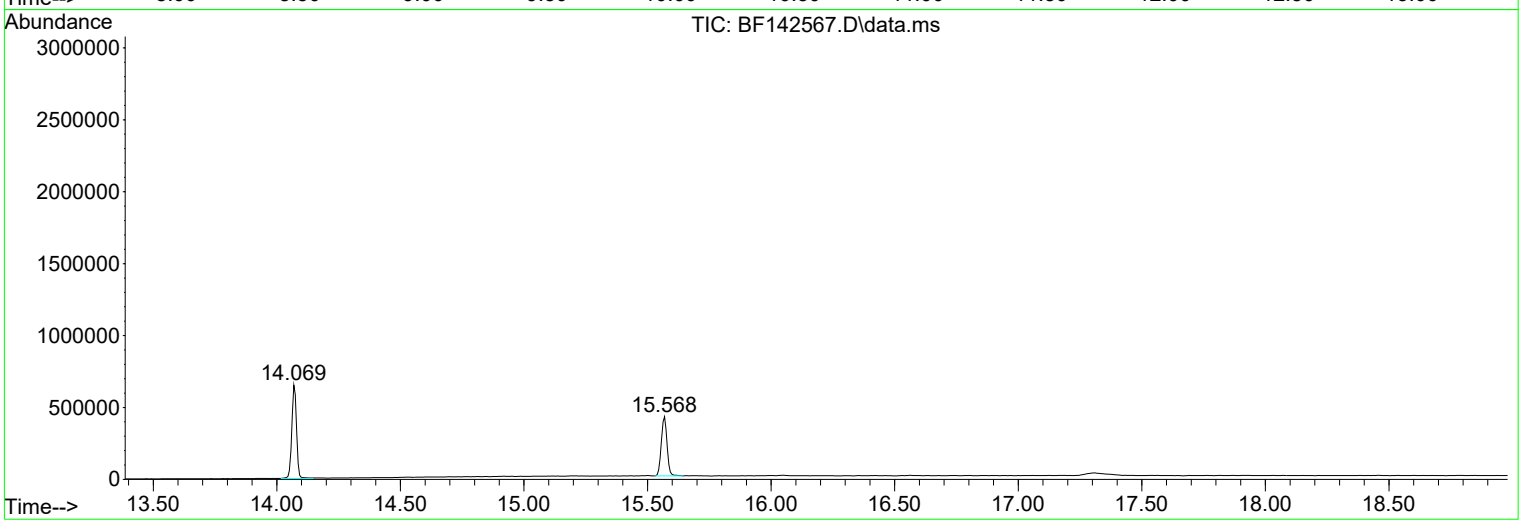
Instrument :
BNA_F
ClientSampleId :
PB168211BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142567.D
Acq On : 30 May 2025 13:49
Operator : RC/JU
Sample : PB168211BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BL

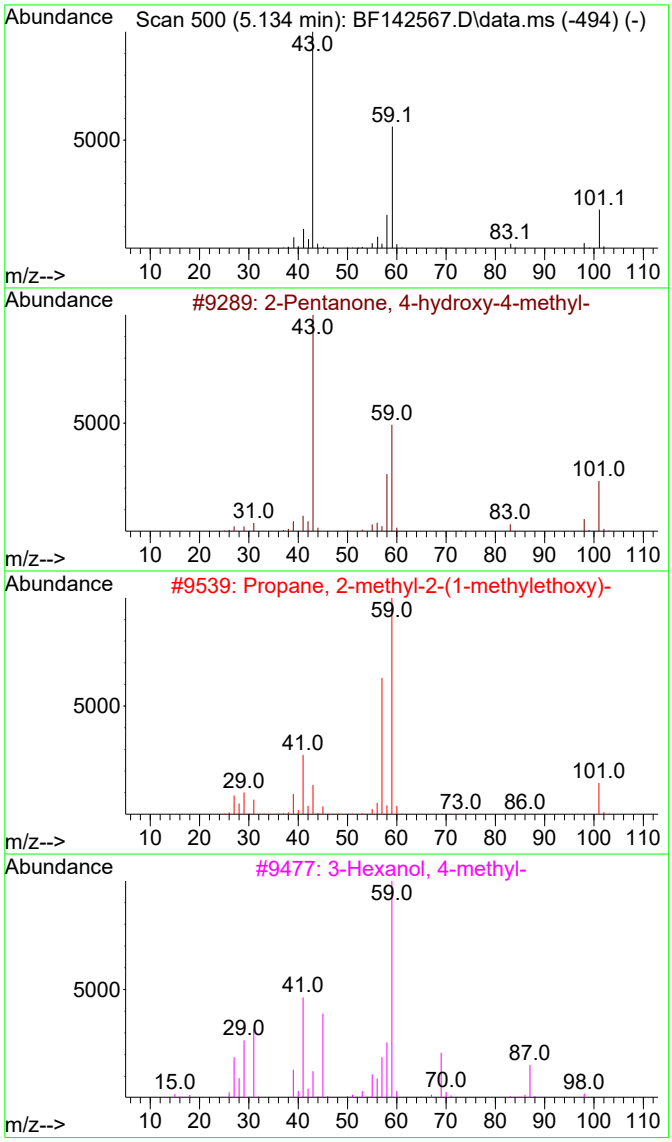
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

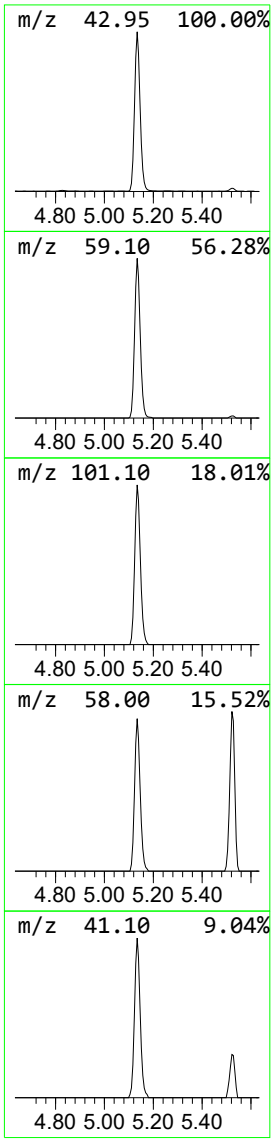
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.134	9.52 ng	323138	1,4-Dichlorobenzene-d4	6.898

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
2	Propane, 2-methyl-2-(1-methyleth...	116	C7H16O	017348-59-3	33
3	3-Hexanol, 4-methyl-	116	C7H16O	000615-29-2	33
4	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	32
5	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	12





Sample Results: **BF142567.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142567.D
Acq On : 30 May 2025 13:49
Operator : RC/JU
Sample : PB168211BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-...	5.134	9.5	ng	323138	1	6.898	678646	20.0

Raw Data: **BF142568.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168211BS	SDG No.:	Q2150
Lab Sample ID:	PB168211BS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142568.D	1	05/30/25 09:50	05/30/25 14:18	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1100		160	330	ug/Kg
108-95-2	Phenol	1400		22.1	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1400		24.3	170	ug/Kg
95-57-8	2-Chlorophenol	1400		24.4	170	ug/Kg
95-48-7	2-Methylphenol	1400		29.9	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1300		37.5	170	ug/Kg
98-86-2	Acetophenone	1400		29.5	170	ug/Kg
65794-96-9	3+4-Methylphenols	1400		41.1	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1300		47.4	80.0	ug/Kg
67-72-1	Hexachloroethane	1300		17.6	170	ug/Kg
98-95-3	Nitrobenzene	1400		18.3	170	ug/Kg
78-59-1	Isophorone	1400		32.8	170	ug/Kg
88-75-5	2-Nitrophenol	1500		58.2	170	ug/Kg
105-67-9	2,4-Dimethylphenol	1400		64.8	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1400		30.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	1500		28.3	170	ug/Kg
91-20-3	Naphthalene	1400		22.7	170	ug/Kg
106-47-8	4-Chloroaniline	700		35.4	170	ug/Kg
87-68-3	Hexachlorobutadiene	1300		25.3	170	ug/Kg
105-60-2	Caprolactam	1700		52.1	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1500		28.7	170	ug/Kg
91-57-6	2-Methylnaphthalene	1400		25.6	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	2700	E	120	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1400		19.8	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1500		29.1	170	ug/Kg
92-52-4	1,1-Biphenyl	1400		21.8	170	ug/Kg
91-58-7	2-Chloronaphthalene	1400		22.5	170	ug/Kg
88-74-4	2-Nitroaniline	1500		48.1	170	ug/Kg
131-11-3	Dimethylphthalate	1500		27.1	170	ug/Kg

Raw Data: **BF142568.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168211BS	SDG No.:	Q2150
Lab Sample ID:	PB168211BS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142568.D	1	05/30/25 09:50	05/30/25 14:18	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1400		28.9	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	1500		33.6	170	ug/Kg
99-09-2	3-Nitroaniline	990		46.0	170	ug/Kg
83-32-9	Acenaphthene	1600		21.3	170	ug/Kg
51-28-5	2,4-Dinitrophenol	3600	E	230	330	ug/Kg
100-02-7	4-Nitrophenol	3300	E	110	330	ug/Kg
132-64-9	Dibenzofuran	1400		22.7	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	1600		50.1	170	ug/Kg
84-66-2	Diethylphthalate	1500		28.3	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1400		26.7	170	ug/Kg
86-73-7	Fluorene	1400		25.3	170	ug/Kg
100-01-6	4-Nitroaniline	1600		64.2	170	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1700		100	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1400		32.9	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1400		27.8	170	ug/Kg
118-74-1	Hexachlorobenzene	1400		25.3	170	ug/Kg
1912-24-9	Atrazine	1600		34.0	170	ug/Kg
87-86-5	Pentachlorophenol	2900	E	51.3	330	ug/Kg
85-01-8	Phenanthrene	1400		20.9	170	ug/Kg
120-12-7	Anthracene	1400		33.3	170	ug/Kg
86-74-8	Carbazole	1500		31.2	170	ug/Kg
84-74-2	Di-n-butylphthalate	1600		47.9	170	ug/Kg
206-44-0	Fluoranthene	1500		30.0	170	ug/Kg
129-00-0	Pyrene	1400		36.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	1700		71.4	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	800		36.7	330	ug/Kg
56-55-3	Benzo(a)anthracene	1500		23.0	170	ug/Kg
218-01-9	Chrysene	1400		19.9	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1500		59.2	170	ug/Kg
117-84-0	Di-n-octyl phthalate	1200		86.8	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	1500		19.0	170	ug/Kg

Raw Data: **BF142568.D**

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

Report of Analysis

Client:	CDM Smith			Date Collected:	
Project:	South River WM Replacement			Date Received:	
Client Sample ID:	PB168211BS			SDG No.:	Q2150
Lab Sample ID:	PB168211BS			Matrix:	SOIL
Analytical Method:	8270E			% Solid:	100
Sample Wt/Vol:	30.01	Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOC-TCL BNA -20
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142568.D	1	05/30/25 09:50	05/30/25 14:18	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1500		22.4	170	ug/Kg
50-32-8	Benzo(a)pyrene	1500		29.5	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1400		29.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1400		27.4	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1400		25.7	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1300		25.6	170	ug/Kg
123-91-1	1,4-Dioxane	1200		45.2	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1500		27.4	170	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	118		18 - 112	78%	SPK: 150
13127-88-3	Phenol-d6	120		15 - 107	80%	SPK: 150
4165-60-0	Nitrobenzene-d5	73.3		18 - 107	73%	SPK: 100
321-60-8	2-Fluorobiphenyl	70.5		20 - 109	70%	SPK: 100
118-79-6	2,4,6-Tribromophenol	127		10 - 116	85%	SPK: 150
1718-51-0	Terphenyl-d14	73.7		10 - 105	74%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	122000	6.898			
1146-65-2	Naphthalene-d8	477000	8.186			
15067-26-2	Acenaphthene-d10	264000	9.945			
1517-22-2	Phenanthrene-d10	470000	11.433			
1719-03-5	Chrysene-d12	271000	14.074			
1520-96-3	Perylene-d12	242000	15.568			

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_F\Data\BF053025\
Data File : BF142568.D
Acq On : 30 May 2025 14:18
Operator : RC/JU
Sample : PB168211BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Quant Time: May 30 17:24:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	122043	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	476655	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	264068	20.000	ng	0.00
64) Phenanthrene-d10	11.433	188	470473	20.000	ng	0.00
76) Chrysene-d12	14.074	240	271265	20.000	ng	0.00
86) Perylene-d12	15.568	264	242037	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.528	112	852680	117.709	ng	0.01
7) Phenol-d6	6.528	99	1047774	120.158	ng	0.00
23) Nitrobenzene-d5	7.463	82	640818	73.309	ng	-0.01
42) 2,4,6-Tribromophenol	10.733	330	372617	127.137	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	1387067	70.484	ng	0.00
79) Terphenyl-d14	13.015	244	1462423	73.672	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.769	88	103387	35.666	ng	99
3) Pyridine	3.528	79	287654	38.968	ng	98
4) n-Nitrosodimethylamine	3.481	42	153912	40.157	ng	93
6) Aniline	6.563	93	386546	32.968	ng	100
8) 2-Chlorophenol	6.681	128	334430	42.385	ng	98
9) Benzaldehyde	6.451	77	176933	33.735	ng	99
10) Phenol	6.545	94	407345	41.516	ng	94
11) bis(2-Chloroethyl)ether	6.634	93	294278	41.665	ng	99
12) 1,3-Dichlorobenzene	6.839	146	348789	39.616	ng	99
13) 1,4-Dichlorobenzene	6.916	146	351735	39.660	ng	98
14) 1,2-Dichlorobenzene	7.069	146	345320	40.692	ng	99
15) Benzyl Alcohol	7.039	79	276133	42.851	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.175	45	478931	40.378	ng	99
17) 2-Methylphenol	7.151	107	265099	43.034	ng	99
18) Hexachloroethane	7.410	117	124413	40.175	ng	97
19) n-Nitroso-di-n-propyla...	7.310	70	216777	40.112	ng	99
20) 3+4-Methylphenols	7.304	107	331352	42.003	ng	98
22) Acetophenone	7.310	105	431045	40.851	ng	99
24) Nitrobenzene	7.481	77	327349	41.521	ng	98
25) Isophorone	7.722	82	603262	41.277	ng	98
26) 2-Nitrophenol	7.798	139	184515	43.800	ng	96
27) 2,4-Dimethylphenol	7.833	122	319426	42.997	ng	100
28) bis(2-Chloroethoxy)met...	7.928	93	377464	41.345	ng	99
29) 2,4-Dichlorophenol	8.039	162	294165	43.541	ng	99
30) 1,2,4-Trichlorobenzene	8.122	180	297631	40.592	ng	98
31) Naphthalene	8.204	128	964027	41.074	ng	100
32) Benzoic acid	7.957	122	216728	47.925	ng	95
33) 4-Chloroaniline	8.251	127	199850	21.014	ng	98
34) Hexachlorobutadiene	8.322	225	179561	39.221	ng	99
35) Caprolactam	8.622	113	95942m	50.562	ng	
36) 4-Chloro-3-methylphenol	8.733	107	307511	44.413	ng	99
37) 2-Methylnaphthalene	8.898	142	603358	40.862	ng	100
38) 1-Methylnaphthalene	8.998	142	628687	41.163	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	306920	40.489	ng	99
41) Hexachlorocyclopentadiene	9.051	237	409386	80.059	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	218158	42.680	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142568.D
Acq On : 30 May 2025 14:18
Operator : RC/JU
Sample : PB168211BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Quant Time: May 30 17:24:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

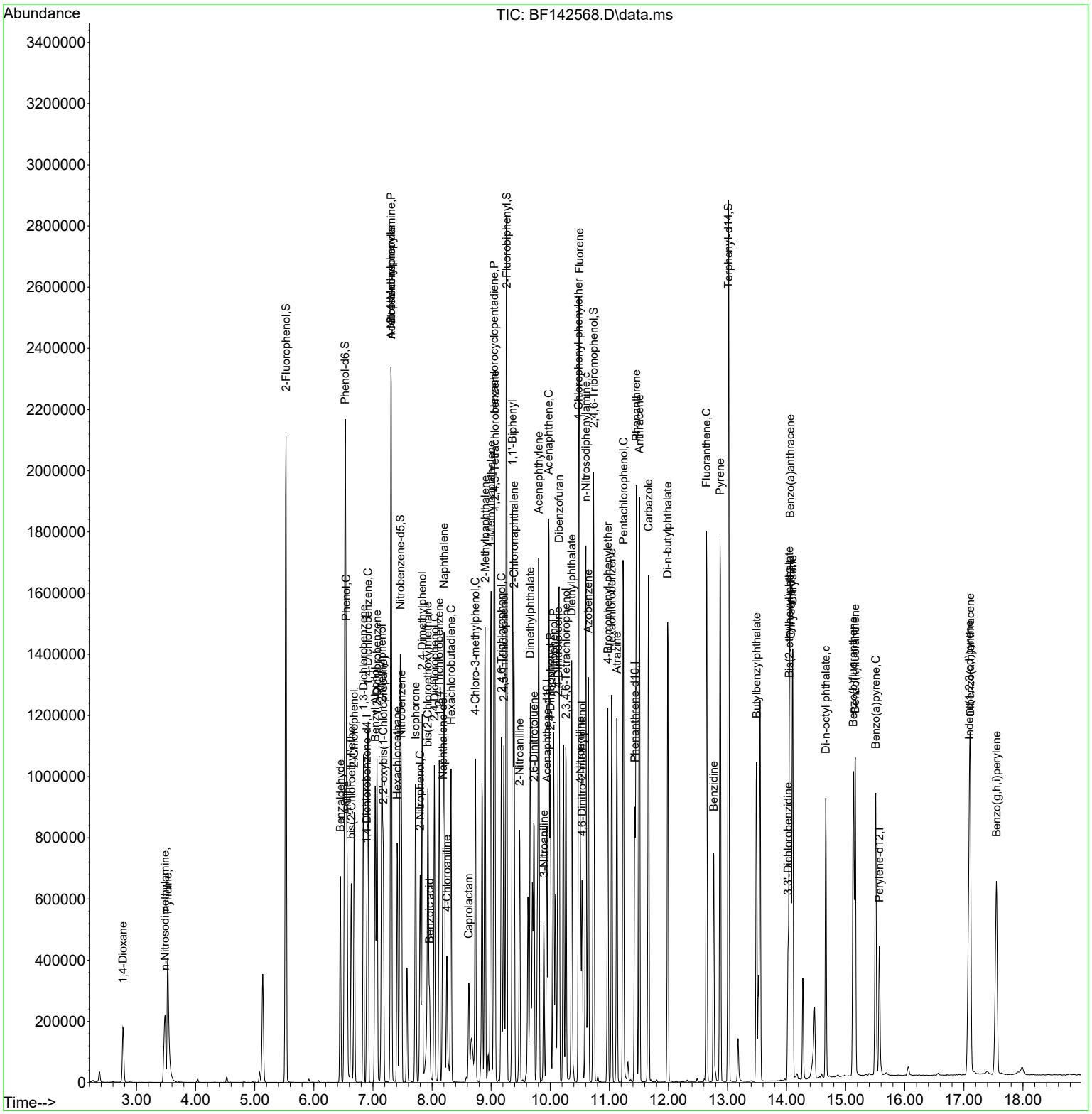
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	237861	44.123	ng	98
46) 1,1'-Biphenyl	9.363	154	838760	40.941	ng	99
47) 2-Chloronaphthalene	9.386	162	621764	41.077	ng	99
48) 2-Nitroaniline	9.480	65	194996	44.570	ng	99
49) Acenaphthylene	9.804	152	1077928	42.174	ng	100
50) Dimethylphthalate	9.663	163	767183	44.030	ng	100
51) 2,6-Dinitrotoluene	9.727	165	170243	45.269	ng	96
52) Acenaphthene	9.974	154	726019	46.519	ng	99
53) 3-Nitroaniline	9.892	138	122177	29.745	ng	99
54) 2,4-Dinitrophenol	10.004	184	208199	107.159	ng	92
55) Dibenzofuran	10.151	168	943056	41.990	ng	99
56) 4-Nitrophenol	10.057	139	297298	98.094	ng	99
57) 2,4-Dinitrotoluene	10.133	165	232579	47.356	ng	98
58) Fluorene	10.492	166	737241	42.491	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.269	232	200089	44.461	ng	99
60) Diethylphthalate	10.363	149	750725	44.116	ng	100
61) 4-Chlorophenyl-phenyle...	10.480	204	360489	42.294	ng	98
62) 4-Nitroaniline	10.510	138	183943	49.377	ng	97
63) Azobenzene	10.645	77	661165	43.257	ng	99
65) 4,6-Dinitro-2-methylph...	10.539	198	131023	49.902	ng	100
66) n-Nitrosodiphenylamine	10.604	169	657232	40.832	ng	100
67) 4-Bromophenyl-phenylether	10.974	248	229459	41.247	ng	98
68) Hexachlorobenzene	11.039	284	253935	41.271	ng	99
69) Atrazine	11.127	200	207887	48.633	ng	99
70) Pentachlorophenol	11.239	266	304411	87.631	ng	99
71) Phenanthrene	11.457	178	1049379	41.736	ng	99
72) Anthracene	11.510	178	1083954	42.242	ng	99
73) Carbazole	11.663	167	987084	44.996	ng	100
74) Di-n-butylphthalate	11.986	149	1125656	46.879	ng	99
75) Fluoranthene	12.645	202	1074252	45.725	ng	98
77) Benzidine	12.768	184	437383	43.328	ng	99
78) Pyrene	12.874	202	1070790	42.315	ng	99
80) Butylbenzylphthalate	13.492	149	358852	51.321	ng	97
81) Benzo(a)anthracene	14.062	228	811376	44.793	ng	99
82) 3,3'-Dichlorobenzidine	14.027	252	131683	23.968	ng	99
83) Chrysene	14.104	228	682489	41.931	ng	100
84) Bis(2-ethylhexyl)phtha...	14.045	149	409441	45.742	ng	99
85) Di-n-octyl phthalate	14.662	149	624867	35.702	ng	100
87) Indeno(1,2,3-cd)pyrene	17.092	276	748803	41.209	ng	99
88) Benzo(b)fluoranthene	15.127	252	663382	46.310	ng	98
89) Benzo(k)fluoranthene	15.162	252	589241	43.918	ng	99
90) Benzo(a)pyrene	15.509	252	605231	44.823	ng	99
91) Dibenzo(a,h)anthracene	17.109	278	612544	41.564	ng	100
92) Benzo(g,h,i)perylene	17.550	276	603462	40.939	ng	98

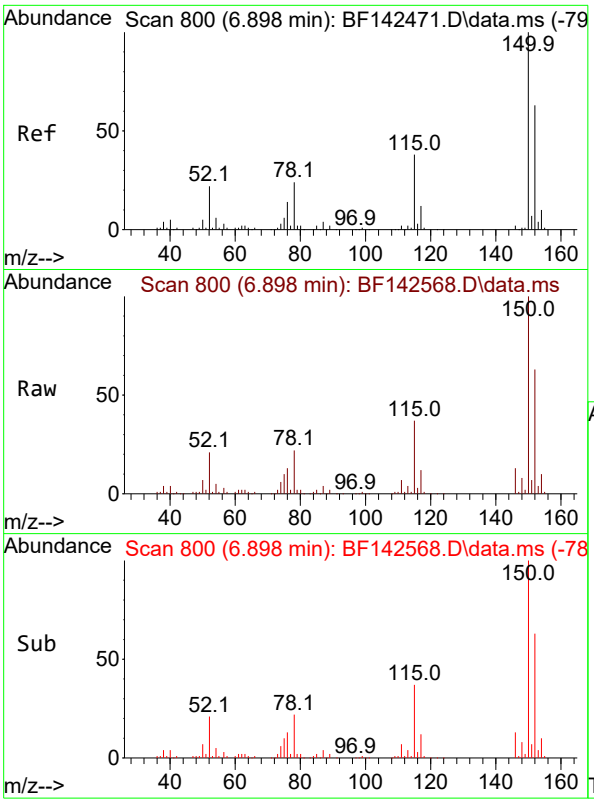
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142568.D
Acq On : 30 May 2025 14:18
Operator : RC/JU
Sample : PB168211BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Quant Time: May 30 17:24:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



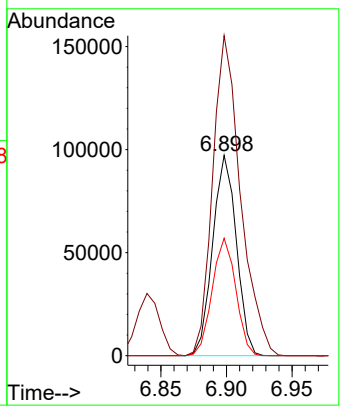


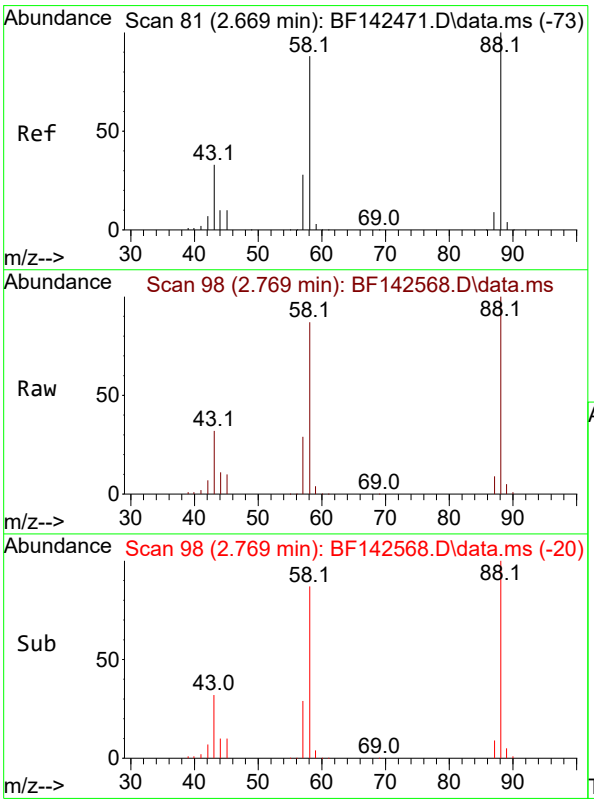
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:152 Resp: 122043

Ion	Ratio	Lower	Upper
152	100		
150	159.8	128.2	192.4
115	58.6	48.3	72.5

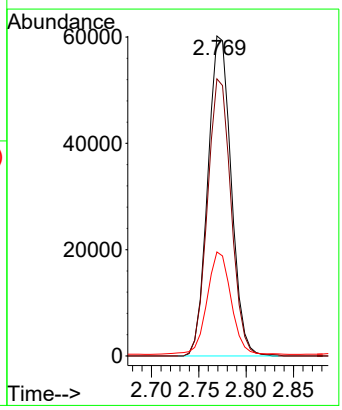


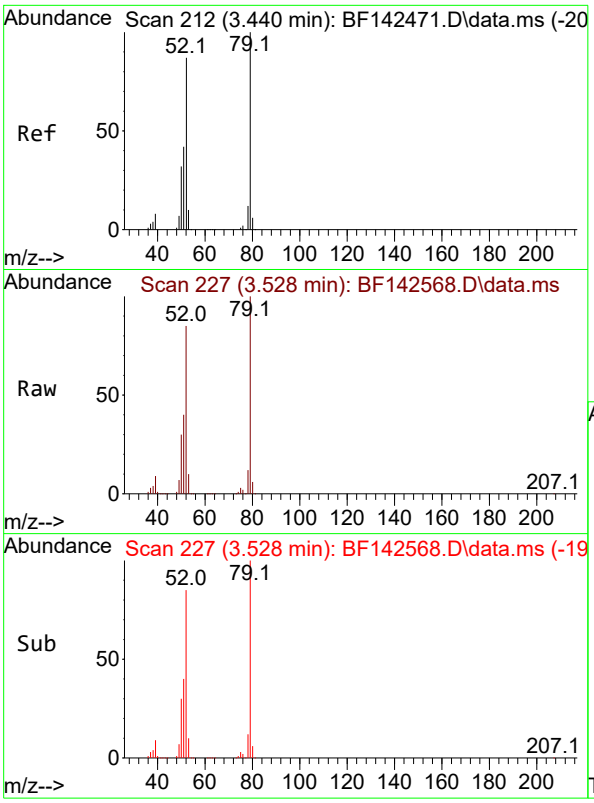


#2
1,4-Dioxane
Concen: 35.666 ng
RT: 2.769 min Scan# 98
Delta R.T. 0.106 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 88 Resp: 103387

Ion	Ratio	Lower	Upper
88	100		
58	87.5	70.8	106.2
43	32.9	26.6	40.0



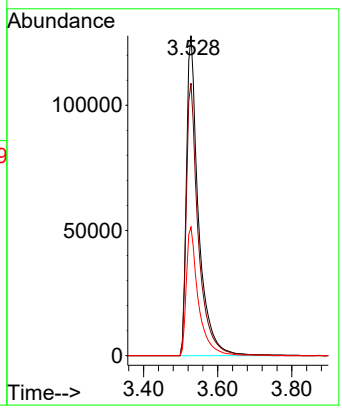


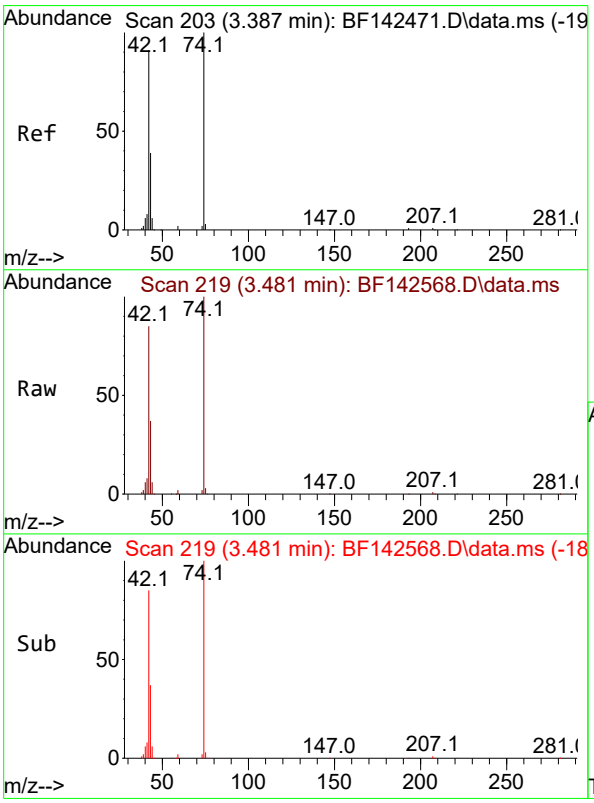
#3
Pyridine
Concen: 38.968 ng
RT: 3.528 min Scan# 2
Delta R.T. 0.088 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 79 Resp: 287654

Ion	Ratio	Lower	Upper
79	100		
52	85.2	69.2	103.8
51	40.2	33.3	49.9

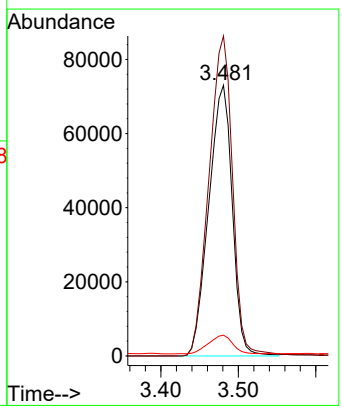


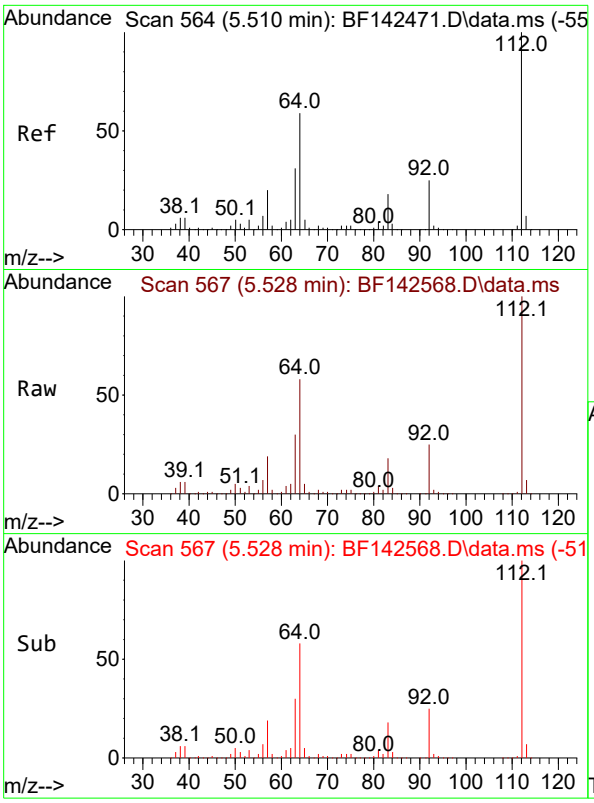


#4
n-Nitrosodimethylamine
Concen: 40.157 ng
RT: 3.481 min Scan# 219
Delta R.T. 0.076 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 42 Resp: 153912

Ion	Ratio	Lower	Upper
42	100		
74	118.2	88.2	132.4
44	7.7	5.4	8.2



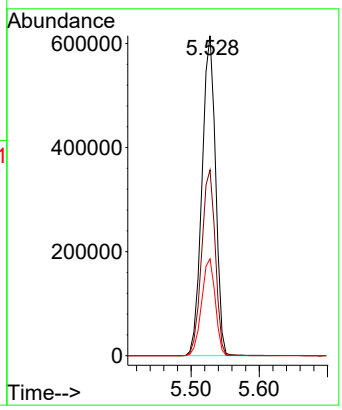


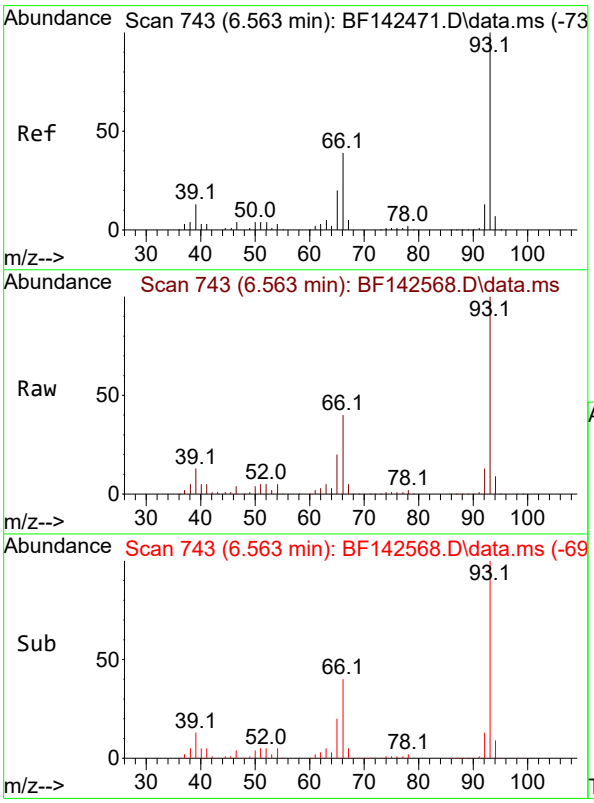
#5
2-Fluorophenol
Concen: 117.709 ng
RT: 5.528 min Scan# 5
Delta R.T. 0.012 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:112 Resp: 852680

Ion	Ratio	Lower	Upper
112	100		
64	58.1	47.5	71.3
63	30.2	24.9	37.3

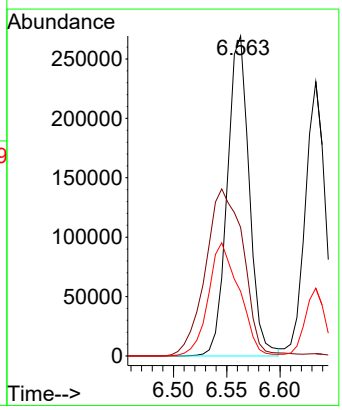


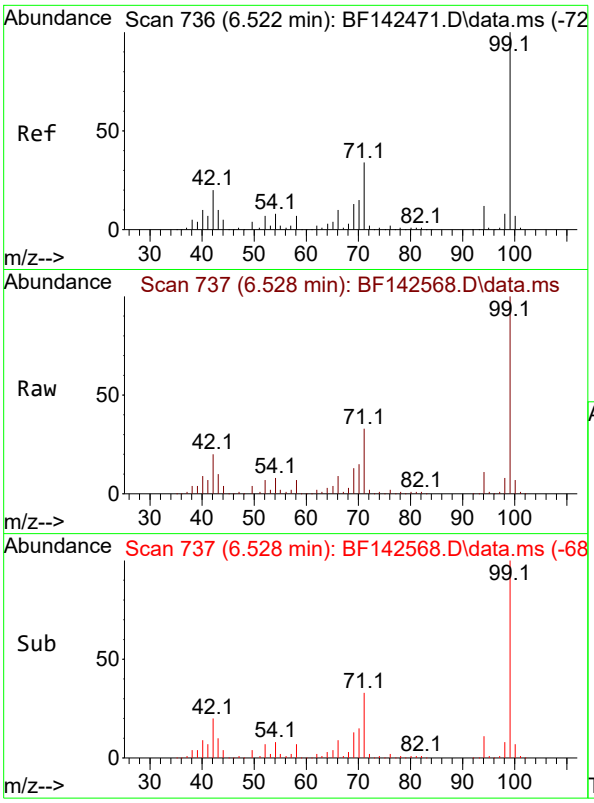


#6
Aniline
Concen: 32.968 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 93 Resp: 386546

Ion	Ratio	Lower	Upper
93	100		
66	40.2	32.0	48.0
65	20.2	16.1	24.1



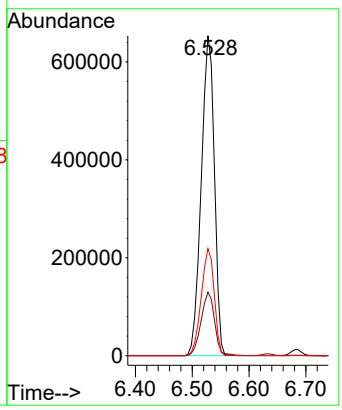


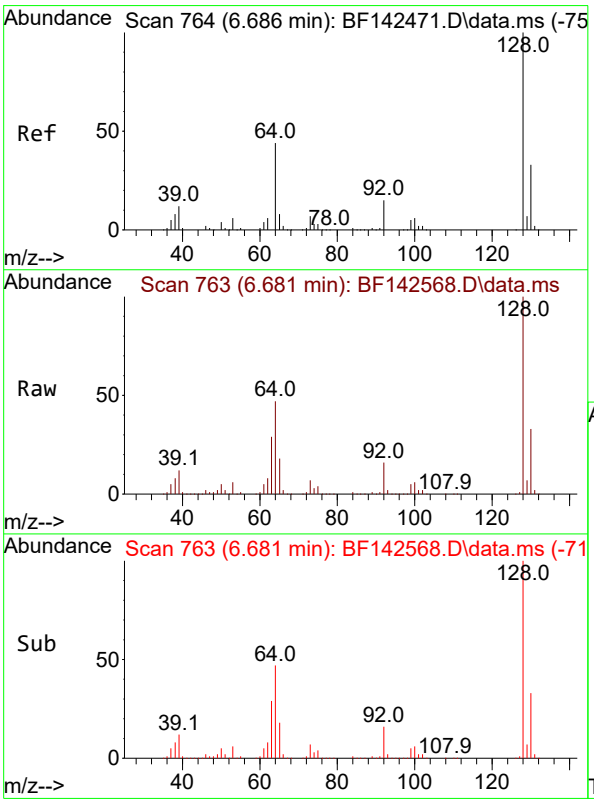
#7
Phenol-d6
Concen: 120.158 ng
RT: 6.528 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 99 Resp: 1047774

Ion	Ratio	Lower	Upper
99	100		
42	19.8	16.2	24.2
71	33.4	27.3	40.9

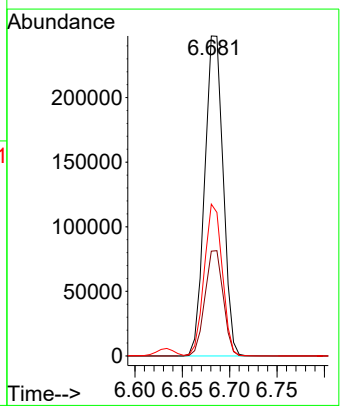


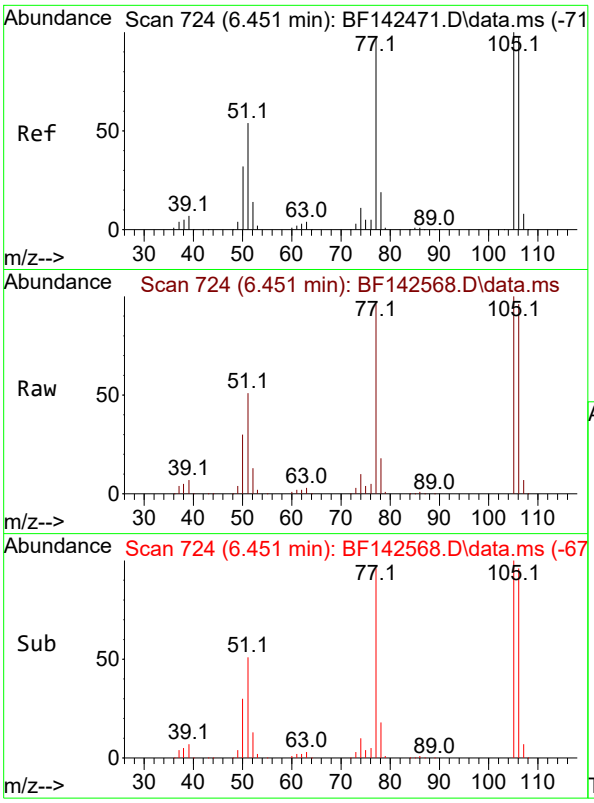


#8
2-Chlorophenol
Concen: 42.385 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:128 Resp: 334430

Ion	Ratio	Lower	Upper
128	100		
130	32.7	12.6	52.6
64	47.5	25.1	65.1



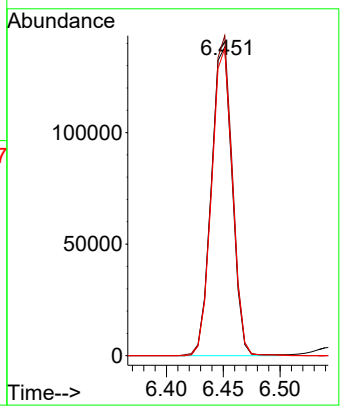


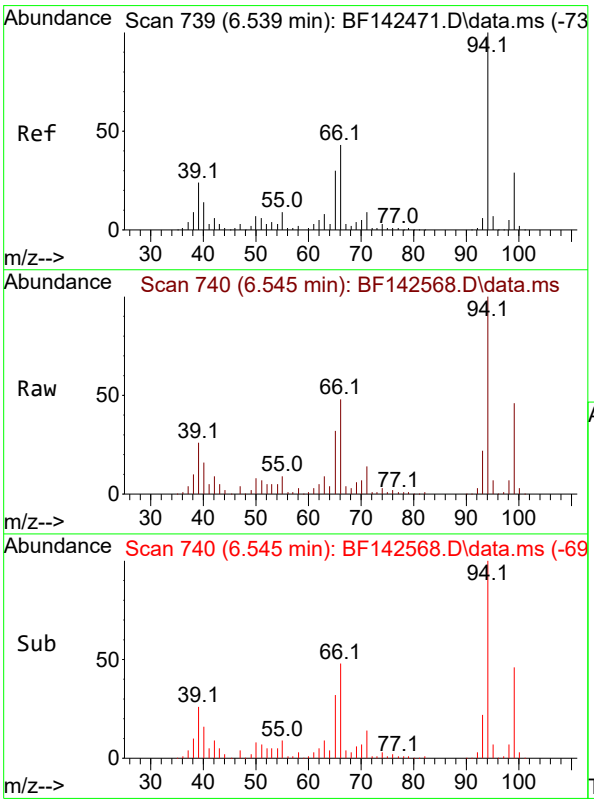
#9
Benzaldehyde
Concen: 33.735 ng
RT: 6.451 min Scan# 7
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 77 Resp: 176933

Ion	Ratio	Lower	Upper
77	100		
105	103.7	82.5	122.5
106	99.5	80.0	120.0

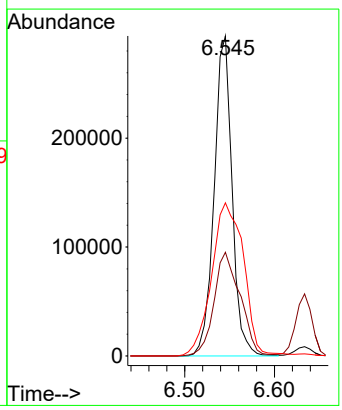


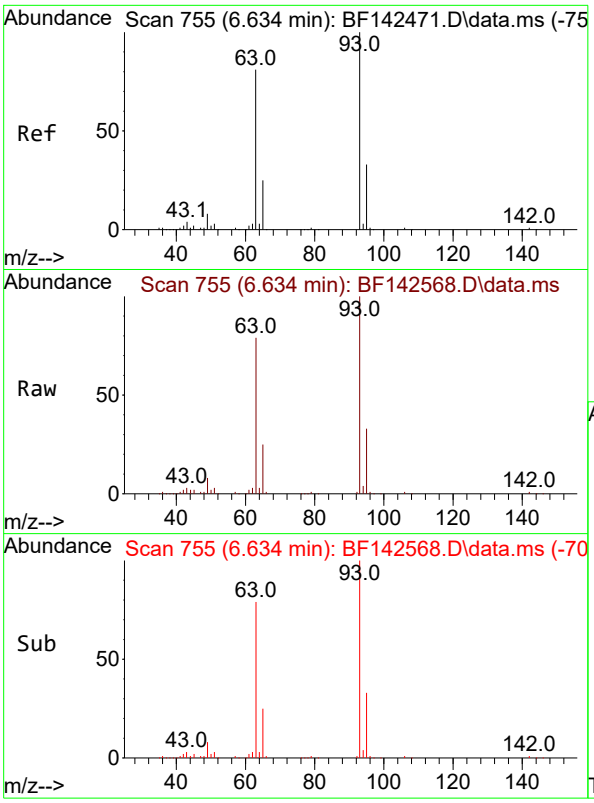


#10
Phenol
Concen: 41.516 ng
RT: 6.545 min Scan# 740
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 94 Resp: 407345

Ion	Ratio	Lower	Upper
94	100		
65	32.4	10.3	50.3
66	47.9	22.6	62.6



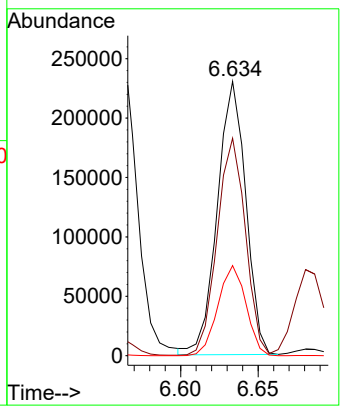


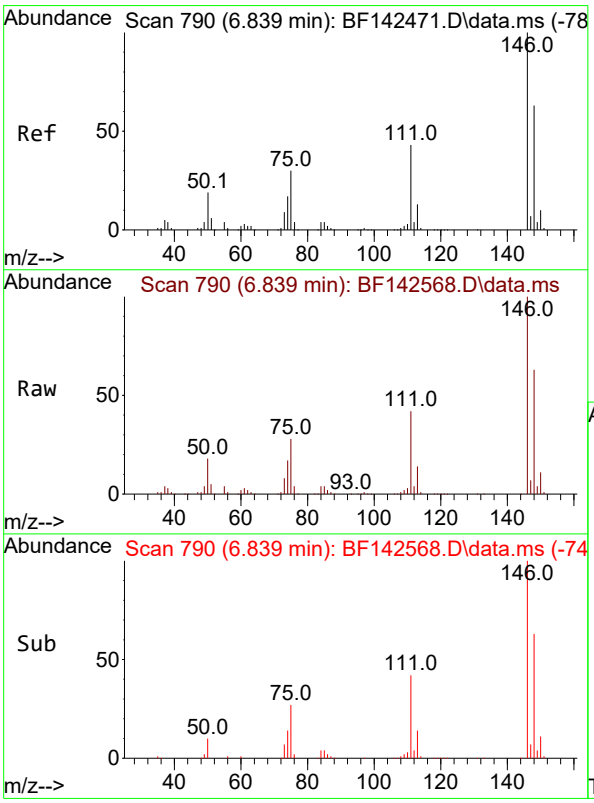
#11
bis(2-Chloroethyl)ether
Concen: 41.665 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 93 Resp: 294278

Ion	Ratio	Lower	Upper
93	100		
63	79.3	60.2	100.2
95	32.9	12.3	52.3

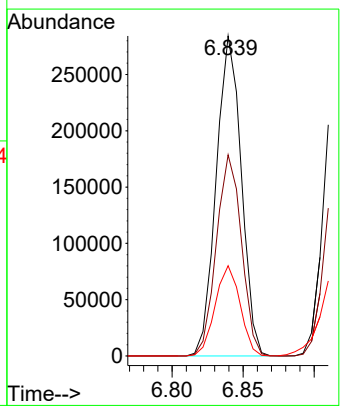


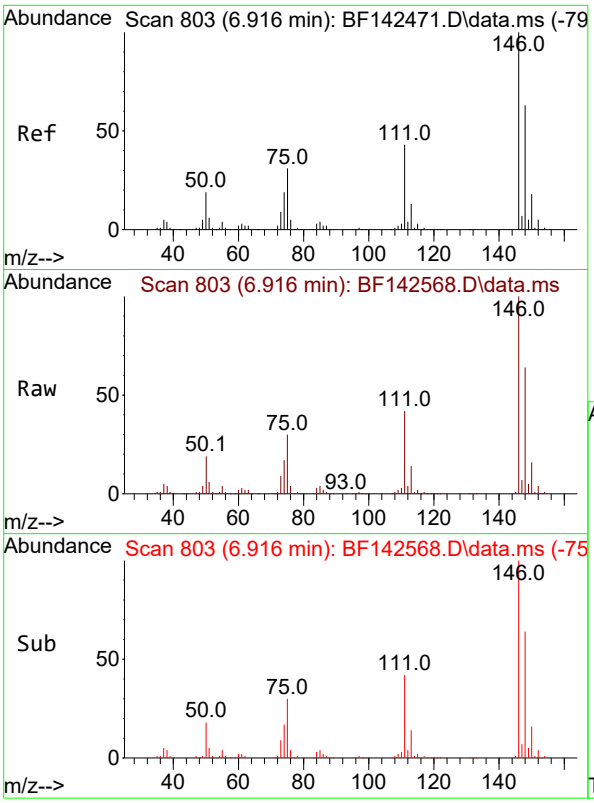


#12
1,3-Dichlorobenzene
Concen: 39.616 ng
RT: 6.839 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:146 Resp: 348789

Ion	Ratio	Lower	Upper
146	100		
148	62.8	50.6	75.8
75	28.2	23.8	35.6



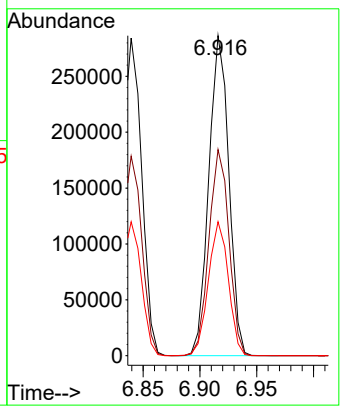


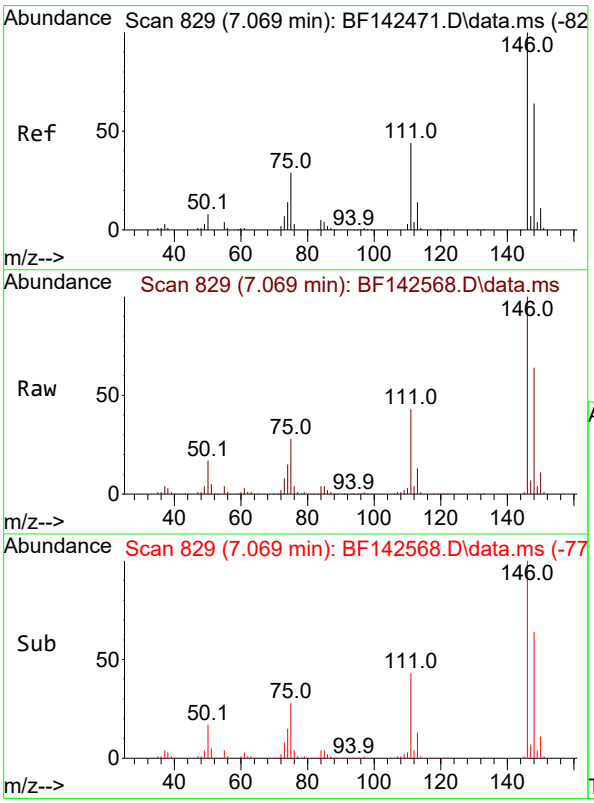
#13
1,4-Dichlorobenzene
Concen: 39.660 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:146 Resp: 351735

Ion	Ratio	Lower	Upper
146	100		
148	64.4	50.4	75.6
111	41.8	34.1	51.1

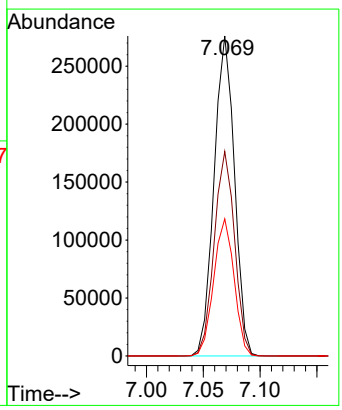


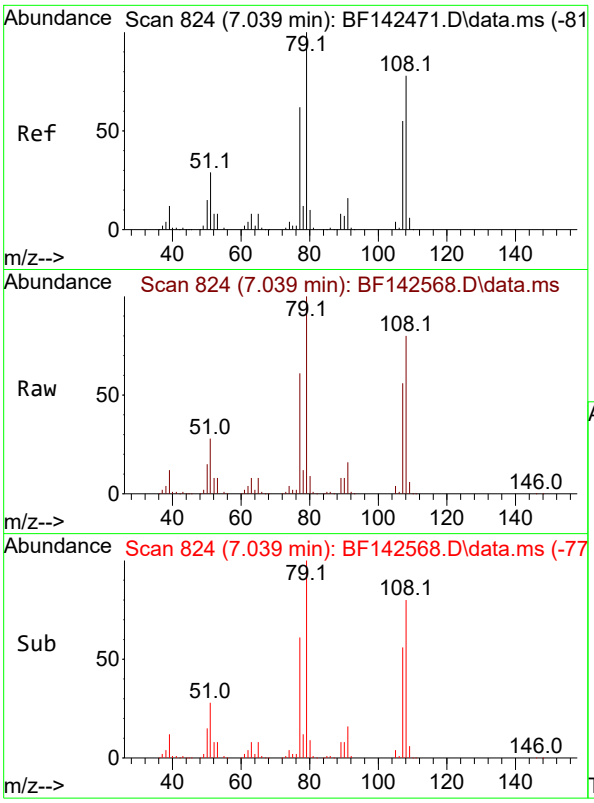


#14
1,2-Dichlorobenzene
Concen: 40.692 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:146 Resp: 345320

Ion	Ratio	Lower	Upper
146	100		
148	63.9	51.0	76.4
111	42.9	35.0	52.6



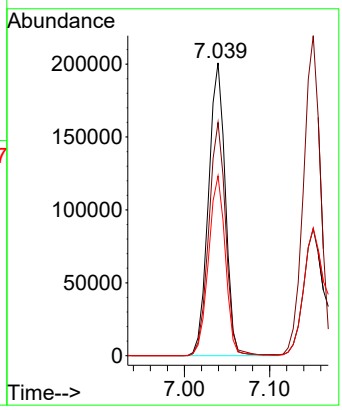


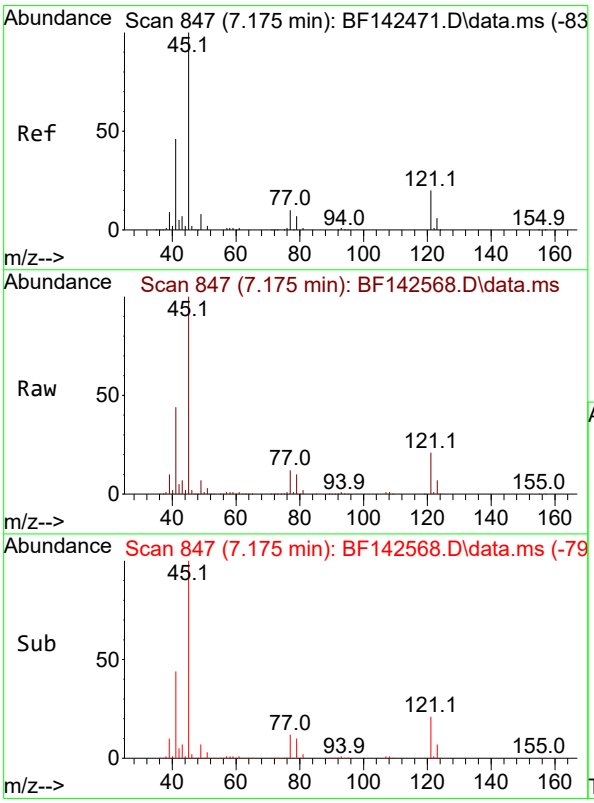
#15
Benzyl Alcohol
Concen: 42.851 ng
RT: 7.039 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 79 Resp: 276133

Ion	Ratio	Lower	Upper
79	100		
108	79.6	62.1	93.1
77	61.4	49.5	74.3

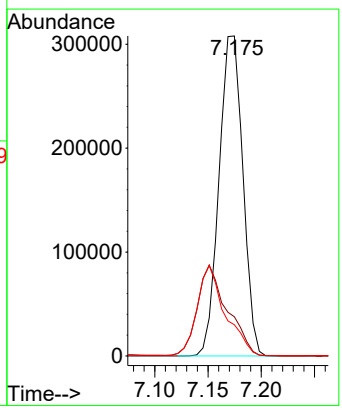


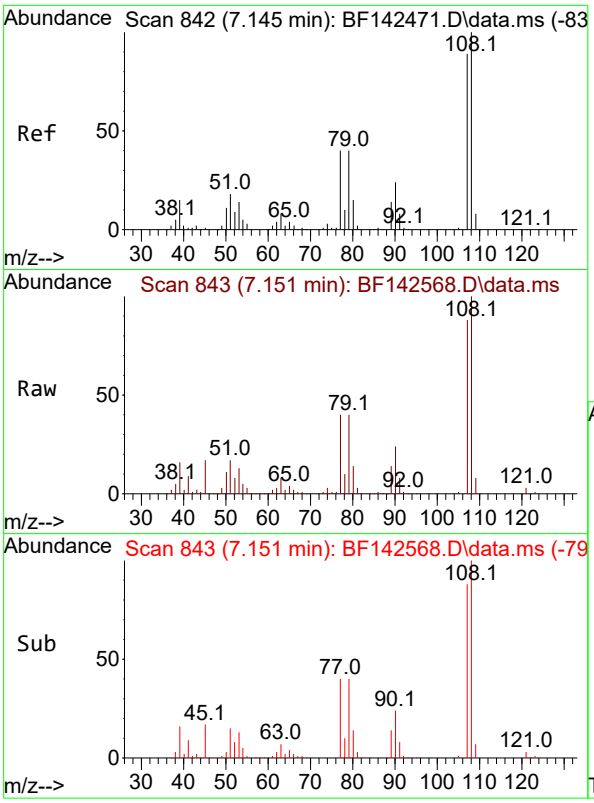


#16
2,2'-oxybis(1-Chloropropane)
Concen: 40.378 ng
RT: 7.175 min Scan# 847
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 45 Resp: 478931

Ion	Ratio	Lower	Upper
45	100		
77	12.3	0.0	32.0
79	9.7	0.0	29.2



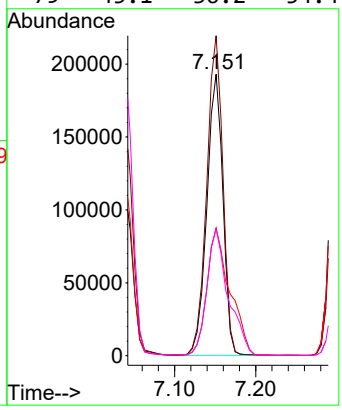


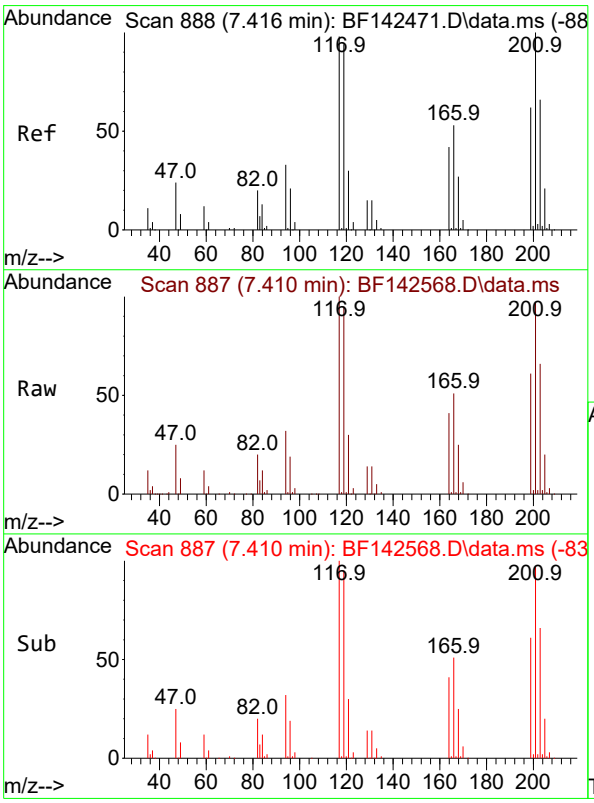
#17
2-Methylphenol
Concen: 43.034 ng
RT: 7.151 min Scan# 84
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:107 Resp: 265099

Ion	Ratio	Lower	Upper
107	100		
108	113.7	90.2	135.2
77	45.4	36.1	54.1
79	45.1	36.2	54.4

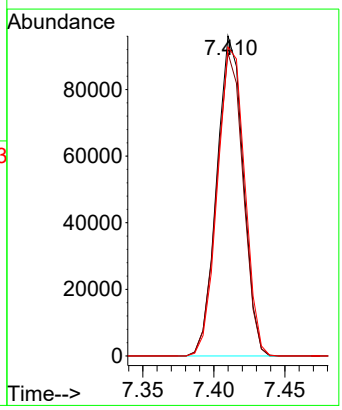


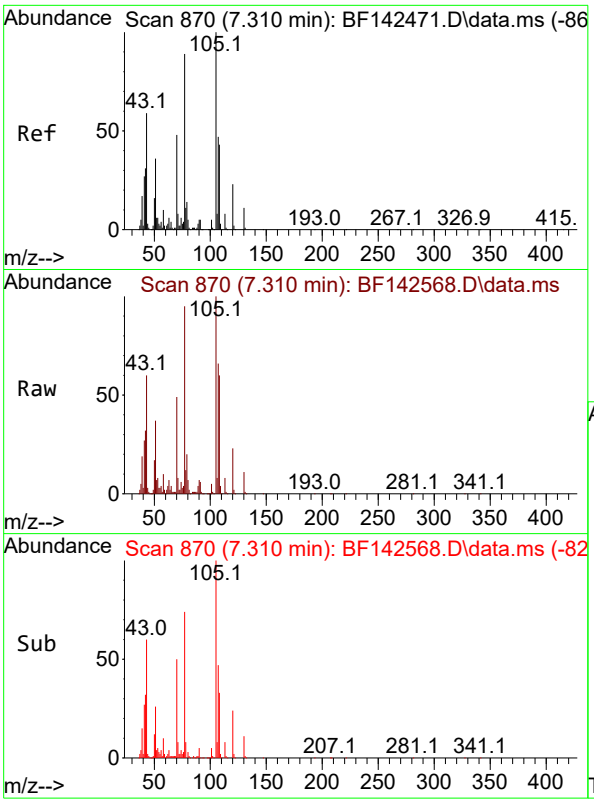


#18
Hexachloroethane
Concen: 40.175 ng
RT: 7.410 min Scan# 887
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:117 Resp: 124413

Ion	Ratio	Lower	Upper
117	100		
119	94.7	76.6	114.8
201	96.6	81.3	121.9



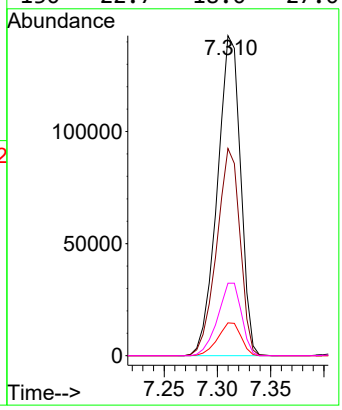


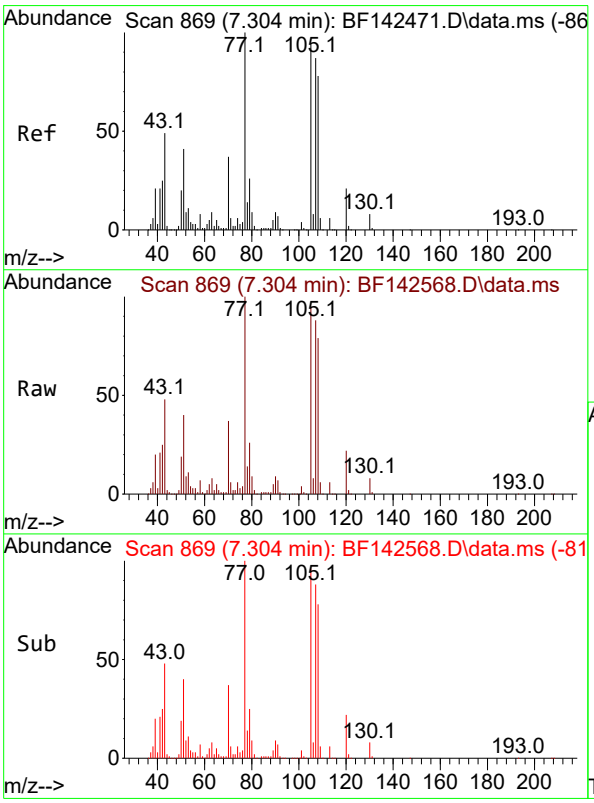
#19
n-Nitroso-di-n-propylamine
Concen: 40.112 ng
RT: 7.310 min Scan# 8
Delta R.T. -0.018 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 70 Resp: 216777

Ion	Ratio	Lower	Upper
70	100		
42	64.8	52.4	78.6
101	10.3	7.8	11.8
130	22.7	18.0	27.0

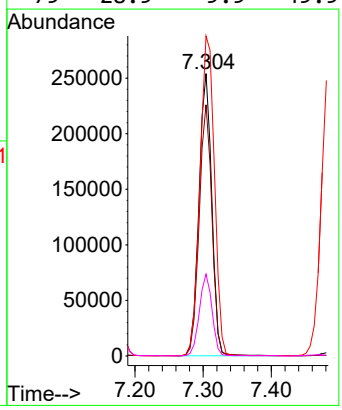


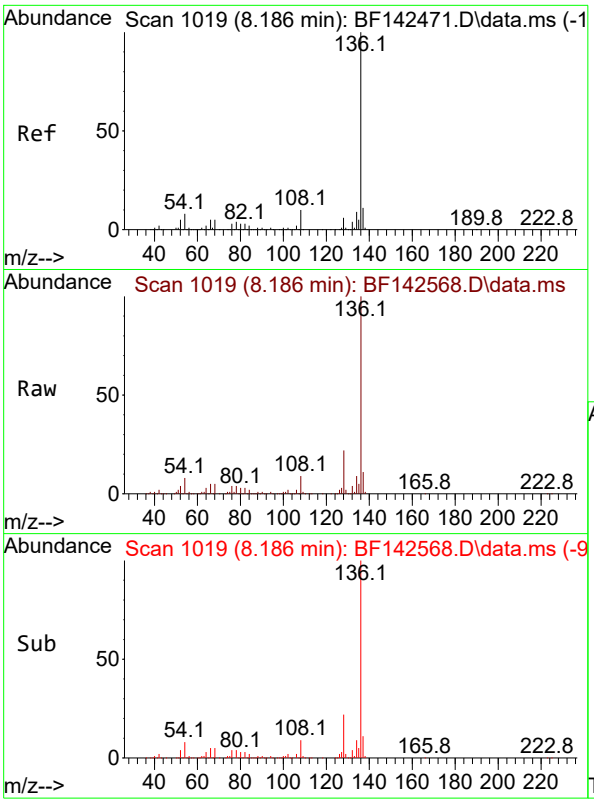


#20
3+4-Methylphenols
Concen: 42.003 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:107 Resp: 331352

Ion	Ratio	Lower	Upper
107	100		
108	88.9	70.4	110.4
77	113.3	95.4	135.4
79	28.9	9.9	49.9



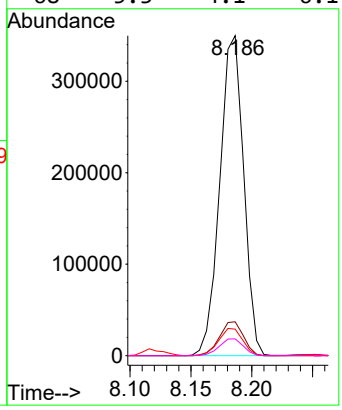


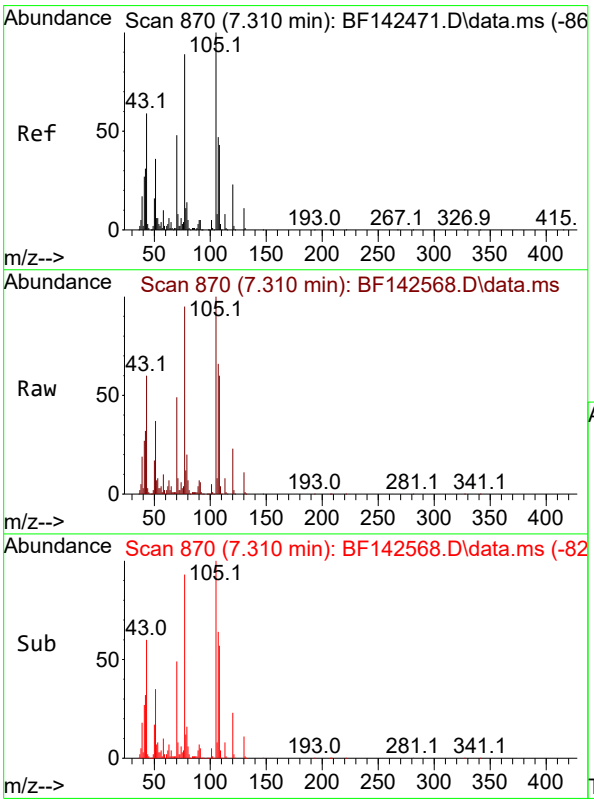
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:136 Resp: 476655

Ion	Ratio	Lower	Upper
136	100		
137	10.6	8.6	13.0
54	8.3	6.6	10.0
68	5.3	4.1	6.1

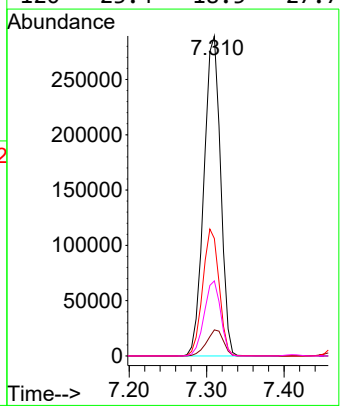


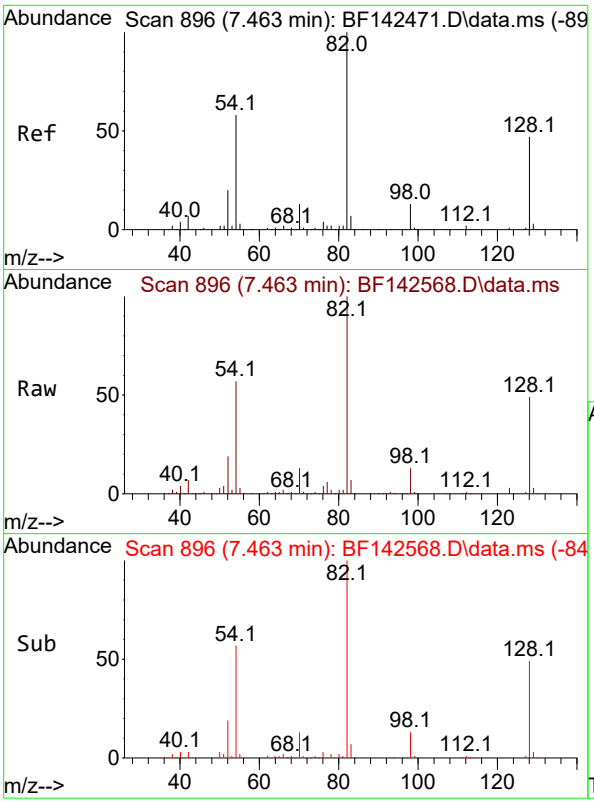


#22
Acetophenone
Concen: 40.851 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:105 Resp: 431045

Ion	Ratio	Lower	Upper
105	100		
71	8.2	6.4	9.6
51	36.7	28.6	42.8
120	23.4	18.5	27.7



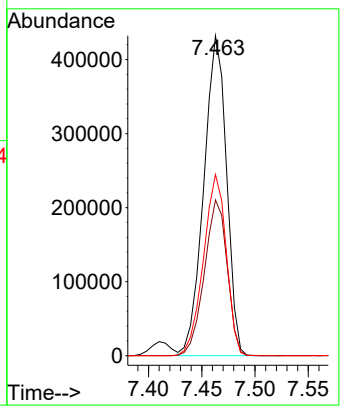


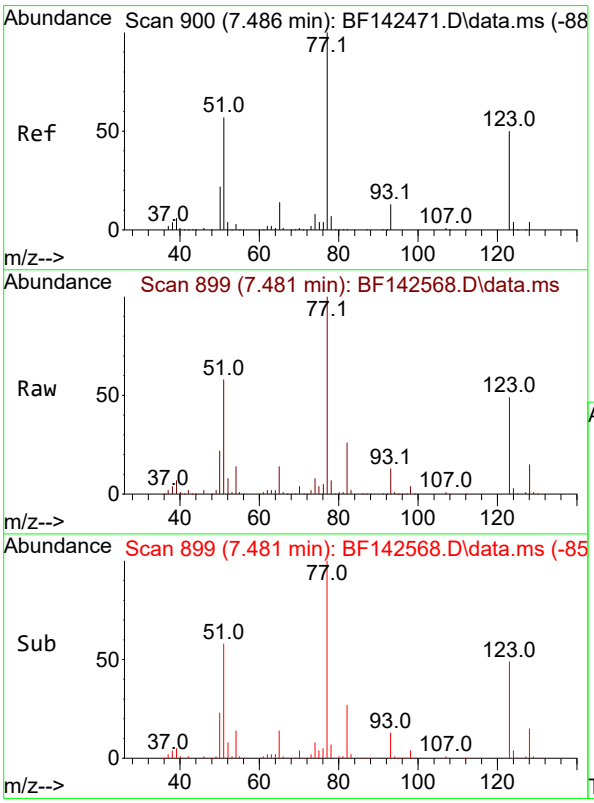
#23
Nitrobenzene-d5
Concen: 73.309 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 82 Resp: 640818

Ion	Ratio	Lower	Upper
82	100		
128	48.7	37.4	56.2
54	56.6	46.6	70.0

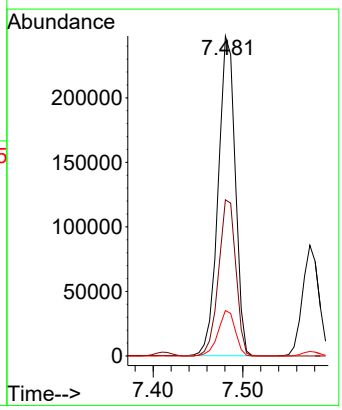


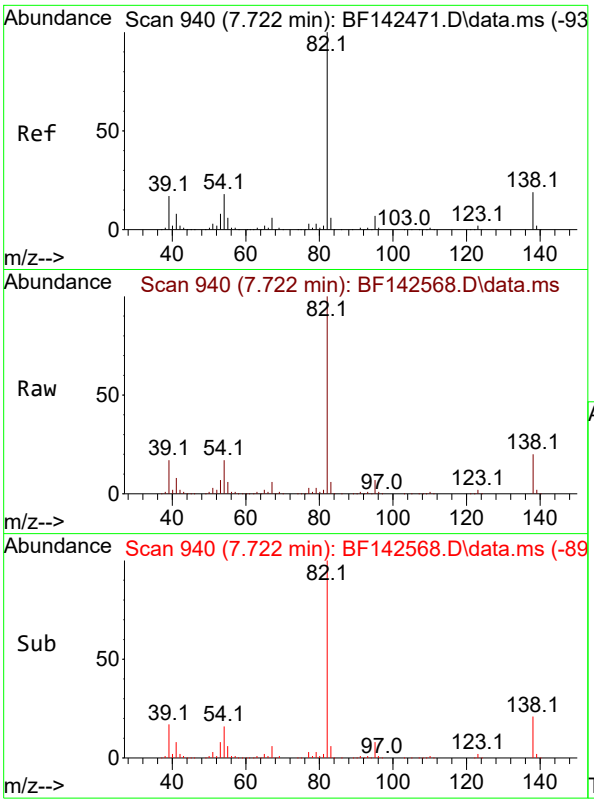


#24
Nitrobenzene
Concen: 41.521 ng
RT: 7.481 min Scan# 899
Delta R.T. -0.012 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 77 Resp: 327349

Ion	Ratio	Lower	Upper
77	100		
123	48.8	40.6	61.0
65	14.2	11.4	17.2



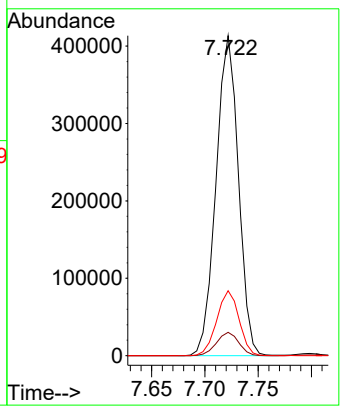


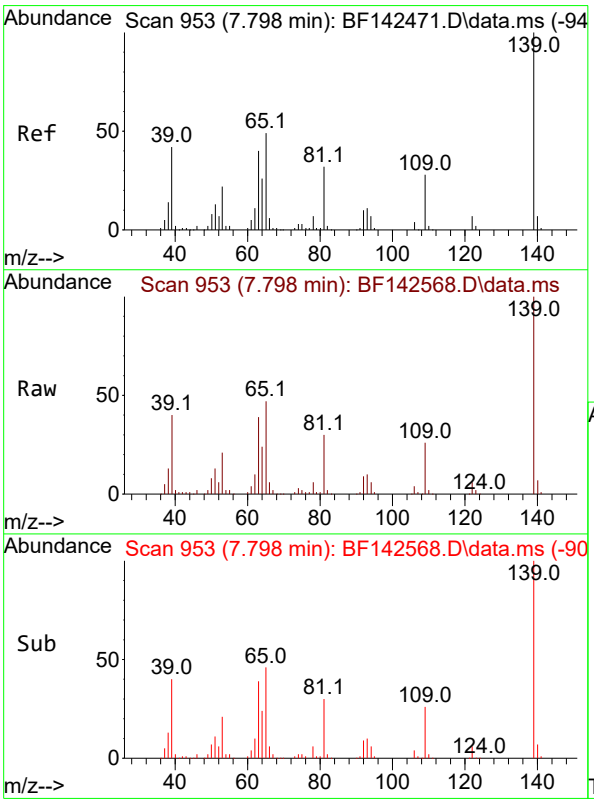
#25
Isophorone
Concen: 41.277 ng
RT: 7.722 min Scan# 94
Delta R.T. -0.012 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 82 Resp: 603262

Ion	Ratio	Lower	Upper
82	100		
95	7.3	6.0	9.0
138	20.3	15.5	23.3

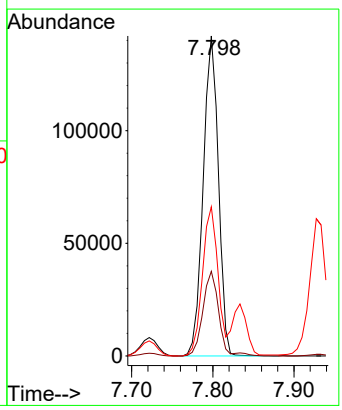


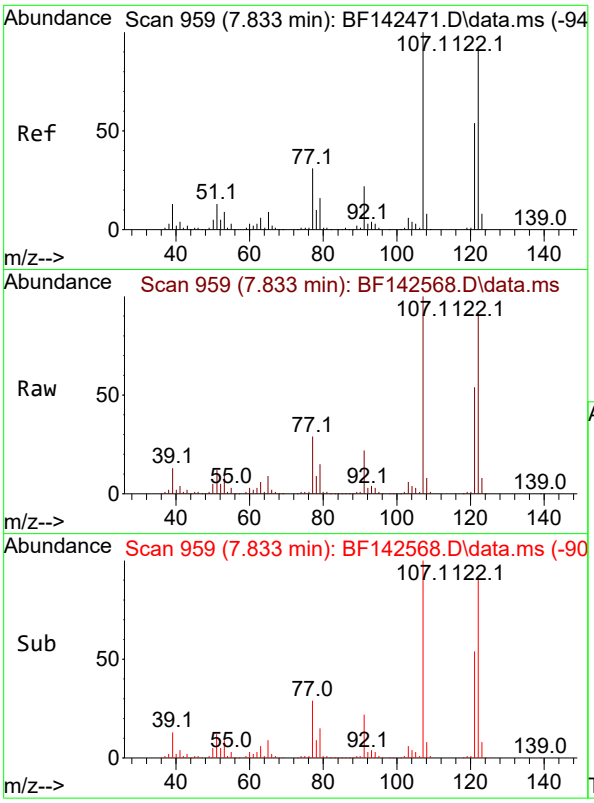


#26
2-Nitrophenol
Concen: 43.800 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:139 Resp: 184515

Ion	Ratio	Lower	Upper
139	100		
109	26.5	22.6	33.8
65	46.6	39.4	59.0



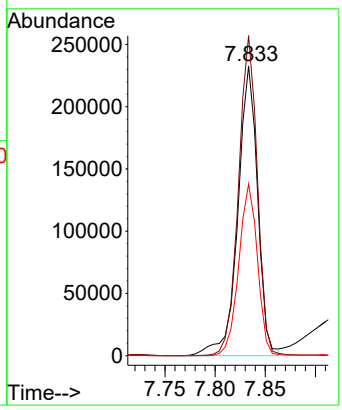


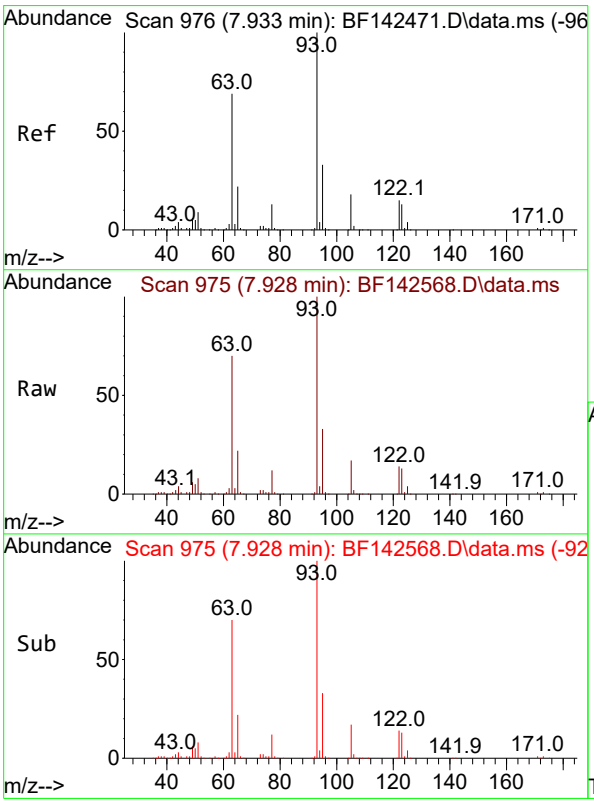
#27
2,4-Dimethylphenol
Concen: 42.997 ng
RT: 7.833 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:122 Resp: 319426

Ion	Ratio	Lower	Upper
122	100		
107	110.4	88.1	132.1
121	59.3	47.3	70.9

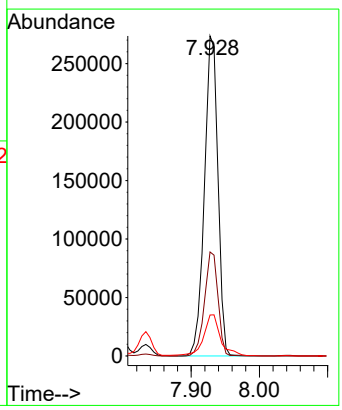


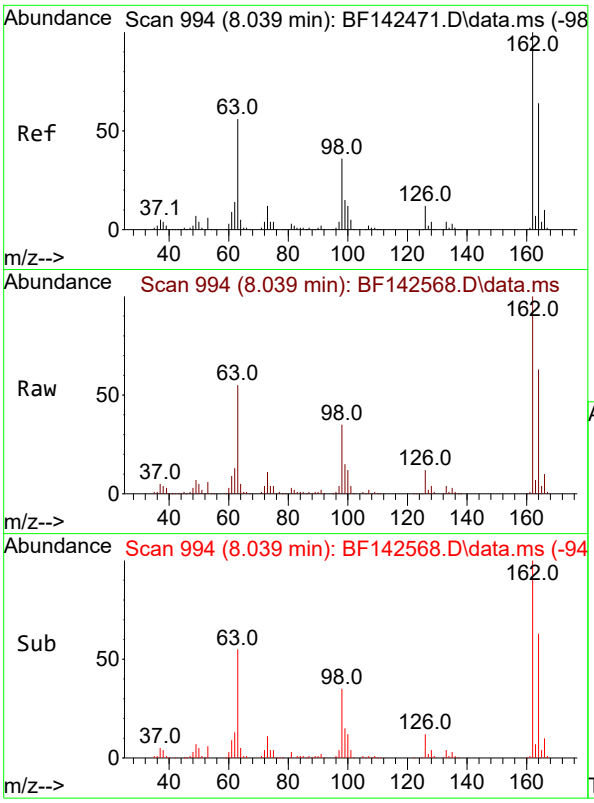


#28
bis(2-Chloroethoxy)methane
Concen: 41.345 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 93 Resp: 377464

Ion	Ratio	Lower	Upper
93	100		
95	32.5	26.4	39.6
123	12.8	10.6	15.8



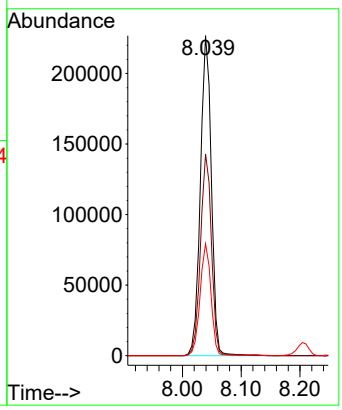


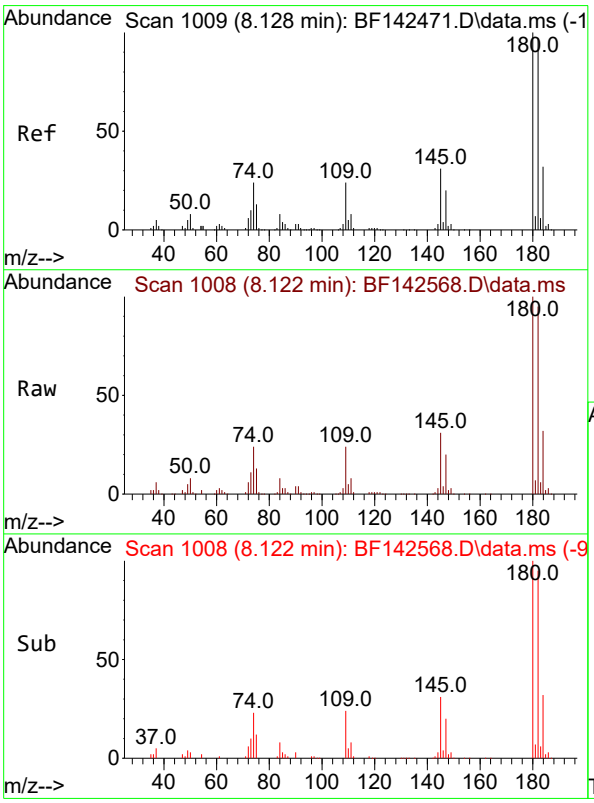
#29
2,4-Dichlorophenol
Concen: 43.541 ng
RT: 8.039 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:162 Resp: 294165

Ion	Ratio	Lower	Upper
162	100		
164	63.0	43.7	83.7
98	35.0	15.5	55.5

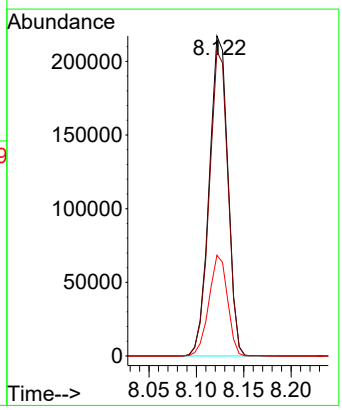


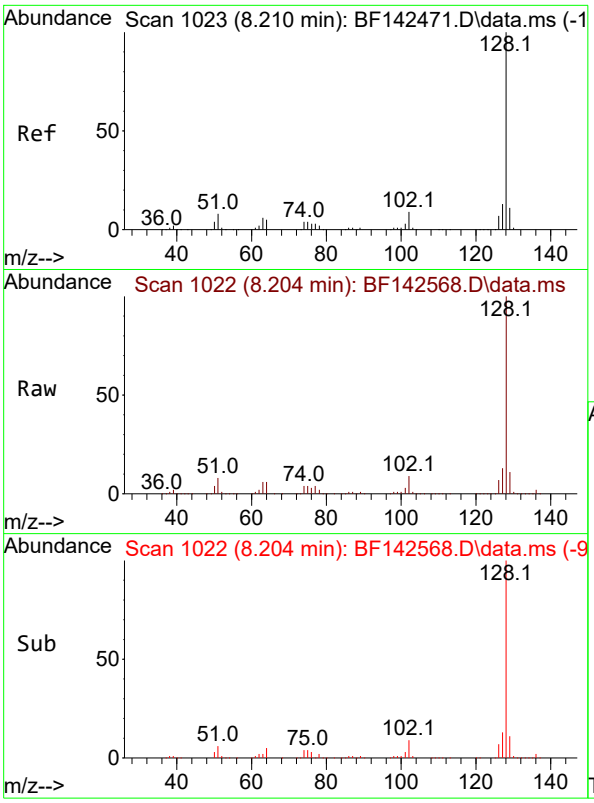


#30
1,2,4-Trichlorobenzene
Concen: 40.592 ng
RT: 8.122 min Scan# 1008
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:180 Resp: 297631

Ion	Ratio	Lower	Upper
180	100		
182	95.2	78.0	117.0
145	31.4	25.0	37.6



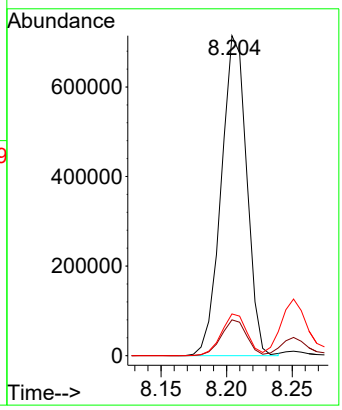


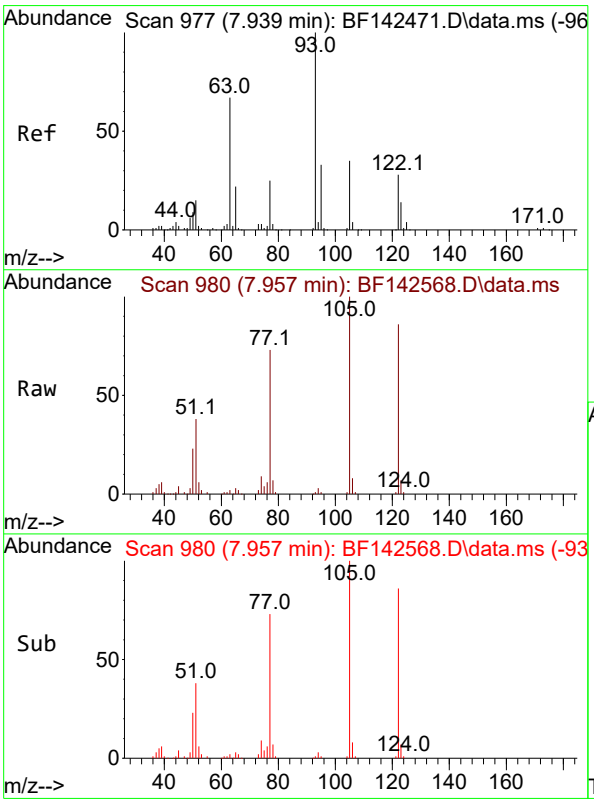
#31
Naphthalene
Concen: 41.074 ng
RT: 8.204 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:128 Resp: 964027

Ion	Ratio	Lower	Upper
128	100		
129	11.2	8.9	13.3
127	13.1	10.5	15.7

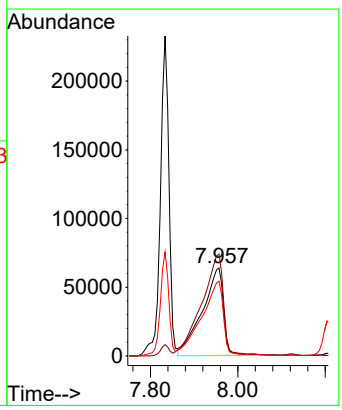


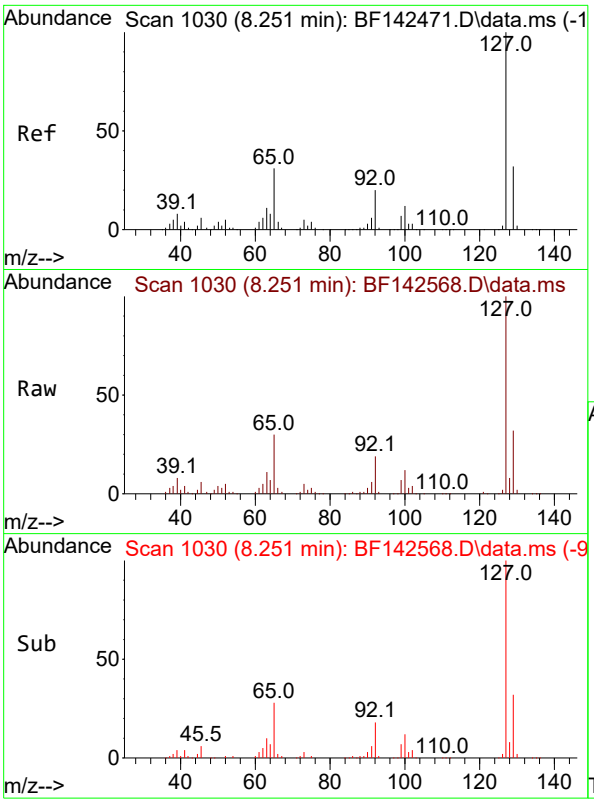


#32
Benzoic acid
Concen: 47.925 ng
RT: 7.957 min Scan# 980
Delta R.T. -0.018 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:122 Resp: 216728

Ion	Ratio	Lower	Upper
122	100		
105	115.8	101.7	141.7
77	84.9	69.5	109.5



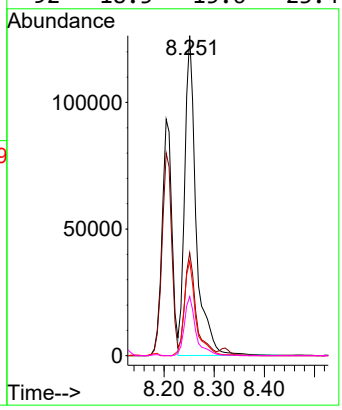


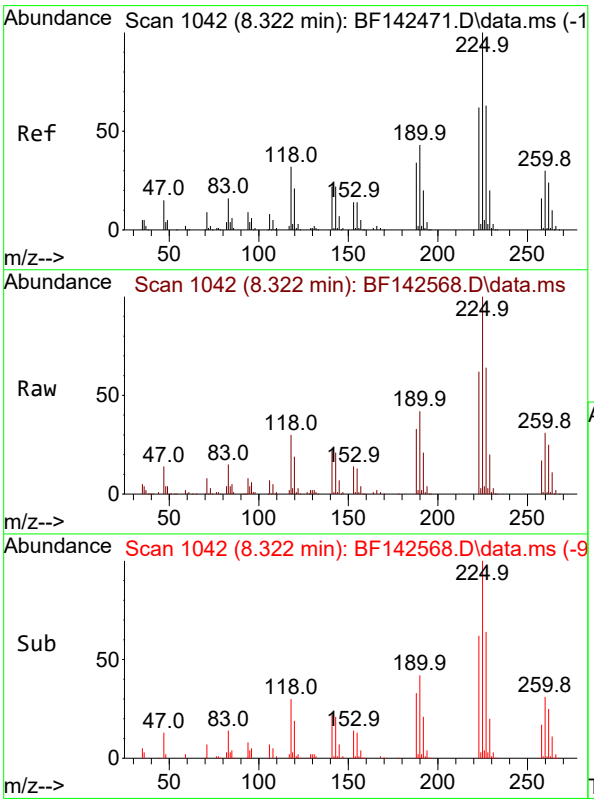
#33
4-Chloroaniline
Concen: 21.014 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:127 Resp: 199850

Ion	Ratio	Lower	Upper
127	100		
129	32.1	26.1	39.1
65	29.6	24.9	37.3
92	18.5	15.6	23.4

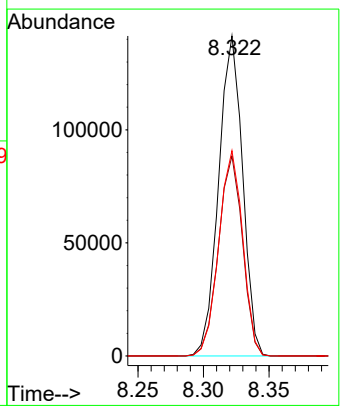


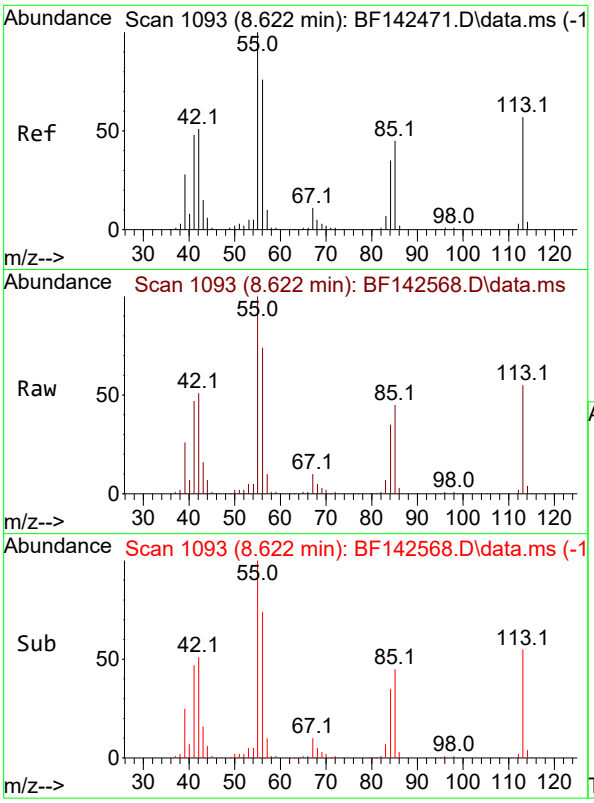


#34
Hexachlorobutadiene
Concen: 39.221 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:225 Resp: 179561

Ion	Ratio	Lower	Upper
225	100		
223	62.5	49.7	74.5
227	64.1	50.3	75.5



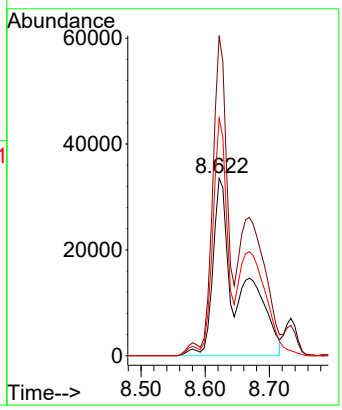


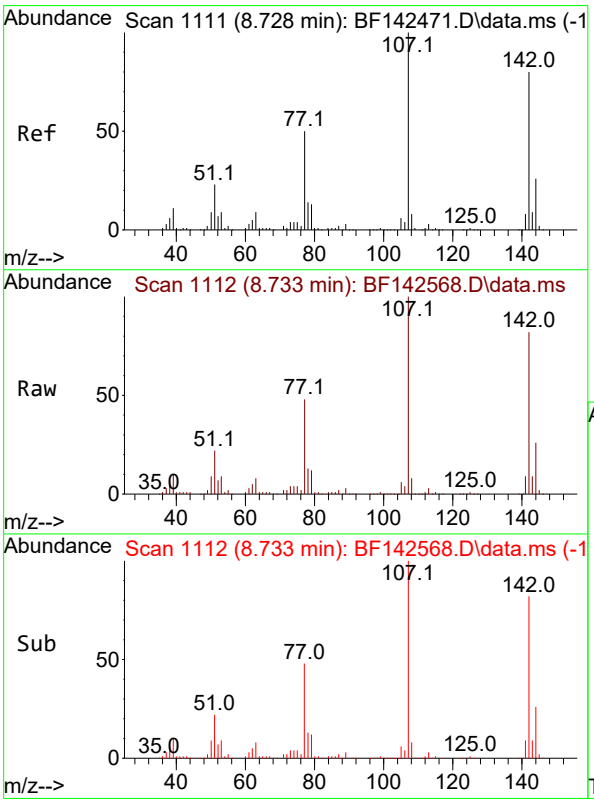
#35
Caprolactam
Concen: 50.562 ng m
RT: 8.622 min Scan# 1
Delta R.T. -0.024 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:113 Resp: 95942

Ion	Ratio	Lower	Upper
113	100		
55	180.3	154.7	194.7
56	133.7	113.2	153.2

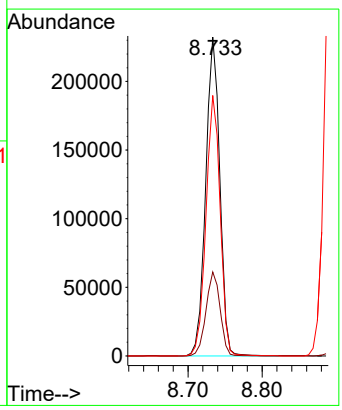


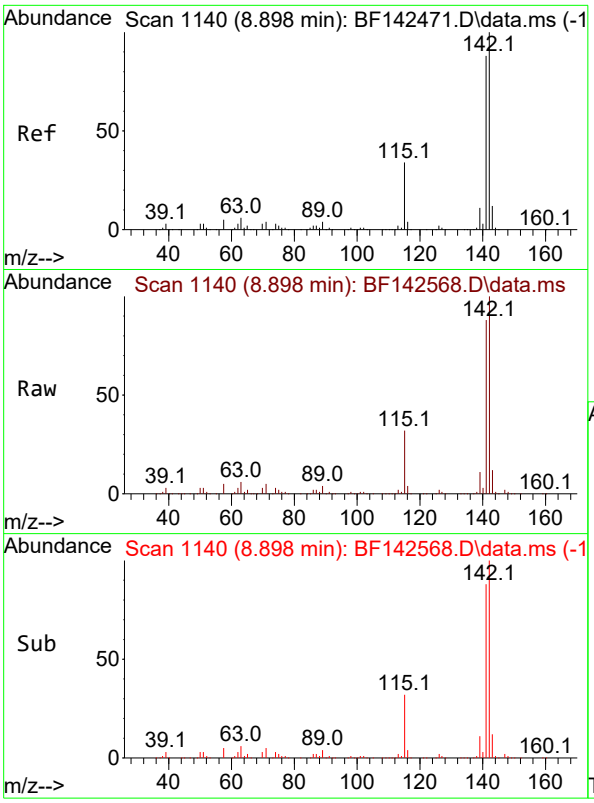


#36
4-Chloro-3-methylphenol
Concen: 44.413 ng
RT: 8.733 min Scan# 1112
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:107 Resp: 307511

Ion	Ratio	Lower	Upper
107	100		
144	26.4	20.9	31.3
142	81.7	64.2	96.2



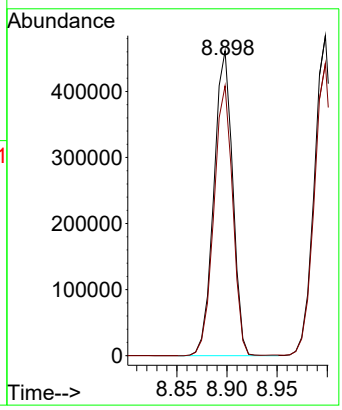


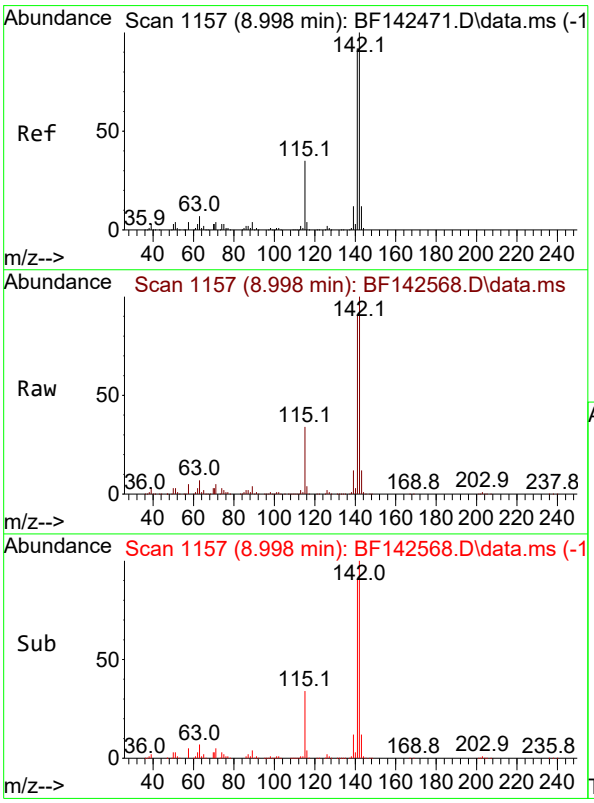
#37
2-Methylnaphthalene
Concen: 40.862 ng
RT: 8.898 min Scan# 11
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:142 Resp: 603358

Ion	Ratio	Lower	Upper
142	100		
141	88.5	70.7	106.1

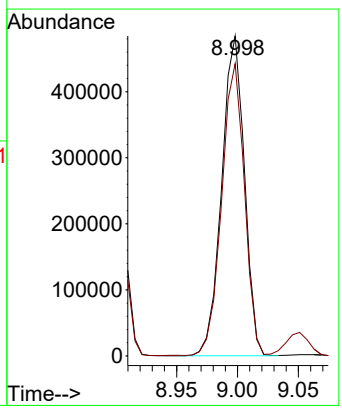


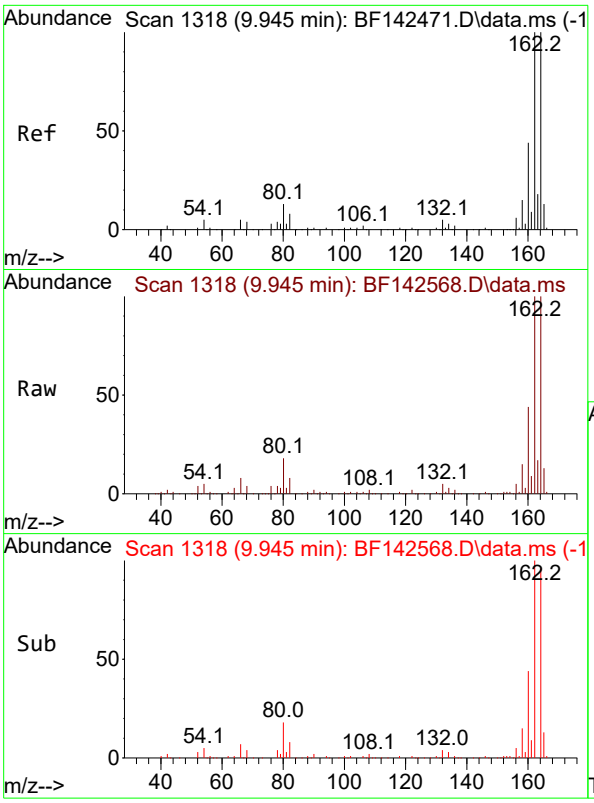


#38
1-Methylnaphthalene
Concen: 41.163 ng
RT: 8.998 min Scan# 1157
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:142 Resp: 628687

Ion	Ratio	Lower	Upper
142	100		
141	91.3	73.4	110.2



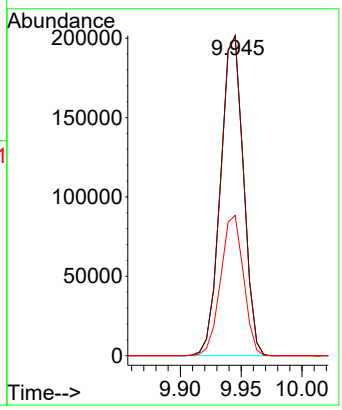


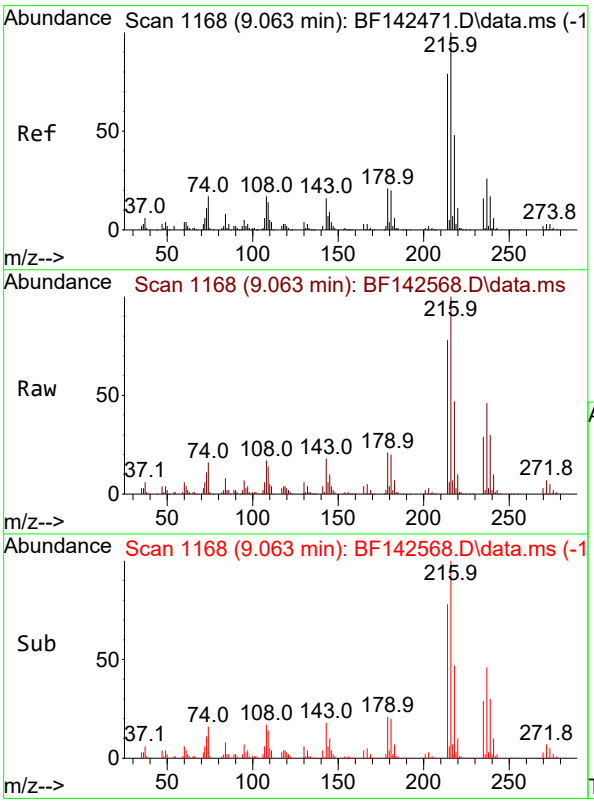
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.945 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:164 Resp: 264068

Ion	Ratio	Lower	Upper
164	100		
162	99.7	80.2	120.4
160	43.8	35.6	53.4

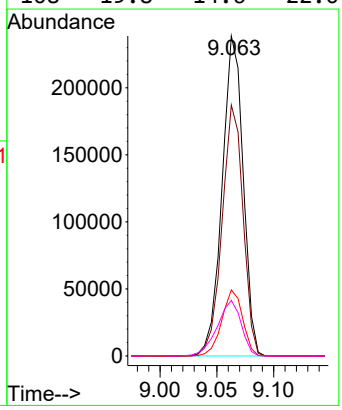


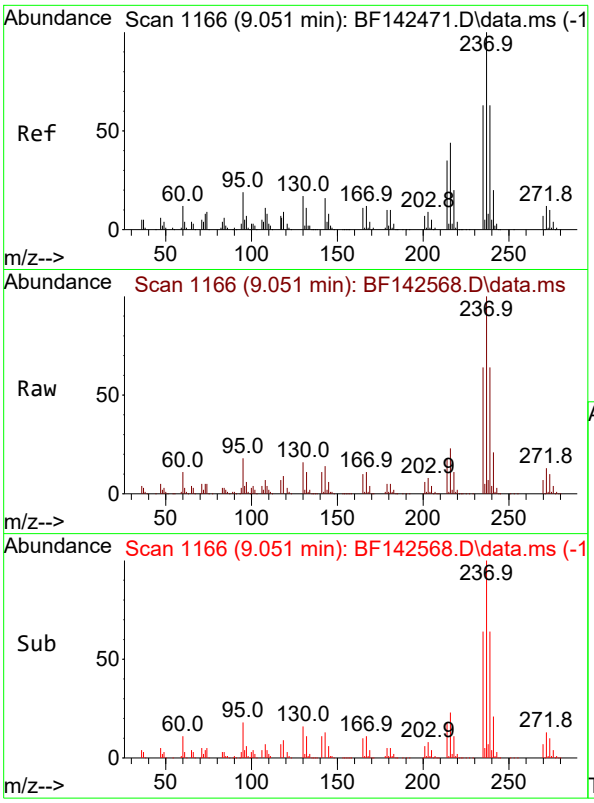


#40
1,2,4,5-Tetrachlorobenzene
Concen: 40.489 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:216 Resp: 306920

Ion	Ratio	Lower	Upper
216	100		
214	78.1	62.9	94.3
179	20.5	16.9	25.3
108	19.8	14.6	22.0



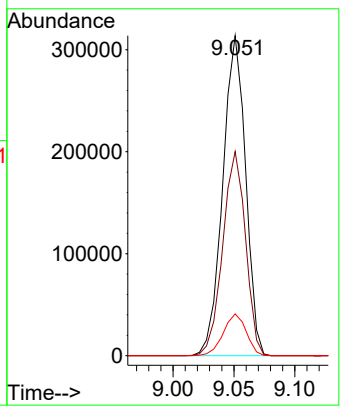


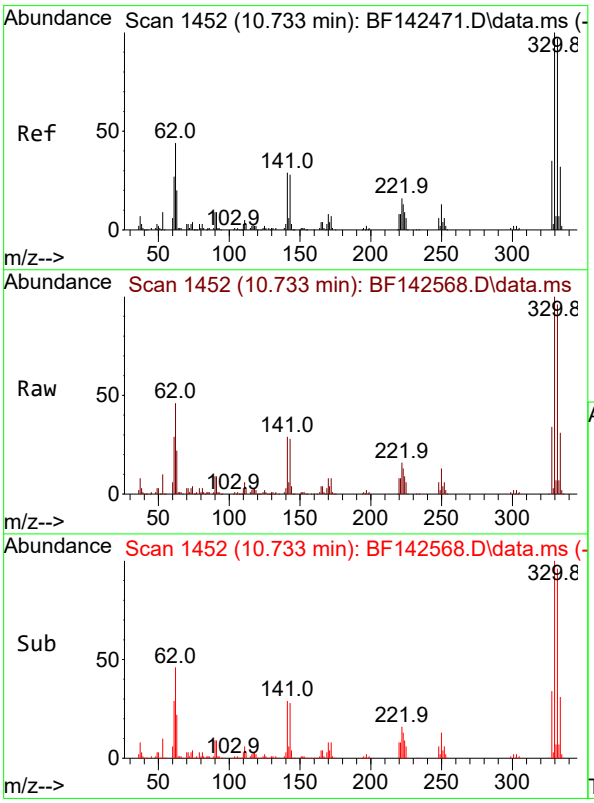
#41
Hexachlorocyclopentadiene
Concen: 80.059 ng
RT: 9.051 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:237 Resp: 409386

Ion	Ratio	Lower	Upper
237	100		
235	63.8	43.3	83.3
272	13.1	0.0	32.4

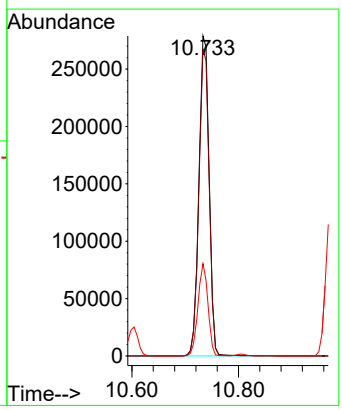


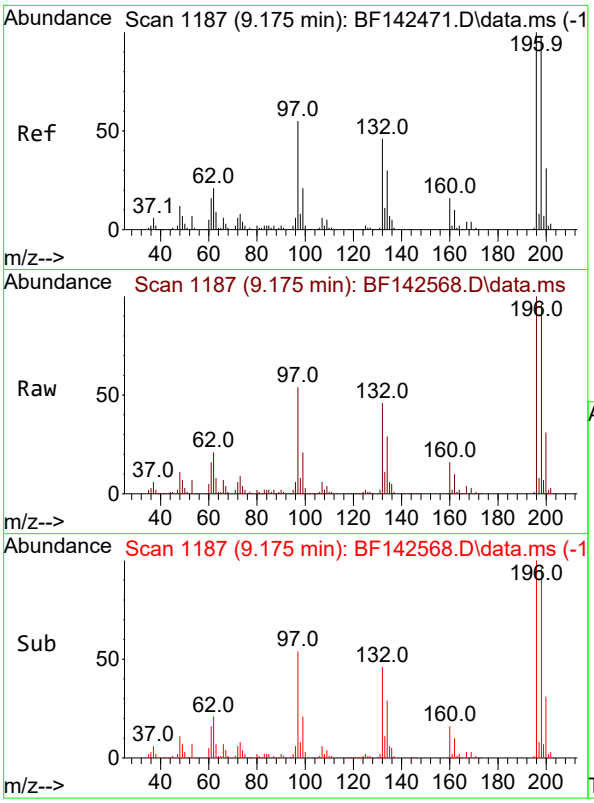


#42
2,4,6-Tribromophenol
Concen: 127.137 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:330 Resp: 372617

Ion	Ratio	Lower	Upper
330	100		
332	96.0	77.6	116.4
141	28.2	24.6	36.8



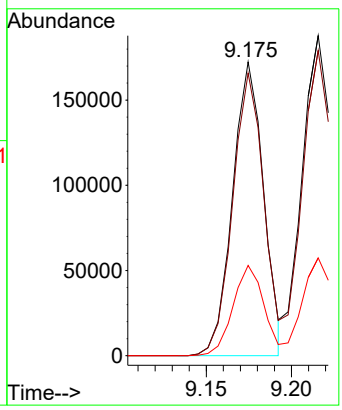


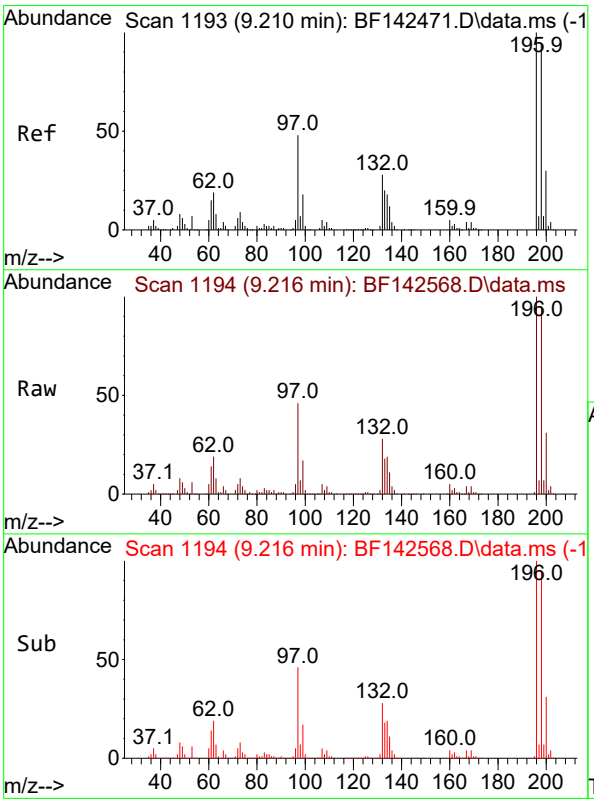
#43
2,4,6-Trichlorophenol
Concen: 42.680 ng
RT: 9.175 min Scan# 11
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:196 Resp: 218158

Ion	Ratio	Lower	Upper
196	100		
198	96.1	78.8	118.2
200	30.7	24.9	37.3

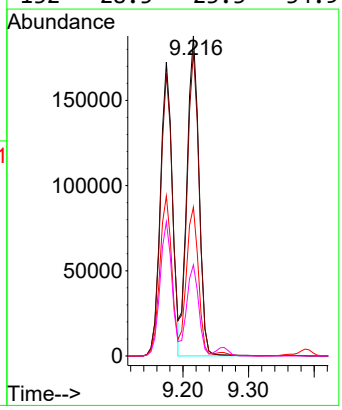


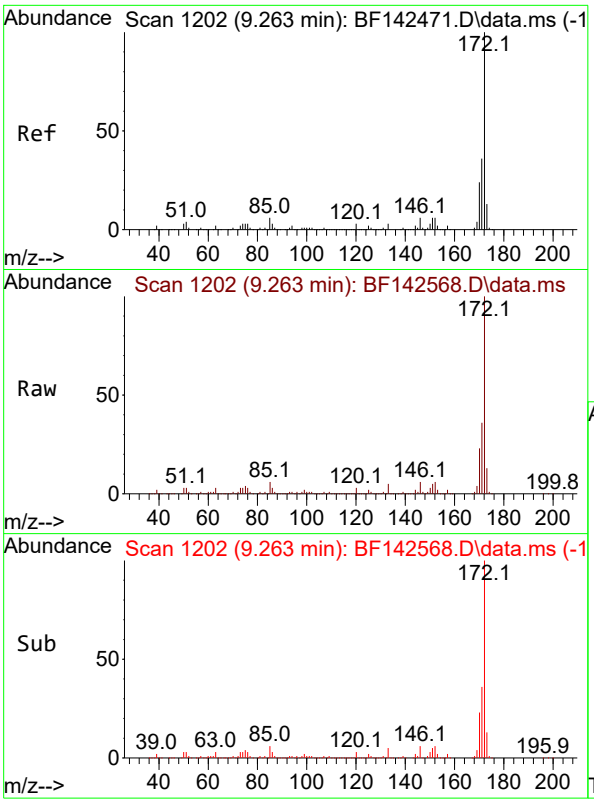


#44
2,4,5-Trichlorophenol
Concen: 44.123 ng
RT: 9.216 min Scan# 1194
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:196 Resp: 237861

Ion	Ratio	Lower	Upper
196	100		
198	95.3	75.5	113.3
97	46.5	39.3	58.9
132	28.5	23.3	34.9



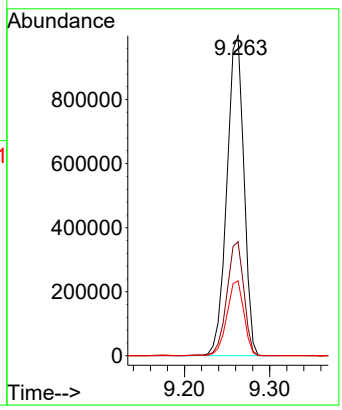


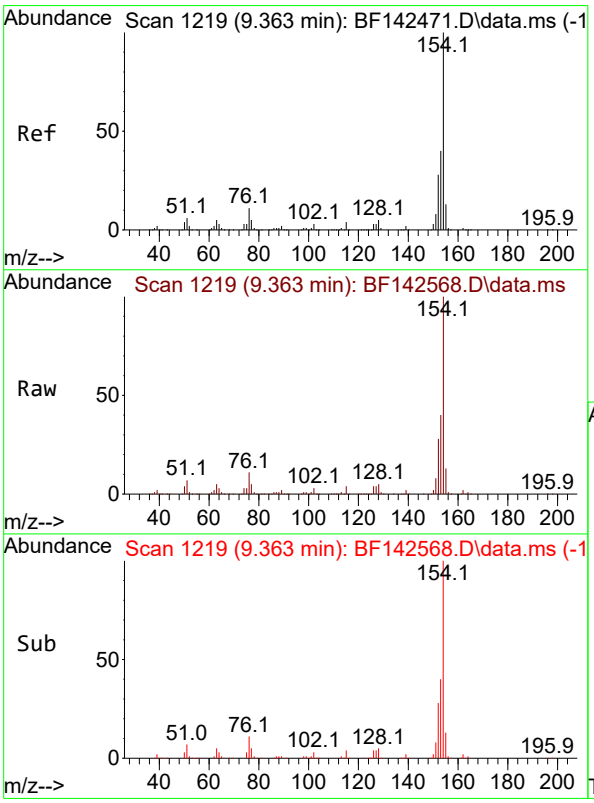
#45
2-Fluorobiphenyl
Concen: 70.484 ng
RT: 9.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:172 Resp: 1387067

Ion	Ratio	Lower	Upper
172	100		
171	35.6	28.6	42.8
170	23.4	18.9	28.3

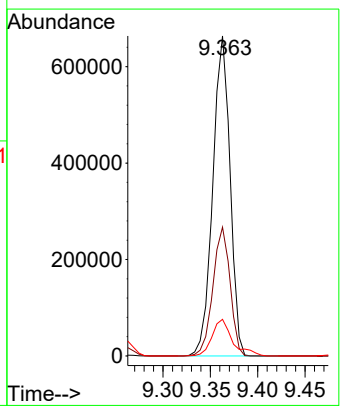


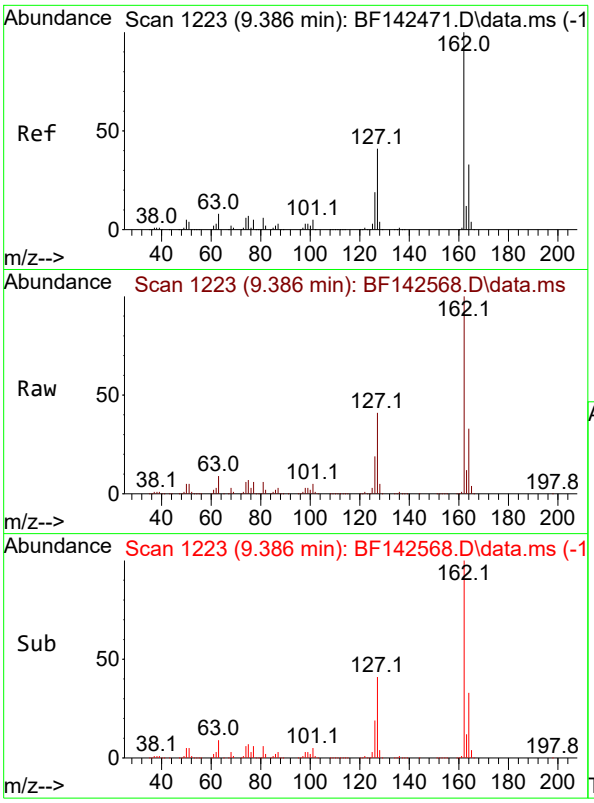


#46
1,1'-Biphenyl
Concen: 40.941 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:154 Resp: 838760

Ion	Ratio	Lower	Upper
154	100		
153	40.3	20.4	60.4
76	11.5	0.0	30.8



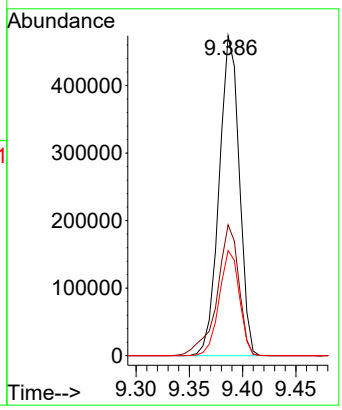


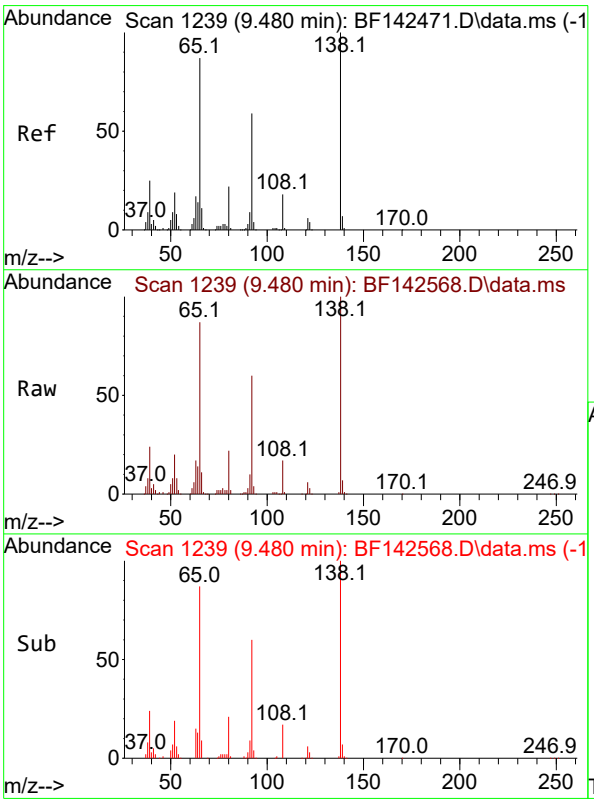
#47
2-Chloronaphthalene
Concen: 41.077 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:162 Resp: 621764

Ion	Ratio	Lower	Upper
162	100		
127	40.9	33.5	50.3
164	32.9	26.1	39.1

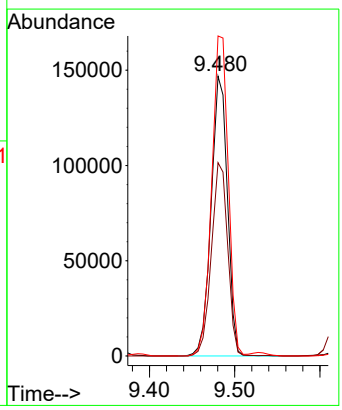


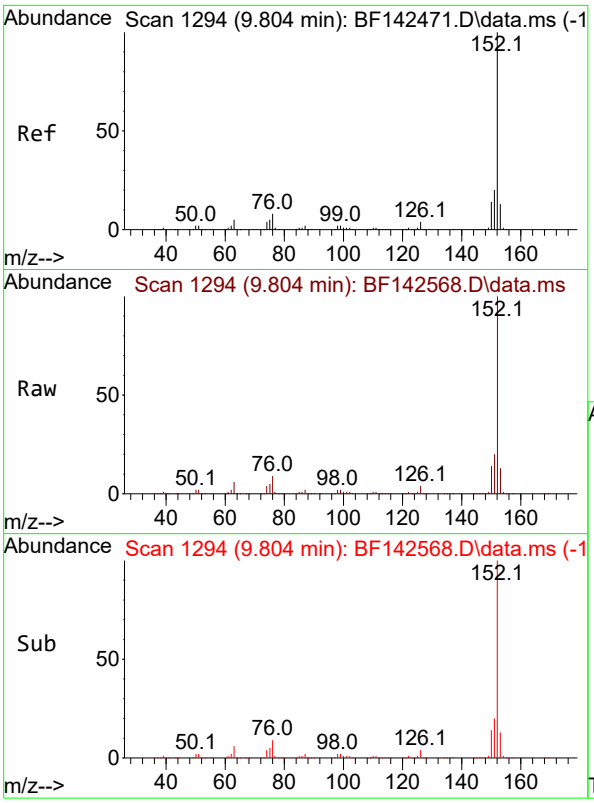


#48
2-Nitroaniline
Concen: 44.570 ng
RT: 9.480 min Scan# 1239
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion: 65 Resp: 194996

Ion	Ratio	Lower	Upper
65	100		
92	69.1	54.4	81.6
138	114.4	91.4	137.2



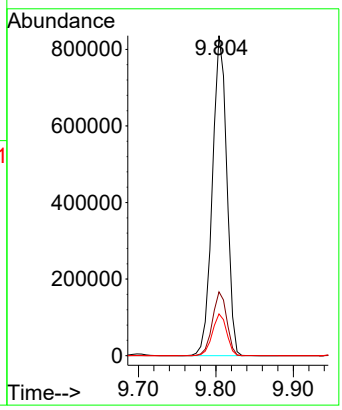


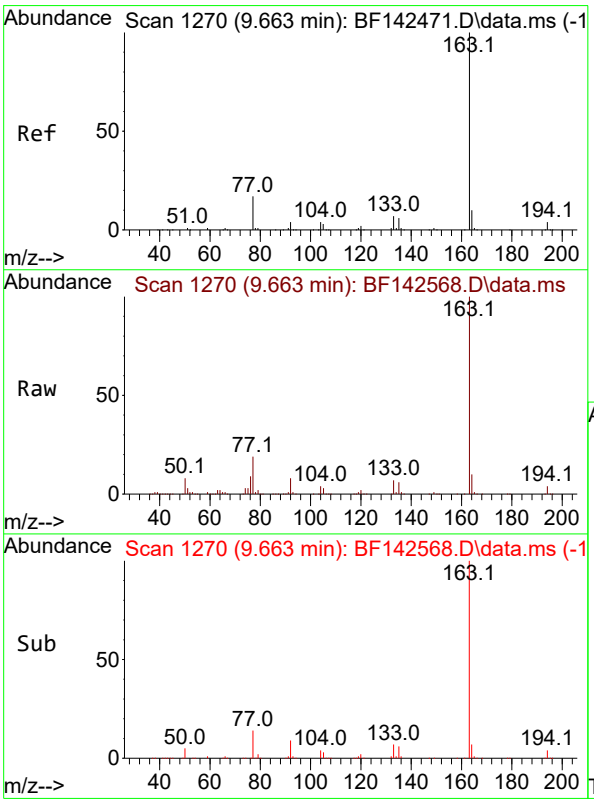
#49
Acenaphthylene
Concen: 42.174 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:152 Resp: 1077928

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.8
153	13.0	10.6	15.8

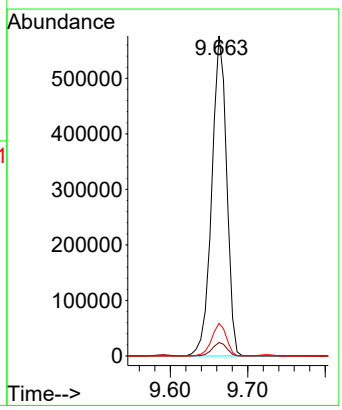


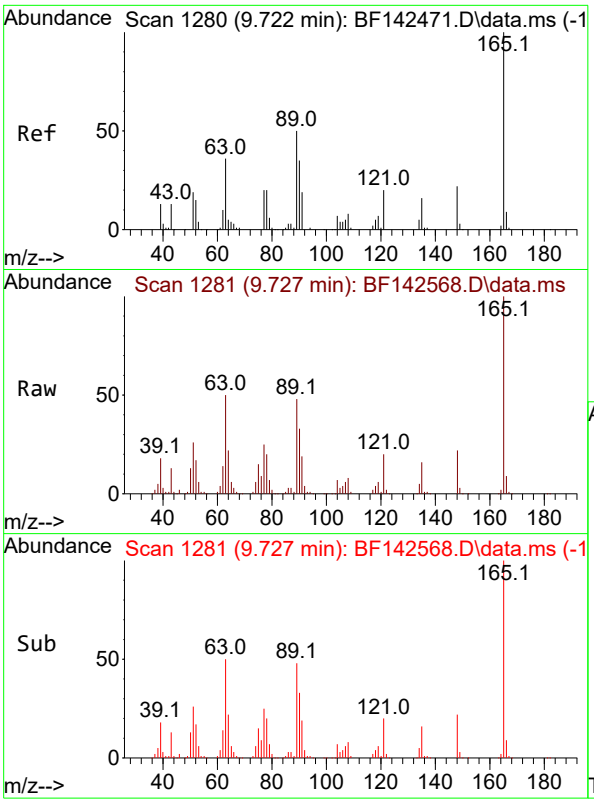


#50
Dimethylphthalate
Concen: 44.030 ng
RT: 9.663 min Scan# 1270
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:163 Resp: 767183

Ion	Ratio	Lower	Upper
163	100		
194	4.2	3.3	4.9
164	10.2	8.2	12.4



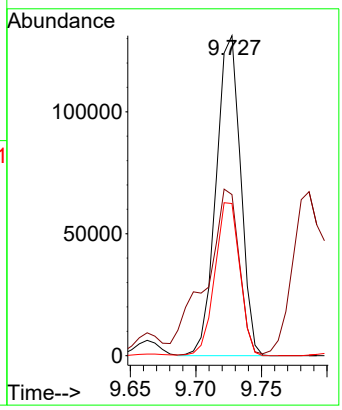


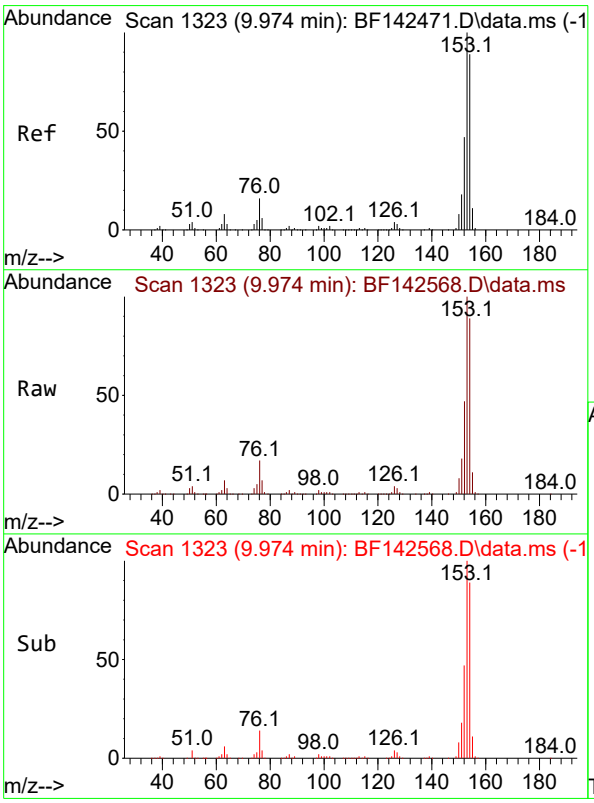
#51
2,6-Dinitrotoluene
Concen: 45.269 ng
RT: 9.727 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:165 Resp: 170243

Ion	Ratio	Lower	Upper
165	100		
63	50.4	42.9	64.3
89	47.5	40.2	60.4

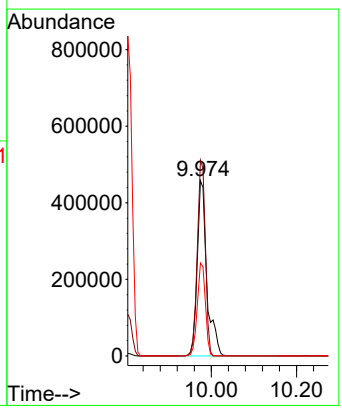


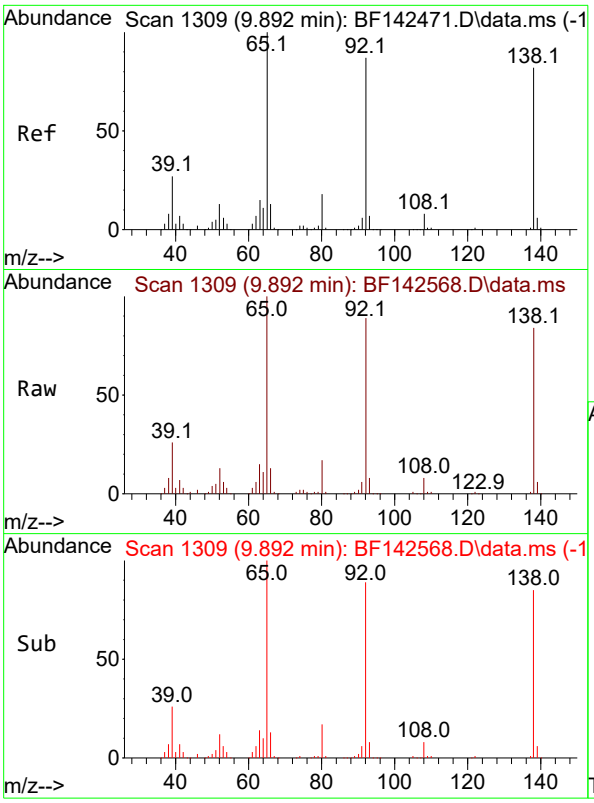


#52
Acenaphthene
Concen: 46.519 ng
RT: 9.974 min Scan# 1323
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:154 Resp: 726019

Ion	Ratio	Lower	Upper
154	100		
153	111.7	90.0	135.0
152	53.0	42.6	64.0



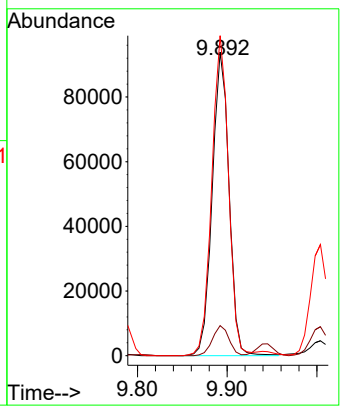


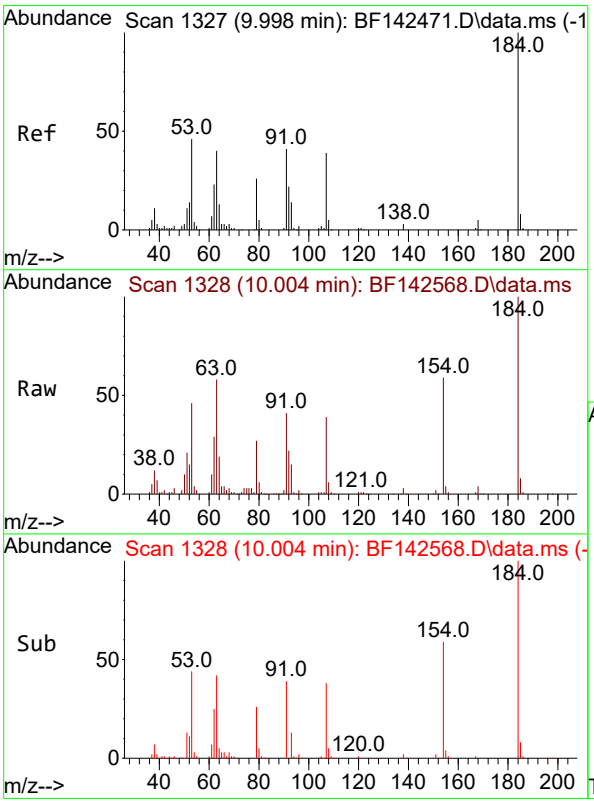
#53
3-Nitroaniline
Concen: 29.745 ng
RT: 9.892 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:138 Resp: 122177

Ion	Ratio	Lower	Upper
138	100		
108	9.9	8.1	12.1
92	105.4	85.2	127.8

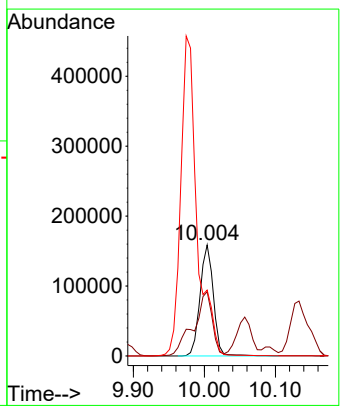


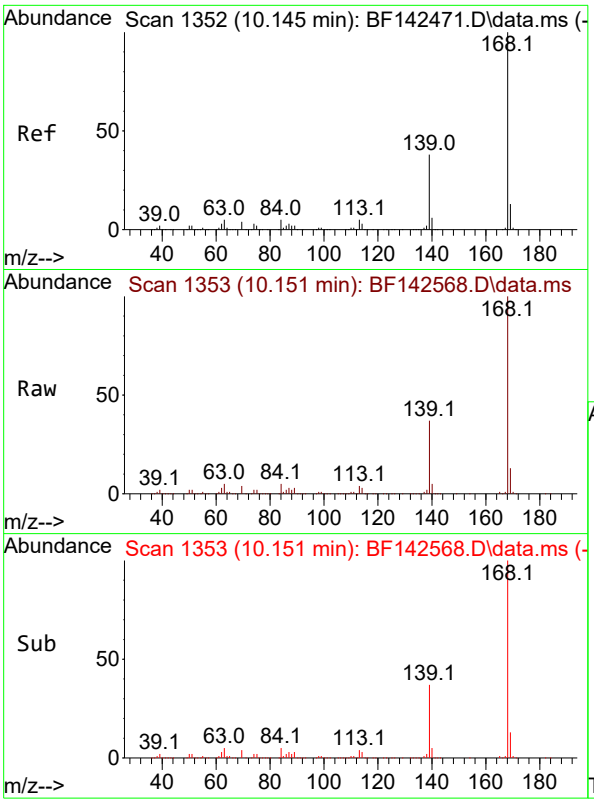


#54
2,4-Dinitrophenol
Concen: 107.159 ng
RT: 10.004 min Scan# 1328
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:184 Resp: 208199

Ion	Ratio	Lower	Upper
184	100		
63	57.9	46.3	69.5
154	59.3	56.8	85.2



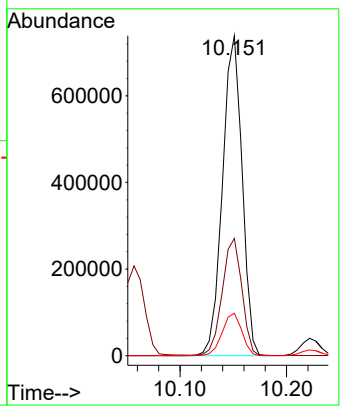


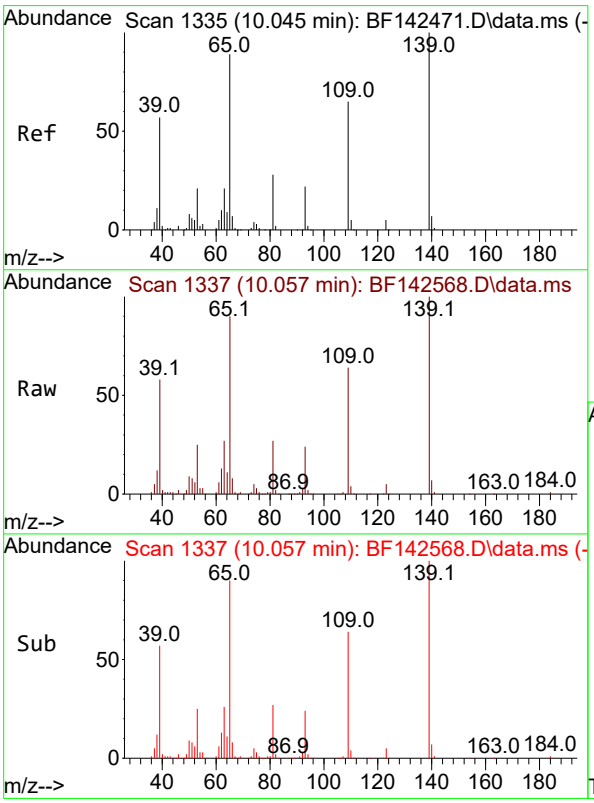
#55
Dibenzofuran
Concen: 41.990 ng
RT: 10.151 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:168 Resp: 943056

Ion	Ratio	Lower	Upper
168	100		
139	36.6	30.2	45.2
169	13.3	10.7	16.1

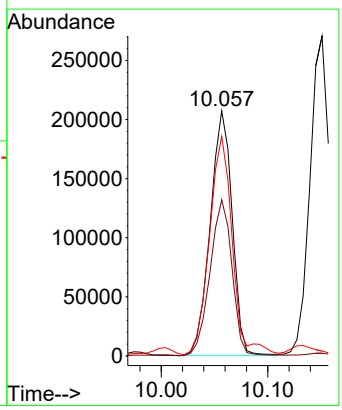


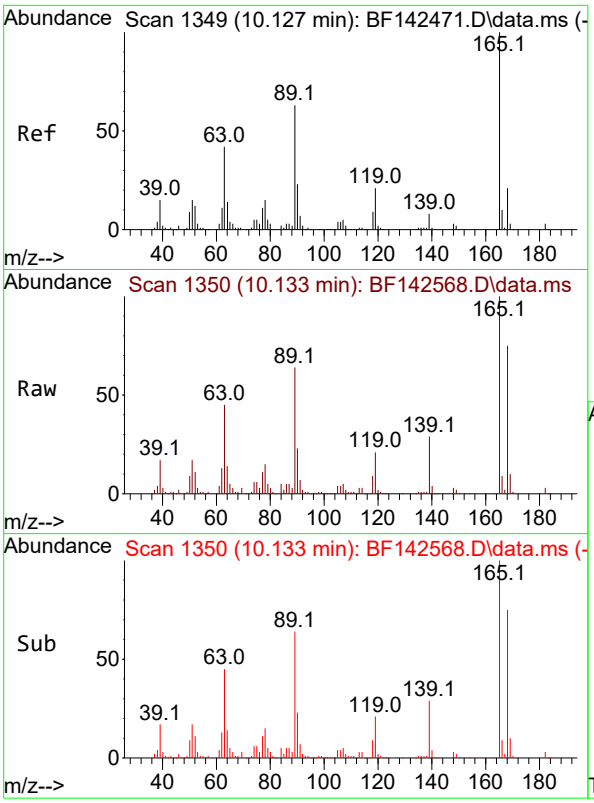


#56
4-Nitrophenol
Concen: 98.094 ng
RT: 10.057 min Scan# 1337
Delta R.T. 0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:139 Resp: 297298

Ion	Ratio	Lower	Upper
139	100		
109	63.7	45.1	85.1
65	89.6	69.7	109.7



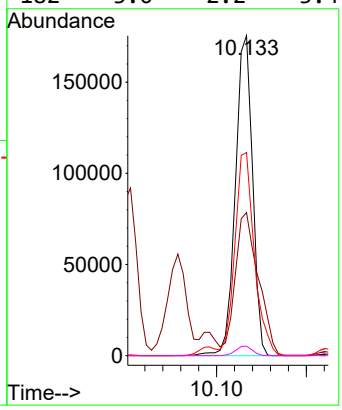


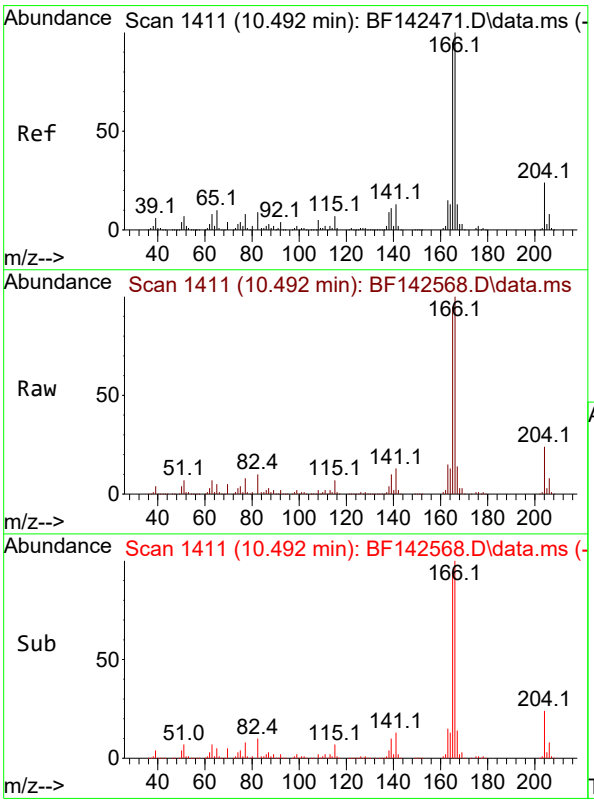
#57
2,4-Dinitrotoluene
Concen: 47.356 ng
RT: 10.133 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:165 Resp: 232579

Ion	Ratio	Lower	Upper
165	100		
63	44.8	33.6	50.4
89	63.5	50.2	75.4
182	3.0	2.2	3.4

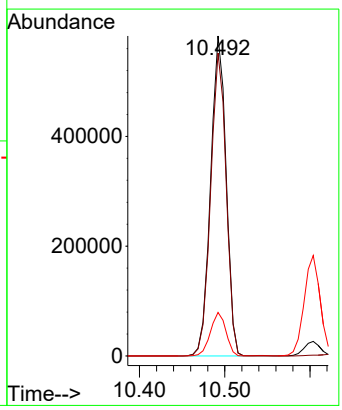


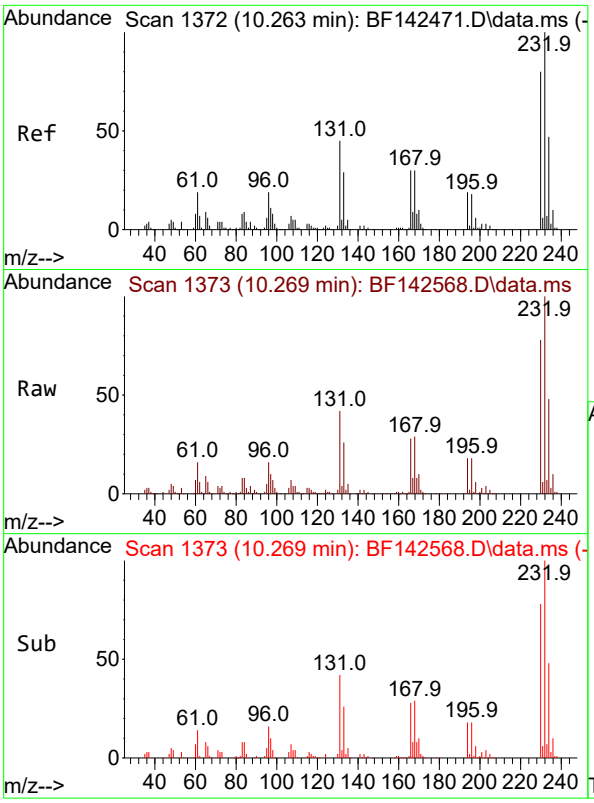


#58
Fluorene
Concen: 42.491 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:166 Resp: 737241

Ion	Ratio	Lower	Upper
166	100		
165	94.7	75.8	113.8
167	13.6	10.6	16.0



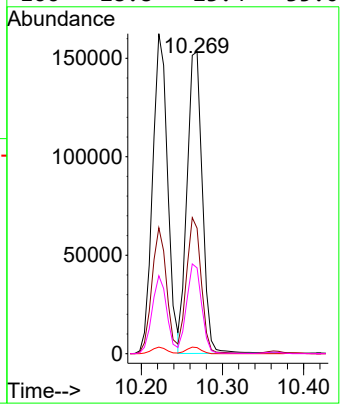


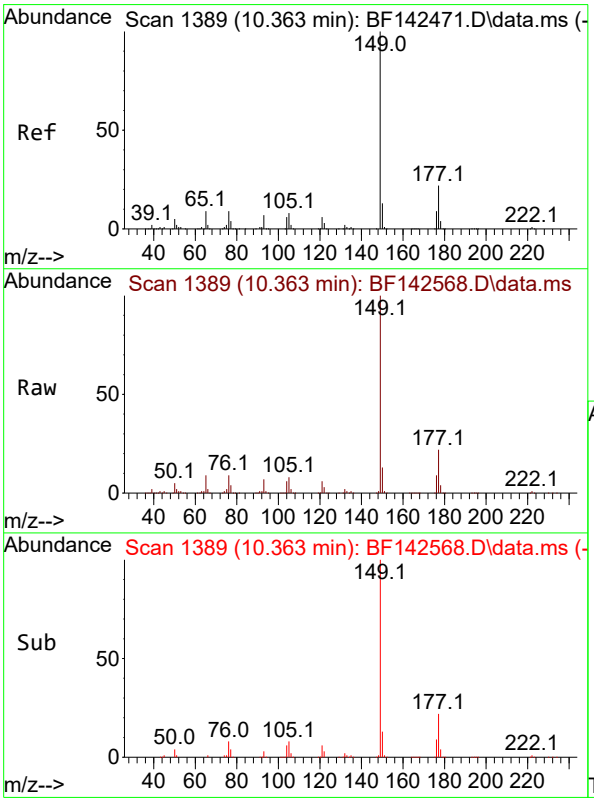
#59
2,3,4,6-Tetrachlorophenol
Concen: 44.461 ng
RT: 10.269 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:232 Resp: 200089

Ion	Ratio	Lower	Upper
232	100		
131	43.6	35.2	52.8
130	2.1	1.7	2.5
166	28.8	23.4	35.0

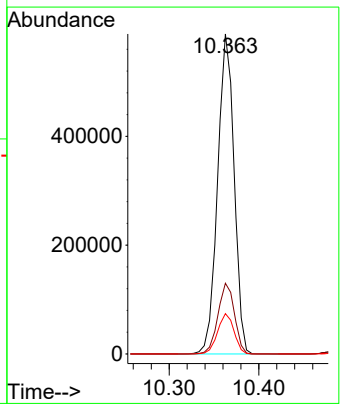


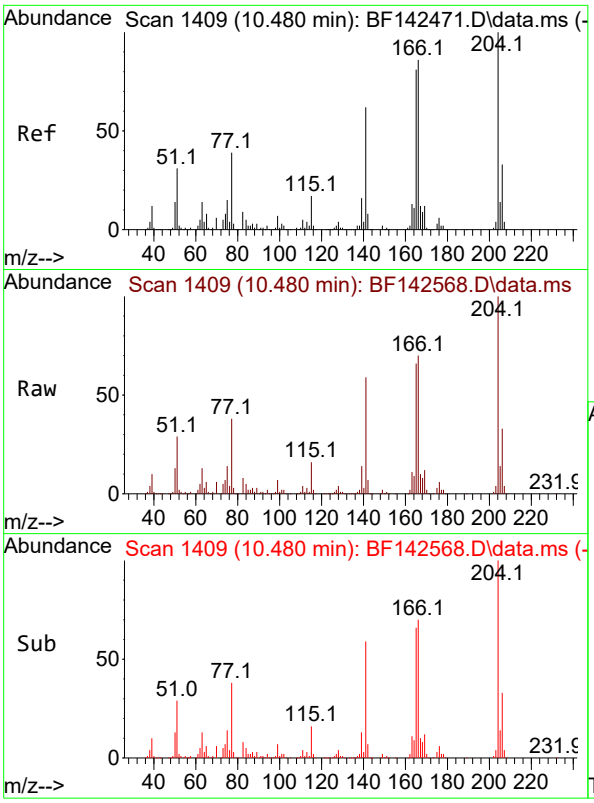


#60
Diethylphthalate
Concen: 44.116 ng
RT: 10.363 min Scan# 1389
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:149 Resp: 750725

Ion	Ratio	Lower	Upper
149	100		
177	22.1	17.6	26.4
150	12.6	10.1	15.1



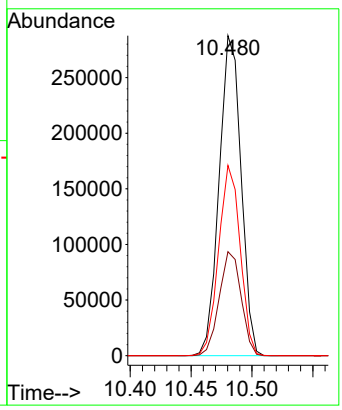


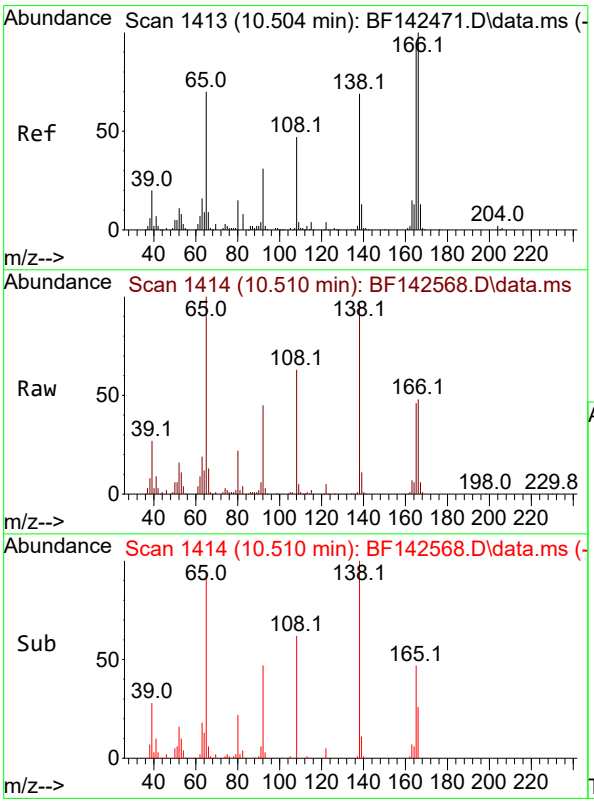
#61
4-Chlorophenyl-phenylether
Concen: 42.294 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:204 Resp: 360489

Ion	Ratio	Lower	Upper
204	100		
206	32.5	26.3	39.5
141	59.5	49.5	74.3

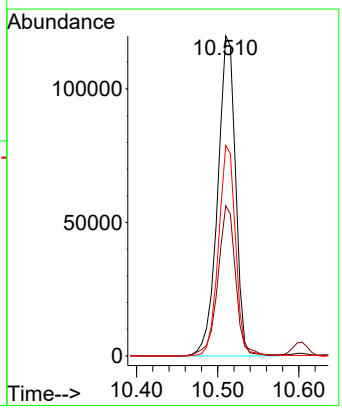


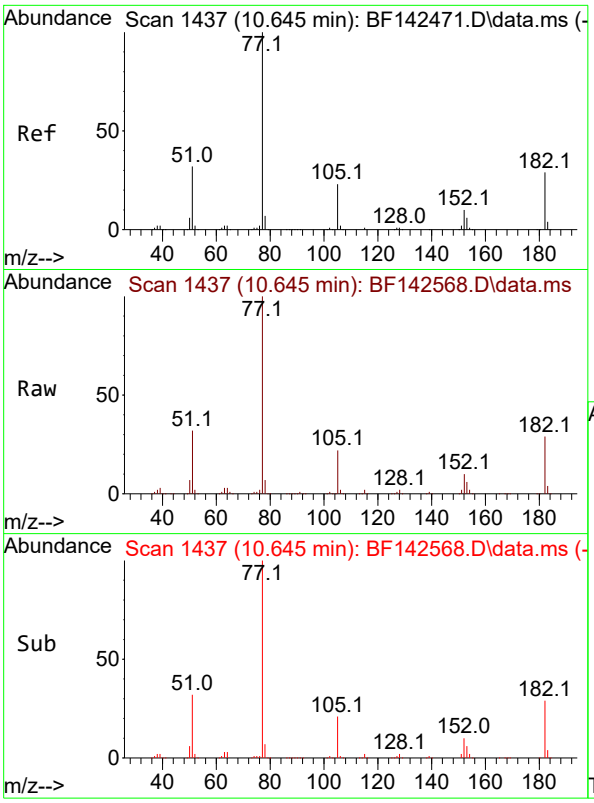


#62
4-Nitroaniline
Concen: 49.377 ng
RT: 10.510 min Scan# 1414
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:138 Resp: 183943

Ion	Ratio	Lower	Upper
138	100		
92	47.0	26.0	66.0
108	65.7	48.4	88.4



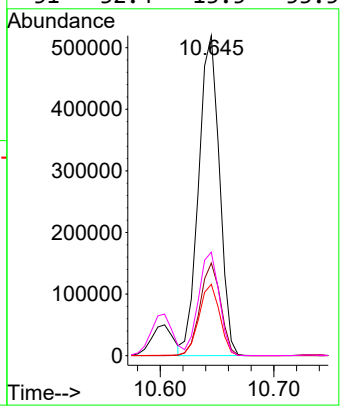


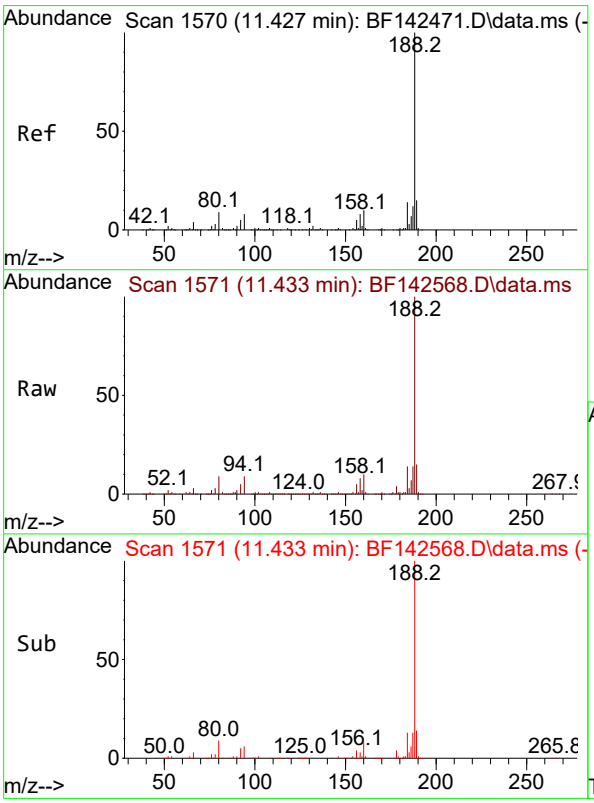
#63
Azobenzene
Concen: 43.257 ng
RT: 10.645 min Scan# 14
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion: 77 Resp: 661165

Ion	Ratio	Lower	Upper
77	100		
182	29.0	9.0	49.0
105	22.3	2.4	42.4
51	32.4	13.5	53.5

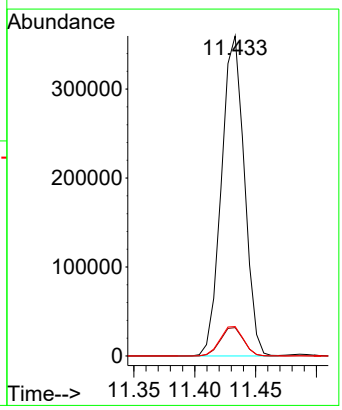


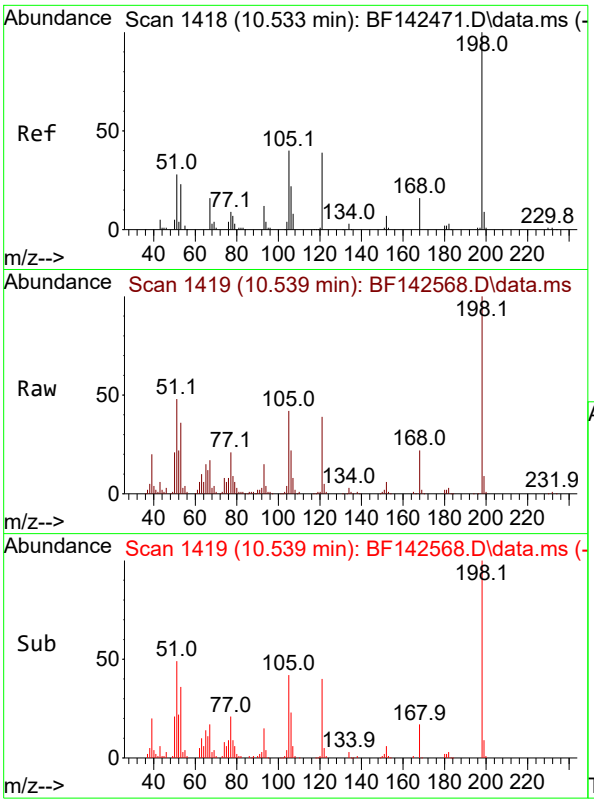


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.433 min Scan# 1571
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:188 Resp: 470473

Ion	Ratio	Lower	Upper
188	100		
94	8.9	6.6	10.0
80	9.2	7.4	11.0



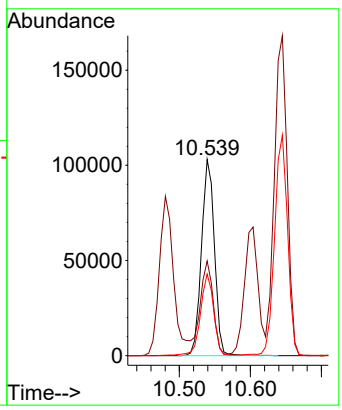


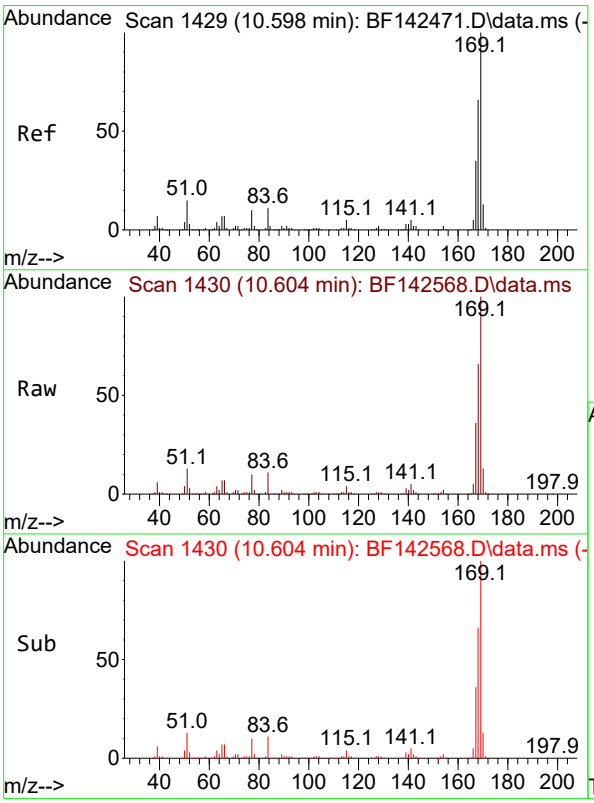
#65
4,6-Dinitro-2-methylphenol
Concen: 49.902 ng
RT: 10.539 min Scan# 14
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:198 Resp: 131023

Ion	Ratio	Lower	Upper
198	100		
51	48.2	28.3	68.3
105	41.6	21.3	61.3

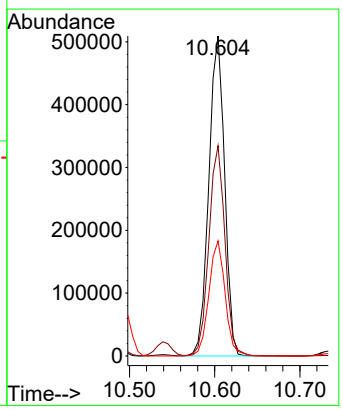


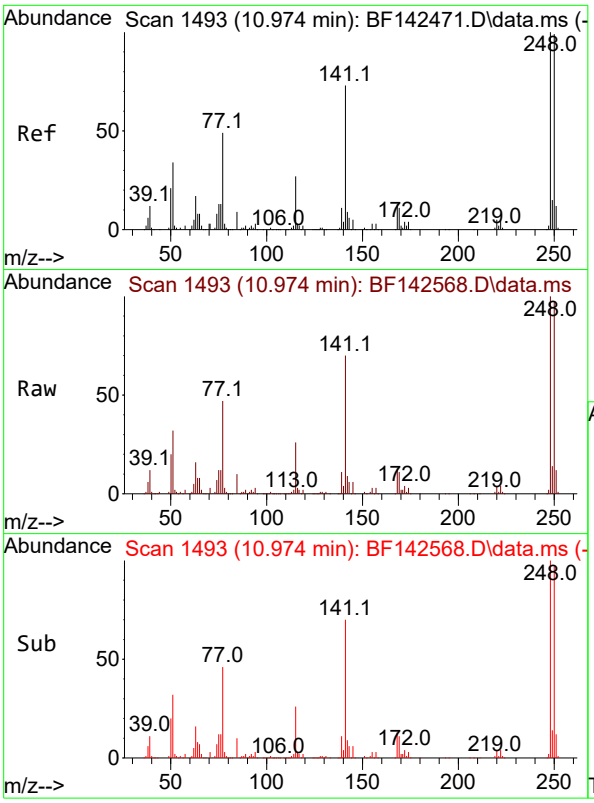


#66
n-Nitrosodiphenylamine
Concen: 40.832 ng
RT: 10.604 min Scan# 1430
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:169 Resp: 657232

Ion	Ratio	Lower	Upper
169	100		
168	65.7	52.7	79.1
167	36.0	28.3	42.5



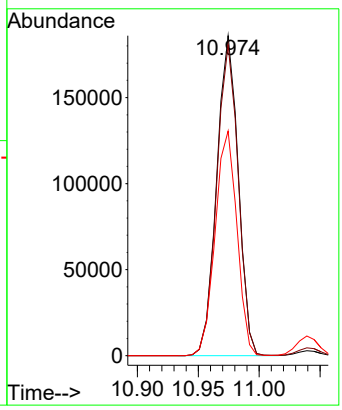


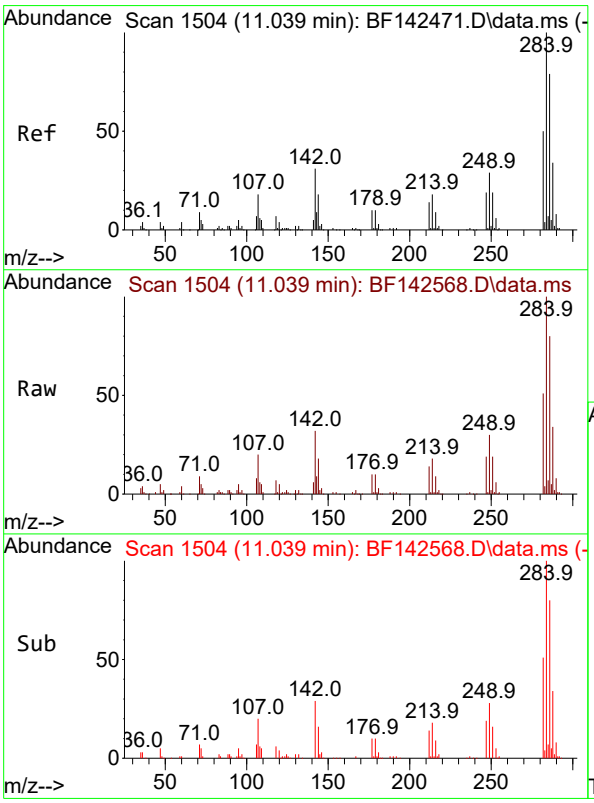
#67
4-Bromophenyl-phenylether
Concen: 41.247 ng
RT: 10.974 min Scan# 14
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:248 Resp: 229459

Ion	Ratio	Lower	Upper
248	100		
250	97.2	79.0	118.4
141	70.2	58.4	87.6

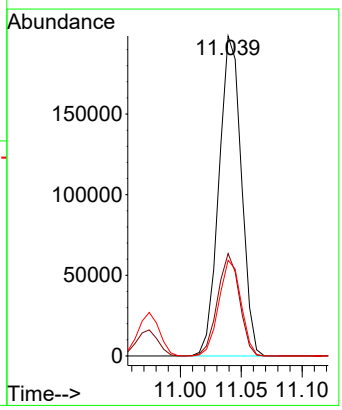


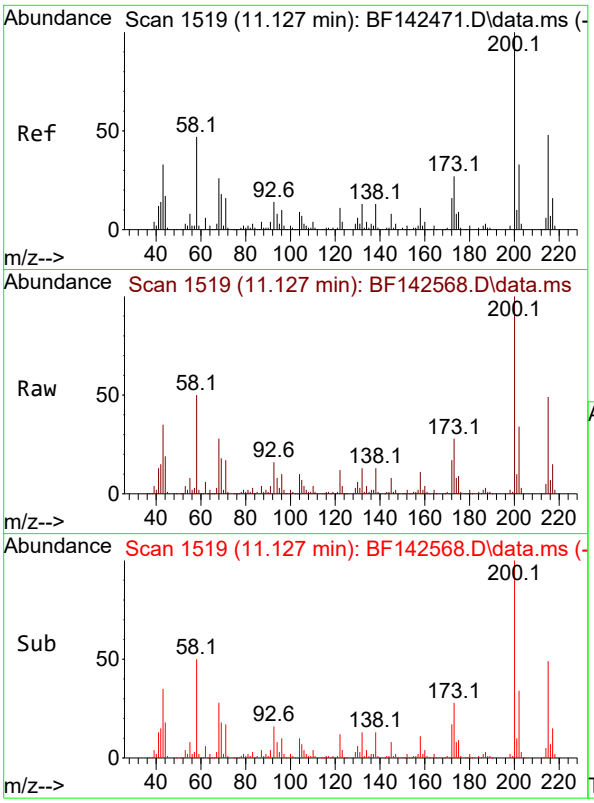


#68
Hexachlorobenzene
Concen: 41.271 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:284 Resp: 253935

Ion	Ratio	Lower	Upper
284	100		
142	32.0	24.8	37.2
249	29.9	23.6	35.4



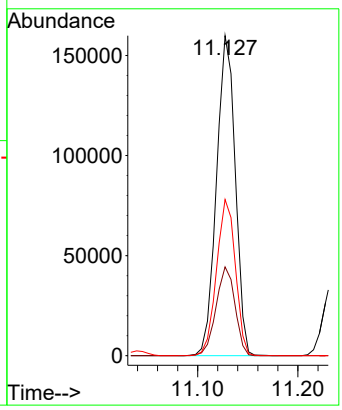


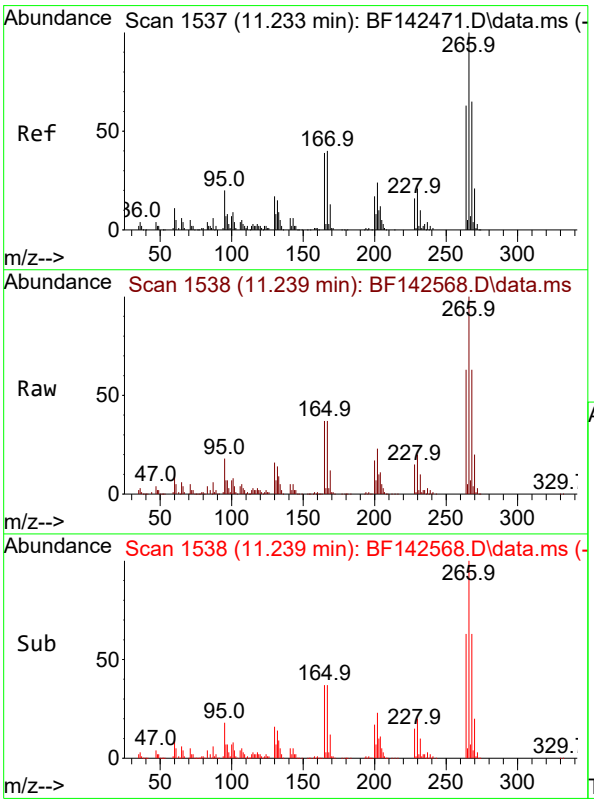
#69
Atrazine
Concen: 48.633 ng
RT: 11.127 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:200 Resp: 207887

Ion	Ratio	Lower	Upper
200	100		
173	27.7	7.4	47.4
215	48.8	28.5	68.5

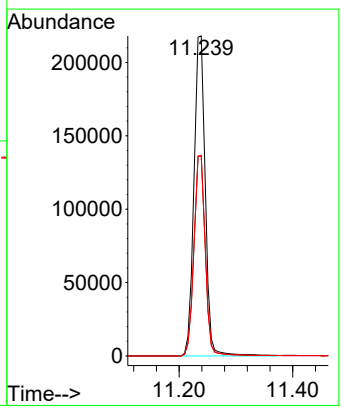


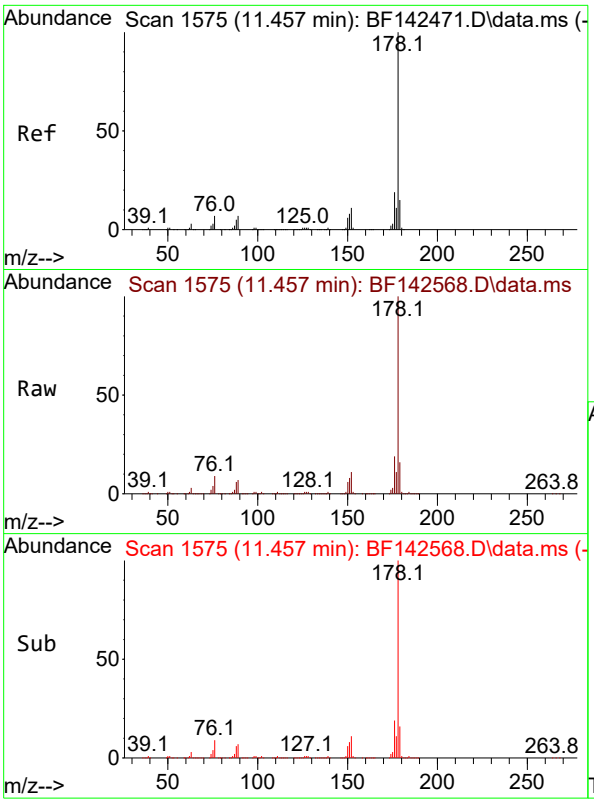


#70
Pentachlorophenol
Concen: 87.631 ng
RT: 11.239 min Scan# 1538
Delta R.T. 0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:266 Resp: 304411

Ion	Ratio	Lower	Upper
266	100		
268	62.7	51.7	77.5
264	62.6	50.4	75.6



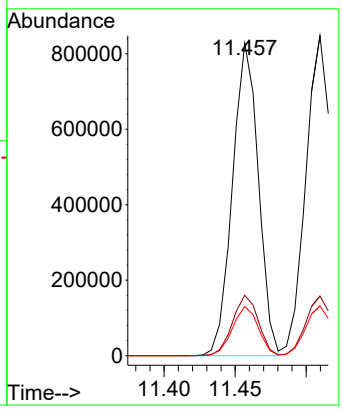


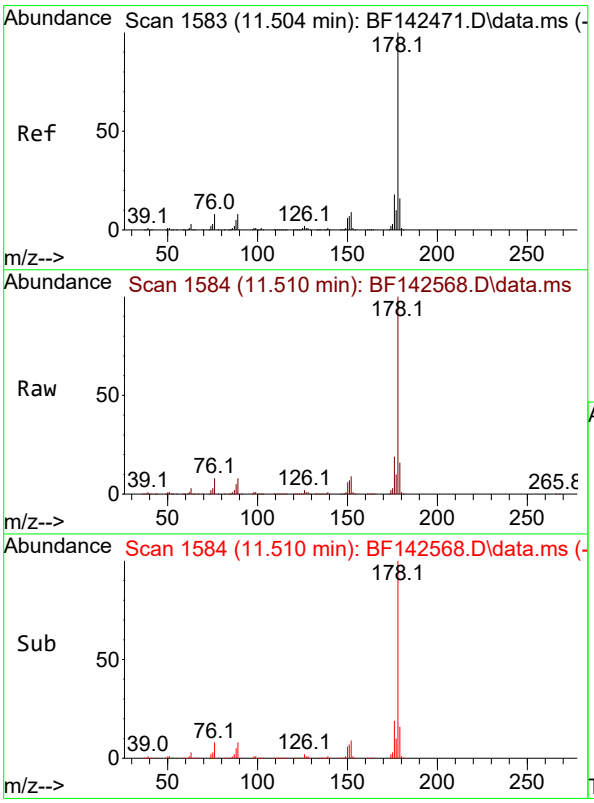
#71
Phenanthrene
Concen: 41.736 ng
RT: 11.457 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:178 Resp: 1049379

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.0
179	15.7	12.3	18.5

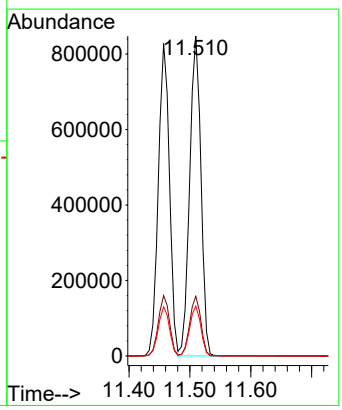


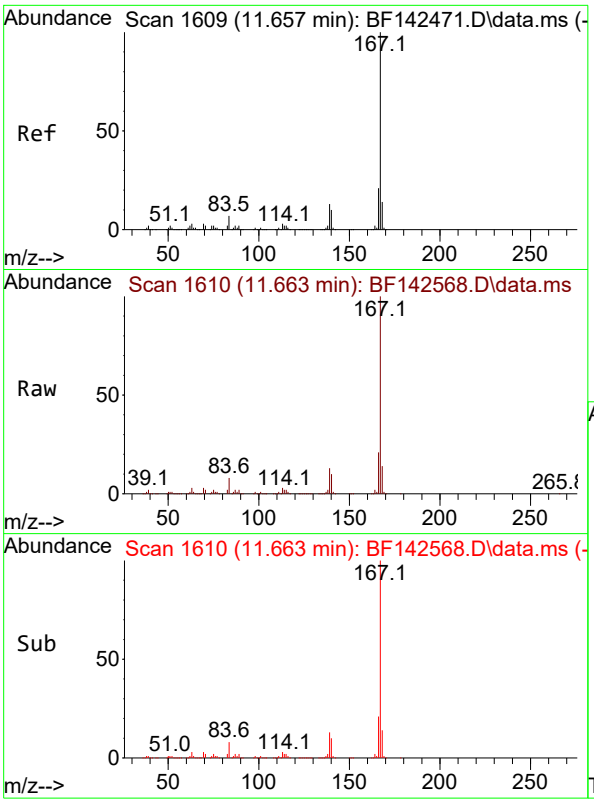


#72
Anthracene
Concen: 42.242 ng
RT: 11.510 min Scan# 1584
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:178 Resp: 1083954

Ion	Ratio	Lower	Upper
178	100		
176	18.6	14.6	21.8
179	15.6	12.4	18.6



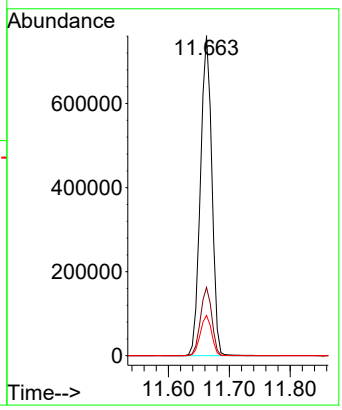


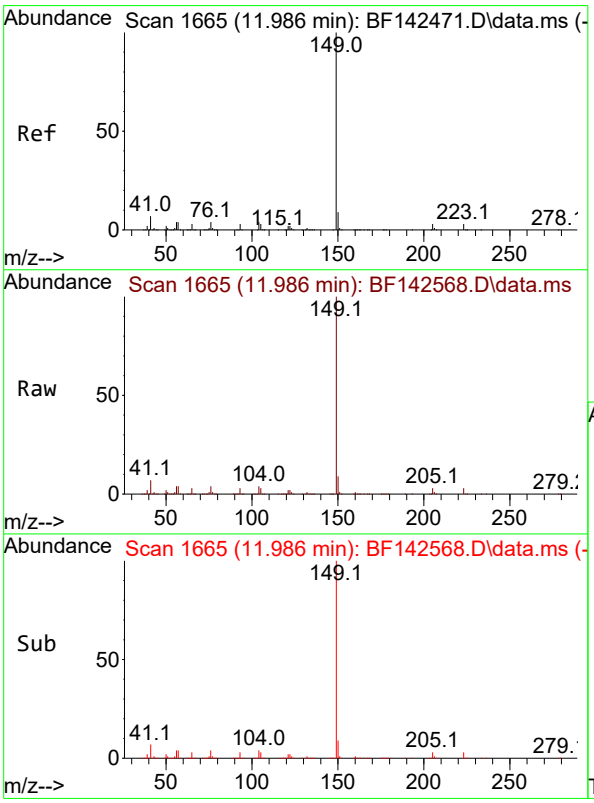
#73
Carbazole
Concen: 44.996 ng
RT: 11.663 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:167 Resp: 987084

Ion	Ratio	Lower	Upper
167	100		
166	21.3	16.9	25.3
139	12.6	10.2	15.4

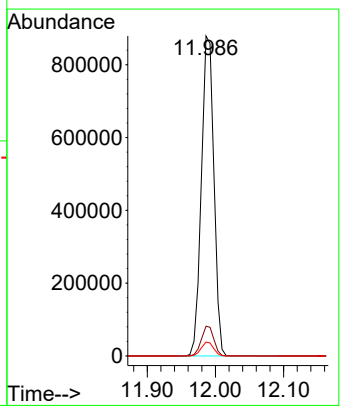


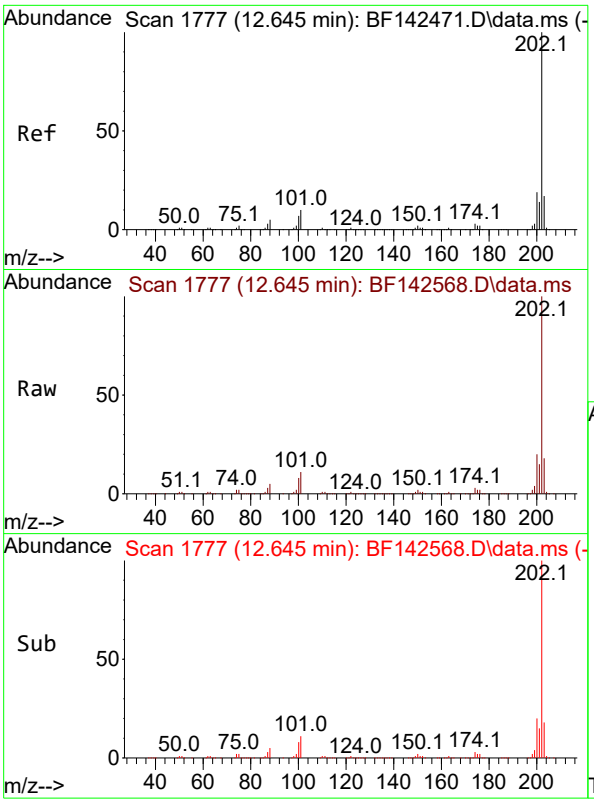


#74
Di-n-butylphthalate
Concen: 46.879 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:149 Resp: 1125656

Ion	Ratio	Lower	Upper
149	100		
150	9.3	7.3	10.9
104	4.3	3.6	5.4



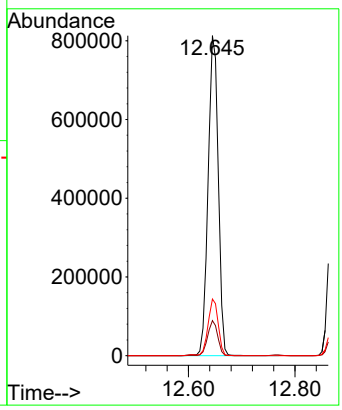


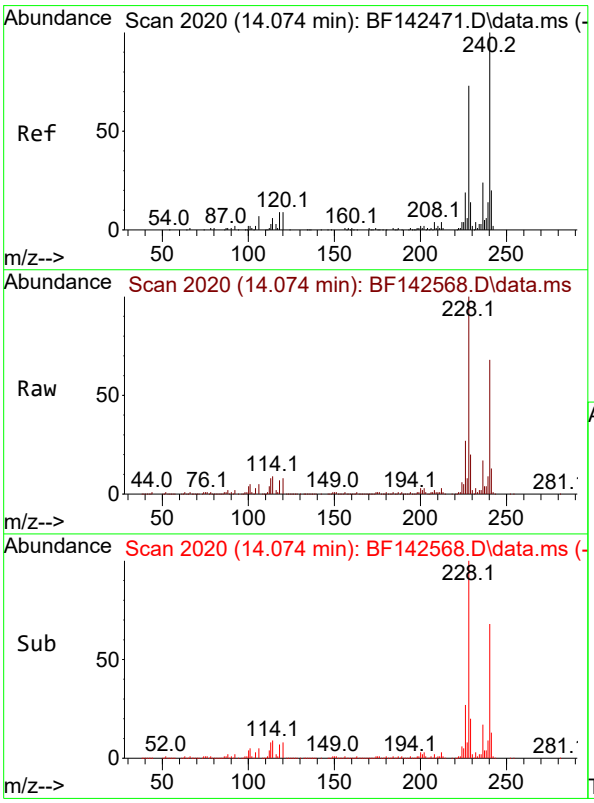
#75
Fluoranthene
Concen: 45.725 ng
RT: 12.645 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:202 Resp: 1074252

Ion	Ratio	Lower	Upper
202	100		
101	11.0	0.0	29.6
203	17.7	0.0	37.2

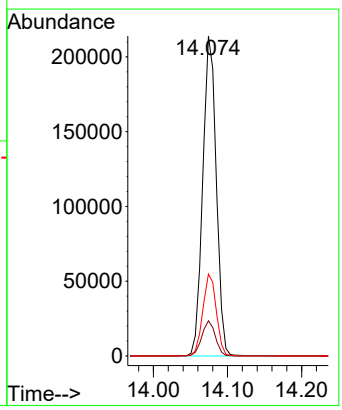


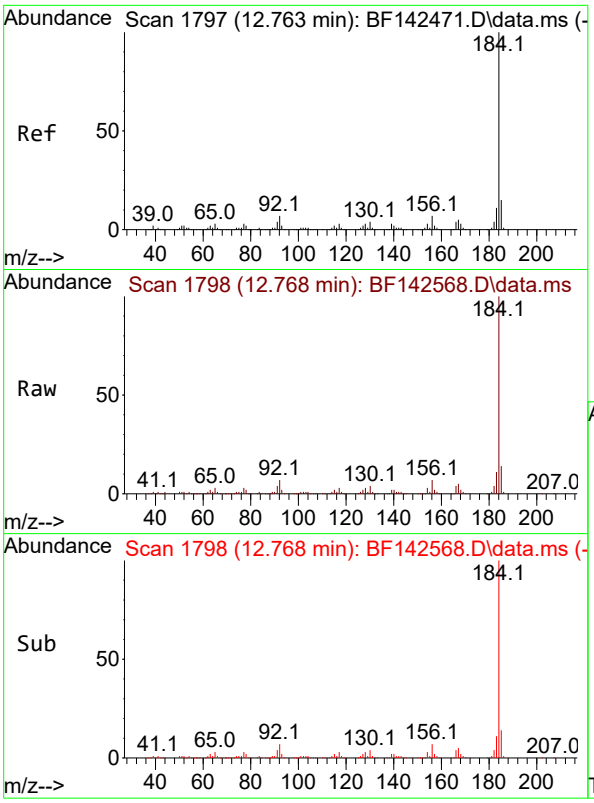


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:240 Resp: 271265

Ion	Ratio	Lower	Upper
240	100		
120	11.0	7.5	11.3
236	25.6	19.6	29.4



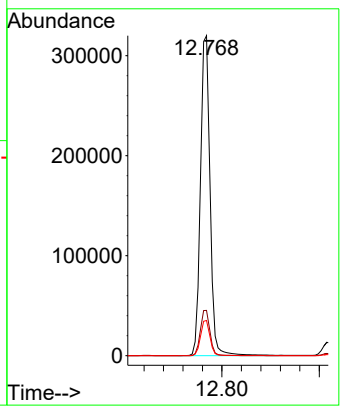


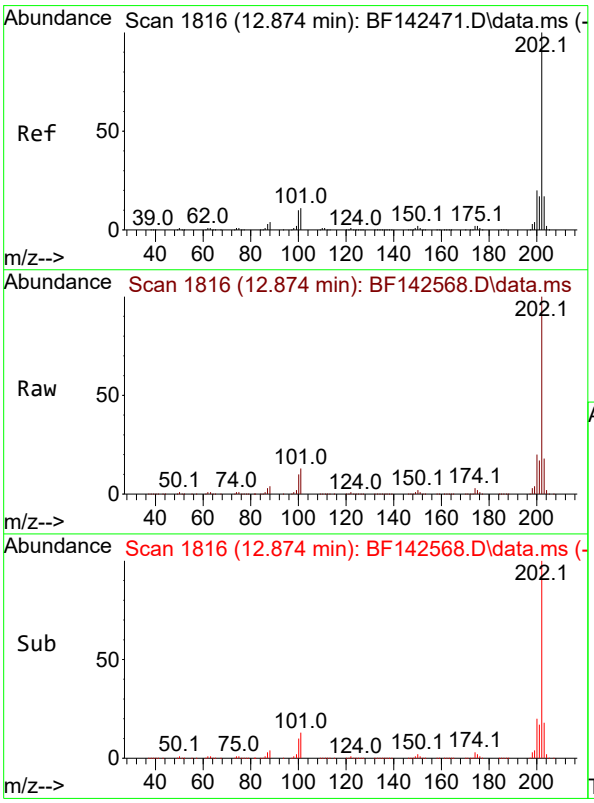
#77
Benzidine
Concen: 43.328 ng
RT: 12.768 min Scan# 1
Delta R.T. 0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:184 Resp: 437383

Ion	Ratio	Lower	Upper
184	100		
185	14.1	11.6	17.4
183	11.0	9.0	13.4

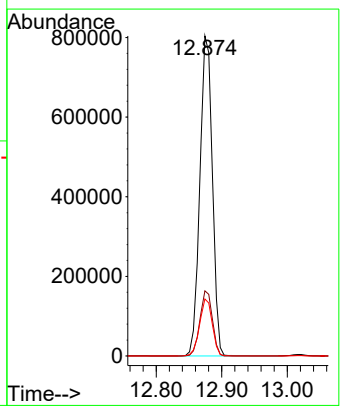


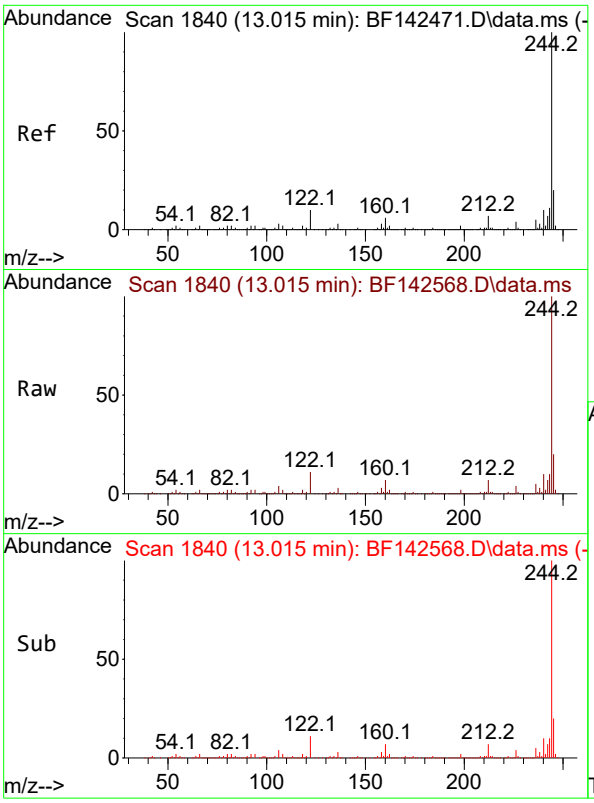


#78
Pyrene
Concen: 42.315 ng
RT: 12.874 min Scan# 1816
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:202 Resp: 1070790

Ion	Ratio	Lower	Upper
202	100		
200	20.4	16.1	24.1
203	17.8	13.9	20.9



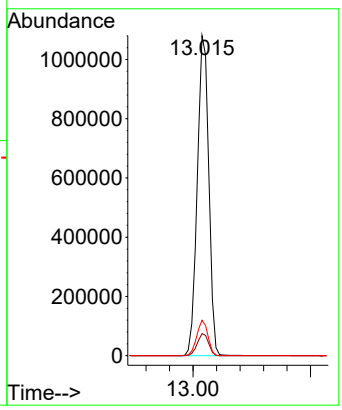


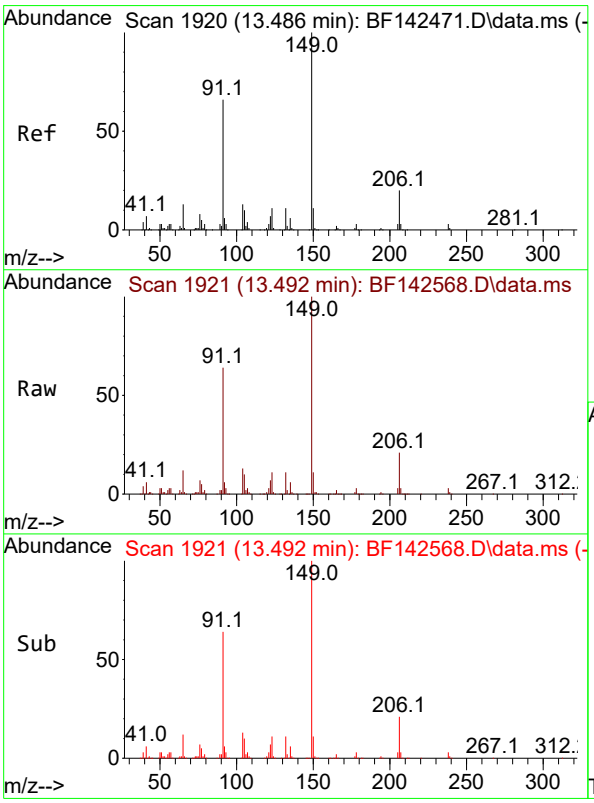
#79
Terphenyl-d14
Concen: 73.672 ng
RT: 13.015 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:244 Resp: 1462423

Ion	Ratio	Lower	Upper
244	100		
212	6.9	5.3	7.9
122	11.0	8.2	12.2

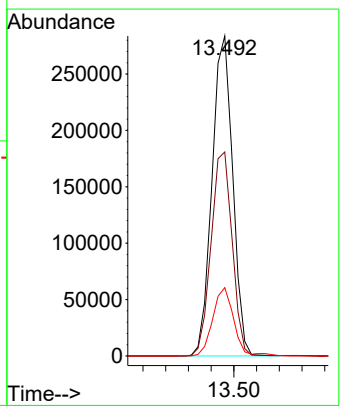


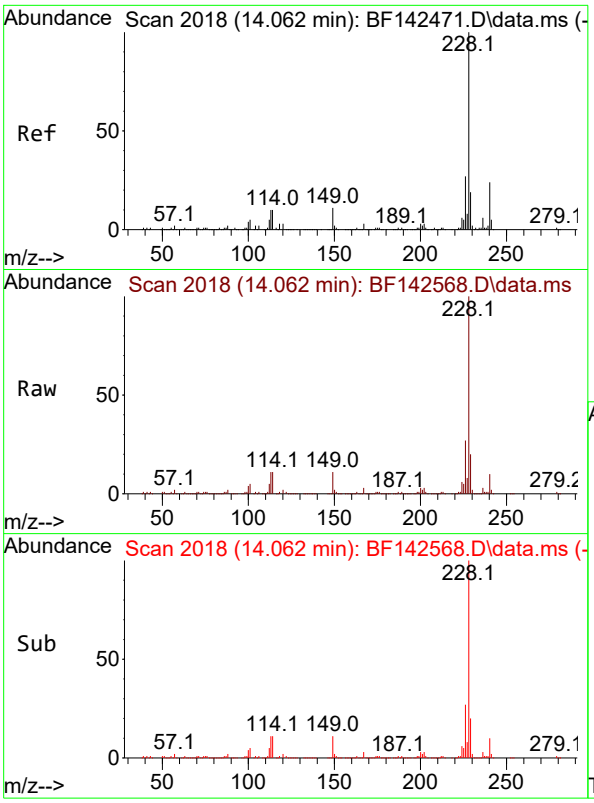


#80
Butylbenzylphthalate
Concen: 51.321 ng
RT: 13.492 min Scan# 1921
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:149 Resp: 358852

Ion	Ratio	Lower	Upper
149	100		
91	63.8	52.9	79.3
206	21.4	16.2	24.2



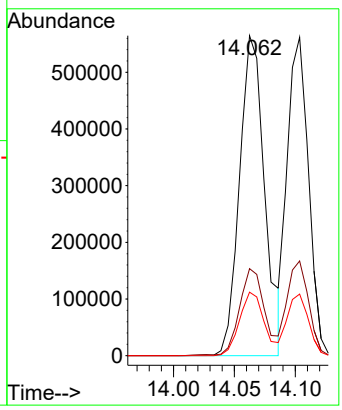


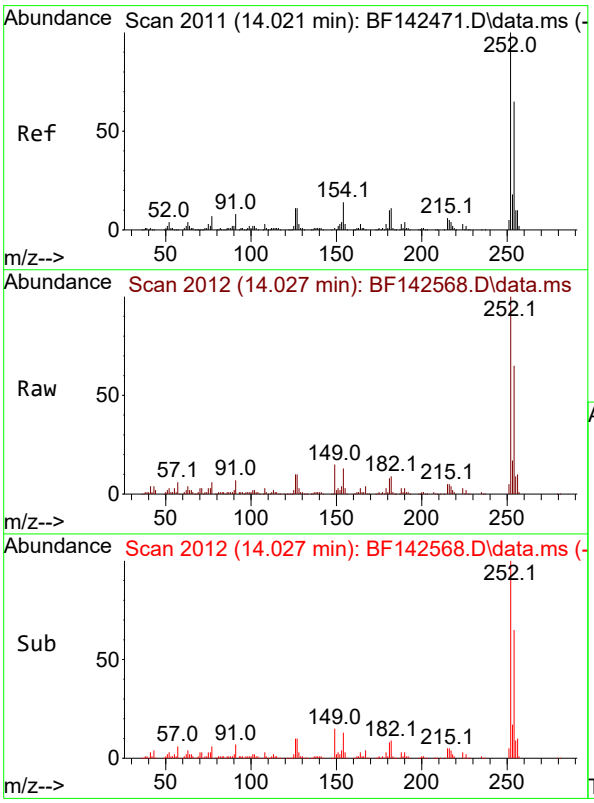
#81
Benzo(a)anthracene
Concen: 44.793 ng
RT: 14.062 min Scan# 2
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:228 Resp: 811376

Ion	Ratio	Lower	Upper
228	100		
226	27.2	21.2	31.8
229	19.8	15.5	23.3

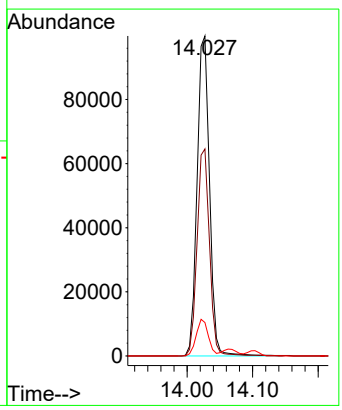


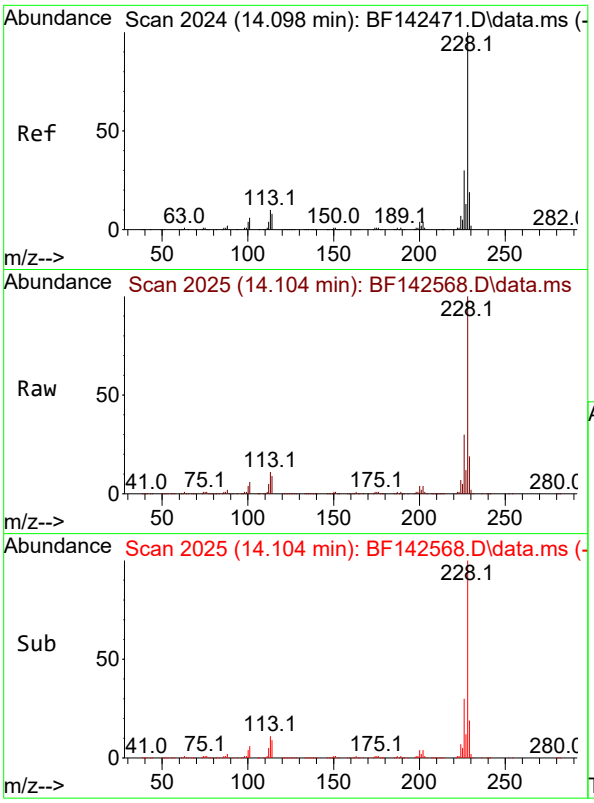


#82
3,3'-Dichlorobenzidine
Concen: 23.968 ng
RT: 14.027 min Scan# 2012
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:252 Resp: 131683

Ion	Ratio	Lower	Upper
252	100		
254	64.7	52.0	78.0
126	10.4	8.9	13.3



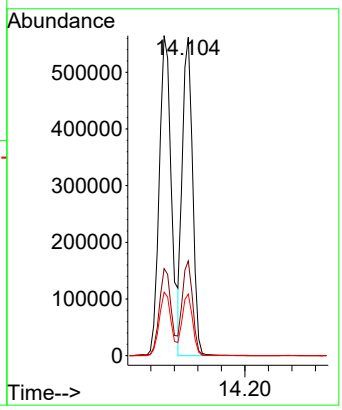


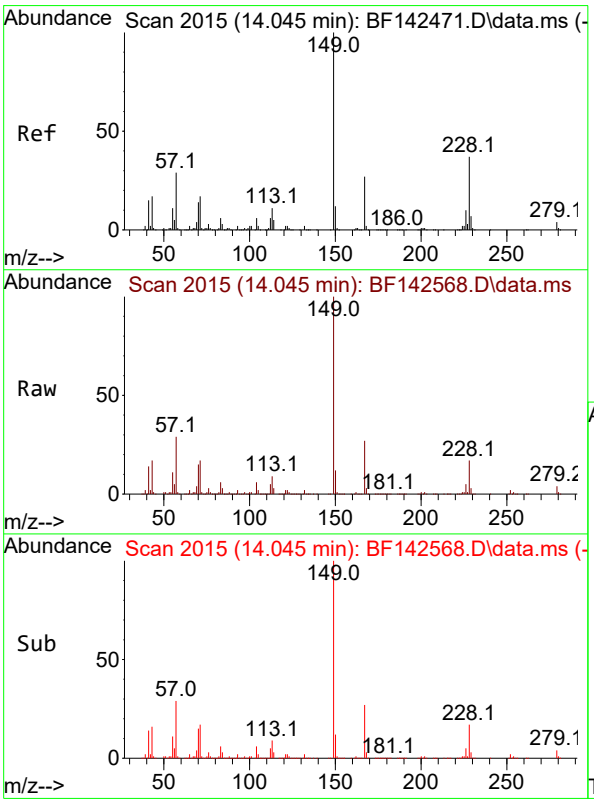
#83
Chrysene
Concen: 41.931 ng
RT: 14.104 min Scan# 2(
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:228 Resp: 682489

Ion	Ratio	Lower	Upper
228	100		
226	29.7	23.8	35.6
229	19.3	15.4	23.2

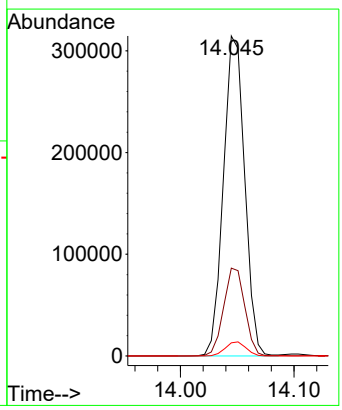


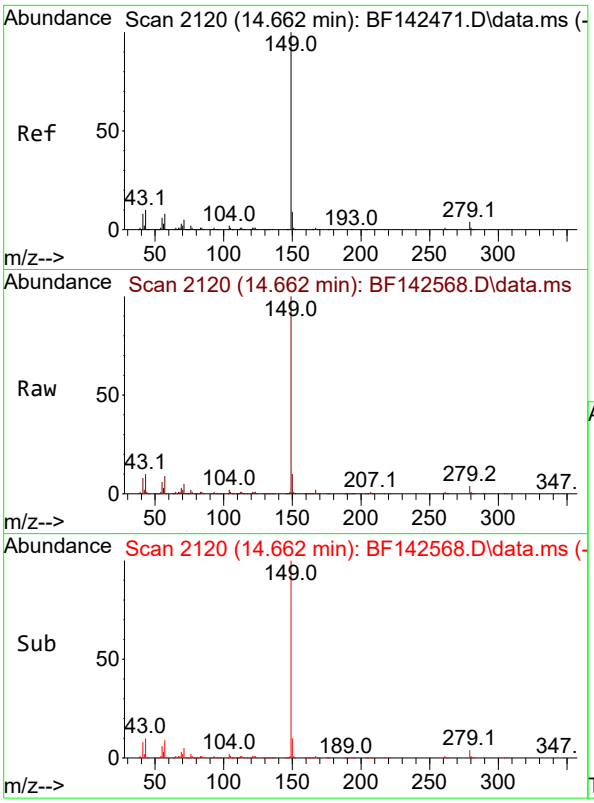


#84
Bis(2-ethylhexyl)phthalate
Concen: 45.742 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:149 Resp: 409441

Ion	Ratio	Lower	Upper
149	100		
167	27.5	21.5	32.3
279	4.1	3.2	4.8



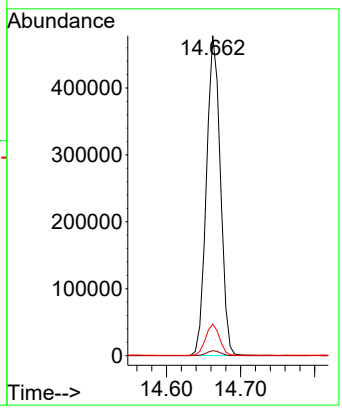


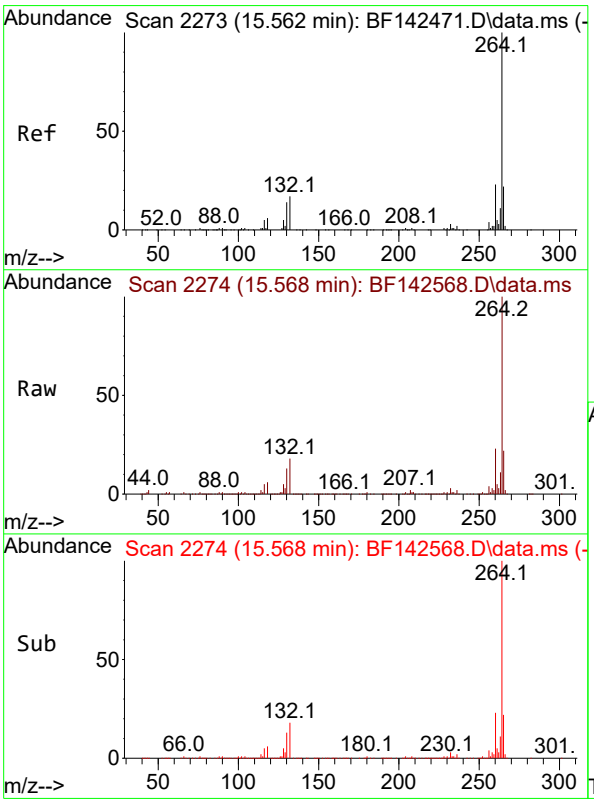
#85
Di-n-octyl phthalate
Concen: 35.702 ng
RT: 14.662 min Scan# 21
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:149 Resp: 624867

Ion	Ratio	Lower	Upper
149	100		
167	1.6	1.2	1.8
43	9.7	7.9	11.9

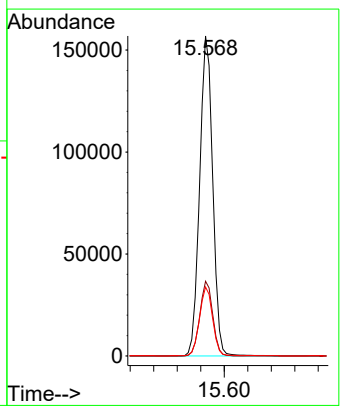


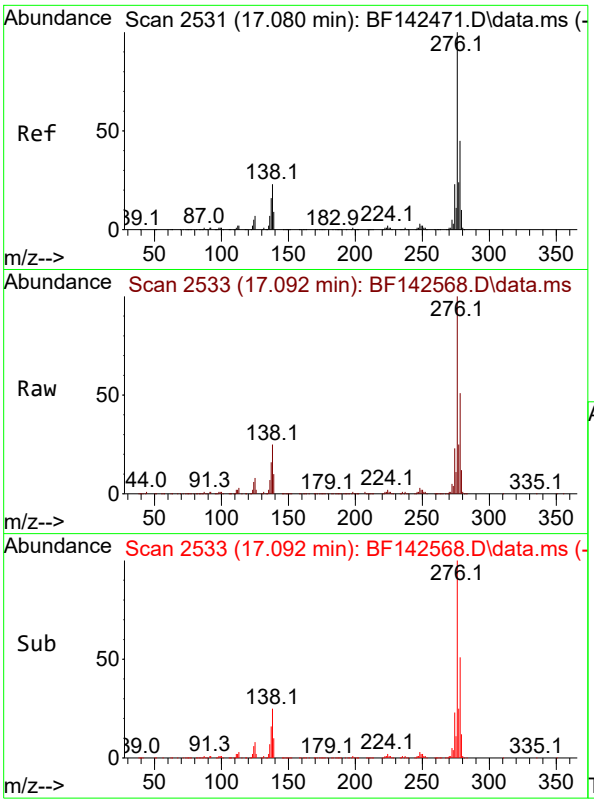


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2274
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:264 Resp: 242037

Ion	Ratio	Lower	Upper
264	100		
260	23.3	18.6	28.0
265	21.6	17.7	26.5



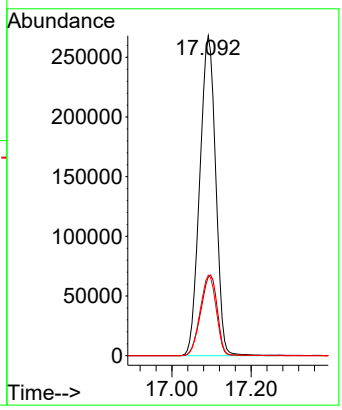


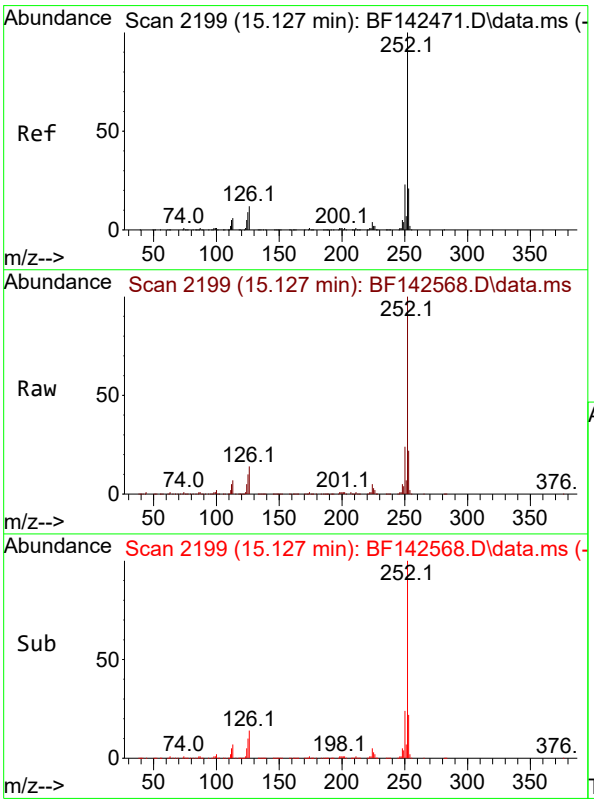
#87
Indeno(1,2,3-cd)pyrene
Concen: 41.209 ng
RT: 17.092 min Scan# 2
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:276 Resp: 748803

Ion	Ratio	Lower	Upper
276	100		
138	26.1	19.9	29.9
277	25.4	20.2	30.2

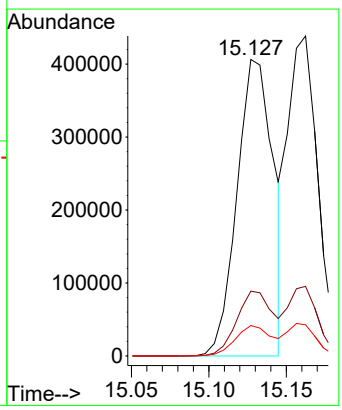


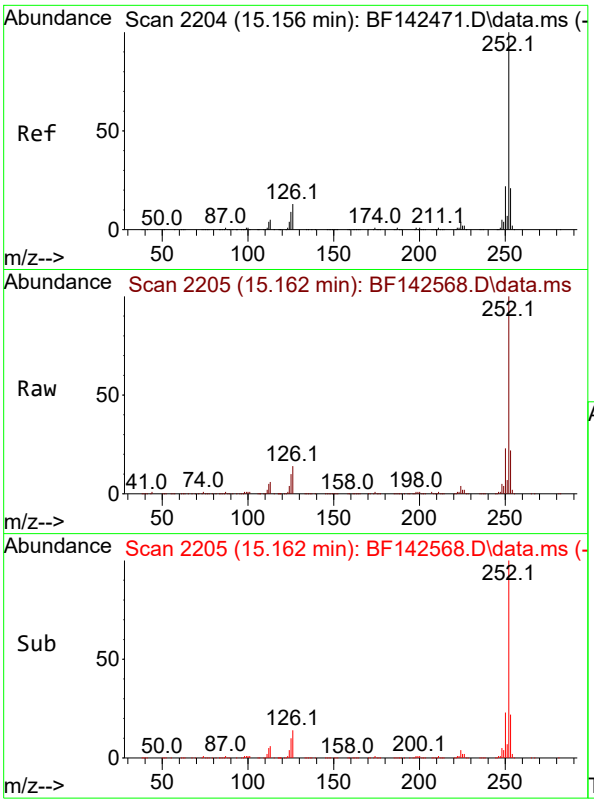


#88
Benzo(b)fluoranthene
Concen: 46.310 ng
RT: 15.127 min Scan# 2199
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:252 Resp: 663382

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.0	25.4
125	10.3	7.4	11.0



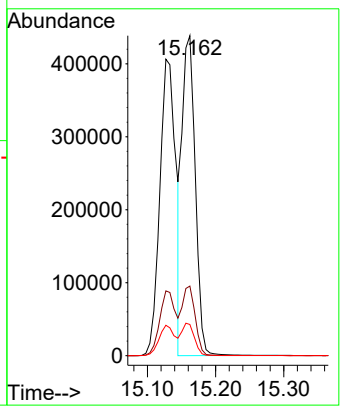


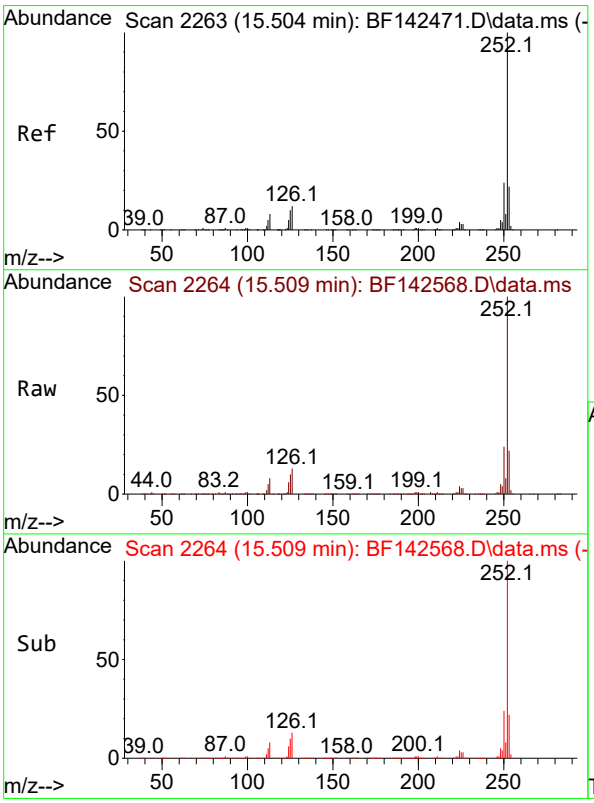
#89
Benzo(k)fluoranthene
Concen: 43.918 ng
RT: 15.162 min Scan# 2
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:252 Resp: 589241

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.0	25.4
125	9.7	7.3	10.9

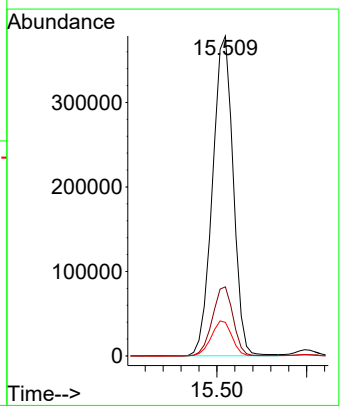


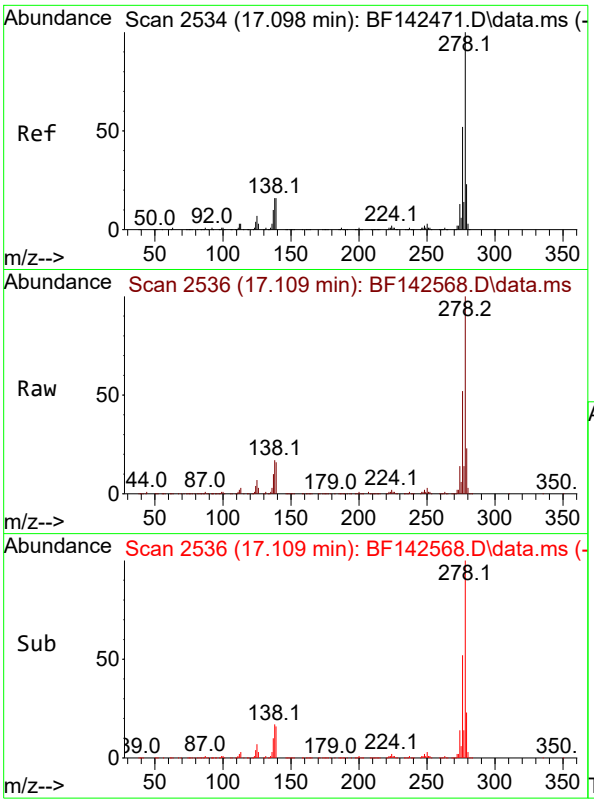


#90
Benzo(a)pyrene
Concen: 44.823 ng
RT: 15.509 min Scan# 2264
Delta R.T. -0.000 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:252 Resp: 605231

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.4	26.0
125	10.5	7.9	11.9



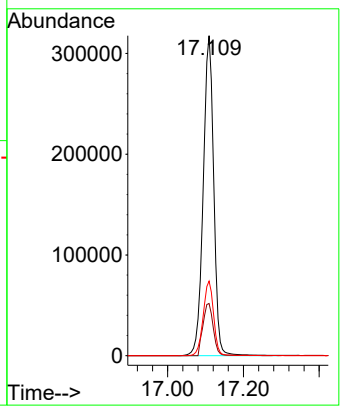


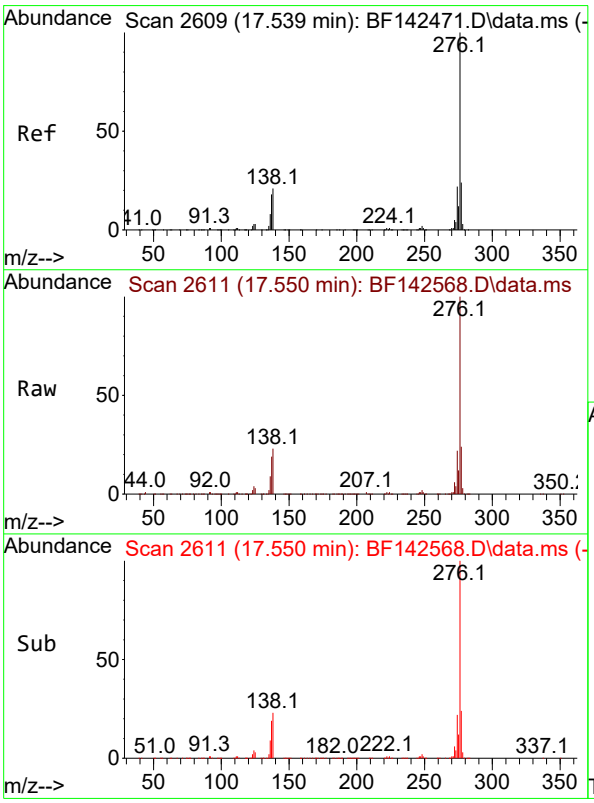
#91
Dibenzo(a,h)anthracene
Concen: 41.564 ng
RT: 17.109 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Instrument :
BNA_F
ClientSampleId :
PB168211BS

Tgt Ion:278 Resp: 612544

Ion	Ratio	Lower	Upper
278	100		
139	16.3	12.8	19.2
279	23.3	18.6	28.0

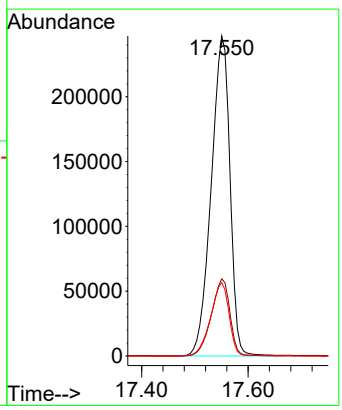




#92
Benzo(g,h,i)perylene
Concen: 40.939 ng
RT: 17.550 min Scan# 2611
Delta R.T. -0.006 min
Lab File: BF142568.D
Acq: 30 May 2025 14:18

Tgt Ion:276 Resp: 603462

Ion	Ratio	Lower	Upper
276	100		
277	24.1	19.2	28.8
138	22.9	16.8	25.2



Raw Data: **BF142571.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54MS	SDG No.:	Q2150
Lab Sample ID:	Q2150-09MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142571.D	1	05/30/25 09:50	05/30/25 15:50	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1500		190	390	ug/Kg
108-95-2	Phenol	1600		26.4	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1700		29.0	200	ug/Kg
95-57-8	2-Chlorophenol	1700		29.1	200	ug/Kg
95-48-7	2-Methylphenol	1600		35.7	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1600		44.8	200	ug/Kg
98-86-2	Acetophenone	1700		35.2	200	ug/Kg
65794-96-9	3+4-Methylphenols	1600		49.1	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1600		56.6	95.5	ug/Kg
67-72-1	Hexachloroethane	1600		21.0	200	ug/Kg
98-95-3	Nitrobenzene	1700		21.8	200	ug/Kg
78-59-1	Isophorone	1600		39.2	200	ug/Kg
88-75-5	2-Nitrophenol	1800		69.5	200	ug/Kg
105-67-9	2,4-Dimethylphenol	1700		77.4	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1700		36.8	200	ug/Kg
120-83-2	2,4-Dichlorophenol	1700		33.8	200	ug/Kg
91-20-3	Naphthalene	1700		27.1	200	ug/Kg
106-47-8	4-Chloroaniline	360		42.3	200	ug/Kg
87-68-3	Hexachlorobutadiene	1700		30.2	200	ug/Kg
105-60-2	Caprolactam	1800		62.2	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1600		34.3	200	ug/Kg
91-57-6	2-Methylnaphthalene	1600		30.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3200	E	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1700		23.6	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1700		34.7	200	ug/Kg
92-52-4	1,1-Biphenyl	1700		26.0	200	ug/Kg
91-58-7	2-Chloronaphthalene	1700		26.9	200	ug/Kg
88-74-4	2-Nitroaniline	1700		57.4	200	ug/Kg
131-11-3	Dimethylphthalate	1700		32.4	200	ug/Kg

Raw Data: **BF142571.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54MS	SDG No.:	Q2150
Lab Sample ID:	Q2150-09MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142571.D	1	05/30/25 09:50	05/30/25 15:50	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1700		34.5	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	1800		40.1	200	ug/Kg
99-09-2	3-Nitroaniline	730		54.9	200	ug/Kg
83-32-9	Acenaphthene	1800		25.4	200	ug/Kg
51-28-5	2,4-Dinitrophenol	3700	E	270	390	ug/Kg
100-02-7	4-Nitrophenol	3500	E	130	390	ug/Kg
132-64-9	Dibenzofuran	1700		27.1	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	1800		59.8	200	ug/Kg
84-66-2	Diethylphthalate	1700		33.8	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1700		31.9	200	ug/Kg
86-73-7	Fluorene	1600		30.2	200	ug/Kg
100-01-6	4-Nitroaniline	1700		76.6	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1900		120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1700		39.3	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1700		33.2	200	ug/Kg
118-74-1	Hexachlorobenzene	1700		30.2	200	ug/Kg
1912-24-9	Atrazine	1900		40.6	200	ug/Kg
87-86-5	Pentachlorophenol	3400	E	61.2	390	ug/Kg
85-01-8	Phenanthrene	1700		25.0	200	ug/Kg
120-12-7	Anthracene	1700		39.8	200	ug/Kg
86-74-8	Carbazole	1700		37.2	200	ug/Kg
84-74-2	Di-n-butylphthalate	1800		57.2	200	ug/Kg
206-44-0	Fluoranthene	1600		35.8	200	ug/Kg
129-00-0	Pyrene	1500		43.0	200	ug/Kg
85-68-7	Butylbenzylphthalate	2100		85.2	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	870		43.8	390	ug/Kg
56-55-3	Benzo(a)anthracene	1800		27.5	200	ug/Kg
218-01-9	Chrysene	1700		23.8	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	2200		70.7	200	ug/Kg
117-84-0	Di-n-octyl phthalate	1900		100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	1700		22.7	200	ug/Kg

Raw Data: **BF142571.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54MS	SDG No.:	Q2150
Lab Sample ID:	Q2150-09MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142571.D	1	05/30/25 09:50	05/30/25 15:50	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1700		26.7	200	ug/Kg
50-32-8	Benzo(a)pyrene	1800		35.2	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1700		34.7	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1700		32.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1700		30.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1800		30.6	200	ug/Kg
123-91-1	1,4-Dioxane	1500		54.0	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1700		32.7	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	86.9		18 - 112	58%	SPK: 150
13127-88-3	Phenol-d6	89.9		15 - 107	60%	SPK: 150
4165-60-0	Nitrobenzene-d5	55.3		18 - 107	55%	SPK: 100
321-60-8	2-Fluorobiphenyl	52.7		20 - 109	53%	SPK: 100
118-79-6	2,4,6-Tribromophenol	92.4		10 - 116	62%	SPK: 150
1718-51-0	Terphenyl-d14	51.3		10 - 105	51%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	124000	6.898			
1146-65-2	Naphthalene-d8	461000	8.181			
15067-26-2	Acenaphthene-d10	237000	9.939			
1517-22-2	Phenanthrene-d10	379000	11.428			
1719-03-5	Chrysene-d12	209000	14.074			
1520-96-3	Perylene-d12	243000	15.568			

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_F\Data\BF053025\
Data File : BF142571.D
Acq On : 30 May 2025 15:50
Operator : RC/JU
Sample : Q2150-09MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Quant Time: May 30 17:24:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	123670	20.000	ng	0.00
21) Naphthalene-d8	8.181	136	460723	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	236866	20.000	ng	0.00
64) Phenanthrene-d10	11.428	188	378954	20.000	ng	0.00
76) Chrysene-d12	14.074	240	208599	20.000	ng	0.00
86) Perylene-d12	15.568	264	243037	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.522	112	637889	86.900	ng	0.00
7) Phenol-d6	6.528	99	794110	89.870	ng	0.00
23) Nitrobenzene-d5	7.463	82	467633	55.347	ng	-0.01
42) 2,4,6-Tribromophenol	10.733	330	242888	92.391	ng	0.00
45) 2-Fluorobiphenyl	9.257	172	929576	52.661	ng	-0.01
79) Terphenyl-d14	13.010	244	783393	51.321	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.746	88	109776	37.372	ng	99
3) Pyridine	3.505	79	302573	40.450	ng	98
4) n-Nitrosodimethylamine	3.463	42	160959	41.443	ng	92
6) Aniline	6.563	93	316940	26.676	ng	99
8) 2-Chlorophenol	6.681	128	338147	42.293	ng	98
9) Benzaldehyde	6.445	77	193731	36.452	ng	97
10) Phenol	6.540	94	406216	40.856	ng	100
11) bis(2-Chloroethyl)ether	6.634	93	301601	42.140	ng	99
12) 1,3-Dichlorobenzene	6.840	146	367071	41.143	ng	98
13) 1,4-Dichlorobenzene	6.916	146	369977	41.168	ng	99
14) 1,2-Dichlorobenzene	7.069	146	353989	41.165	ng	98
15) Benzyl Alcohol	7.040	79	268961	41.189	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.169	45	496978	41.349	ng	97
17) 2-Methylphenol	7.151	107	258669	41.437	ng	99
18) Hexachloroethane	7.410	117	128740	41.025	ng	98
19) n-Nitroso-di-n-propyla...	7.310	70	218260	39.855	ng	99
20) 3+4-Methylphenols	7.304	107	322695	40.368	ng	96
22) Acetophenone	7.310	105	427657	41.931	ng	99
24) Nitrobenzene	7.481	77	329801	43.279	ng	99
25) Isophorone	7.722	82	584319	41.364	ng	98
26) 2-Nitrophenol	7.798	139	182519	44.825	ng	97
27) 2,4-Dimethylphenol	7.834	122	308400	42.948	ng	99
28) bis(2-Chloroethoxy)met...	7.928	93	371689	42.120	ng	100
29) 2,4-Dichlorophenol	8.040	162	279177	42.751	ng	100
30) 1,2,4-Trichlorobenzene	8.122	180	306167	43.200	ng	98
31) Naphthalene	8.204	128	949468	41.853	ng	100
32) Benzoic acid	7.951	122	196256	44.899	ng	98
33) 4-Chloroaniline	8.251	127	83788	9.115	ng	97
34) Hexachlorobutadiene	8.322	225	184383	41.667	ng	99
35) Caprolactam	8.622	113	83353m	45.447	ng	
36) 4-Chloro-3-methylphenol	8.734	107	276787	41.358	ng	97
37) 2-Methylnaphthalene	8.898	142	586972	41.127	ng	100
38) 1-Methylnaphthalene	8.998	142	601058	40.715	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	300567	44.205	ng	99
41) Hexachlorocyclopentadiene	9.051	237	370150	80.699	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	199554	43.524	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142571.D
Acq On : 30 May 2025 15:50
Operator : RC/JU
Sample : Q2150-09MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Quant Time: May 30 17:24:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

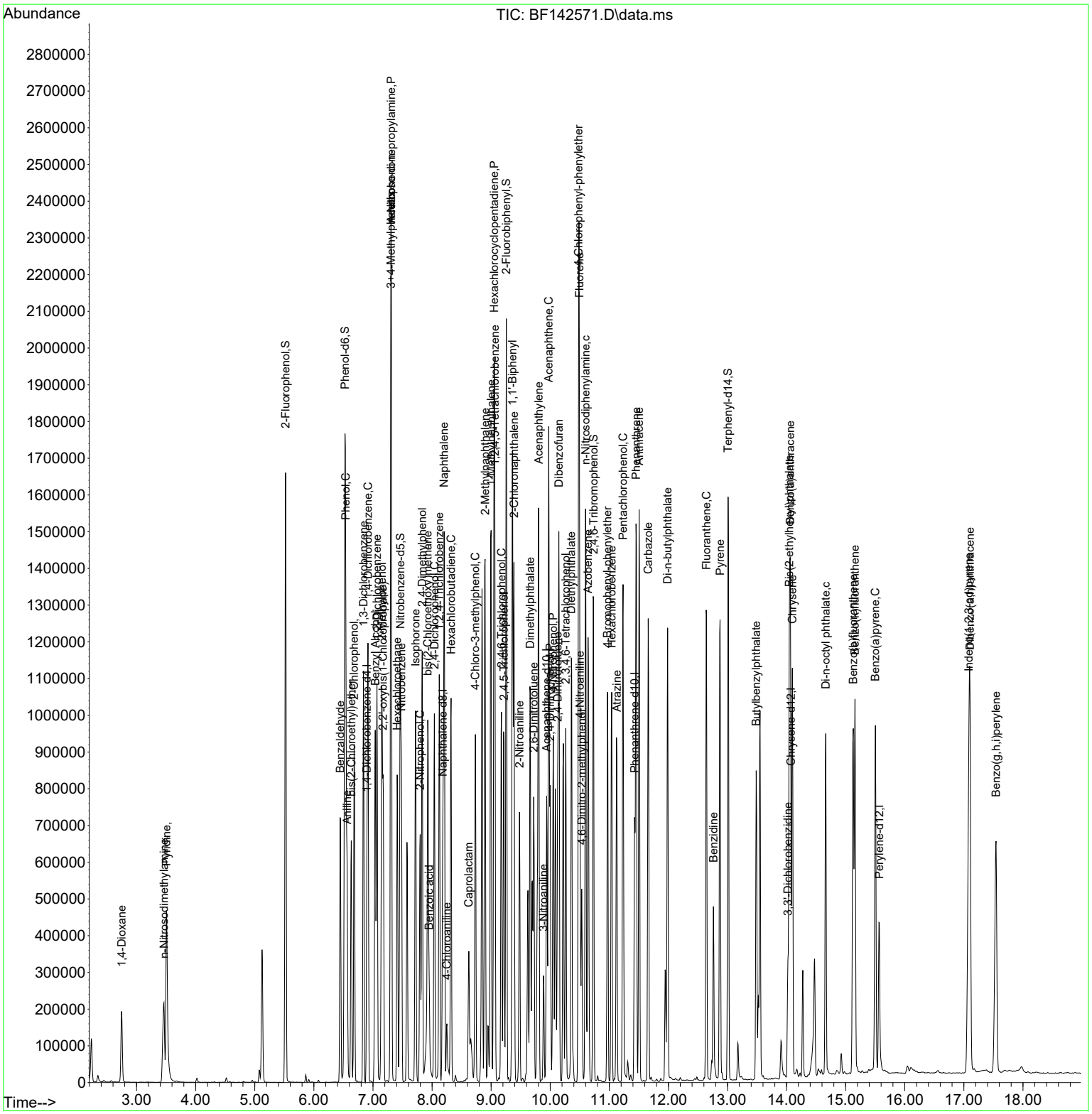
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	209342	43.293	ng	97
46) 1,1'-Biphenyl	9.363	154	792558	43.129	ng	100
47) 2-Chloronaphthalene	9.386	162	588404	43.338	ng	99
48) 2-Nitroaniline	9.481	65	166305	42.377	ng	97
49) Acenaphthylene	9.804	152	978892	42.698	ng	100
50) Dimethylphthalate	9.663	163	676381	43.277	ng	99
51) 2,6-Dinitrotoluene	9.722	165	148602	44.053	ng	97
52) Acenaphthene	9.975	154	643854	45.992	ng	100
53) 3-Nitroaniline	9.886	138	67401	18.294	ng	99
54) 2,4-Dinitrophenol	9.998	184	161261	92.532	ng	92
55) Dibenzofuran	10.145	168	849661	42.177	ng	99
56) 4-Nitrophenol	10.051	139	237434	87.339	ng	97
57) 2,4-Dinitrotoluene	10.128	165	197146	44.751	ng	99
58) Fluorene	10.492	166	644831	41.433	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	171201	42.410	ng	100
60) Diethylphthalate	10.357	149	637907	41.791	ng	100
61) 4-Chlorophenyl-phenyle...	10.481	204	318453	41.653	ng	97
62) 4-Nitroaniline	10.504	138	141774	42.427	ng	98
63) Azobenzene	10.639	77	611242	44.583	ng	98
65) 4,6-Dinitro-2-methylph...	10.533	198	103049	48.726	ng	98
66) n-Nitrosodiphenylamine	10.598	169	566216	43.673	ng	100
67) 4-Bromophenyl-phenylether	10.969	248	192434	42.946	ng	99
68) Hexachlorobenzene	11.039	284	213538	43.087	ng	98
69) Atrazine	11.128	200	164223	47.696	ng	99
70) Pentachlorophenol	11.233	266	235596	84.200	ng	99
71) Phenanthrene	11.451	178	847323	41.839	ng	100
72) Anthracene	11.504	178	875823	42.374	ng	100
73) Carbazole	11.657	167	742117	42.000	ng	99
74) Di-n-butylphthalate	11.986	149	879121	45.454	ng	100
75) Fluoranthene	12.645	202	773487	40.874	ng	99
77) Benzidine	12.763	184	265343	34.182	ng	99
78) Pyrene	12.874	202	751841	38.637	ng	100
80) Butylbenzylphthalate	13.486	149	280690	52.203	ng	99
81) Benzo(a)anthracene	14.063	228	612892	44.000	ng	99
82) 3,3'-Dichlorobenzidine	14.021	252	92517	21.898	ng	99
83) Chrysene	14.098	228	536134	42.835	ng	99
84) Bis(2-ethylhexyl)phtha...	14.045	149	383177	55.668	ng	99
85) Di-n-octyl phthalate	14.663	149	659017	48.965	ng	99
87) Indeno(1,2,3-cd)pyrene	17.086	276	773974	42.419	ng	99
88) Benzo(b)fluoranthene	15.127	252	610821	42.465	ng	99
89) Benzo(k)fluoranthene	15.157	252	581284	43.147	ng	98
90) Benzo(a)pyrene	15.504	252	600806	44.312	ng	99
91) Dibenzo(a,h)anthracene	17.104	278	634178	42.855	ng	100
92) Benzo(g,h,i)perylene	17.545	276	619254	41.838	ng	98

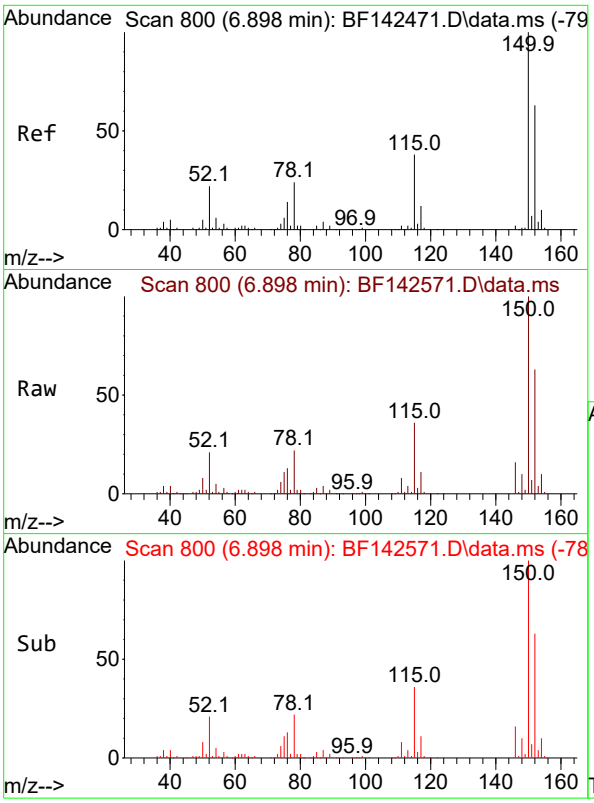
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142571.D
Acq On : 30 May 2025 15:50
Operator : RC/JU
Sample : Q2150-09MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Quant Time: May 30 17:24:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



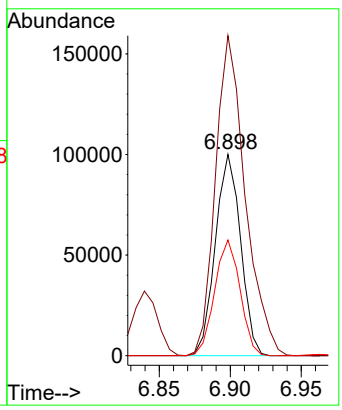


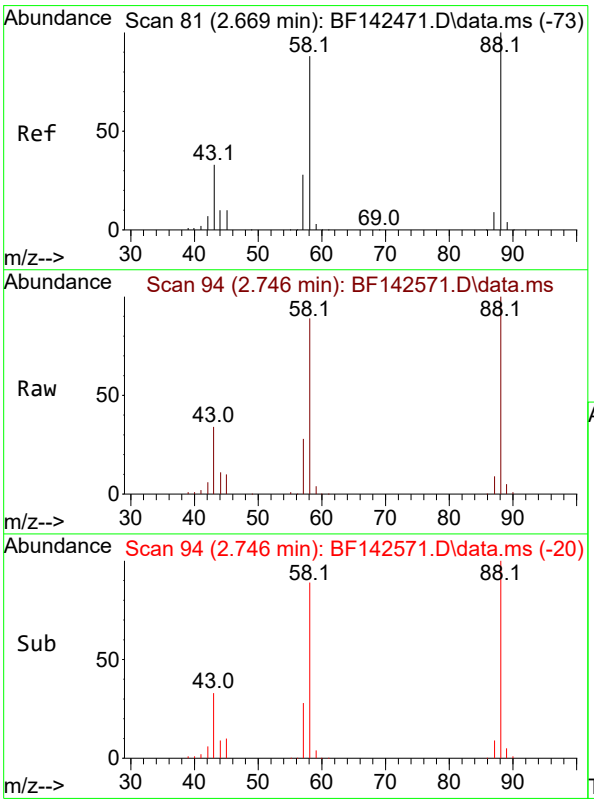
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:152 Resp: 123670

Ion	Ratio	Lower	Upper
152	100		
150	159.0	128.2	192.4
115	57.5	48.3	72.5

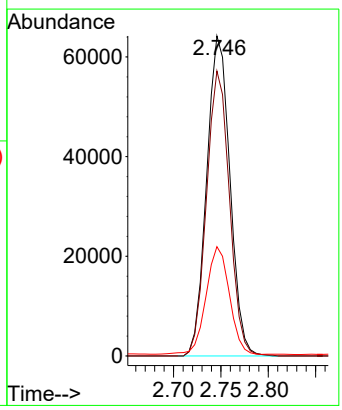


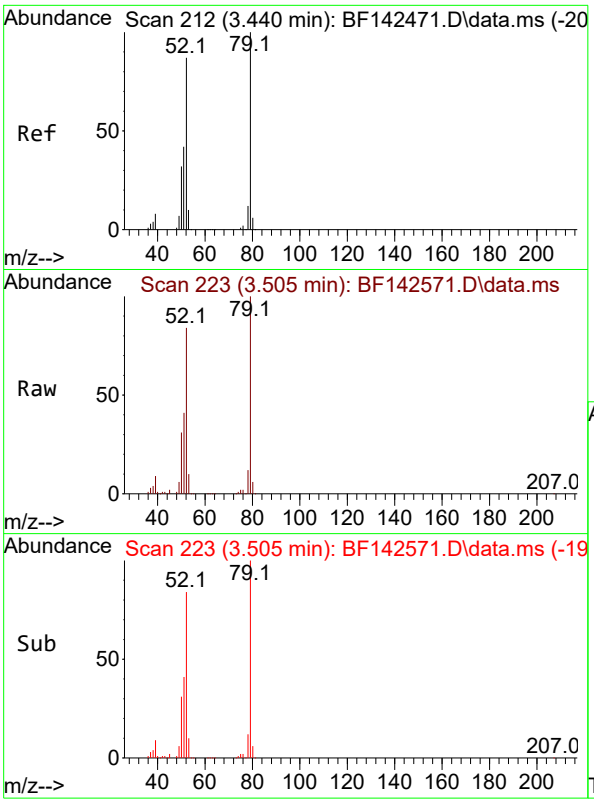


#2
1,4-Dioxane
Concen: 37.372 ng
RT: 2.746 min Scan# 94
Delta R.T. 0.083 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 88 Resp: 109776

Ion	Ratio	Lower	Upper
88	100		
58	87.8	70.8	106.2
43	33.6	26.6	40.0



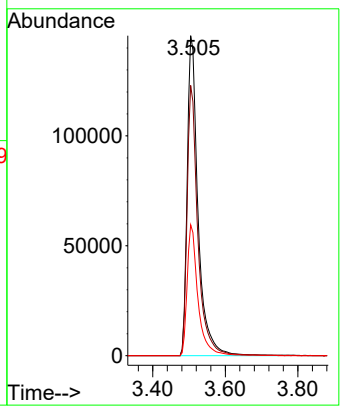


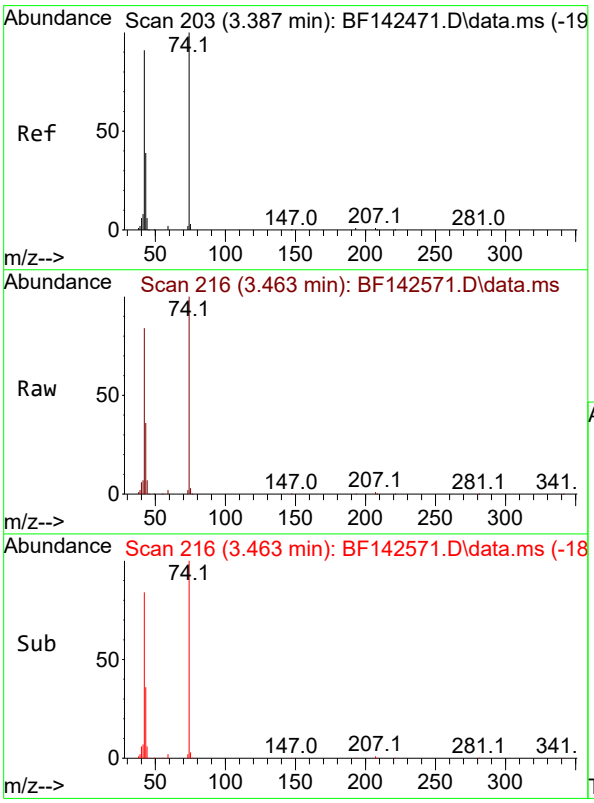
#3
Pyridine
Concen: 40.450 ng
RT: 3.505 min Scan# 2
Delta R.T. 0.065 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 79 Resp: 302573

Ion	Ratio	Lower	Upper
79	100		
52	84.4	69.2	103.8
51	40.9	33.3	49.9

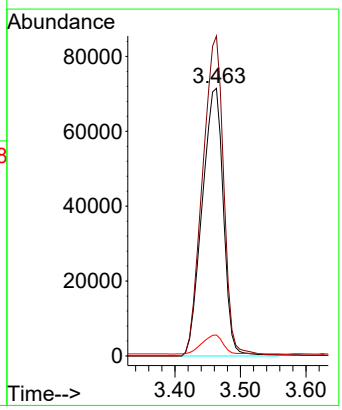


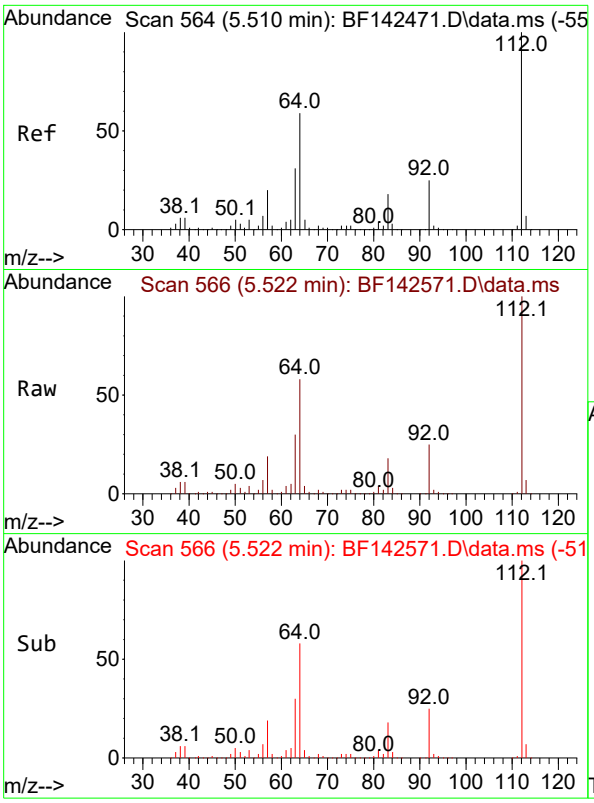


#4
n-Nitrosodimethylamine
Concen: 41.443 ng
RT: 3.463 min Scan# 216
Delta R.T. 0.059 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 42 Resp: 160959

Ion	Ratio	Lower	Upper
42	100		
74	119.6	88.2	132.4
44	7.8	5.4	8.2



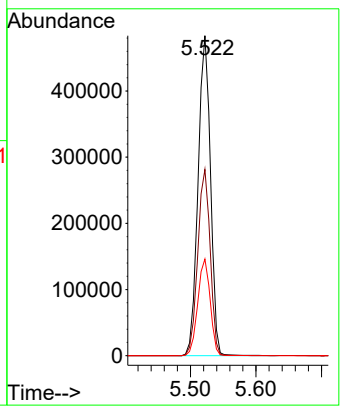


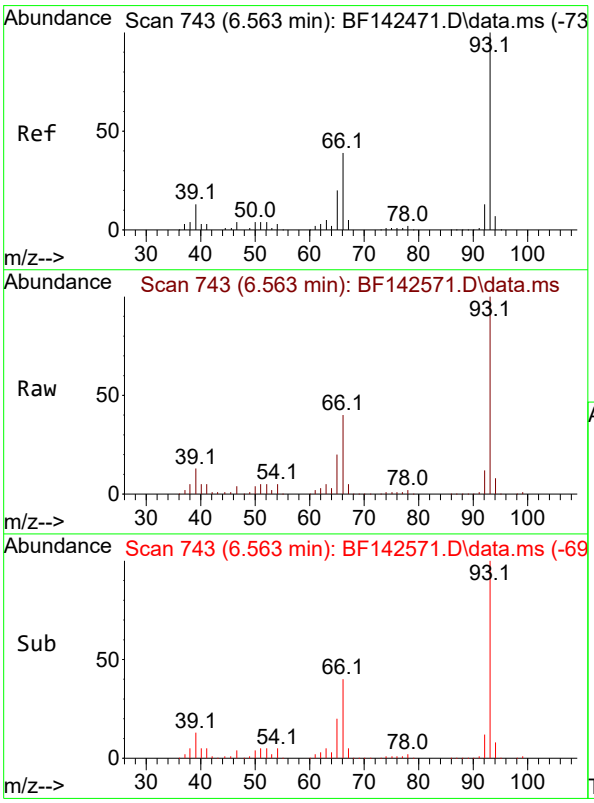
#5
2-Fluorophenol
Concen: 86.900 ng
RT: 5.522 min Scan# 5
Delta R.T. 0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:112 Resp: 637889

Ion	Ratio	Lower	Upper
112	100		
64	58.2	47.5	71.3
63	30.2	24.9	37.3

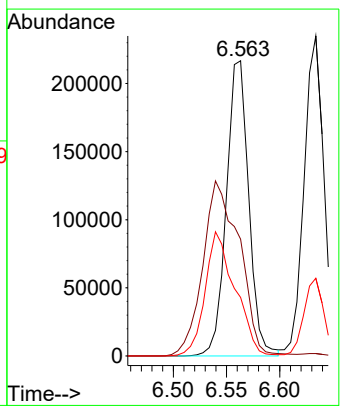


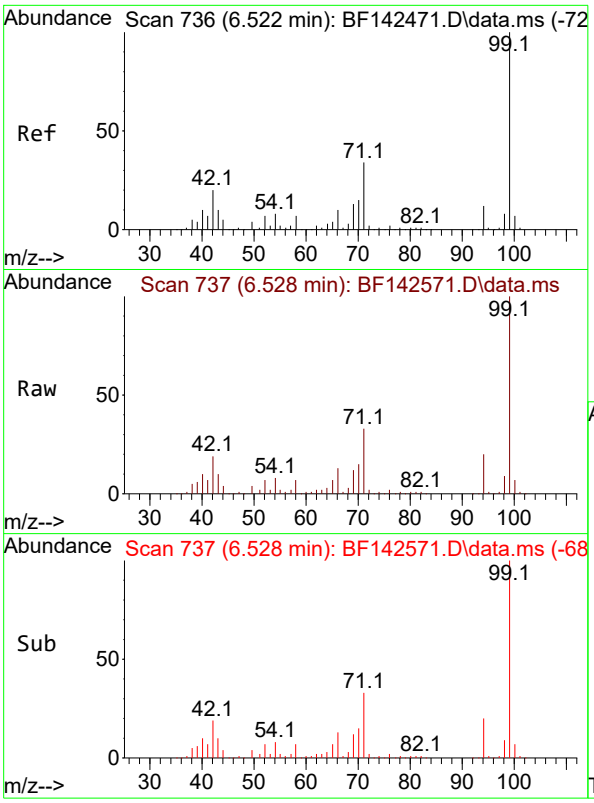


#6
Aniline
Concen: 26.676 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 93 Resp: 316940

Ion	Ratio	Lower	Upper
93	100		
66	39.6	32.0	48.0
65	19.8	16.1	24.1



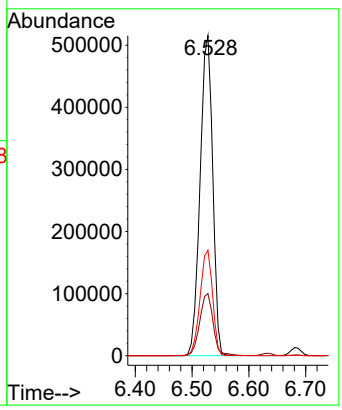


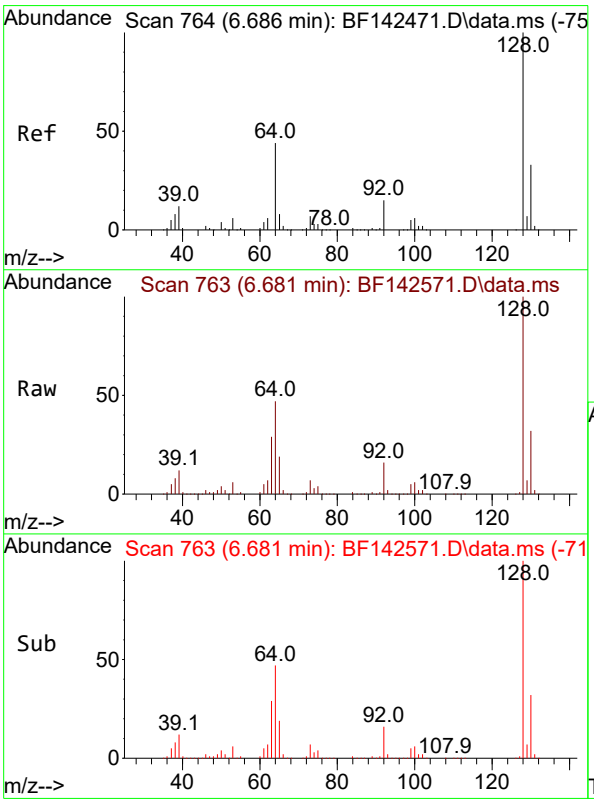
#7
Phenol-d6
Concen: 89.870 ng
RT: 6.528 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 99 Resp: 794110

Ion	Ratio	Lower	Upper
99	100		
42	19.4	16.2	24.2
71	32.9	27.3	40.9

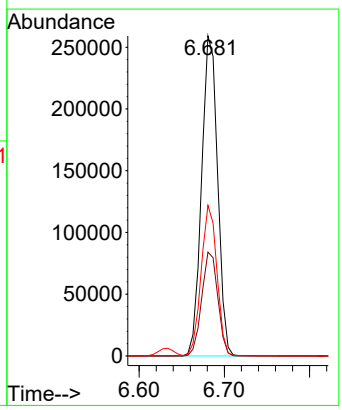


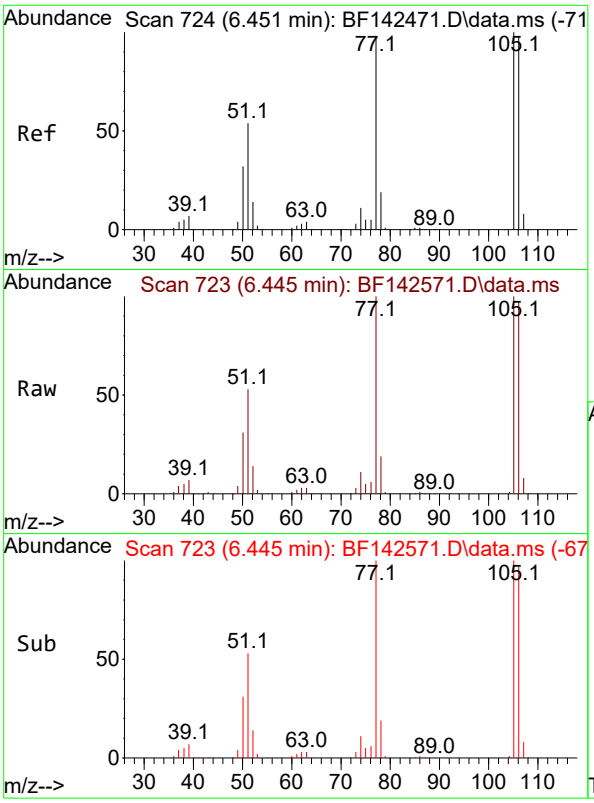


#8
2-Chlorophenol
Concen: 42.293 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:128 Resp: 338147

Ion	Ratio	Lower	Upper
128	100		
130	32.5	12.6	52.6
64	47.1	25.1	65.1



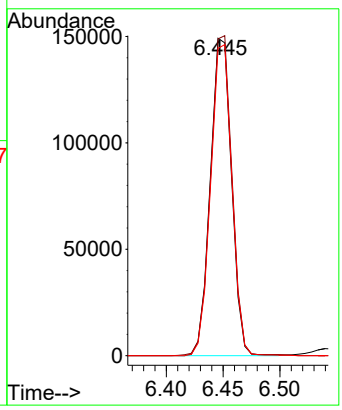


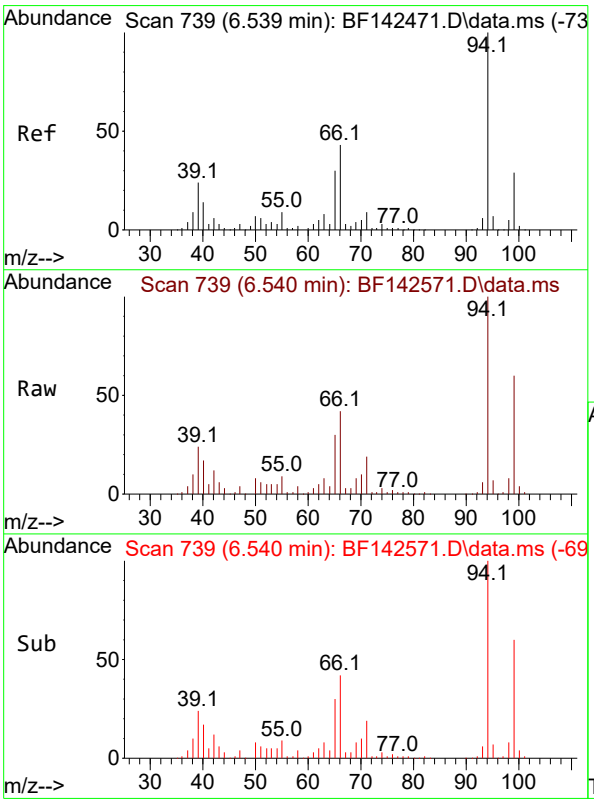
#9
Benzaldehyde
Concen: 36.452 ng
RT: 6.445 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 77 Resp: 193731

Ion	Ratio	Lower	Upper
77	100		
105	99.8	82.5	122.5
106	96.8	80.0	120.0

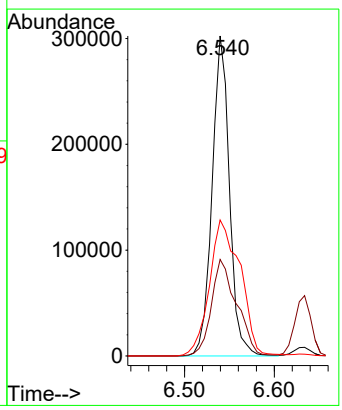


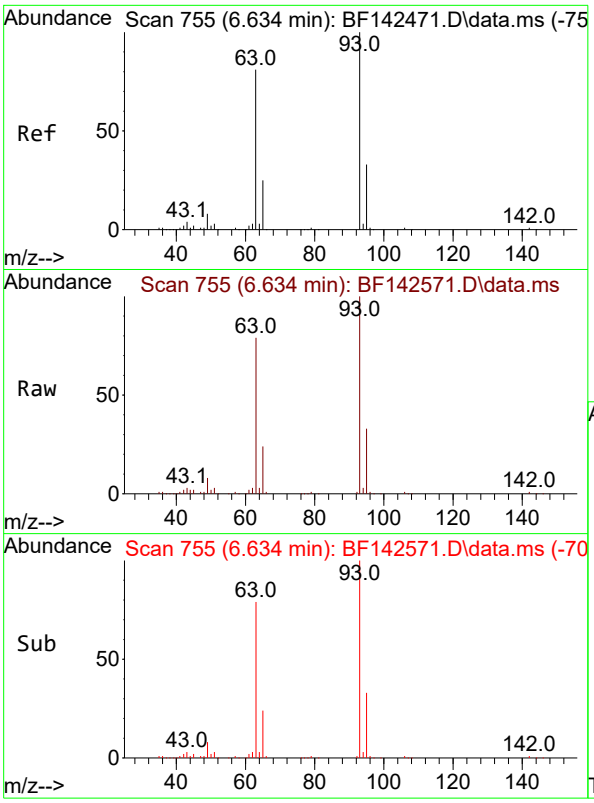


#10
Phenol
Concen: 40.856 ng
RT: 6.540 min Scan# 739
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 94 Resp: 406216

Ion	Ratio	Lower	Upper
94	100		
65	30.1	10.3	50.3
66	42.5	22.6	62.6



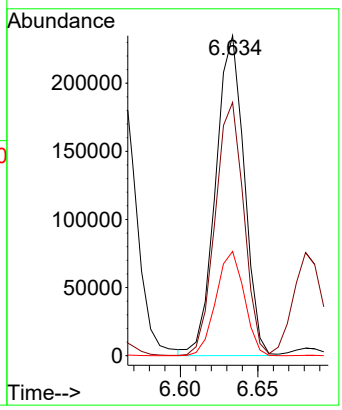


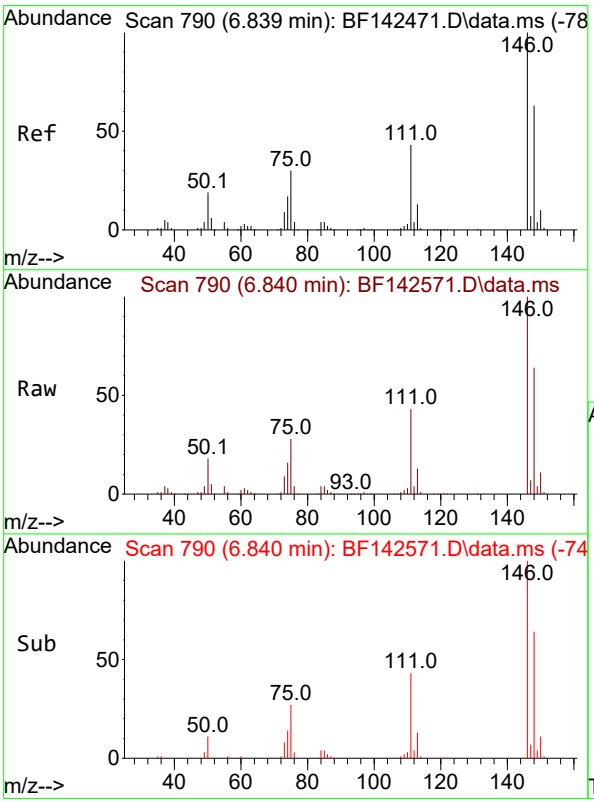
#11
bis(2-Chloroethyl)ether
Concen: 42.140 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 93 Resp: 301601

Ion	Ratio	Lower	Upper
93	100		
63	79.1	60.2	100.2
95	32.6	12.3	52.3

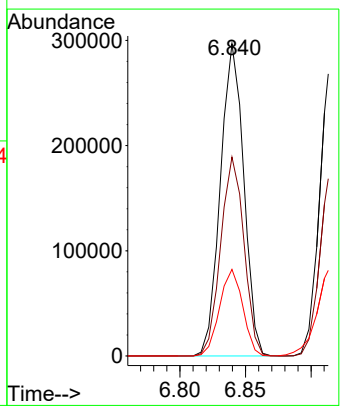


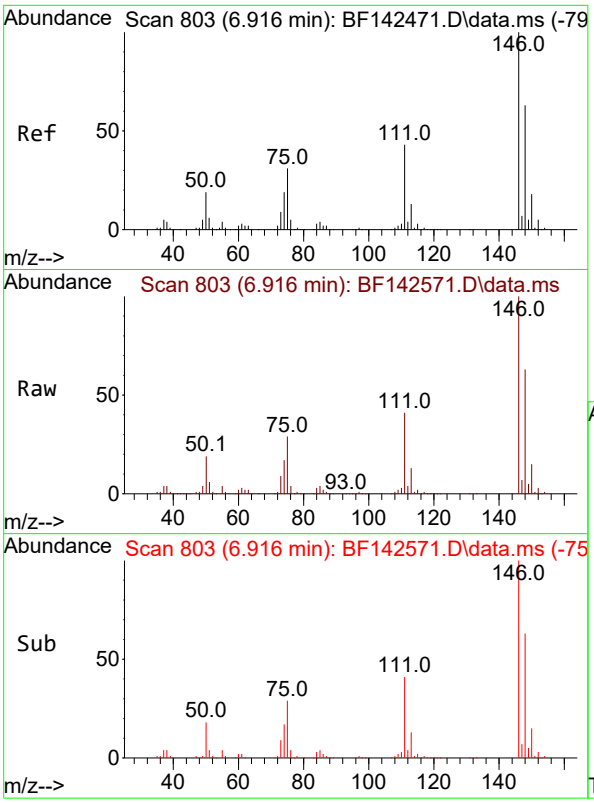


#12
1,3-Dichlorobenzene
Concen: 41.143 ng
RT: 6.840 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:146 Resp: 367071

Ion	Ratio	Lower	Upper
146	100		
148	63.7	50.6	75.8
75	27.7	23.8	35.6



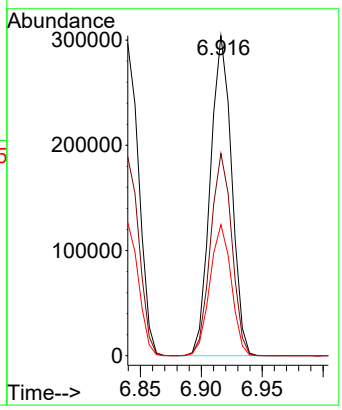


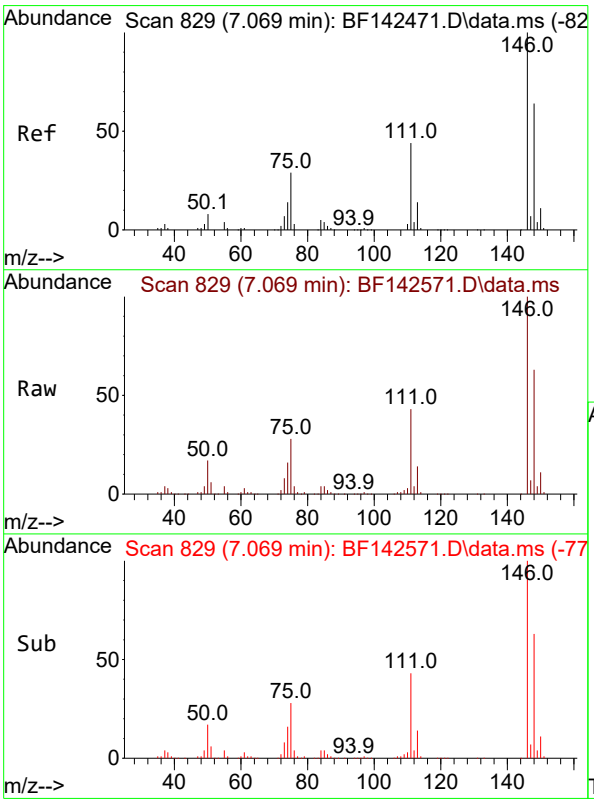
#13
1,4-Dichlorobenzene
Concen: 41.168 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:146 Resp: 369977

Ion	Ratio	Lower	Upper
146	100		
148	63.2	50.4	75.6
111	40.9	34.1	51.1

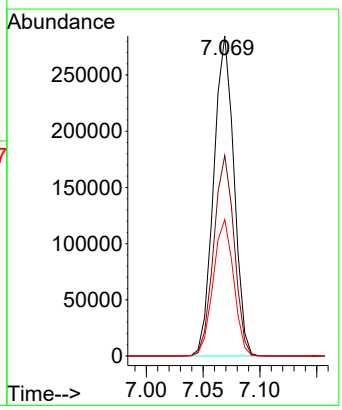


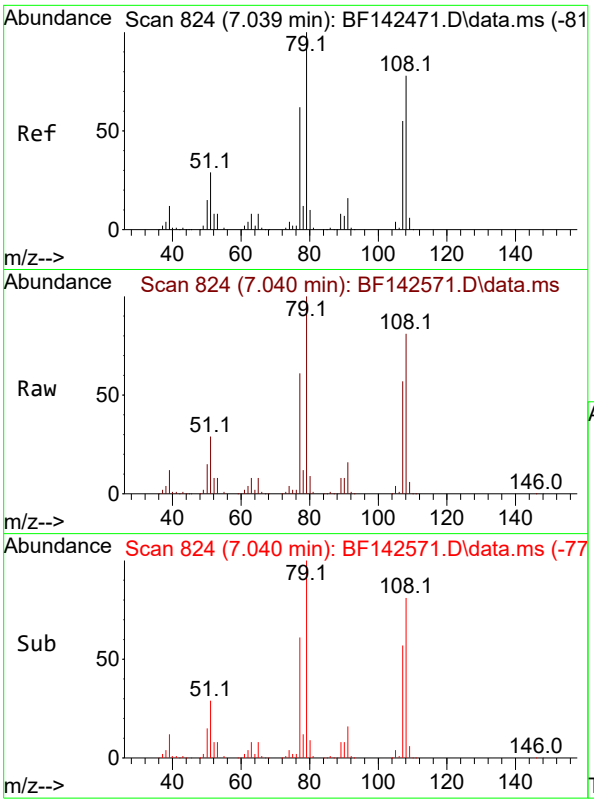


#14
1,2-Dichlorobenzene
Concen: 41.165 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:146 Resp: 353989

Ion	Ratio	Lower	Upper
146	100		
148	62.7	51.0	76.4
111	42.6	35.0	52.6



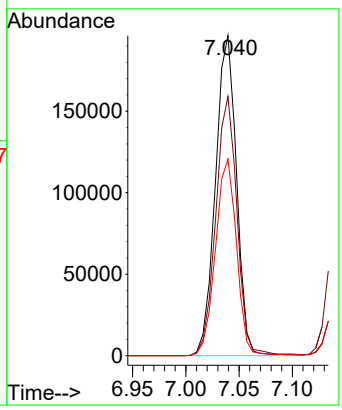


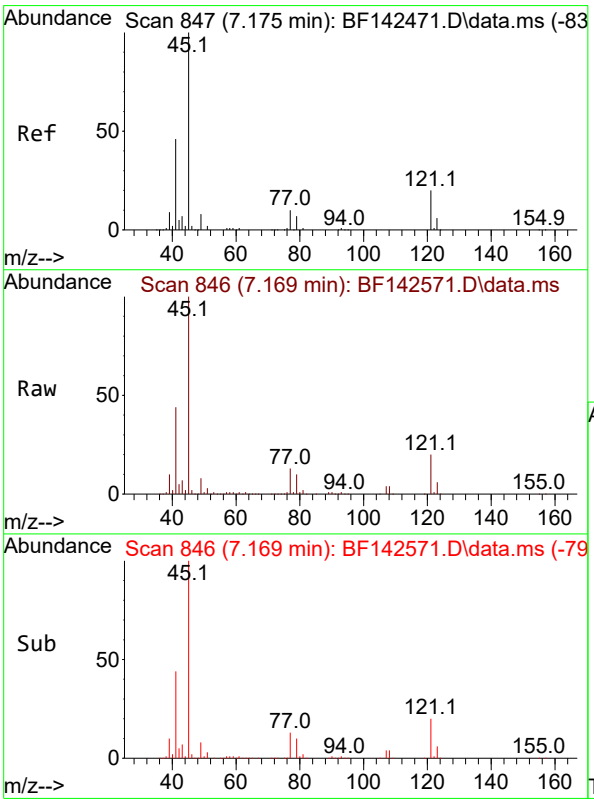
#15
Benzyl Alcohol
Concen: 41.189 ng
RT: 7.040 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 79 Resp: 268961

Ion	Ratio	Lower	Upper
79	100		
108	81.0	62.1	93.1
77	61.4	49.5	74.3

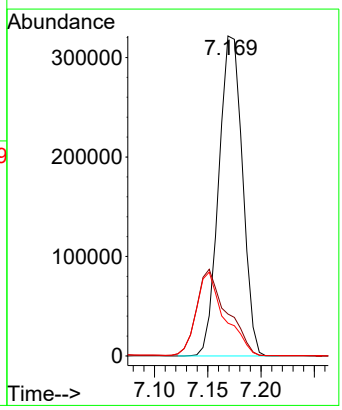


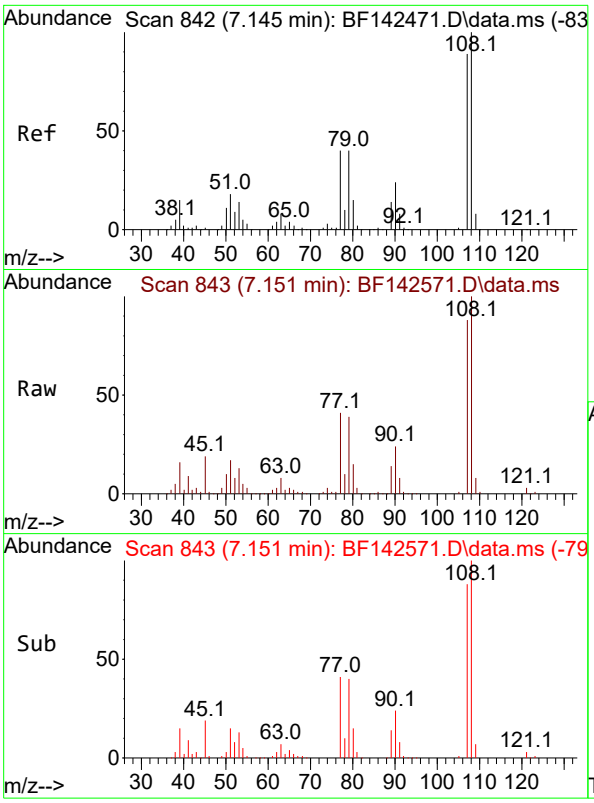


#16
2,2'-oxybis(1-Chloropropane)
Concen: 41.349 ng
RT: 7.169 min Scan# 846
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 45 Resp: 496978

Ion	Ratio	Lower	Upper
45	100		
77	13.1	0.0	32.0
79	10.2	0.0	29.2



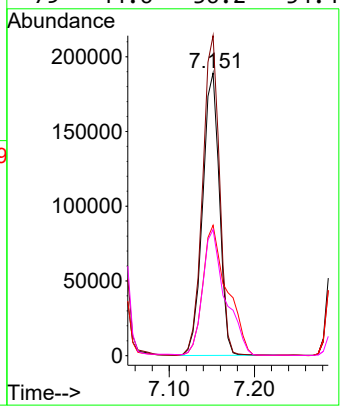


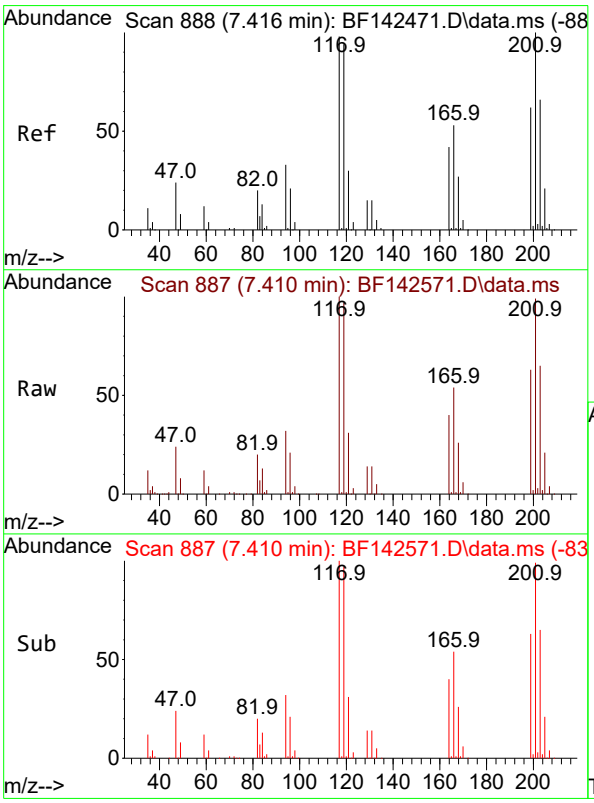
#17
2-Methylphenol
Concen: 41.437 ng
RT: 7.151 min Scan# 84
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:107 Resp: 258669

Ion	Ratio	Lower	Upper
107	100		
108	113.2	90.2	135.2
77	46.1	36.1	54.1
79	44.6	36.2	54.4

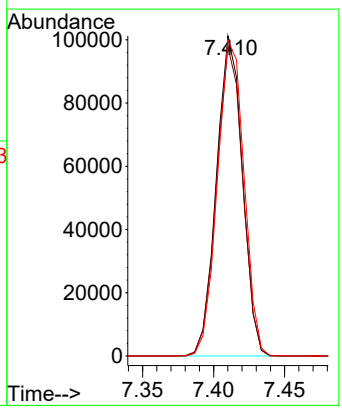


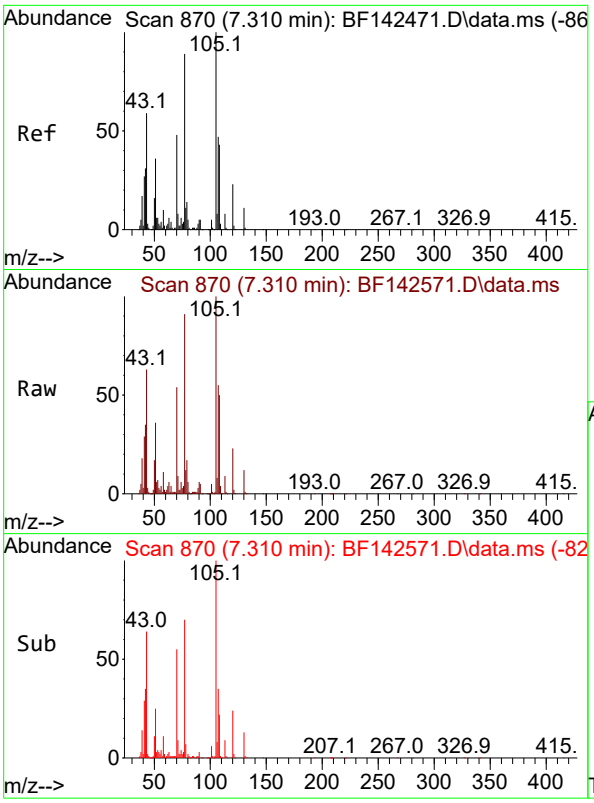


#18
Hexachloroethane
Concen: 41.025 ng
RT: 7.410 min Scan# 887
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:117 Resp: 128740

Ion	Ratio	Lower	Upper
117	100		
119	96.7	76.6	114.8
201	98.7	81.3	121.9



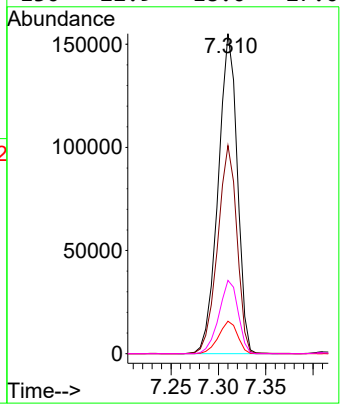


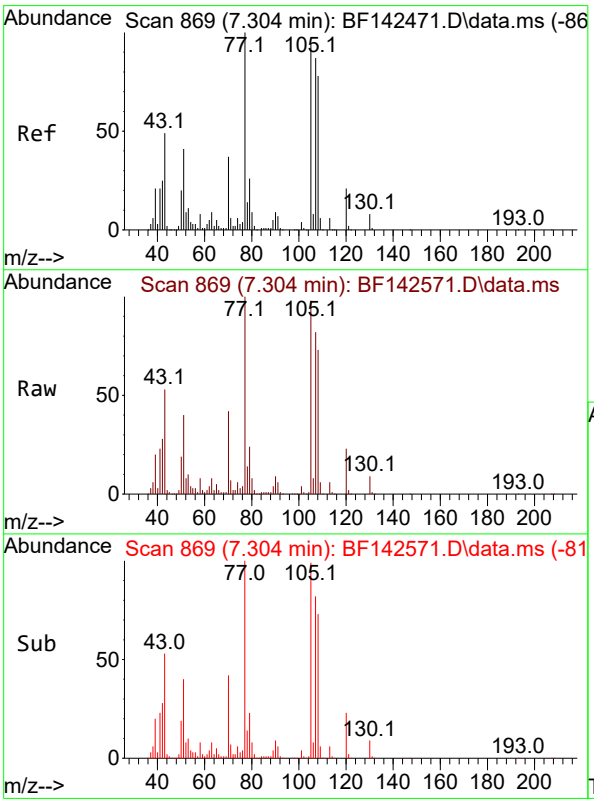
#19
n-Nitroso-di-n-propylamine
Concen: 39.855 ng
RT: 7.310 min Scan# 8
Delta R.T. -0.017 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 70 Resp: 218260

Ion	Ratio	Lower	Upper
70	100		
42	65.0	52.4	78.6
101	10.1	7.8	11.8
130	22.9	18.0	27.0

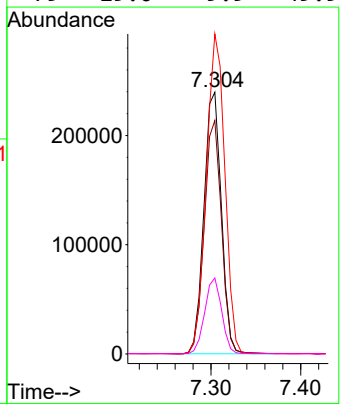


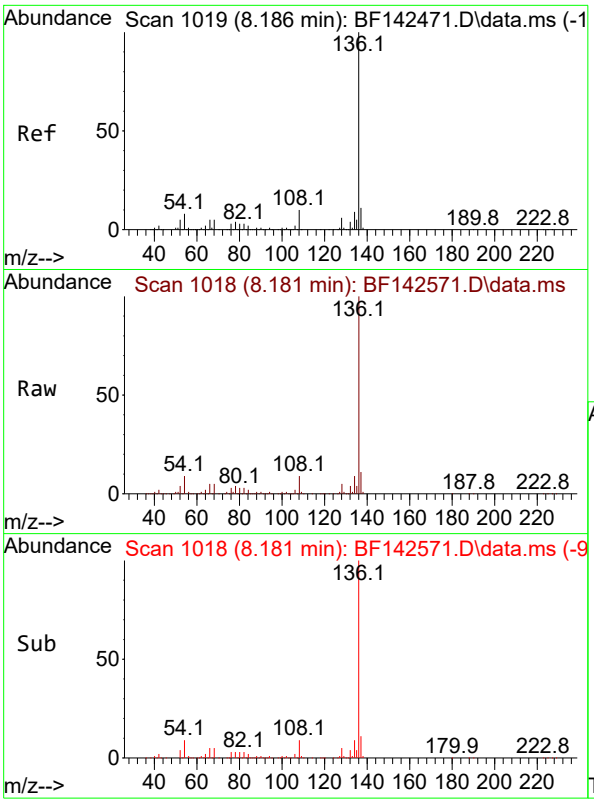


#20
3+4-Methylphenols
Concen: 40.368 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:107 Resp: 322695

Ion	Ratio	Lower	Upper
107	100		
108	89.2	70.4	110.4
77	122.2	95.4	135.4
79	29.0	9.9	49.9



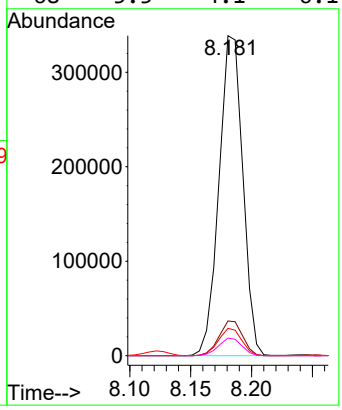


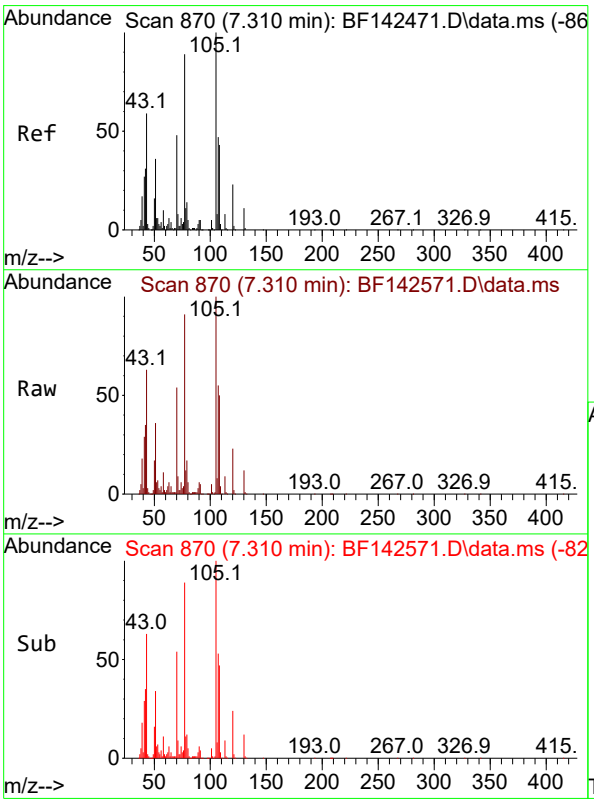
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.181 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:136 Resp: 460723

Ion	Ratio	Lower	Upper
136	100		
137	10.9	8.6	13.0
54	8.6	6.6	10.0
68	5.5	4.1	6.1

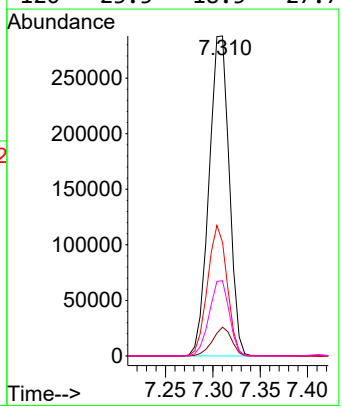


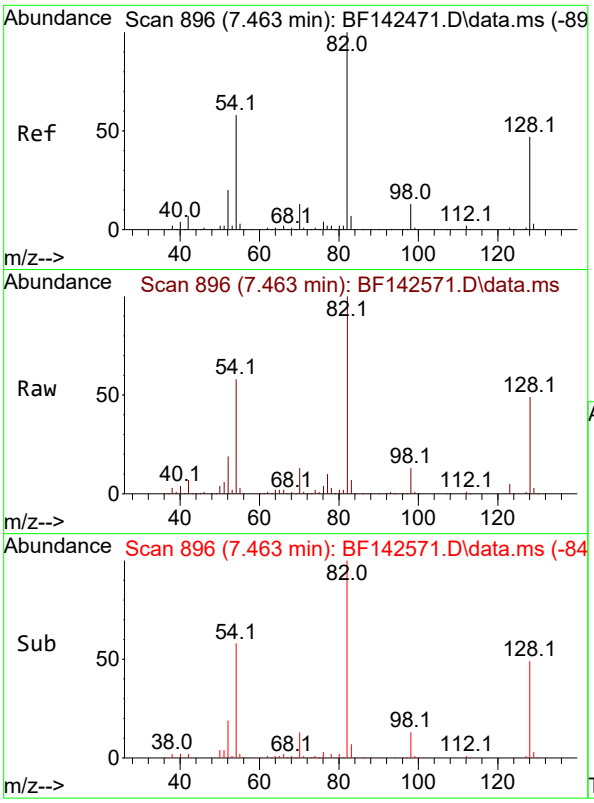


#22
Acetophenone
Concen: 41.931 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:105 Resp: 427657

Ion	Ratio	Lower	Upper
105	100		
71	9.0	6.4	9.6
51	35.6	28.6	42.8
120	23.5	18.5	27.7



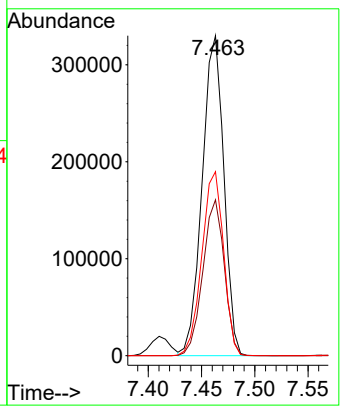


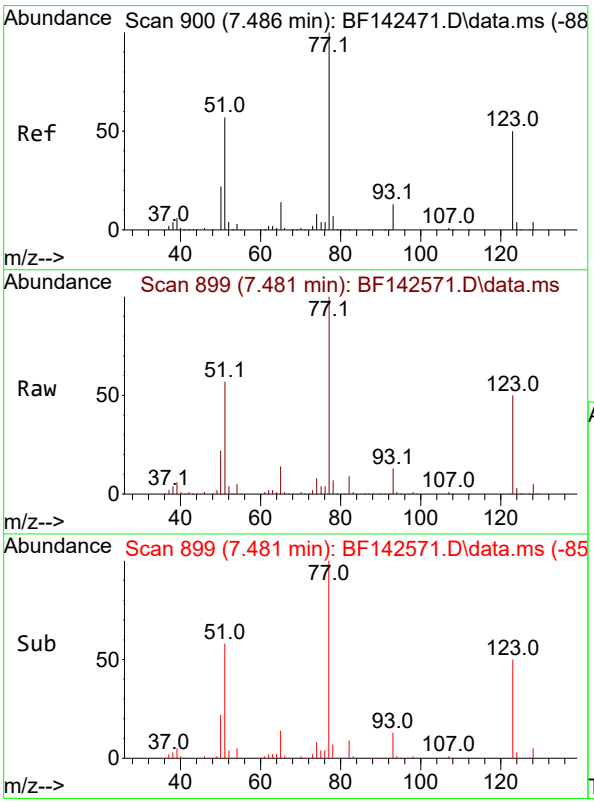
#23
Nitrobenzene-d5
Concen: 55.347 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 82 Resp: 467633

Ion	Ratio	Lower	Upper
82	100		
128	48.7	37.4	56.2
54	57.5	46.6	70.0

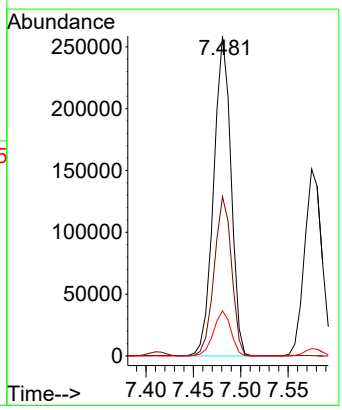


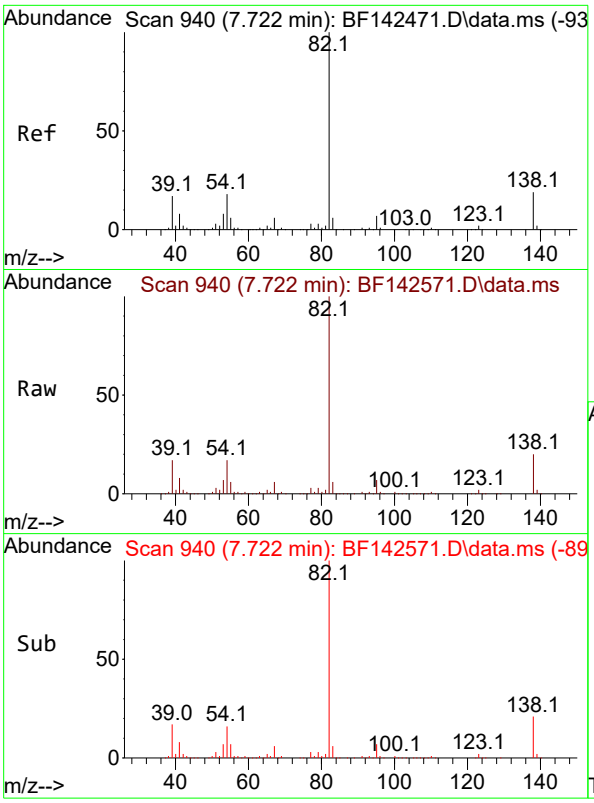


#24
Nitrobenzene
Concen: 43.279 ng
RT: 7.481 min Scan# 899
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 77 Resp: 329801

Ion	Ratio	Lower	Upper
77	100		
123	49.8	40.6	61.0
65	14.1	11.4	17.2



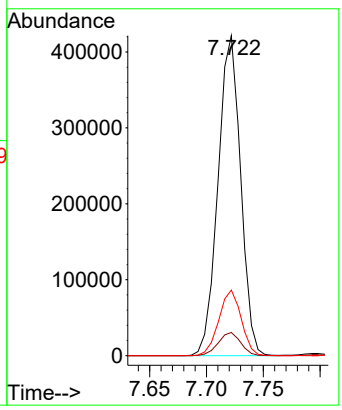


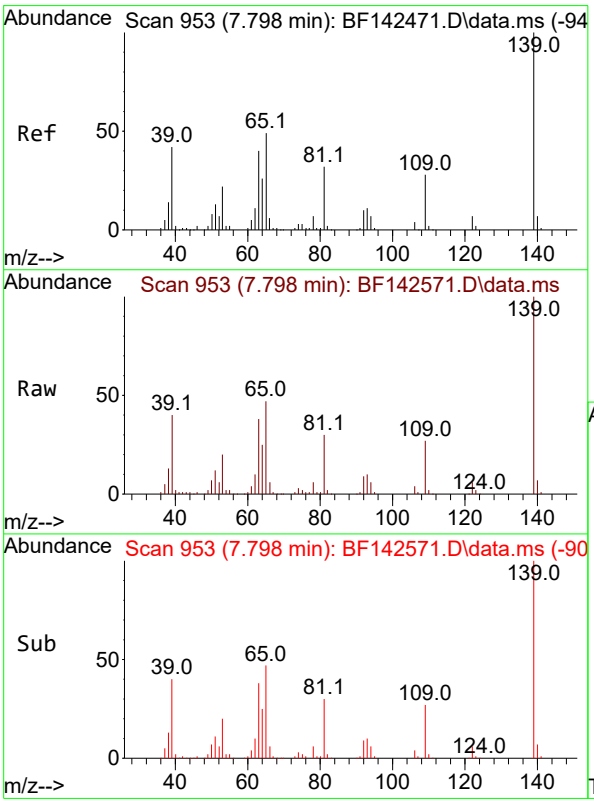
#25
Isophorone
Concen: 41.364 ng
RT: 7.722 min Scan# 94
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 82 Resp: 584319

Ion	Ratio	Lower	Upper
82	100		
95	7.3	6.0	9.0
138	20.5	15.5	23.3

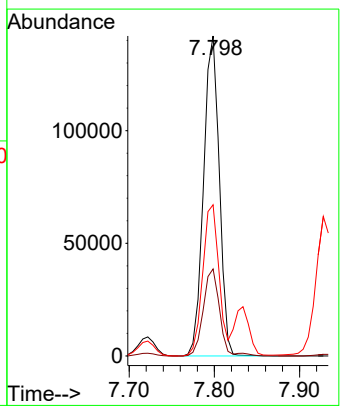


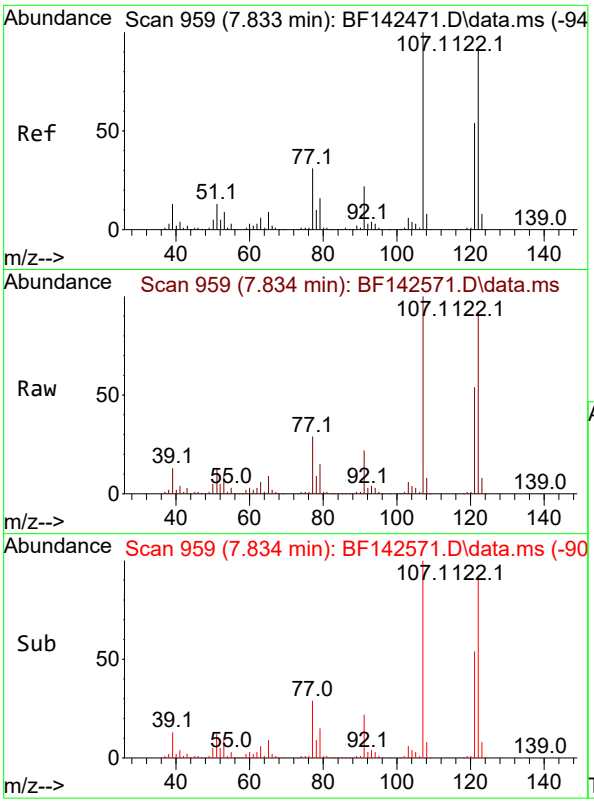


#26
2-Nitrophenol
Concen: 44.825 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:139 Resp: 182519

Ion	Ratio	Lower	Upper
139	100		
109	27.2	22.6	33.8
65	47.2	39.4	59.0



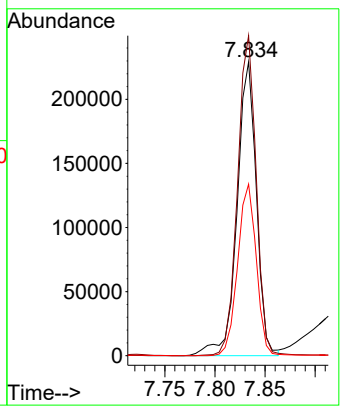


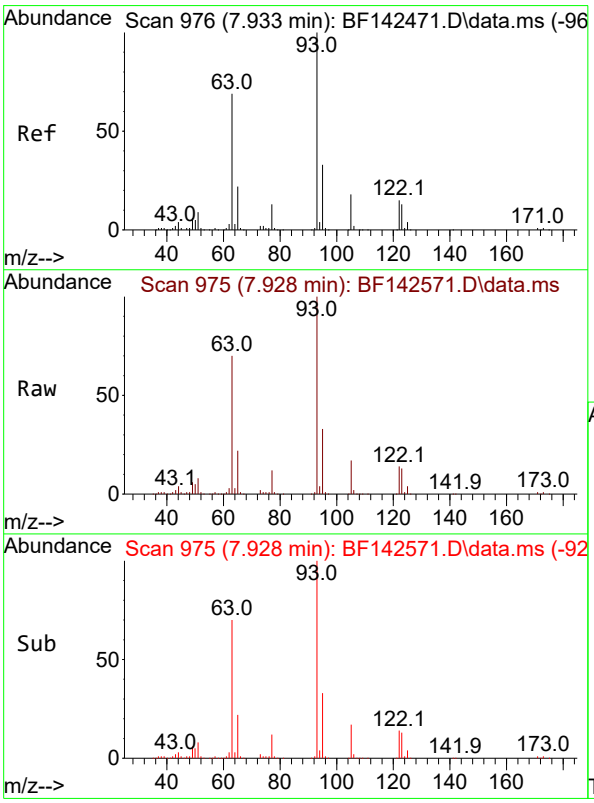
#27
2,4-Dimethylphenol
Concen: 42.948 ng
RT: 7.834 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:122 Resp: 308400

Ion	Ratio	Lower	Upper
122	100		
107	108.9	88.1	132.1
121	58.4	47.3	70.9

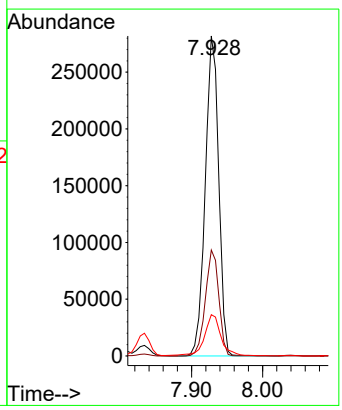


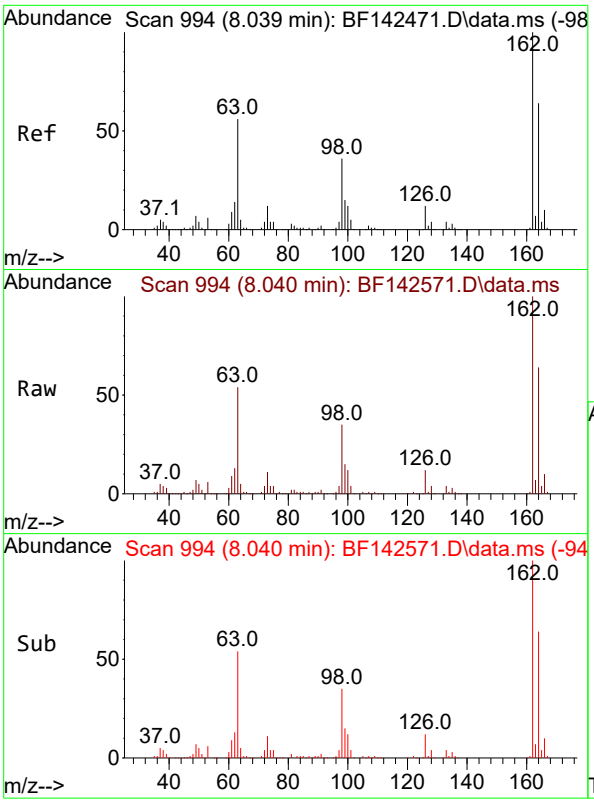


#28
bis(2-Chloroethoxy)methane
Concen: 42.120 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 93 Resp: 371689

Ion	Ratio	Lower	Upper
93	100		
95	33.1	26.4	39.6
123	12.9	10.6	15.8



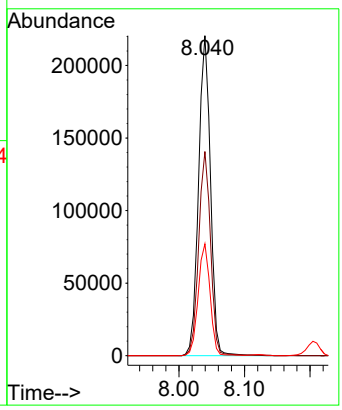


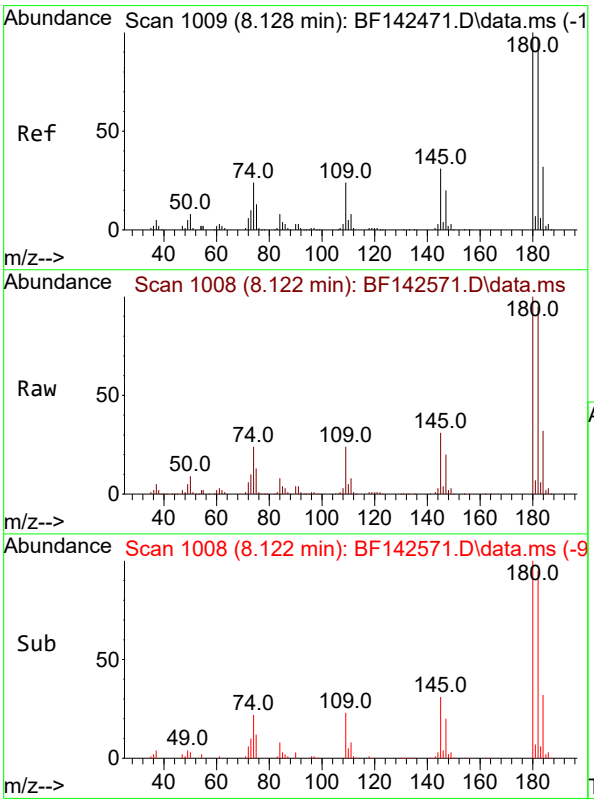
#29
2,4-Dichlorophenol
Concen: 42.751 ng
RT: 8.040 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:162 Resp: 279177

Ion	Ratio	Lower	Upper
162	100		
164	63.8	43.7	83.7
98	35.0	15.5	55.5

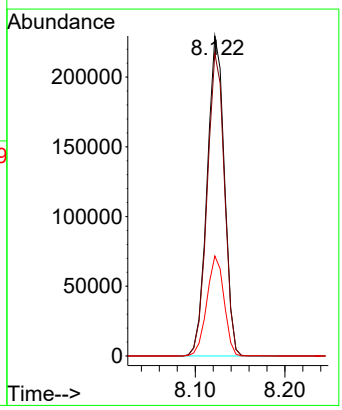


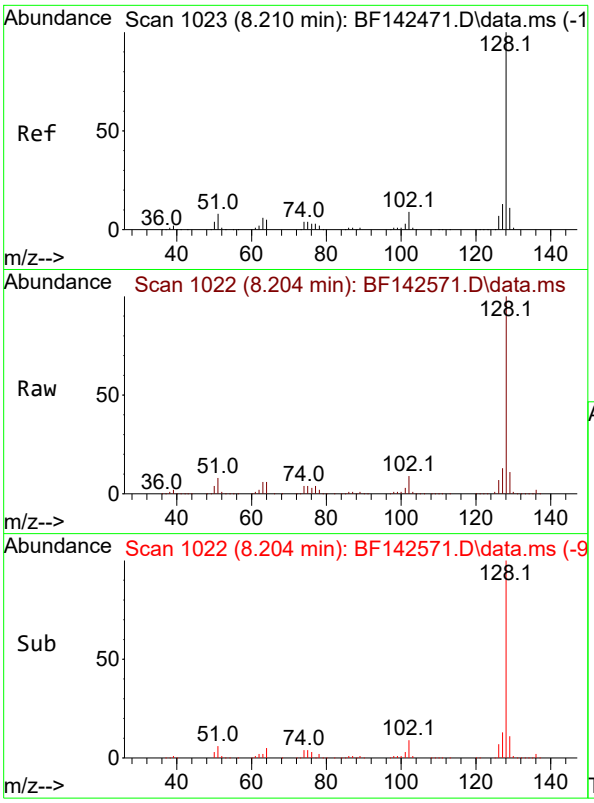


#30
1,2,4-Trichlorobenzene
Concen: 43.200 ng
RT: 8.122 min Scan# 1008
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:180 Resp: 306167

Ion	Ratio	Lower	Upper
180	100		
182	94.6	78.0	117.0
145	31.3	25.0	37.6



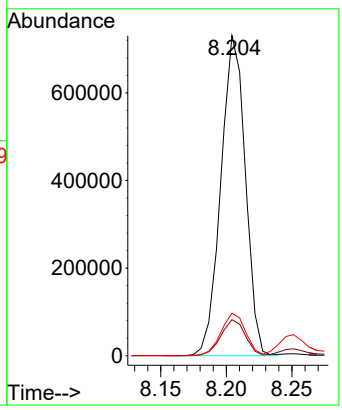


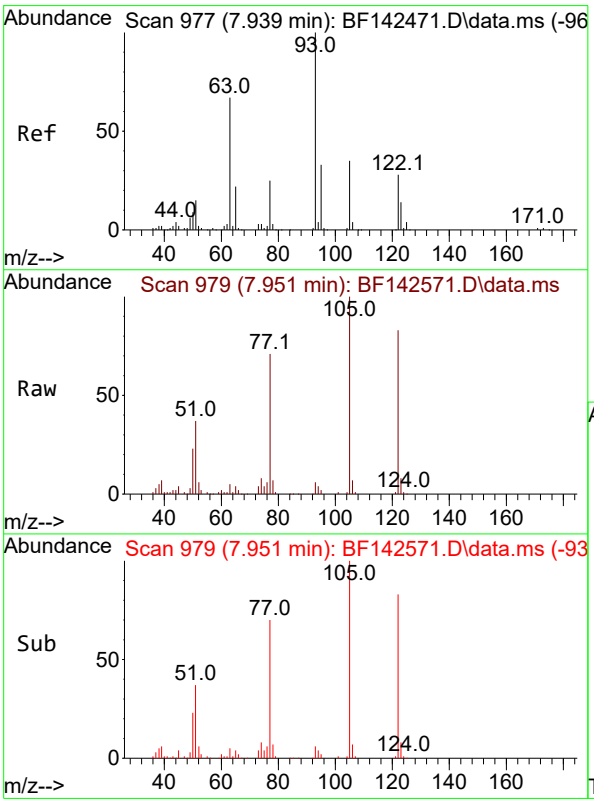
#31
Naphthalene
Concen: 41.853 ng
RT: 8.204 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:128 Resp: 949468

Ion	Ratio	Lower	Upper
128	100		
129	11.2	8.9	13.3
127	13.3	10.5	15.7

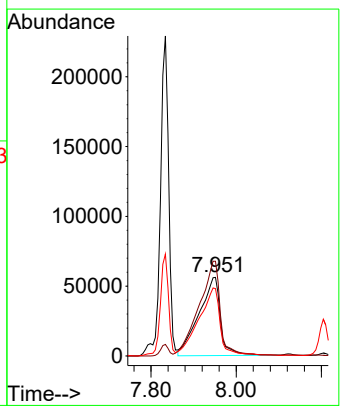


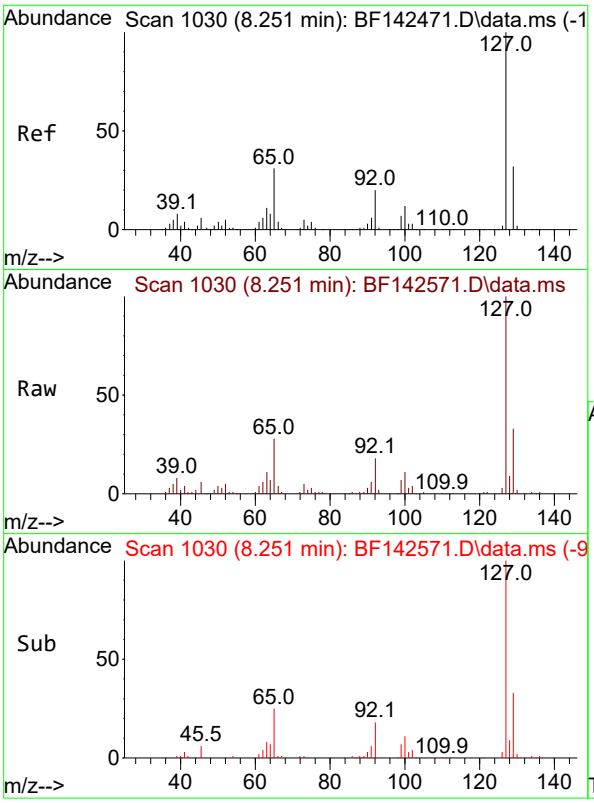


#32
Benzoic acid
Concen: 44.899 ng
RT: 7.951 min Scan# 979
Delta R.T. -0.024 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:122 Resp: 196256

Ion	Ratio	Lower	Upper
122	100		
105	120.5	101.7	141.7
77	85.6	69.5	109.5



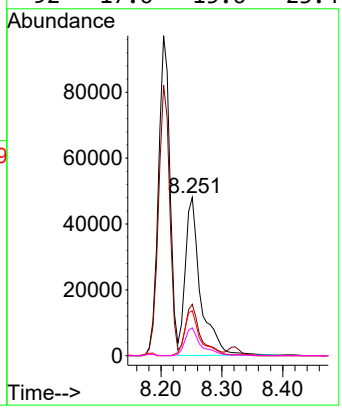


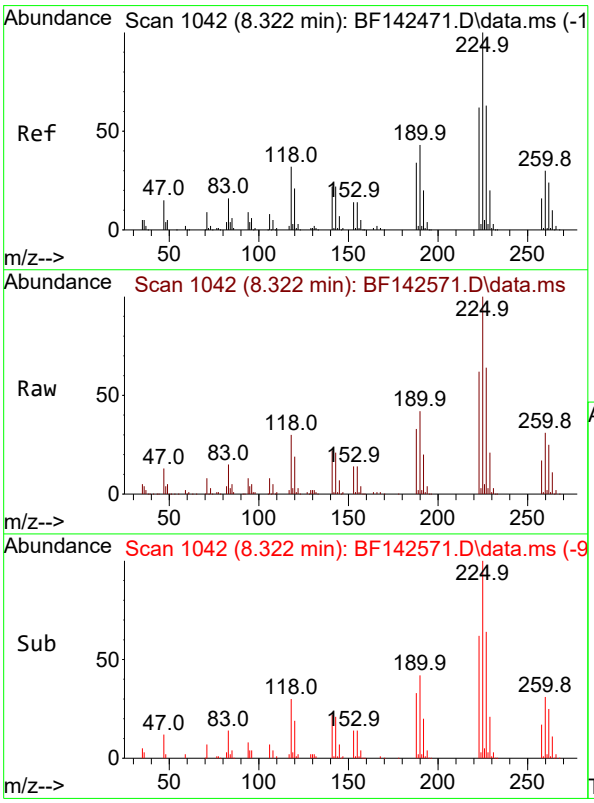
#33
4-Chloroaniline
Concen: 9.115 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:127 Resp: 83788

Ion	Ratio	Lower	Upper
127	100		
129	32.5	26.1	39.1
65	28.4	24.9	37.3
92	17.6	15.6	23.4

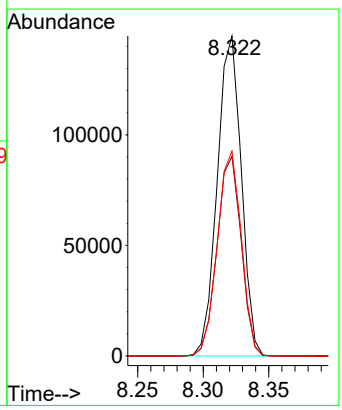


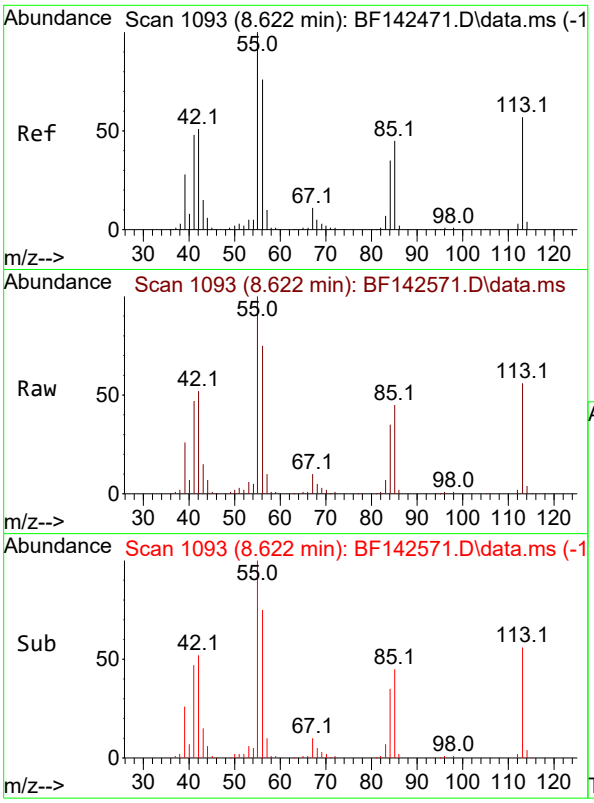


#34
Hexachlorobutadiene
Concen: 41.667 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:225 Resp: 184383

Ion	Ratio	Lower	Upper
225	100		
223	62.4	49.7	74.5
227	64.0	50.3	75.5



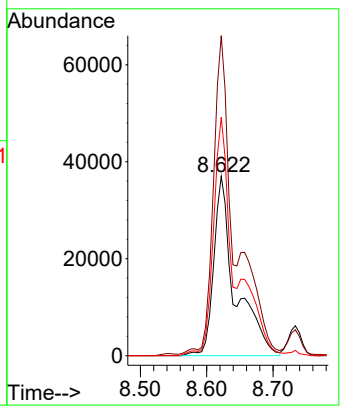


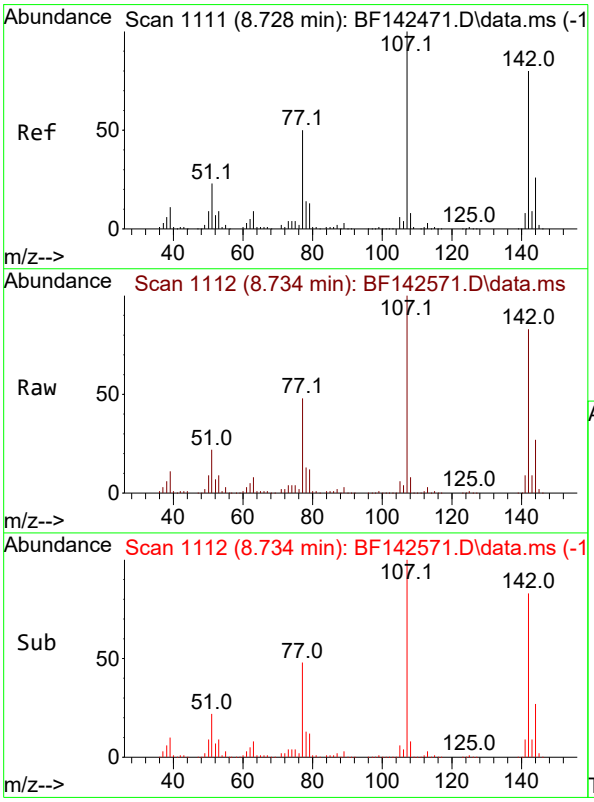
#35
Caprolactam
Concen: 45.447 ng m
RT: 8.622 min Scan# 1
Delta R.T. -0.023 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:113 Resp: 83353

Ion	Ratio	Lower	Upper
113	100		
55	178.4	154.7	194.7
56	132.9	113.2	153.2

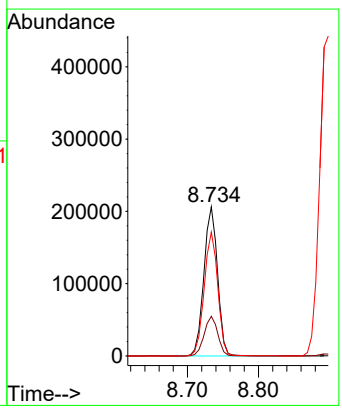


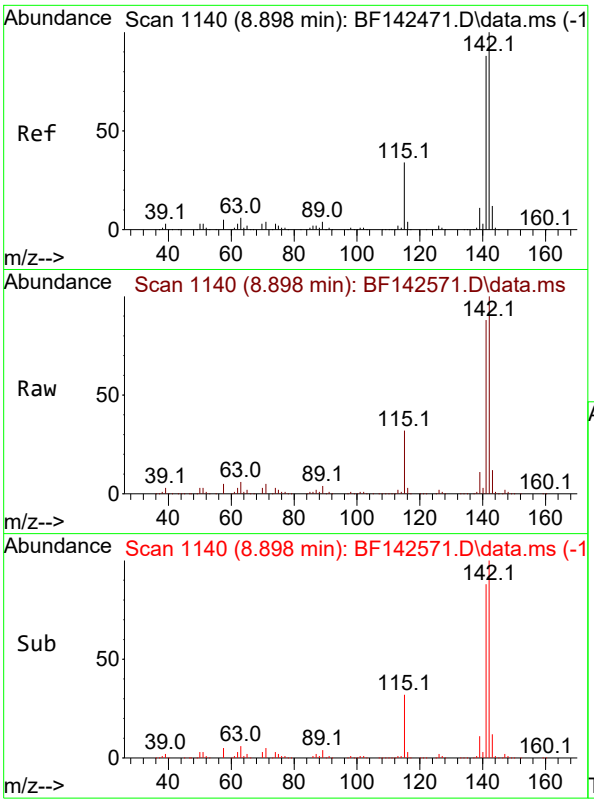


#36
4-Chloro-3-methylphenol
Concen: 41.358 ng
RT: 8.734 min Scan# 1112
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:107 Resp: 276787

Ion	Ratio	Lower	Upper
107	100		
144	26.6	20.9	31.3
142	83.0	64.2	96.2



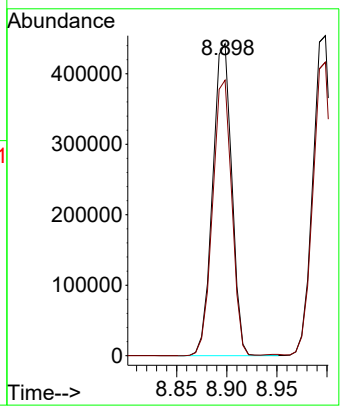


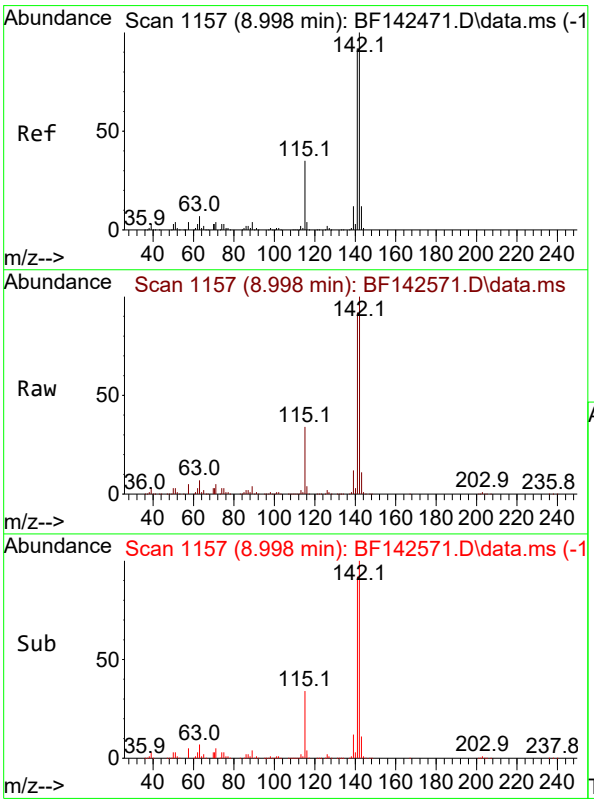
#37
2-Methylnaphthalene
Concen: 41.127 ng
RT: 8.898 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:142 Resp: 586972

Ion	Ratio	Lower	Upper
142	100		
141	88.3	70.7	106.1

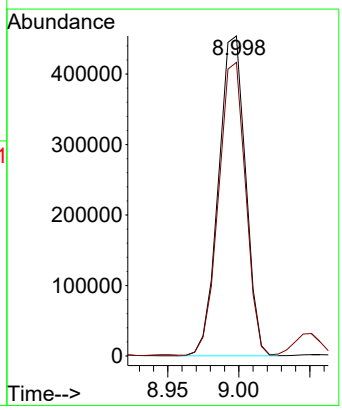


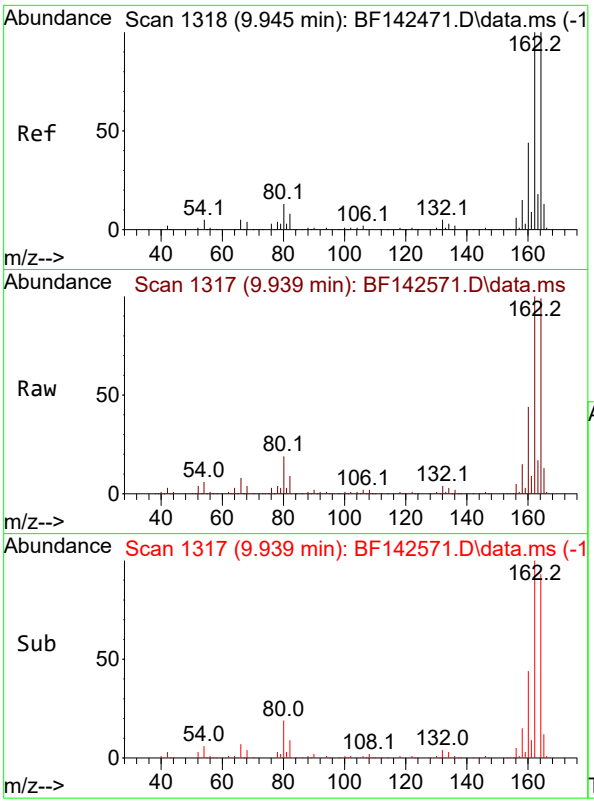


#38
1-Methylnaphthalene
Concen: 40.715 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:142 Resp: 601058

Ion	Ratio	Lower	Upper
142	100		
141	91.8	73.4	110.2



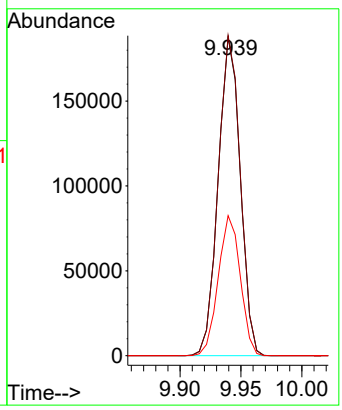


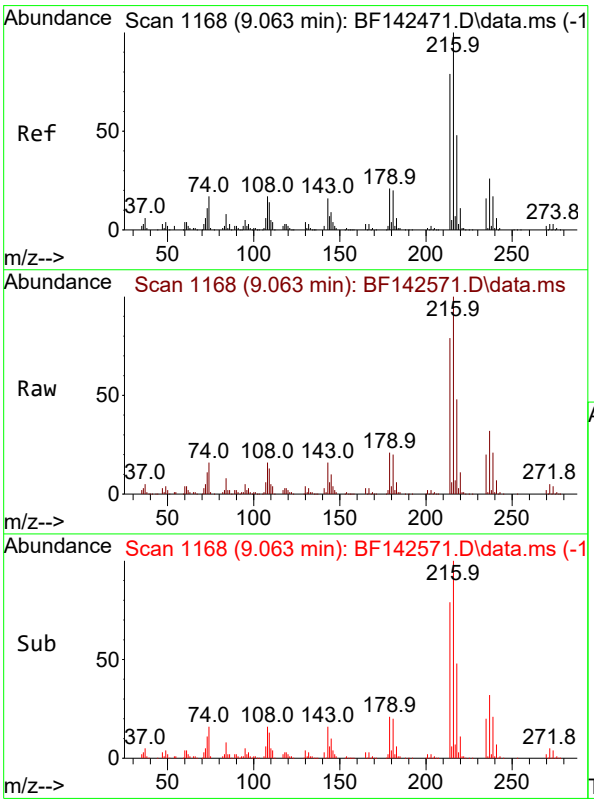
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:164 Resp: 236866

Ion	Ratio	Lower	Upper
164	100		
162	100.5	80.2	120.4
160	44.0	35.6	53.4

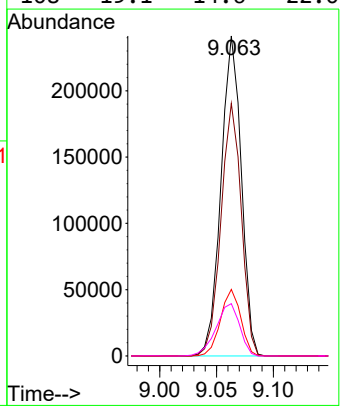


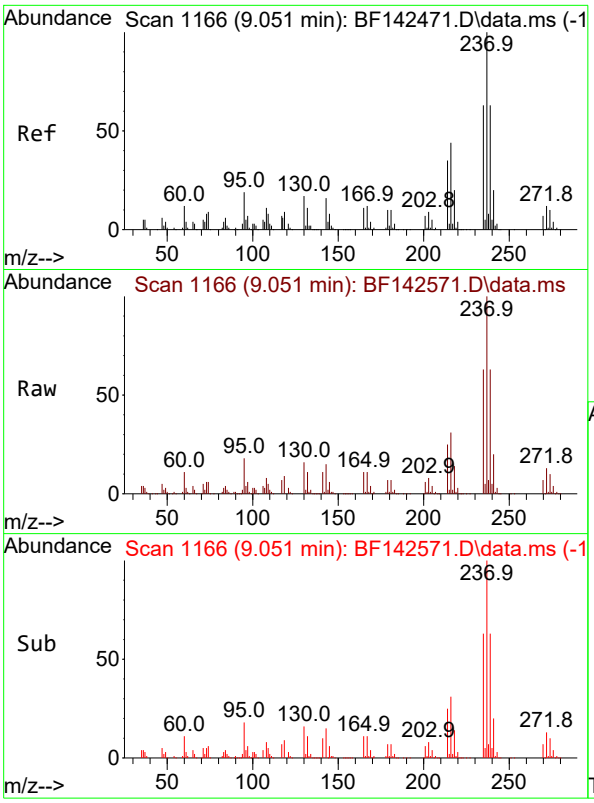


#40
1,2,4,5-Tetrachlorobenzene
Concen: 44.205 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:216 Resp: 300567

Ion	Ratio	Lower	Upper
216	100		
214	78.7	62.9	94.3
179	20.7	16.9	25.3
108	19.1	14.6	22.0



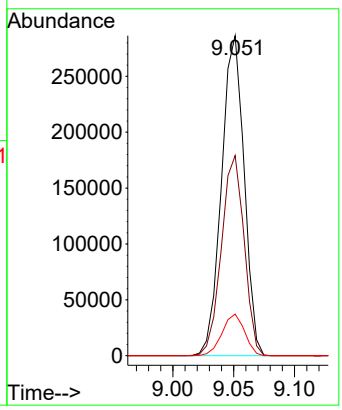


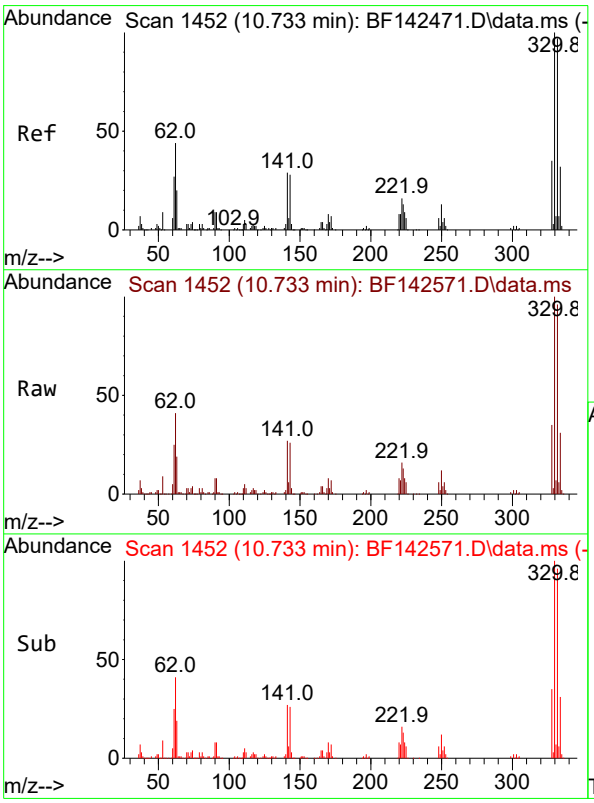
#41
Hexachlorocyclopentadiene
Concen: 80.699 ng
RT: 9.051 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:237 Resp: 370150

Ion	Ratio	Lower	Upper
237	100		
235	62.5	43.3	83.3
272	13.0	0.0	32.4

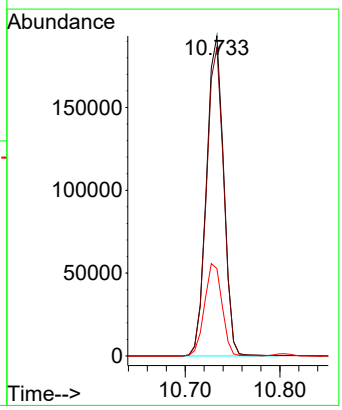


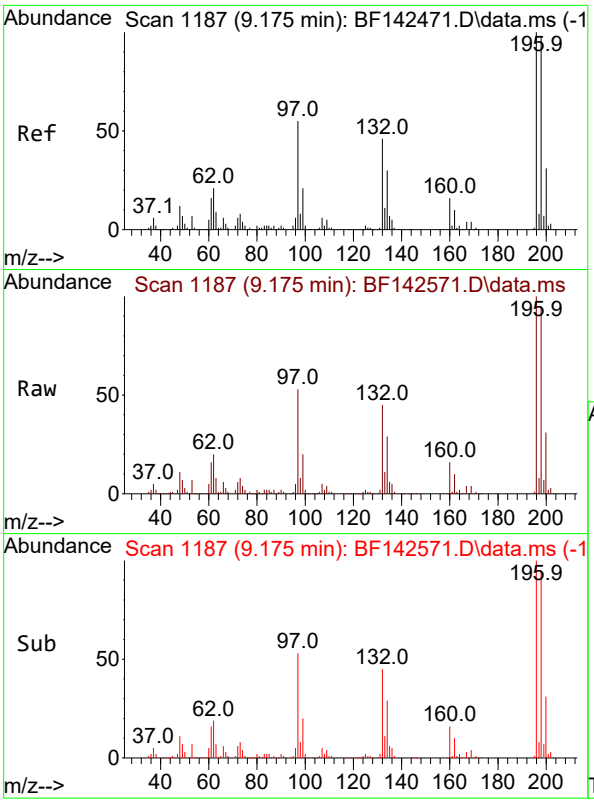


#42
2,4,6-Tribromophenol
Concen: 92.391 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:330 Resp: 242888

Ion	Ratio	Lower	Upper
330	100		
332	96.9	77.6	116.4
141	29.4	24.6	36.8



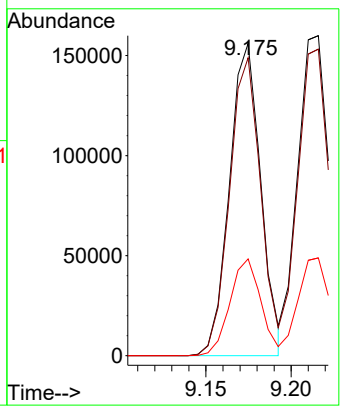


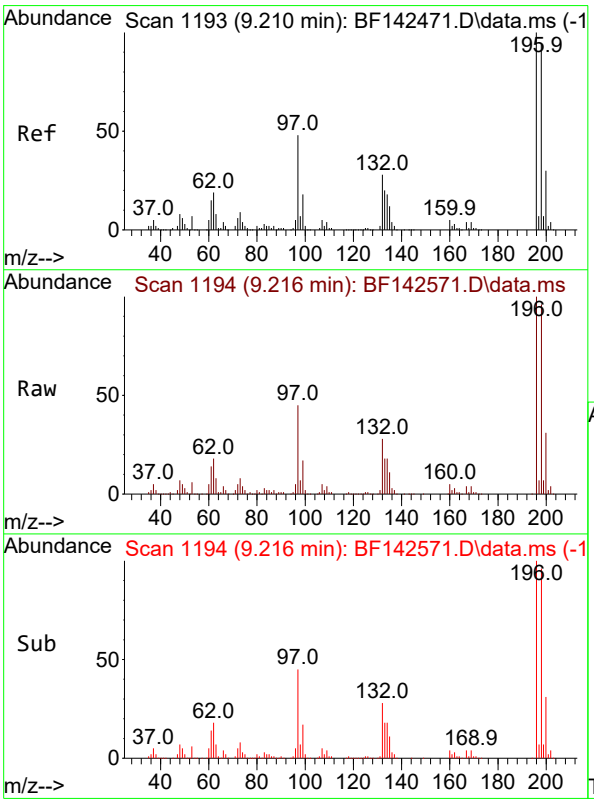
#43
2,4,6-Trichlorophenol
Concen: 43.524 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:196 Resp: 199554

Ion	Ratio	Lower	Upper
196	100		
198	95.4	78.8	118.2
200	31.0	24.9	37.3

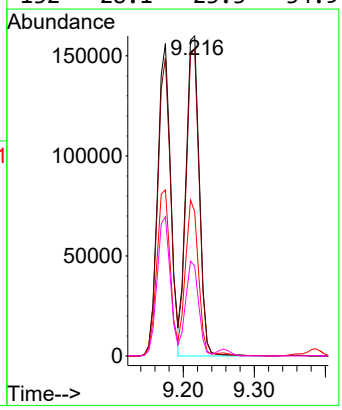


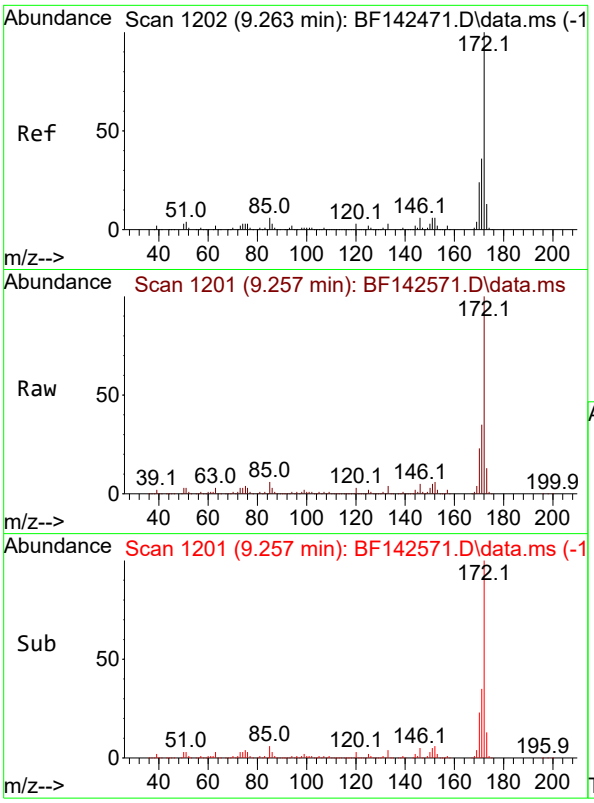


#44
2,4,5-Trichlorophenol
Concen: 43.293 ng
RT: 9.216 min Scan# 1194
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:196 Resp: 209342

Ion	Ratio	Lower	Upper
196	100		
198	95.8	75.5	113.3
97	45.1	39.3	58.9
132	28.1	23.3	34.9



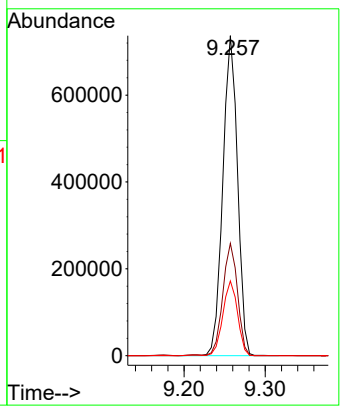


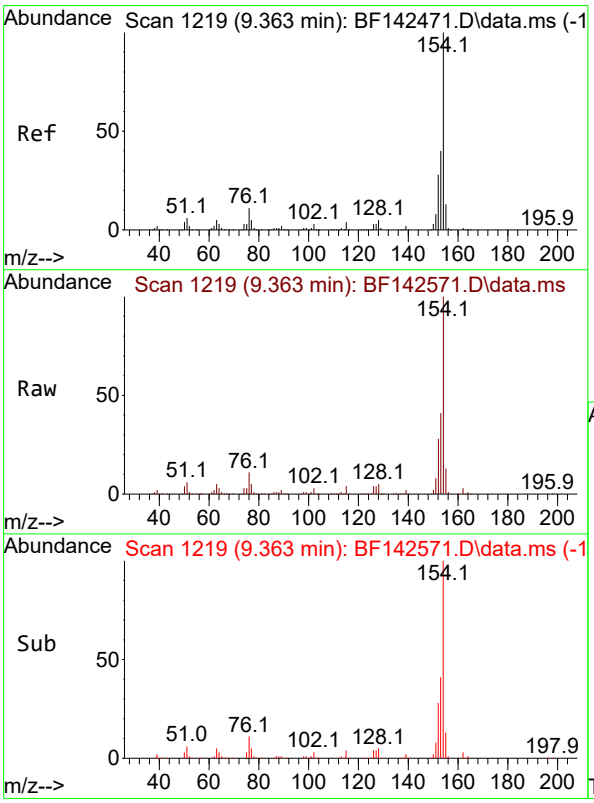
#45
2-Fluorobiphenyl
Concen: 52.661 ng
RT: 9.257 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:172 Resp: 929576

Ion	Ratio	Lower	Upper
172	100		
171	35.1	28.6	42.8
170	23.4	18.9	28.3

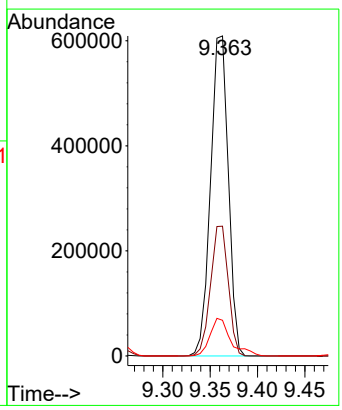


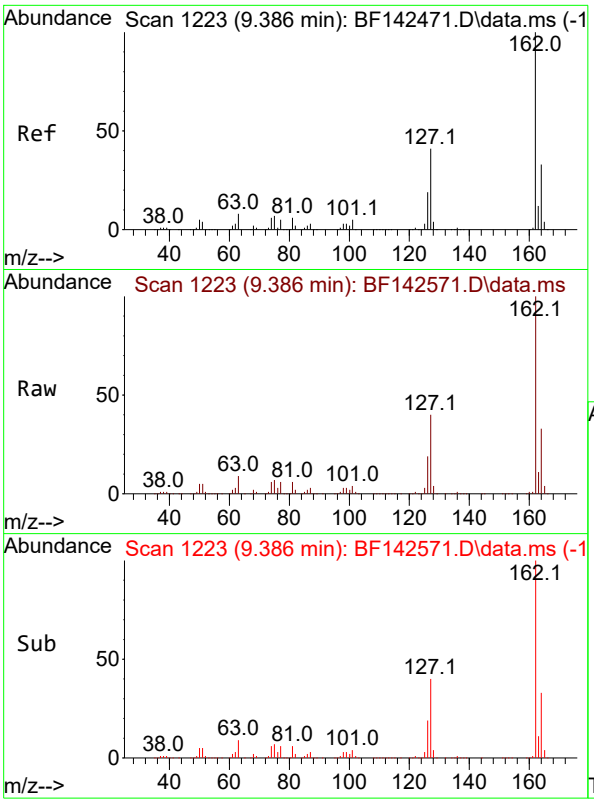


#46
1,1'-Biphenyl
Concen: 43.129 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:154 Resp: 792558

Ion	Ratio	Lower	Upper
154	100		
153	40.6	20.4	60.4
76	11.1	0.0	30.8



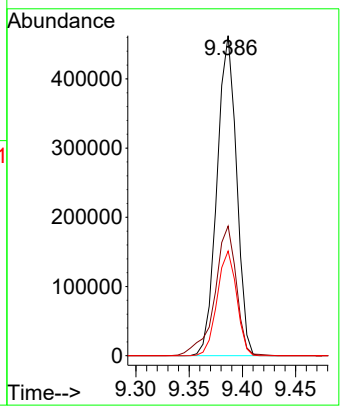


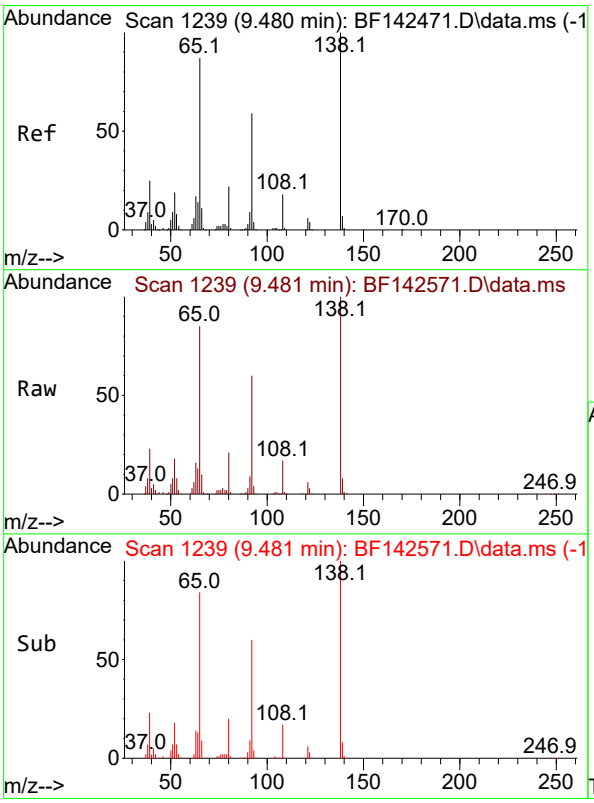
#47
2-Chloronaphthalene
Concen: 43.338 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:162 Resp: 588404

Ion	Ratio	Lower	Upper
162	100		
127	40.5	33.5	50.3
164	32.7	26.1	39.1

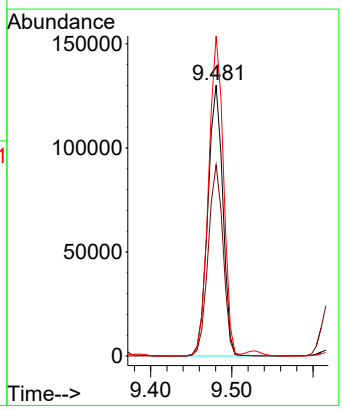


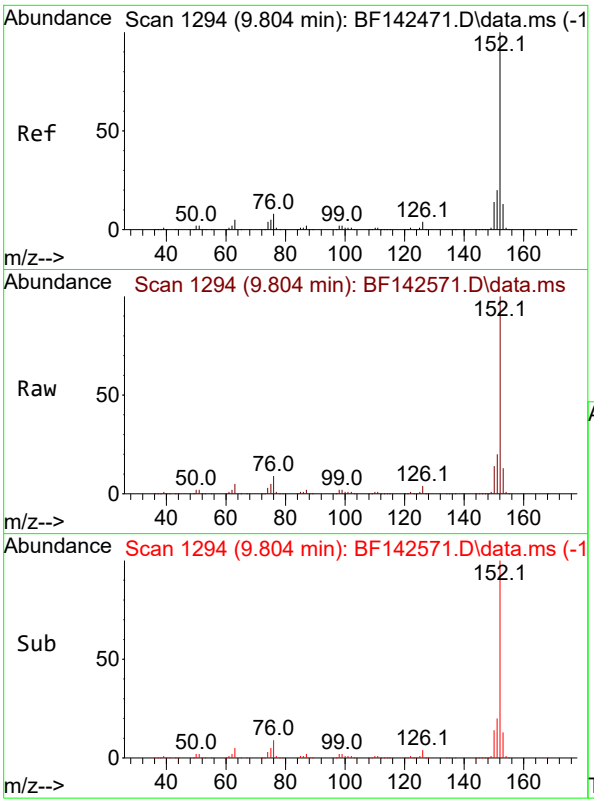


#48
2-Nitroaniline
Concen: 42.377 ng
RT: 9.481 min Scan# 1239
Delta R.T. -0.005 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion: 65 Resp: 166305

Ion	Ratio	Lower	Upper
65	100		
92	70.6	54.4	81.6
138	118.2	91.4	137.2



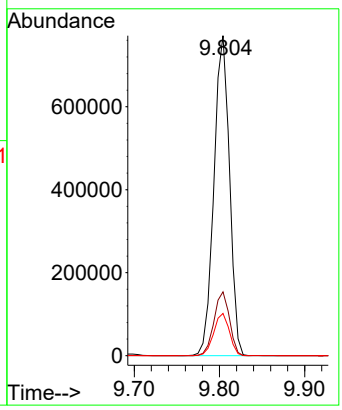


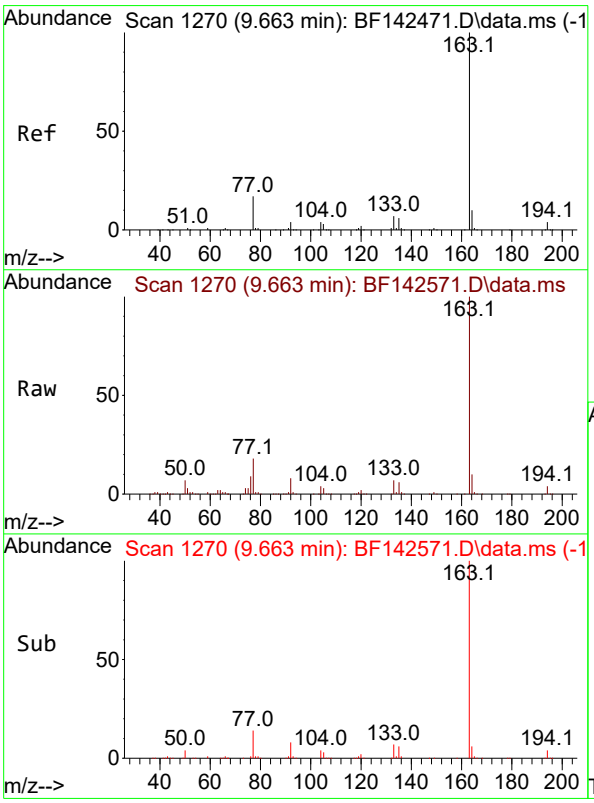
#49
Acenaphthylene
Concen: 42.698 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:152 Resp: 978892

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.8
153	13.2	10.6	15.8

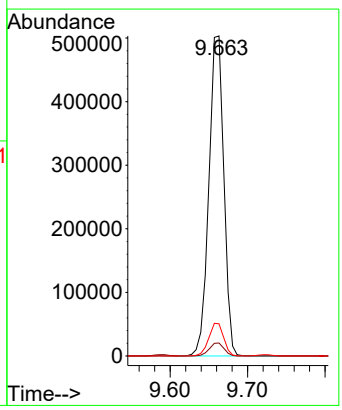


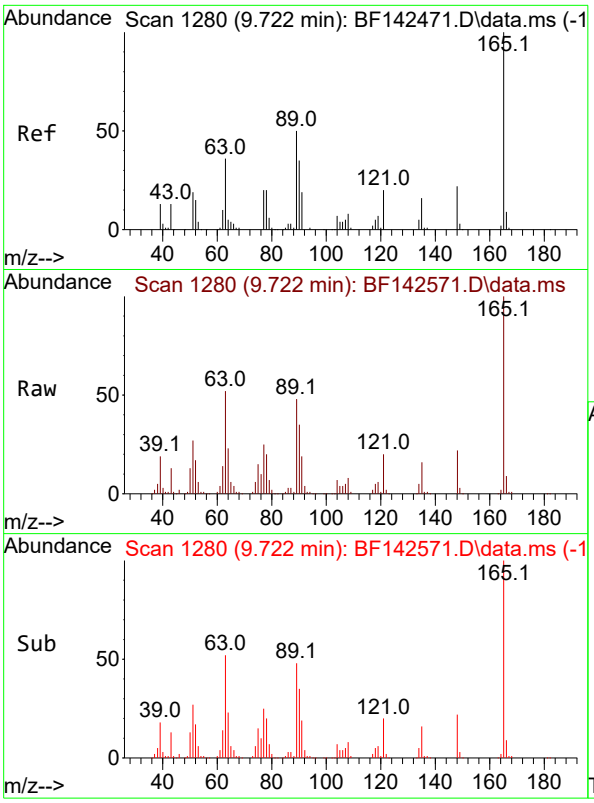


#50
Dimethylphthalate
Concen: 43.277 ng
RT: 9.663 min Scan# 1270
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:163 Resp: 676381

Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.3	4.9
164	10.1	8.2	12.4



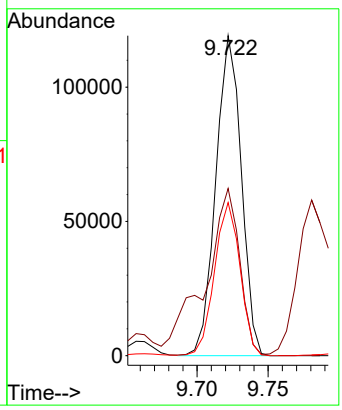


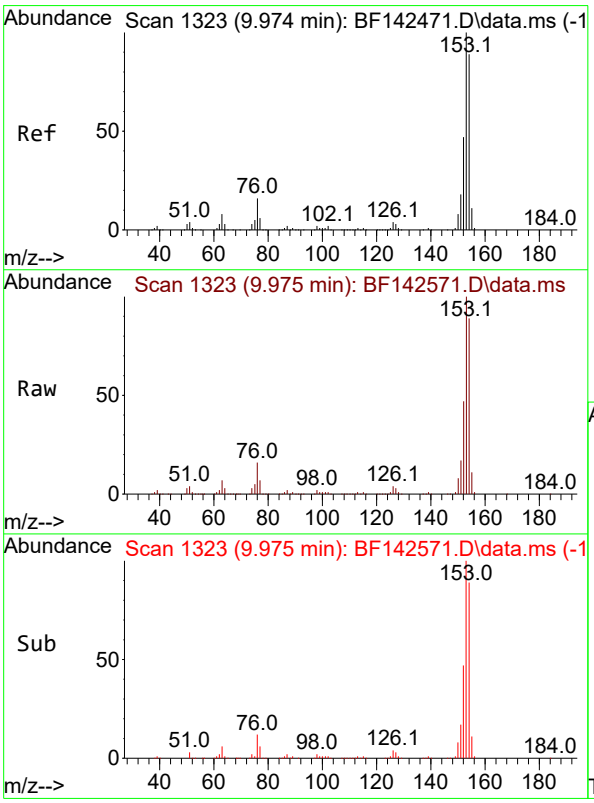
#51
2,6-Dinitrotoluene
Concen: 44.053 ng
RT: 9.722 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:165 Resp: 148602

Ion	Ratio	Lower	Upper
165	100		
63	52.3	42.9	64.3
89	47.8	40.2	60.4

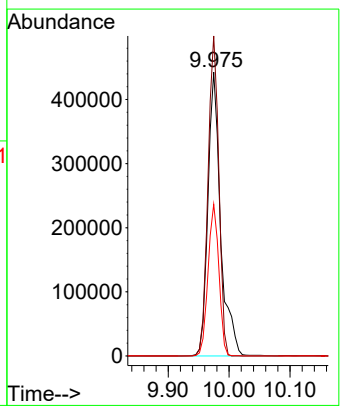


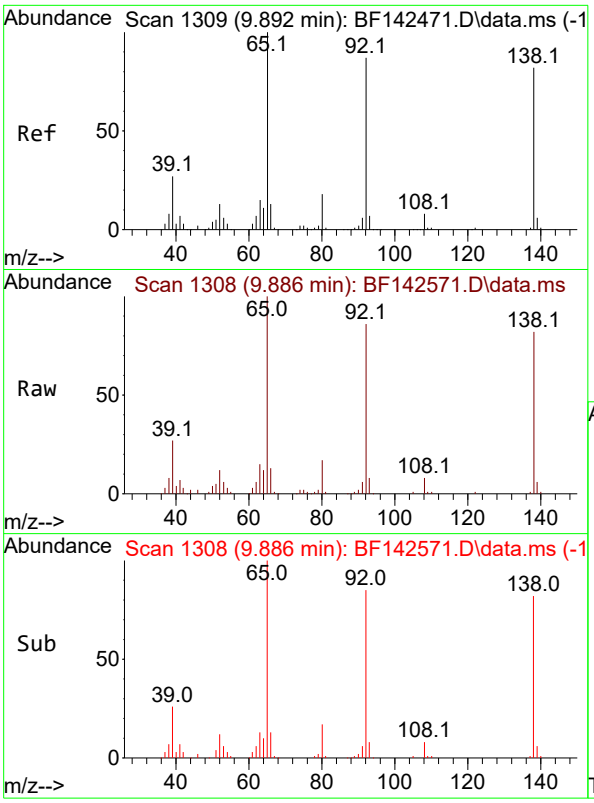


#52
Acenaphthene
Concen: 45.992 ng
RT: 9.975 min Scan# 1323
Delta R.T. -0.005 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:154 Resp: 643854

Ion	Ratio	Lower	Upper
154	100		
153	112.7	90.0	135.0
152	53.4	42.6	64.0



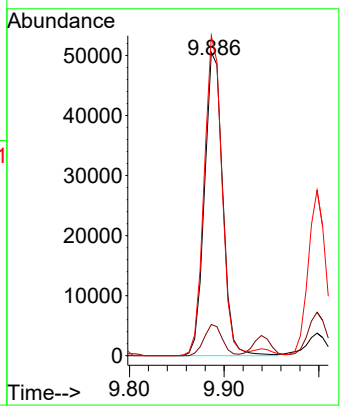


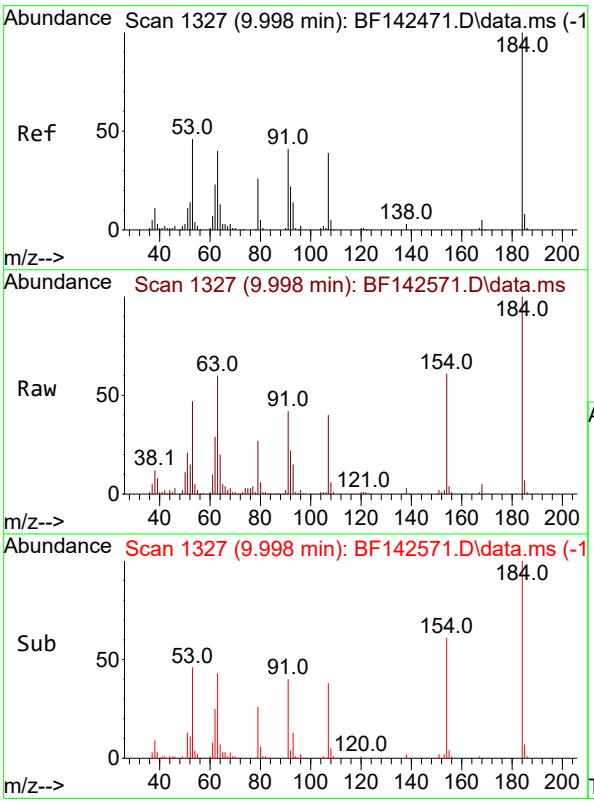
#53
3-Nitroaniline
Concen: 18.294 ng
RT: 9.886 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:138 Resp: 67401

Ion	Ratio	Lower	Upper
138	100		
108	10.3	8.1	12.1
92	105.5	85.2	127.8

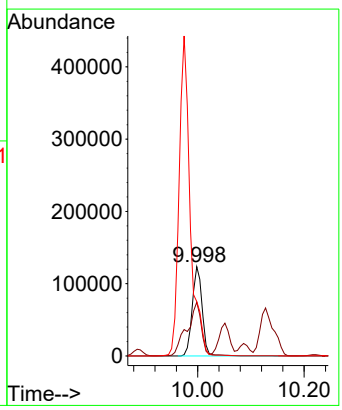


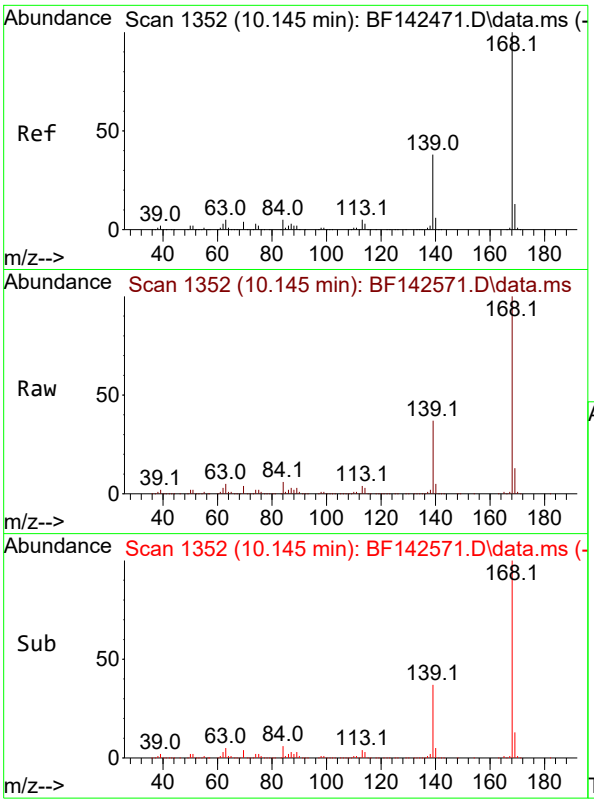


#54
2,4-Dinitrophenol
Concen: 92.532 ng
RT: 9.998 min Scan# 1327
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:184 Resp: 161261

Ion	Ratio	Lower	Upper
184	100		
63	60.1	46.3	69.5
154	60.9	56.8	85.2



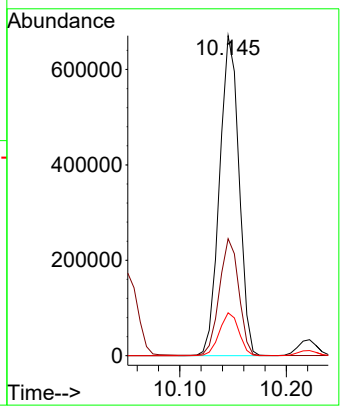


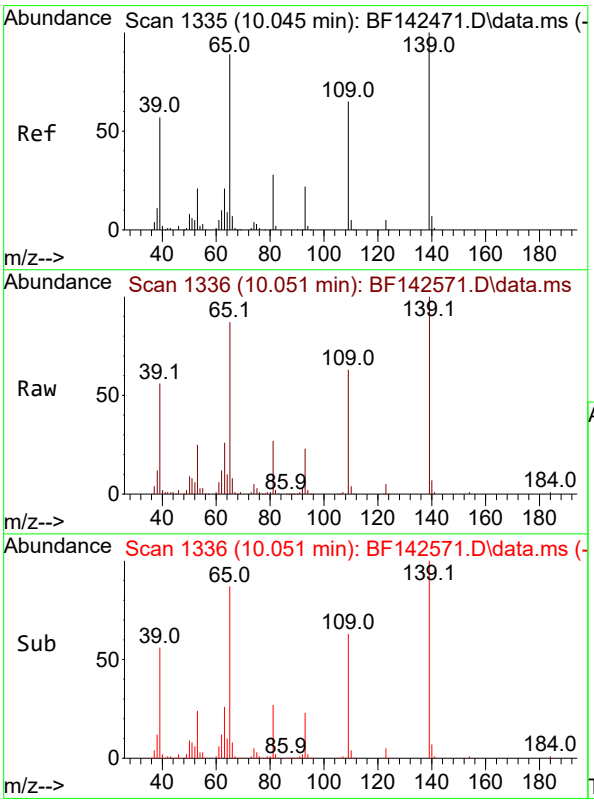
#55
Dibenzofuran
Concen: 42.177 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:168 Resp: 849661

Ion	Ratio	Lower	Upper
168	100		
139	36.6	30.2	45.2
169	13.4	10.7	16.1

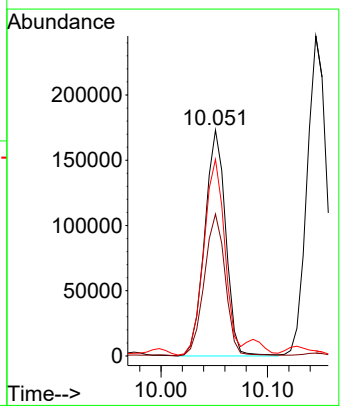


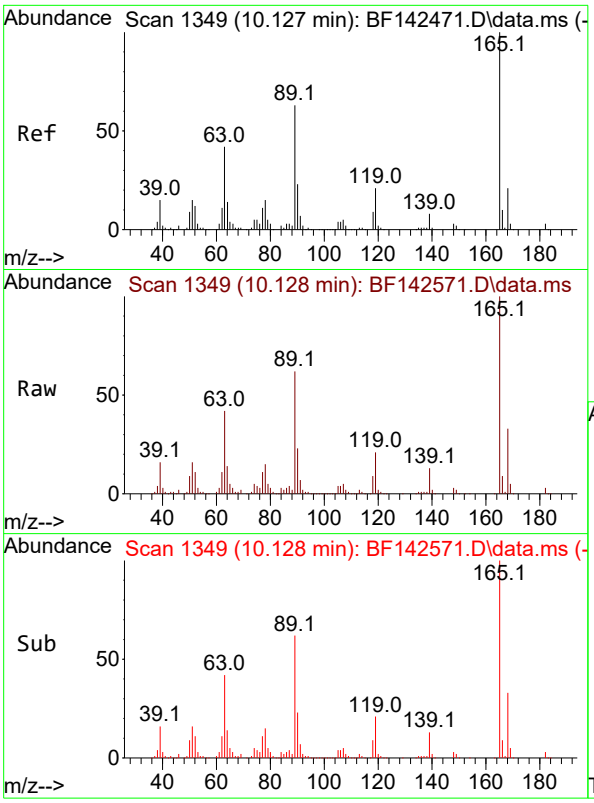


#56
4-Nitrophenol
Concen: 87.339 ng
RT: 10.051 min Scan# 1336
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:139 Resp: 237434

Ion	Ratio	Lower	Upper
139	100		
109	62.8	45.1	85.1
65	87.0	69.7	109.7



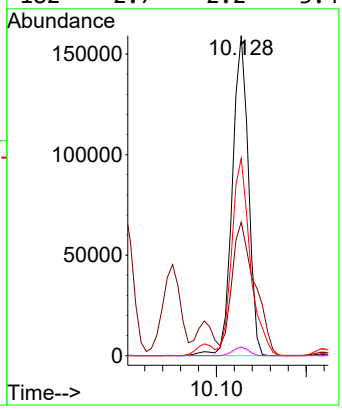


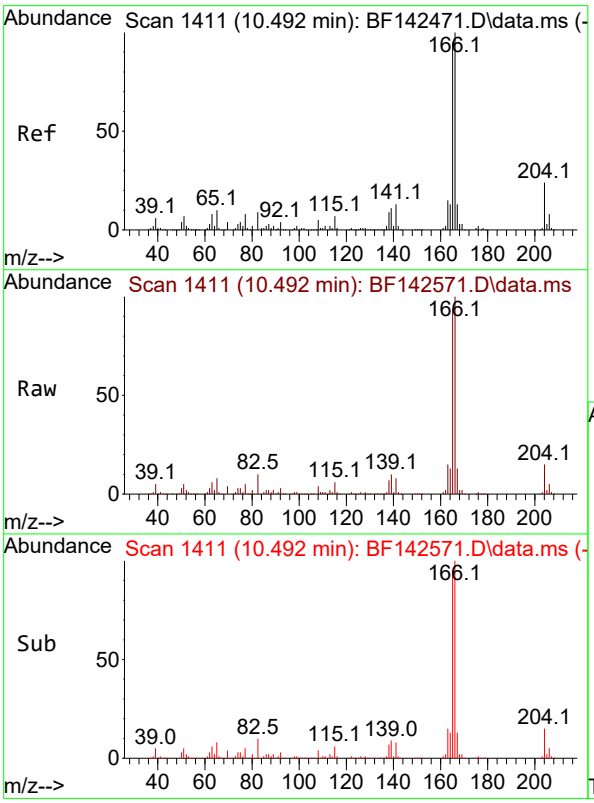
#57
2,4-Dinitrotoluene
Concen: 44.751 ng
RT: 10.128 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:165 Resp: 197146

Ion	Ratio	Lower	Upper
165	100		
63	41.8	33.6	50.4
89	61.7	50.2	75.4
182	2.7	2.2	3.4

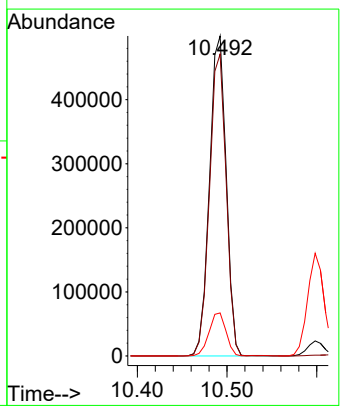


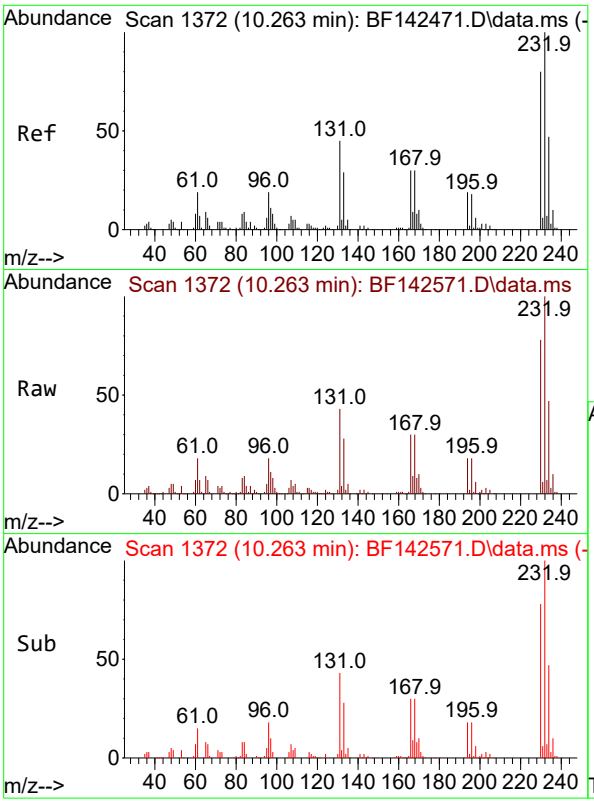


#58
Fluorene
Concen: 41.433 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:166 Resp: 644831

Ion	Ratio	Lower	Upper
166	100		
165	94.3	75.8	113.8
167	13.4	10.6	16.0



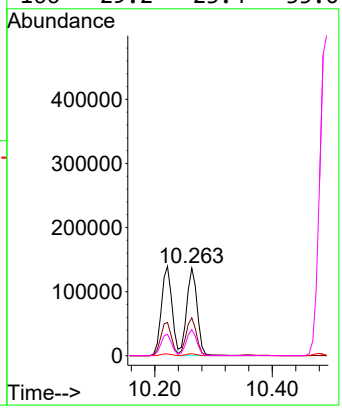


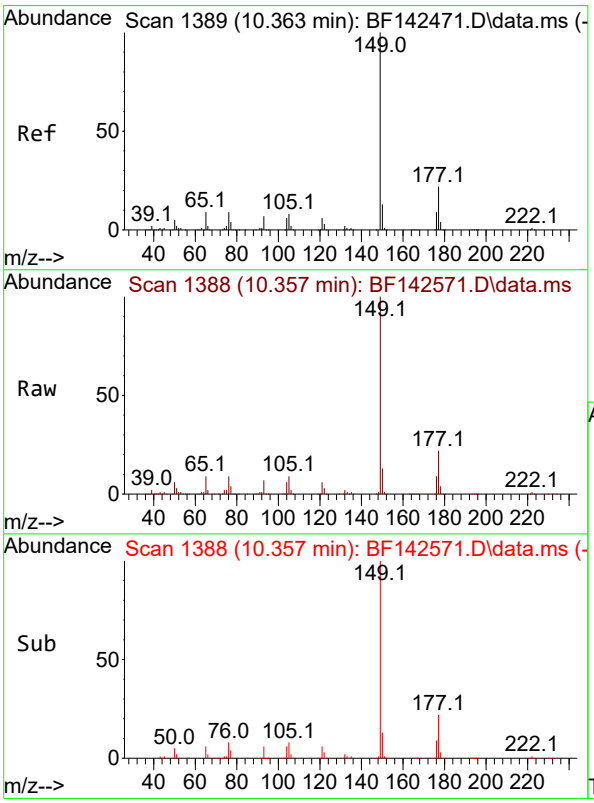
#59
2,3,4,6-Tetrachlorophenol
Concen: 42.410 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:232 Resp: 171201

Ion	Ratio	Lower	Upper
232	100		
131	43.5	35.2	52.8
130	2.1	1.7	2.5
166	29.2	23.4	35.0

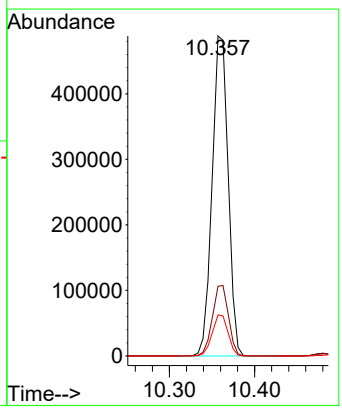


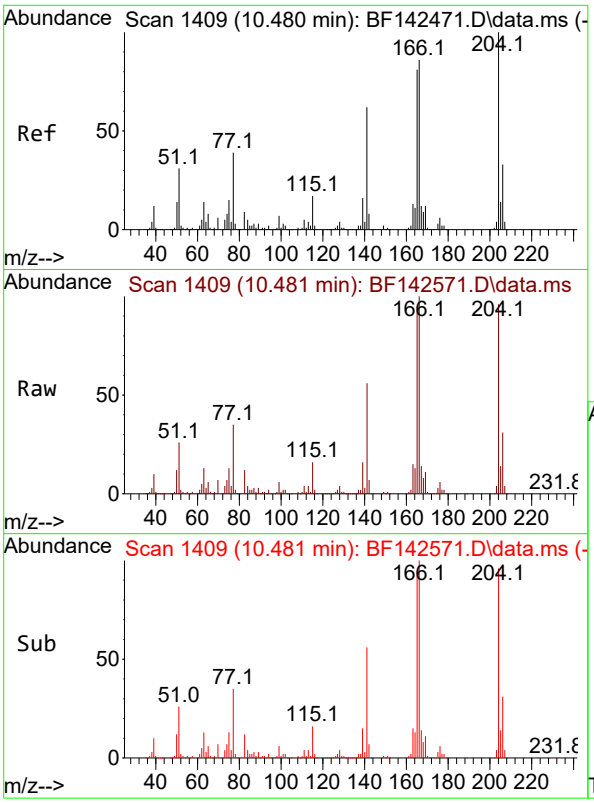


#60
Diethylphthalate
Concen: 41.791 ng
RT: 10.357 min Scan# 1388
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:149 Resp: 637907

Ion	Ratio	Lower	Upper
149	100		
177	21.8	17.6	26.4
150	12.9	10.1	15.1



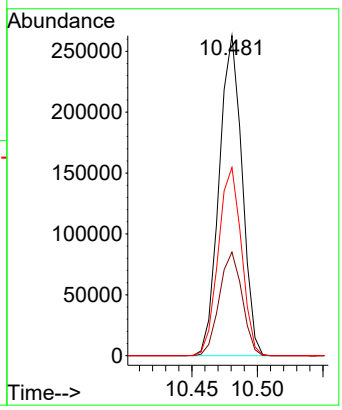


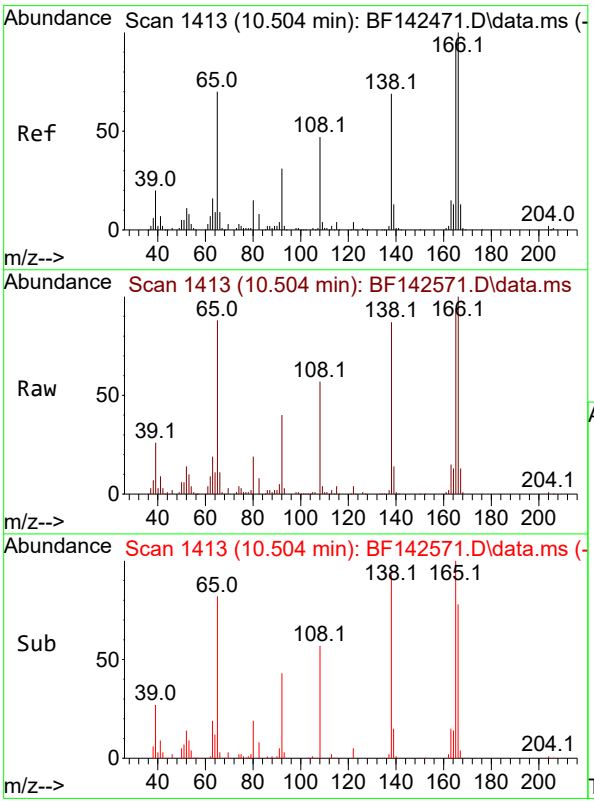
#61
4-Chlorophenyl-phenylether
Concen: 41.653 ng
RT: 10.481 min Scan# 14
Delta R.T. -0.005 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:204 Resp: 318453

Ion	Ratio	Lower	Upper
204	100		
206	32.4	26.3	39.5
141	58.8	49.5	74.3

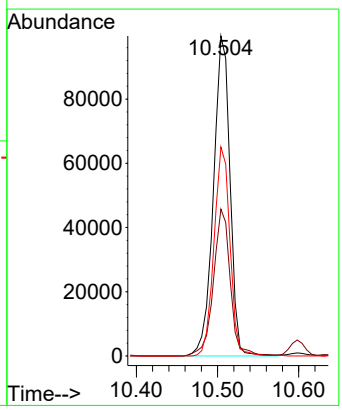


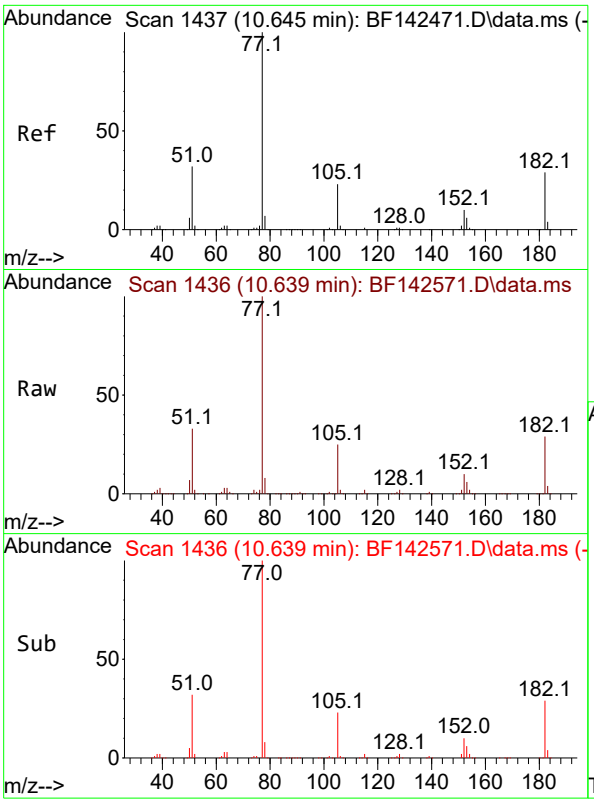


#62
4-Nitroaniline
Concen: 42.427 ng
RT: 10.504 min Scan# 1413
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:138 Resp: 141774

Ion	Ratio	Lower	Upper
138	100		
92	45.9	26.0	66.0
108	65.3	48.4	88.4



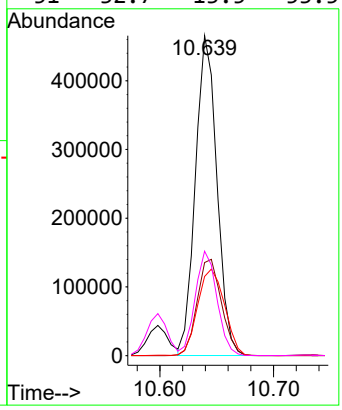


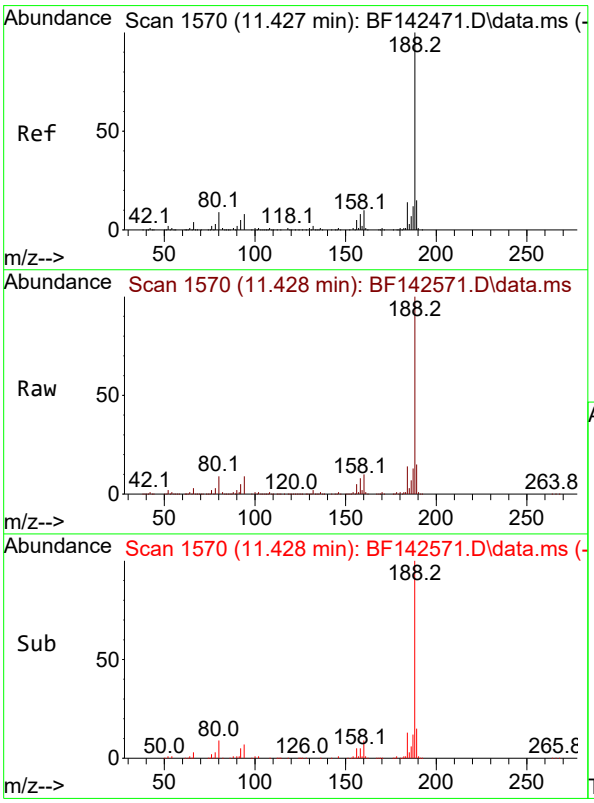
#63
Azobenzene
Concen: 44.583 ng
RT: 10.639 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion: 77 Resp: 611242

Ion	Ratio	Lower	Upper
77	100		
182	29.1	9.0	49.0
105	24.7	2.4	42.4
51	32.7	13.5	53.5

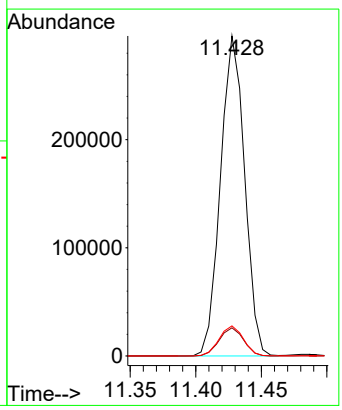


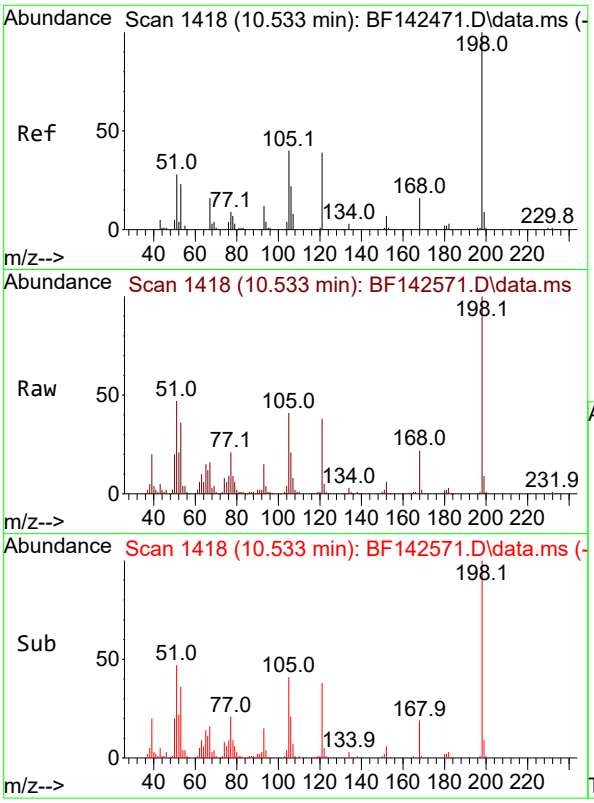


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.428 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:188 Resp: 378954

Ion	Ratio	Lower	Upper
188	100		
94	8.8	6.6	10.0
80	9.4	7.4	11.0



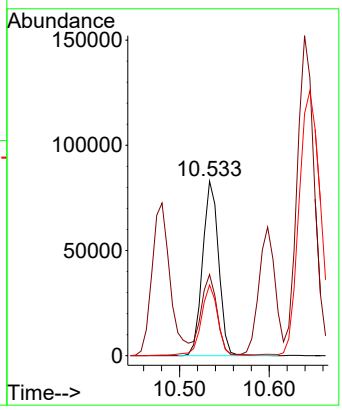


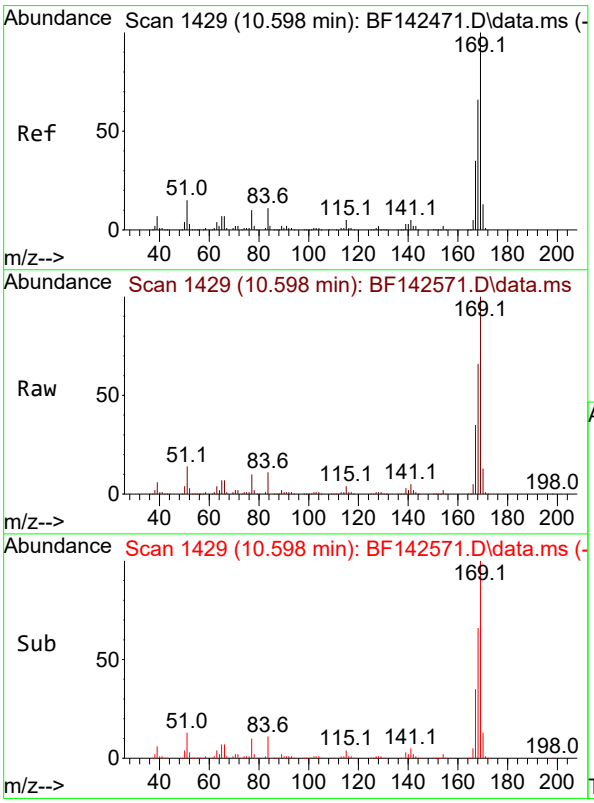
#65
4,6-Dinitro-2-methylphenol
Concen: 48.726 ng
RT: 10.533 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:198 Resp: 103049

Ion	Ratio	Lower	Upper
198	100		
51	46.5	28.3	68.3
105	40.5	21.3	61.3

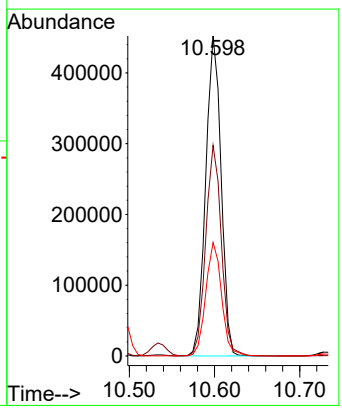


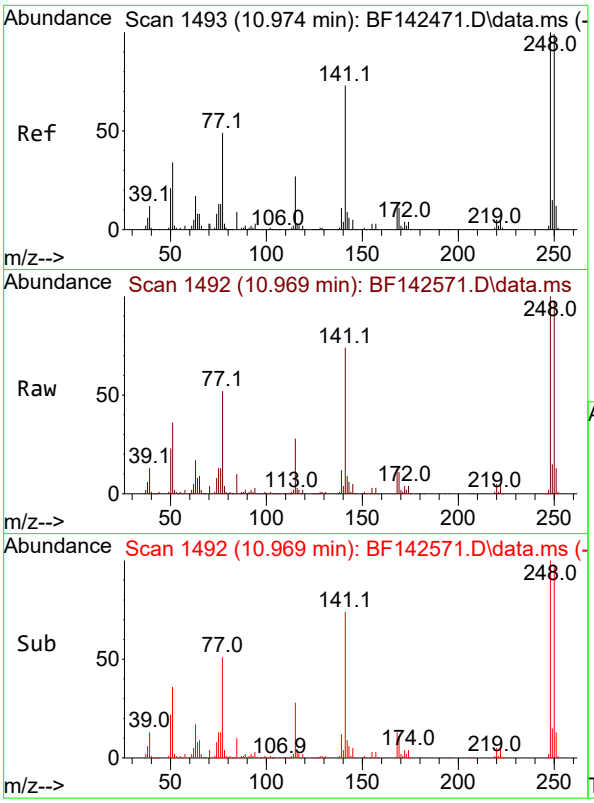


#66
n-Nitrosodiphenylamine
Concen: 43.673 ng
RT: 10.598 min Scan# 1429
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:169 Resp: 566216

Ion	Ratio	Lower	Upper
169	100		
168	65.8	52.7	79.1
167	35.5	28.3	42.5



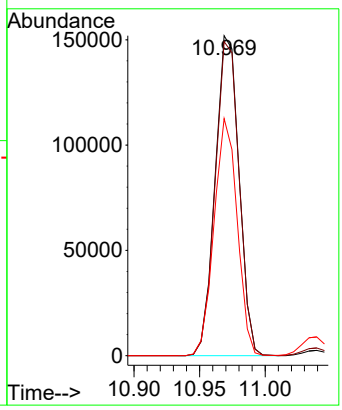


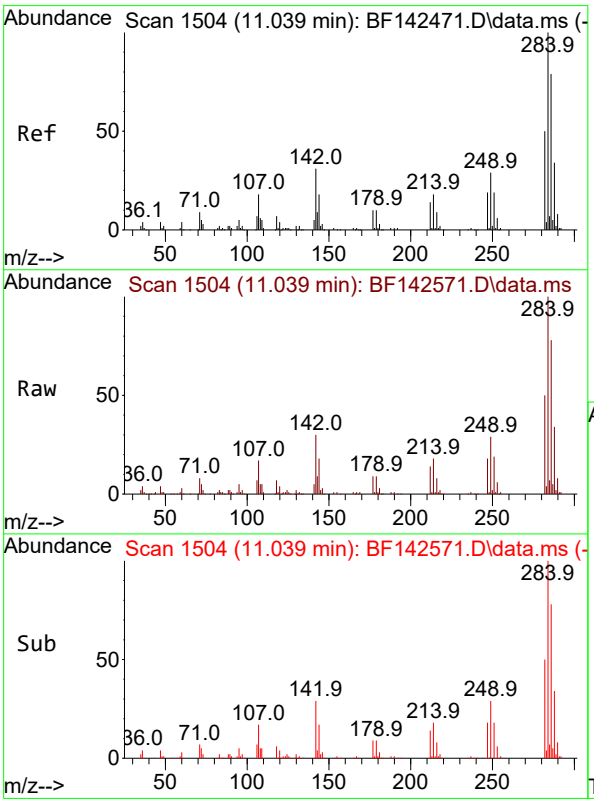
#67
4-Bromophenyl-phenylether
Concen: 42.946 ng
RT: 10.969 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:248 Resp: 192434

Ion	Ratio	Lower	Upper
248	100		
250	98.1	79.0	118.4
141	74.1	58.4	87.6

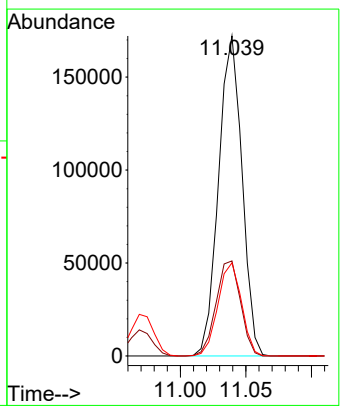


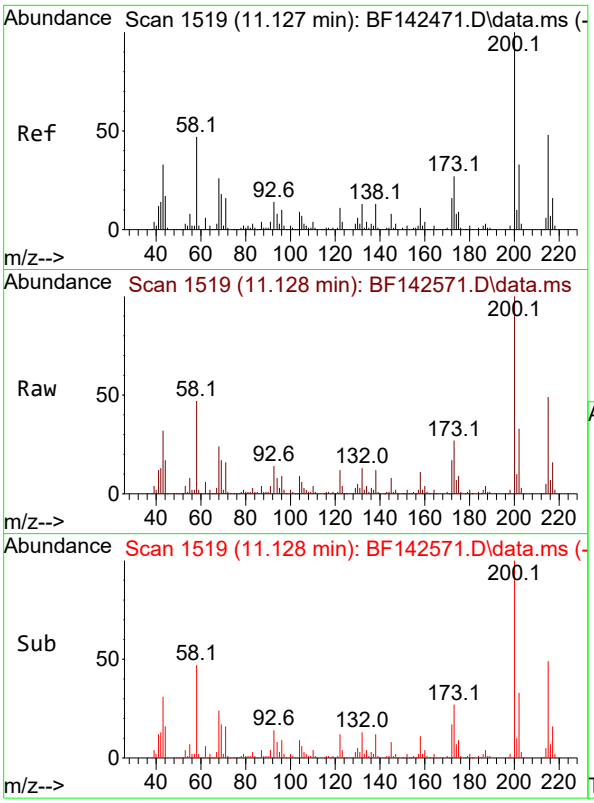


#68
Hexachlorobenzene
Concen: 43.087 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:284 Resp: 213538

Ion	Ratio	Lower	Upper
284	100		
142	29.7	24.8	37.2
249	29.1	23.6	35.4



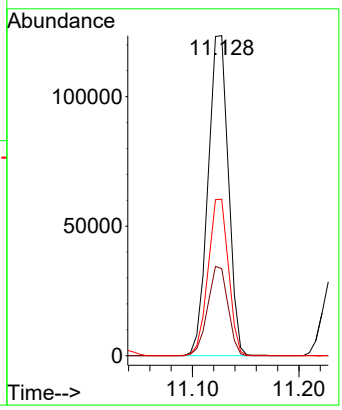


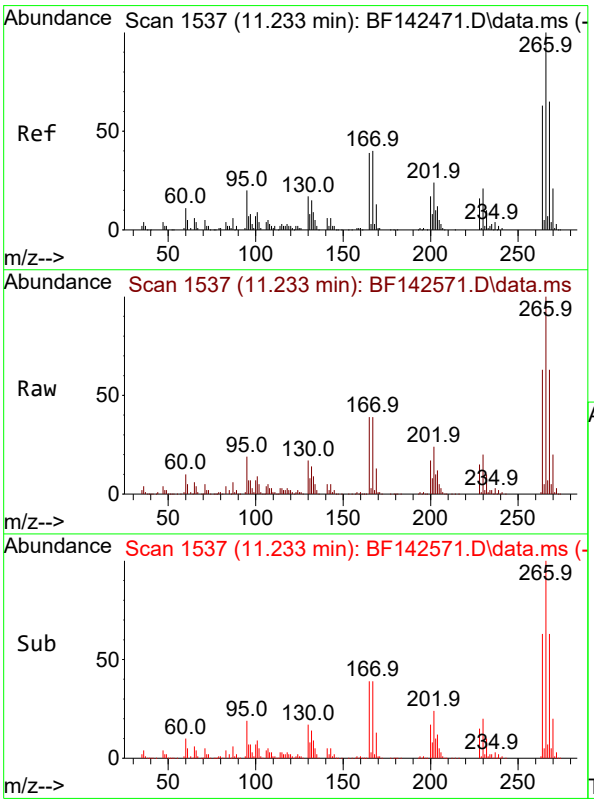
#69
Atrazine
Concen: 47.696 ng
RT: 11.128 min Scan# 1
Delta R.T. 0.001 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:200 Resp: 164223

Ion	Ratio	Lower	Upper
200	100		
173	27.2	7.4	47.4
215	48.9	28.5	68.5

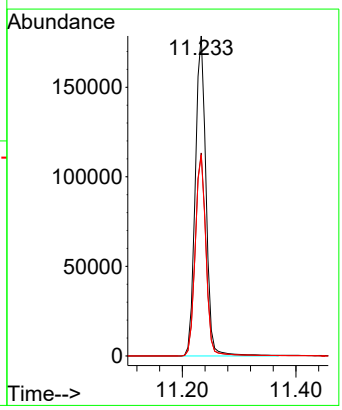


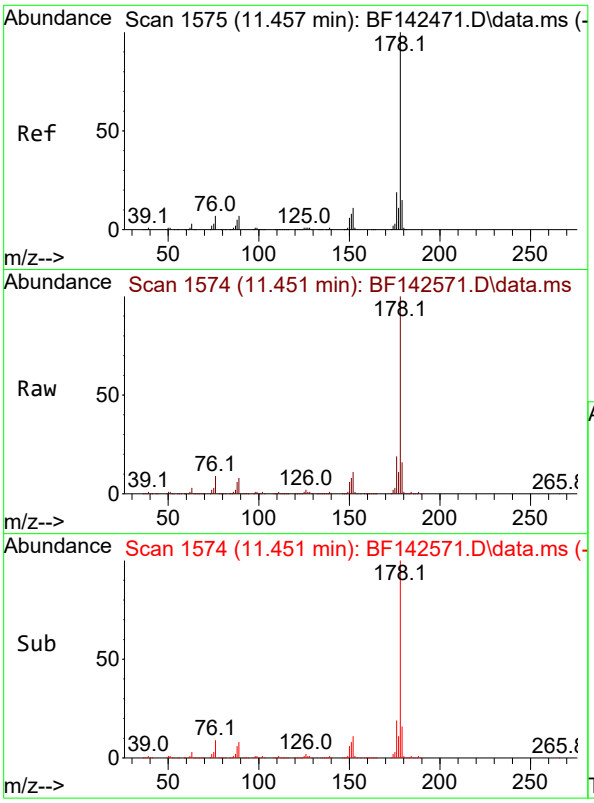


#70
Pentachlorophenol
Concen: 84.200 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:266 Resp: 235596

Ion	Ratio	Lower	Upper
266	100		
268	63.4	51.7	77.5
264	62.8	50.4	75.6



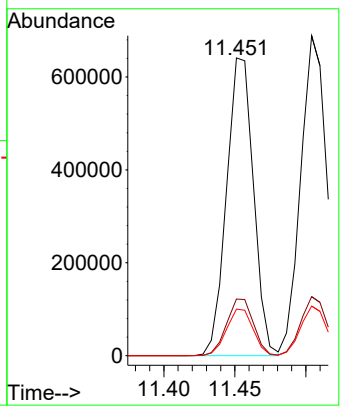


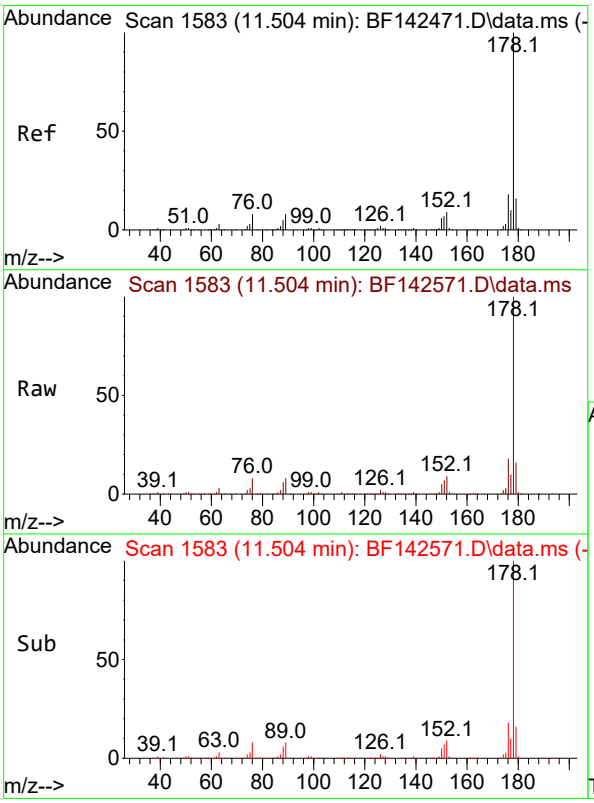
#71
Phenanthrene
Concen: 41.839 ng
RT: 11.451 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:178 Resp: 847323

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.4	23.0
179	15.7	12.3	18.5

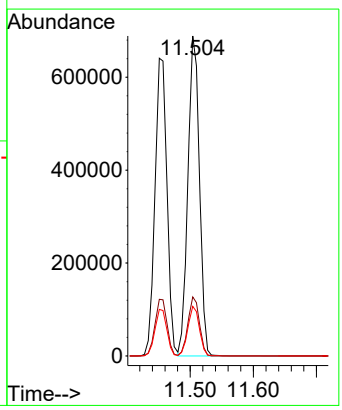


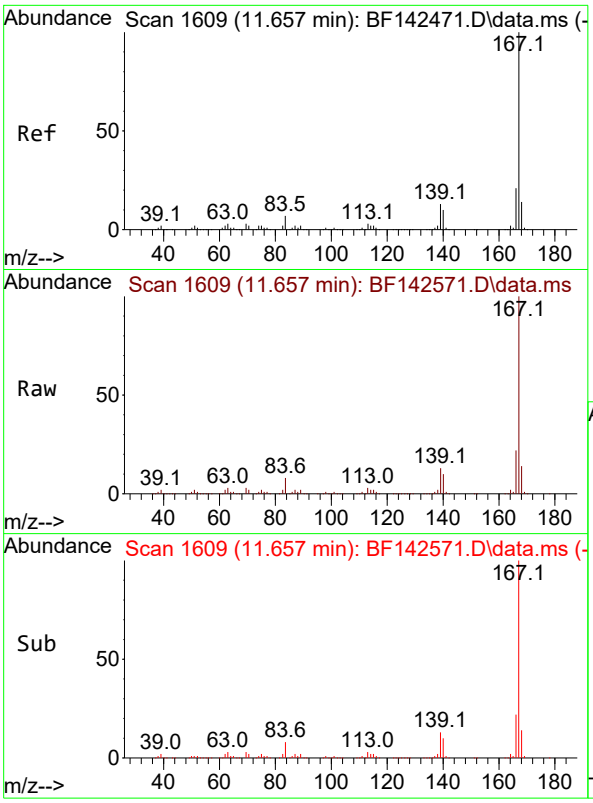


#72
Anthracene
Concen: 42.374 ng
RT: 11.504 min Scan# 1583
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:178 Resp: 875823

Ion	Ratio	Lower	Upper
178	100		
176	18.4	14.6	21.8
179	15.5	12.4	18.6



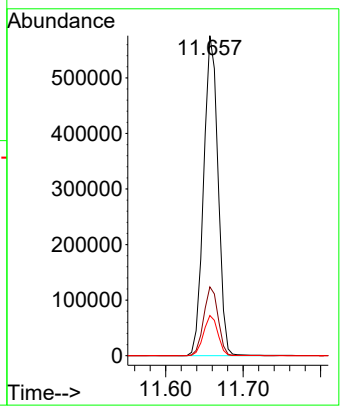


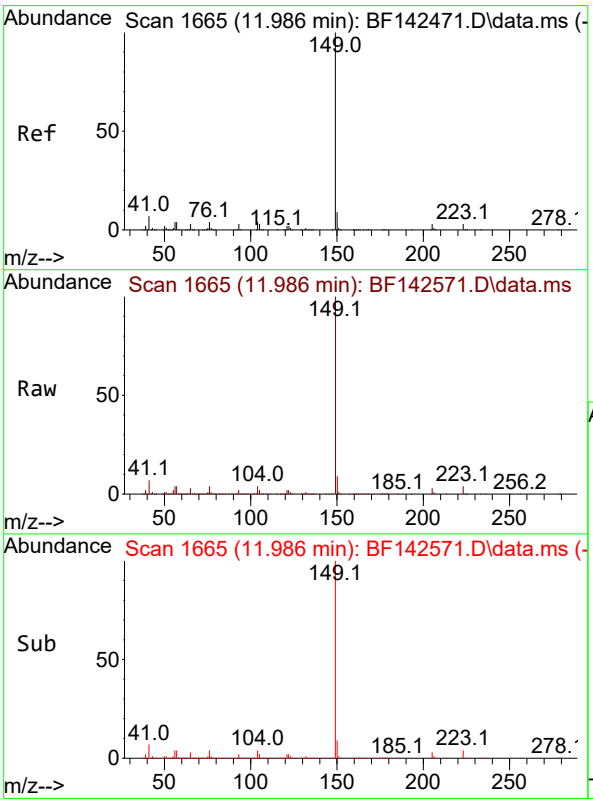
#73
Carbazole
Concen: 42.000 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:167 Resp: 742117

Ion	Ratio	Lower	Upper
167	100		
166	21.5	16.9	25.3
139	12.6	10.2	15.4

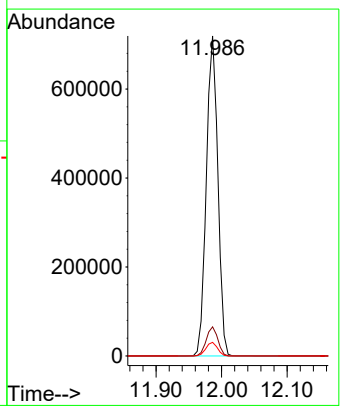


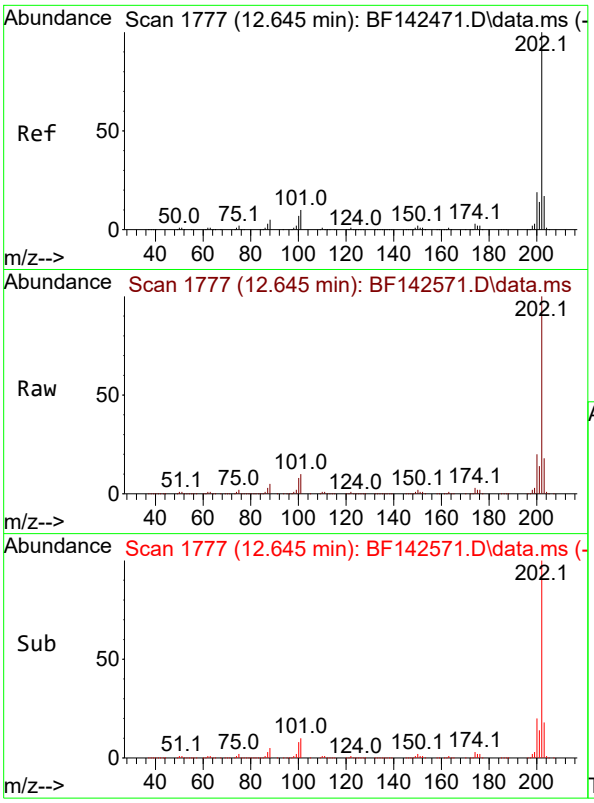


#74
Di-n-butylphthalate
Concen: 45.454 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:149 Resp: 879121

Ion	Ratio	Lower	Upper
149	100		
150	9.1	7.3	10.9
104	4.3	3.6	5.4



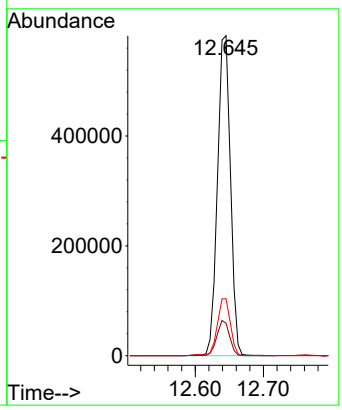


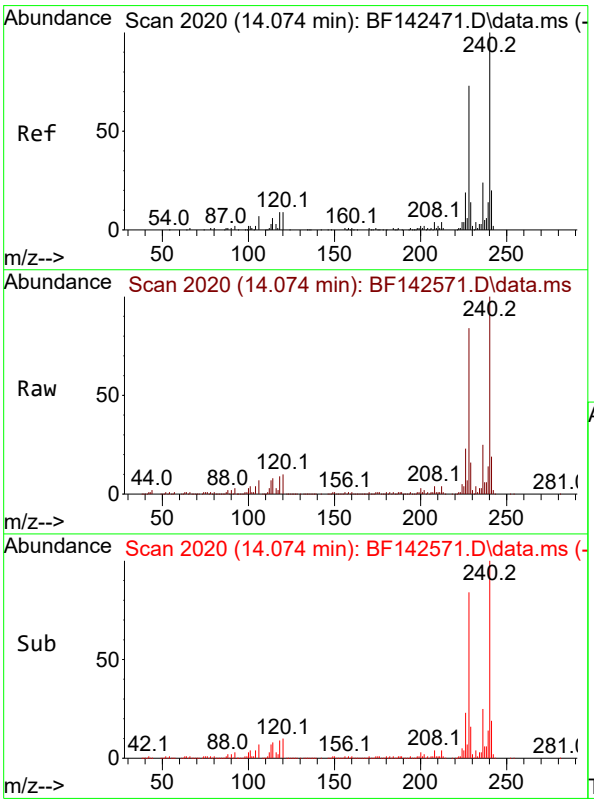
#75
Fluoranthene
Concen: 40.874 ng
RT: 12.645 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:202 Resp: 773487

Ion	Ratio	Lower	Upper
202	100		
101	10.1	0.0	29.6
203	17.8	0.0	37.2

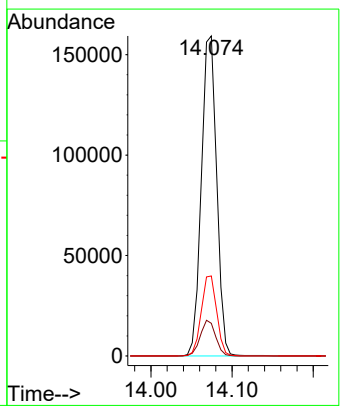


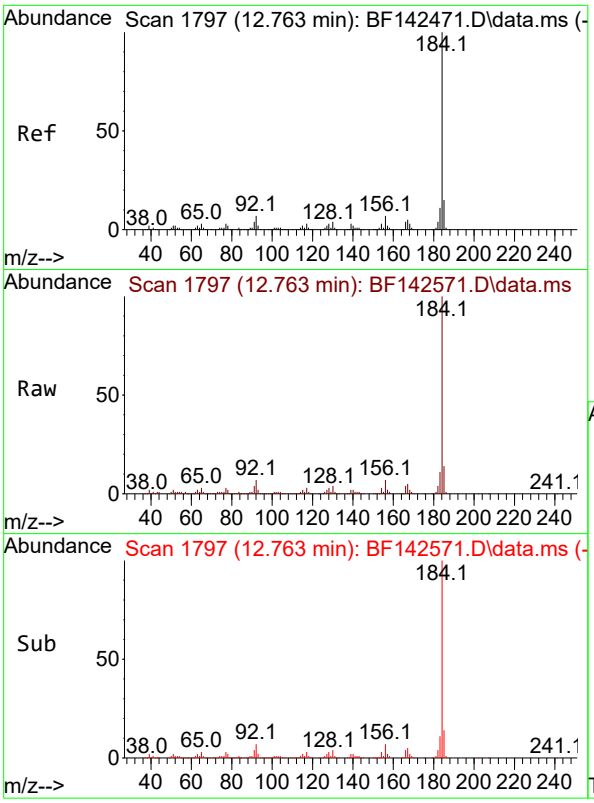


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:240 Resp: 208599

Ion	Ratio	Lower	Upper
240	100		
120	10.2	7.5	11.3
236	25.0	19.6	29.4



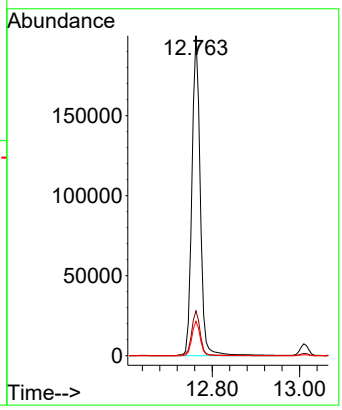


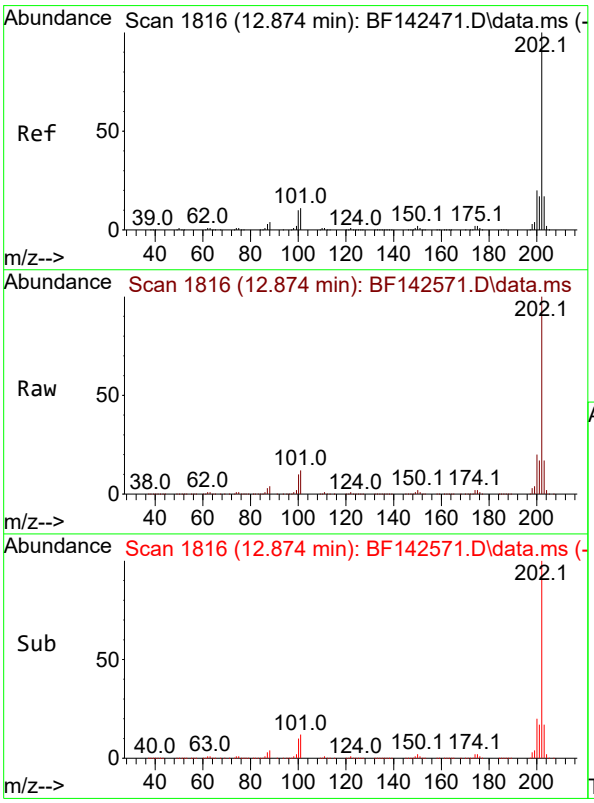
#77
Benzidine
Concen: 34.182 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:184 Resp: 265343

Ion	Ratio	Lower	Upper
184	100		
185	14.0	11.6	17.4
183	10.8	9.0	13.4

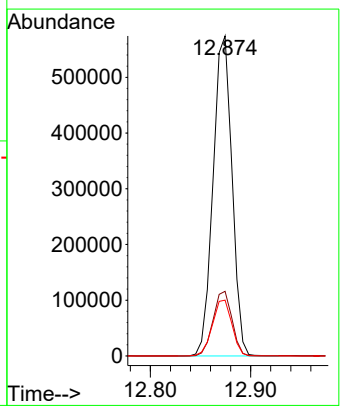


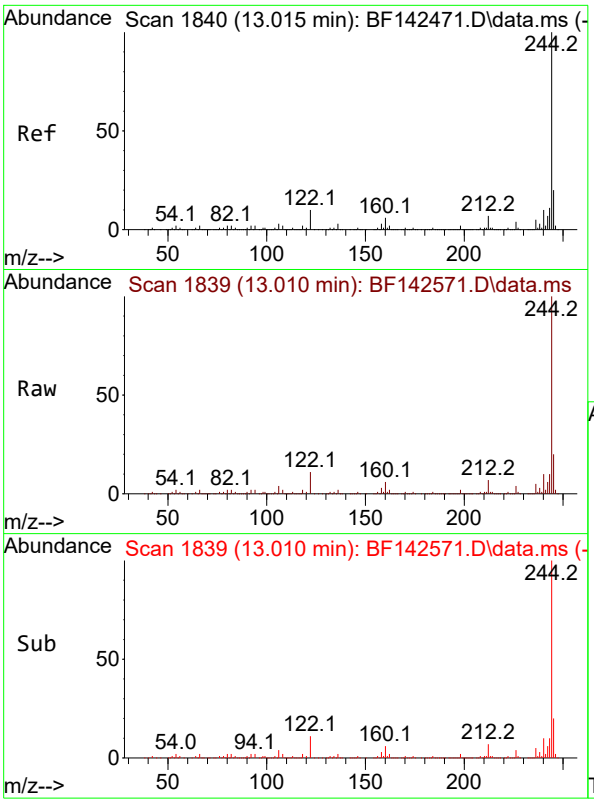


#78
Pyrene
Concen: 38.637 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:202 Resp: 751841

Ion	Ratio	Lower	Upper
202	100		
200	20.2	16.1	24.1
203	17.5	13.9	20.9



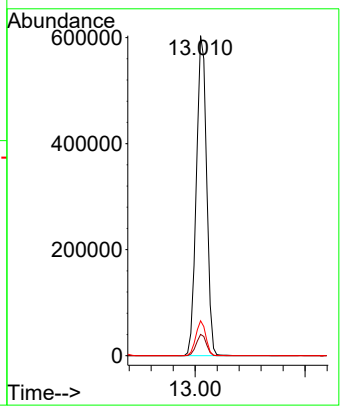


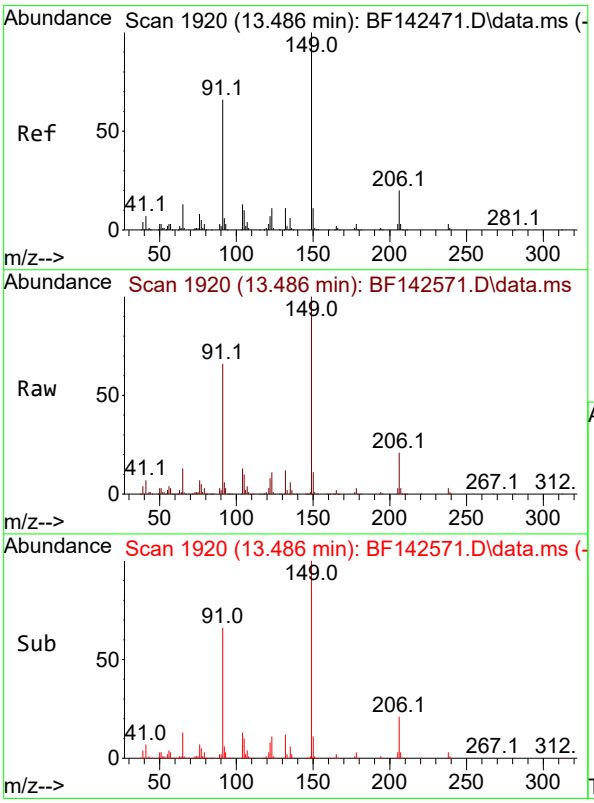
#79
Terphenyl-d14
Concen: 51.321 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:244 Resp: 783393

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.3	7.9
122	10.9	8.2	12.2

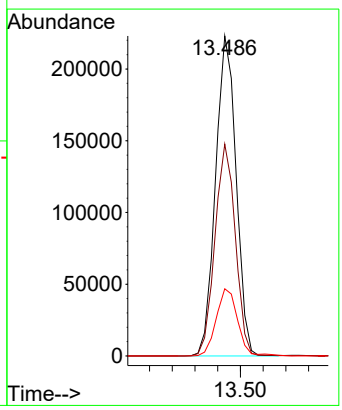


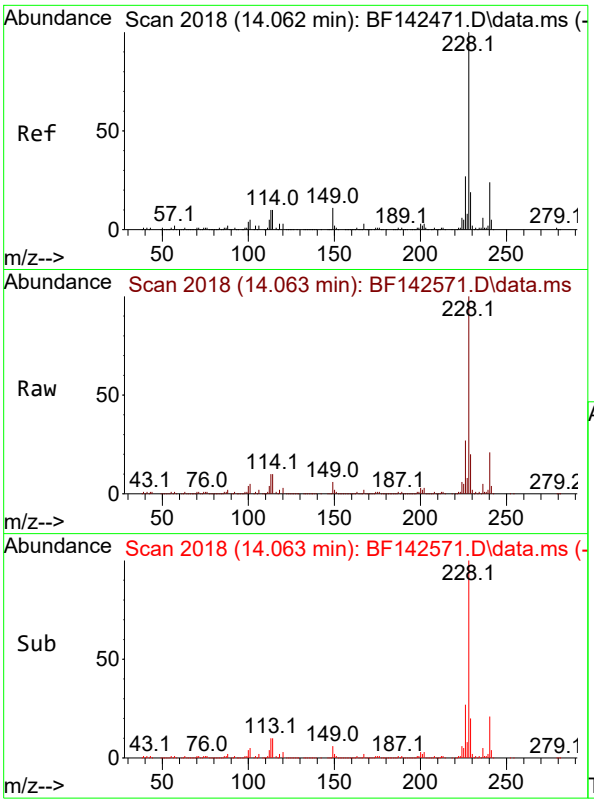


#80
Butylbenzylphthalate
Concen: 52.203 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:149 Resp: 280690

Ion	Ratio	Lower	Upper
149	100		
91	66.2	52.9	79.3
206	21.0	16.2	24.2



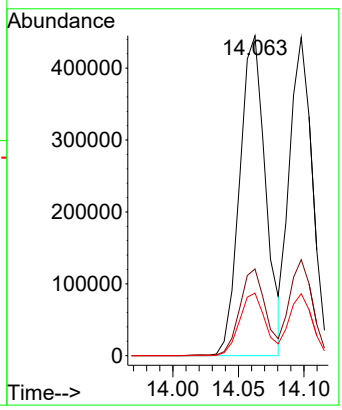


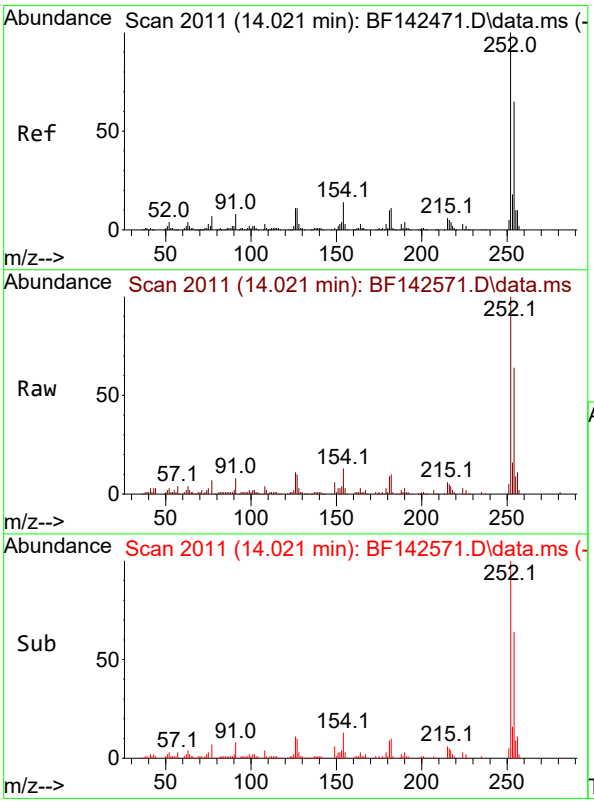
#81
Benzo(a)anthracene
Concen: 44.000 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:228 Resp: 612892

Ion	Ratio	Lower	Upper
228	100		
226	27.1	21.2	31.8
229	19.5	15.5	23.3

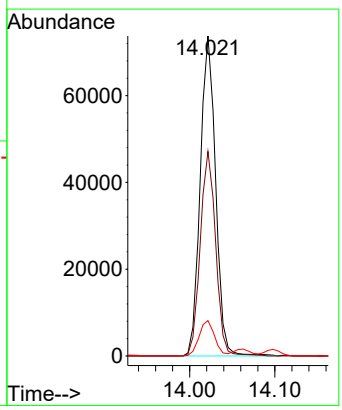


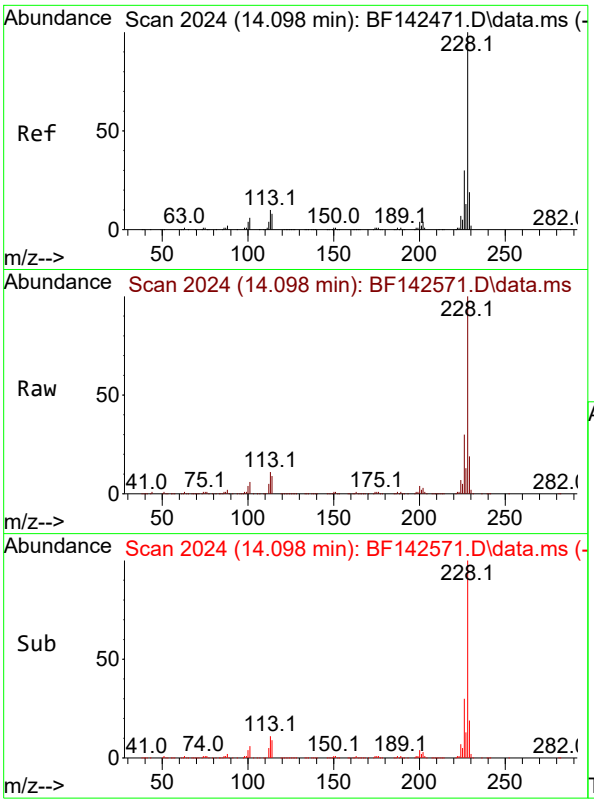


#82
3,3'-Dichlorobenzidine
Concen: 21.898 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:252 Resp: 92517

Ion	Ratio	Lower	Upper
252	100		
254	63.9	52.0	78.0
126	11.1	8.9	13.3



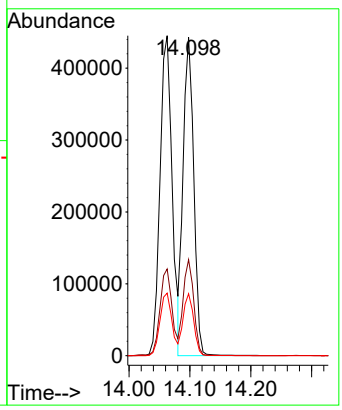


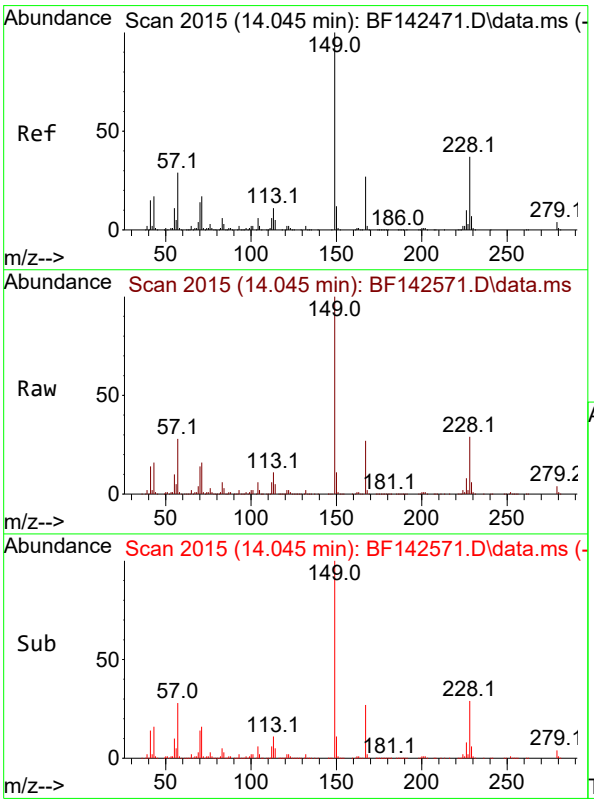
#83
Chrysene
Concen: 42.835 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:228 Resp: 536134

Ion	Ratio	Lower	Upper
228	100		
226	30.2	23.8	35.6
229	19.5	15.4	23.2

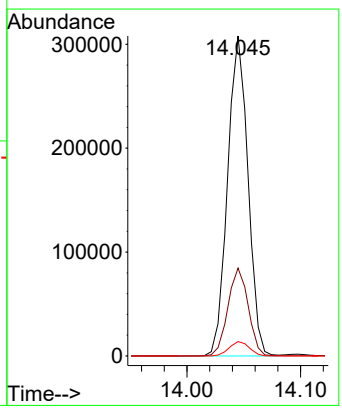


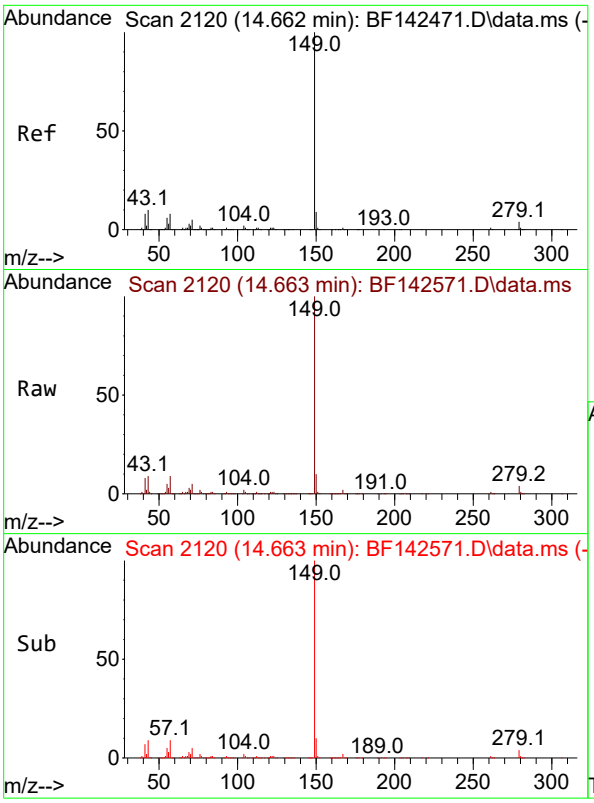


#84
Bis(2-ethylhexyl)phthalate
Concen: 55.668 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:149 Resp: 383177

Ion	Ratio	Lower	Upper
149	100		
167	27.4	21.5	32.3
279	4.5	3.2	4.8



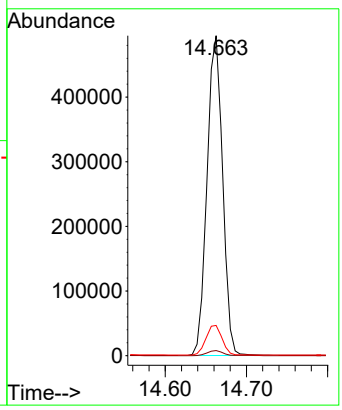


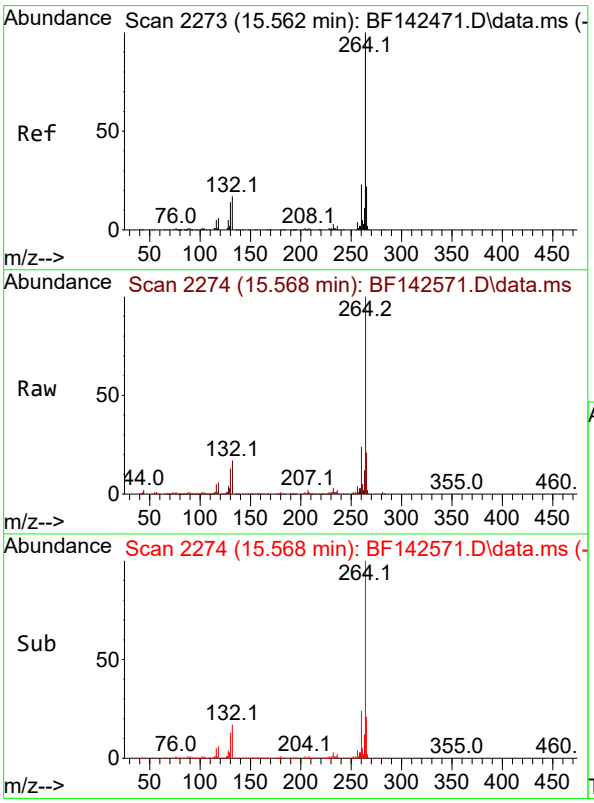
#85
Di-n-octyl phthalate
Concen: 48.965 ng
RT: 14.663 min Scan# 21
Delta R.T. -0.005 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:149 Resp: 659017

Ion	Ratio	Lower	Upper
149	100		
167	1.7	1.2	1.8
43	9.6	7.9	11.9

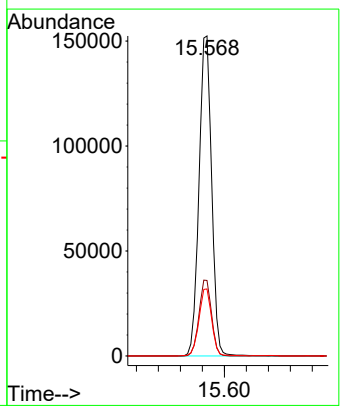


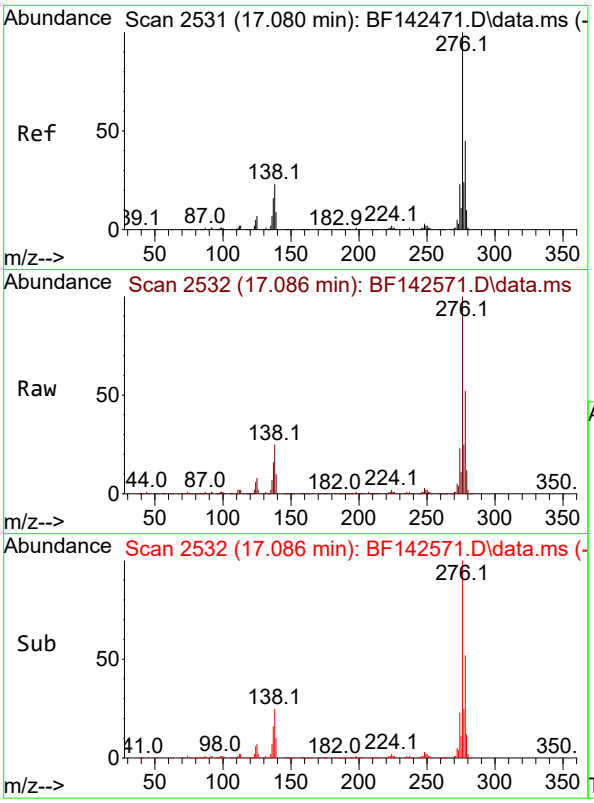


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2274
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:264 Resp: 243037

Ion	Ratio	Lower	Upper
264	100		
260	23.6	18.6	28.0
265	20.9	17.7	26.5



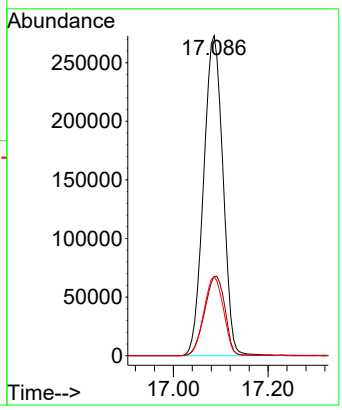


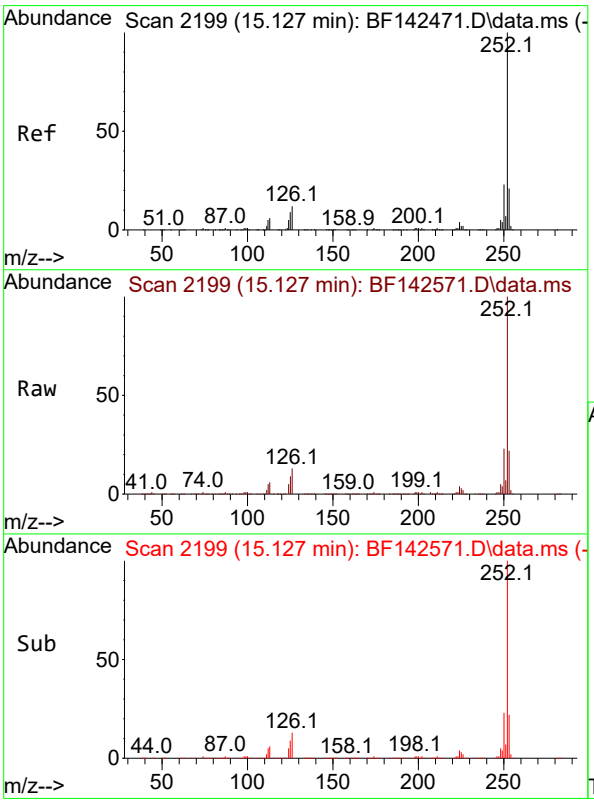
#87
Indeno(1,2,3-cd)pyrene
Concen: 42.419 ng
RT: 17.086 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:276 Resp: 773974

Ion	Ratio	Lower	Upper
276	100		
138	26.4	19.9	29.9
277	25.2	20.2	30.2

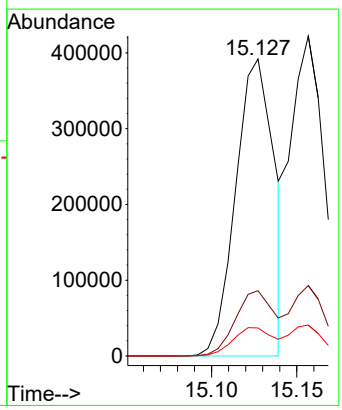


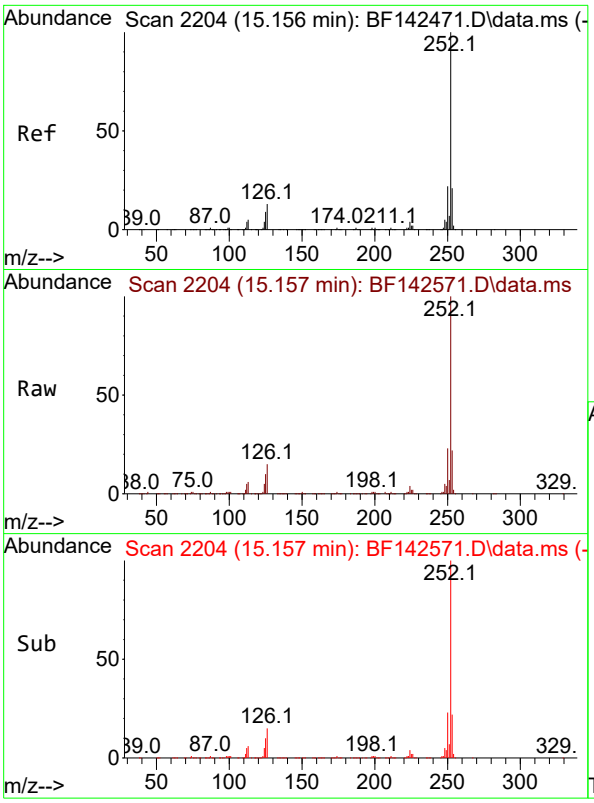


#88
Benzo(b)fluoranthene
Concen: 42.465 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:252 Resp: 610821

Ion	Ratio	Lower	Upper
252	100		
253	22.0	17.0	25.4
125	9.4	7.4	11.0



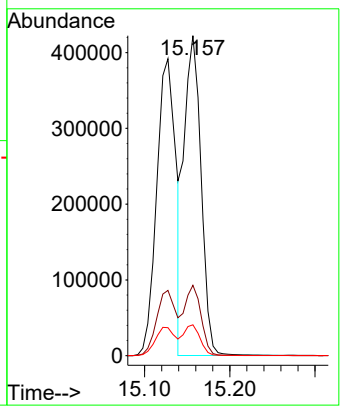


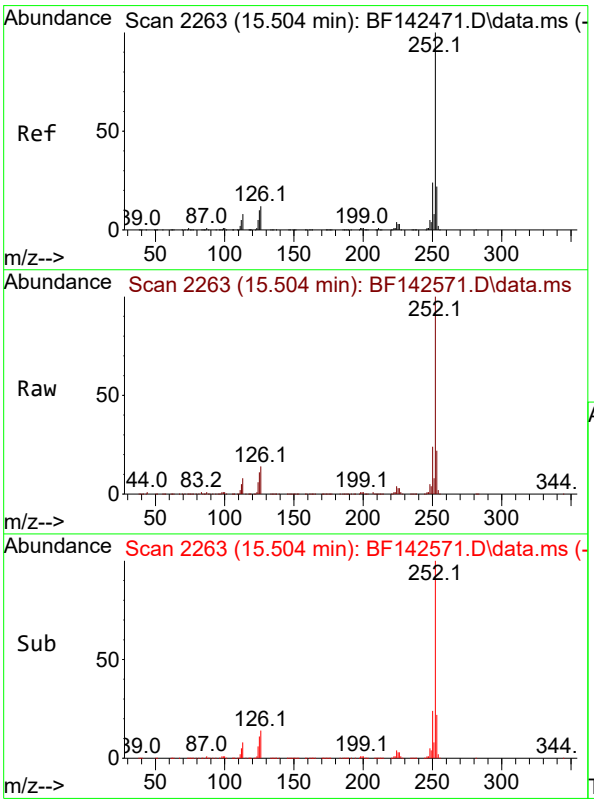
#89
Benzo(k)fluoranthene
Concen: 43.147 ng
RT: 15.157 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:252 Resp: 581284

Ion	Ratio	Lower	Upper
252	100		
253	22.0	17.0	25.4
125	9.7	7.3	10.9

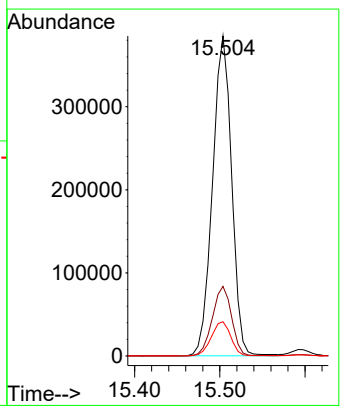


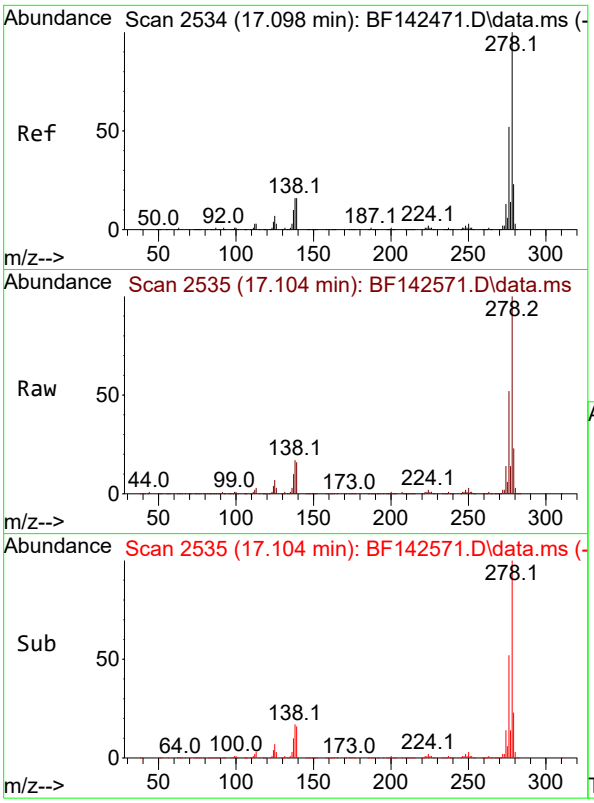


#90
Benzo(a)pyrene
Concen: 44.312 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:252 Resp: 600806

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.4	26.0
125	10.7	7.9	11.9



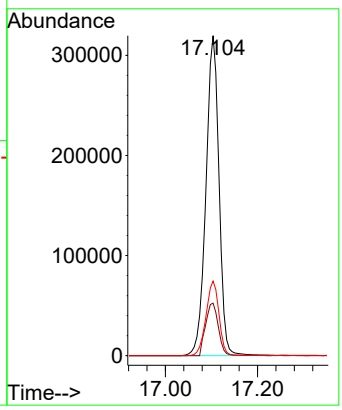


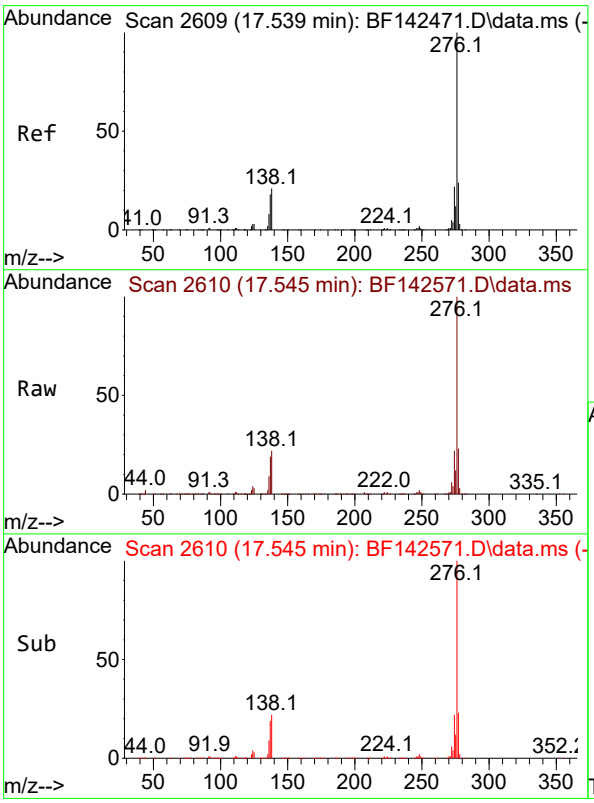
#91
Dibenzo(a,h)anthracene
Concen: 42.855 ng
RT: 17.104 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Instrument :
BNA_F
ClientSampleId :
TP-54MS

Tgt Ion:278 Resp: 634178

Ion	Ratio	Lower	Upper
278	100		
139	16.4	12.8	19.2
279	23.3	18.6	28.0

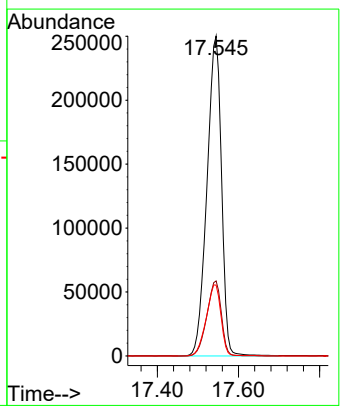




#92
Benzo(g,h,i)perylene
Concen: 41.838 ng
RT: 17.545 min Scan# 2610
Delta R.T. -0.012 min
Lab File: BF142571.D
Acq: 30 May 2025 15:50

Tgt Ion:276 Resp: 619254

Ion	Ratio	Lower	Upper
276	100		
277	23.4	19.2	28.8
138	22.1	16.8	25.2



Raw Data: **BF142572.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54MSD	SDG No.:	Q2150
Lab Sample ID:	Q2150-09MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142572.D	1	05/30/25 09:50	05/30/25 16:19	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1500		190	390	ug/Kg
108-95-2	Phenol	1700		26.4	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1700		29.0	200	ug/Kg
95-57-8	2-Chlorophenol	1700		29.1	200	ug/Kg
95-48-7	2-Methylphenol	1700		35.7	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1700		44.8	200	ug/Kg
98-86-2	Acetophenone	1700		35.2	200	ug/Kg
65794-96-9	3+4-Methylphenols	1600		49.1	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1600		56.6	95.6	ug/Kg
67-72-1	Hexachloroethane	1700		21.0	200	ug/Kg
98-95-3	Nitrobenzene	1700		21.9	200	ug/Kg
78-59-1	Isophorone	1700		39.2	200	ug/Kg
88-75-5	2-Nitrophenol	1800		69.5	200	ug/Kg
105-67-9	2,4-Dimethylphenol	1700		77.4	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1700		36.8	200	ug/Kg
120-83-2	2,4-Dichlorophenol	1700		33.8	200	ug/Kg
91-20-3	Naphthalene	1700		27.1	200	ug/Kg
106-47-8	4-Chloroaniline	400		42.3	200	ug/Kg
87-68-3	Hexachlorobutadiene	1700		30.2	200	ug/Kg
105-60-2	Caprolactam	1900		62.2	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1700		34.3	200	ug/Kg
91-57-6	2-Methylnaphthalene	1600		30.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3200	E	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1800		23.7	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1700		34.8	200	ug/Kg
92-52-4	1,1-Biphenyl	1700		26.0	200	ug/Kg
91-58-7	2-Chloronaphthalene	1700		26.9	200	ug/Kg
88-74-4	2-Nitroaniline	1700		57.5	200	ug/Kg
131-11-3	Dimethylphthalate	1700		32.4	200	ug/Kg

Raw Data: **BF142572.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54MSD	SDG No.:	Q2150
Lab Sample ID:	Q2150-09MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142572.D	1	05/30/25 09:50	05/30/25 16:19	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1700		34.5	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	1800		40.1	200	ug/Kg
99-09-2	3-Nitroaniline	750		55.0	200	ug/Kg
83-32-9	Acenaphthene	1900		25.4	200	ug/Kg
51-28-5	2,4-Dinitrophenol	3800	E	270	390	ug/Kg
100-02-7	4-Nitrophenol	3500	E	130	390	ug/Kg
132-64-9	Dibenzofuran	1700		27.1	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	1800		59.8	200	ug/Kg
84-66-2	Diethylphthalate	1700		33.8	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1700		31.9	200	ug/Kg
86-73-7	Fluorene	1700		30.2	200	ug/Kg
100-01-6	4-Nitroaniline	1700		76.7	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1900		120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1700		39.3	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1700		33.2	200	ug/Kg
118-74-1	Hexachlorobenzene	1700		30.2	200	ug/Kg
1912-24-9	Atrazine	1900		40.6	200	ug/Kg
87-86-5	Pentachlorophenol	3400	E	61.3	390	ug/Kg
85-01-8	Phenanthrene	1700		25.0	200	ug/Kg
120-12-7	Anthracene	1700		39.8	200	ug/Kg
86-74-8	Carbazole	1700		37.3	200	ug/Kg
84-74-2	Di-n-butylphthalate	1900		57.2	200	ug/Kg
206-44-0	Fluoranthene	1700		35.8	200	ug/Kg
129-00-0	Pyrene	1600		43.0	200	ug/Kg
85-68-7	Butylbenzylphthalate	2200		85.3	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	860		43.8	390	ug/Kg
56-55-3	Benzo(a)anthracene	1700		27.5	200	ug/Kg
218-01-9	Chrysene	1800		23.8	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	2200		70.7	200	ug/Kg
117-84-0	Di-n-octyl phthalate	1900		100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	1700		22.7	200	ug/Kg

Raw Data: **BF142572.D**

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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/28/25
Project:	South River WM Replacement	Date Received:	05/28/25
Client Sample ID:	TP-54MSD	SDG No.:	Q2150
Lab Sample ID:	Q2150-09MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	83.6
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142572.D	1	05/30/25 09:50	05/30/25 16:19	PB168211

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1800		26.8	200	ug/Kg
50-32-8	Benzo(a)pyrene	1800		35.2	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1700		34.8	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1700		32.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1700		30.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1800		30.6	200	ug/Kg
123-91-1	1,4-Dioxane	1500		54.0	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1700		32.7	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	88.2		18 - 112	59%	SPK: 150
13127-88-3	Phenol-d6	90.6		15 - 107	60%	SPK: 150
4165-60-0	Nitrobenzene-d5	55.6		18 - 107	56%	SPK: 100
321-60-8	2-Fluorobiphenyl	53.1		20 - 109	53%	SPK: 100
118-79-6	2,4,6-Tribromophenol	94.6		10 - 116	63%	SPK: 150
1718-51-0	Terphenyl-d14	52.7		10 - 105	53%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	120000	6.898			
1146-65-2	Naphthalene-d8	452000	8.187			
15067-26-2	Acenaphthene-d10	234000	9.939			
1517-22-2	Phenanthrene-d10	377000	11.428			
1719-03-5	Chrysene-d12	204000	14.074			
1520-96-3	Perylene-d12	235000	15.568			

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_F\Data\BF053025\
Data File : BF142572.D
Acq On : 30 May 2025 16:19
Operator : RC/JU
Sample : Q2150-09MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Quant Time: May 30 17:25:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.898	152	119675	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	451884	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	233525	20.000	ng	0.00
64) Phenanthrene-d10	11.428	188	376587	20.000	ng	0.00
76) Chrysene-d12	14.074	240	204232	20.000	ng	0.00
86) Perylene-d12	15.568	264	234981	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.522	112	626206	88.156	ng	0.00
7) Phenol-d6	6.528	99	774467	90.572	ng	0.00
23) Nitrobenzene-d5	7.463	82	460687	55.591	ng	-0.01
42) 2,4,6-Tribromophenol	10.733	330	245306	94.646	ng	0.00
45) 2-Fluorobiphenyl	9.257	172	923939	53.091	ng	-0.01
79) Terphenyl-d14	13.010	244	787087	52.665	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.746	88	107868	37.948	ng	99
3) Pyridine	3.504	79	294169	40.639	ng	99
4) n-Nitrosodimethylamine	3.457	42	158199	42.092	ng	94
6) Aniline	6.563	93	315467	27.438	ng	100
8) 2-Chlorophenol	6.681	128	330816	42.757	ng	98
9) Benzaldehyde	6.451	77	188917	36.733	ng	99
10) Phenol	6.540	94	399774	41.550	ng	99
11) bis(2-Chloroethyl)ether	6.634	93	297241	42.917	ng	99
12) 1,3-Dichlorobenzene	6.840	146	361346	41.854	ng	99
13) 1,4-Dichlorobenzene	6.916	146	360999	41.510	ng	99
14) 1,2-Dichlorobenzene	7.069	146	352553	42.366	ng	99
15) Benzyl Alcohol	7.040	79	264525	41.862	ng	97
16) 2,2'-oxybis(1-Chloropr...	7.169	45	487250	41.893	ng	97
17) 2-Methylphenol	7.151	107	254267	42.092	ng	100
18) Hexachloroethane	7.410	117	126375	41.616	ng	98
19) n-Nitroso-di-n-propyla...	7.310	70	213930	40.369	ng	99
20) 3+4-Methylphenols	7.304	107	316160	40.870	ng	96
22) Acetophenone	7.310	105	422319	42.218	ng	99
24) Nitrobenzene	7.481	77	322834	43.193	ng	100
25) Isophorone	7.722	82	577626	41.690	ng	98
26) 2-Nitrophenol	7.798	139	179840	45.031	ng	96
27) 2,4-Dimethylphenol	7.834	122	305712	43.407	ng	98
28) bis(2-Chloroethoxy)met...	7.928	93	370438	42.800	ng	99
29) 2,4-Dichlorophenol	8.039	162	272520	42.548	ng	99
30) 1,2,4-Trichlorobenzene	8.122	180	297632	42.817	ng	98
31) Naphthalene	8.204	128	949483	42.672	ng	100
32) Benzoic acid	7.951	122	192119	44.812	ng	95
33) 4-Chloroaniline	8.251	127	90517	10.040	ng	98
34) Hexachlorobutadiene	8.322	225	182076	41.950	ng	99
35) Caprolactam	8.622	113	85172m	47.347	ng	
36) 4-Chloro-3-methylphenol	8.734	107	272050	41.445	ng	97
37) 2-Methylnaphthalene	8.898	142	572580	40.904	ng	99
38) 1-Methylnaphthalene	8.998	142	592334	40.908	ng	100
40) 1,2,4,5-Tetrachloroben...	9.063	216	295710	44.113	ng	99
41) Hexachlorocyclopentadiene	9.051	237	367045	81.167	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	199370	44.106	ng	97

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142572.D
Acq On : 30 May 2025 16:19
Operator : RC/JU
Sample : Q2150-09MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Quant Time: May 30 17:25:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration

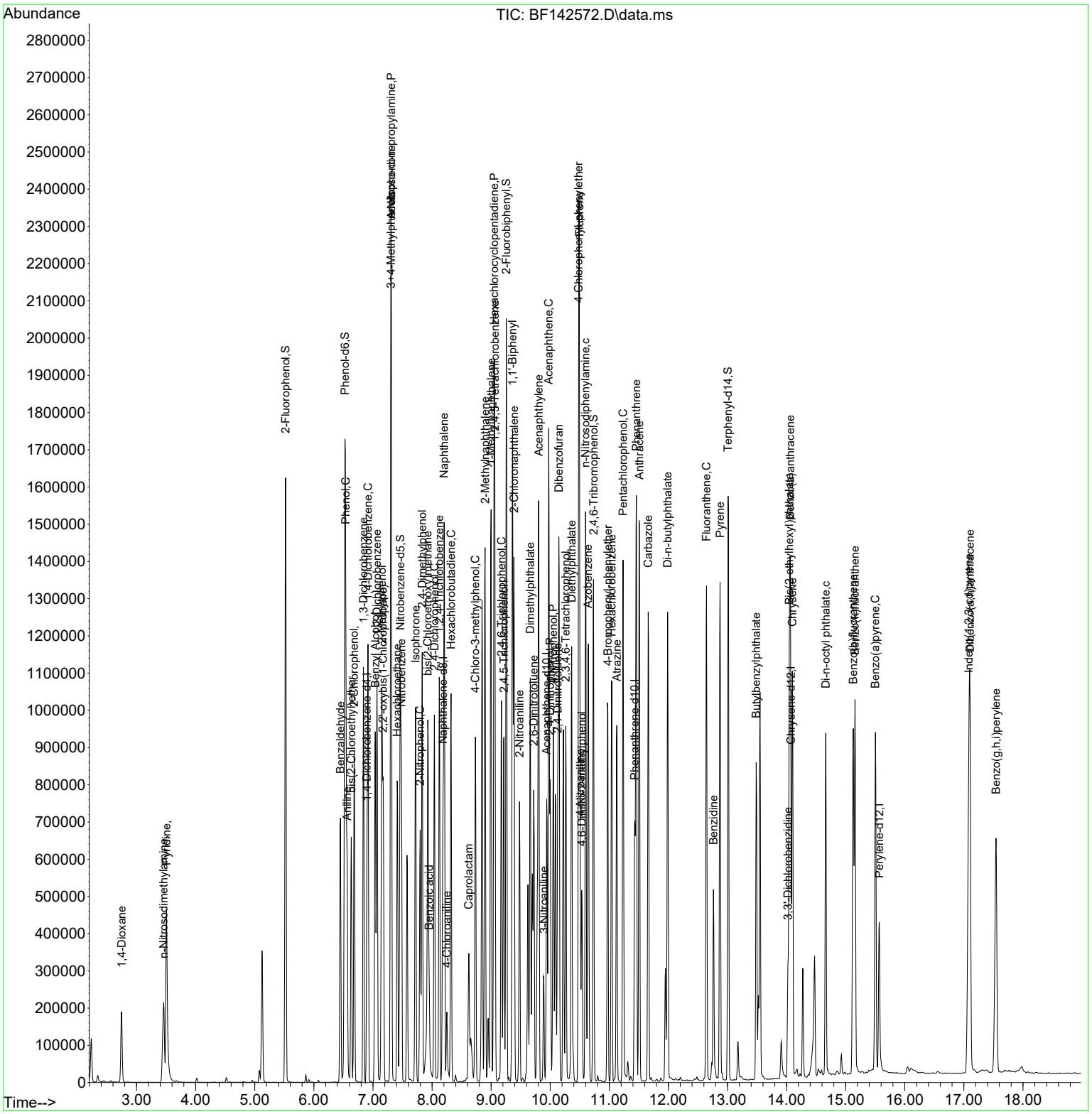
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	206416	43.298	ng		97
46) 1,1'-Biphenyl	9.363	154	782223	43.175	ng		100
47) 2-Chloronaphthalene	9.386	162	580508	43.368	ng		98
48) 2-Nitroaniline	9.481	65	169375	43.777	ng		98
49) Acenaphthylene	9.804	152	966376	42.755	ng		100
50) Dimethylphthalate	9.663	163	663411	43.054	ng		100
51) 2,6-Dinitrotoluene	9.722	165	146601	44.081	ng		99
52) Acenaphthene	9.975	154	647101	46.885	ng		98
53) 3-Nitroaniline	9.892	138	68290	18.800	ng		96
54) 2,4-Dinitrophenol	9.998	184	162358	94.494	ng		93
55) Dibenzofuran	10.145	168	835708	42.078	ng		99
56) 4-Nitrophenol	10.051	139	232388	86.705	ng		98
57) 2,4-Dinitrotoluene	10.128	165	196609	45.268	ng		100
58) Fluorene	10.492	166	644728	42.019	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	166679	41.881	ng		98
60) Diethylphthalate	10.363	149	645000	42.860	ng		99
61) 4-Chlorophenyl-phenyle...	10.480	204	314568	41.734	ng		98
62) 4-Nitroaniline	10.510	138	141101	42.830	ng		96
63) Azobenzene	10.639	77	613439	45.384	ng		99
65) 4,6-Dinitro-2-methylph...	10.533	198	102404	48.726	ng		99
66) n-Nitrosodiphenylamine	10.598	169	558179	43.324	ng		99
67) 4-Bromophenyl-phenylether	10.975	248	192522	43.235	ng		98
68) Hexachlorobenzene	11.039	284	212135	43.073	ng		99
69) Atrazine	11.128	200	166454	48.648	ng		100
70) Pentachlorophenol	11.233	266	236131	84.922	ng		100
71) Phenanthrene	11.457	178	866540	43.057	ng		100
72) Anthracene	11.510	178	876073	42.653	ng		100
73) Carbazole	11.657	167	760532	43.312	ng		100
74) Di-n-butylphthalate	11.986	149	894989	46.565	ng		100
75) Fluoranthene	12.645	202	782953	41.635	ng		99
77) Benzidine	12.763	184	279867	36.824	ng		99
78) Pyrene	12.874	202	777772	40.824	ng		100
80) Butylbenzylphthalate	13.486	149	285871	54.303	ng		100
81) Benzo(a)anthracene	14.063	228	596751	43.758	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	88980	21.511	ng		98
83) Chrysene	14.098	228	538958	43.981	ng		99
84) Bis(2-ethylhexyl)phtha...	14.045	149	378894	56.222	ng		99
85) Di-n-octyl phthalate	14.663	149	640360	48.596	ng	#	100
87) Indeno(1,2,3-cd)pyrene	17.086	276	753995	42.741	ng		99
88) Benzo(b)fluoranthene	15.127	252	582813	41.907	ng		99
89) Benzo(k)fluoranthene	15.157	252	593433	45.559	ng		99
90) Benzo(a)pyrene	15.504	252	584344	44.576	ng		99
91) Dibenzo(a,h)anthracene	17.104	278	611507	42.740	ng		99
92) Benzo(g,h,i)perylene	17.545	276	599741	41.909	ng		98

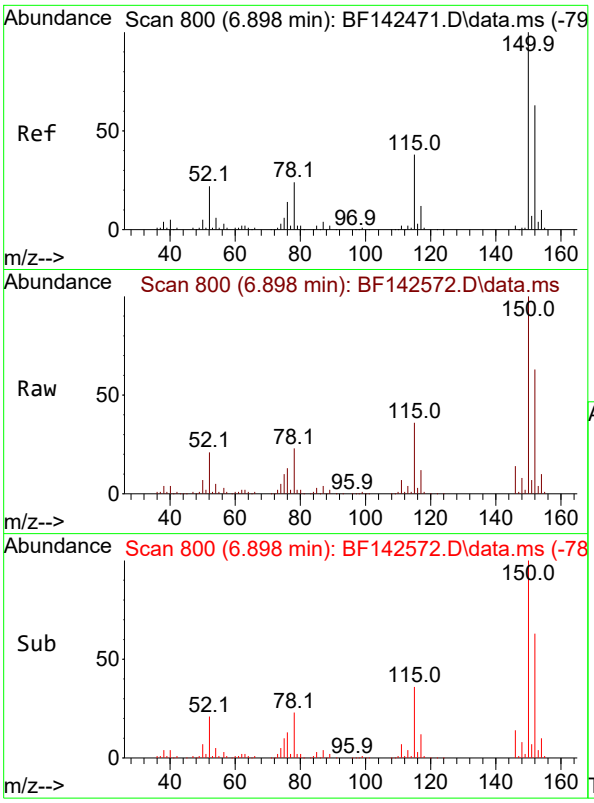
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF053025\
Data File : BF142572.D
Acq On : 30 May 2025 16:19
Operator : RC/JU
Sample : Q2150-09MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Quant Time: May 30 17:25:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF052025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 20 16:26:47 2025
Response via : Initial Calibration



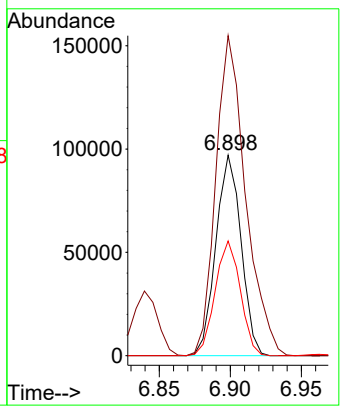


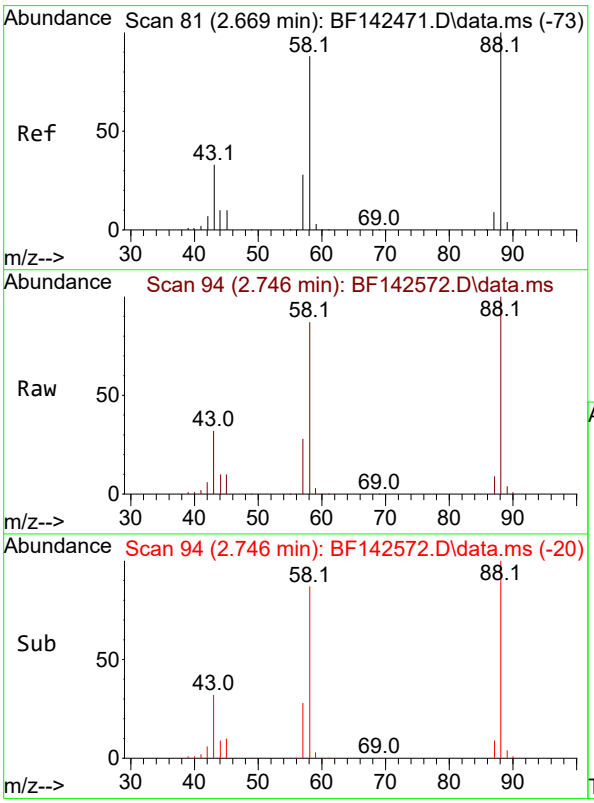
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.898 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:152 Resp: 119675

Ion	Ratio	Lower	Upper
152	100		
150	159.6	128.2	192.4
115	57.2	48.3	72.5

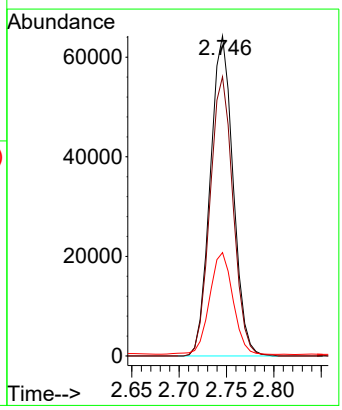


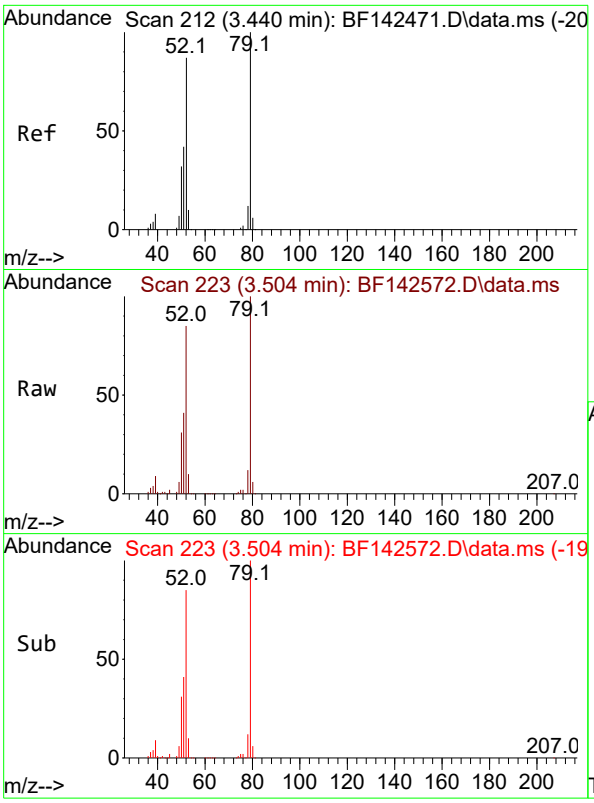


#2
1,4-Dioxane
Concen: 37.948 ng
RT: 2.746 min Scan# 94
Delta R.T. 0.083 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 88 Resp: 107868

Ion	Ratio	Lower	Upper
88	100		
58	87.8	70.8	106.2
43	32.5	26.6	40.0



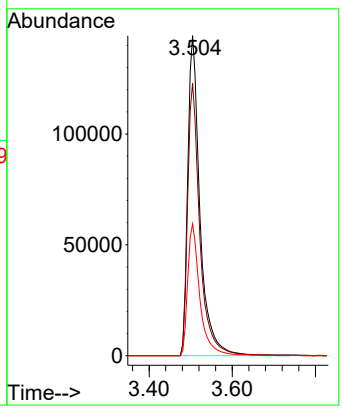


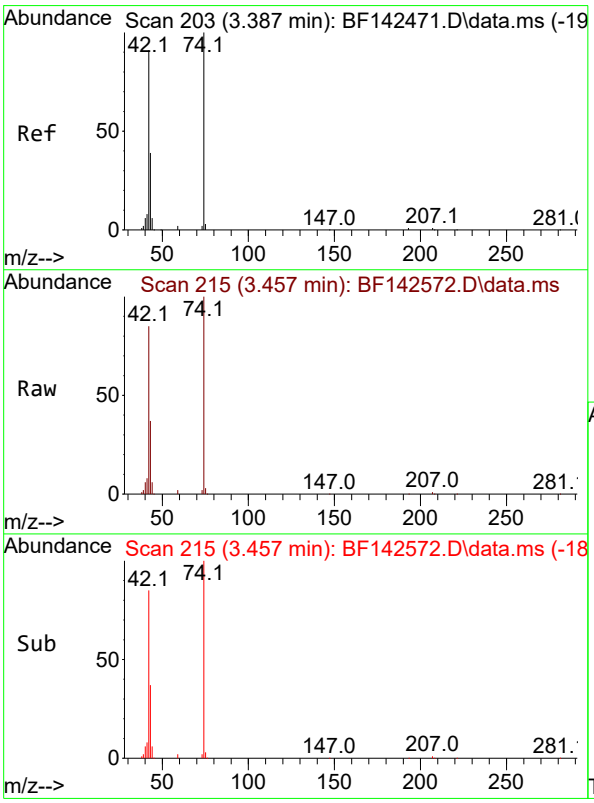
#3
Pyridine
Concen: 40.639 ng
RT: 3.504 min Scan# 2
Delta R.T. 0.065 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 79 Resp: 294169

Ion	Ratio	Lower	Upper
79	100		
52	85.1	69.2	103.8
51	41.2	33.3	49.9

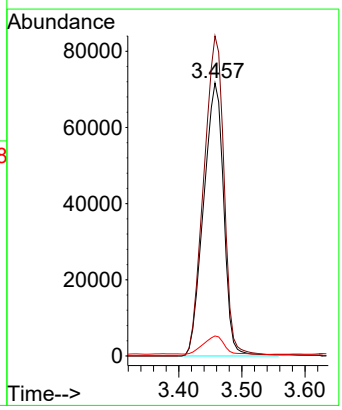


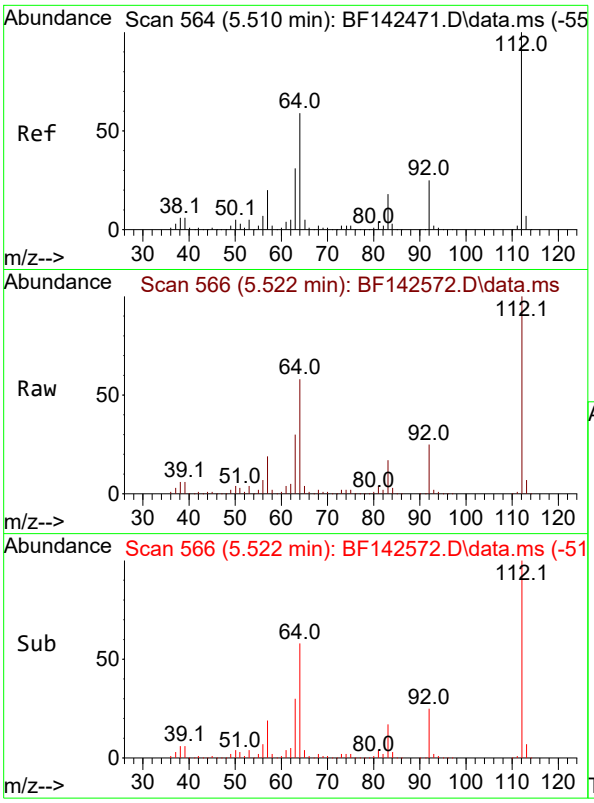


#4
n-Nitrosodimethylamine
Concen: 42.092 ng
RT: 3.457 min Scan# 215
Delta R.T. 0.053 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 42 Resp: 158199

Ion	Ratio	Lower	Upper
42	100		
74	117.2	88.2	132.4
44	7.3	5.4	8.2



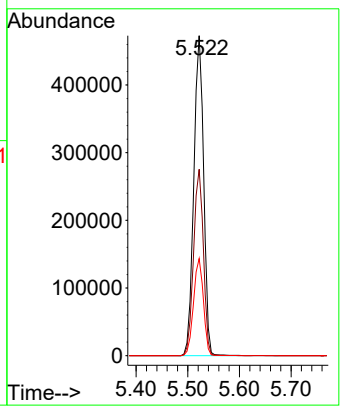


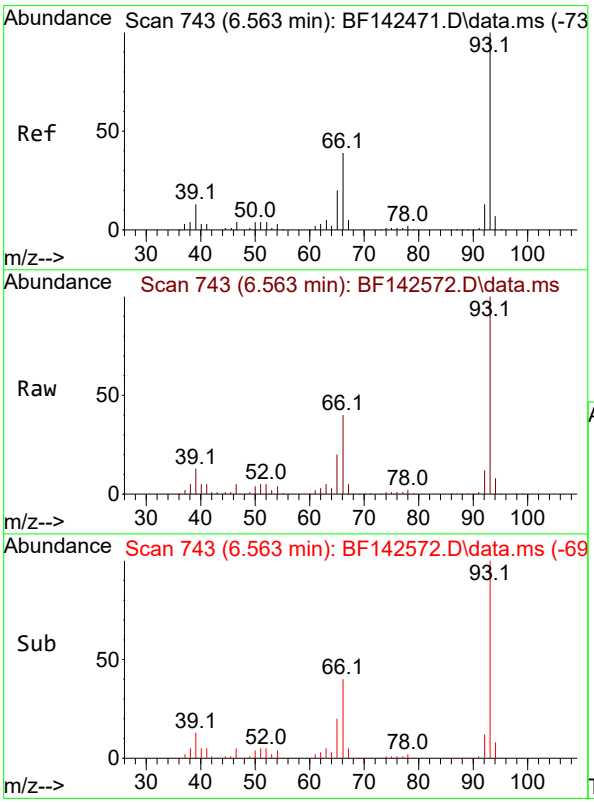
#5
2-Fluorophenol
Concen: 88.156 ng
RT: 5.522 min Scan# 5
Delta R.T. 0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:112 Resp: 626206

Ion	Ratio	Lower	Upper
112	100		
64	58.2	47.5	71.3
63	30.4	24.9	37.3

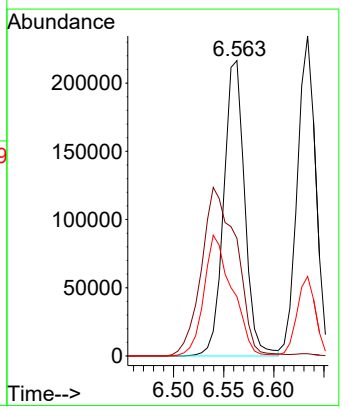


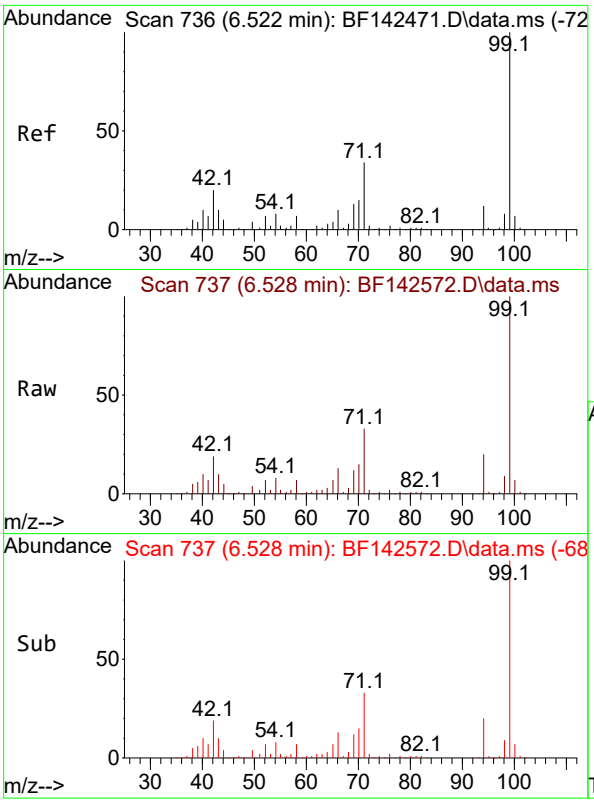


#6
Aniline
Concen: 27.438 ng
RT: 6.563 min Scan# 743
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 93 Resp: 315467

Ion	Ratio	Lower	Upper
93	100		
66	39.8	32.0	48.0
65	20.1	16.1	24.1



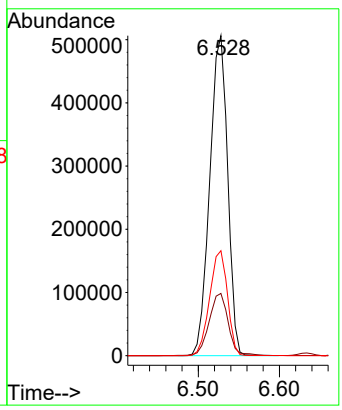


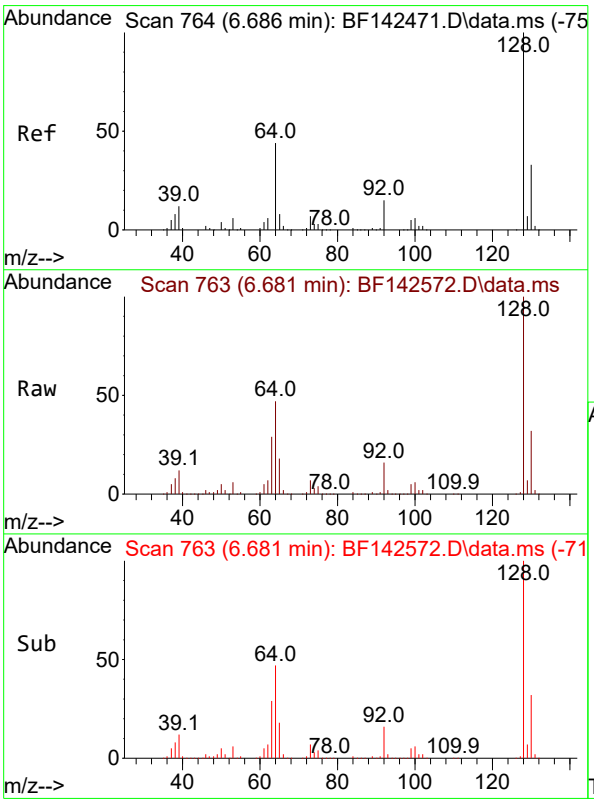
#7
Phenol-d6
Concen: 90.572 ng
RT: 6.528 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 99 Resp: 774467

Ion	Ratio	Lower	Upper
99	100		
42	19.4	16.2	24.2
71	32.8	27.3	40.9

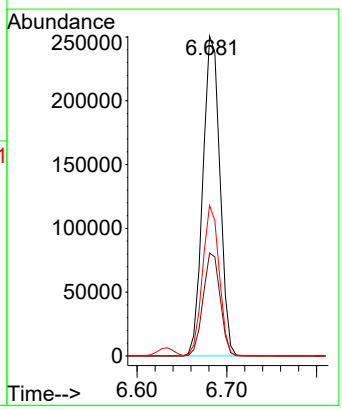


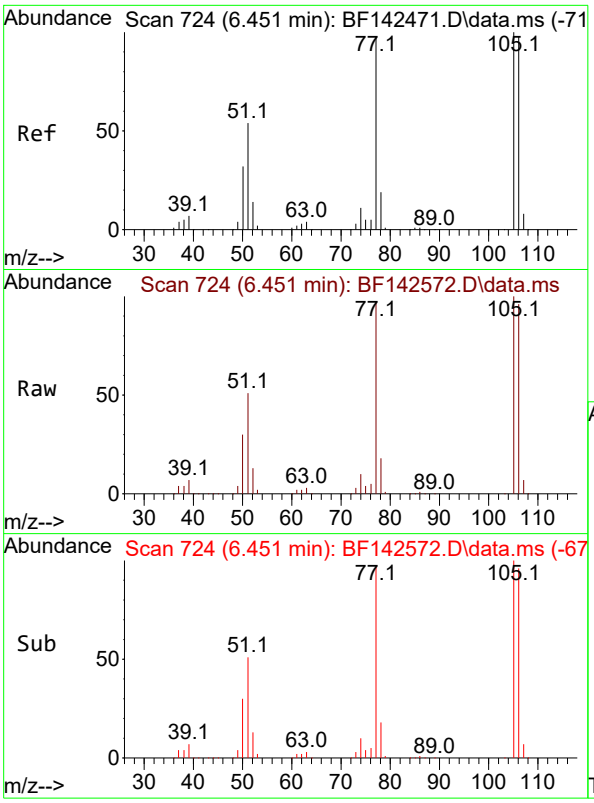


#8
2-Chlorophenol
Concen: 42.757 ng
RT: 6.681 min Scan# 763
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:128 Resp: 330816

Ion	Ratio	Lower	Upper
128	100		
130	32.2	12.6	52.6
64	47.0	25.1	65.1



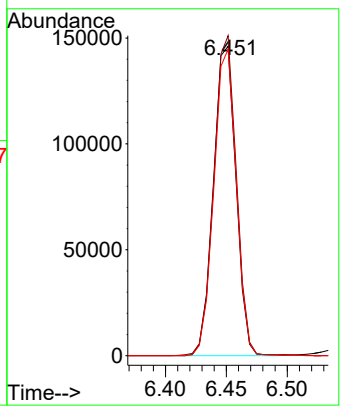


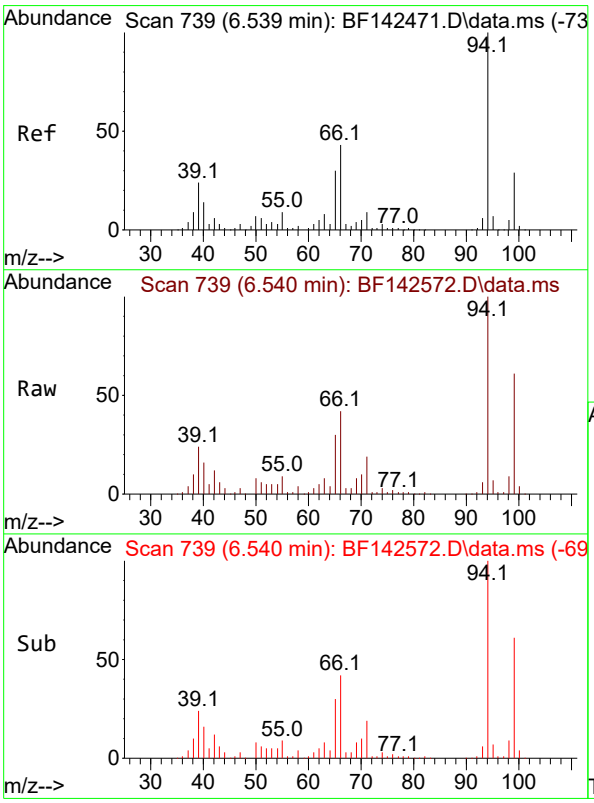
#9
Benzaldehyde
Concen: 36.733 ng
RT: 6.451 min Scan# 7
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 77 Resp: 188917

Ion	Ratio	Lower	Upper
77	100		
105	103.4	82.5	122.5
106	99.0	80.0	120.0

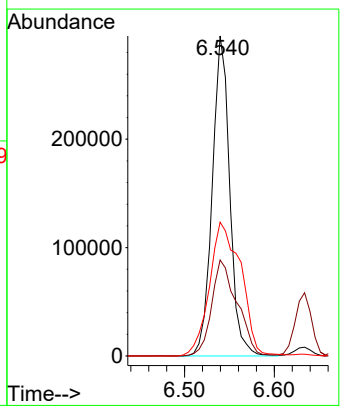


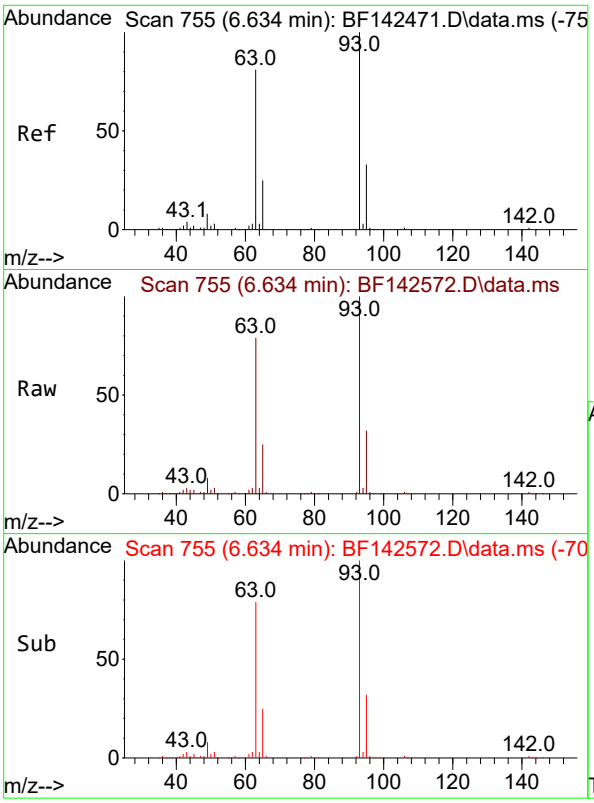


#10
Phenol
Concen: 41.550 ng
RT: 6.540 min Scan# 739
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 94 Resp: 399774

Ion	Ratio	Lower	Upper
94	100		
65	30.0	10.3	50.3
66	41.8	22.6	62.6



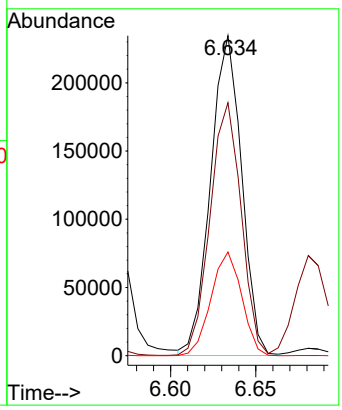


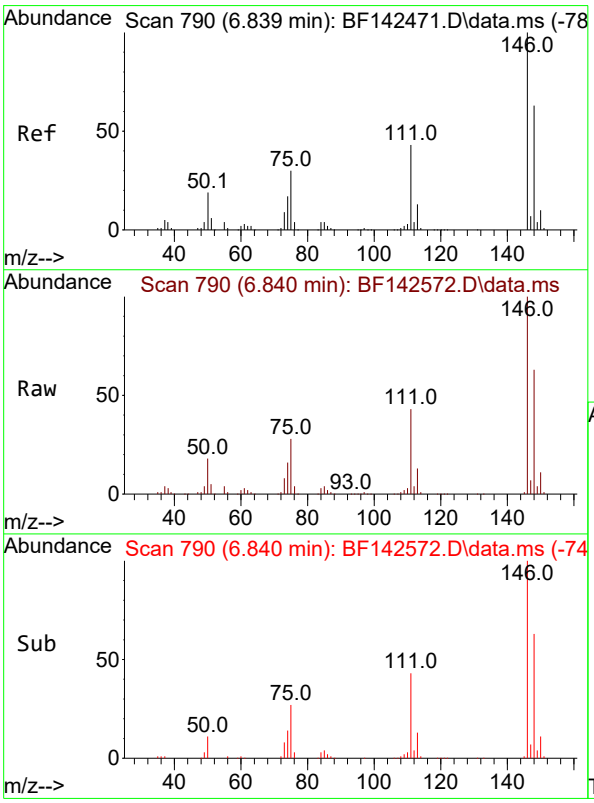
#11
bis(2-Chloroethyl)ether
Concen: 42.917 ng
RT: 6.634 min Scan# 7
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 93 Resp: 297241

Ion	Ratio	Lower	Upper
93	100		
63	79.1	60.2	100.2
95	32.4	12.3	52.3

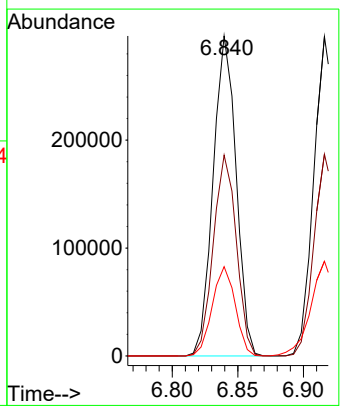


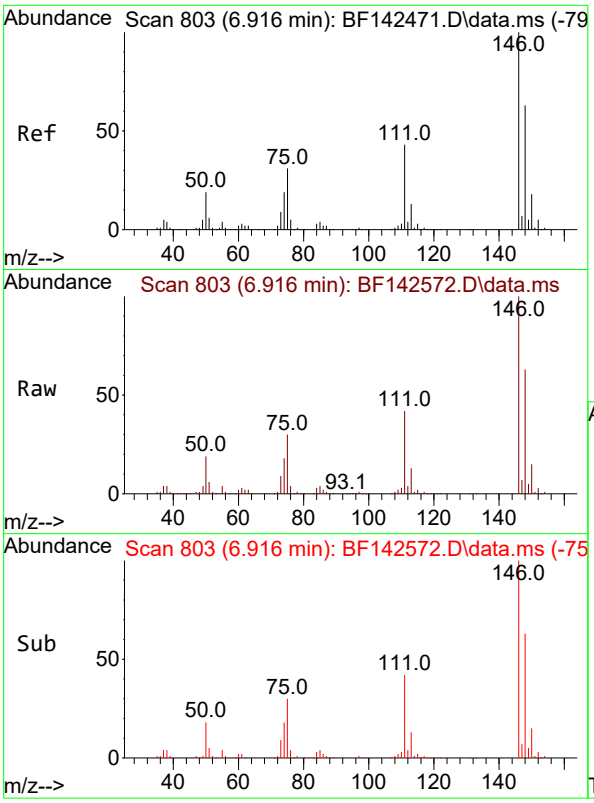


#12
1,3-Dichlorobenzene
Concen: 41.854 ng
RT: 6.840 min Scan# 790
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:146 Resp: 361346

Ion	Ratio	Lower	Upper
146	100		
148	62.7	50.6	75.8
75	27.9	23.8	35.6



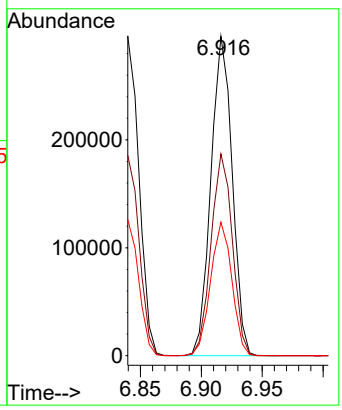


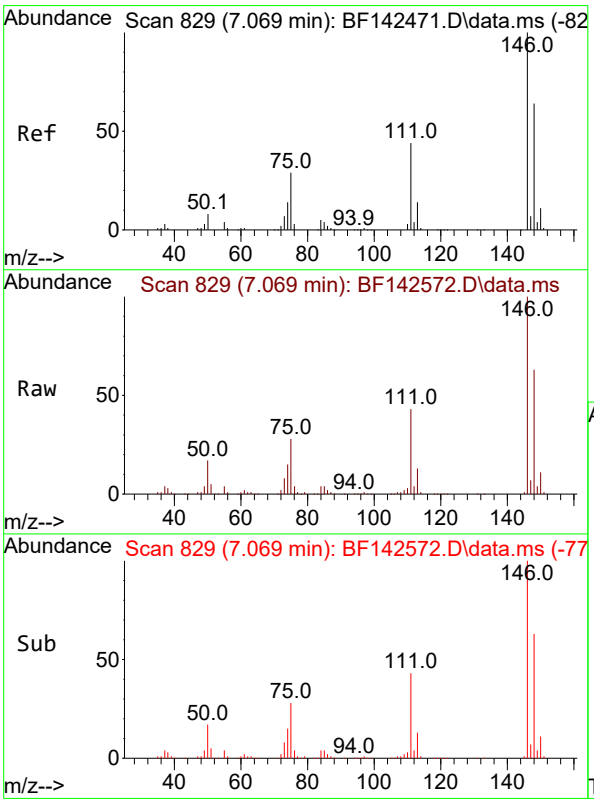
#13
1,4-Dichlorobenzene
Concen: 41.510 ng
RT: 6.916 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:146 Resp: 360999

Ion	Ratio	Lower	Upper
146	100		
148	63.2	50.4	75.6
111	41.8	34.1	51.1

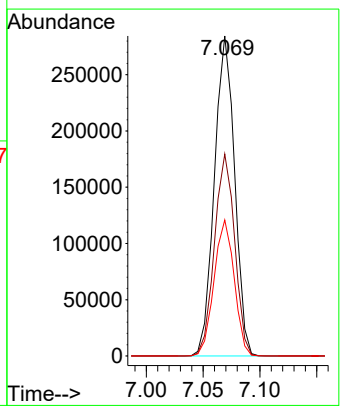


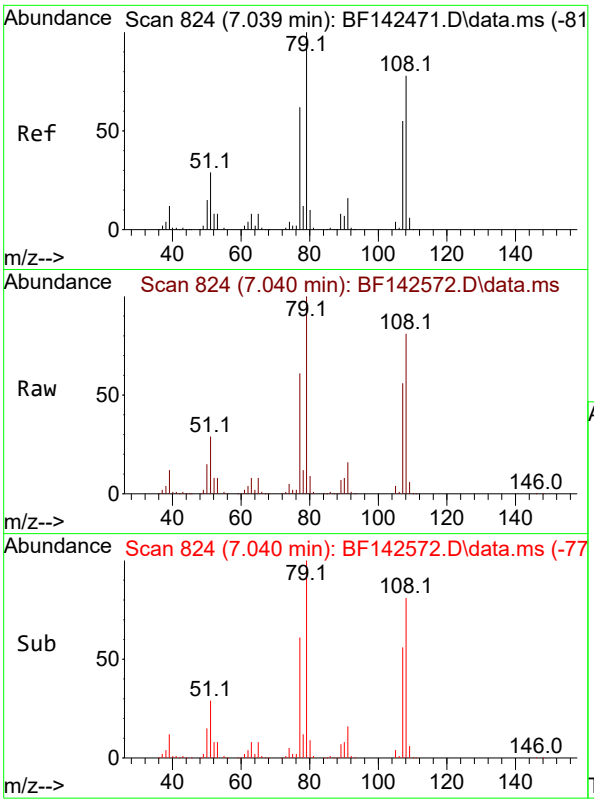


#14
1,2-Dichlorobenzene
Concen: 42.366 ng
RT: 7.069 min Scan# 829
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:146 Resp: 352553

Ion	Ratio	Lower	Upper
146	100		
148	63.1	51.0	76.4
111	42.5	35.0	52.6



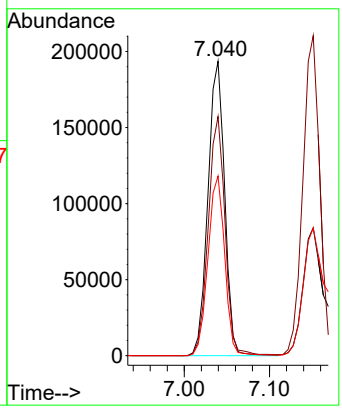


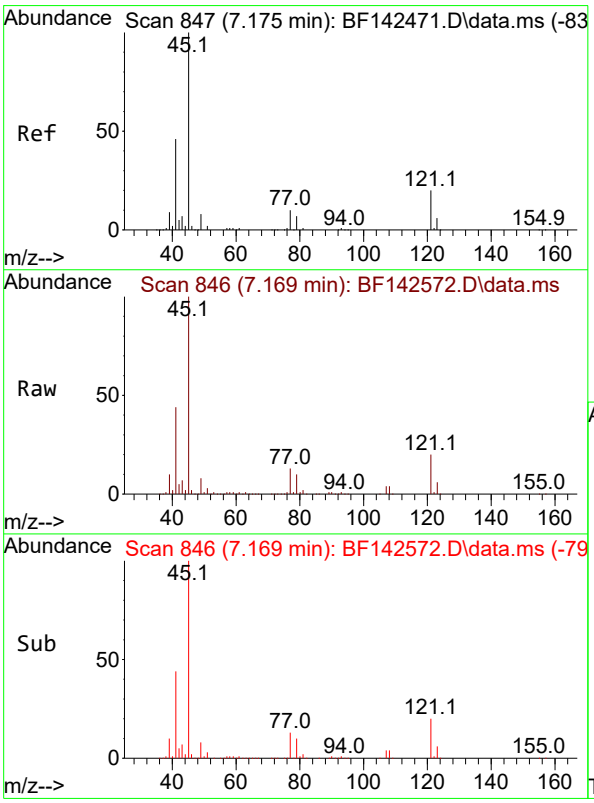
#15
Benzyl Alcohol
Concen: 41.862 ng
RT: 7.040 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 79 Resp: 264525

Ion	Ratio	Lower	Upper
79	100		
108	81.3	62.1	93.1
77	61.0	49.5	74.3

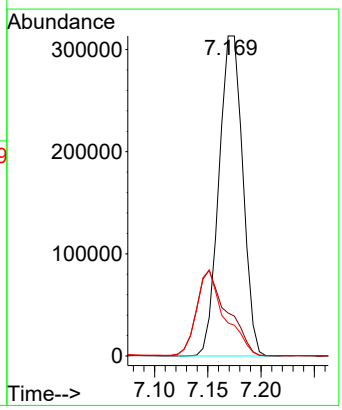


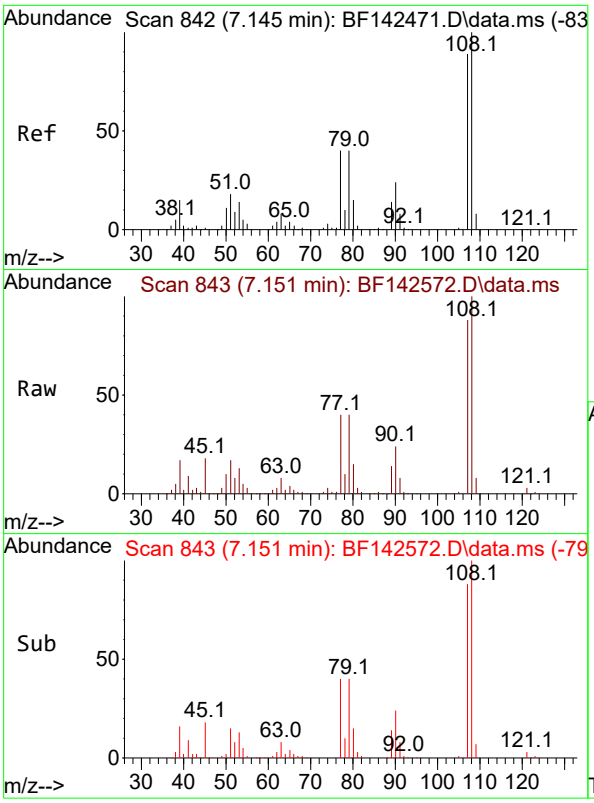


#16
2,2'-oxybis(1-Chloropropane)
Concen: 41.893 ng
RT: 7.169 min Scan# 846
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 45 Resp: 487250

Ion	Ratio	Lower	Upper
45	100		
77	13.4	0.0	32.0
79	10.3	0.0	29.2



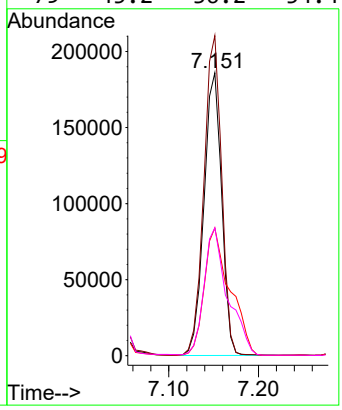


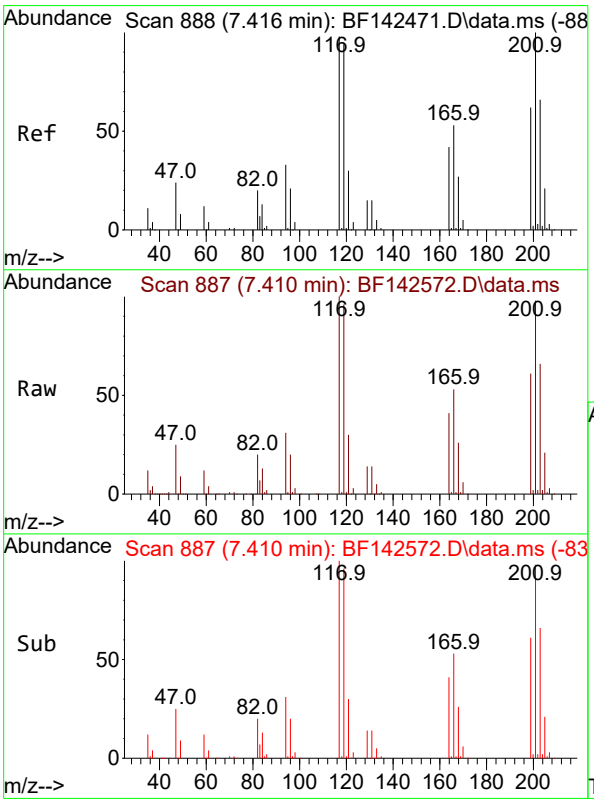
#17
2-Methylphenol
Concen: 42.092 ng
RT: 7.151 min Scan# 84
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:107 Resp: 254267

Ion	Ratio	Lower	Upper
107	100		
108	113.1	90.2	135.2
77	45.1	36.1	54.1
79	45.2	36.2	54.4

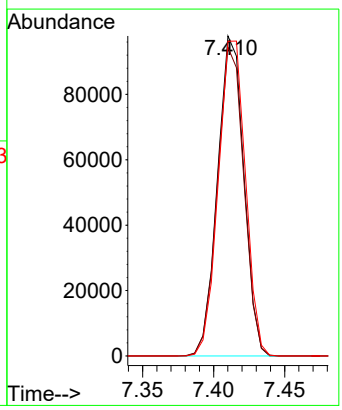


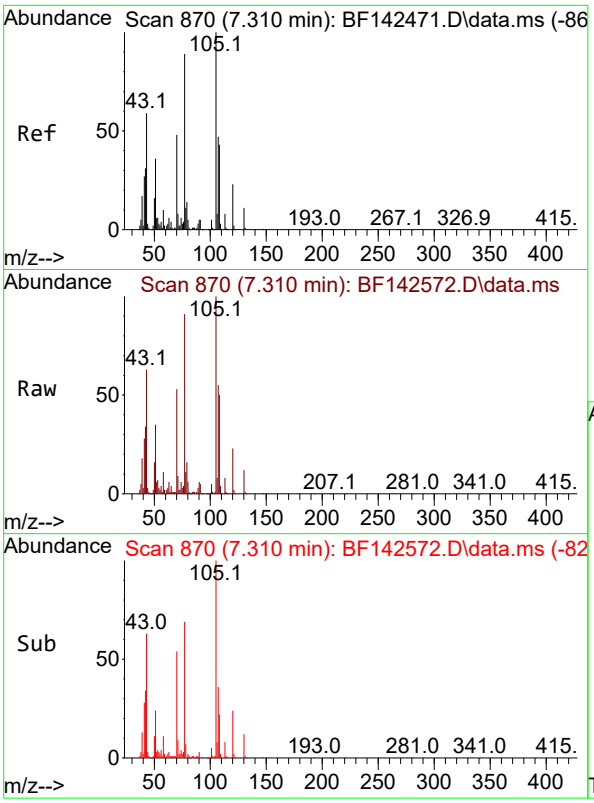


#18
Hexachloroethane
Concen: 41.616 ng
RT: 7.410 min Scan# 887
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:117 Resp: 126375

Ion	Ratio	Lower	Upper
117	100		
119	96.5	76.6	114.8
201	98.3	81.3	121.9



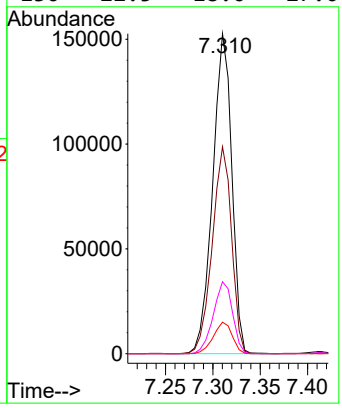


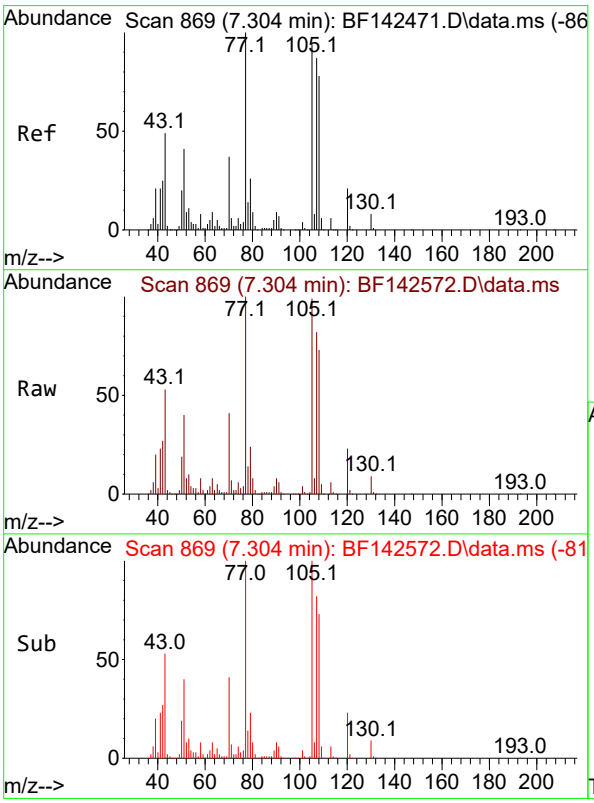
#19
n-Nitroso-di-n-propylamine
Concen: 40.369 ng
RT: 7.310 min Scan# 8
Delta R.T. -0.017 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 70 Resp: 213930

Ion	Ratio	Lower	Upper
70	100		
42	64.6	52.4	78.6
101	9.9	7.8	11.8
130	22.5	18.0	27.0

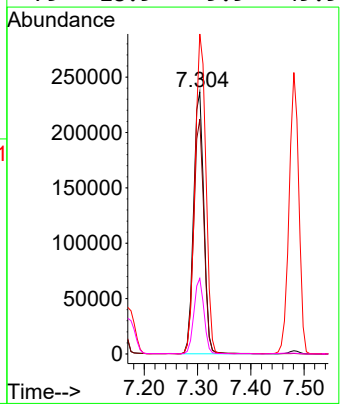


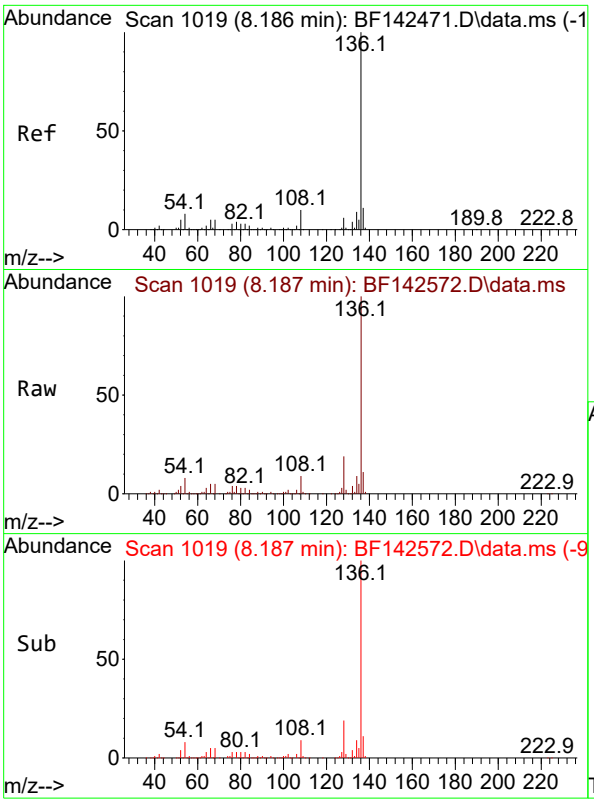


#20
3+4-Methylphenols
Concen: 40.870 ng
RT: 7.304 min Scan# 869
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:107 Resp: 316160

Ion	Ratio	Lower	Upper
107	100		
108	89.6	70.4	110.4
77	122.2	95.4	135.4
79	28.9	9.9	49.9



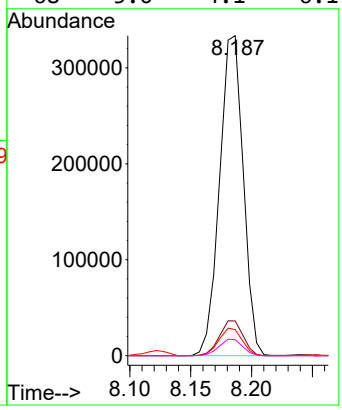


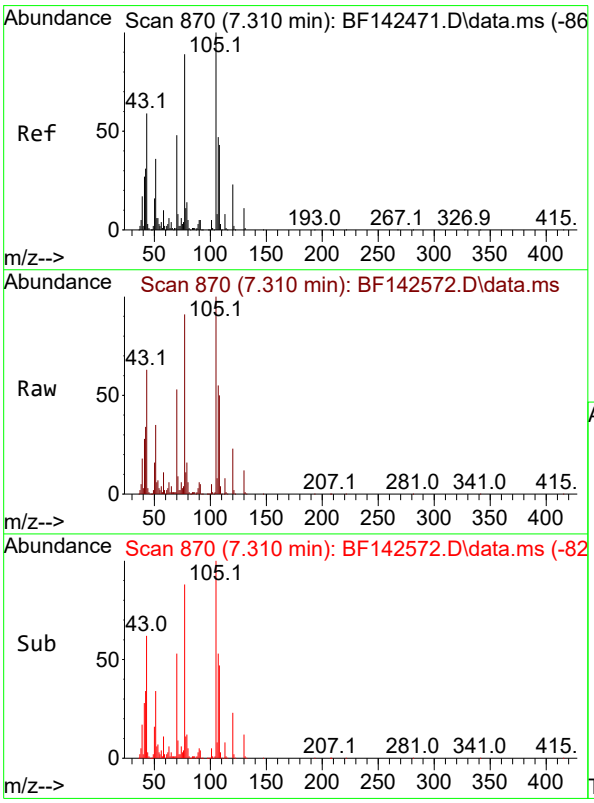
#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.187 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:136 Resp: 451884

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.6	13.0
54	8.1	6.6	10.0
68	5.0	4.1	6.1

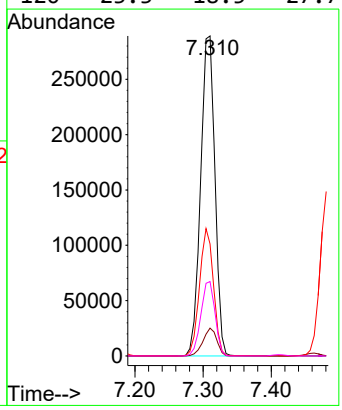


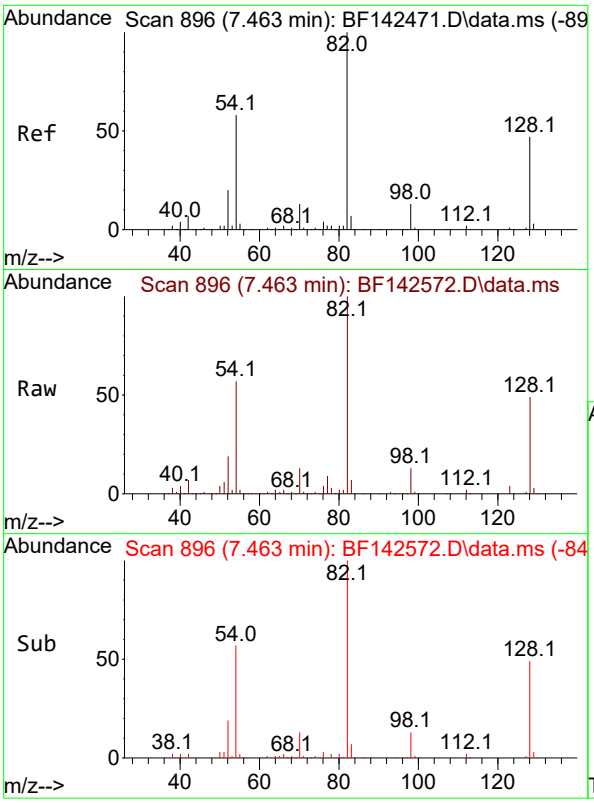


#22
Acetophenone
Concen: 42.218 ng
RT: 7.310 min Scan# 870
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:105 Resp: 422319

Ion	Ratio	Lower	Upper
105	100		
71	8.7	6.4	9.6
51	35.0	28.6	42.8
120	23.3	18.5	27.7



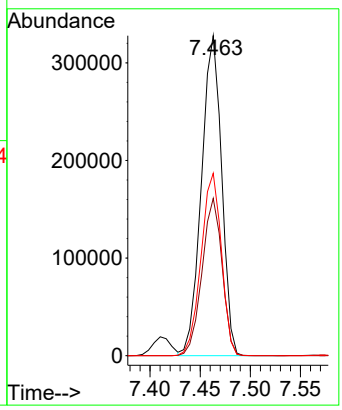


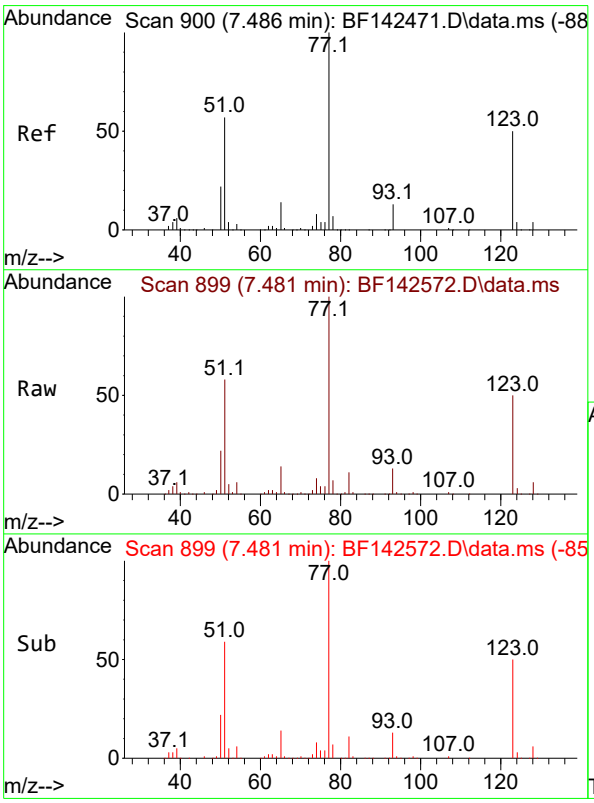
#23
Nitrobenzene-d5
Concen: 55.591 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 82 Resp: 460687

Ion	Ratio	Lower	Upper
82	100		
128	49.1	37.4	56.2
54	57.0	46.6	70.0

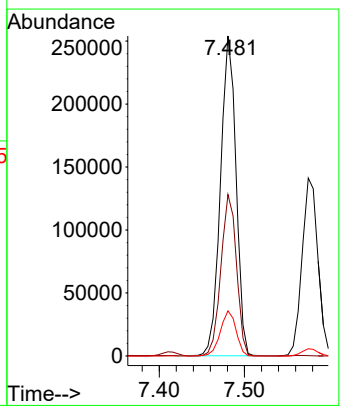


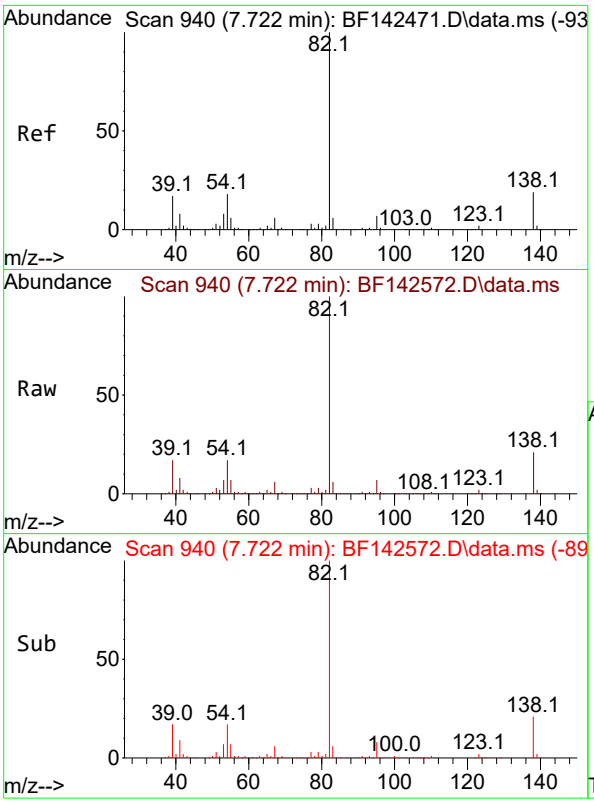


#24
Nitrobenzene
Concen: 43.193 ng
RT: 7.481 min Scan# 899
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 77 Resp: 322834

Ion	Ratio	Lower	Upper
77	100		
123	50.5	40.6	61.0
65	14.1	11.4	17.2



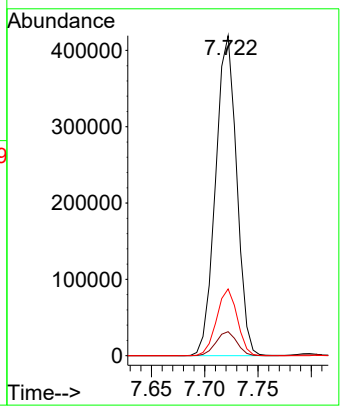


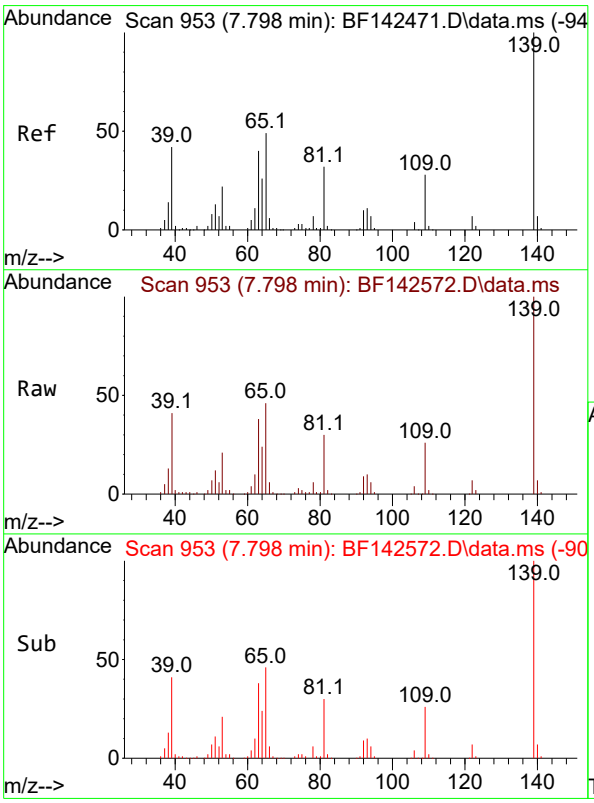
#25
Isophorone
Concen: 41.690 ng
RT: 7.722 min Scan# 94
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 82 Resp: 577626

Ion	Ratio	Lower	Upper
82	100		
95	7.5	6.0	9.0
138	20.9	15.5	23.3

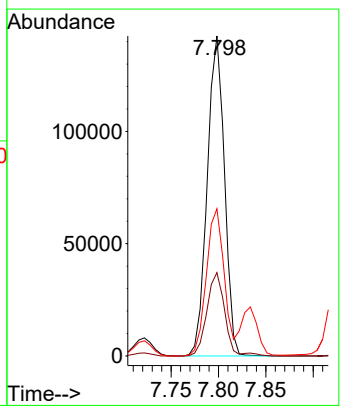


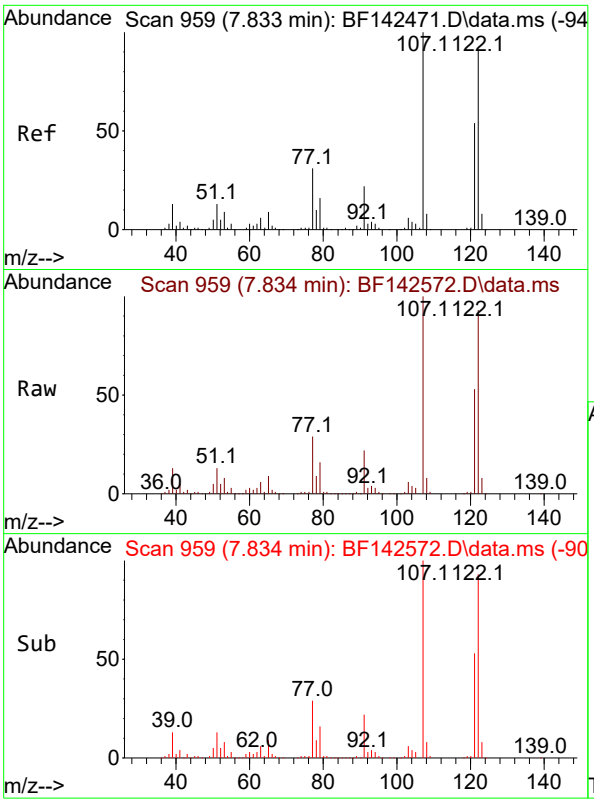


#26
2-Nitrophenol
Concen: 45.031 ng
RT: 7.798 min Scan# 953
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:139 Resp: 179840

Ion	Ratio	Lower	Upper
139	100		
109	26.1	22.6	33.8
65	46.0	39.4	59.0



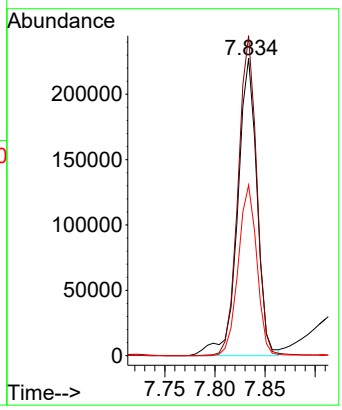


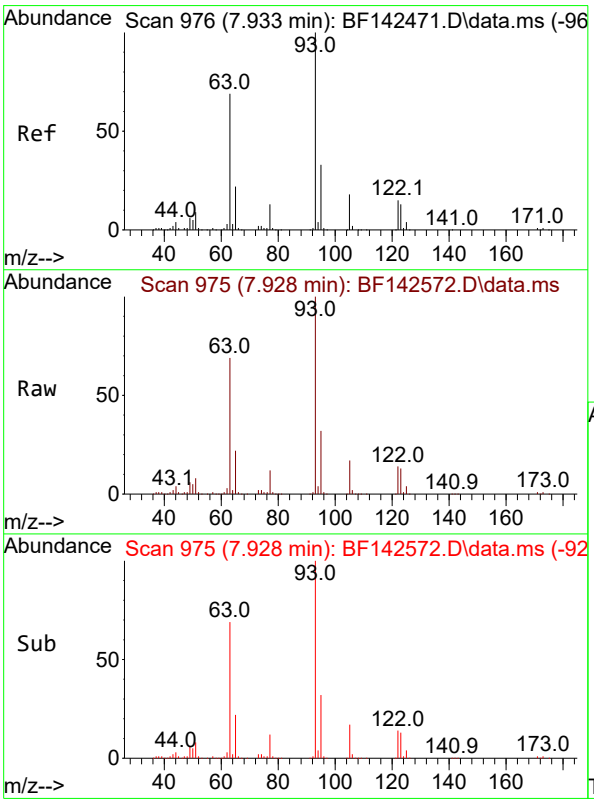
#27
2,4-Dimethylphenol
Concen: 43.407 ng
RT: 7.834 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:122 Resp: 305712

Ion	Ratio	Lower	Upper
122	100		
107	107.6	88.1	132.1
121	57.3	47.3	70.9

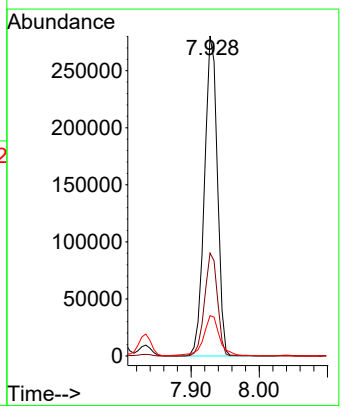


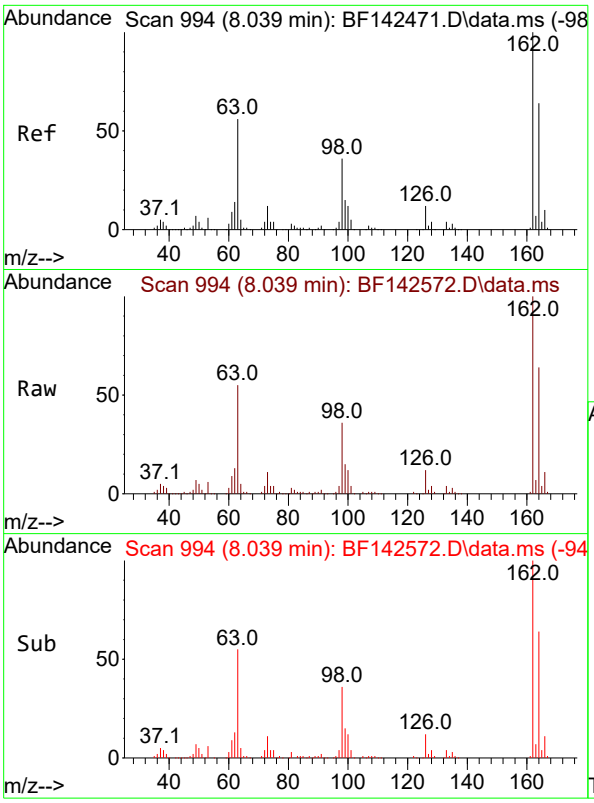


#28
bis(2-Chloroethoxy)methane
Concen: 42.800 ng
RT: 7.928 min Scan# 975
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 93 Resp: 370438

Ion	Ratio	Lower	Upper
93	100		
95	32.1	26.4	39.6
123	12.6	10.6	15.8



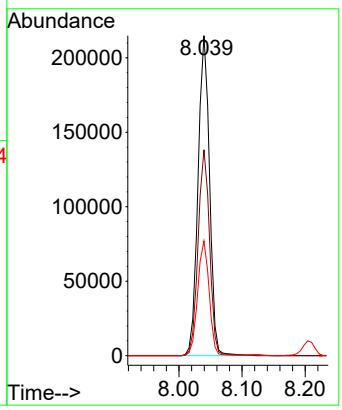


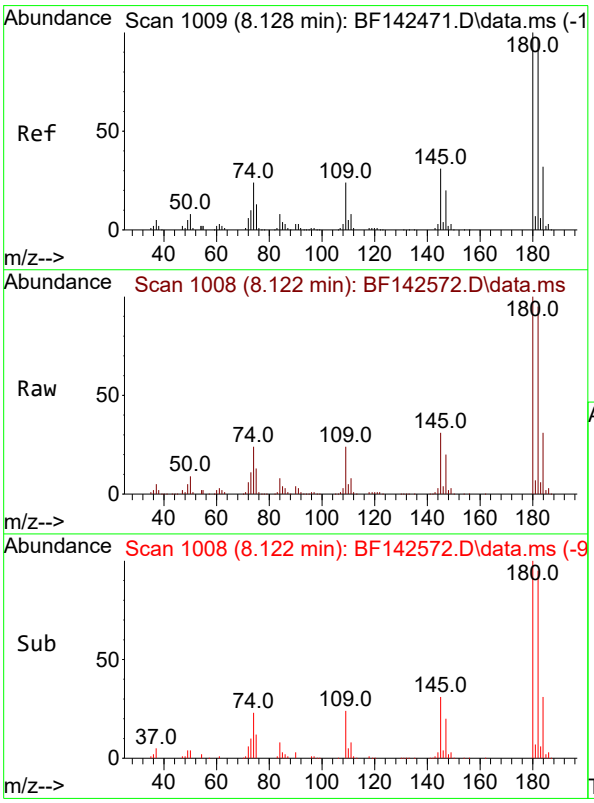
#29
2,4-Dichlorophenol
Concen: 42.548 ng
RT: 8.039 min Scan# 9
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:162 Resp: 272520

Ion	Ratio	Lower	Upper
162	100		
164	64.3	43.7	83.7
98	35.9	15.5	55.5

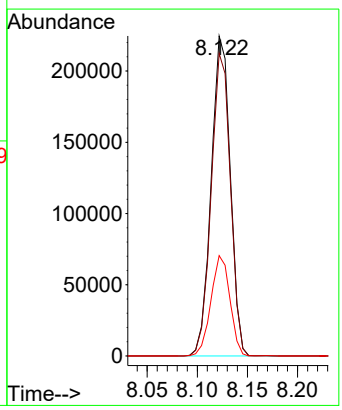


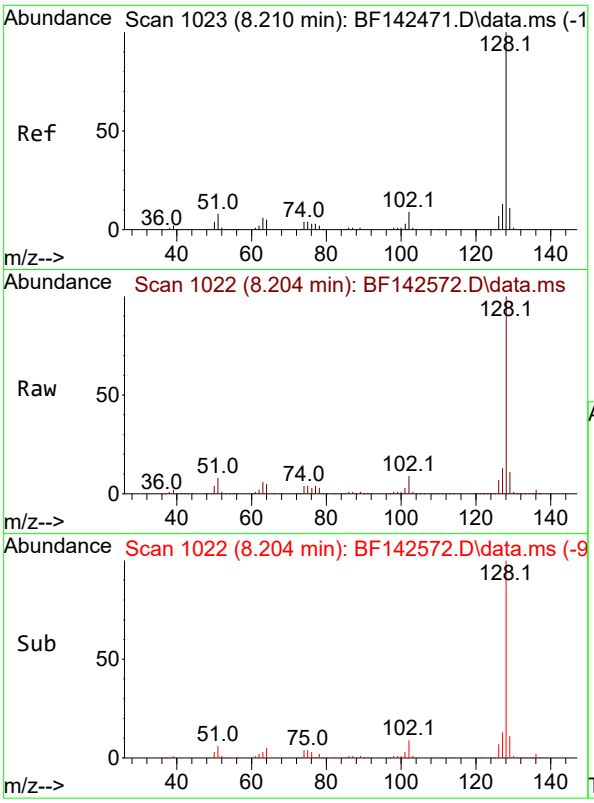


#30
1,2,4-Trichlorobenzene
Concen: 42.817 ng
RT: 8.122 min Scan# 1008
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:180 Resp: 297632

Ion	Ratio	Lower	Upper
180	100		
182	94.6	78.0	117.0
145	31.4	25.0	37.6



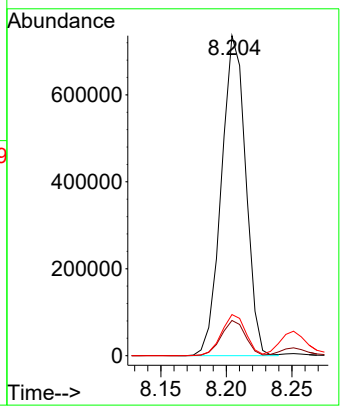


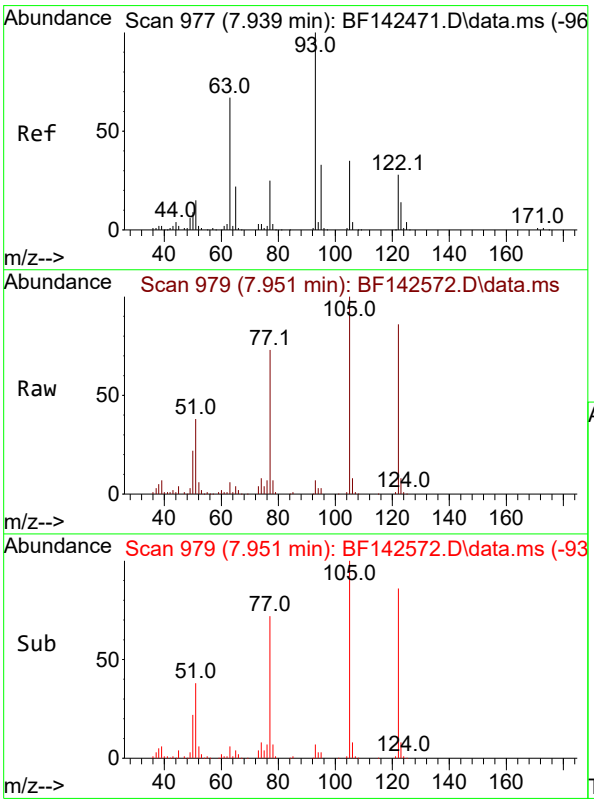
#31
Naphthalene
Concen: 42.672 ng
RT: 8.204 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:128 Resp: 949483

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.9	13.3
127	12.9	10.5	15.7

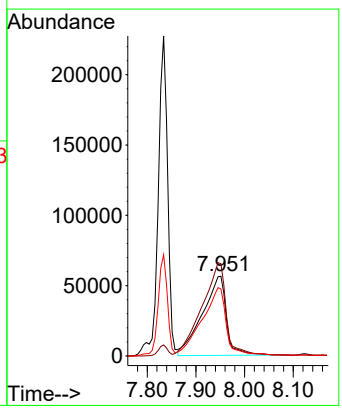


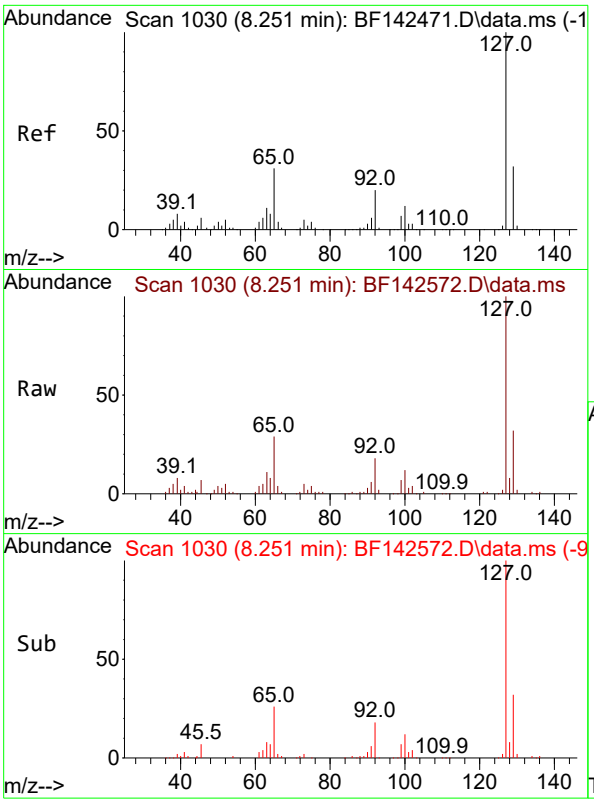


#32
Benzoic acid
Concen: 44.812 ng
RT: 7.951 min Scan# 979
Delta R.T. -0.024 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:122 Resp: 192119

Ion	Ratio	Lower	Upper
122	100		
105	116.0	101.7	141.7
77	84.3	69.5	109.5



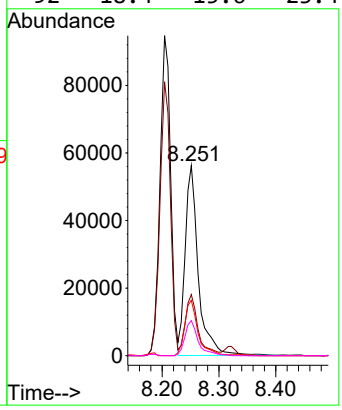


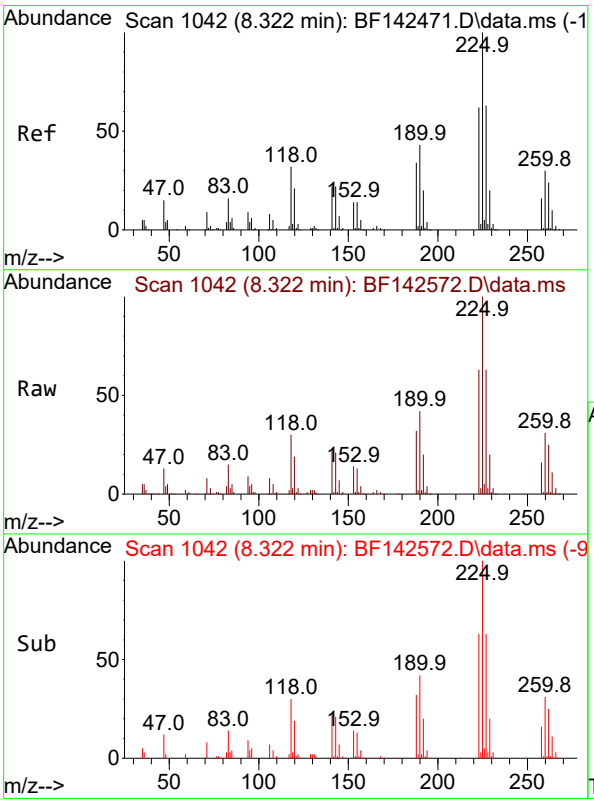
#33
4-Chloroaniline
Concen: 10.040 ng
RT: 8.251 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:127 Resp: 90517

Ion	Ratio	Lower	Upper
127	100		
129	32.2	26.1	39.1
65	29.1	24.9	37.3
92	18.4	15.6	23.4

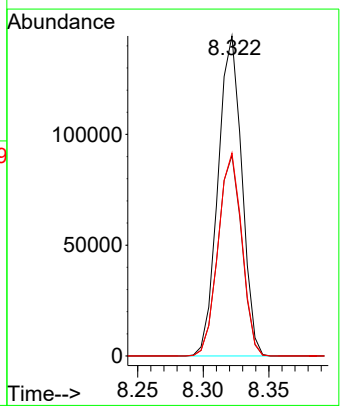


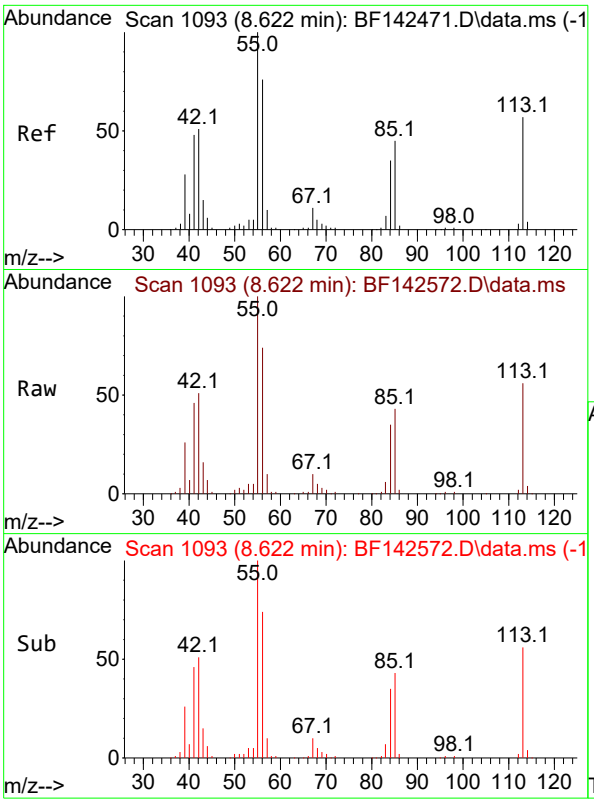


#34
Hexachlorobutadiene
Concen: 41.950 ng
RT: 8.322 min Scan# 1042
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:225 Resp: 182076

Ion	Ratio	Lower	Upper
225	100		
223	62.7	49.7	74.5
227	63.5	50.3	75.5



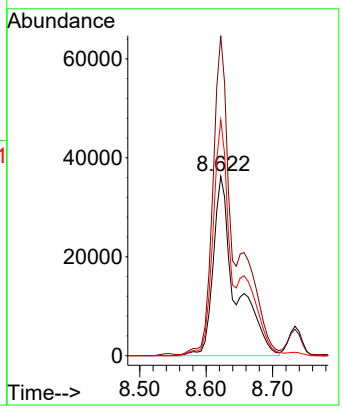


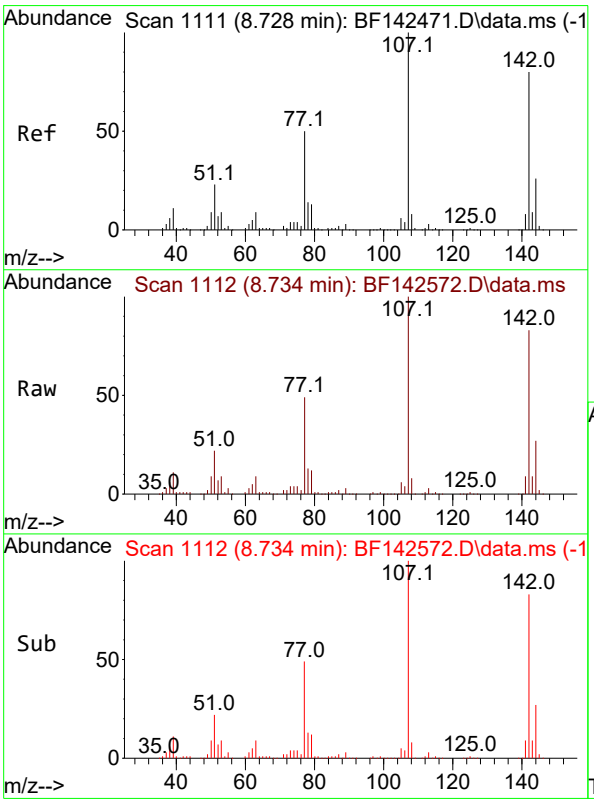
#35
Caprolactam
Concen: 47.347 ng m
RT: 8.622 min Scan# 1
Delta R.T. -0.023 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:113 Resp: 85172

Ion	Ratio	Lower	Upper
113	100		
55	178.3	154.7	194.7
56	131.5	113.2	153.2

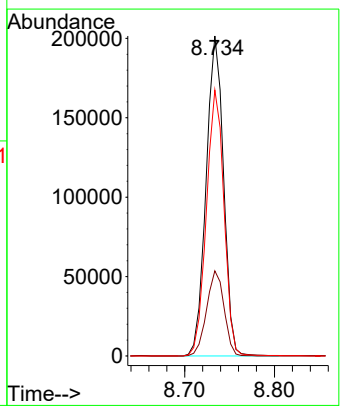


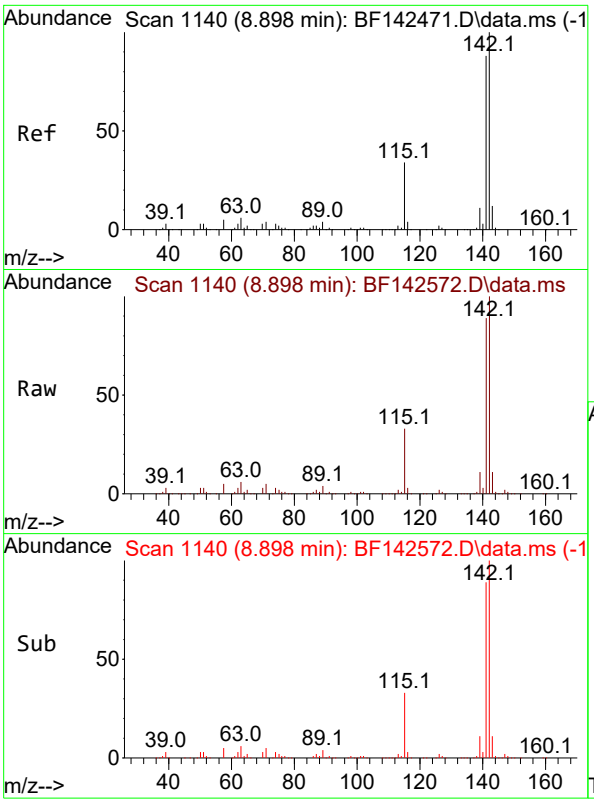


#36
4-Chloro-3-methylphenol
Concen: 41.445 ng
RT: 8.734 min Scan# 1112
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:107 Resp: 272050

Ion	Ratio	Lower	Upper
107	100		
144	26.6	20.9	31.3
142	83.1	64.2	96.2



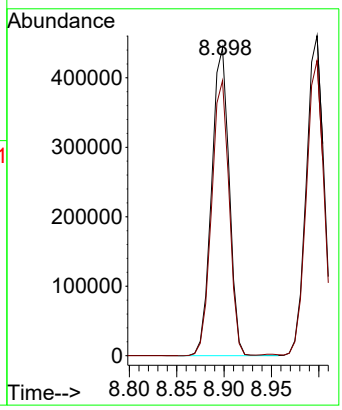


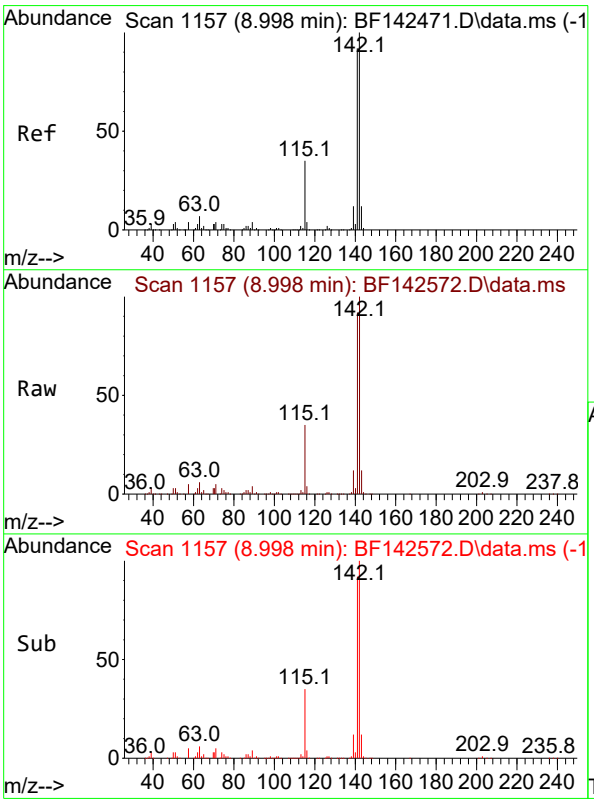
#37
2-Methylnaphthalene
Concen: 40.904 ng
RT: 8.898 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:142 Resp: 572580

Ion	Ratio	Lower	Upper
142	100		
141	89.3	70.7	106.1

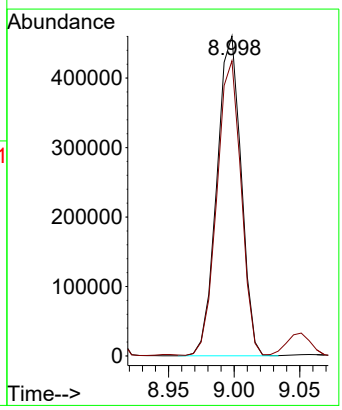


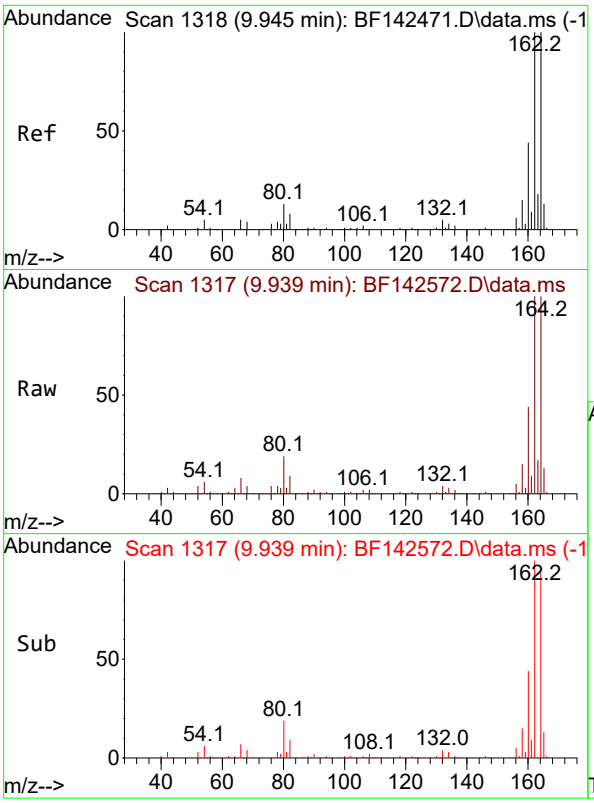


#38
1-Methylnaphthalene
Concen: 40.908 ng
RT: 8.998 min Scan# 1157
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:142 Resp: 592334

Ion	Ratio	Lower	Upper
142	100		
141	92.2	73.4	110.2



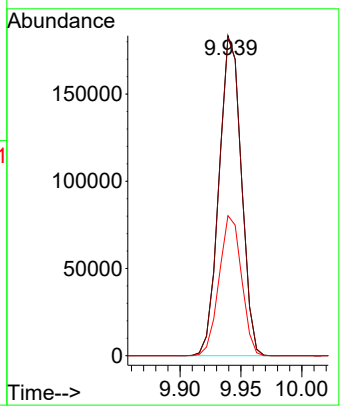


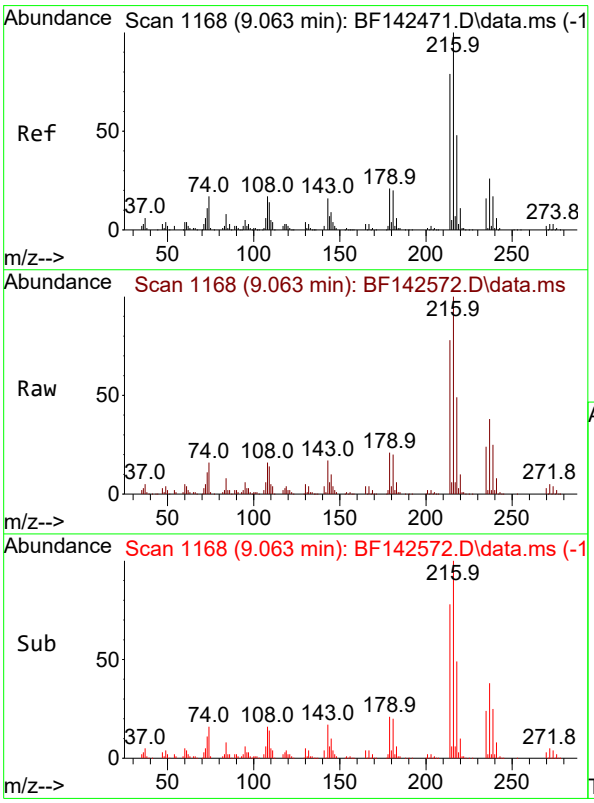
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:164 Resp: 233525

Ion	Ratio	Lower	Upper
164	100		
162	99.5	80.2	120.4
160	43.7	35.6	53.4

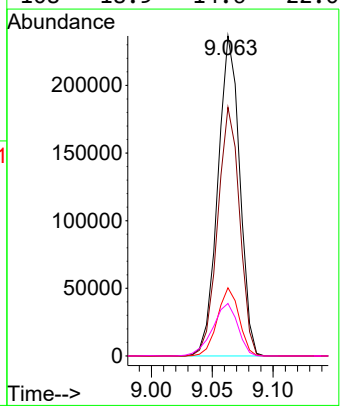


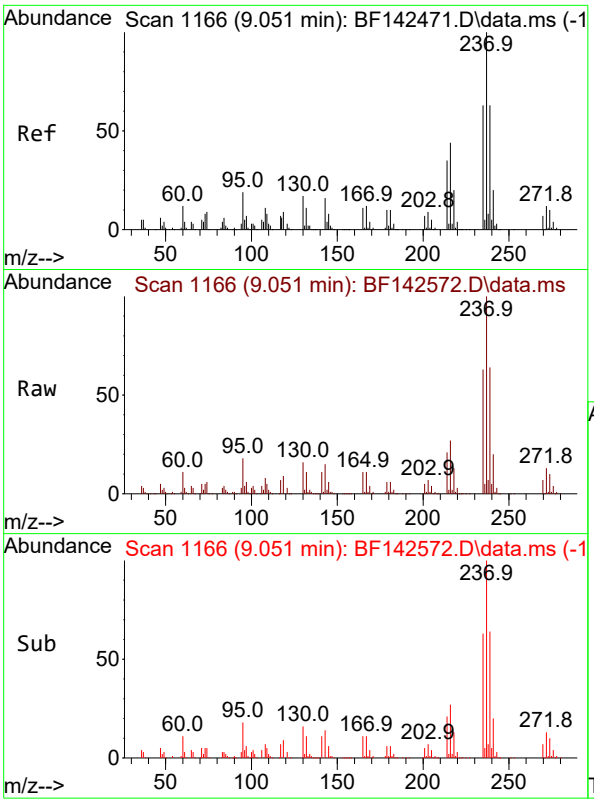


#40
1,2,4,5-Tetrachlorobenzene
Concen: 44.113 ng
RT: 9.063 min Scan# 1168
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:216 Resp: 295710

Ion	Ratio	Lower	Upper
216	100		
214	77.5	62.9	94.3
179	21.1	16.9	25.3
108	18.9	14.6	22.0



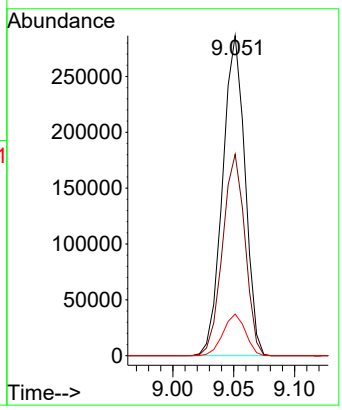


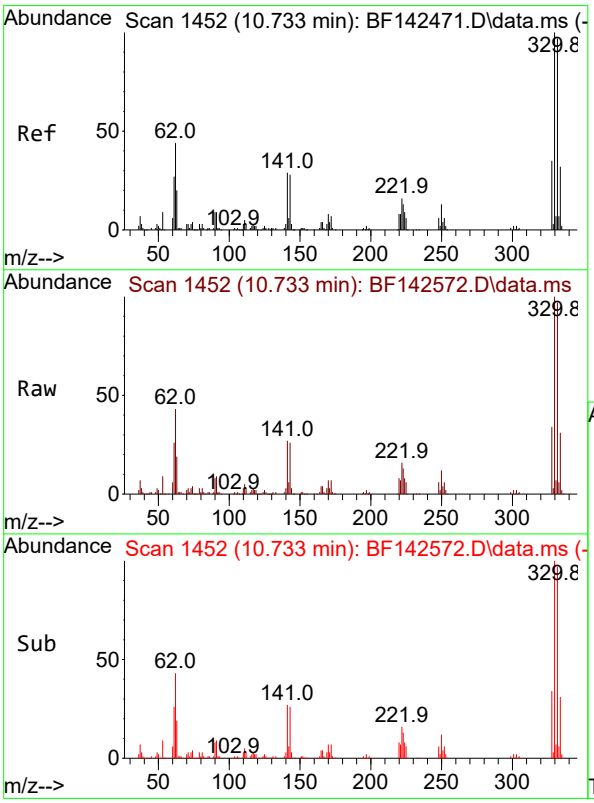
#41
Hexachlorocyclopentadiene
Concen: 81.167 ng
RT: 9.051 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:237 Resp: 367045

Ion	Ratio	Lower	Upper
237	100		
235	62.9	43.3	83.3
272	13.0	0.0	32.4

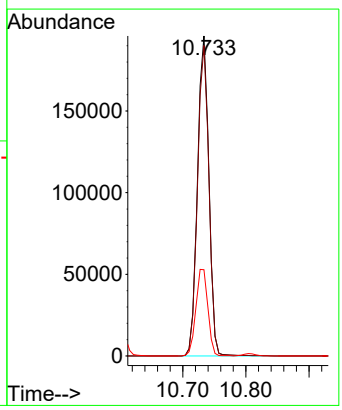


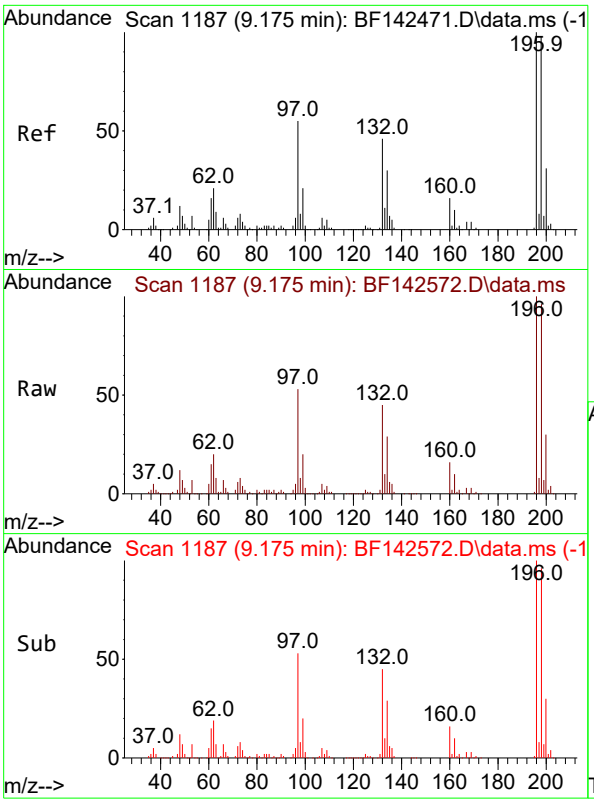


#42
2,4,6-Tribromophenol
Concen: 94.646 ng
RT: 10.733 min Scan# 1452
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:330 Resp: 245306

Ion	Ratio	Lower	Upper
330	100		
332	97.0	77.6	116.4
141	28.4	24.6	36.8



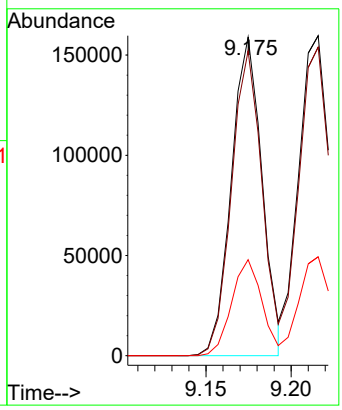


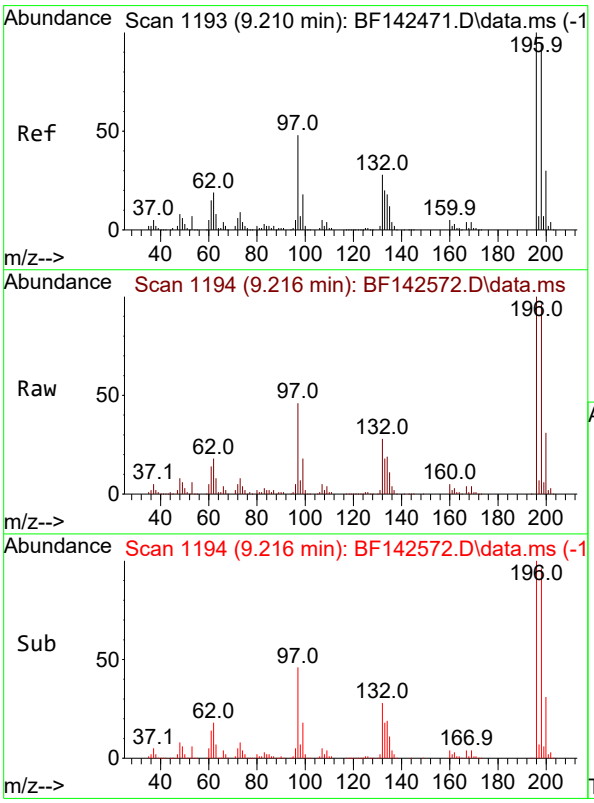
#43
2,4,6-Trichlorophenol
Concen: 44.106 ng
RT: 9.175 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:196 Resp: 199370

Ion	Ratio	Lower	Upper
196	100		
198	95.7	78.8	118.2
200	30.1	24.9	37.3

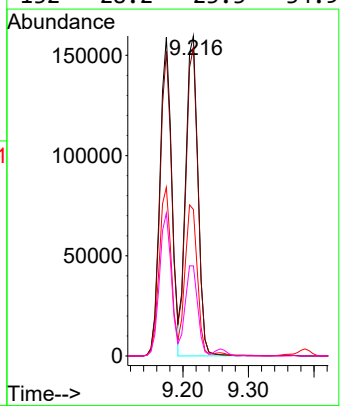


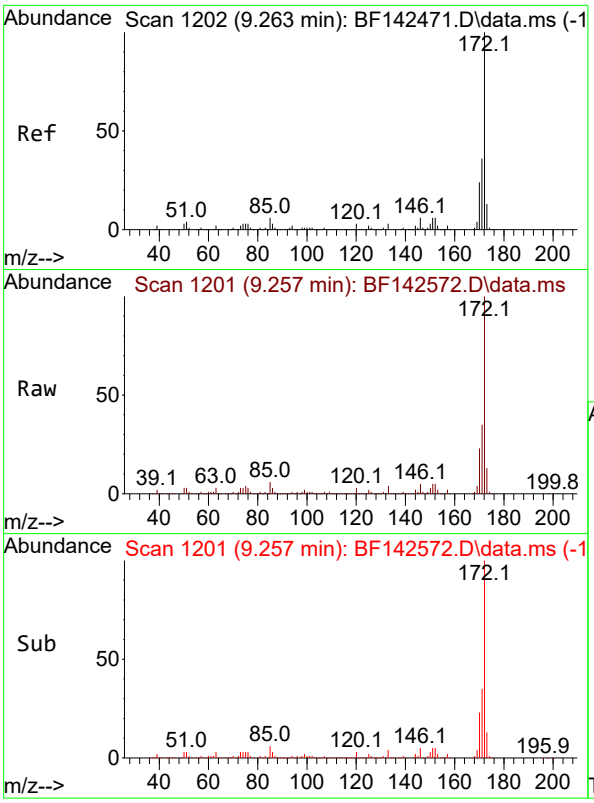


#44
2,4,5-Trichlorophenol
Concen: 43.298 ng
RT: 9.216 min Scan# 1194
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:196 Resp: 206416

Ion	Ratio	Lower	Upper
196	100		
198	96.4	75.5	113.3
97	45.8	39.3	58.9
132	28.2	23.3	34.9



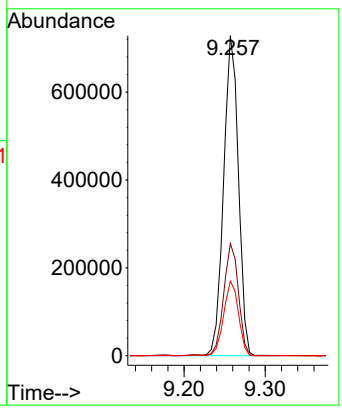


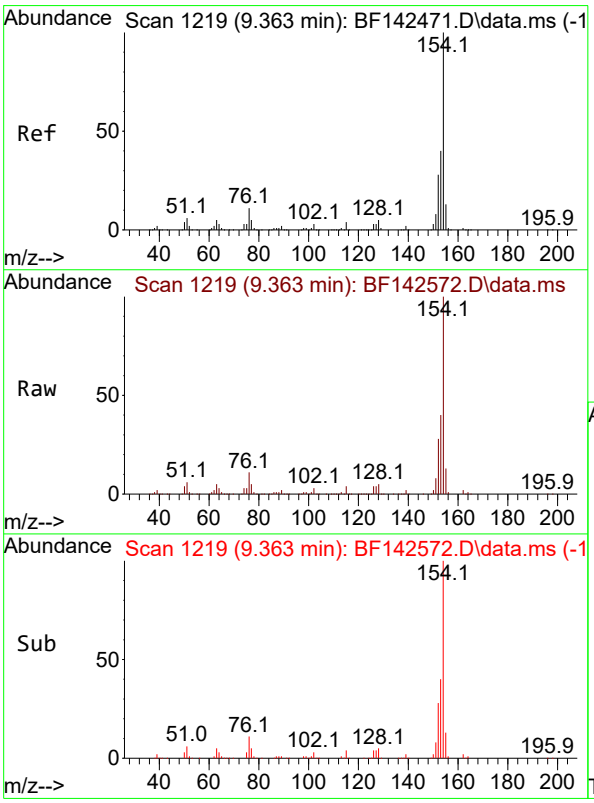
#45
2-Fluorobiphenyl
Concen: 53.091 ng
RT: 9.257 min Scan# 1
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:172 Resp: 923939

Ion	Ratio	Lower	Upper
172	100		
171	35.0	28.6	42.8
170	23.3	18.9	28.3

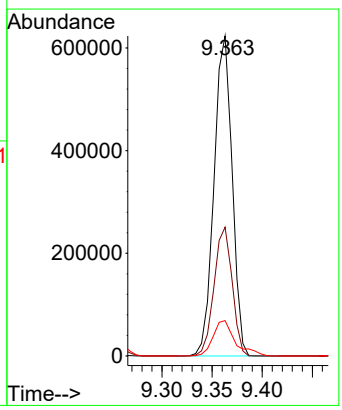


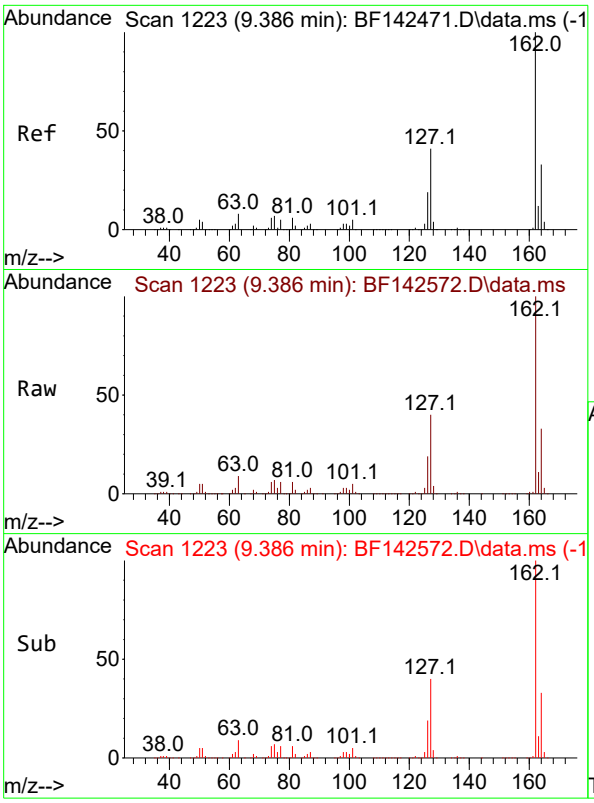


#46
1,1'-Biphenyl
Concen: 43.175 ng
RT: 9.363 min Scan# 1219
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:154 Resp: 782223

Ion	Ratio	Lower	Upper
154	100		
153	40.2	20.4	60.4
76	11.0	0.0	30.8



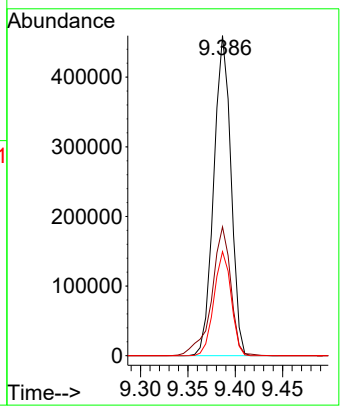


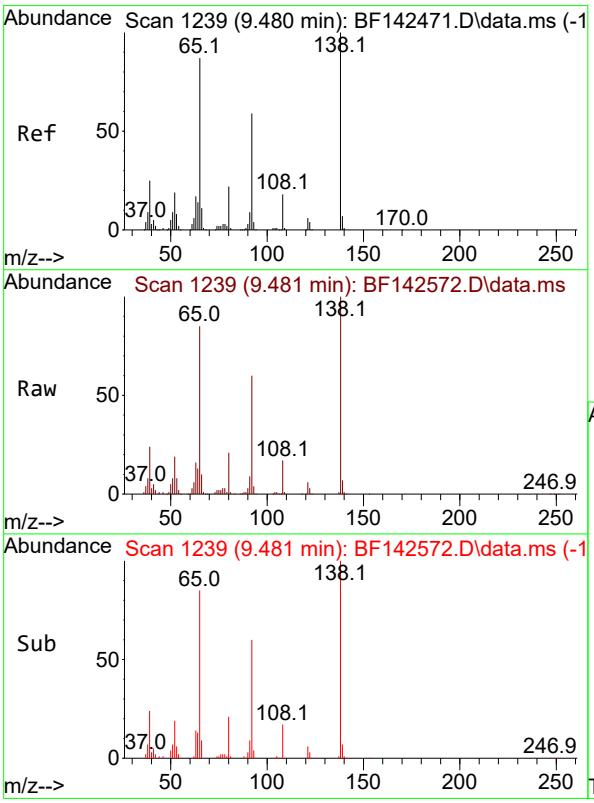
#47
2-Chloronaphthalene
Concen: 43.368 ng
RT: 9.386 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:162 Resp: 580508

Ion	Ratio	Lower	Upper
162	100		
127	40.3	33.5	50.3
164	32.5	26.1	39.1

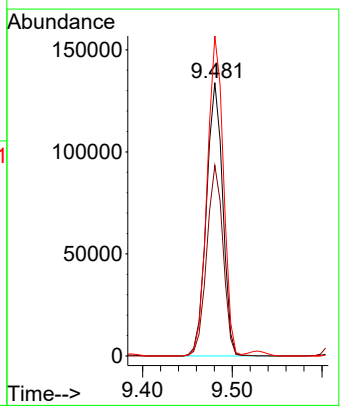


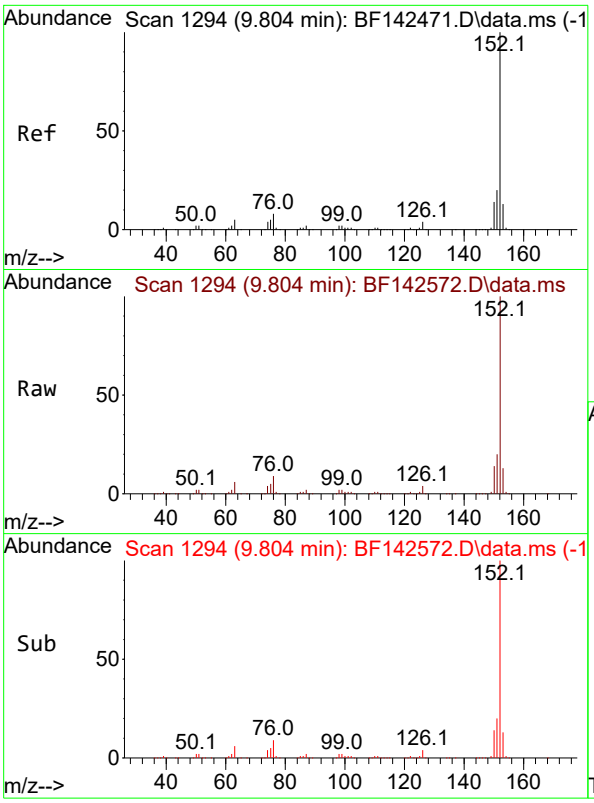


#48
2-Nitroaniline
Concen: 43.777 ng
RT: 9.481 min Scan# 1239
Delta R.T. -0.005 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion: 65 Resp: 169375

Ion	Ratio	Lower	Upper
65	100		
92	69.8	54.4	81.6
138	117.1	91.4	137.2



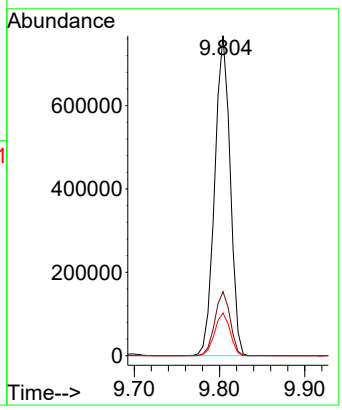


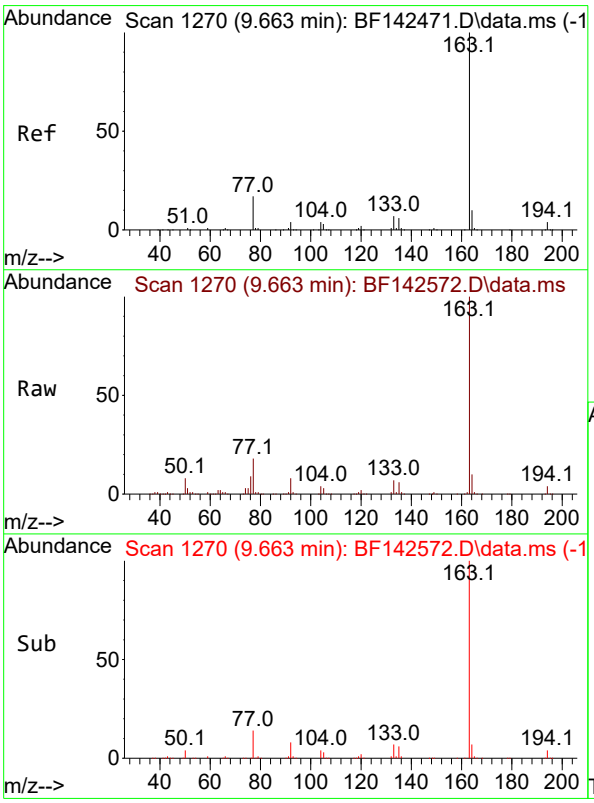
#49
Acenaphthylene
Concen: 42.755 ng
RT: 9.804 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:152 Resp: 966376

Ion	Ratio	Lower	Upper
152	100		
151	20.0	15.8	23.8
153	13.4	10.6	15.8

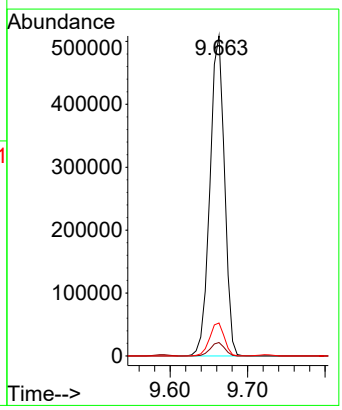


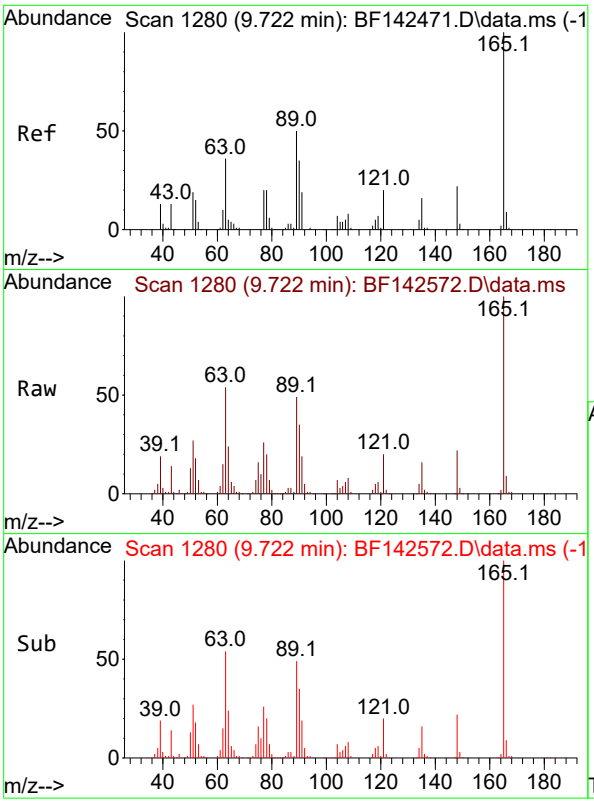


#50
Dimethylphthalate
Concen: 43.054 ng
RT: 9.663 min Scan# 1270
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:163 Resp: 663411

Ion	Ratio	Lower	Upper
163	100		
194	4.2	3.3	4.9
164	10.3	8.2	12.4



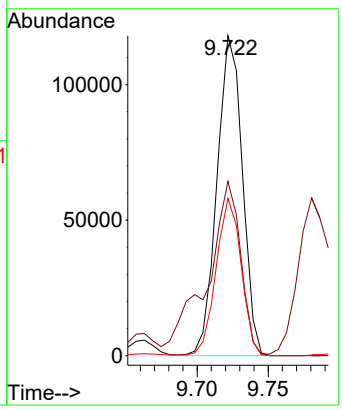


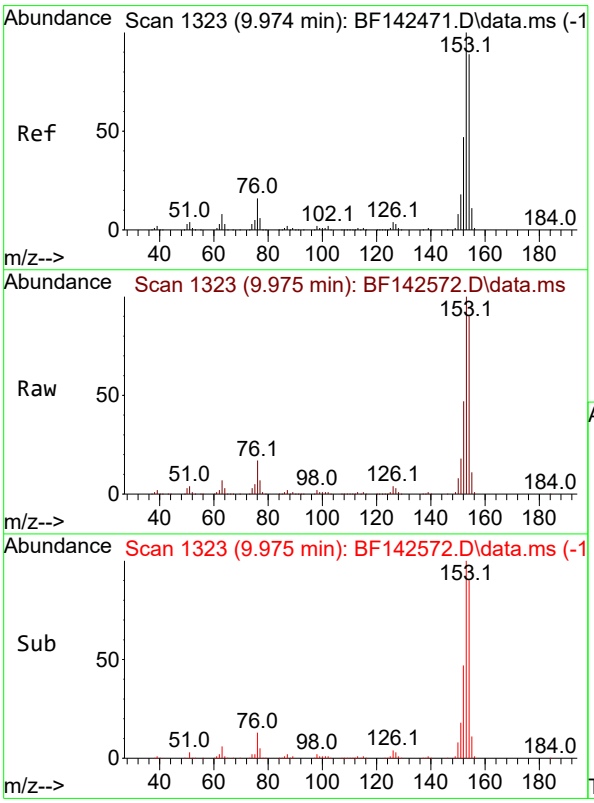
#51
2,6-Dinitrotoluene
Concen: 44.081 ng
RT: 9.722 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:165 Resp: 146601

Ion	Ratio	Lower	Upper
165	100		
63	54.5	42.9	64.3
89	49.1	40.2	60.4

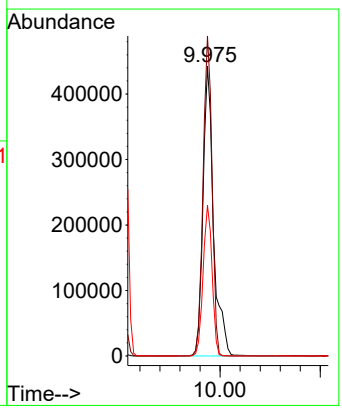


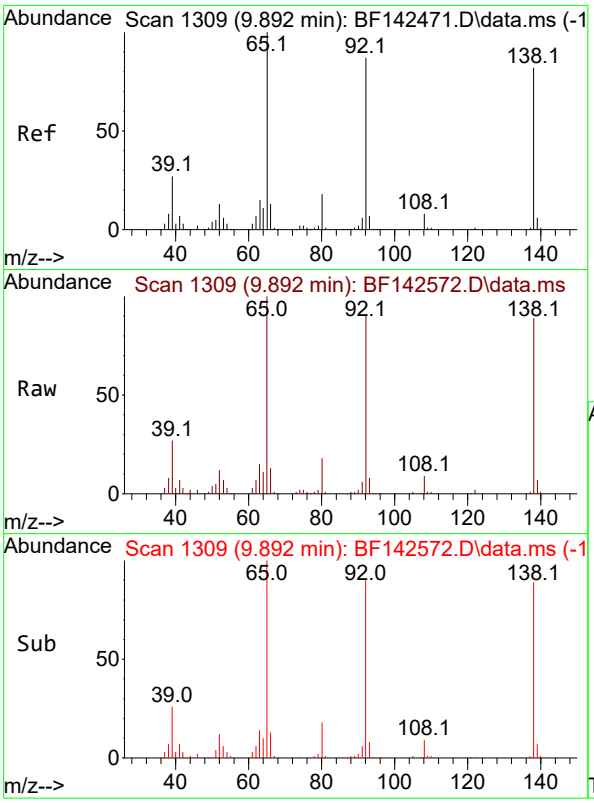


#52
Acenaphthene
Concen: 46.885 ng
RT: 9.975 min Scan# 1323
Delta R.T. -0.005 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:154 Resp: 647101

Ion	Ratio	Lower	Upper
154	100		
153	110.5	90.0	135.0
152	52.0	42.6	64.0



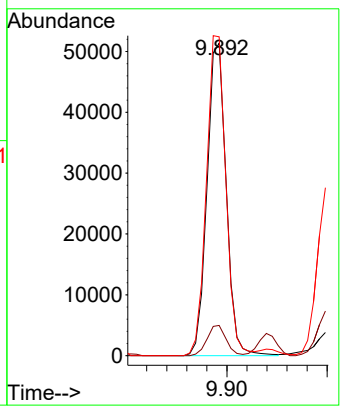


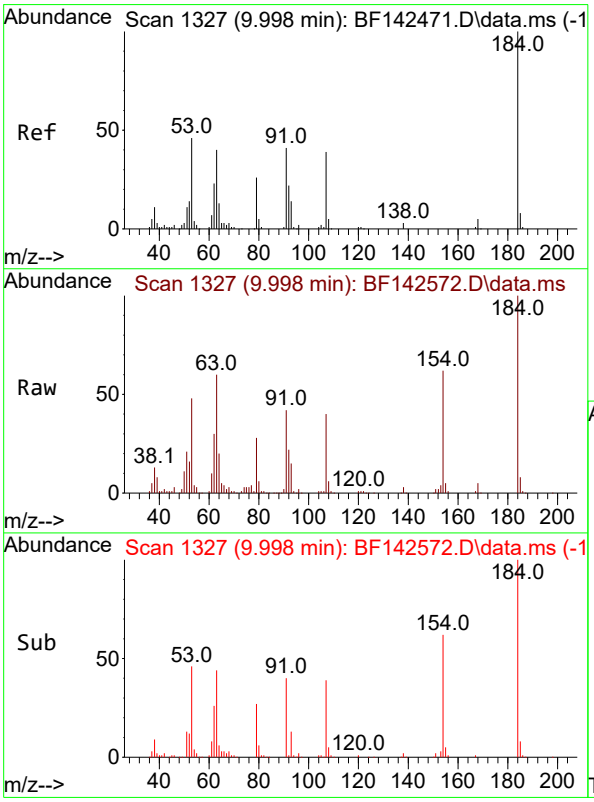
#53
3-Nitroaniline
Concen: 18.800 ng
RT: 9.892 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:138 Resp: 68290

Ion	Ratio	Lower	Upper
138	100		
108	9.7	8.1	12.1
92	102.0	85.2	127.8

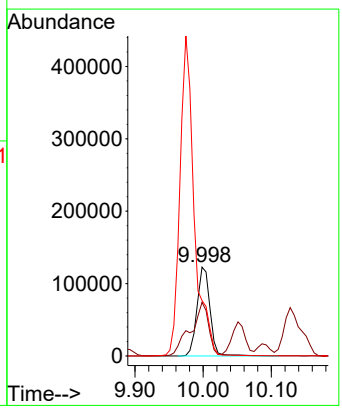


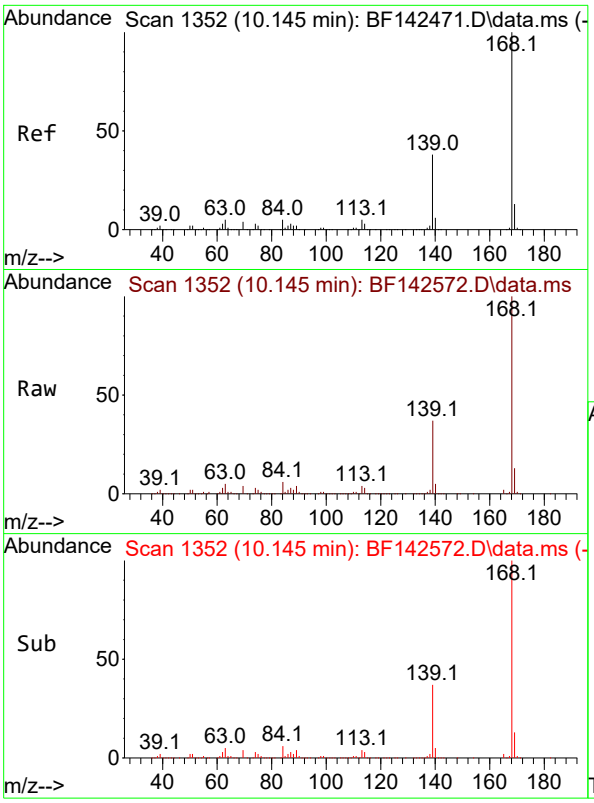


#54
2,4-Dinitrophenol
Concen: 94.494 ng
RT: 9.998 min Scan# 1327
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:184 Resp: 162358

Ion	Ratio	Lower	Upper
184	100		
63	60.4	46.3	69.5
154	62.4	56.8	85.2



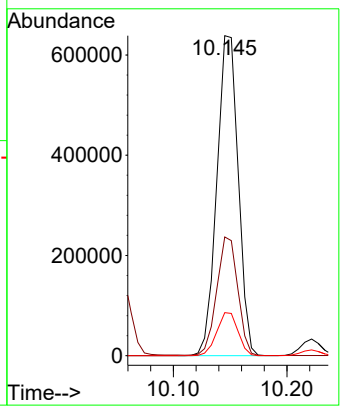


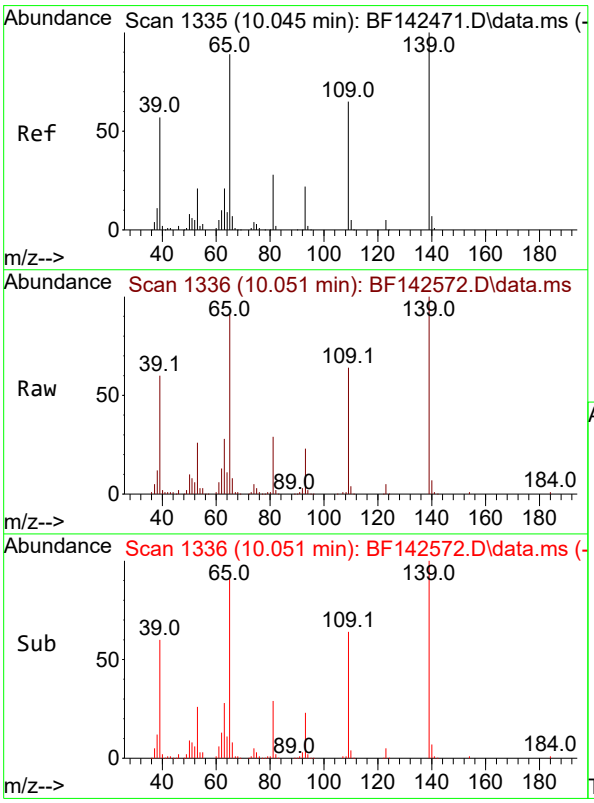
#55
Dibenzofuran
Concen: 42.078 ng
RT: 10.145 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:168 Resp: 835708

Ion	Ratio	Lower	Upper
168	100		
139	37.1	30.2	45.2
169	13.5	10.7	16.1

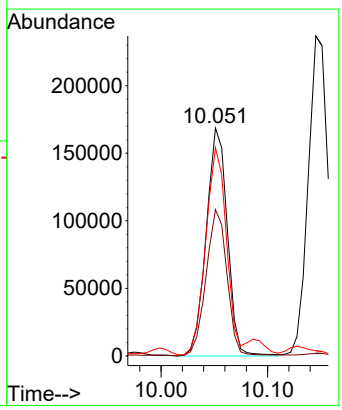


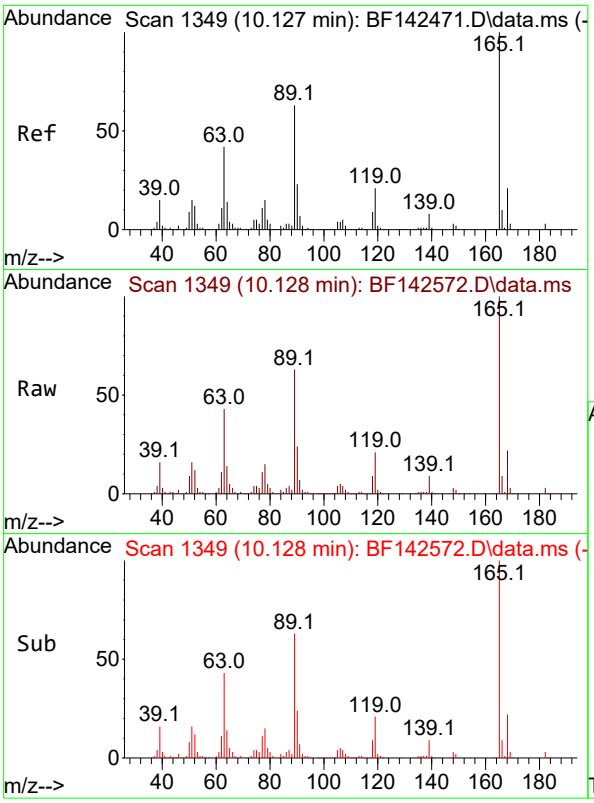


#56
4-Nitrophenol
Concen: 86.705 ng
RT: 10.051 min Scan# 1336
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:139 Resp: 232388

Ion	Ratio	Lower	Upper
139	100		
109	64.2	45.1	85.1
65	91.4	69.7	109.7



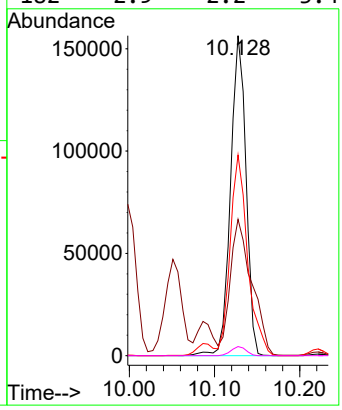


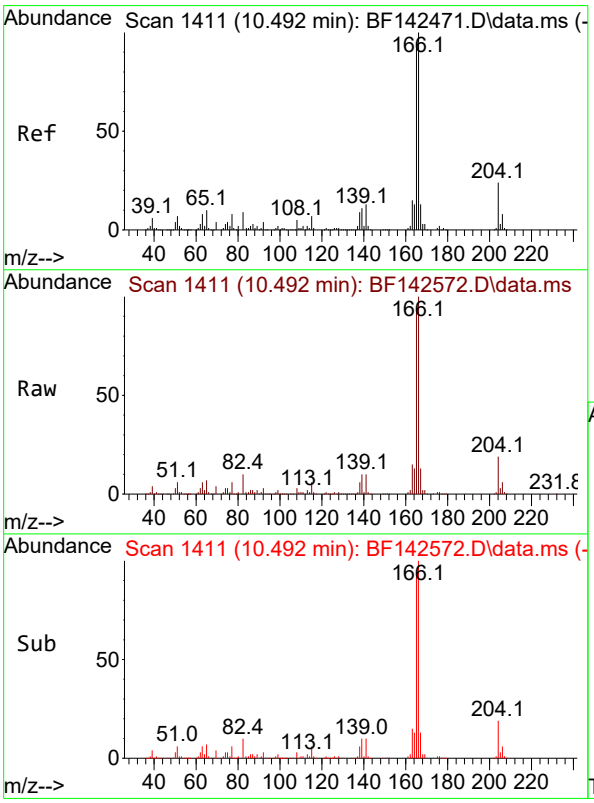
#57
2,4-Dinitrotoluene
Concen: 45.268 ng
RT: 10.128 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:165 Resp: 196609

Ion	Ratio	Lower	Upper
165	100		
63	42.6	33.6	50.4
89	62.7	50.2	75.4
182	2.9	2.2	3.4

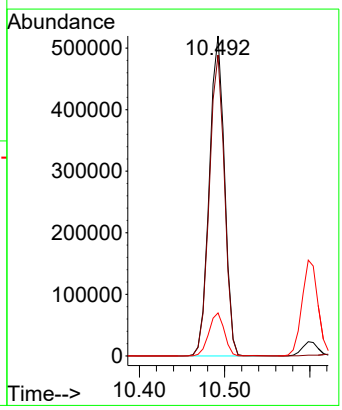


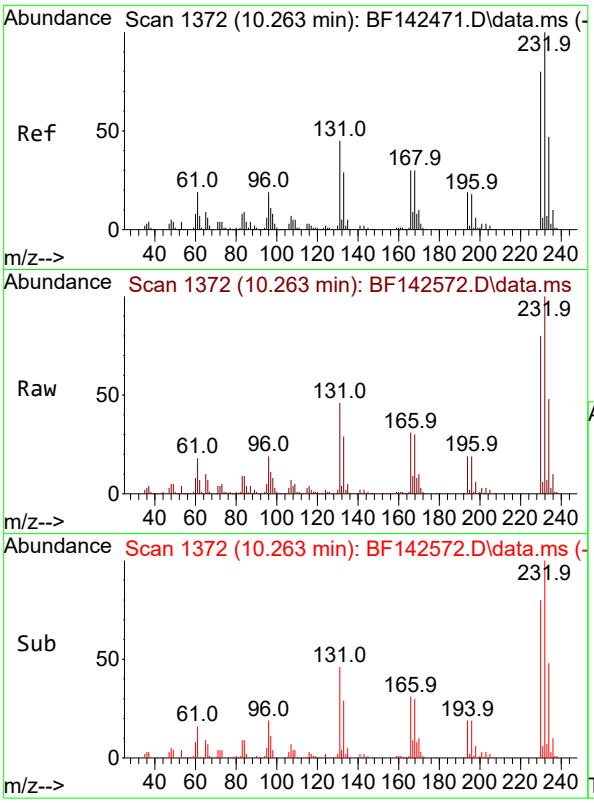


#58
Fluorene
Concen: 42.019 ng
RT: 10.492 min Scan# 1411
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:166 Resp: 644728

Ion	Ratio	Lower	Upper
166	100		
165	94.1	75.8	113.8
167	13.5	10.6	16.0



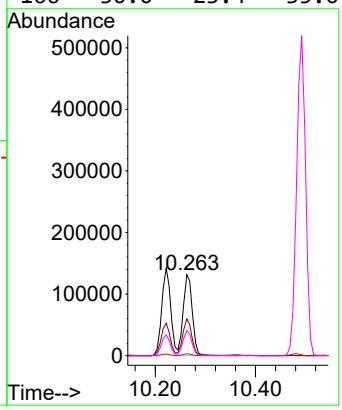


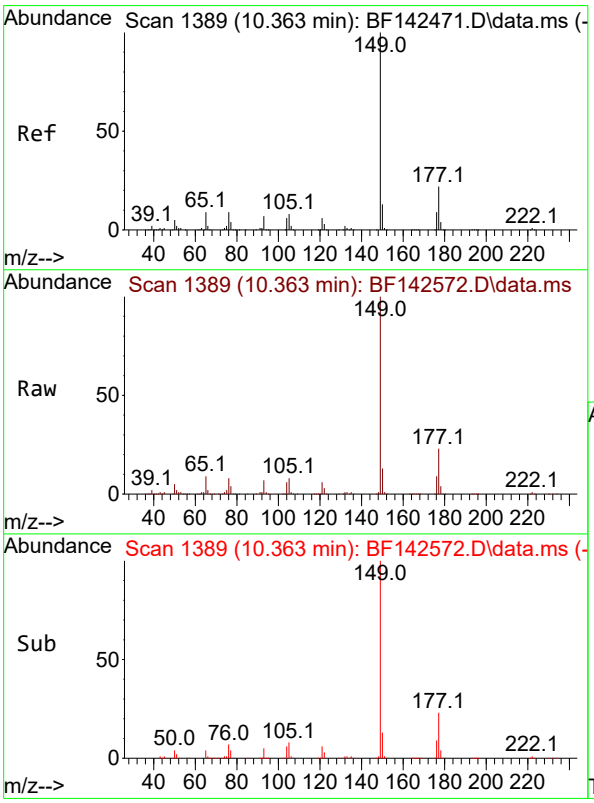
#59
2,3,4,6-Tetrachlorophenol
Concen: 41.881 ng
RT: 10.263 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:232 Resp: 166679

Ion	Ratio	Lower	Upper
232	100		
131	45.1	35.2	52.8
130	2.2	1.7	2.5
166	30.0	23.4	35.0

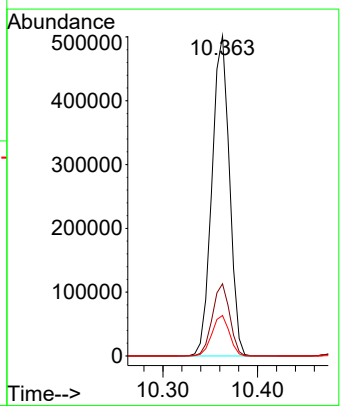


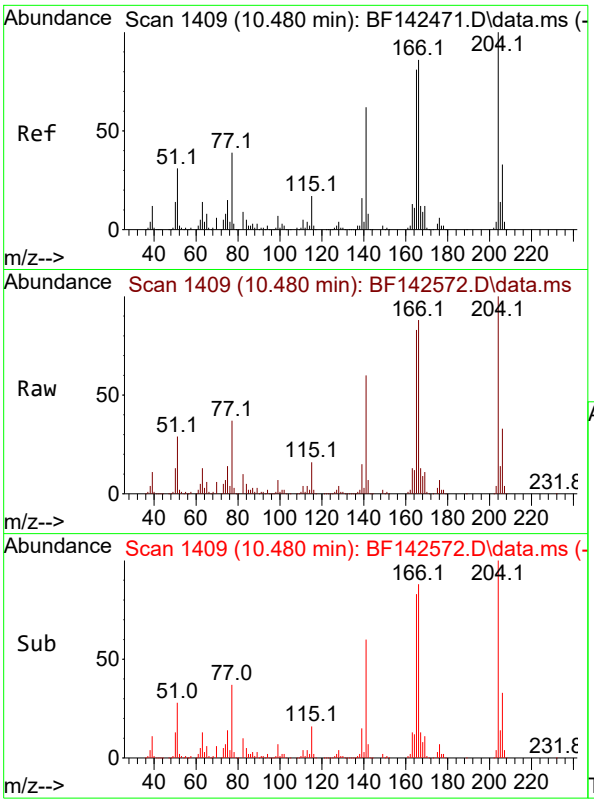


#60
Diethylphthalate
Concen: 42.860 ng
RT: 10.363 min Scan# 1389
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:149 Resp: 645000

Ion	Ratio	Lower	Upper
149	100		
177	22.6	17.6	26.4
150	12.7	10.1	15.1



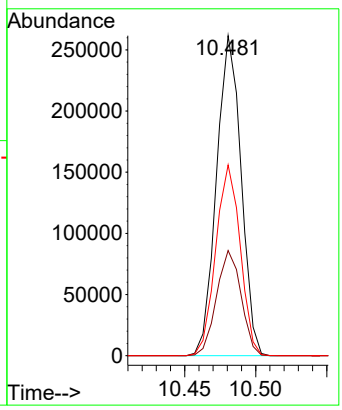


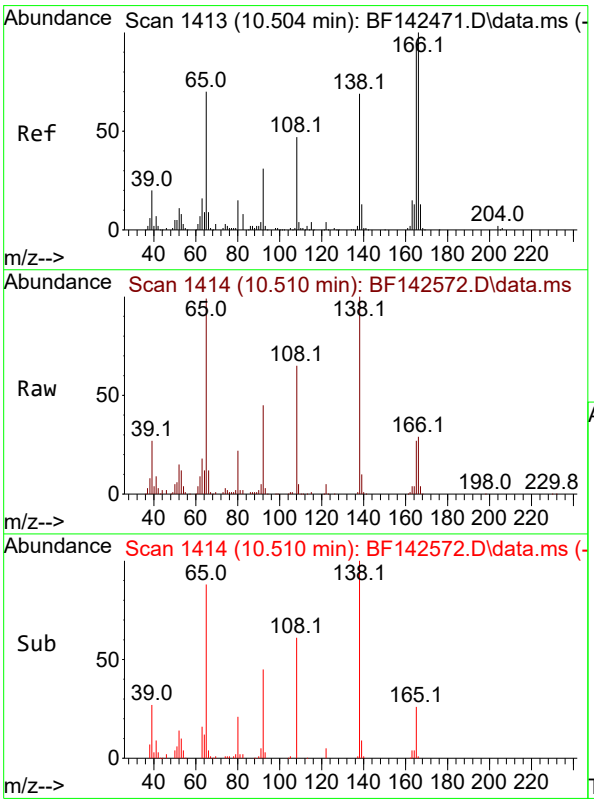
#61
4-Chlorophenyl-phenylether
Concen: 41.734 ng
RT: 10.480 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:204 Resp: 314568

Ion	Ratio	Lower	Upper
204	100		
206	32.9	26.3	39.5
141	59.6	49.5	74.3

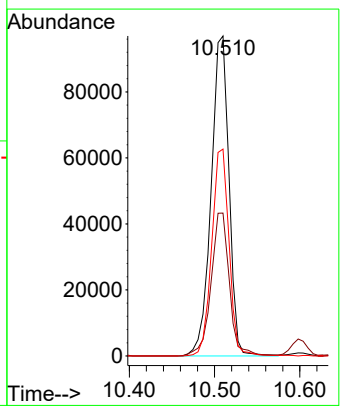


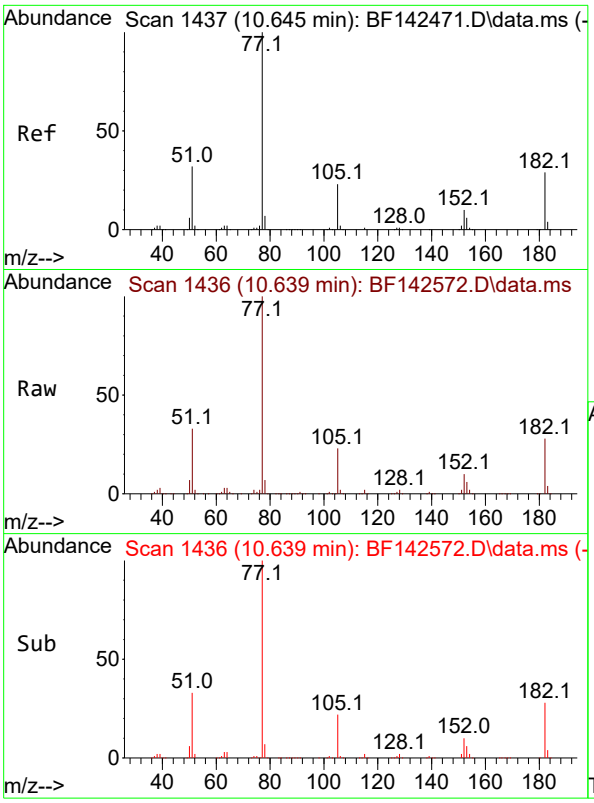


#62
4-Nitroaniline
Concen: 42.830 ng
RT: 10.510 min Scan# 1414
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:138 Resp: 141101

Ion	Ratio	Lower	Upper
138	100		
92	44.6	26.0	66.0
108	64.7	48.4	88.4



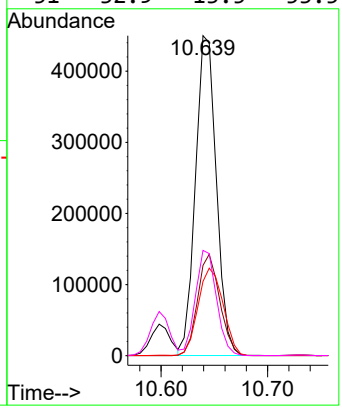


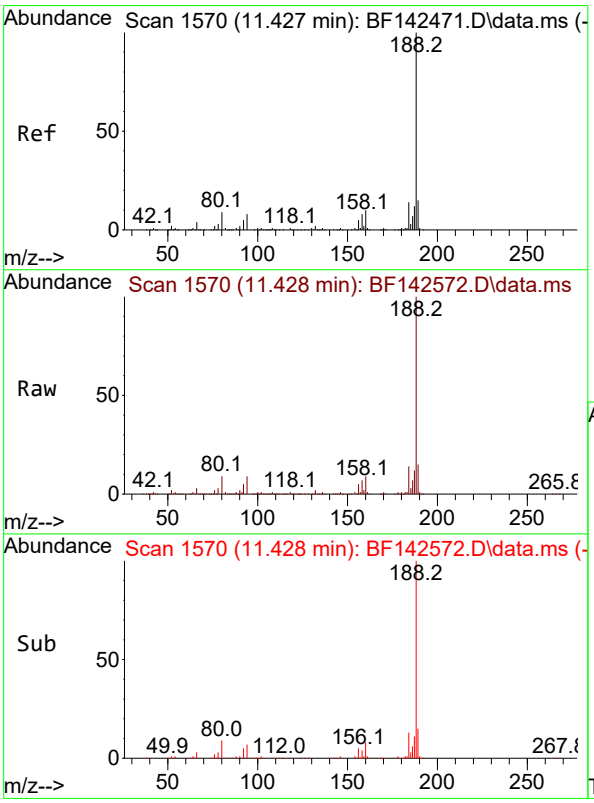
#63
Azobenzene
Concen: 45.384 ng
RT: 10.639 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion: 77 Resp: 613439

Ion	Ratio	Lower	Upper
77	100		
182	28.2	9.0	49.0
105	23.2	2.4	42.4
51	32.9	13.5	53.5

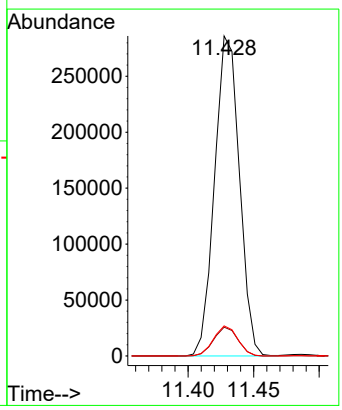


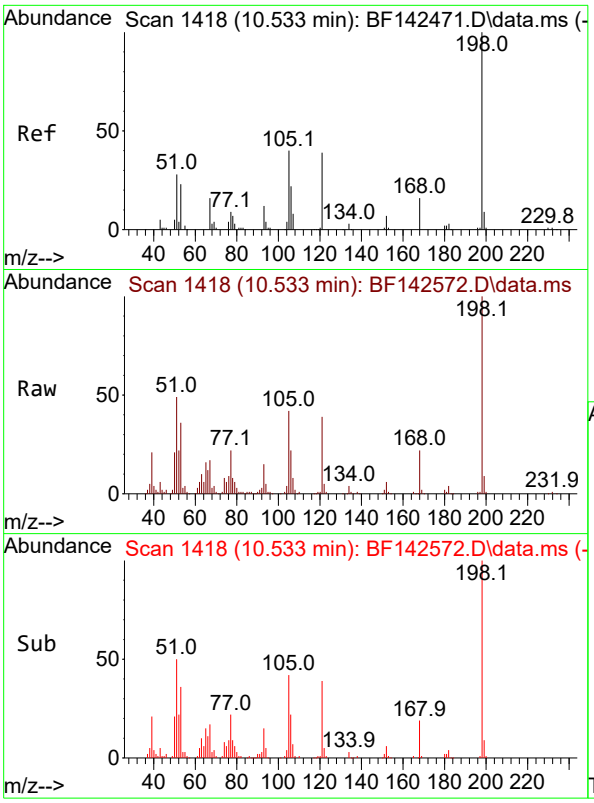


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.428 min Scan# 1570
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:188 Resp: 376587

Ion	Ratio	Lower	Upper
188	100		
94	9.0	6.6	10.0
80	9.4	7.4	11.0



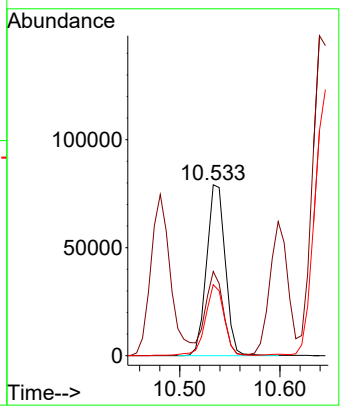


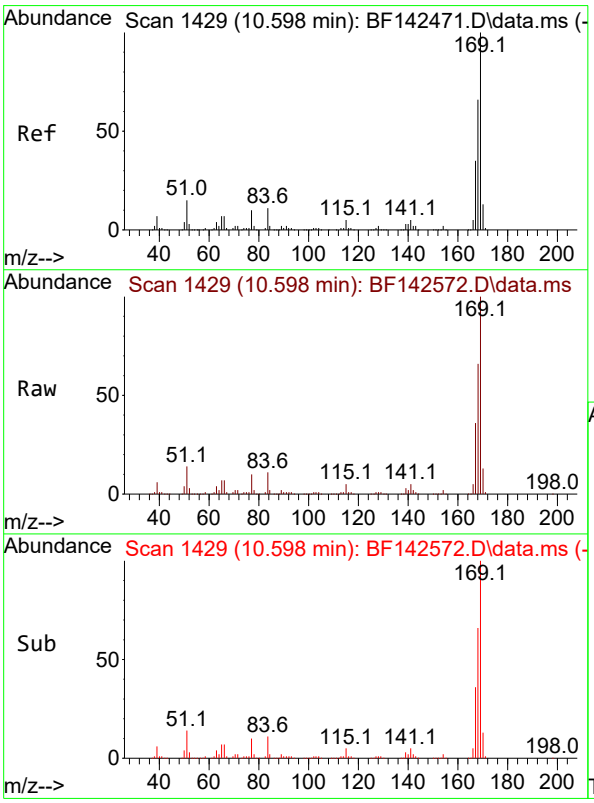
#65
4,6-Dinitro-2-methylphenol
Concen: 48.726 ng
RT: 10.533 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:198 Resp: 102404

Ion	Ratio	Lower	Upper
198	100		
51	49.3	28.3	68.3
105	41.6	21.3	61.3

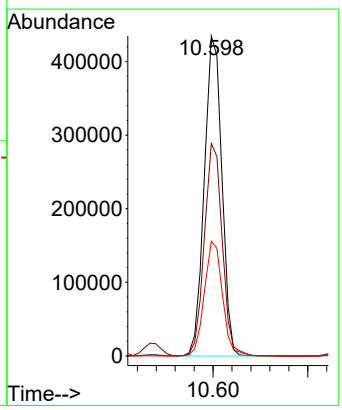


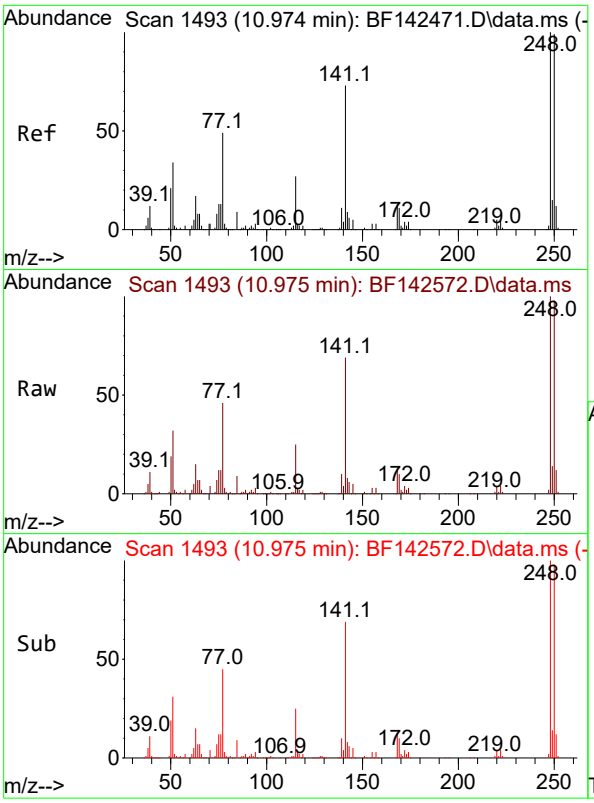


#66
n-Nitrosodiphenylamine
Concen: 43.324 ng
RT: 10.598 min Scan# 1429
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:169 Resp: 558179

Ion	Ratio	Lower	Upper
169	100		
168	66.4	52.7	79.1
167	35.8	28.3	42.5



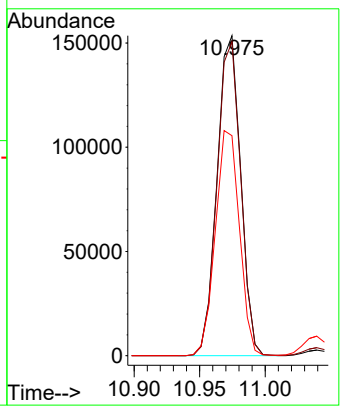


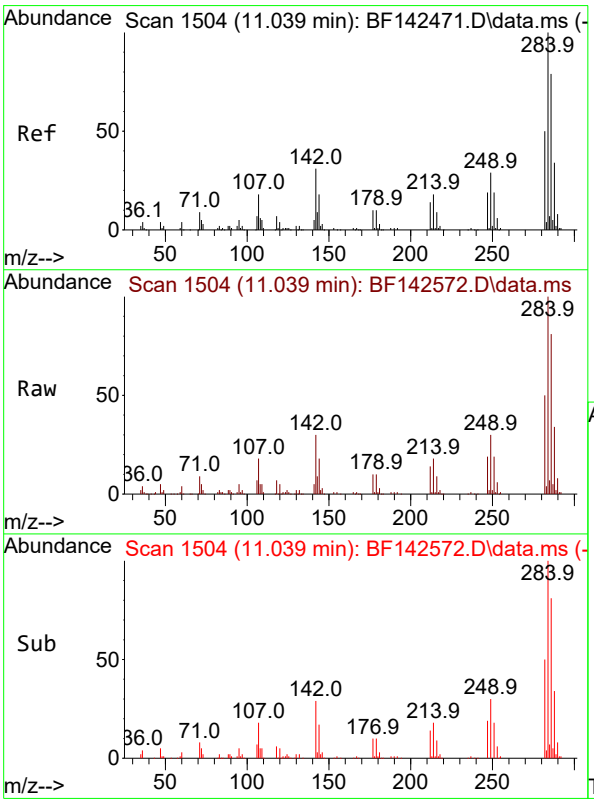
#67
4-Bromophenyl-phenylether
Concen: 43.235 ng
RT: 10.975 min Scan# 14
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:248 Resp: 192522

Ion	Ratio	Lower	Upper
248	100		
250	98.1	79.0	118.4
141	68.8	58.4	87.6

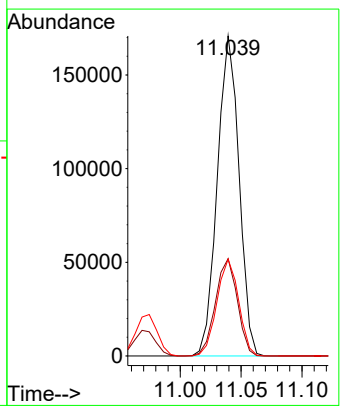


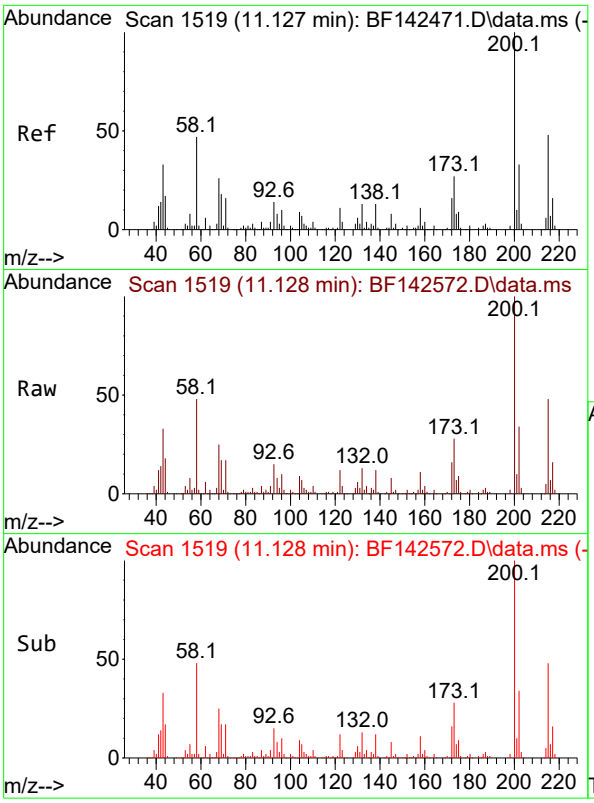


#68
Hexachlorobenzene
Concen: 43.073 ng
RT: 11.039 min Scan# 1504
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:284 Resp: 212135

Ion	Ratio	Lower	Upper
284	100		
142	30.4	24.8	37.2
249	30.2	23.6	35.4



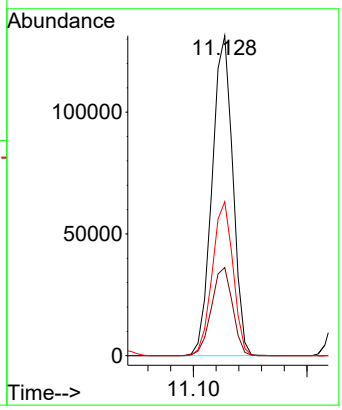


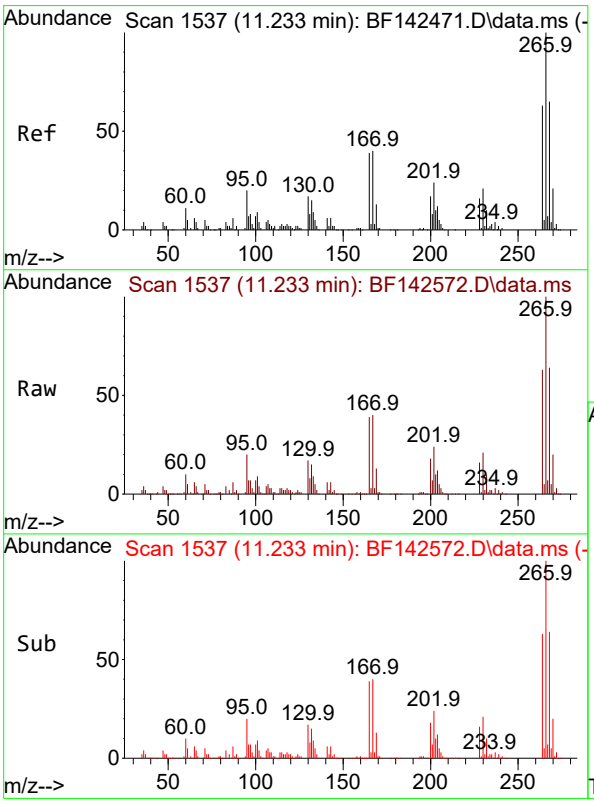
#69
Atrazine
Concen: 48.648 ng
RT: 11.128 min Scan# 1
Delta R.T. 0.001 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:200 Resp: 166454

Ion	Ratio	Lower	Upper
200	100		
173	27.6	7.4	47.4
215	48.1	28.5	68.5

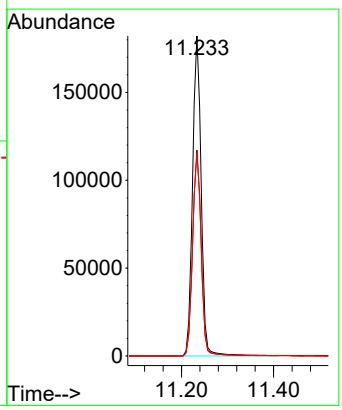


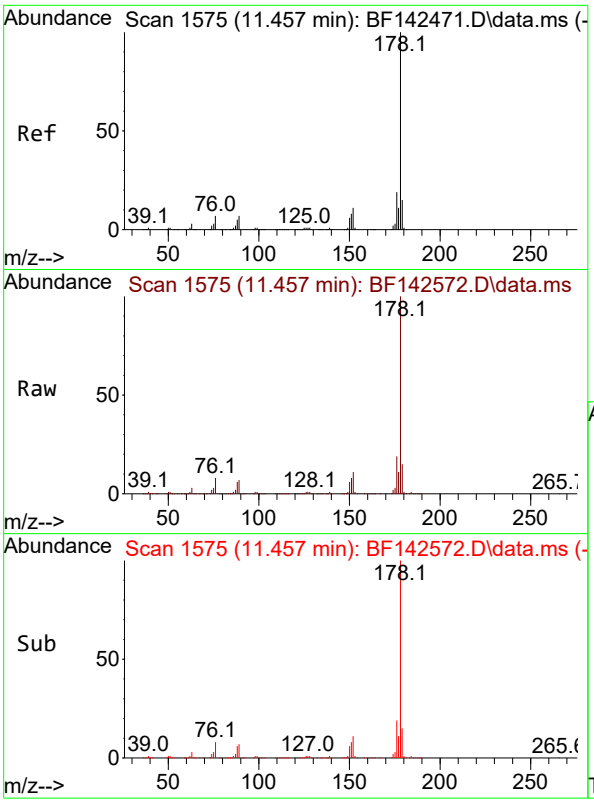


#70
Pentachlorophenol
Concen: 84.922 ng
RT: 11.233 min Scan# 1537
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:266 Resp: 236131

Ion	Ratio	Lower	Upper
266	100		
268	64.3	51.7	77.5
264	63.5	50.4	75.6



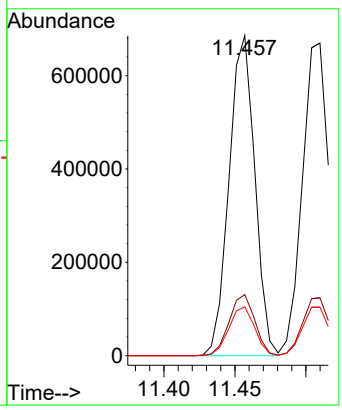


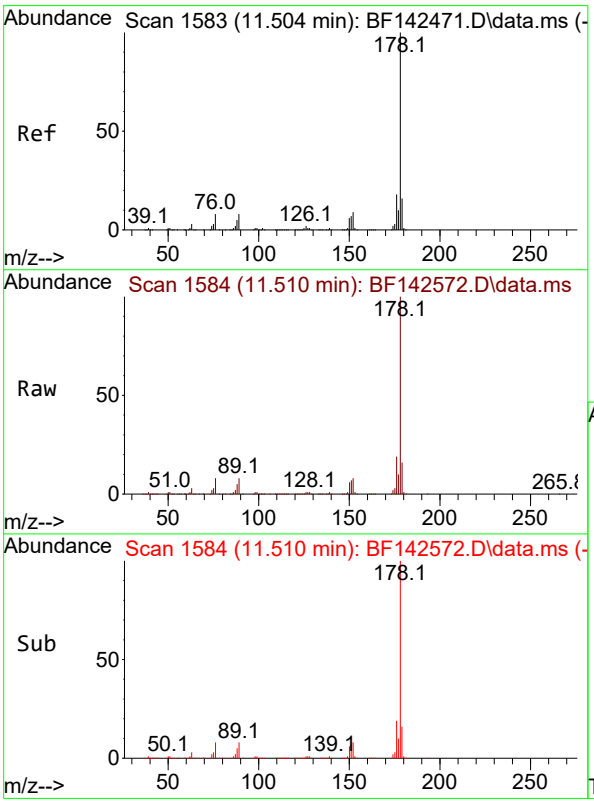
#71
Phenanthrene
Concen: 43.057 ng
RT: 11.457 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:178 Resp: 866540

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.0
179	15.2	12.3	18.5

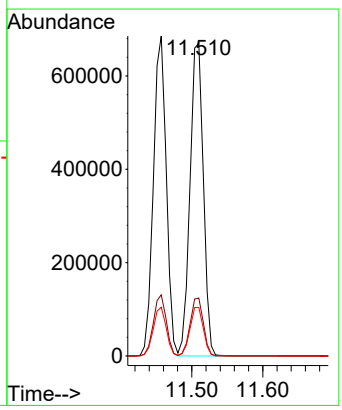


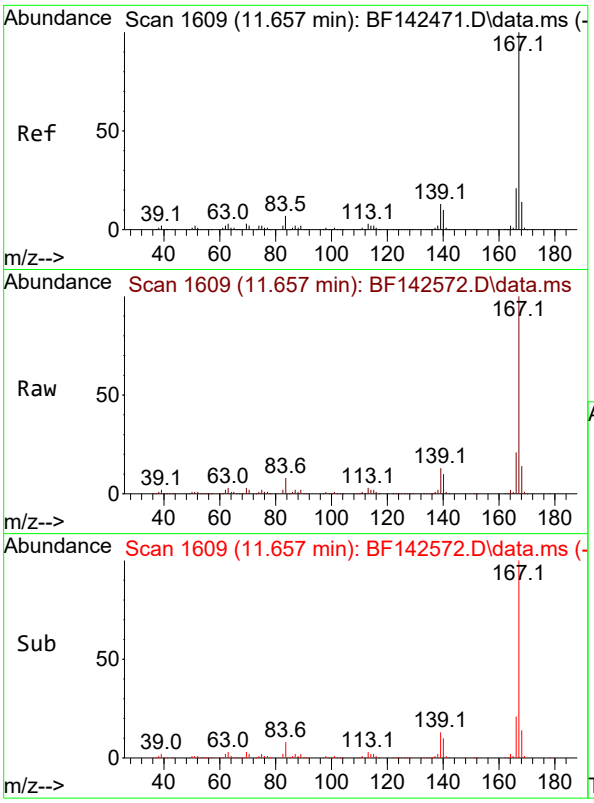


#72
Anthracene
Concen: 42.653 ng
RT: 11.510 min Scan# 1584
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:178 Resp: 876073

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.6	21.8
179	15.5	12.4	18.6



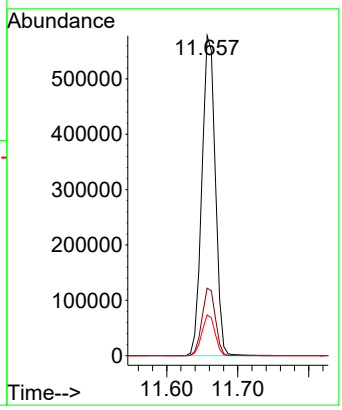


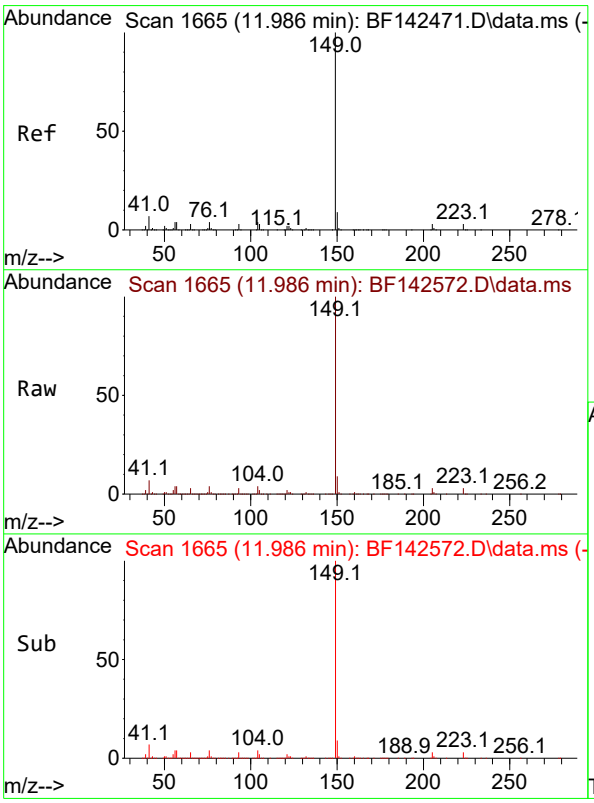
#73
Carbazole
Concen: 43.312 ng
RT: 11.657 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:167 Resp: 760532

Ion	Ratio	Lower	Upper
167	100		
166	21.1	16.9	25.3
139	12.7	10.2	15.4

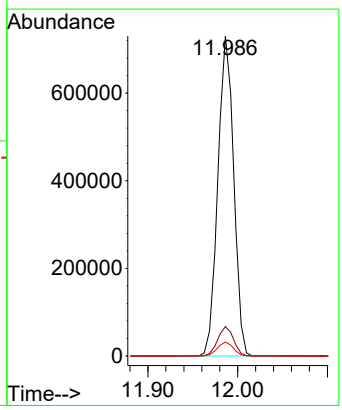


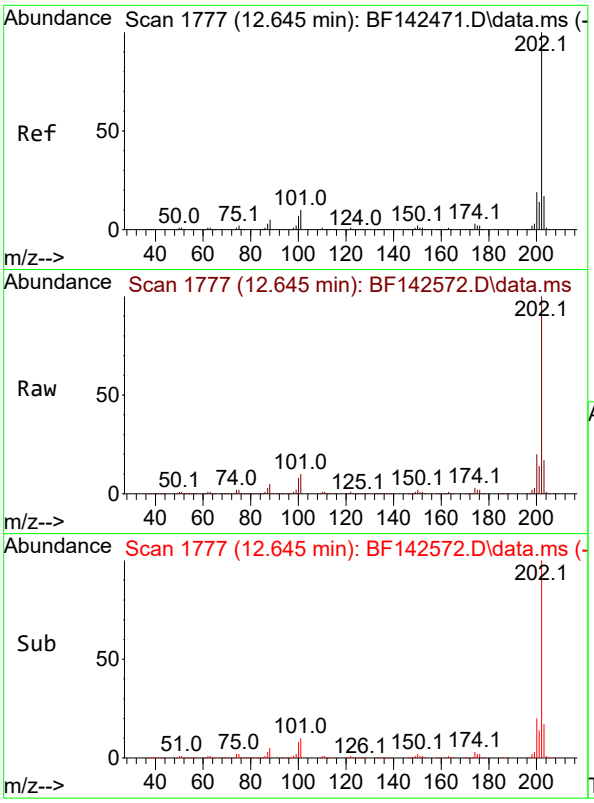


#74
Di-n-butylphthalate
Concen: 46.565 ng
RT: 11.986 min Scan# 1665
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:149 Resp: 894989

Ion	Ratio	Lower	Upper
149	100		
150	9.2	7.3	10.9
104	4.4	3.6	5.4



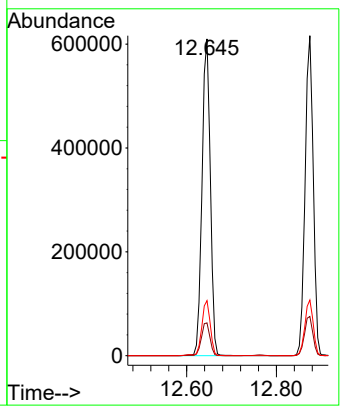


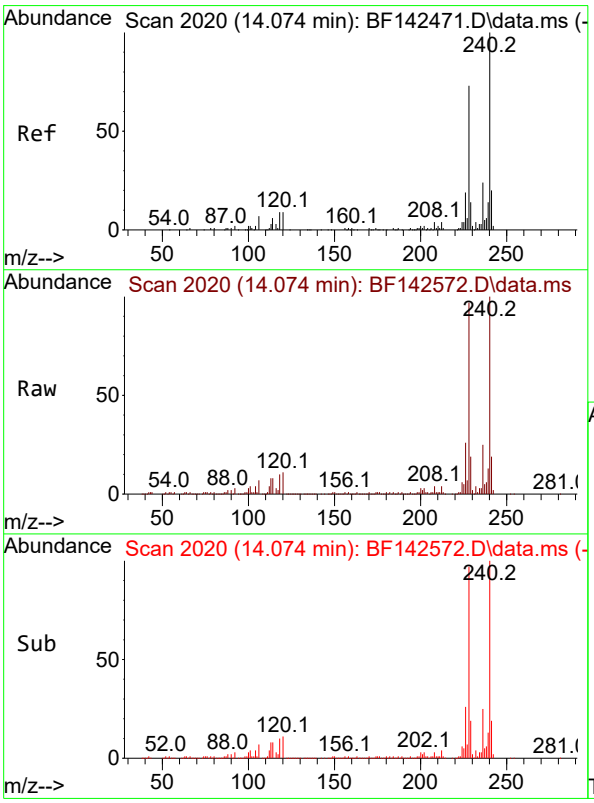
#75
Fluoranthene
Concen: 41.635 ng
RT: 12.645 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:202 Resp: 782953

Ion	Ratio	Lower	Upper
202	100		
101	10.3	0.0	29.6
203	17.4	0.0	37.2

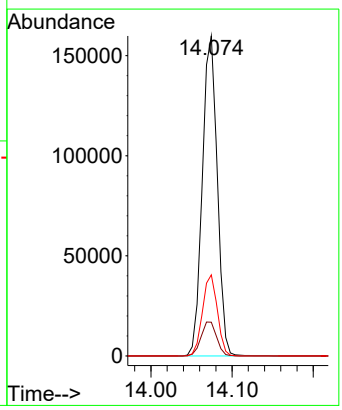


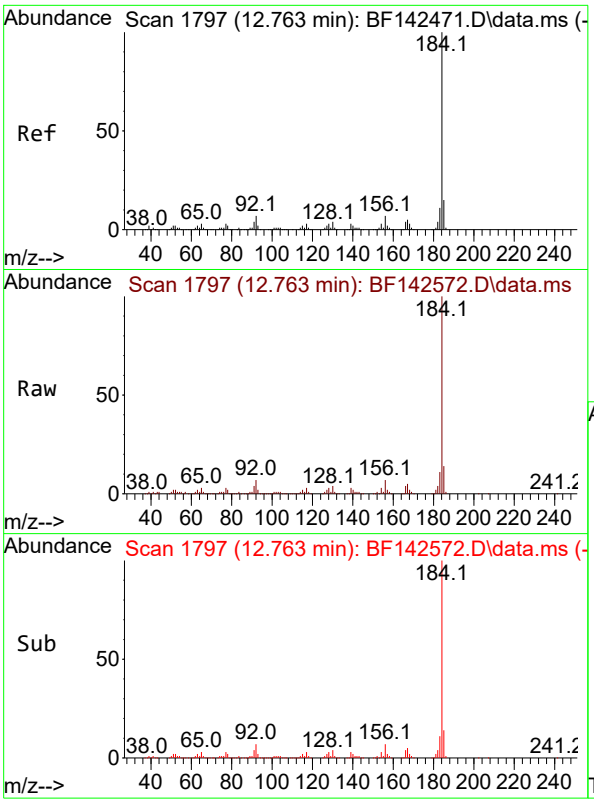


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.074 min Scan# 2020
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:240 Resp: 204232

Ion	Ratio	Lower	Upper
240	100		
120	10.5	7.5	11.3
236	25.3	19.6	29.4



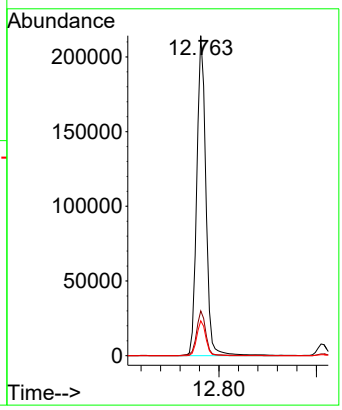


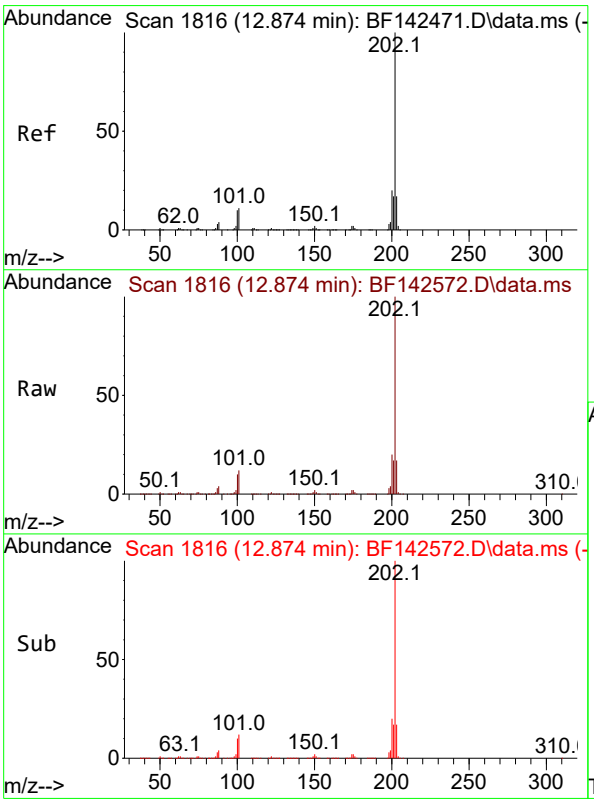
#77
Benzidine
Concen: 36.824 ng
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:184 Resp: 279867

Ion	Ratio	Lower	Upper
184	100		
185	14.0	11.6	17.4
183	10.9	9.0	13.4

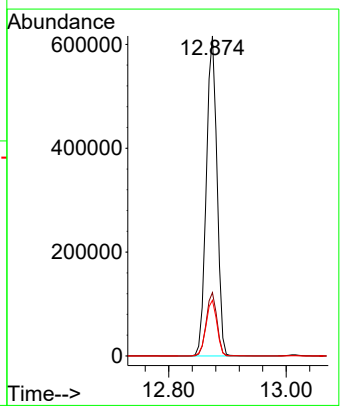


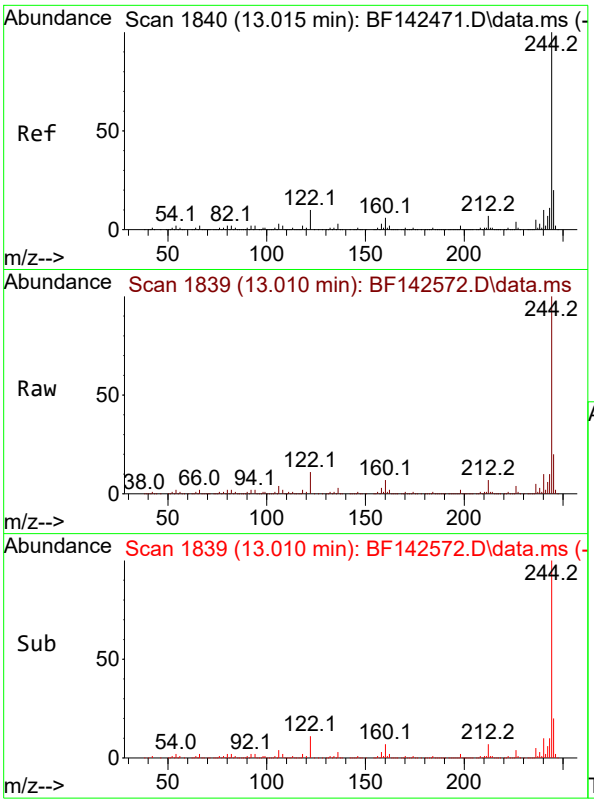


#78
Pyrene
Concen: 40.824 ng
RT: 12.874 min Scan# 1816
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:202 Resp: 777772

Ion	Ratio	Lower	Upper
202	100		
200	19.8	16.1	24.1
203	17.4	13.9	20.9



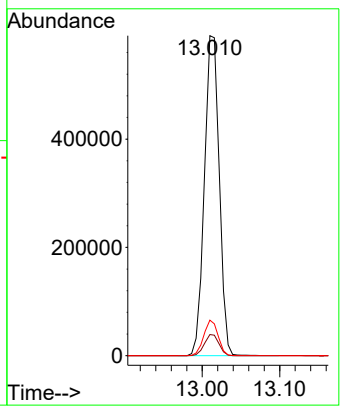


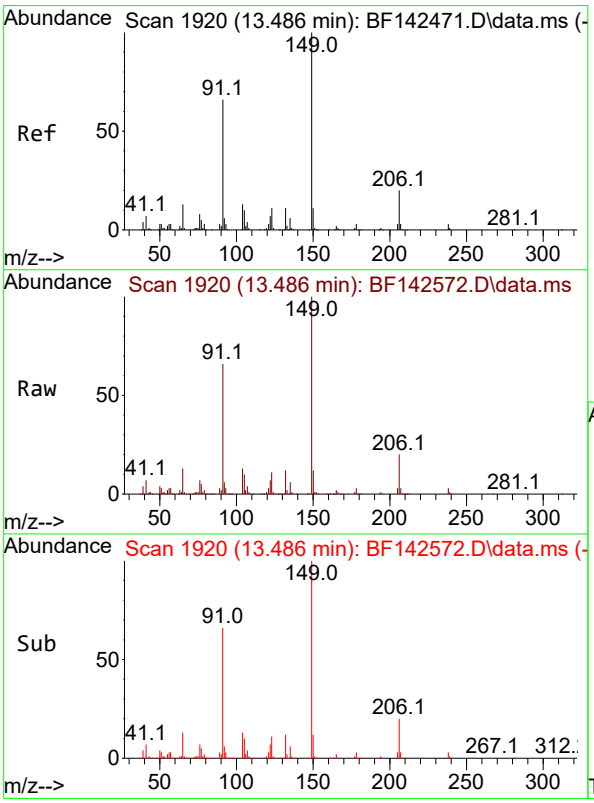
#79
Terphenyl-d14
Concen: 52.665 ng
RT: 13.010 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:244 Resp: 787087

Ion	Ratio	Lower	Upper
244	100		
212	6.6	5.3	7.9
122	11.1	8.2	12.2

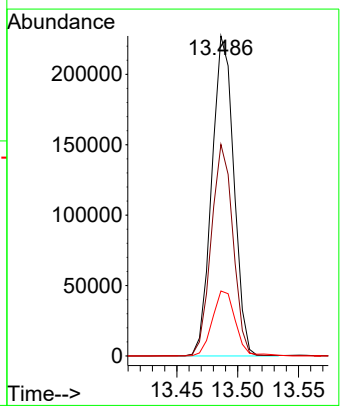


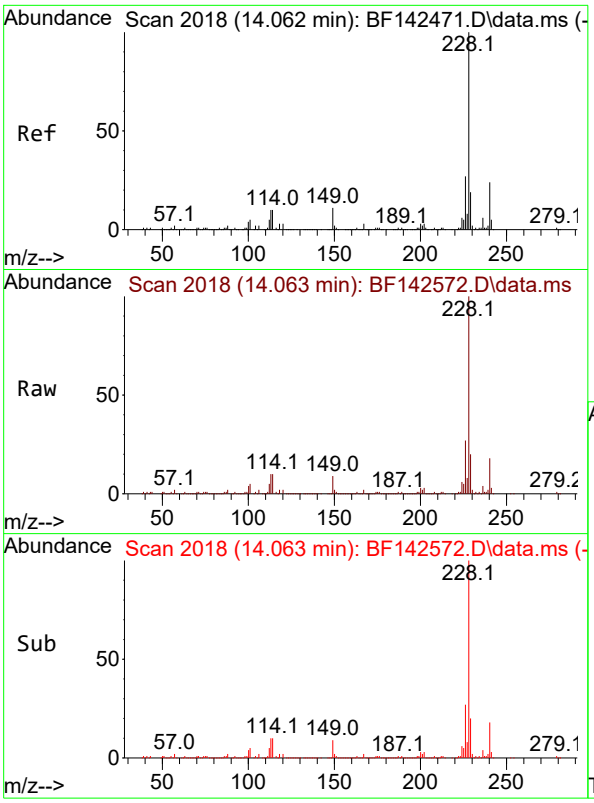


#80
Butylbenzylphthalate
Concen: 54.303 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:149 Resp: 285871

Ion	Ratio	Lower	Upper
149	100		
91	66.1	52.9	79.3
206	20.3	16.2	24.2



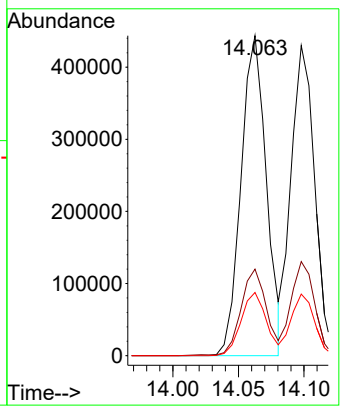


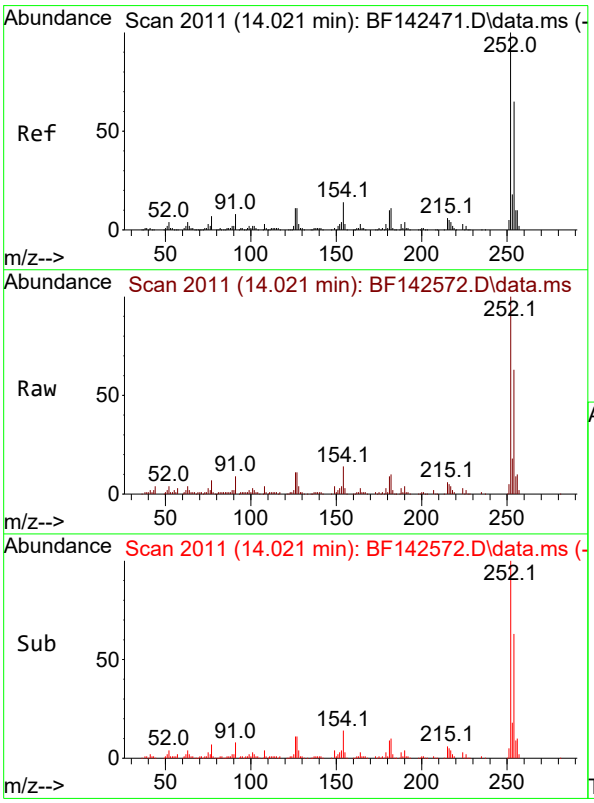
#81
Benzo(a)anthracene
Concen: 43.758 ng
RT: 14.063 min Scan# 2
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:228 Resp: 596751

Ion	Ratio	Lower	Upper
228	100		
226	27.1	21.2	31.8
229	19.7	15.5	23.3

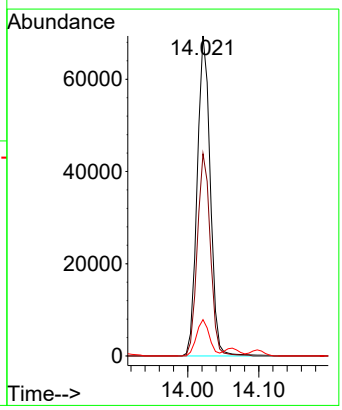


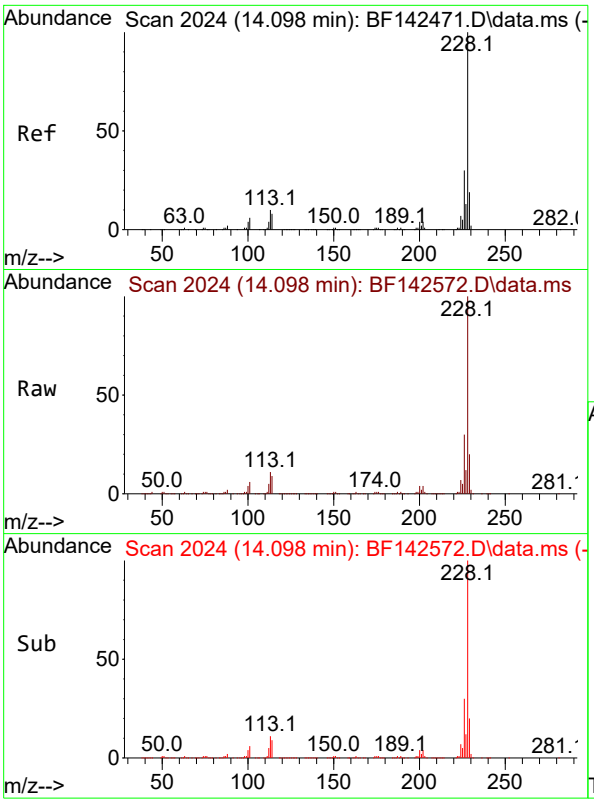


#82
3,3'-Dichlorobenzidine
Concen: 21.511 ng
RT: 14.021 min Scan# 2011
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:252 Resp: 88980

Ion	Ratio	Lower	Upper
252	100		
254	63.2	52.0	78.0
126	11.4	8.9	13.3



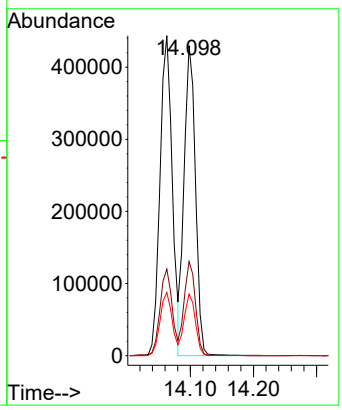


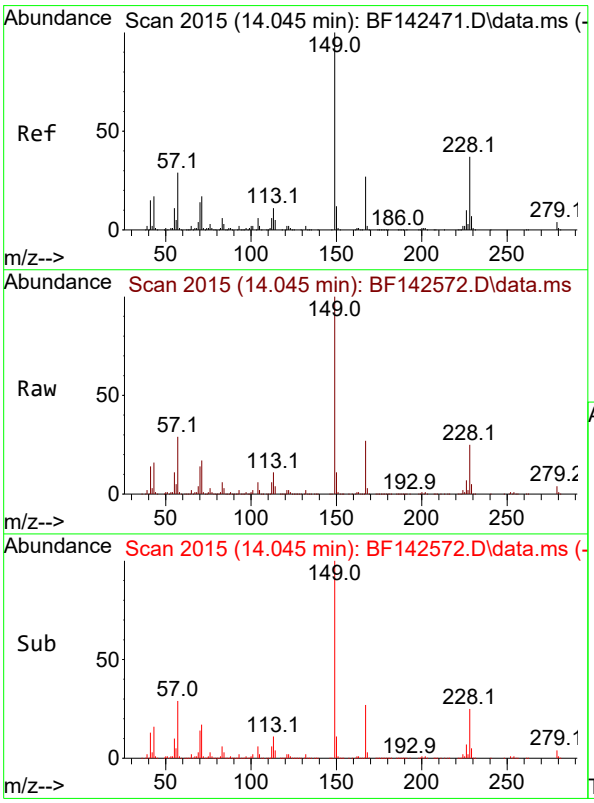
#83
Chrysene
Concen: 43.981 ng
RT: 14.098 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:228 Resp: 538958

Ion	Ratio	Lower	Upper
228	100		
226	30.3	23.8	35.6
229	19.9	15.4	23.2

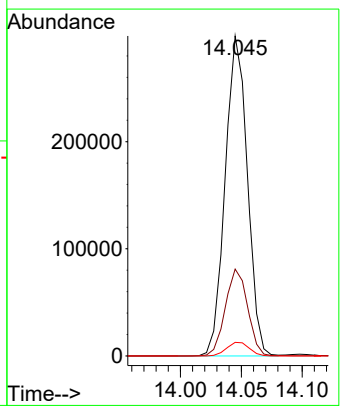


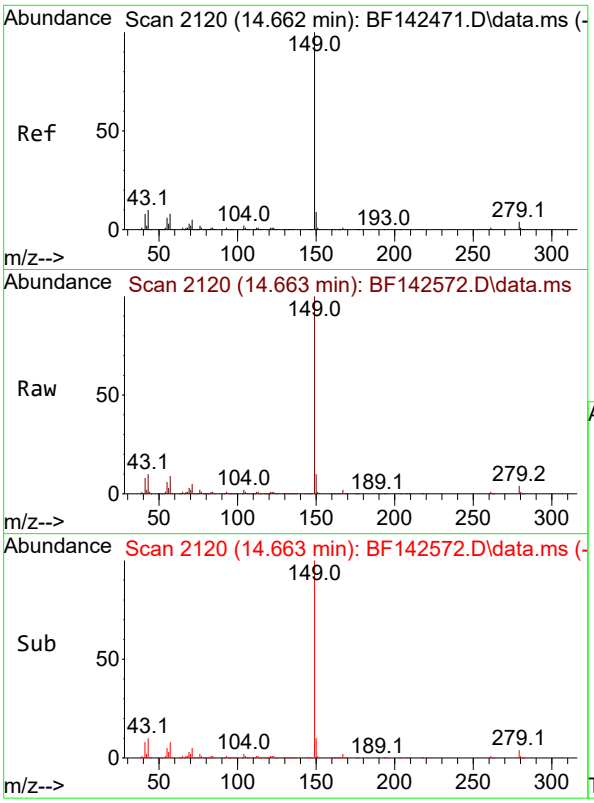


#84
Bis(2-ethylhexyl)phthalate
Concen: 56.222 ng
RT: 14.045 min Scan# 2015
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:149 Resp: 378894

Ion	Ratio	Lower	Upper
149	100		
167	27.2	21.5	32.3
279	4.3	3.2	4.8



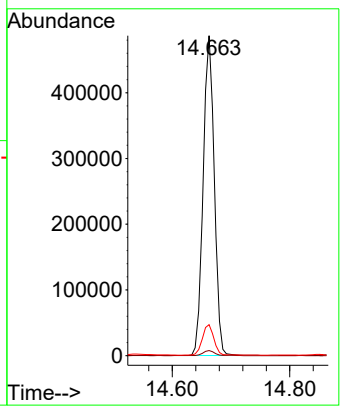


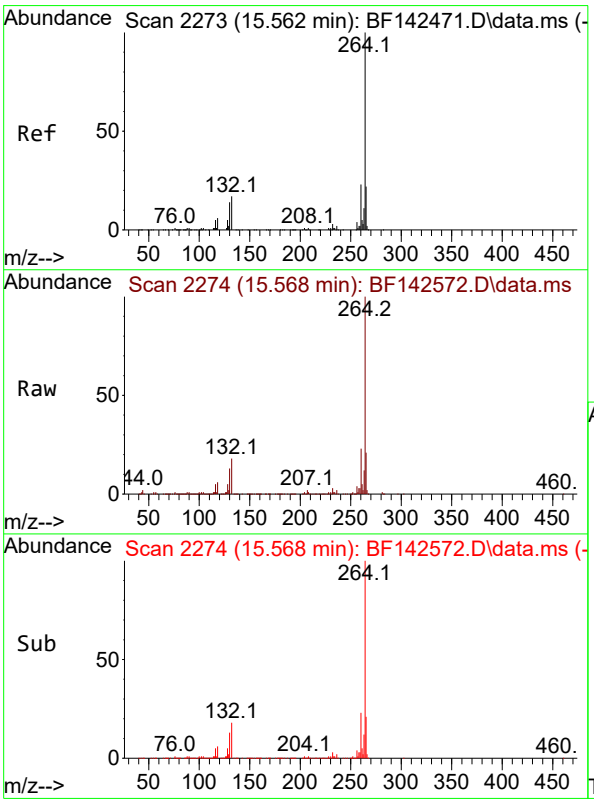
#85
Di-n-octyl phthalate
Concen: 48.596 ng
RT: 14.663 min Scan# 21
Delta R.T. -0.005 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:149 Resp: 640360

Ion	Ratio	Lower	Upper
149	100		
167	1.8	1.2	1.8#
43	9.9	7.9	11.9

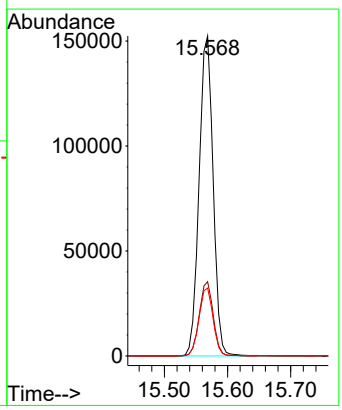


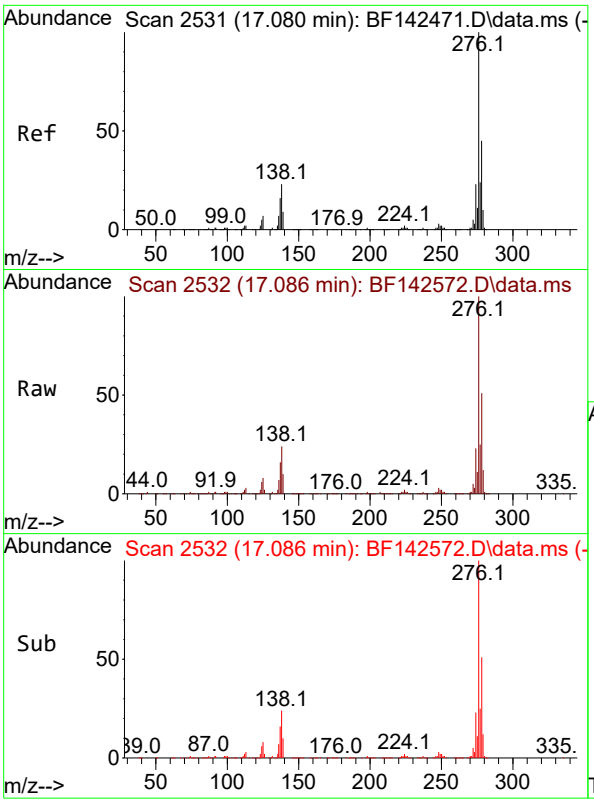


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.568 min Scan# 2274
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:264 Resp: 234981

Ion	Ratio	Lower	Upper
264	100		
260	23.2	18.6	28.0
265	21.2	17.7	26.5



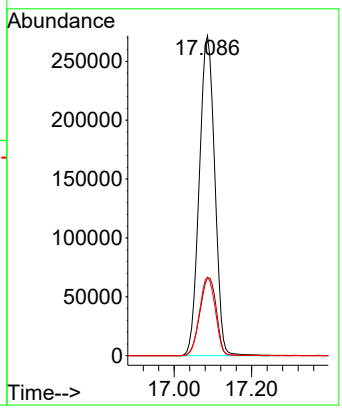


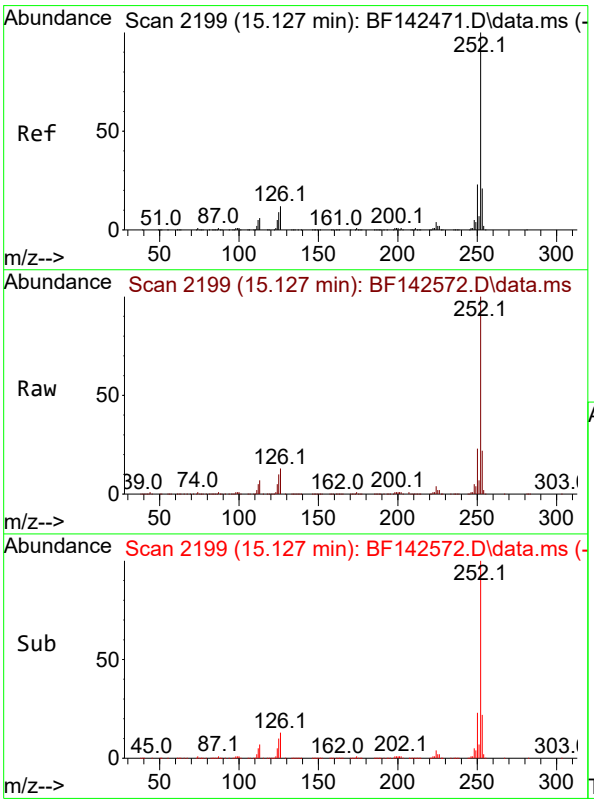
#87
Indeno(1,2,3-cd)pyrene
Concen: 42.741 ng
RT: 17.086 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:276 Resp: 753995

Ion	Ratio	Lower	Upper
276	100		
138	25.8	19.9	29.9
277	25.0	20.2	30.2

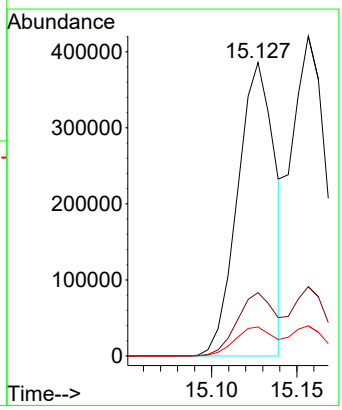


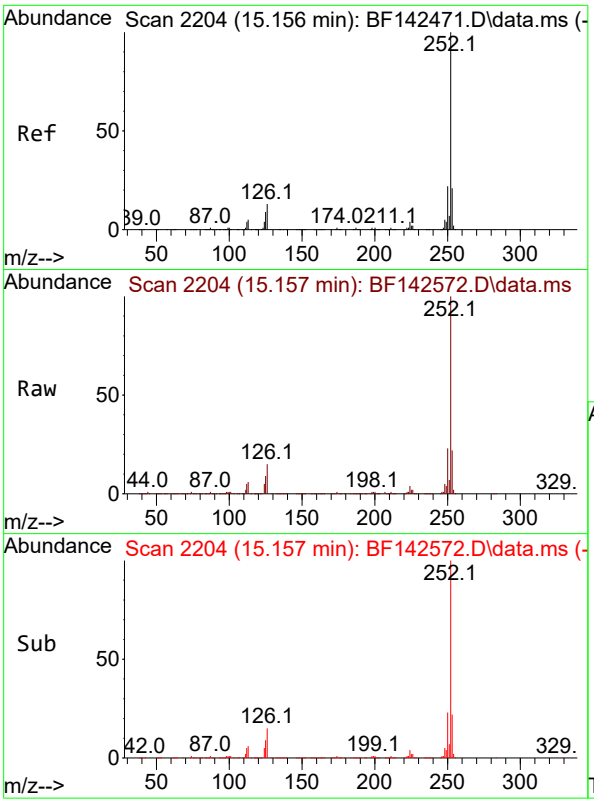


#88
Benzo(b)fluoranthene
Concen: 41.907 ng
RT: 15.127 min Scan# 2199
Delta R.T. 0.000 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:252 Resp: 582813

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.0	25.4
125	9.9	7.4	11.0



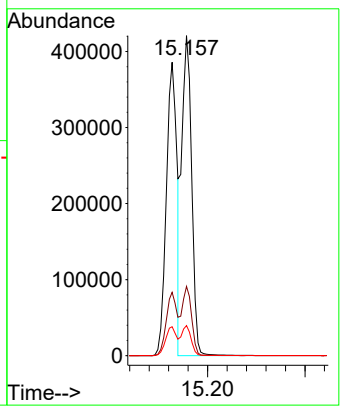


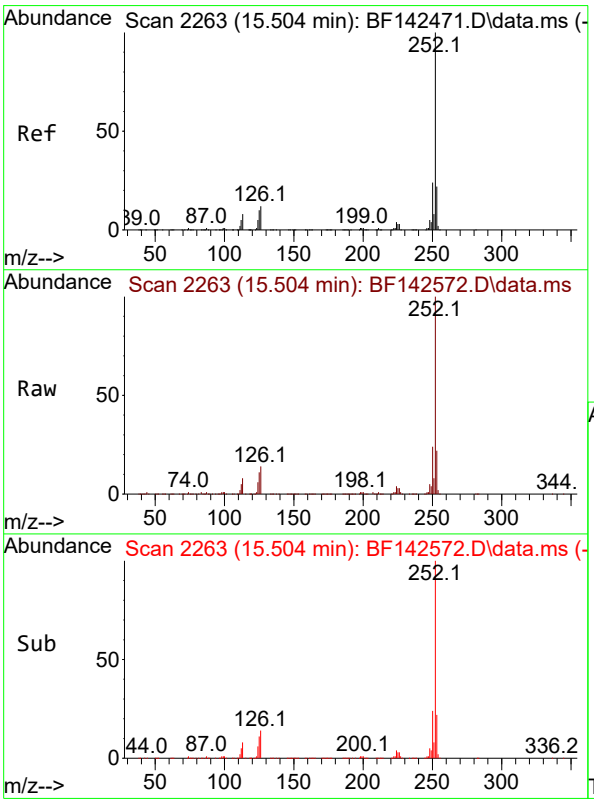
#89
Benzo(k)fluoranthene
Concen: 45.559 ng
RT: 15.157 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:252 Resp: 593433

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.0	25.4
125	9.4	7.3	10.9

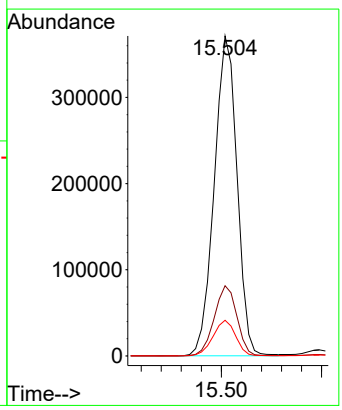


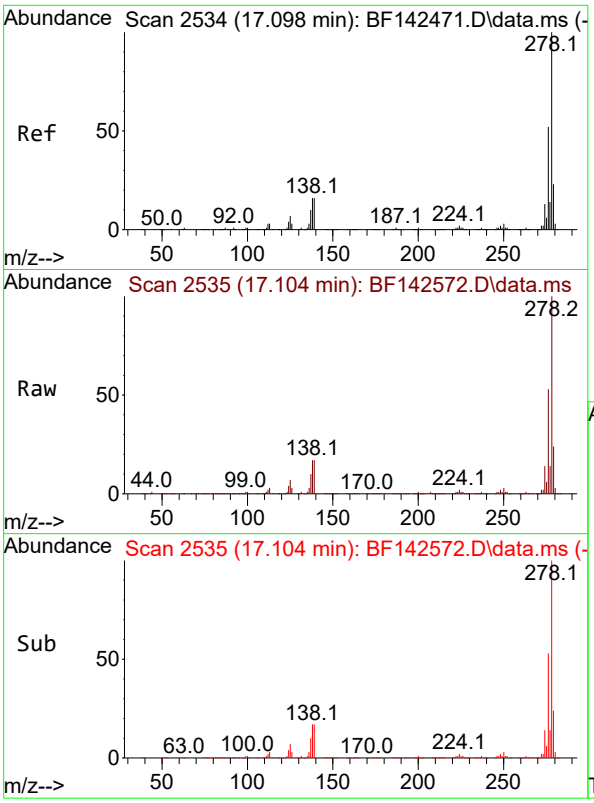


#90
Benzo(a)pyrene
Concen: 44.576 ng
RT: 15.504 min Scan# 2263
Delta R.T. -0.006 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:252 Resp: 584344

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.0
125	11.1	7.9	11.9



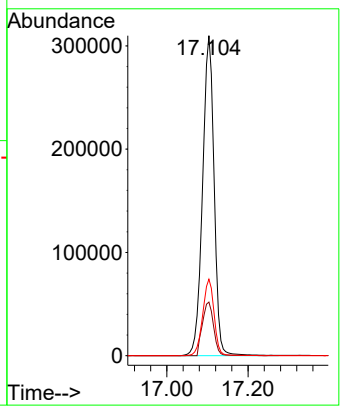


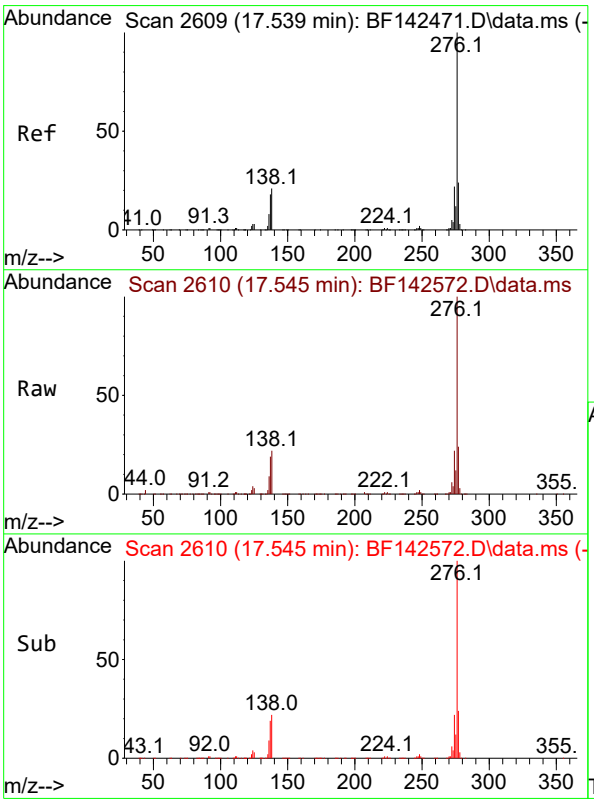
#91
Dibenzo(a,h)anthracene
Concen: 42.740 ng
RT: 17.104 min Scan# 2
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Instrument :
BNA_F
ClientSampleId :
TP-54MSD

Tgt Ion:278 Resp: 611507

Ion	Ratio	Lower	Upper
278	100		
139	16.8	12.8	19.2
279	23.9	18.6	28.0

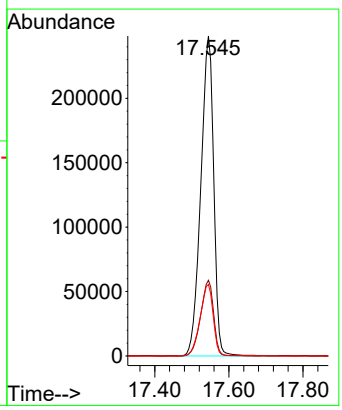




#92
Benzo(g,h,i)perylene
Concen: 41.909 ng
RT: 17.545 min Scan# 2610
Delta R.T. -0.012 min
Lab File: BF142572.D
Acq: 30 May 2025 16:19

Tgt Ion:276 Resp: 599741

Ion	Ratio	Lower	Upper
276	100		
277	23.7	19.2	28.8
138	22.3	16.8	25.2



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

Manual Integration Report

Sequence:	bf052025	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC010	BF142469.D	Benzoic acid	Rahul	5/21/2025 2:07:30 PM	Jagrut	5/21/2025 4:43:55 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	bf053025	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB168211BS	BF142568.D	Caprolactam	Rahul	6/2/2025 9:37:32 AM	Jagrut	6/2/2025 11:12:45 AM	Peak Integrated by Software
Q2150-09MS	BF142571.D	Caprolactam	Rahul	6/2/2025 9:37:36 AM	Jagrut	6/2/2025 11:12:47 AM	Peak Integrated by Software
Q2150-09MSD	BF142572.D	Caprolactam	Rahul	6/2/2025 9:37:39 AM	Jagrut	6/2/2025 11:12:50 AM	Peak Integrated by Software
Q2150-03	BF142580.D	Benzo(b)fluoranthene	Rahul	6/2/2025 9:37:55 AM	Jagrut	6/2/2025 11:13:22 AM	Peak Integrated by Software
Q2150-02	BF142583.D	Benzo(b)fluoranthene	Rahul	6/2/2025 9:37:58 AM	Jagrut	6/2/2025 11:13:24 AM	Peak Integrated by Software
Q2150-06	BF142584.D	Benzo(b)fluoranthene	Rahul	6/2/2025 9:38:01 AM	Jagrut	6/2/2025 11:13:26 AM	Peak Integrated by Software
Q2150-06	BF142584.D	Benzo(k)fluoranthene	Rahul	6/2/2025 9:38:01 AM	Jagrut	6/2/2025 11:13:26 AM	Peak Integrated by Software
Q2150-08	BF142585.D	Benzo(b)fluoranthene	Rahul	6/2/2025 9:38:05 AM	Jagrut	6/2/2025 11:13:28 AM	Peak Integrated by Software
Q2150-08	BF142585.D	Benzo(k)fluoranthene	Rahul	6/2/2025 9:38:05 AM	Jagrut	6/2/2025 11:13:28 AM	Peak Integrated by Software
Q2150-01	BF142586.D	Benzo(b)fluoranthene	Rahul	6/2/2025 9:38:08 AM	Jagrut	6/2/2025 11:13:31 AM	Peak Integrated by Software
Q2150-01	BF142586.D	Benzo(k)fluoranthene	Rahul	6/2/2025 9:38:08 AM	Jagrut	6/2/2025 11:13:31 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	BF060225	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q2150-01DL	BF142598.D	Benzo(b)fluoranthene	Rahul	6/3/2025 1:29:44 PM	Jagrut	6/3/2025 5:25:08 PM	Peak Integrated by Software
Q2150-01DL	BF142598.D	Benzo(k)fluoranthene	Rahul	6/3/2025 1:29:44 PM	Jagrut	6/3/2025 5:25:08 PM	Peak Integrated by Software

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF052025

Review By	Rahul	Review On	5/21/2025 2:52:20 PM				
Supervise By	Jagrut	Supervise On	5/21/2025 4:44:06 PM				
SubDirectory	BF052025	HP Acquire Method	BNA_F		HP Processing Method	bf052025	

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12665,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BF142465.D	20 May 2025 11:13	RC/JU	Ok
2	SSTDCCC040	BF142466.D	20 May 2025 11:41	RC/JU	Not Ok
3	SSTDICC2.5	BF142467.D	20 May 2025 12:10	RC/JU	Ok
4	SSTDICC005	BF142468.D	20 May 2025 12:38	RC/JU	Ok
5	SSTDICC010	BF142469.D	20 May 2025 13:07	RC/JU	Ok,M
6	SSTDICC020	BF142470.D	20 May 2025 13:36	RC/JU	Ok
7	SSTDICCC040	BF142471.D	20 May 2025 14:05	RC/JU	Ok
8	SSTDICC050	BF142472.D	20 May 2025 14:34	RC/JU	Ok
9	SSTDICC060	BF142473.D	20 May 2025 15:03	RC/JU	Ok
10	SSTDICC080	BF142474.D	20 May 2025 15:31	RC/JU	Ok
11	SSTDICV040	BF142475.D	20 May 2025 16:31	RC/JU	Ok
12	PB168067TB	BF142476.D	20 May 2025 17:29	RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF053025

Review By	Rahul	Review On	6/2/2025 9:40:01 AM				
Supervise By	Jagrut	Supervise On	6/2/2025 11:13:47 AM				
SubDirectory	BF053025	HP Acquire Method	BNA_F			HP Processing Method	bf052025

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12667,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BF142565.D	30 May 2025 12:23	RC/JU	Ok
2	SSTDCCC040	BF142566.D	30 May 2025 13:20	RC/JU	Ok
3	PB168211BL	BF142567.D	30 May 2025 13:49	RC/JU	Ok
4	PB168211BS	BF142568.D	30 May 2025 14:18	RC/JU	Ok,M
5	Q2150-05	BF142569.D	30 May 2025 14:52	RC/JU	Ok
6	Q2150-09	BF142570.D	30 May 2025 15:21	RC/JU	Ok
7	Q2150-09MS	BF142571.D	30 May 2025 15:50	RC/JU	Ok,M
8	Q2150-09MSD	BF142572.D	30 May 2025 16:19	RC/JU	Ok,M
9	Q2151-01	BF142573.D	30 May 2025 16:49	RC/JU	Ok
10	Q2136-05	BF142574.D	30 May 2025 17:18	RC/JU	Ok
11	Q2136-05MS	BF142575.D	30 May 2025 17:47	RC/JU	Ok,M
12	Q2136-05MSD	BF142576.D	30 May 2025 18:16	RC/JU	Ok,M
13	Q2146-04	BF142577.D	30 May 2025 18:46	RC/JU	Ok
14	Q2151-04	BF142578.D	30 May 2025 19:15	RC/JU	Ok,M
15	Q2150-07	BF142579.D	30 May 2025 19:45	RC/JU	Ok
16	Q2150-03	BF142580.D	30 May 2025 20:14	RC/JU	Ok,M
17	Q2150-04	BF142581.D	30 May 2025 20:43	RC/JU	Ok
18	Q2150-10	BF142582.D	30 May 2025 21:13	RC/JU	Ok
19	Q2150-02	BF142583.D	30 May 2025 21:42	RC/JU	Ok,M
20	Q2150-06	BF142584.D	30 May 2025 22:11	RC/JU	Ok,M
21	Q2150-08	BF142585.D	30 May 2025 22:41	RC/JU	Ok,M

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF053025

Review By	Rahul	Review On	6/2/2025 9:40:01 AM				
Supervise By	Jagrut	Supervise On	6/2/2025 11:13:47 AM				
SubDirectory	BF053025	HP Acquire Method	BNA_F		HP Processing Method	bf052025	

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12667,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q2150-01	BF142586.D	30 May 2025 23:10	RC/JU	Dilution
23	Q2153-01	BF142587.D	30 May 2025 23:41	RC/JU	Ok,M
24	Q2152-01	BF142588.D	31 May 2025 00:10	RC/JU	Ok,M

M : Manual Integration

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF060225

Review By	Rahul	Review On	6/3/2025 1:30:43 PM				
Supervise By	Jagrut	Supervise On	6/3/2025 5:25:27 PM				
SubDirectory	BF060225	HP Acquire Method	BNA_F		HP Processing Method	bf052025	

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12667,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BF142589.D	02 Jun 2025 11:01	RC/JU	Ok
2	SSTDCCC040	BF142590.D	02 Jun 2025 11:30	RC/JU	Ok
3	PB168219BL	BF142591.D	02 Jun 2025 11:59	RC/JU	Ok
4	PB168219BS	BF142592.D	02 Jun 2025 12:28	RC/JU	Ok,M
5	PB168190TB	BF142593.D	02 Jun 2025 12:57	RC/JU	Ok
6	PB168235BL	BF142594.D	02 Jun 2025 13:26	RC/JU	Ok
7	PB168235BS	BF142595.D	02 Jun 2025 13:54	RC/JU	Ok,M
8	PB168235BSD	BF142596.D	02 Jun 2025 14:23	RC/JU	Ok,M
9	Q2134-01	BF142597.D	02 Jun 2025 15:05	RC/JU	Ok
10	Q2150-01DL	BF142598.D	02 Jun 2025 15:34	RC/JU	Ok,M
11	Q2149-01	BF142599.D	02 Jun 2025 16:03	RC/JU	Dilution
12	Q2149-01DL	BF142600.D	02 Jun 2025 17:11	RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF052025

Review By	Rahul	Review On	5/21/2025 2:52:20 PM		
Supervise By	Jagrut	Supervise On	5/21/2025 4:44:06 PM		
SubDirectory	BF052025	HP Acquire Method	BNA_F	HP Processing Method	bf052025

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12665,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BF142465.D	20 May 2025 11:13		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BF142466.D	20 May 2025 11:41	Fresh Calibration Required	RC/JU	Not Ok
3	SSTDICC2.5	SSTDICC2.5	BF142467.D	20 May 2025 12:10		RC/JU	Ok
4	SSTDICC005	SSTDICC005	BF142468.D	20 May 2025 12:38	Compound #32,54,85 removed from 5ppm	RC/JU	Ok
5	SSTDICC010	SSTDICC010	BF142469.D	20 May 2025 13:07		RC/JU	Ok,M
6	SSTDICC020	SSTDICC020	BF142470.D	20 May 2025 13:36		RC/JU	Ok
7	SSTDICCC040	SSTDICCC040	BF142471.D	20 May 2025 14:05	This calibration is good for both the methods, 8270E DOD and 625.1.	RC/JU	Ok
8	SSTDICC050	SSTDICC050	BF142472.D	20 May 2025 14:34		RC/JU	Ok
9	SSTDICC060	SSTDICC060	BF142473.D	20 May 2025 15:03		RC/JU	Ok
10	SSTDICC080	SSTDICC080	BF142474.D	20 May 2025 15:31		RC/JU	Ok
11	SSTDICV040	ICVBF052025	BF142475.D	20 May 2025 16:31		RC/JU	Ok
12	PB168067TB	PB168067TB	BF142476.D	20 May 2025 17:29		RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF053025

Review By	Rahul	Review On	6/2/2025 9:40:01 AM		
Supervise By	Jagrut	Supervise On	6/2/2025 11:13:47 AM		
SubDirectory	BF053025	HP Acquire Method	BNA_F	HP Processing Method	bf052025

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12667,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BF142565.D	30 May 2025 12:23		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BF142566.D	30 May 2025 13:20		RC/JU	Ok
3	PB168211BL	PB168211BL	BF142567.D	30 May 2025 13:49		RC/JU	Ok
4	PB168211BS	PB168211BS	BF142568.D	30 May 2025 14:18		RC/JU	Ok,M
5	Q2150-05	TP-47	BF142569.D	30 May 2025 14:52		RC/JU	Ok
6	Q2150-09	TP-54	BF142570.D	30 May 2025 15:21		RC/JU	Ok
7	Q2150-09MS	TP-54MS	BF142571.D	30 May 2025 15:50		RC/JU	Ok,M
8	Q2150-09MSD	TP-54MSD	BF142572.D	30 May 2025 16:19		RC/JU	Ok,M
9	Q2151-01	WC-1	BF142573.D	30 May 2025 16:49		RC/JU	Ok
10	Q2136-05	OR-646-COMP-52	BF142574.D	30 May 2025 17:18		RC/JU	Ok
11	Q2136-05MS	OR-646-COMP-52MS	BF142575.D	30 May 2025 17:47		RC/JU	Ok,M
12	Q2136-05MSD	OR-646-COMP-52MSD	BF142576.D	30 May 2025 18:16		RC/JU	Ok,M
13	Q2146-04	TP04-MHN-WC	BF142577.D	30 May 2025 18:46		RC/JU	Ok
14	Q2151-04	WC-1	BF142578.D	30 May 2025 19:15		RC/JU	Ok,M
15	Q2150-07	TP-51	BF142579.D	30 May 2025 19:45		RC/JU	Ok
16	Q2150-03	TP-39	BF142580.D	30 May 2025 20:14		RC/JU	Ok,M
17	Q2150-04	TP-48	BF142581.D	30 May 2025 20:43		RC/JU	Ok
18	Q2150-10	TP-53	BF142582.D	30 May 2025 21:13		RC/JU	Ok

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF053025

Review By	Rahul	Review On	6/2/2025 9:40:01 AM		
Supervise By	Jagrut	Supervise On	6/2/2025 11:13:47 AM		
SubDirectory	BF053025	HP Acquire Method	BNA_F	HP Processing Method	bf052025

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12667,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q2150-02	TP-42	BF142583.D	30 May 2025 21:42		RC/JU	Ok,M
20	Q2150-06	TP-50	BF142584.D	30 May 2025 22:11		RC/JU	Ok,M
21	Q2150-08	TP-52	BF142585.D	30 May 2025 22:41		RC/JU	Ok,M
22	Q2150-01	TP-44	BF142586.D	30 May 2025 23:10	Need 5X Dilution	RC/JU	Dilution
23	Q2153-01	TR-04-0592025	BF142587.D	30 May 2025 23:41		RC/JU	Ok,M
24	Q2152-01	OK-02-05292025	BF142588.D	31 May 2025 00:10		RC/JU	Ok,M

M : Manual Integration

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF060225

Review By	Rahul	Review On	6/3/2025 1:30:43 PM		
Supervise By	Jagrut	Supervise On	6/3/2025 5:25:27 PM		
SubDirectory	BF060225	HP Acquire Method	BNA_F	HP Processing Method	bf052025

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12667,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BF142589.D	02 Jun 2025 11:01		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BF142590.D	02 Jun 2025 11:30		RC/JU	Ok
3	PB168219BL	PB168219BL	BF142591.D	02 Jun 2025 11:59		RC/JU	Ok
4	PB168219BS	PB168219BS	BF142592.D	02 Jun 2025 12:28		RC/JU	Ok,M
5	PB168190TB	PB168190TB	BF142593.D	02 Jun 2025 12:57		RC/JU	Ok
6	PB168235BL	PB168235BL	BF142594.D	02 Jun 2025 13:26		RC/JU	Ok
7	PB168235BS	PB168235BS	BF142595.D	02 Jun 2025 13:54		RC/JU	Ok,M
8	PB168235BSD	PB168235BSD	BF142596.D	02 Jun 2025 14:23		RC/JU	Ok,M
9	Q2134-01	MW10	BF142597.D	02 Jun 2025 15:05		RC/JU	Ok
10	Q2150-01DL	TP-44DL	BF142598.D	02 Jun 2025 15:34		RC/JU	Ok,M
11	Q2149-01	FILTER-CAKE	BF142599.D	02 Jun 2025 16:03	Need 5X Dilution	RC/JU	Dilution
12	Q2149-01DL	FILTER-CAKEDL	BF142600.D	02 Jun 2025 17:11		RC/JU	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/30/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 05/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:27
Out Date: 05/30/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135945

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2150-01	TP-44	1	1.15	10.30	11.45	9.28	78.9	
Q2150-02	TP-42	2	1.13	10.45	11.58	10.14	86.2	
Q2150-03	TP-39	3	1.14	10.46	11.6	9.89	83.7	
Q2150-04	TP-48	4	1.18	10.44	11.62	9.6	80.7	
Q2150-05	TP-47	5	1.17	10.18	11.35	9.42	81.0	
Q2150-06	TP-50	6	1.18	10.70	11.88	10.38	86.0	
Q2150-07	TP-51	7	1.17	10.74	11.91	10.16	83.7	
Q2150-08	TP-52	8	1.16	10.61	11.77	10.25	85.7	
Q2150-09	TP-54	9	1.16	10.50	11.66	9.94	83.6	
Q2150-10	TP-53	10	1.12	10.56	11.68	10.13	85.3	
Q2151-01	WC-1	11	1.15	10.02	11.17	9.71	85.4	
Q2151-02	WC-1-EPH	12	1.17	10.23	11.4	9.99	86.2	
Q2151-03	WC-1-VOC	13	1.19	10.41	11.6	9.98	84.4	
Q2152-01	OK-02-05292025	31	1.18	10.25	11.43	10.2	88.0	
Q2152-02	OK-02-05292025-E2	32	1.13	10.47	11.6	10.54	89.9	
Q2153-01	TR-04-0592025	33	1.15	10.40	11.55	10.54	90.3	
Q2153-02	TR-04-0592025-E2	34	1.17	10.39	11.56	10.6	90.8	
Q2154-01	BC271336-1-1	14	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-02	BC271336-1-2	15	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-03	BC271336-2-1	16	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-04	BC271336-2-2	17	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-05	BC278406-1-1	18	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-06	BC278406-1-2	19	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-07	BC278406-2-1	20	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-08	BC278406-2-2	21	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-09	BC22682C-1-1	22	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-10	BC22682C-1-2	23	1.00	1.00	2.00	2.00	100.0	pilc
Q2154-11	GHA409H-1-1	24	1.00	1.00	2.00	2.00	100.0	pilc

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/30/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 05/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:27
Out Date: 05/30/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135945

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2154-12	GHA409H-1-2	25	1.00	1.00	2.00	2.00	100.0	oilc
Q2155-01	446	26	1.18	10.02	11.2	10.42	92.2	
Q2155-02	447-SOLID	27	1.13	10.35	11.48	6.13	48.3	
Q2156-01	KZZ331H-1-1	28	1.00	1.00	2.00	2.00	100.0	oilc
Q2156-02	KZZ331H-1-2	29	1.00	1.00	2.00	2.00	100.0	oilc
Q2157-01	291	30	1.00	1.00	2.00	2.00	100.0	debris

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

WP 135945

WorkList Name : %1-052925 **WorkList ID :** 189801 **Department :** Wet-Chemistry **Date :** 05-29-2025 08:14:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2150-01	TP-44	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-02	TP-42	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-03	TP-39	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-04	TP-48	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-05	TP-47	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-06	TP-50	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-07	TP-51	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-08	TP-52	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/27/2025	Chemtech -SO
Q2150-09	TP-54	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/28/2025	Chemtech -SO
Q2150-10	TP-53	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/28/2025	Chemtech -SO
Q2151-01	WC-1	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/28/2025	Chemtech -SO
Q2151-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2151-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/29/2025	Chemtech -SO
Q2152-01	OK-02-05292025	Solid	Percent Solids	Cool 4 deg C	PSEG05	L21	05/29/2025	Chemtech -SO
Q2152-02	OK-02-05292025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L21	05/29/2025	Chemtech -SO
Q2153-01	TR-04-0592025	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	05/29/2025	Chemtech -SO
Q2153-02	TR-04-0592025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	05/29/2025	Chemtech -SO
Q2154-01	BC271336-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-02	BC271336-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-03	BC271336-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-04	BC271336-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO

Date/Time 05/29/25 16:15

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 05/29/25 17:30

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

WORKLIST(Hardcopy Internal Chain)

VB 135945

WorkList Name : %1-052925 **WorkList ID :** 189801 **Department :** Wet-Chemistry **Date :** 05-29-2025 08:14:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2154-05	BC278406-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-06	BC278406-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-07	BC278406-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-08	BC278406-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-09	BC22682C-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-10	BC22682C-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-11	GHA409H-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2154-12	GHA409H-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2155-01	446	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2155-02	447-SOLID	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2156-01	KZZ331H-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2156-02	KZZ331H-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO
Q2157-01	291	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/29/2025	Chemtech -SO

Date/Time 05/29/25 1615

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 05/29/25 1730

Raw Sample Received by:

Raw Sample Relinquished by:

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB168211

SOP ID:	M3541-ASE Extraction-14				
Clean Up SOP #:	N/A			**Extraction Start Date :**	05/30/2025
Matrix :	Solid			**Extraction Start Time :**	09:50
Weigh By:	EH	**Extraction By:**	RJ	**Extraction End Date :**	05/30/2025
Balance check:	RJ	**Filter By:**	RJ	**Extraction End Time :**	12:50
Balance ID:	EX-SC-2	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	N/A	**Hood ID:**	3,7	**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	50/100 PPM	SP6782
Surrogate	1.0ML	100/150 PPM	SP6754
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
MeCl2/Acetone/1:1	N/A	EP2612
Baked Na2SO4	N/A	EP2614
Sand	N/A	EP2865
Methylene Chloride	N/A	E3939
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:

1.5ML Vial Lot # 2210443.

KD Bath ID:	N/A	**Envap ID:**	NEVAP-02
KD Bath Temperature:	N/A	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
5/30/25	RS (Ext Lab)	RC/svor
12:55	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB168211

Analytical Method: M3541-ASE Extraction-14 **Concentration Date:** 05/30/2025

Sample ID	Client Sample ID	Test	g/mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168211BL	SBLK211	SVOC-TCL BNA -20	30.02	N/A	ritesh	Evelyn	1			U3-1
PB168211BS	SLCS211	SVOC-TCL BNA -20	30.01	N/A	ritesh	Evelyn	1			2
Q2150-01	TP-44	SVOC-TCL BNA -20	30.05	N/A	ritesh	Evelyn	1	E		3
Q2150-02	TP-42	SVOC-TCL BNA -20	30.06	N/A	ritesh	Evelyn	1	E		4
Q2150-03	TP-39	SVOC-TCL BNA -20	30.08	N/A	ritesh	Evelyn	1	E		5
Q2150-04	TP-48	SVOC-TCL BNA -20	30.05	N/A	ritesh	Evelyn	1	E		6
Q2150-05	TP-47	SVOC-TCL BNA -20	30.04	N/A	ritesh	Evelyn	1	E		U6-1
Q2150-06	TP-50	SVOC-TCL BNA -20	30.02	N/A	ritesh	Evelyn	1	E		2
Q2150-07	TP-51	SVOC-TCL BNA -20	30.03	N/A	ritesh	Evelyn	1	E		3
Q2150-08	TP-52	SVOC-TCL BNA -20	30.05	N/A	ritesh	Evelyn	1	E		4
Q2150-09	TP-54	SVOC-TCL BNA -20	30.01	N/A	ritesh	Evelyn	1	E		5
Q2150-09MS	TP-54MS	SVOC-TCL BNA -20	30.06	N/A	ritesh	Evelyn	1	E		6
Q2150-09MSD	TP-54MSD	SVOC-TCL BNA -20	30.04	N/A	ritesh	Evelyn	1	E		U2-1
Q2150-10	TP-53	SVOC-TCL BNA -20	30.05	N/A	ritesh	Evelyn	1	E		2
Q2151-01	WC-1	SVOC-TCL BNA -20	50.03	N/A	ritesh	Evelyn	1	E		3
Q2152-01	OK-02-05292025	SVOC-TCL BNA -20	50.06	N/A	ritesh	Evelyn	1	E		4
Q2153-01	TR-04-0592025	SVOC-TCL BNA -20	50.07	N/A	ritesh	Evelyn	1	E		5

RS
5/30

* **Extracts relinquished on the same date as received.**

16821
9:50

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2152 **WorkList ID :** 189839 **Department :** Extraction **Date :** 05-30-2025 08:43:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2150-01	TP-44	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/27/2025	8270E
Q2150-02	TP-42	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/27/2025	8270E
Q2150-03	TP-39	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/27/2025	8270E
Q2150-04	TP-48	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/27/2025	8270E
Q2150-05	TP-47	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/27/2025	8270E
Q2150-06	TP-50	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/27/2025	8270E
Q2150-07	TP-51	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/27/2025	8270E
Q2150-08	TP-52	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/28/2025	8270E
Q2150-09	TP-54	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/28/2025	8270E
Q2150-10	TP-53	Solid	SVOC-TCL BNA -20	Cool 4 deg C	CAMP02	L41	05/28/2025	8270E
Q2151-01	WC-1	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG03	L41	05/29/2025	8270E
Q2152-01	OK-02-05292025	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG05	L21	05/29/2025	8270E
Q2153-01	TR-04-0592025	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG05	L31	05/29/2025	8270E

Date/Time 05/30/25 9:45
Raw Sample Received by: RJ (CEL-Lab)
Raw Sample Relinquished by: SM

Date/Time 05/30/25 10:05
Raw Sample Received by: SM
Raw Sample Relinquished by: RJ (CEL-Lab)

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

Prep Standard - Chemical Standard Summary

Order ID : Q2150

Test : SVOC-TCL BNA -20

Prepbatch ID : PB168211,

Sequence ID/Qc Batch ID: BF053025,BF060225,

Standard ID :
EP2612,EP2614,EP2865,SP6754,SP6757,SP6769,SP6770,SP6782,SP6783,SP6784,SP6785,SP6786,SP6787,SP6788,SP6789,SP6790,SP6791,

Chemical ID :
10ul/1000ul sample,E3551,E3902,E3904,E3921,E3926,E3930,E3932,E3939,S10104,S10399,S10584,S11143,S11162,S11484,S11496,S11650,S11788,S11789,S11790,S11798,S11799,S12115,S12190,S12191,S12192,S12193,S12194,S12195,S12209,S12210,S12211,S12212,S12213,S12214,S12215,S12216,S12271,S12277,S12486,S12488,S12489,S12490,S12491,S12492,S12493,S12494,S12495,S12496,S12534,S12535,S12536,S12537,S12538,S12539,S12540,S12541,S12542,S12577,S12658,S12662,S12667,S12793,S12974,S12976,S12977,S12978,S12979,S12980,S12981,S12982,S12983,S13078
,

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
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2612	05/09/2025	11/05/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 05/09/2025

FROM 8000.00000ml of E3930 + 8000.00000ml of E3932 = Final Quantity: 16000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2614	05/19/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/19/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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
19	8270/CLP Surrogate Solution, 100 PPM BN/150 PPM ACID	SP6754	03/18/2025	09/18/2025	Rahul Chavli	None	None	Jagrut Upadhyay 04/03/2025

FROM 1930.00000ml of E3902 + 2.60000ml of S12216 + 2.70000ml of S12195 + 5.20000ml of S12210 + 5.30000ml of S12192 + 5.30000ml of S12194 + 5.30000ml of S12209 + 5.30000ml of S12211 + 5.30000ml of S12212 + 5.30000ml of S12213 + 5.40000ml of S12190 + 5.40000ml of S12214 + 5.60000ml of S12191 + 5.60000ml of S12215 + 5.70000ml of S12193 = Final Quantity: 2000.000 ml

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
18	Second Source Calibration Stock Standard, 100 PPM, (8270/625/CLP)	SP6769	04/10/2025	09/10/2025	Jagrut Upadhyay	None	None	Sohil Jodhani 04/16/2025

FROM 0.04000ml of S12195 + 0.08000ml of S12216 + 0.10000ml of S11788 + 0.20000ml of S12486 + 0.20000ml of S12534 + 0.20000ml of S12974 + 1.18000ml of E3926 = Final Quantity: 2.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
416	40 ng BNA ICV, 40 PPM	SP6770	04/10/2025	09/10/2025	Jagrut Upadhyay	None	None	Sohil Jodhani 04/16/2025

FROM 0.01000ml of S12658 + 0.60000ml of E3926 + 0.40000ml of SP6769 = 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
171	8270/625 Spike Solution, 50/100 PPM	SP6782	04/30/2025	05/31/2025	Rahul Chavli	None	None	Jagrut Upadhyay 05/15/2025

FROM 0.10000ml of S12488 + 0.20000ml of S12534 + 0.20000ml of S12983 + 0.40000ml of S10399 + 0.40000ml of S10584 + 0.40000ml of S11143 + 0.40000ml of S11484 + 0.40000ml of S11650 + 0.50000ml of S12542 + 0.80000ml of S12974 + 1.00000ml of S12496 + 1.10000ml of S11789 + 1.10000ml of S12492 + 1.20000ml of S11799 + 1.20000ml of S12491 + 1.20000ml of S12493 + 1.20000ml of S12976 + 1.20000ml of S12980 + 1.20000ml of S12982 + 1.30000ml of S11798 + 1.30000ml of S12490 + 1.30000ml of S12495 + 1.30000ml of S12535 + 1.30000ml of S12537 + 1.30000ml of S12538 + 1.30000ml of S12540 + 1.30000ml of S12541 + 1.30000ml of S12979 + 1.30000ml of S12981 + 1.40000ml of S11790 + 1.40000ml of S12489 + 1.40000ml of S12494 + 1.40000ml of S12536 + 1.40000ml of S12539 + 1.40000ml of S12977 + 1.40000ml of S12978 + 163.00000ml of E3921 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3764	8270/625 Stock solution 100 ng	SP6783	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.26700ml of S10104 + 0.40000ml of S11496 + 0.50000ml of S12115 + 1.00000ml of S11162 + 1.00000ml of S12271 + 1.00000ml of S12277 + 1.00000ml of S12793 + 1.00000ml of S13078 + 3.83300ml of E3930 = Final Quantity: 10.000 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
413	80 ng BNA ICC, 80 PPM	SP6784	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.20000ml of E3930 + 0.80000ml of SP6783 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
412	60 ng BNA ICC, 60 PPM	SP6785	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.40000ml of E3930 + 0.60000ml of SP6783 = 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
411	50 ng BNA ICC, 50 PPM	SP6786	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.50000ml of E3930 + 0.50000ml of SP6783 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
410	40 ng BNA ICC, 40 PPM	SP6787	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.60000ml of E3930 + 0.40000ml of SP6783 = 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
3678	20 ng BNA ICC, 20 PPM	SP6788	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.80000ml of E3930 + 0.20000ml of SP6783 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
407	5 ng BNA ICC, 5 PPM	SP6789	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.95000ml of E3930 + 0.05000ml of SP6783 = 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
408	10 ng BNA ICC, 10 PPM	SP6790	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.90000ml of E3930 + 0.10000ml of SP6783 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
175	2.5 ng BNA ICC, 2.5 PPM	SP6791	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.50000ml of E3930 + 0.50000ml of SP6789 = Final Quantity: 1.010 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.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	12/04/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

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)	24H2762008	09/18/2025	03/18/2025 / RUPESH	02/12/2025 / RUPESH	E3902

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	01/07/2026	03/13/2025 /	12/27/2024 / RUPESH	E3904

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)	6789	09/24/2025	03/14/2025 / Rajesh	03/13/2025 / Rajesh	E3921

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)	25A0262002	10/08/2025	04/08/2025 / Rajesh	02/07/2025 / Rajesh	E3926

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)	25A0262002	02/20/2026	05/02/2025 / RUPESH	03/09/2025 / RUPESH	E3930

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A2862010	11/22/2025	05/22/2025 / RUPESH	02/28/2025 / RUPESH	E3939

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	07/30/2025	01/30/2025 / anahy	12/09/2021 / Christian	S10104

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555871 / Custom Standard, 4-nitrophenol Std [CS 5238-4]	A0185300	05/31/2025	04/30/2025 / Rahul	05/18/2022 / Christian	S10399

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555868 / Custom Standard, Benzidine Std [CS 5328-1]	A0186373	06/30/2025	01/29/2025 / anahy	07/05/2022 / Christian	S10584

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555869 / Custom Standard, hexachlorocyclopentadiene Std [CS 5328-2]	A0194702	07/29/2025	01/29/2025 / anahy	02/20/2023 / Christian	S11143

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 #
CPI International	Z-110817-01 / Custom 8270 Mix, 4-55, 1000 mg/L, 1 ml, (Maximum Expiration: 90 Days)	414125	06/21/2025	05/05/2025 / Jagrut	03/06/2023 / Christian	S11162

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555870 / Custom Standard, 2,4-dinitrophenol Std [CS 5328-3]	A0200549	10/30/2025	04/30/2025 / Rahul	08/10/2023 / yogesh	S11484

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

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	07/29/2025	01/29/2025 / anahy	11/09/2023 / Yogesh	S11650

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	09/10/2025	03/10/2025 / anahy	11/21/2023 / Rahul	S11788

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	10/25/2025	04/25/2025 / Jagrut	11/21/2023 / Rahul	S11789

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	10/30/2025	04/30/2025 / Rahul	11/21/2023 / Rahul	S11790

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	10/30/2025	04/30/2025 / Rahul	11/21/2023 / rahul	S11798

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	10/30/2025	04/30/2025 / Rahul	11/21/2023 / rahul	S11799

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	S12190

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	S12191

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	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12192

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	S12193

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	S12194

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	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12209

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	S12210

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	S12211

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	S12212

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	S12213

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	S12214

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	S12215

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

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 #
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	520963	10/28/2025	04/28/2025 / Jagrut	05/24/2024 / Rahul	S12271

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-010442-07 / Benzaldehyde Solution, 1000 mg/L, 1.3 ml, (Maximum Expiration: 90 Days)	495833	11/05/2025	05/05/2025 / Jagrut	05/24/2024 / Rahul	S12277

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12486

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	10/25/2025	04/25/2025 / Jagrut	07/23/2024 / RAHUL	S12488

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12489

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12490

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12491

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12492

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12493

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12494

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12495

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12496

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	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	10/10/2025	04/10/2025 / Jagrut	07/23/2024 / RAHUL	S12534

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	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12535

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	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12536

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	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12537

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	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12538

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	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12539

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	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12540

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	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12541

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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12542

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	04/30/2030	04/07/2025 / anahy	09/20/2024 / anahy	S12658

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	11/01/2025	05/01/2025 / Rahul	09/20/2024 / anahy	S12662

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	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0212266	11/28/2025	05/28/2025 / Rahul	09/20/2024 / anahy	S12667

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	06/21/2025	05/05/2025 / Jagrut	05/24/2024 / Rahul	S12793

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	09/10/2025	03/10/2025 / anahy	12/11/2024 / anahy	S12974

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	04/30/2025 / Rahul	12/11/2024 / anahy	S12976

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	04/30/2025 / Rahul	12/11/2024 / anahy	S12977

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	04/30/2025 / Rahul	12/11/2024 / anahy	S12978

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12979

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	04/30/2025 / Rahul	12/11/2024 / anahy	S12980

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	04/30/2025 / Rahul	12/11/2024 / anahy	S12981

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	04/30/2025 / Rahul	12/11/2024 / anahy	S12982

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	04/30/2025 / Rahul	12/11/2024 / anahy	S12983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-010074-07 / 3,3'-Dichlorobenzidine Solution, 1,000 mg/L, 1 ml, (Maximum Expiration: 180 days)	525551	11/05/2025	05/05/2025 / Jagrut	03/10/2025 / anahy	S13078

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-110817-01	414125	≤ -10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-55, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acetophenone	98-86-2	99.2	85.8.1P	998 ± 11.5
benzoic acid	65-85-0	100	123.7.1P	1010 ± 5.88
biphenyl	92-52-4	99.9	366.29.1P	999 ± 5.82
1,2,4,5-tetrachlorobenzene	95-94-3	99.7	53.7.2P	993 ± 5.79

Received on
02/07/23
by
CG
S11089
to
S11093

*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: _____
Shane Overcash
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

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 by CG on 05/19/22

S10393 to S10402

Catalog No. : 555871 **Lot No.:** A0185300

Description : Custom 4-Nitrophenol Standard

Custom 4-Nitrophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	4-Nitrophenol	25,060.0 µg/mL	+/- 231.9100 µg/mL	Gravimetric
	CAS # 100-02-7 (Lot MKCN1089)		+/- 753.2622 µg/mL	Unstressed
	Purity 99%		+/- 905.6020 µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Katelyn McGinnis - Operations Tech I

Date Mixed: 16-May-2022 **Balance:** 1128342314

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

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 by
CG
on
07/05/22
S 10583
to
S 10592

Catalog No. : 555868 **Lot No.:** A0186373

Description : Custom Benzidine Standard

Custom Benzidine Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2025 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzidine	25,200.0 µg/mL	+/- 233.2055 µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 220511RSR)		+/- 351.6606 µg/mL	Unstressed
	Purity 99%		+/- 512.6054 µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Tom Suckar - Mix Technician **Date Mixed:** 16-Jun-2022 **Balance:** 1122030677

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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

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. : 555869 **Lot No.:** A0194702

Description : Custom Hexachlorocyclopentadiene Standard

Custom Hexachlorocyclopentadiene Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)
1	Hexachlorocyclopentadiene	77-47-4	0012019	99%	25,008.0 µg/mL

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 15-Feb-2023 **Balance:** B442140311

Manufactured under Restek Registered Quality Certificate #FM

tified Reference Material Notes

:es:

n date valid for unopened ampul stored in compliance with the recommended conditions.

nty, concentration, and expiration of the CRM are based on the unopened product being stored according to the ended condition found in the storage field.

d/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, LC/MS, RI, and/or melting point.

nds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A n factor is used to calculate the amount of compound necessary to achieve the desired concentration of the mpound in solution.

isomeric compounds is reported as the sum of the isomers.

lues are rounded to the nearest whole number.

rtainty Value Notes:

rtainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded ty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability ty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

erage factor of 2, which gives a level of confidence of approximately 95%.

ged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure nimum packaged amount can be sufficiently transferred.

Notes:

tion is based upon gravimetric preparation using either a balance whose calibration has been verified daily traceable weights, and/or dilutions with Class A glassware.

:

the unopened product, when stored in compliance with the recommended conditions, is guaranteed through ion displayed on the product label and certificate. Contact Restek for additional opened product stability ı, with the knowledge/understanding that open product stability is subject to the specific handling and ntal conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with ards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom m. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, des complete instructions.

ssolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RG-02-01, Ed. 3

Recd. by RB on 7/24/23 E3551

PO: PO2-798 PRODUCT CODE: SHIP DATE: 12/9/2024

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor | J.T.Baker

Material No.: 9254-03
Batch No.: 24H2762008
Manufactured Date: 2024-04-18
Expiration Date:2027-04-18
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3902

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

PO: PO2-1308 PRODUCT CODE: SHIP DATE: 2/7/25

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date:2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3926

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

PO: PO2-1178.2 PRODUCT CODE: SHIP DATE: 1/20/2025

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date:2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3930

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
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

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

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

E3939

J Croak
Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

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.

S11484 ↓ S11493 Y.P. 08/10/23

Catalog No. : 555870 **Lot No.:** A0200549

Description : Custom 2,4-Dinitrophenol Standard

Custom 2,4-Dinitrophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 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	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	25,008.0 µg/mL	+/- 777.3323

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Tom Suckar - Mix Technician

Date Mixed: 02-Aug-2023 **Balance:** 1128342314

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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-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.

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

511649 ↓ 511658 Y.P. 11/13/23

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.:** A0196453

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11749 ↓ S11794 RC 11/30/23

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	SHBN3770	99%	2,013.0 µg/mL	+/- 25.0521

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

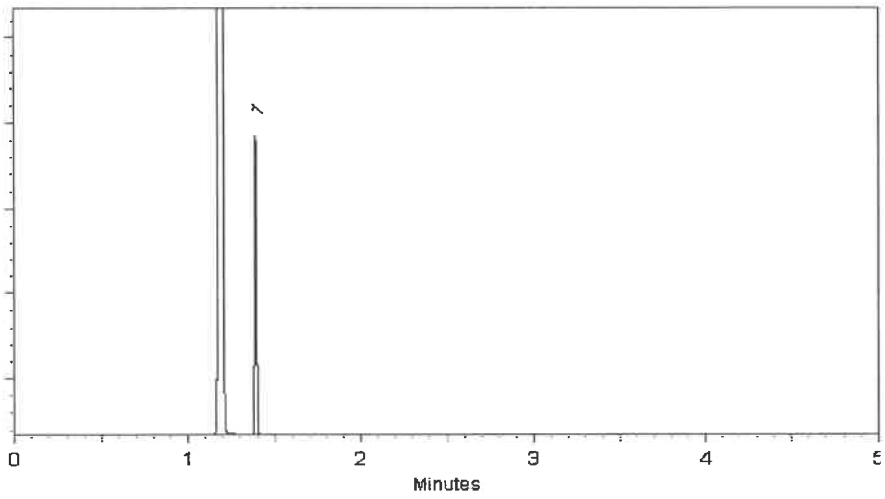
Inj. Temp:
250°C

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.

Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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.:** A0196453

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11749 ↓ S11794 RC 11/30/23

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	SHBN3770	99%	2,013.0 µg/mL	+/- 25.0521

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

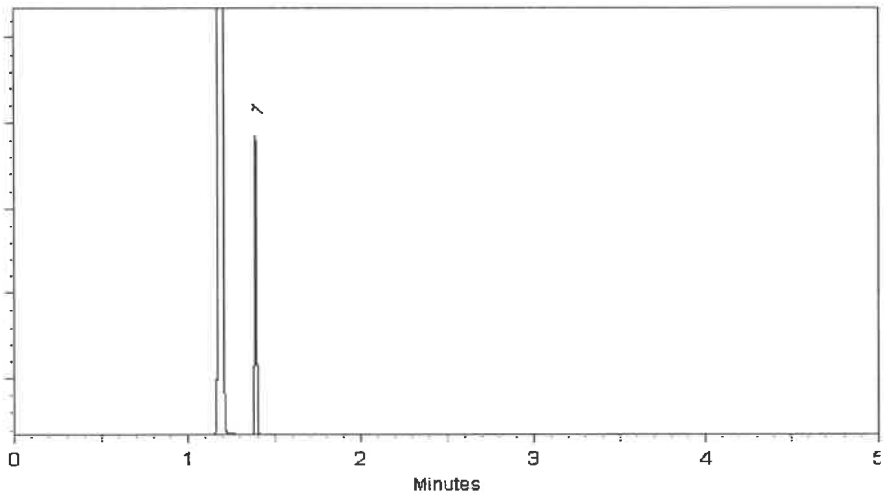
Inj. Temp:
250°C

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.

Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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.:** A0196453

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11749 ↓ S11794 RC 11/30/23

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	SHBN3770	99%	2,013.0 µg/mL	+/- 25.0521

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

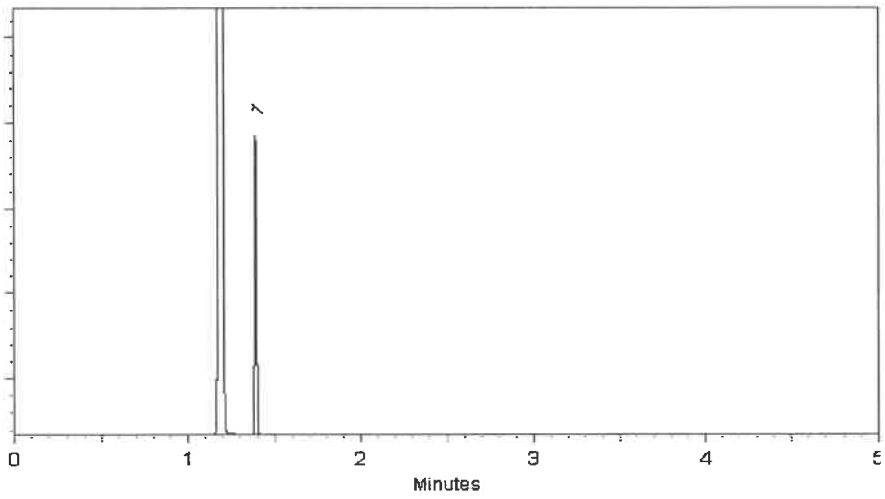
Inj. Temp:
250°C

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.

Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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

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

S11795 ↓ S11808 RC 11/30/23

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.)

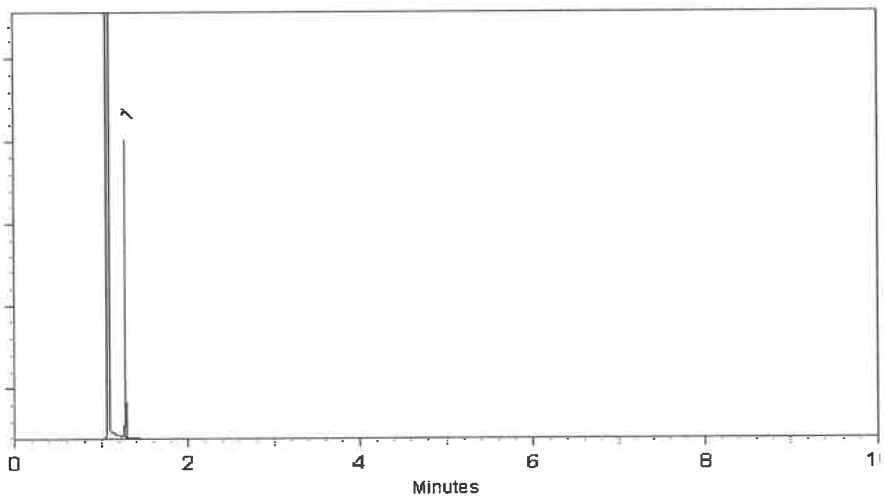
Inj. Temp:
250°C

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

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

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

S11795 ↓ S11808 RC 11/30/23

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.)

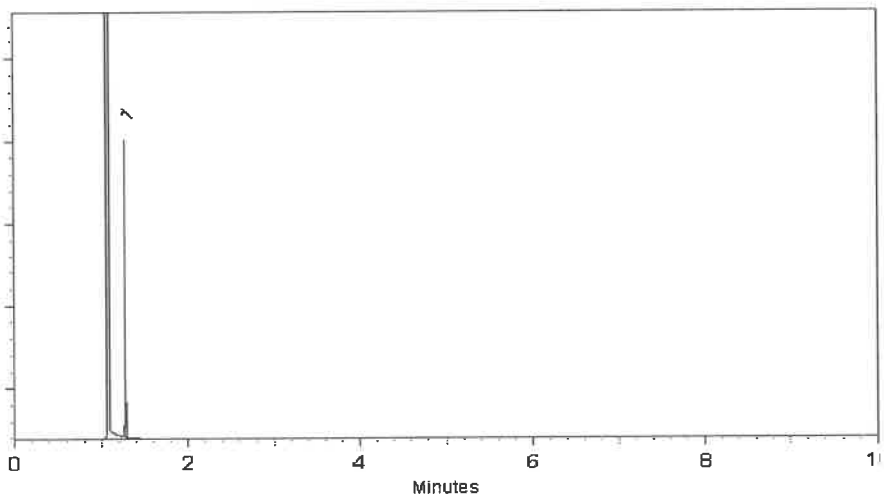
Inj. Temp:
250°C

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.

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

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. : 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.)

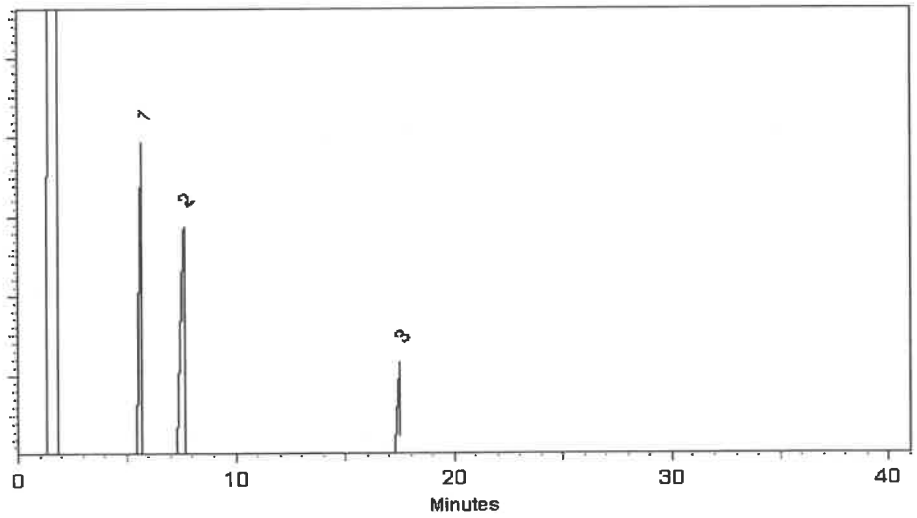
Inj. Temp:
250°C

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

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. : 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.)

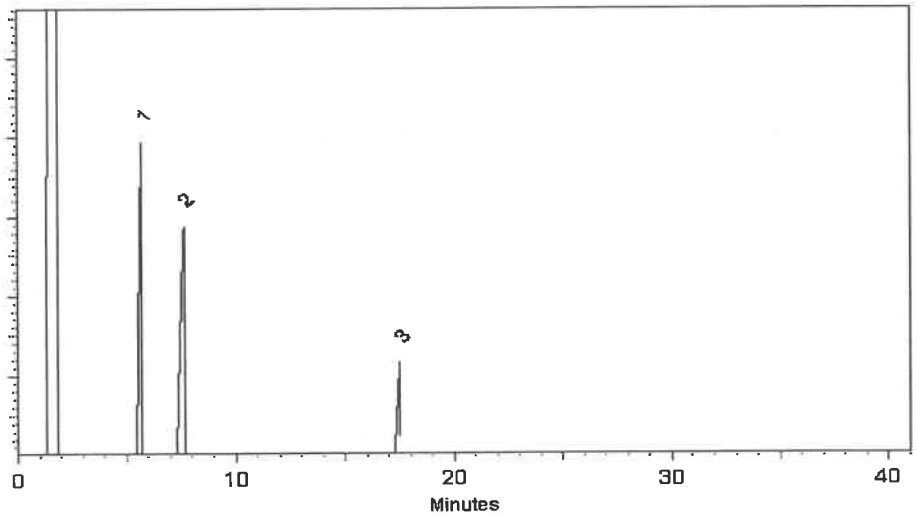
Inj. Temp:
250°C

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

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. : 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.)

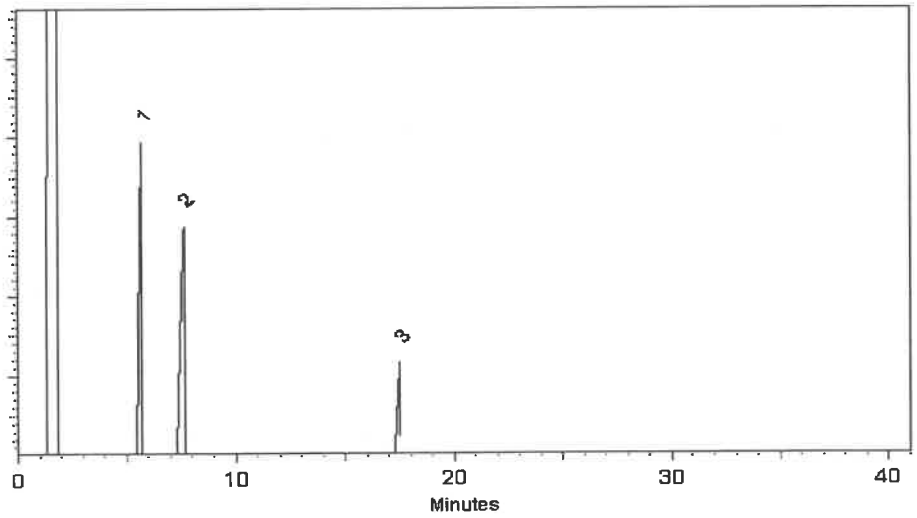
Inj. Temp:
250°C

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

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. : 31087 **Lot No.:** A0206206

Description : Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul

S12187 ↓ S12206 } RC/ 03/18/24

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2032 **Storage:** 10°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	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.)

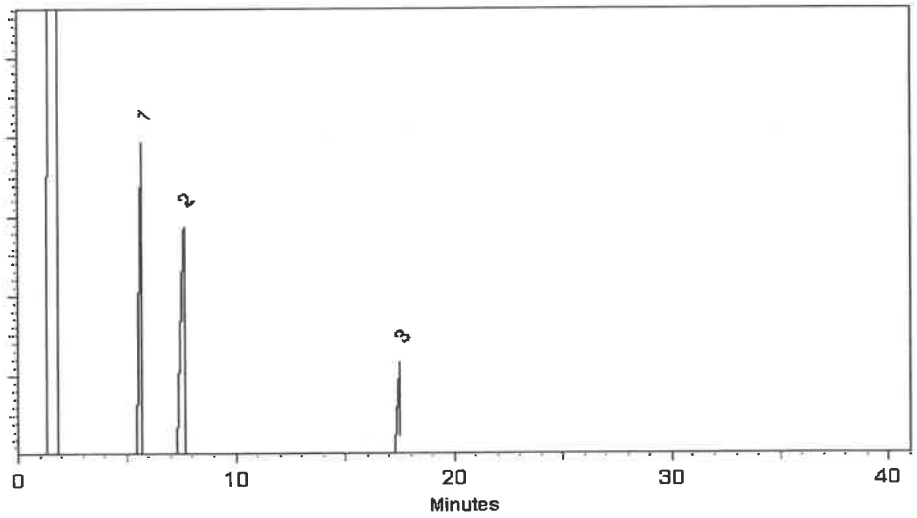
Inj. Temp:
250°C

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

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. : 31087 **Lot No.:** A0206206

Description : Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul

S12187 ↓ S12206 } RC/ 03/18/24

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2032 **Storage:** 10°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	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.)

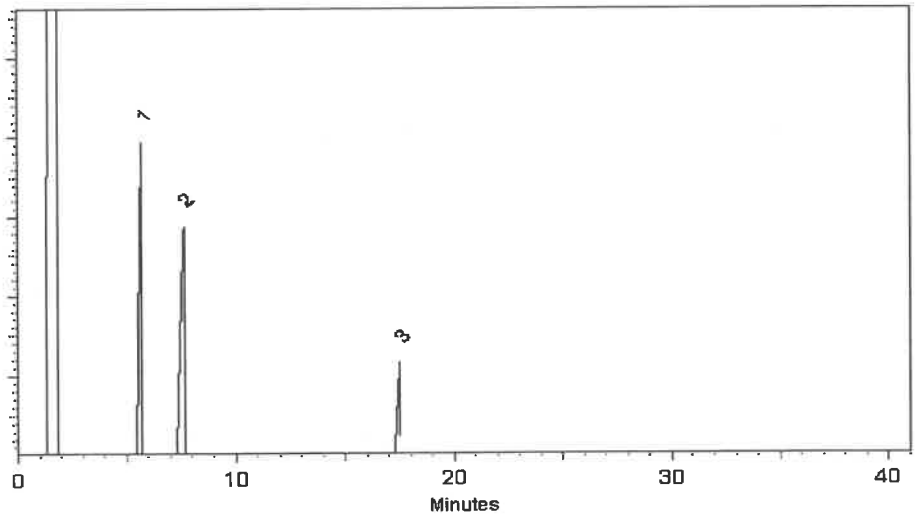
Inj. Temp:
250°C

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

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. : 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.)

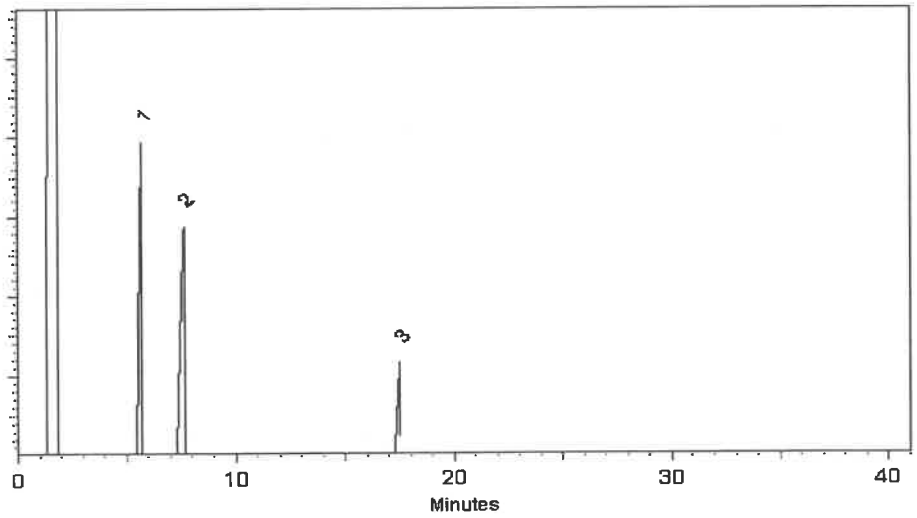
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

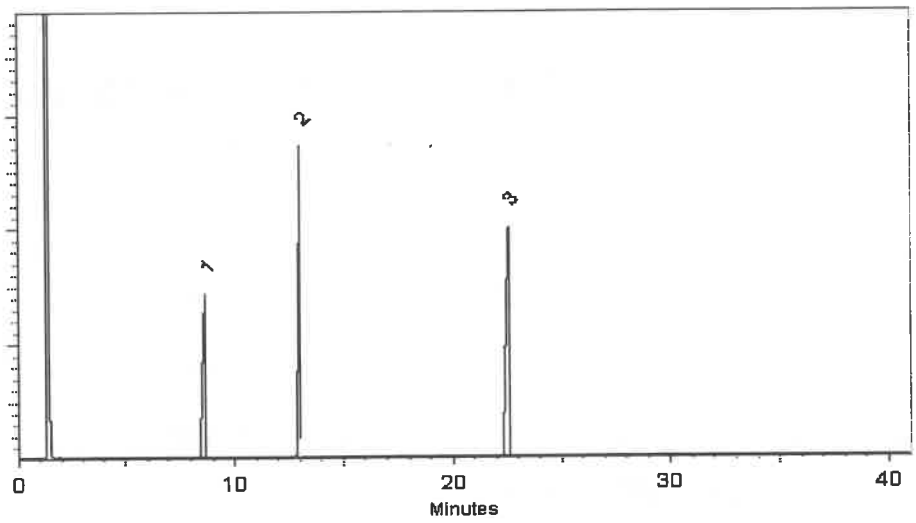
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

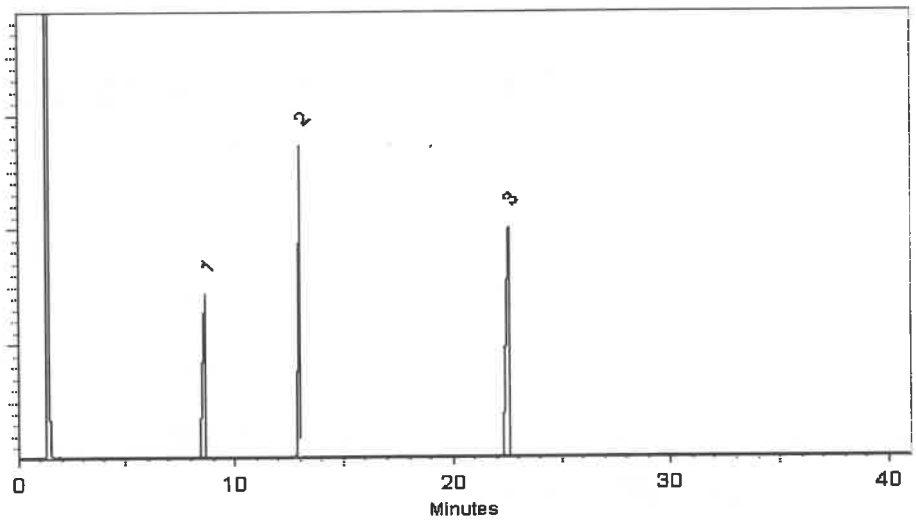
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

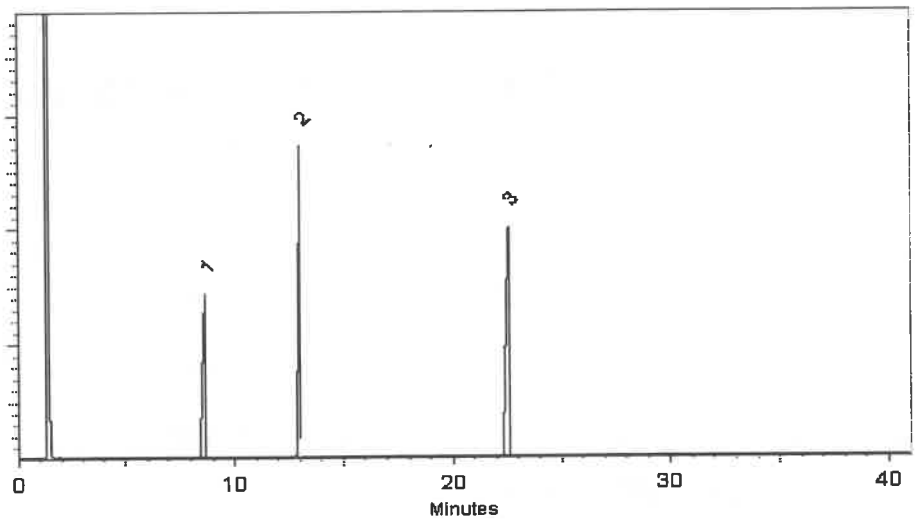
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

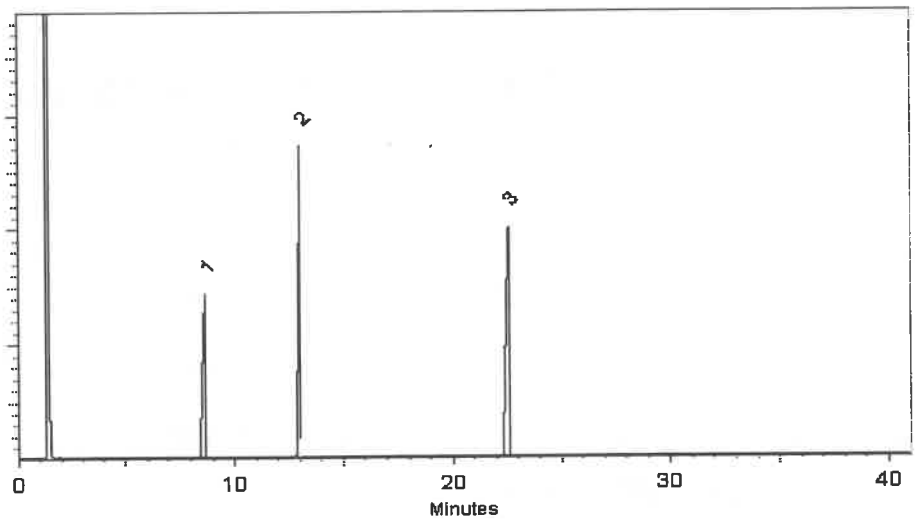
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

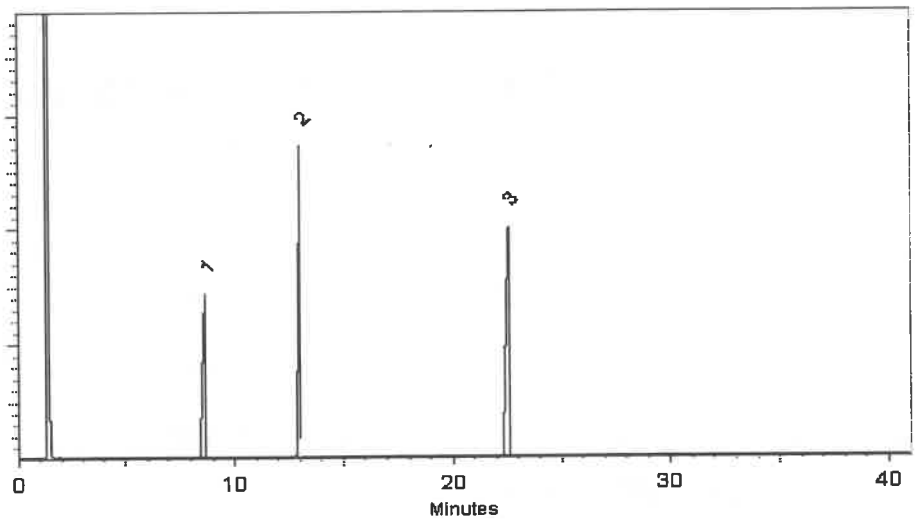
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

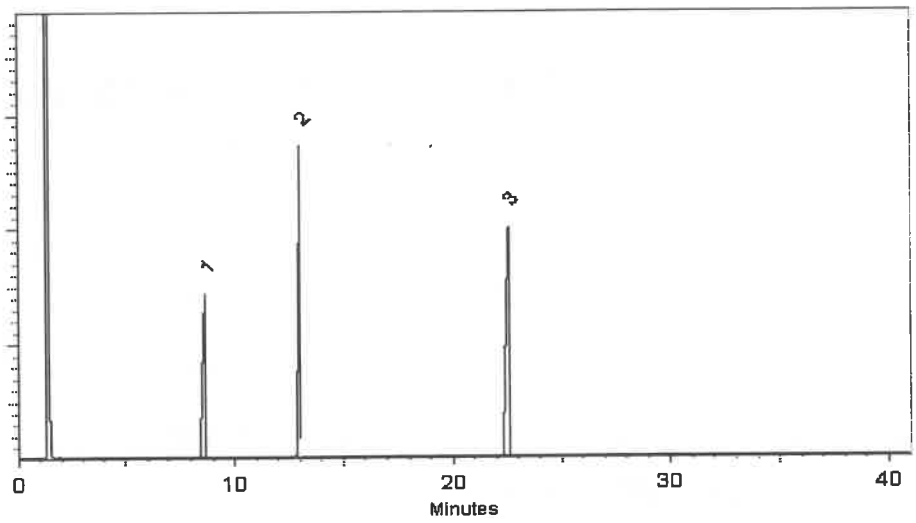
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

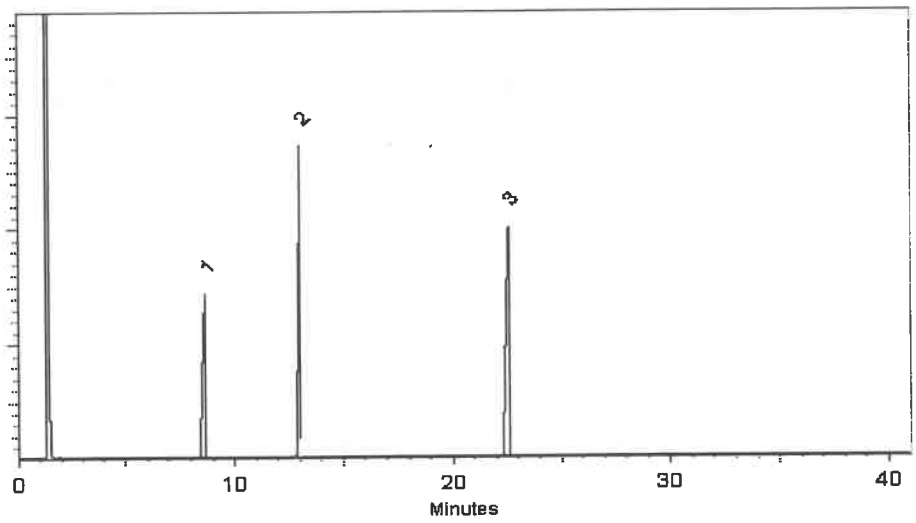
Inj. Temp:
250°C

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

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

S12207 ↓ S12221 RC/ 03/18/24

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.)

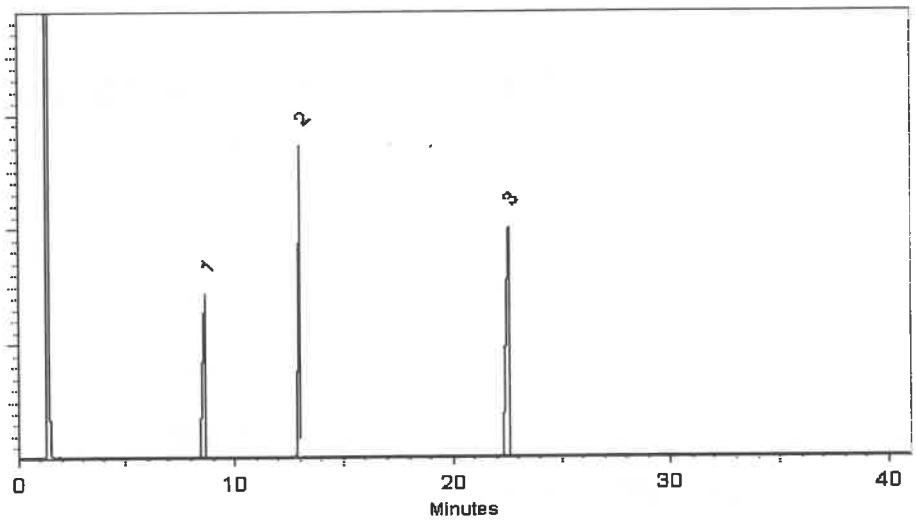
Inj. Temp:
250°C

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.

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-010442-07	495833	≤ -10 °C	Methylene Chloride	1/16/2028	Benzaldehyde Solution, 1000 mg/L, 1.3 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
benzaldehyde	100-52-7	98.3	442.421.1P	996.8 ± 11.49

S12275 ↓ S12279 } RC/ 05/24/24

*Not a certified value

Certified By: S. Hunter

Scott Hunter
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

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

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

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

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

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

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

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

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

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

Certificate of Analysis

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** 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.)

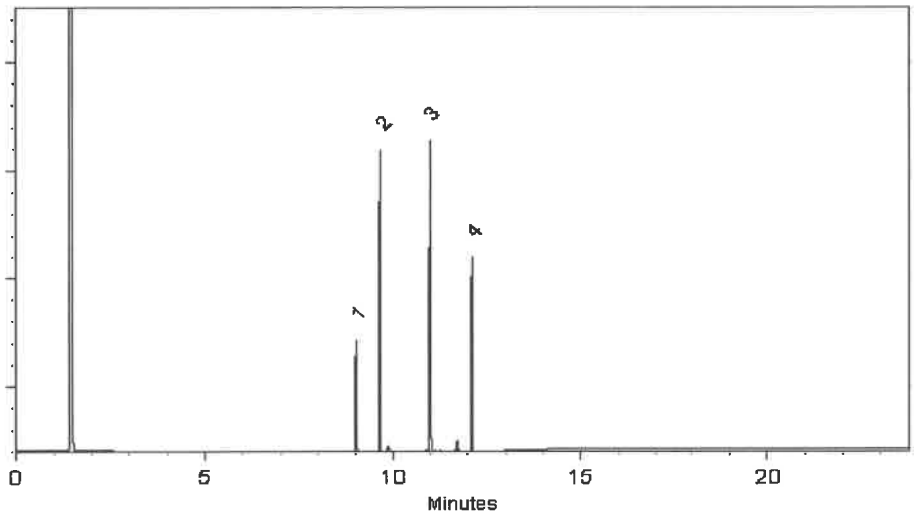
Inj. Temp:
250°C

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

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

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

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	414127	≤-10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine	1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine	92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam	105-60-2	99.9	271.1.6P	999 ± 5.82

~~S12280~~ ↓ ~~S12284~~ RCI 05/24/24

New numbers Generated.

S12790 ↓ S12794 RCI 11/12/24

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: _____
Shane Overcash
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined 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

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.

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.

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.

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.

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.

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.

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.

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.

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-010074-07	525551	-18°C +/- 4°C	Methylene Chloride	9/3/2029	3,3'-Dichlorobenzidine Solution, 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
3,3'-dichlorobenzidine	91-94-1	97.9	74.421.2P	994.7 ± 30.56

This RM is intended for use as a calibration standard or a quality control standard for chromatography equipment such as GC, GC/MS, HPLC, and HPLC/MS. It may also be used for various USEPA, NIOSH and ASTM methods.

Recommended storage container for ampuled products after opening is a 12 mm x 32 mm amber vial with screw cap Teflon lined silicon septum. The modeled % change per day can be calculated using the following:

$$\% \text{ Change} = 116192x^{-2.578} + 40.383e^{-0.03y}$$

where x = boiling point of the most volatile analyte in the mix (in degrees K)
y = boiling point of the solvent (in degrees K)

This model assumes the container is stored at -10 °C and is unopened during storage. The user should determine what the acceptable error for their process is and calculate the maximum number of days the opened ampule should be stored. The minimum sample size recommended for use is 1µL.

S13078 ↓ S13087 } AC 3/10/25

Manufactured by

Raevyn Steele
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.

*Not a certified valu

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q2150
COC Number 2047108

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: CDM SMITH
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY EDISON STATE: NJ ZIP: 08837
ATTENTION: MARCIE ENCINAS
PHONE: 732-590-4679 FAX: 732-225-7851

CLIENT PROJECT INFORMATION

PROJECT NAME: SOUTH RIVER WM REPLACEMENT
PROJECT NO. 302781 LOCATION: SOUTH RIVER, NJ
PROJECT MANAGER: MARCIE ENCINAS
e-mail: ENCINASMA@CDMSMITH.COM
PHONE: 732-590-4679 FAX: 732-225-7851

CLIENT BILLING INFORMATION

BILL TO: CDM SMITH PO#:
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY EDISON STATE: NJ ZIP: 08837
ATTENTION: MARCIE ENCINAS PHONE: 732-590-4679

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☑ Level 2 (Results + QC) ☑ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B ☐ Other _____
☐ EDD FORMAT _____

ANALYSIS

1: TCL VOC
2: TCL SVOC
3: METALS
4: PCB
5: PESTICIDE
6: HERBICIDE
7: DRO/GRO
8:
9:

ALLIANCE 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.	TP-44	SOIL		X	5/27/25	0620	6	X	X	X	X	X	X	X			E
2.	TP-42	SOIL		X	5/27/25	0915	6	X	X	X	X	X	X	X			E
3.	TP-39	SOIL		X	5/27/25	0950	6	X	X	X	X	X	X	X			E
4.	TP-48	SOIL		X	5/27/25	1220	6	X	X	X	X	X	X	X			E
5.	TP-47	SOIL		X	5/27/25	1120	6	X	X	X	X	X	X	X			E
6.	TP-50	SOIL		X	5/27/25	1330	6	X	X	X	X	X	X	X			E
7.	TP-51	SOIL		X	5/27/25	1505	6	X	X	X	X	X	X	X			E
8.	TP-52	SOIL		X	5/28/25	0850	6	X	X	X	X	X	X	X			E
9.	TP-54	SOIL		X	5/28/25	1145	6	X	X	X	X	X	X	X			E
10.	TP-53	SOIL		X	5/28/25	1425	6	X	X	X	X	X	X	X			F

COMMENTS ← Specify Preservatives: A-HCl, B-HN03, C-H2SO4, D-NaOH, E-ICE, F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	5/28/25 1550	1. 1550 5-28-25
2.		2.
3.	5-28-25 1645	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.5 °C
Comments:

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

Copyright © 2024

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE 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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2150 CAMP02
Client Name : CDM Smith
Client Contact : Marcie Ann Encinas
Invoice Name : CDM Smith
Invoice Contact : Marcie Ann Encinas

Order Date : 5/28/2025 3:53:00 PM
Project Name : South River WM Replacem
Receive DateTime : 5/28/2025 ~~12:00:00~~ AM
Purchase Order : 18:45

Project Mgr :
Report Type : Level 1
EDD Type : EXCEL NOCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2150-01	TP-44	Solid	05/27/2025	08:20					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2150-02	TP-42	Solid	05/27/2025	09:15					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2150-03	TP-39	Solid	05/27/2025	09:50					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2150-04	TP-48	Solid	05/27/2025	12:20					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2150-05	TP-47	Solid	05/27/2025	11:20					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2150-06	TP-50	Solid	05/27/2025	13:30					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2150-07	TP-51	Solid	05/27/2025	15:05					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2150-08	TP-52	Solid	05/28/2025	08:50					

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2150 CAMP02
Client Name : CDM Smith
Client Contact : Marcie Ann Encinas
Invoice Name : CDM Smith
Invoice Contact : Marcie Ann Encinas

Order Date : 5/28/2025 3:53:00 PM
Project Name : South River WM Replacem
Receive DateTime : 5/28/2025 ~~12:00:00~~ 16:45 AM
Purchase Order :

Project Mgr :
Report Type : Level 1
EDD Type : EXCEL NOCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2150-09	TP-54	Solid	05/28/2025	11:45					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2150-10	TP-53	Solid	05/28/2025	14:25					
					VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinguished By :
Date / Time : 5/29/25 0950

Received By :
Date / Time : 05/29/25 0950 Mg# 6 FR 2
Storage Area : **VOA Refridgerator Room**