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Cover Page

Order ID : Q1746

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number	Client Sample Number
Q1746-01	B-149-SB01
Q1746-02	B-149-SB01
Q1746-03	B-149-SB02
Q1746-04	B-149-SB02
Q1746-05	B-158-GW01
Q1746-06	B-149-GW01
Q1746-07	EB-2025-4-7
Q1746-08	TB-2025-4-7

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

Signature : _____

Date: 4/19/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Portal Partners Tri-Venture
Project Name: Amtrak Sawtooth Bridges 2025
Project # N/A
Chemtech Project # Q1746
Test Name: SVOC-TCL BNA -20

A. Number of Samples and Date of Receipt:
4 Solid samples were received on 04/07/2025.
4 Water samples were received on 04/07/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_M using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe samples were analyzed on instrument BNA_P using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for B-149-GW01 [2,4,6-Tribromophenol - 114%], EB-2025-4-7 [2,4,6-Tribromophenol - 115%]
these compounds did not meet the NJDKQP criteria but met the in-house criteria.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The MS {Q1744-01MS} with File ID: BM049865.D recoveries met the requirements for all compounds except for 4-Chloroaniline[23%] this compound did not meet the NJDKQP criteria but met the in-house criteria also 2,4-Dimethylphenol[144%],

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3,3-Dichlorobenzidine[31%], 3-Nitroaniline[28%], Atrazine[139%] and Hexachlorocyclopentadiene[176%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {Q1744-01MSD} with File ID: BM049866.D recoveries met the acceptable requirements except for 4-Chloroaniline[25%] this compound did not meet the NJDKQP criteria but met the in-house criteria also 2,4-Dimethylphenol[150%], 3,3-Dichlorobenzidine[32%], 3-Nitroaniline[28%], Atrazine[144%] and Hexachlorocyclopentadiene[184%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The RPD met criteria .

The Blank Spike for {PB167521BS} with File ID: BM049861.D met requirements for all samples except for 3,3-Dichlorobenzidine[47%], 3-Nitroaniline[44%], 4-Chloroaniline[42%] these compounds did not meet the NJDKQP criteria but met the in-house criteria and Hexachlorocyclopentadiene[180%] this compound did not meet the NJDKQP criteria and in-house criteria but no positive hit in associated samples therefore no corrective action taken.

The Blank Spike Duplicate for {PB167521BSD} with File ID: BM049862.D met requirements for all samples except for 3,3-Dichlorobenzidine[52%], 3-Nitroaniline[53%], 4-Chloroaniline[51%] these compounds did not meet the NJDKQP criteria but met the in-house criteria and Atrazine[132%] and Hexachlorocyclopentadiene[190%] these compounds did not meet the NJDKQP criteria and in-house criteria but no positive hist in associated samples therefore no corrective action taken.

The Blank Spike for {PB167509BS} with File ID: BM049947.D met requirements for all samples except for 3-Nitroaniline[65%], 4-Chloroaniline[48%] and Hexachlorocyclopentadiene[164%] these compounds did not meet the NJDKQP criteria but met the in-house criteria .

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

The % RSD is greater than 20% in the Initial Calibration (8270-BM040825.M) for 2,4-Dinitrophenol, these compounds are passing on Linear Regression.

The Continuous Calibration File ID BM049944.D met the requirements except for Atrazine and Benzaldehyde but associated QC within limits therefore no corrective action taken.

The Continuous Calibration File ID BP024245.D met the requirements except for Di-n-octyl phthalate but associated sample having hit below CRQL therefore no corrective action taken.

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The Tuning criteria met requirements.

E. Additional Comments:
The Form 6 is not included in the data package because the Initial Calibration was performed using 8 points.

The soil samples results are based on a dry weight basis.

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

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

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

Signature_____

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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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1746**

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

QA Review Signature: **SOHIL JODHANI** **Date:** **04/19/2025**

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LAB CHRONICLE

OrderID:	Q1746	**OrderDate:**	4/7/2025 12:00:00 PM
Client:	Portal Partners Tri-Venture	**Project:**	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	**Location:**	L41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1746-01	**B-149-SB01**	**SOIL**			**04/05/25**			**04/07/25**
			SVOC-TCL BNA -20	8270E		04/08/25	04/09/25	
Q1746-02	**B-149-SB01**	**TCLP**			**04/05/25**			**04/07/25**
			TCLP BNA	8270E		04/09/25	04/11/25	
Q1746-03	**B-149-SB02**	**SOIL**			**04/06/25**			**04/07/25**
			SVOC-TCL BNA -20	8270E		04/08/25	04/09/25	
Q1746-04	**B-149-SB02**	**TCLP**			**04/06/25**			**04/07/25**
			TCLP BNA	8270E		04/09/25	04/11/25	
Q1746-05	**B-158-GW01**	**Water**			**04/05/25**			**04/07/25**
			SVOC-TCL BNA -20	8270E		04/08/25	04/10/25	
Q1746-06	**B-149-GW01**	**Water**			**04/06/25**			**04/07/25**
			SVOC-TCL BNA -20	8270E		04/08/25	04/10/25	
Q1746-07	**EB-2025-4-7**	**Water**			**04/07/25**			**04/07/25**
			SVOC-TCL BNA -20	8270E		04/08/25	04/09/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**B-149-SB01**								
Q1746-01	B-149-SB01	SOIL	Phenanthrene		110.000	J	23.4	190	ug/Kg
Q1746-01	B-149-SB01	SOIL	Fluoranthene		200.000		33.6	190	ug/Kg
Q1746-01	B-149-SB01	SOIL	Pyrene		190.000		40.3	190	ug/Kg
Q1746-01	B-149-SB01	SOIL	Benzo(a)anthracene		100.000	J	25.7	190	ug/Kg
Q1746-01	B-149-SB01	SOIL	Chrysene		120.000	J	22.3	190	ug/Kg
Q1746-01	B-149-SB01	SOIL	Benzo(b)fluoranthene		130.000	J	21.3	190	ug/Kg
Q1746-01	B-149-SB01	SOIL	Benzo(a)pyrene		100.000	J	33	190	ug/Kg
			Total Svoc :		**950.00**				
Q1746-01	B-149-SB01	SOIL	Hexanedioic acid, bis(2-ethylhexy	*	160.000	J	0	0	ug/Kg
Q1746-01	B-149-SB01	SOIL	n-Hexadecanoic acid	*	210.000	JB	0	0	ug/Kg
Q1746-01	B-149-SB01	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	350.000	AB	0	0	ug/Kg
Q1746-01	B-149-SB01	SOIL	3-Eicosene, (E)-	*	75.300	J	0	0	ug/Kg
Q1746-01	B-149-SB01	SOIL	Benzophenone	*	290.000	J	0	0	ug/Kg
Q1746-01	B-149-SB01	SOIL	Butyl citrate	*	120.000	J	0	0	ug/Kg
			Total Tics :		**1,205.30**				
			Total Concentration:		**2,155.30**				
Client ID :	**B-149-SB02**								
Q1746-03	B-149-SB02	SOIL	Chrysene		86.400	J	23.4	200	ug/Kg
Q1746-03	B-149-SB02	SOIL	Benzo(b)fluoranthene		110.000	J	22.4	200	ug/Kg
Q1746-03	B-149-SB02	SOIL	Benzo(k)fluoranthene		100.000	J	26.4	200	ug/Kg
			Total Svoc :		**296.40**				
Q1746-03	B-149-SB02	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	530.000	AB	0	0	ug/Kg
Q1746-03	B-149-SB02	SOIL	Benzophenone	*	410.000	J	0	0	ug/Kg
Q1746-03	B-149-SB02	SOIL	Cyclotetracosane	*	160.000	J	0	0	ug/Kg
Q1746-03	B-149-SB02	SOIL	n-Hexadecanoic acid	*	450.000	JB	0	0	ug/Kg
Q1746-03	B-149-SB02	SOIL	Octadecanoic acid	*	140.000	JB	0	0	ug/Kg
			Total Tics :		**1,690.00**				
			Total Concentration:		**1,986.40**				
Client ID :	**B-158-GW01**								
Q1746-05	B-158-GW01	WATER	1-Heneicosanol	*	10.500	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	1-Phenyl-1-butene	*	3.500	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	2-Pentanone, 4-hydroxy-4-methyl	*	3.600	AB	0	0	ug/L
Q1746-05	B-158-GW01	WATER	Benzene, 1,2,3,4-tetramethyl-	*	2.300	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	Benzene, 1,2,3,5-tetramethyl-	*	4.700	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	Benzene, 1,2,4,5-tetramethyl-	*	2.800	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	Benzophenone	*	11.100	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	Butyl citrate	*	8.900	J	0	0	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Sample ID	Client ID		Parameter		Concentration	C	MDL	RDL	Units
Q1746-05	B-158-GW01	WATER	Ethanol, 2-(2-butoxyethoxy)-	*	24.400	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	n-Hexadecanoic acid	*	17.700	J	0	0	ug/L
Q1746-05	B-158-GW01	WATER	Octadecanoic acid	*	20.800	J	0	0	ug/L
			Total Tics :		**110.30**				
			Total Concentration:		**110.30**				
Client ID :	**B-149-GW01**								
Q1746-06	B-149-GW01	WATER	Di-n-butylphthalate		4.100	J	1.3	5.2	ug/L
			Total Svoc :		**4.10**				
Q1746-06	B-149-GW01	WATER	1,2-Benzenedicarboxylic acid, bis	*	2.500	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	1,4-Dibutyl benzene-1,4-dicarbox	*	4.600	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	1-Hexacosene	*	3.200	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	2-Pentanone, 4-hydroxy-4-methyl	*	4.900	AB	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Adipic acid, butyl 3-pentyl ester	*	69.500	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Benzophenone	*	3.600	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Butyl citrate	*	5.800	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Ethanol, 2-(2-butoxyethoxy)-	*	8.900	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Ethanol, 2-[2-(2-butoxyethoxy)eth	*	2.300	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Hexanoic acid, 2-ethyl-	*	31.100	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	n-Hexadecanoic acid	*	31.200	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Octadecanoic acid	*	51.500	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Pentanoic acid, 2,2,4-trimethyl-3-	*	5.700	J	0	0	ug/L
Q1746-06	B-149-GW01	WATER	Benzoic acid	*	5.000	J	4.3	10.3	ug/L
			Total Tics :		**229.80**				
			Total Concentration:		**233.90**				
Client ID :	**EB-2025-4-7**								
Q1746-07	EB-2025-4-7	WATER	2-Pentanone, 4-hydroxy-4-methyl	*	5.400	AB	0	0	ug/L
Q1746-07	EB-2025-4-7	WATER	7,9-Di-tert-butyl-1-oxaspiro(4,5)d	*	4.200	J	0	0	ug/L
Q1746-07	EB-2025-4-7	WATER	trans-13-Octadecenoic acid	*	2.500	J	0	0	ug/L
			Total Tics :		**12.10**				
			Total Concentration:		**12.10**				



QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB167509BL	PB167509BL	2-Fluorophenol	150	138	92		30 (18)	130 (112)
		Phenol-d6	150	134	89		30 (15)	130 (107)
		Nitrobenzene-d5	100	95.5	95		30 (18)	130 (107)
		2-Fluorobiphenyl	100	96.3	96		30 (20)	130 (109)
		2,4,6-Tribromophenol	150	146	97		30 (10)	130 (116)
		Terphenyl-d14	100	112	112		30 (10)	130 (105)
PB167509BS	PB167509BS	2-Fluorophenol	150	127	85		30 (18)	130 (112)
		Phenol-d6	150	126	84		30 (15)	130 (107)
		Nitrobenzene-d5	100	87.2	87		30 (18)	130 (107)
		2-Fluorobiphenyl	100	89.2	89		30 (20)	130 (109)
		2,4,6-Tribromophenol	150	145	97		30 (10)	130 (116)
		Terphenyl-d14	100	101	101		30 (10)	130 (105)
Q1744-01MS	B-158-SB01MS	2-Fluorophenol	150	123	82		30 (18)	130 (112)
		Phenol-d6	150	125	83		30 (15)	130 (107)
		Nitrobenzene-d5	100	82.9	83		30 (18)	130 (107)
		2-Fluorobiphenyl	100	81.7	82		30 (20)	130 (109)
		2,4,6-Tribromophenol	150	135	90		30 (10)	130 (116)
		Terphenyl-d14	100	89.4	89		30 (10)	130 (105)
Q1744-01MSD	B-158-SB01MSD	2-Fluorophenol	150	127	85		30 (18)	130 (112)
		Phenol-d6	150	130	87		30 (15)	130 (107)
		Nitrobenzene-d5	100	86.2	86		30 (18)	130 (107)
		2-Fluorobiphenyl	100	85.2	85		30 (20)	130 (109)
		2,4,6-Tribromophenol	150	141	94		30 (10)	130 (116)
		Terphenyl-d14	100	93.3	93		30 (10)	130 (105)
Q1746-01	B-149-SB01	2-Fluorophenol	150	107	71		30 (18)	130 (112)
		Phenol-d6	150	105	70		30 (15)	130 (107)
		Nitrobenzene-d5	100	73.2	73		30 (18)	130 (107)
		2-Fluorobiphenyl	100	65.6	66		30 (20)	130 (109)
		2,4,6-Tribromophenol	150	103	69		30 (10)	130 (116)
		Terphenyl-d14	100	62.9	63		30 (10)	130 (105)
Q1746-03	B-149-SB02	2-Fluorophenol	150	152	102		30 (18)	130 (112)
		Phenol-d6	150	155	104		30 (15)	130 (107)
		Nitrobenzene-d5	100	105	105		30 (18)	130 (107)
		2-Fluorobiphenyl	100	101	101		30 (20)	130 (109)
		2,4,6-Tribromophenol	150	177	118		30 (10)	130 (116)
		Terphenyl-d14	100	109	109		30 (10)	130 (105)

( ) = LABORATORY INHOUSE LIMIT

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Surrogate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB167521BL	PB167521BL	2-Fluorophenol	150	128	86		15 (10)	110 (139)
		Phenol-d6	150	125	83		15 (10)	110 (134)
		Nitrobenzene-d5	100	88.3	88		30 (49)	130 (133)
		2-Fluorobiphenyl	100	89.2	89		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	136	91		15 (44)	110 (137)
		Terphenyl-d14	100	108	108		30 (48)	130 (125)
PB167521BS	PB167521BS	2-Fluorophenol	150	119	79		15 (10)	110 (139)
		Phenol-d6	150	118	78		15 (10)	110 (134)
		Nitrobenzene-d5	100	79.5	79		30 (49)	130 (133)
		2-Fluorobiphenyl	100	82.6	83		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	130	87		15 (44)	110 (137)
		Terphenyl-d14	100	94.4	94		30 (48)	130 (125)
PB167521BSD	PB167521BSD	2-Fluorophenol	150	125	83		15 (10)	110 (139)
		Phenol-d6	150	122	82		15 (10)	110 (134)
		Nitrobenzene-d5	100	84.5	84		30 (49)	130 (133)
		2-Fluorobiphenyl	100	84.4	84		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	136	91		15 (44)	110 (137)
		Terphenyl-d14	100	98.6	99		30 (48)	130 (125)
Q1746-05	B-158-GW01	2-Fluorophenol	150	37.1	25		15 (10)	110 (139)
		Phenol-d6	150	23.0	15		15 (10)	110 (134)
		Nitrobenzene-d5	100	65.7	66		30 (49)	130 (133)
		2-Fluorobiphenyl	100	61.4	61		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	83.8	56		15 (44)	110 (137)
		Terphenyl-d14	100	58.4	58		30 (48)	130 (125)
Q1746-06	B-149-GW01	2-Fluorophenol	150	68.5	46		15 (10)	110 (139)
		Phenol-d6	150	40.8	27		15 (10)	110 (134)
		Nitrobenzene-d5	100	99.7	100		30 (49)	130 (133)
		2-Fluorobiphenyl	100	94.1	94		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	172	114	*	15 (44)	110 (137)
		Terphenyl-d14	100	96.3	96		30 (48)	130 (125)
Q1746-07	EB-2025-4-7	2-Fluorophenol	150	68.3	46		15 (10)	110 (139)
		Phenol-d6	150	38.6	26		15 (10)	110 (134)
		Nitrobenzene-d5	100	105	105		30 (49)	130 (133)
		2-Fluorobiphenyl	100	92.4	92		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	172	115	*	15 (44)	110 (137)
		Terphenyl-d14	100	104	104		30 (48)	130 (125)

( ) = LABORATORY INHOUSE LIMIT

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1744-01MS		**Client Sample ID: B-158-SB01MS**						**DataFile: BM049865.D**			
Benzaldehyde	1800	0	1600	ug/Kg	89				20 (10)	160 (86)	
Phenol	1800	0	1900	ug/Kg	106				20 (67)	160 (126)	
bis(2-Chloroethyl)ether	1800	0	1700	ug/Kg	94				70 (54)	130 (125)	
2-Chlorophenol	1800	0	1800	ug/Kg	100				70 (79)	130 (107)	
2-Methylphenol	1800	0	1900	ug/Kg	106				70 (66)	130 (122)	
2,2-oxybis(1-Chloropropane)	1800	0	1800	ug/Kg	100				70 (65)	130 (110)	
Acetophenone	1800	0	1700	ug/Kg	94				70 (75)	130 (111)	
3+4-Methylphenols	1800	0	1900	ug/Kg	106				20 (66)	160 (104)	
N-Nitroso-di-n-propylamine	1800	0	1800	ug/Kg	100				70 (59)	130 (119)	
Hexachloroethane	1800	0	1700	ug/Kg	94				20 (65)	160 (117)	
Nitrobenzene	1800	0	1700	ug/Kg	94				70 (70)	130 (119)	
Isophorone	1800	0	1900	ug/Kg	106				70 (76)	130 (122)	
2-Nitrophenol	1800	0	1700	ug/Kg	94				70 (54)	130 (145)	
2,4-Dimethylphenol	1800	0	2600	ug/Kg	144	*			70 (44)	130 (135)	
bis(2-Chloroethoxy)methane	1800	0	1700	ug/Kg	94				70 (68)	130 (112)	
2,4-Dichlorophenol	1800	0	1800	ug/Kg	100				70 (72)	130 (118)	
Naphthalene	1800	0	1700	ug/Kg	94				70 (72)	130 (110)	
4-Chloroaniline	1800	0	410	ug/Kg	23	*			70 (10)	130 (91)	
Hexachlorobutadiene	1800	0	1700	ug/Kg	94				70 (66)	130 (114)	
Caprolactam	1800	0	1700	ug/Kg	94				20 (51)	160 (134)	
4-Chloro-3-methylphenol	1800	0	1800	ug/Kg	100				70 (57)	130 (132)	
2-Methylnaphthalene	1800	0	1600	ug/Kg	89				70 (59)	130 (123)	
Hexachlorocyclopentadiene	3700	0	6500	ug/Kg	176	*			20 (10)	160 (175)	
2,4,6-Trichlorophenol	1800	0	1800	ug/Kg	100				70 (72)	130 (117)	
2,4,5-Trichlorophenol	1800	0	1800	ug/Kg	100				70 (72)	130 (117)	
1,1-Biphenyl	1800	0	1700	ug/Kg	94				70 (75)	130 (113)	
2-Chloronaphthalene	1800	0	1700	ug/Kg	94				70 (67)	130 (118)	
2-Nitroaniline	1800	0	1800	ug/Kg	100				70 (69)	130 (127)	
Dimethylphthalate	1800	0	1700	ug/Kg	94				70 (70)	130 (113)	
Acenaphthylene	1800	0	1900	ug/Kg	106				70 (79)	130 (118)	
2,6-Dinitrotoluene	1800	0	1800	ug/Kg	100				70 (70)	130 (125)	
3-Nitroaniline	1800	0	500	ug/Kg	28	*			70 (30)	130 (99)	
Acenaphthene	1800	0	1700	ug/Kg	94				70 (70)	130 (121)	
2,4-Dinitrophenol	3700	0	3100	ug/Kg	84				20 (10)	160 (155)	
4-Nitrophenol	3700	0	3900	ug/Kg	105				20 (45)	160 (133)	
Dibenzofuran	1800	0	1700	ug/Kg	94				70 (72)	130 (110)	
2,4-Dinitrotoluene	1800	0	1900	ug/Kg	106				70 (55)	130 (128)	
Diethylphthalate	1800	0	1700	ug/Kg	94				70 (70)	130 (112)	
4-Chlorophenyl-phenylether	1800	0	1800	ug/Kg	100				70 (71)	130 (108)	
Fluorene	1800	0	1800	ug/Kg	100				70 (68)	130 (116)	
4-Nitroaniline	1800	0	1600	ug/Kg	89				70 (55)	130 (120)	
4,6-Dinitro-2-methylphenol	1800	0	1700	ug/Kg	94				70 (10)	130 (160)	
N-Nitrosodiphenylamine	1800	0	1800	ug/Kg	100				70 (73)	130 (118)	
4-Bromophenyl-phenylether	1800	0	1700	ug/Kg	94				70 (65)	130 (121)	
Hexachlorobenzene	1800	0	1800	ug/Kg	100				70 (67)	130 (118)	
Atrazine	1800	0	2500	ug/Kg	139	*			70 (79)	130 (127)	

( ) = LABORATORY INHOUSE LIMIT

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Pentachlorophenol	3700	0	3600	ug/Kg	97				20 (47)	160 (128)	
Phenanthrene	1800	0	1800	ug/Kg	100				70 (52)	130 (128)	
Anthracene	1800	0	1800	ug/Kg	100				70 (62)	130 (124)	
Carbazole	1800	0	1800	ug/Kg	100				70 (59)	130 (119)	
Di-n-butylphthalate	1800	0	1700	ug/Kg	94				70 (69)	130 (118)	
Fluoranthene	1800	0	1800	ug/Kg	100				70 (44)	130 (125)	
Pyrene	1800	0	1700	ug/Kg	94				70 (26)	130 (142)	
Butylbenzylphthalate	1800	0	1600	ug/Kg	89				70 (64)	130 (126)	
3,3-Dichlorobenzidine	1800	0	550	ug/Kg	31	*			70 (33)	130 (116)	
Benzo(a)anthracene	1800	81.9	1800	ug/Kg	95				70 (71)	130 (114)	
Chrysene	1800	160	1900	ug/Kg	97				70 (57)	130 (121)	
bis(2-Ethylhexyl)phthalate	1800	0	1700	ug/Kg	94				70 (42)	130 (169)	
Di-n-octyl phthalate	1800	0	1600	ug/Kg	89				70 (23)	130 (175)	
Benzo(b)fluoranthene	1800	160	1900	ug/Kg	97				70 (67)	130 (121)	
Benzo(k)fluoranthene	1800	160	1900	ug/Kg	97				70 (57)	130 (134)	
Benzo(a)pyrene	1800	0	1900	ug/Kg	106				70 (70)	130 (142)	
Indeno(1,2,3-cd)pyrene	1800	0	1800	ug/Kg	100				70 (40)	130 (129)	
Dibenz(a,h)anthracene	1800	0	1800	ug/Kg	100				70 (43)	130 (123)	
Benzo(g,h,i)perylene	1800	0	1700	ug/Kg	94				70 (24)	130 (125)	
1,2,4,5-Tetrachlorobenzene	1800	0	1700	ug/Kg	94				70 (69)	130 (124)	
1,4-Dioxane	1800	0	1600	ug/Kg	89				20 (46)	160 (112)	
2,3,4,6-Tetrachlorophenol	1800	0	1700	ug/Kg	94				70 (69)	130 (112)	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1744-01MSD		**Client Sample ID: B-158-SB01MSD**						**DataFile: BM049866.D**			
Benzaldehyde	1800	0	1600	ug/Kg	89		0		20 (10)	160 (86)	30 (20)
Phenol	1800	0	1900	ug/Kg	106		0		20 (67)	160 (126)	30 (20)
bis(2-Chloroethyl)ether	1800	0	1800	ug/Kg	100		6		70 (54)	130 (125)	30 (20)
2-Chlorophenol	1800	0	1900	ug/Kg	106		6		70 (79)	130 (107)	30 (20)
2-Methylphenol	1800	0	2000	ug/Kg	111		5		70 (66)	130 (122)	30 (20)
2,2-oxybis(1-Chloropropane)	1800	0	1900	ug/Kg	106		6		70 (65)	130 (110)	30 (20)
Acetophenone	1800	0	1800	ug/Kg	100		6		70 (75)	130 (111)	30 (20)
3+4-Methylphenols	1800	0	2000	ug/Kg	111		5		20 (66)	160 (104)	30 (20)
N-Nitroso-di-n-propylamine	1800	0	1900	ug/Kg	106		6		70 (59)	130 (119)	30 (20)
Hexachloroethane	1800	0	1800	ug/Kg	100		6		20 (65)	160 (117)	30 (20)
Nitrobenzene	1800	0	1800	ug/Kg	100		6		70 (70)	130 (119)	30 (20)
Isophorone	1800	0	1900	ug/Kg	106		0		70 (76)	130 (122)	30 (20)
2-Nitrophenol	1800	0	1800	ug/Kg	100		6		70 (54)	130 (145)	30 (20)
2,4-Dimethylphenol	1800	0	2700	ug/Kg	150	*	4		70 (44)	130 (135)	30 (20)
bis(2-Chloroethoxy)methane	1800	0	1800	ug/Kg	100		6		70 (68)	130 (112)	30 (20)
2,4-Dichlorophenol	1800	0	1900	ug/Kg	106		6		70 (72)	130 (118)	30 (20)
Naphthalene	1800	0	1700	ug/Kg	94		0		70 (72)	130 (110)	30 (20)
4-Chloroaniline	1800	0	450	ug/Kg	25	*	8		70 (10)	130 (91)	30 (20)
Hexachlorobutadiene	1800	0	1800	ug/Kg	100		6		70 (66)	130 (114)	30 (20)
Caprolactam	1800	0	1800	ug/Kg	100		6		20 (51)	160 (134)	30 (20)
4-Chloro-3-methylphenol	1800	0	1900	ug/Kg	106		6		70 (57)	130 (132)	30 (20)
2-Methylnaphthalene	1800	0	1600	ug/Kg	89		0		70 (59)	130 (123)	30 (20)
Hexachlorocyclopentadiene	3700	0	6800	ug/Kg	184	*	4		20 (10)	160 (175)	30 (20)
2,4,6-Trichlorophenol	1800	0	1800	ug/Kg	100		0		70 (72)	130 (117)	30 (20)
2,4,5-Trichlorophenol	1800	0	1900	ug/Kg	106		6		70 (72)	130 (117)	30 (20)
1,1-Biphenyl	1800	0	1800	ug/Kg	100		6		70 (75)	130 (113)	30 (20)
2-Chloronaphthalene	1800	0	1800	ug/Kg	100		6		70 (67)	130 (118)	30 (20)
2-Nitroaniline	1800	0	1900	ug/Kg	106		6		70 (69)	130 (127)	30 (20)
Dimethylphthalate	1800	0	1800	ug/Kg	100		6		70 (70)	130 (113)	30 (20)
Acenaphthylene	1800	0	1900	ug/Kg	106		0		70 (79)	130 (118)	30 (20)
2,6-Dinitrotoluene	1800	0	1900	ug/Kg	106		6		70 (70)	130 (125)	30 (20)
3-Nitroaniline	1800	0	510	ug/Kg	28	*	0		70 (30)	130 (99)	30 (20)
Acenaphthene	1800	0	1800	ug/Kg	100		6		70 (70)	130 (121)	30 (20)
2,4-Dinitrophenol	3700	0	3200	ug/Kg	86		2		20 (10)	160 (155)	30 (20)
4-Nitrophenol	3700	0	4100	ug/Kg	111		6		20 (45)	160 (133)	30 (20)
Dibenzofuran	1800	0	1700	ug/Kg	94		0		70 (72)	130 (110)	30 (20)
2,4-Dinitrotoluene	1800	0	2000	ug/Kg	111		5		70 (55)	130 (128)	30 (20)
Diethylphthalate	1800	0	1800	ug/Kg	100		6		70 (70)	130 (112)	30 (20)
4-Chlorophenyl-phenylether	1800	0	1900	ug/Kg	106		6		70 (71)	130 (108)	30 (20)
Fluorene	1800	0	1800	ug/Kg	100		0		70 (68)	130 (116)	30 (20)
4-Nitroaniline	1800	0	1700	ug/Kg	94		5		70 (55)	130 (120)	30 (20)
4,6-Dinitro-2-methylphenol	1800	0	1800	ug/Kg	100		6		70 (10)	130 (160)	30 (20)
N-Nitrosodiphenylamine	1800	0	1800	ug/Kg	100		0		70 (73)	130 (118)	30 (20)
4-Bromophenyl-phenylether	1800	0	1800	ug/Kg	100		6		70 (65)	130 (121)	30 (20)
Hexachlorobenzene	1800	0	1800	ug/Kg	100		0		70 (67)	130 (118)	30 (20)
Atrazine	1800	0	2600	ug/Kg	144	*	4		70 (79)	130 (127)	30 (20)

( ) = LABORATORY INHOUSE LIMIT

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Pentachlorophenol	3700	0	3700	ug/Kg	100		3		20 (47)	160 (128)	30 (20)
Phenanthrene	1800	0	1800	ug/Kg	100		0		70 (52)	130 (128)	30 (20)
Anthracene	1800	0	1900	ug/Kg	106		6		70 (62)	130 (124)	30 (20)
Carbazole	1800	0	1900	ug/Kg	106		6		70 (59)	130 (119)	30 (20)
Di-n-butylphthalate	1800	0	1800	ug/Kg	100		6		70 (69)	130 (118)	30 (20)
Fluoranthene	1800	0	1900	ug/Kg	106		6		70 (44)	130 (125)	30 (20)
Pyrene	1800	0	1800	ug/Kg	100		6		70 (26)	130 (142)	30 (20)
Butylbenzylphthalate	1800	0	1700	ug/Kg	94		5		70 (64)	130 (126)	30 (20)
3,3-Dichlorobenzidine	1800	0	580	ug/Kg	32	*	3		70 (33)	130 (116)	30 (20)
Benzo(a)anthracene	1800	81.9	1900	ug/Kg	101		6		70 (71)	130 (114)	30 (20)
Chrysene	1800	160	1900	ug/Kg	97		0		70 (57)	130 (121)	30 (20)
bis(2-Ethylhexyl)phthalate	1800	0	1700	ug/Kg	94		0		70 (42)	130 (169)	30 (20)
Di-n-octyl phthalate	1800	0	1700	ug/Kg	94		5		70 (23)	130 (175)	30 (20)
Benzo(b)fluoranthene	1800	160	1900	ug/Kg	97		0		70 (67)	130 (121)	30 (20)
Benzo(k)fluoranthene	1800	160	2000	ug/Kg	102		5		70 (57)	130 (134)	30 (20)
Benzo(a)pyrene	1800	0	2000	ug/Kg	111		5		70 (70)	130 (142)	30 (20)
Indeno(1,2,3-cd)pyrene	1800	0	1900	ug/Kg	106		6		70 (40)	130 (129)	30 (20)
Dibenz(a,h)anthracene	1800	0	1900	ug/Kg	106		6		70 (43)	130 (123)	30 (20)
Benzo(g,h,i)perylene	1800	0	1800	ug/Kg	100		6		70 (24)	130 (125)	30 (20)
1,2,4,5-Tetrachlorobenzene	1800	0	1800	ug/Kg	100		6		70 (69)	130 (124)	30 (20)
1,4-Dioxane	1800	0	1600	ug/Kg	89		0		20 (46)	160 (112)	30 (20)
2,3,4,6-Tetrachlorophenol	1800	0	1800	ug/Kg	100		6		70 (69)	130 (112)	30 (20)

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E **DataFile:** BM049861.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167521BS	Benzaldehyde	50	35.7	ug/L	71				20 (10)	160 (162)	
	Phenol	50	42.1	ug/L	84				20 (66)	160 (118)	
	bis(2-Chloroethyl)ether	50	41.4	ug/L	83				70 (62)	130 (103)	
	2-Chlorophenol	50	41.6	ug/L	83				70 (70)	130 (117)	
	2-Methylphenol	50	44.0	ug/L	88				70 (69)	130 (109)	
	2,2-oxybis(1-Chloropropane)	50	43.2	ug/L	86				70 (65)	130 (100)	
	Acetophenone	50	41.0	ug/L	82				70 (60)	130 (104)	
	3+4-Methylphenols	50	43.6	ug/L	87				20 (67)	160 (106)	
	N-Nitroso-di-n-propylamine	50	42.8	ug/L	86				70 (57)	130 (107)	
	Hexachloroethane	50	41.0	ug/L	82				20 (76)	160 (118)	
	Nitrobenzene	50	40.6	ug/L	81				70 (58)	130 (106)	
	Isophorone	50	43.6	ug/L	87				70 (61)	130 (102)	
	2-Nitrophenol	50	40.0	ug/L	80				70 (70)	130 (115)	
	2,4-Dimethylphenol	50	60.6	ug/L	121				70 (42)	130 (142)	
	bis(2-Chloroethoxy)methane	50	41.6	ug/L	83				70 (58)	130 (109)	
	2,4-Dichlorophenol	50	41.7	ug/L	83				70 (66)	130 (115)	
	Naphthalene	50	39.4	ug/L	79				70 (64)	130 (107)	
	4-Chloroaniline	50	21.2	ug/L	42		*		70 (10)	130 (85)	
	Hexachlorobutadiene	50	41.2	ug/L	82				70 (69)	130 (101)	
	Caprolactam	50	39.5	ug/L	79				20 (58)	160 (128)	
	4-Chloro-3-methylphenol	50	41.8	ug/L	84				70 (65)	130 (114)	
	2-Methylnaphthalene	50	36.8	ug/L	74				70 (64)	130 (107)	
	Hexachlorocyclopentadiene	100	180	ug/L	180		*		20 (36)	160 (160)	
	2,4,6-Trichlorophenol	50	43.1	ug/L	86				70 (61)	130 (110)	
	2,4,5-Trichlorophenol	50	43.2	ug/L	86				70 (70)	130 (106)	
	1,1-Biphenyl	50	41.6	ug/L	83				70 (72)	130 (98)	
	2-Chloronaphthalene	50	42.2	ug/L	84				70 (59)	130 (106)	
	2-Nitroaniline	50	43.8	ug/L	88				70 (73)	130 (114)	
	Dimethylphthalate	50	42.1	ug/L	84				70 (64)	130 (103)	
	Acenaphthylene	50	45.7	ug/L	91				70 (79)	130 (103)	
	2,6-Dinitrotoluene	50	43.4	ug/L	87				70 (64)	130 (110)	
	3-Nitroaniline	50	22.2	ug/L	44		*		70 (28)	130 (100)	
	Acenaphthene	50	41.7	ug/L	83				70 (59)	130 (113)	
	2,4-Dinitrophenol	100	80.2	ug/L	80				20 (36)	160 (166)	
	4-Nitrophenol	100	92.4	ug/L	92				20 (45)	160 (147)	
	Dibenzofuran	50	40.7	ug/L	81				70 (65)	130 (106)	
	2,4-Dinitrotoluene	50	45.8	ug/L	92				70 (60)	130 (115)	
	Diethylphthalate	50	41.2	ug/L	82				70 (63)	130 (105)	
	4-Chlorophenyl-phenylether	50	43.1	ug/L	86				70 (61)	130 (104)	
	Fluorene	50	42.7	ug/L	85				70 (64)	130 (107)	
	4-Nitroaniline	50	41.6	ug/L	83				70 (55)	130 (125)	
	4,6-Dinitro-2-methylphenol	50	43.6	ug/L	87				70 (62)	130 (132)	
	N-Nitrosodiphenylamine	50	44.3	ug/L	89				70 (61)	130 (109)	
	4-Bromophenyl-phenylether	50	43.4	ug/L	87				70 (73)	130 (103)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E **DataFile:** BM049861.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167521BS	Hexachlorobenzene	50	43.8	ug/L	88				70 (73)	130 (106)	
	Atrazine	50	62.2	ug/L	124				70 (76)	130 (120)	
	Pentachlorophenol	100	87.0	ug/L	87				20 (47)	160 (114)	
	Phenanthrene	50	43.8	ug/L	88				70 (62)	130 (109)	
	Anthracene	50	45.4	ug/L	91				70 (65)	130 (110)	
	Carbazole	50	43.7	ug/L	87				70 (62)	130 (106)	
	Di-n-butylphthalate	50	41.8	ug/L	84				70 (64)	130 (106)	
	Fluoranthene	50	42.1	ug/L	84				70 (64)	130 (110)	
	Pyrene	50	43.8	ug/L	88				70 (71)	130 (103)	
	Butylbenzylphthalate	50	42.3	ug/L	85				70 (61)	130 (105)	
	3,3-Dichlorobenzidine	50	23.5	ug/L	47		*		70 (43)	130 (108)	
	Benzo(a)anthracene	50	44.0	ug/L	88				70 (62)	130 (107)	
	Chrysene	50	43.1	ug/L	86				70 (61)	130 (108)	
	bis(2-Ethylhexyl)phthalate	50	41.7	ug/L	83				70 (59)	130 (110)	
	Di-n-octyl phthalate	50	40.0	ug/L	80				70 (52)	130 (139)	
	Benzo(b)fluoranthene	50	41.9	ug/L	84				70 (77)	130 (113)	
	Benzo(k)fluoranthene	50	44.5	ug/L	89				70 (77)	130 (105)	
	Benzo(a)pyrene	50	46.4	ug/L	93				70 (72)	130 (131)	
	Indeno(1,2,3-cd)pyrene	50	44.5	ug/L	89				70 (72)	130 (105)	
	Dibenz(a,h)anthracene	50	44.0	ug/L	88				70 (78)	130 (115)	
	Benzo(g,h,i)perylene	50	42.3	ug/L	85				70 (75)	130 (118)	
	1,2,4,5-Tetrachlorobenzene	50	42.4	ug/L	85				70 (72)	130 (101)	
	1,4-Dioxane	50	32.1	ug/L	64				20 (38)	160 (125)	
	2,3,4,6-Tetrachlorophenol	50	42.1	ug/L	84				70 (63)	130 (116)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E **DataFile:** BM049862.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167521BSD	Benzaldehyde	50	37.4	ug/L	75	5			20 (10)	160 (162)	20 (20)
	Phenol	50	44.7	ug/L	89	6			20 (66)	160 (118)	20 (20)
	bis(2-Chloroethyl)ether	50	43.9	ug/L	88	6			70 (62)	130 (103)	20 (20)
	2-Chlorophenol	50	44.4	ug/L	89	7			70 (70)	130 (117)	20 (20)
	2-Methylphenol	50	46.6	ug/L	93	6			70 (69)	130 (109)	20 (20)
	2,2-oxybis(1-Chloropropane)	50	45.5	ug/L	91	5			70 (65)	130 (100)	20 (20)
	Acetophenone	50	43.3	ug/L	87	5			70 (60)	130 (104)	20 (20)
	3+4-Methylphenols	50	45.7	ug/L	91	5			20 (67)	160 (106)	20 (20)
	N-Nitroso-di-n-propylamine	50	44.1	ug/L	88	3			70 (57)	130 (107)	20 (20)
	Hexachloroethane	50	43.4	ug/L	87	6			20 (76)	160 (118)	20 (20)
	Nitrobenzene	50	43.6	ug/L	87	7			70 (58)	130 (106)	20 (20)
	Isophorone	50	46.7	ug/L	93	7			70 (61)	130 (102)	20 (20)
	2-Nitrophenol	50	43.4	ug/L	87	8			70 (70)	130 (115)	20 (20)
	2,4-Dimethylphenol	50	63.9	ug/L	128	5			70 (42)	130 (142)	20 (20)
	bis(2-Chloroethoxy)methane	50	44.3	ug/L	89	6			70 (58)	130 (109)	20 (20)
	2,4-Dichlorophenol	50	44.3	ug/L	89	6			70 (66)	130 (115)	20 (20)
	Naphthalene	50	42.1	ug/L	84	7			70 (64)	130 (107)	20 (20)
	4-Chloroaniline	50	25.5	ug/L	51	18	*		70 (10)	130 (85)	20 (20)
	Hexachlorobutadiene	50	44.3	ug/L	89	7			70 (69)	130 (101)	20 (20)
	Caprolactam	50	42.2	ug/L	84	7			20 (58)	160 (128)	20 (20)
	4-Chloro-3-methylphenol	50	43.7	ug/L	87	4			70 (65)	130 (114)	20 (20)
	2-Methylnaphthalene	50	39.1	ug/L	78	6			70 (64)	130 (107)	20 (20)
	Hexachlorocyclopentadiene	100	190	ug/L	190	5	*		20 (36)	160 (160)	20 (20)
	2,4,6-Trichlorophenol	50	44.4	ug/L	89	3			70 (61)	130 (110)	20 (20)
	2,4,5-Trichlorophenol	50	45.0	ug/L	90	4			70 (70)	130 (106)	20 (20)
	1,1-Biphenyl	50	43.1	ug/L	86	4			70 (72)	130 (98)	20 (20)
	2-Chloronaphthalene	50	43.6	ug/L	87	3			70 (59)	130 (106)	20 (20)
	2-Nitroaniline	50	45.9	ug/L	92	5			70 (73)	130 (114)	20 (20)
	Dimethylphthalate	50	43.8	ug/L	88	4			70 (64)	130 (103)	20 (20)
	Acenaphthylene	50	47.0	ug/L	94	3			70 (79)	130 (103)	20 (20)
	2,6-Dinitrotoluene	50	45.4	ug/L	91	5			70 (64)	130 (110)	20 (20)
	3-Nitroaniline	50	26.5	ug/L	53	18	*		70 (28)	130 (100)	20 (20)
	Acenaphthene	50	42.9	ug/L	86	3			70 (59)	130 (113)	20 (20)
	2,4-Dinitrophenol	100	84.7	ug/L	85	5			20 (36)	160 (166)	20 (20)
	4-Nitrophenol	100	99.6	ug/L	100	7			20 (45)	160 (147)	20 (20)
	Dibenzofuran	50	41.8	ug/L	84	3			70 (65)	130 (106)	20 (20)
	2,4-Dinitrotoluene	50	48.1	ug/L	96	5			70 (60)	130 (115)	20 (20)
	Diethylphthalate	50	42.9	ug/L	86	4			70 (63)	130 (105)	20 (20)
	4-Chlorophenyl-phenylether	50	44.7	ug/L	89	4			70 (61)	130 (104)	20 (20)
	Fluorene	50	44.5	ug/L	89	4			70 (64)	130 (107)	20 (20)
	4-Nitroaniline	50	44.6	ug/L	89	7			70 (55)	130 (125)	20 (20)
	4,6-Dinitro-2-methylphenol	50	45.4	ug/L	91	4			70 (62)	130 (132)	20 (20)
	N-Nitrosodiphenylamine	50	45.8	ug/L	92	3			70 (61)	130 (109)	20 (20)
	4-Bromophenyl-phenylether	50	44.9	ug/L	90	3			70 (73)	130 (103)	20 (20)

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E **DataFile:** BM049862.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167521BSD	Hexachlorobenzene	50	45.6	ug/L	91	4			70 (73)	130 (106)	20 (20)
	Atrazine	50	66.0	ug/L	132	6	*		70 (76)	130 (120)	20 (20)
	Pentachlorophenol	100	92.0	ug/L	92	6			20 (47)	160 (114)	20 (20)
	Phenanthrene	50	45.9	ug/L	92	5			70 (62)	130 (109)	20 (20)
	Anthracene	50	47.6	ug/L	95	5			70 (65)	130 (110)	20 (20)
	Carbazole	50	46.1	ug/L	92	5			70 (62)	130 (106)	20 (20)
	Di-n-butylphthalate	50	44.1	ug/L	88	5			70 (64)	130 (106)	20 (20)
	Fluoranthene	50	45.0	ug/L	90	7			70 (64)	130 (110)	20 (20)
	Pyrene	50	45.9	ug/L	92	5			70 (71)	130 (103)	20 (20)
	Butylbenzylphthalate	50	44.3	ug/L	89	5			70 (61)	130 (105)	20 (20)
	3,3-Dichlorobenzidine	50	25.9	ug/L	52	10	*		70 (43)	130 (108)	20 (20)
	Benzo(a)anthracene	50	46.5	ug/L	93	6			70 (62)	130 (107)	20 (20)
	Chrysene	50	45.1	ug/L	90	5			70 (61)	130 (108)	20 (20)
	bis(2-Ethylhexyl)phthalate	50	44.1	ug/L	88	6			70 (59)	130 (110)	20 (20)
	Di-n-octyl phthalate	50	42.3	ug/L	85	6			70 (52)	130 (139)	20 (20)
	Benzo(b)fluoranthene	50	45.0	ug/L	90	7			70 (77)	130 (113)	20 (20)
	Benzo(k)fluoranthene	50	47.2	ug/L	94	6			70 (77)	130 (105)	20 (20)
	Benzo(a)pyrene	50	49.1	ug/L	98	6			70 (72)	130 (131)	20 (20)
	Indeno(1,2,3-cd)pyrene	50	46.9	ug/L	94	5			70 (72)	130 (105)	20 (20)
	Dibenz(a,h)anthracene	50	46.2	ug/L	92	5			70 (78)	130 (115)	20 (20)
	Benzo(g,h,i)perylene	50	44.3	ug/L	89	5			70 (75)	130 (118)	20 (20)
	1,2,4,5-Tetrachlorobenzene	50	44.4	ug/L	89	5			70 (72)	130 (101)	20 (20)
	1,4-Dioxane	50	35.7	ug/L	71	11			20 (38)	160 (125)	20 (20)
	2,3,4,6-Tetrachlorophenol	50	43.7	ug/L	87	4			70 (63)	130 (116)	20 (20)

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E **DataFile:** BM049947.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167509BS	Benzaldehyde	1700	1100	ug/Kg	65				20 (10)	160 (133)	
	Phenol	1700	1500	ug/Kg	88				20 (62)	160 (112)	
	bis(2-Chloroethyl)ether	1700	1500	ug/Kg	88				70 (60)	130 (101)	
	2-Chlorophenol	1700	1500	ug/Kg	88				70 (65)	130 (112)	
	2-Methylphenol	1700	1600	ug/Kg	94				70 (61)	130 (108)	
	2,2-oxybis(1-Chloropropane)	1700	1600	ug/Kg	94				70 (51)	130 (100)	
	Acetophenone	1700	1500	ug/Kg	88				70 (66)	130 (98)	
	3+4-Methylphenols	1700	1600	ug/Kg	94				20 (58)	160 (111)	
	N-Nitroso-di-n-propylamine	1700	1500	ug/Kg	88				70 (63)	130 (95)	
	Hexachloroethane	1700	1500	ug/Kg	88				20 (72)	160 (108)	
	Nitrobenzene	1700	1500	ug/Kg	88				70 (57)	130 (101)	
	Isophorone	1700	1600	ug/Kg	94				70 (59)	130 (99)	
	2-Nitrophenol	1700	1500	ug/Kg	88				70 (61)	130 (111)	
	2,4-Dimethylphenol	1700	2200	ug/Kg	129				70 (46)	130 (141)	
	bis(2-Chloroethoxy)methane	1700	1500	ug/Kg	88				70 (66)	130 (97)	
	2,4-Dichlorophenol	1700	1500	ug/Kg	88				70 (62)	130 (107)	
	Naphthalene	1700	1400	ug/Kg	82				70 (62)	130 (100)	
	4-Chloroaniline	1700	820	ug/Kg	48		*		70 (16)	130 (100)	
	Hexachlorobutadiene	1700	1500	ug/Kg	88				70 (53)	130 (98)	
	Caprolactam	1700	1500	ug/Kg	88				20 (67)	160 (110)	
	4-Chloro-3-methylphenol	1700	1500	ug/Kg	88				70 (58)	130 (112)	
	2-Methylnaphthalene	1700	1300	ug/Kg	76				70 (60)	130 (104)	
	Hexachlorocyclopentadiene	3300	5400	ug/Kg	164		*		20 (45)	160 (165)	
	2,4,6-Trichlorophenol	1700	1600	ug/Kg	94				70 (59)	130 (102)	
	2,4,5-Trichlorophenol	1700	1600	ug/Kg	94				70 (61)	130 (98)	
	1,1-Biphenyl	1700	1500	ug/Kg	88				70 (57)	130 (103)	
	2-Chloronaphthalene	1700	1500	ug/Kg	88				70 (58)	130 (99)	
	2-Nitroaniline	1700	1600	ug/Kg	94				70 (66)	130 (101)	
	Dimethylphthalate	1700	1500	ug/Kg	88				70 (61)	130 (99)	
	Acenaphthylene	1700	1600	ug/Kg	94				70 (63)	130 (101)	
	2,6-Dinitrotoluene	1700	1600	ug/Kg	94				70 (61)	130 (104)	
	3-Nitroaniline	1700	1100	ug/Kg	65		*		70 (28)	130 (100)	
	Acenaphthene	1700	1500	ug/Kg	88				70 (57)	130 (104)	
	2,4-Dinitrophenol	3300	2900	ug/Kg	88				20 (37)	160 (128)	
	4-Nitrophenol	3300	3200	ug/Kg	97				20 (48)	160 (119)	
	Dibenzofuran	1700	1500	ug/Kg	88				70 (63)	130 (99)	
	2,4-Dinitrotoluene	1700	1700	ug/Kg	100				70 (60)	130 (106)	
	Diethylphthalate	1700	1500	ug/Kg	88				70 (60)	130 (101)	
	4-Chlorophenyl-phenylether	1700	1600	ug/Kg	94				70 (58)	130 (98)	
	Fluorene	1700	1500	ug/Kg	88				70 (61)	130 (101)	
	4-Nitroaniline	1700	1600	ug/Kg	94				70 (64)	130 (103)	
	4,6-Dinitro-2-methylphenol	1700	1600	ug/Kg	94				70 (76)	130 (113)	
	N-Nitrosodiphenylamine	1700	1600	ug/Kg	94				70 (71)	130 (99)	
	4-Bromophenyl-phenylether	1700	1600	ug/Kg	94				70 (66)	130 (102)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8270E **DataFile:** BM049947.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167509BS	Hexachlorobenzene	1700	1600	ug/Kg	94				70 (64)	130 (98)	
	Atrazine	1700	2200	ug/Kg	129				70 (47)	130 (152)	
	Pentachlorophenol	3300	3100	ug/Kg	94				20 (67)	160 (105)	
	Phenanthrene	1700	1600	ug/Kg	94				70 (59)	130 (103)	
	Anthracene	1700	1700	ug/Kg	100				70 (61)	130 (105)	
	Carbazole	1700	1600	ug/Kg	94				70 (61)	130 (99)	
	Di-n-butylphthalate	1700	1500	ug/Kg	88				70 (58)	130 (104)	
	Fluoranthene	1700	1600	ug/Kg	94				70 (57)	130 (107)	
	Pyrene	1700	1600	ug/Kg	94				70 (59)	130 (103)	
	Butylbenzylphthalate	1700	1600	ug/Kg	94				70 (55)	130 (103)	
	3,3-Dichlorobenzidine	1700	1200	ug/Kg	71				70 (42)	130 (91)	
	Benzo(a)anthracene	1700	1600	ug/Kg	94				70 (60)	130 (102)	
	Chrysene	1700	1600	ug/Kg	94				70 (59)	130 (101)	
	bis(2-Ethylhexyl)phthalate	1700	1500	ug/Kg	88				70 (54)	130 (135)	
	Di-n-octyl phthalate	1700	1500	ug/Kg	88				70 (52)	130 (137)	
	Benzo(b)fluoranthene	1700	1600	ug/Kg	94				70 (62)	130 (109)	
	Benzo(k)fluoranthene	1700	1600	ug/Kg	94				70 (62)	130 (109)	
	Benzo(a)pyrene	1700	1700	ug/Kg	100				70 (63)	130 (103)	
	Indeno(1,2,3-cd)pyrene	1700	1600	ug/Kg	94				70 (63)	130 (101)	
	Dibenz(a,h)anthracene	1700	1600	ug/Kg	94				70 (61)	130 (112)	
	Benzo(g,h,i)perylene	1700	1500	ug/Kg	88				70 (70)	130 (108)	
	1,2,4,5-Tetrachlorobenzene	1700	1500	ug/Kg	88				70 (53)	130 (101)	
	1,4-Dioxane	1700	1200	ug/Kg	71				20 (50)	160 (96)	
	2,3,4,6-Tetrachlorophenol	1700	1500	ug/Kg	88				70 (59)	130 (108)	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167509BL

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BM049877.D Lab Sample ID: PB167509BL

Instrument ID: BNA_M Date Extracted: 04/08/2025

Matrix: (soil/water) SOIL Date Analyzed: 04/10/2025

Level: (low/med) LOW Time Analyzed: 10:11

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167509BS	PB167509BS	BM049947.D	04/16/2025
B-149-SB01	Q1746-01	BP024240.D	04/09/2025
B-158-SB01MS	Q1744-01MS	BM049865.D	04/09/2025
B-158-SB01MSD	Q1744-01MSD	BM049866.D	04/09/2025
B-149-SB02	Q1746-03	BM049868.D	04/09/2025

COMMENTS:

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167521BL

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BM049860.D Lab Sample ID: PB167521BL

Instrument ID: BNA_M Date Extracted: 04/08/2025

Matrix: (soil/water) Water Date Analyzed: 04/09/2025

Level: (low/med) LOW Time Analyzed: 09:48

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167521BS	PB167521BS	BM049861.D	04/09/2025
PB167521BSD	PB167521BSD	BM049862.D	04/09/2025
B-158-GW01	Q1746-05	BP024252.D	04/10/2025
B-149-GW01	Q1746-06	BP024253.D	04/10/2025
EB-2025-4-7	Q1746-07	BP024239.D	04/09/2025

COMMENTS:

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BM049847.D DFTPP Injection Date: 04/08/2025

Instrument ID: BNA_M DFTPP Injection Time: 12:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	22.1
68	Less than 2.0% of mass 69	0.3 (1.2) 1
69	Mass 69 relative abundance	26.5
70	Less than 2.0% of mass 69	0.1 (0.3) 1
127	10.0 - 80.0% of mass 198	34.9
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	26.5
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	12.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.3 (18.8) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BM049848.D	04/08/2025	13:35
SSTDICC005	SSTDICC005	BM049849.D	04/08/2025	14:14
SSTDICC010	SSTDICC010	BM049850.D	04/08/2025	14:53
SSTDICC020	SSTDICC020	BM049851.D	04/08/2025	15:32
SSTDICCC040	SSTDICCC040	BM049852.D	04/08/2025	16:12
SSTDICC050	SSTDICC050	BM049853.D	04/08/2025	17:30
SSTDICC060	SSTDICC060	BM049854.D	04/08/2025	19:28
SSTDICC080	SSTDICC080	BM049855.D	04/08/2025	20:07

Raw Data: **BM049858.D**

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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BM049858.D DFTPP Injection Date: 04/09/2025

Instrument ID: BNA_M DFTPP Injection Time: 08:30

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	23.8
68	Less than 2.0% of mass 69	0.4 (1.4) 1
69	Mass 69 relative abundance	28.7
70	Less than 2.0% of mass 69	0.1 (0.5) 1
127	10.0 - 80.0% of mass 198	35.4
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	25.8
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	11.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	13.8 (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	BM049859.D	04/09/2025	09:09
PB167521BL	PB167521BL	BM049860.D	04/09/2025	09:48
PB167521BS	PB167521BS	BM049861.D	04/09/2025	10:27
PB167521BSD	PB167521BSD	BM049862.D	04/09/2025	11:06
B-158-SB01MS	Q1744-01MS	BM049865.D	04/09/2025	13:08
B-158-SB01MSD	Q1744-01MSD	BM049866.D	04/09/2025	13:47
B-149-SB02	Q1746-03	BM049868.D	04/09/2025	15:05

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BM049875.D DFTPP Injection Date: 04/10/2025

Instrument ID: BNA_M DFTPP Injection Time: 08:53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.6
68	Less than 2.0% of mass 69	0.4 (1.4) 1
69	Mass 69 relative abundance	25.7
70	Less than 2.0% of mass 69	0.1 (0.5) 1
127	10.0 - 80.0% of mass 198	33.2
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	25.9
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	11.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15 (19.7) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BM049876.D	04/10/2025	09:32
PB167509BL	PB167509BL	BM049877.D	04/10/2025	10:11

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BM049943.D DFTPP Injection Date: 04/16/2025

Instrument ID: BNA_M DFTPP Injection Time: 08:49

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	23
68	Less than 2.0% of mass 69	0.4 (1.5) 1
69	Mass 69 relative abundance	27.6
70	Less than 2.0% of mass 69	0.2 (0.7) 1
127	10.0 - 80.0% of mass 198	34.9
197	Less than 2.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	26.1
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	11.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.6 (19.4) 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	BM049944.D	04/16/2025	09:28
PB167509BS	PB167509BS	BM049947.D	04/16/2025	11:26

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BP024159.D DFTPP Injection Date: 03/12/2025

Instrument ID: BNA_P DFTPP Injection Time: 15:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	28.5
68	Less than 2.0% of mass 69	0.6 (1.6) 1
69	Mass 69 relative abundance	33.9
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	46.1
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	27.5
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	14.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.4 (19.5) 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	BP024160.D	03/12/2025	16:17
SSTDICC005	SSTDICC005	BP024161.D	03/12/2025	16:57
SSTDICC010	SSTDICC010	BP024162.D	03/12/2025	17:38
SSTDICC020	SSTDICC020	BP024163.D	03/12/2025	18:19
SSTDICCC040	SSTDICCC040	BP024164.D	03/12/2025	19:00
SSTDICC050	SSTDICC050	BP024165.D	03/12/2025	19:41
SSTDICC060	SSTDICC060	BP024166.D	03/12/2025	20:21
SSTDICC080	SSTDICC080	BP024167.D	03/12/2025	21:02

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BP024227.D DFTPP Injection Date: 04/09/2025

Instrument ID: BNA_P DFTPP Injection Time: 08:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	28.2
68	Less than 2.0% of mass 69	0.6 (1.6) 1
69	Mass 69 relative abundance	34.3
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	46.7
197	Less than 2.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	28.9
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	14.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.3 (19.7) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BP024228.D	04/09/2025	10:08
EB-2025-4-7	Q1746-07	BP024239.D	04/09/2025	17:41
B-149-SB01	Q1746-01	BP024240.D	04/09/2025	18:22

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM SAS No.: Q1746 SDG NO.: Q1746

Lab File ID: BP024244.D DFTPP Injection Date: 04/10/2025

Instrument ID: BNA_P DFTPP Injection Time: 09:05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	28.8
68	Less than 2.0% of mass 69	0.6 (1.7) 1
69	Mass 69 relative abundance	34.8
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	47
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	28.5
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	14.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.8 (19.7) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BP024245.D	04/10/2025	09:46
B-158-GW01	Q1746-05	BP024252.D	04/10/2025	14:36
B-149-GW01	Q1746-06	BP024253.D	04/10/2025	15:17

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/09/2025

Lab File ID: BM049859.D Time Analyzed: 09:09

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	296698	7.775	1015270	10.57	639621	14.42
	UPPER LIMIT	593396	8.275	2030540	11.069	1279240	14.922
	LOWER LIMIT	148349	7.275	507635	10.069	319811	13.922
	EPA SAMPLE NO.						
01	B-158-SB01MS	298114	7.78	1050150	10.57	691142	14.42
02	B-158-SB01MSD	285351	7.78	1005760	10.57	663787	14.42
03	B-149-SB02	322464	7.78	1148080	10.58	770952	14.42
04	PB167521BL	332281	7.78	1132680	10.57	701970	14.42
05	PB167521BS	336910	7.78	1172190	10.57	730256	14.42
06	PB167521BSD	335066	7.78	1150030	10.57	735598	14.42

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/09/2025

Lab File ID: BM049859.D Time Analyzed: 09:09

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1259630	17.163	1253560	21.398	1316820	24.397
	UPPER LIMIT	2519260	17.663	2507120	21.898	2633640	24.897
	LOWER LIMIT	629815	16.663	626780	20.898	658410	23.897
	EPA SAMPLE NO.						
01	B-158-SB01MS	1385050	17.16	1462180	21.40	1514540	24.39
02	B-158-SB01MSD	1342340	17.16	1401870	21.40	1461450	24.39
03	B-149-SB02	1525450	17.16	1431870	21.40	1579360	24.40
04	PB167521BL	1345530	17.16	1270010	21.40	1381060	24.39
05	PB167521BS	1422910	17.16	1400190	21.40	1421400	24.39
06	PB167521BSD	1446570	17.16	1438520	21.40	1424300	24.39

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.

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/10/2025

Lab File ID: BM049876.D Time Analyzed: 09:32

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	319220	7.781	1042650	10.57	653251	14.42
	UPPER LIMIT	638440	8.281	2085300	11.074	1306500	14.921
	LOWER LIMIT	159610	7.281	521325	10.074	326626	13.921
	EPA SAMPLE NO.						
01	PB167509BL	304918	7.78	1031960	10.57	649646	14.42

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

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* Values outside of QC limits.

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/10/2025

Lab File ID: BM049876.D Time Analyzed: 09:32

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1279700	17.162	1240970	21.397	1368350	24.397
	UPPER LIMIT	2559400	17.662	2481940	21.897	2736700	24.897
	LOWER LIMIT	639850	16.662	620485	20.897	684175	23.897
	EPA SAMPLE NO.						
01	PB167509BL	1225290	17.16	1173500	21.40	1306480	24.40

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.

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/16/2025

Lab File ID: BM049944.D Time Analyzed: 09:28

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	390253	7.769	1356600	10.56	881748	14.42
	UPPER LIMIT	780506	8.269	2713200	11.063	1763500	14.916
	LOWER LIMIT	195127	7.269	678300	10.063	440874	13.916
	EPA SAMPLE NO.						
01	PB167509BS	335569	7.77	1154160	10.56	723173	14.42

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/16/2025

Lab File ID: BM049944.D Time Analyzed: 09:28

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1791610	17.163	1770470	21.403	1819920	24.409
	UPPER LIMIT	3583220	17.663	3540940	21.903	3639840	24.909
	LOWER LIMIT	895805	16.663	885235	20.903	909960	23.909
	EPA SAMPLE NO.						
01	PB167509BS	1408530	17.16	1396790	21.40	1468800	24.40

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.

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/09/2025

Lab File ID: BP024228.D Time Analyzed: 10:08

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	293576	7.769	1173450	10.55	712048	14.40
	UPPER LIMIT	587152	8.269	2346900	11.052	1424100	14.904
	LOWER LIMIT	146788	7.269	586725	10.052	356024	13.904
	EPA SAMPLE NO.						
01	B-149-SB01	273538	7.74	1106820	10.52	675246	14.38
02	EB-2025-4-7	235704	7.74	911036	10.52	559100	14.38

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/09/2025

Lab File ID: BP024228.D Time Analyzed: 10:08

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1380060	17.222	1470280	21.651	1654290	25.033
	UPPER LIMIT	2760120	17.722	2940560	22.151	3308580	25.533
	LOWER LIMIT	690030	16.722	735140	21.151	827145	24.533
	EPA SAMPLE NO.						
01	B-149-SB01	1352000	17.18	1469550	21.62	1665460	24.99
02	EB-2025-4-7	1174140	17.18	1378630	21.62	1470680	24.99

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.

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/10/2025

Lab File ID: BP024245.D Time Analyzed: 09:46

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	322953	7.746	1317780	10.53	792808	14.39
	UPPER LIMIT	645906	8.246	2635560	11.028	1585620	14.892
	LOWER LIMIT	161477	7.246	658890	10.028	396404	13.892
	EPA SAMPLE NO.						
01	B-158-GW01	262571	7.74	1031590	10.52	601225	14.37
02	B-149-GW01	262973	7.74	1043720	10.52	640452	14.38

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.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

EPA Sample No.: SSTDCCC040 Date Analyzed: 04/10/2025

Lab File ID: BP024245.D Time Analyzed: 09:46

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1512090	17.192	1553360	21.645	1762600	25.009
	UPPER LIMIT	3024180	17.692	3106720	22.145	3525200	25.509
	LOWER LIMIT	756045	16.692	776680	21.145	881300	24.509
	EPA SAMPLE NO.						
01	B-158-GW01	1138230	17.18	1210780	21.62	1465710	24.97
02	B-149-GW01	1285270	17.18	1386090	21.62	1576980	24.99

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: **BP024240.D**

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB01	SDG No.:	Q1746
Lab Sample ID:	Q1746-01	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.3
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
BP024240.D	1	04/08/25 08:59	04/09/25 18:22	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	170	U	170	370	ug/Kg
108-95-2	Phenol	24.7	U	24.7	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	27.2	U	27.2	190	ug/Kg
95-57-8	2-Chlorophenol	27.3	U	27.3	190	ug/Kg
95-48-7	2-Methylphenol	33.4	U	33.4	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	42.0	U	42.0	190	ug/Kg
98-86-2	Acetophenone	33.0	U	33.0	190	ug/Kg
65794-96-9	3+4-Methylphenols	46.0	U	46.0	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	53.0	U	53.0	89.5	ug/Kg
67-72-1	Hexachloroethane	19.7	U	19.7	190	ug/Kg
98-95-3	Nitrobenzene	20.5	U	20.5	190	ug/Kg
78-59-1	Isophorone	36.7	U	36.7	190	ug/Kg
88-75-5	2-Nitrophenol	65.1	U	65.1	190	ug/Kg
105-67-9	2,4-Dimethylphenol	72.5	U	72.5	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	34.5	U	34.5	190	ug/Kg
120-83-2	2,4-Dichlorophenol	31.7	U	31.7	190	ug/Kg
91-20-3	Naphthalene	25.4	U	25.4	190	ug/Kg
106-47-8	4-Chloroaniline	39.6	UQ	39.6	190	ug/Kg
87-68-3	Hexachlorobutadiene	28.3	U	28.3	190	ug/Kg
105-60-2	Caprolactam	58.3	U	58.3	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	32.1	U	32.1	190	ug/Kg
91-57-6	2-Methylnaphthalene	28.6	U	28.6	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	UQ	130	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.2	U	22.2	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	32.6	U	32.6	190	ug/Kg
92-52-4	1,1-Biphenyl	24.4	U	24.4	190	ug/Kg
91-58-7	2-Chloronaphthalene	25.2	U	25.2	190	ug/Kg
88-74-4	2-Nitroaniline	53.8	U	53.8	190	ug/Kg
131-11-3	Dimethylphthalate	30.3	U	30.3	190	ug/Kg

Raw Data: **BP024240.D**

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB01	SDG No.:	Q1746
Lab Sample ID:	Q1746-01	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.3
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
BP024240.D	1	04/08/25 08:59	04/09/25 18:22	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	32.3	U	32.3	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	37.6	U	37.6	190	ug/Kg
99-09-2	3-Nitroaniline	51.5	UQ	51.5	190	ug/Kg
83-32-9	Acenaphthene	23.8	U	23.8	190	ug/Kg
51-28-5	2,4-Dinitrophenol	260	U	260	370	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	370	ug/Kg
132-64-9	Dibenzofuran	25.4	U	25.4	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	56.0	U	56.0	190	ug/Kg
84-66-2	Diethylphthalate	31.7	U	31.7	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	29.9	U	29.9	190	ug/Kg
86-73-7	Fluorene	28.3	U	28.3	190	ug/Kg
100-01-6	4-Nitroaniline	71.8	U	71.8	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	36.8	U	36.8	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	31.1	U	31.1	190	ug/Kg
118-74-1	Hexachlorobenzene	28.3	U	28.3	190	ug/Kg
1912-24-9	Atrazine	38.0	U	38.0	190	ug/Kg
87-86-5	Pentachlorophenol	57.4	U	57.4	370	ug/Kg
85-01-8	Phenanthrene	110	J	23.4	190	ug/Kg
120-12-7	Anthracene	37.3	U	37.3	190	ug/Kg
86-74-8	Carbazole	34.9	U	34.9	190	ug/Kg
84-74-2	Di-n-butylphthalate	53.6	U	53.6	190	ug/Kg
206-44-0	Fluoranthene	200		33.6	190	ug/Kg
129-00-0	Pyrene	190		40.3	190	ug/Kg
85-68-7	Butylbenzylphthalate	79.9	U	79.9	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	41.1	U	41.1	370	ug/Kg
56-55-3	Benzo(a)anthracene	100	J	25.7	190	ug/Kg
218-01-9	Chrysene	120	J	22.3	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	66.2	U	66.2	190	ug/Kg
117-84-0	Di-n-octyl phthalate	97.1	U	97.1	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	130	J	21.3	190	ug/Kg

Raw Data: **BP024240.D**

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB01	SDG No.:	Q1746
Lab Sample ID:	Q1746-01	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.3
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
BP024240.D	1	04/08/25 08:59	04/09/25 18:22	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.1	U	25.1	190	ug/Kg
50-32-8	Benzo(a)pyrene	100	J	33.0	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	32.6	U	32.6	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	30.7	U	30.7	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	28.8	U	28.8	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	28.6	U	28.6	190	ug/Kg
123-91-1	1,4-Dioxane	50.6	U	50.6	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	30.7	U	30.7	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	107		30 (18) - 130 (112)	71%	SPK: 150
13127-88-3	Phenol-d6	105		30 (15) - 130 (107)	70%	SPK: 150
4165-60-0	Nitrobenzene-d5	73.2		30 (18) - 130 (107)	73%	SPK: 100
321-60-8	2-Fluorobiphenyl	65.6		30 (20) - 130 (109)	66%	SPK: 100
118-79-6	2,4,6-Tribromophenol	103		30 (10) - 130 (116)	69%	SPK: 150
1718-51-0	Terphenyl-d14	62.9		30 (10) - 130 (105)	63%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	274000	7.74			
1146-65-2	Naphthalene-d8	1110000	10.516			
15067-26-2	Acenaphthene-d10	675000	14.375			
1517-22-2	Phenanthrene-d10	1350000	17.175			
1719-03-5	Chrysene-d12	1470000	21.621			
1520-96-3	Perylene-d12	1670000	24.992			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	350	AB		4.90	ug/Kg
000119-61-9	Benzophenone	290	J		15.8	ug/Kg
000057-10-3	n-Hexadecanoic acid	210	JB		18.1	ug/Kg
000077-94-1	Butyl citrate	120	J		19.6	ug/Kg
000103-23-1	Hexanedioic acid, bis(2-ethylhexyl	160	J		20.7	ug/Kg
074685-33-9	3-Eicosene, (E)-	75.3	J		21.3	ug/Kg

Raw Data: **BP024240.D**

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB01	SDG No.:	Q1746
Lab Sample ID:	Q1746-01	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.3
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
BP024240.D	1	04/08/25 08:59	04/09/25 18:22	PB167509

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_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Time: Apr 10 01:00:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

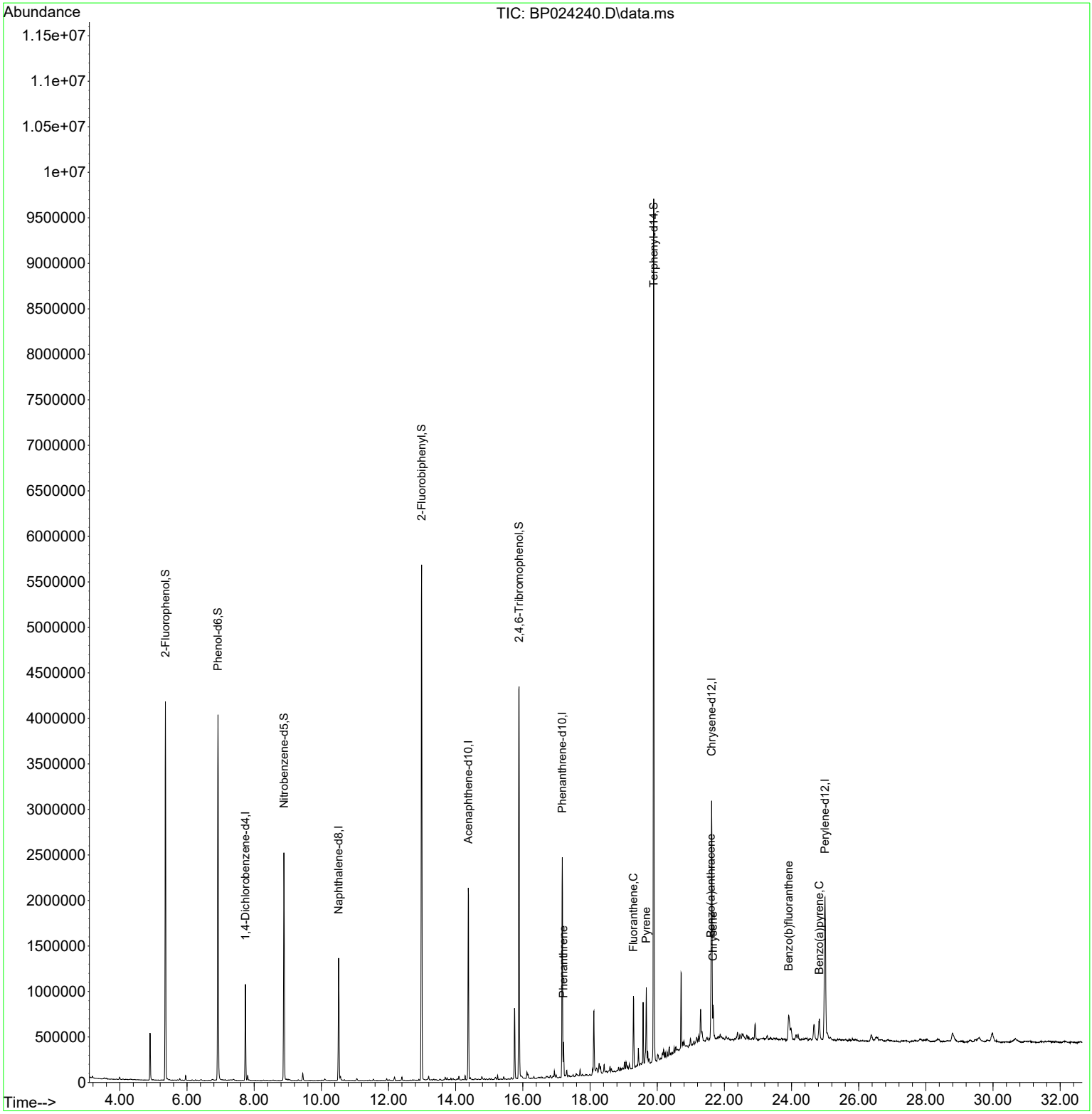
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.740	152	273538	20.000	ng		-0.03
21) Naphthalene-d8	10.516	136	1106820	20.000	ng		-0.04
39) Acenaphthene-d10	14.375	164	675246	20.000	ng		-0.03
64) Phenanthrene-d10	17.175	188	1351996	20.000	ng		-0.03
76) Chrysene-d12	21.621	240	1469545	20.000	ng		-0.04
86) Perylene-d12	24.992	264	1665459	20.000	ng		-0.06
System Monitoring Compounds							
5) 2-Fluorophenol	5.358	112	1830629	106.830	ng		-0.02
7) Phenol-d6	6.922	99	2412488	105.279	ng		-0.03
23) Nitrobenzene-d5	8.887	82	1436557	73.230	ng		-0.04
42) 2,4,6-Tribromophenol	15.886	330	875242	102.902	ng		-0.03
45) 2-Fluorobiphenyl	12.987	172	3002639	65.568	ng		-0.03
79) Terphenyl-d14	19.898	244	4475088	62.860	ng		-0.02
Target Compounds							Qvalue
71) Phenanthrene	17.210	178	214910	2.910	ng		99
75) Fluoranthene	19.292	202	460658	5.385	ng		98
78) Pyrene	19.675	202	469635	5.140	ng		99
81) Benzo(a)anthracene	21.598	228	255473	2.796	ng		97
83) Chrysene	21.663	228	273819	3.118	ng		98
88) Benzo(b)fluoranthene	23.915	252	347008	3.456	ng	#	96
90) Benzo(a)pyrene	24.827	252	236671	2.710	ng	#	96

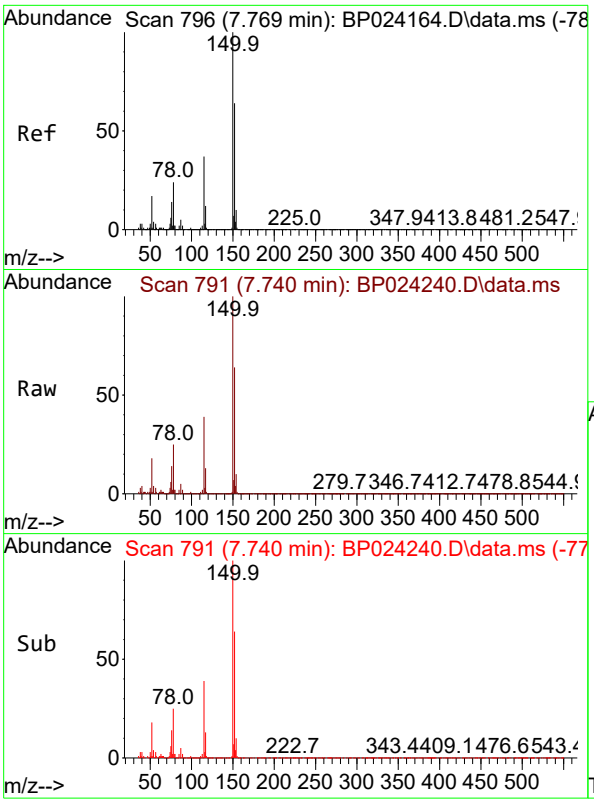
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Time: Apr 10 01:00:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration



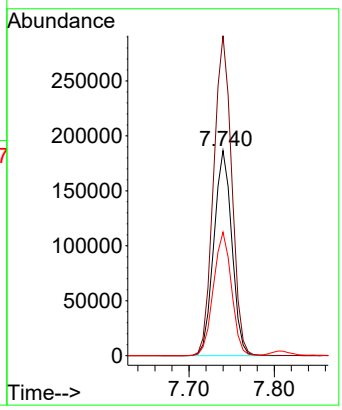


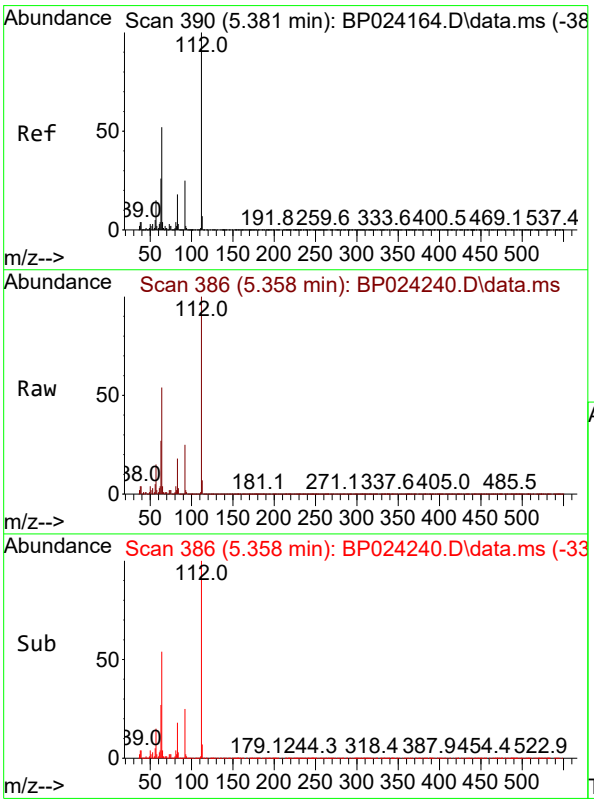
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.740 min Scan# 7
Delta R.T. -0.029 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:152 Resp: 273538

Ion	Ratio	Lower	Upper
152	100		
150	156.0	125.5	188.3
115	60.3	46.3	69.5

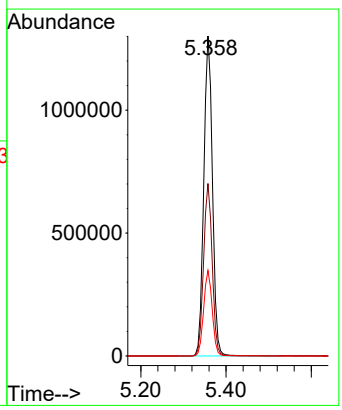


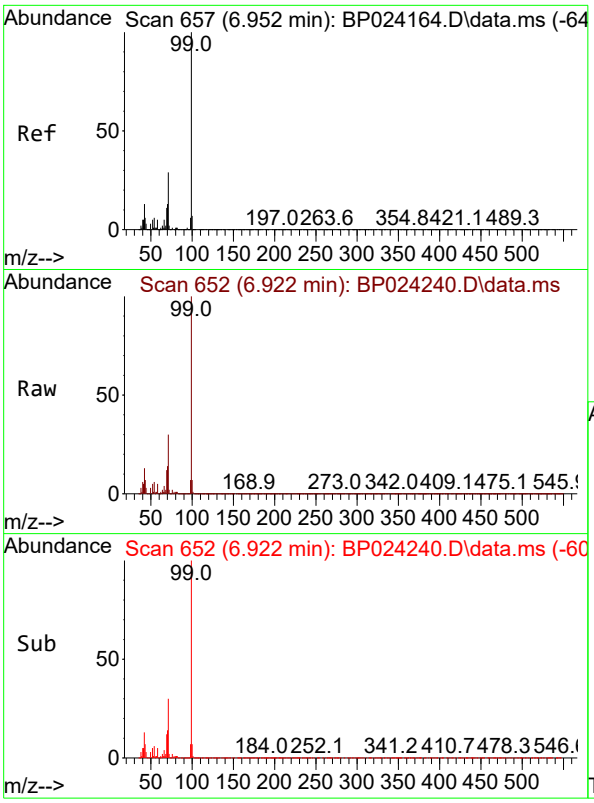


#5
2-Fluorophenol
Concen: 106.830 ng
RT: 5.358 min Scan# 386
Delta R.T. -0.024 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:112 Resp: 1830629

Ion	Ratio	Lower	Upper
112	100		
64	53.9	41.3	61.9
63	26.7	20.6	31.0



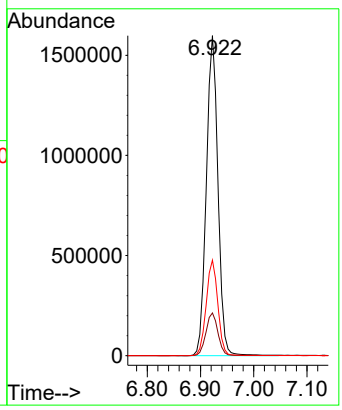


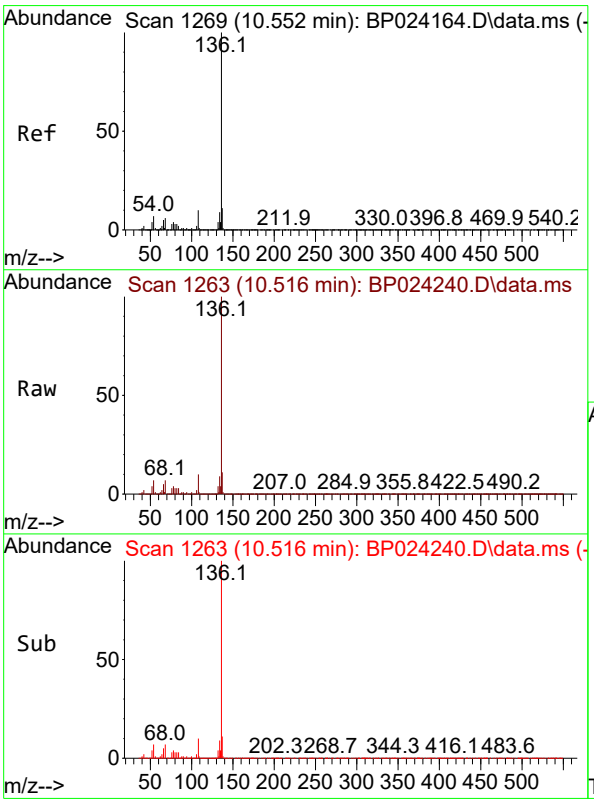
#7
Phenol-d6
Concen: 105.279 ng
RT: 6.922 min Scan# 6
Delta R.T. -0.030 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion: 99 Resp: 2412488

Ion	Ratio	Lower	Upper
99	100		
42	13.3	10.6	16.0
71	29.8	23.3	34.9

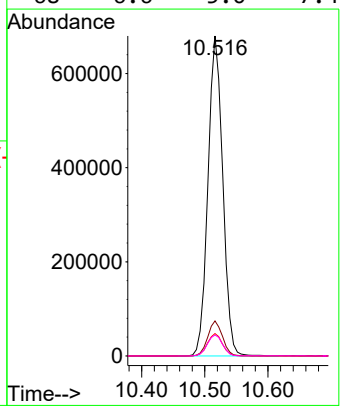


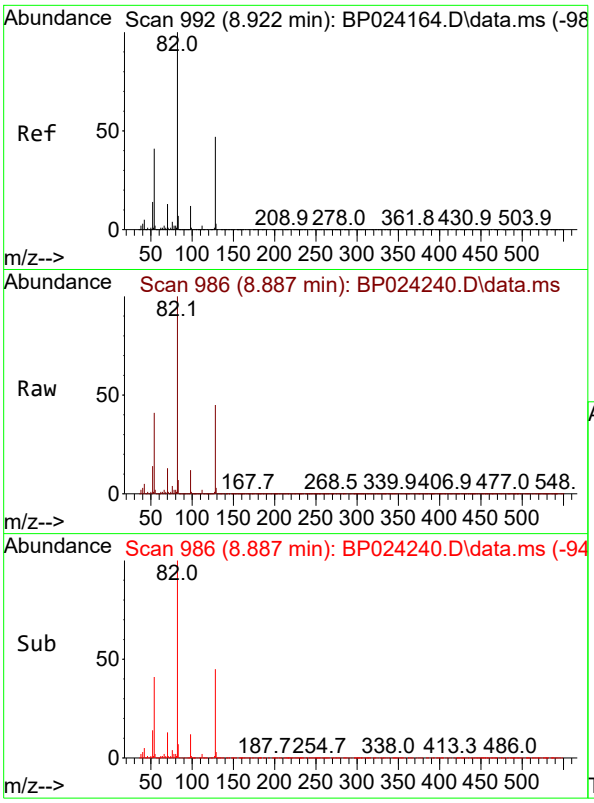


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.516 min Scan# 1263
Delta R.T. -0.035 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:136 Resp: 1106820

Ion	Ratio	Lower	Upper
136	100		
137	10.9	9.0	13.4
54	7.0	5.3	7.9
68	6.6	5.0	7.4



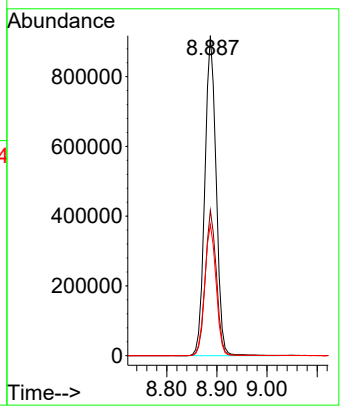


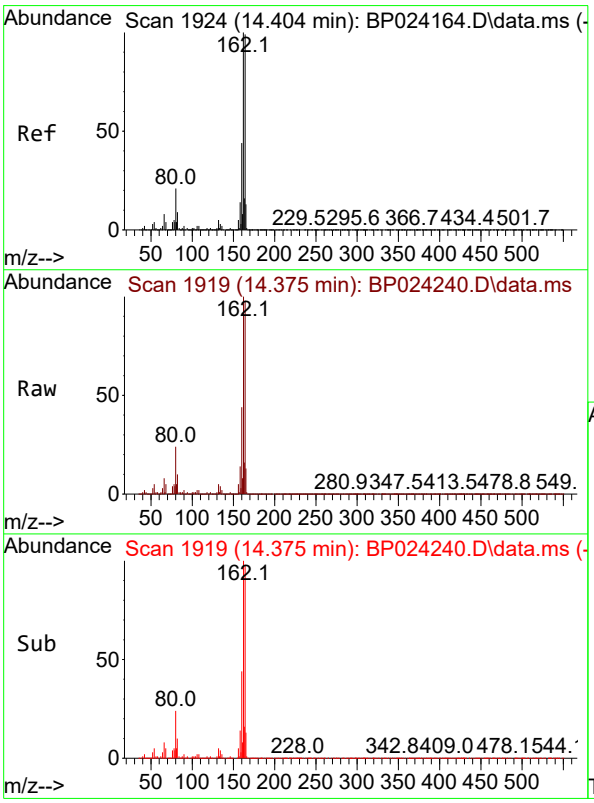
#23
Nitrobenzene-d5
Concen: 73.230 ng
RT: 8.887 min Scan# 9
Delta R.T. -0.035 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion: 82 Resp: 1436557

Ion	Ratio	Lower	Upper
82	100		
128	45.4	37.4	56.0
54	40.9	32.5	48.7

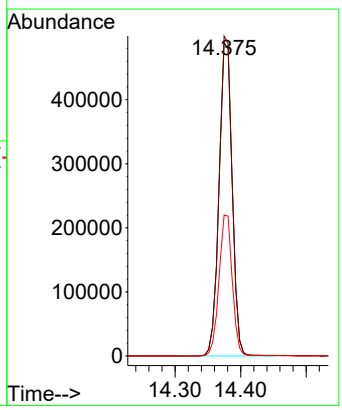


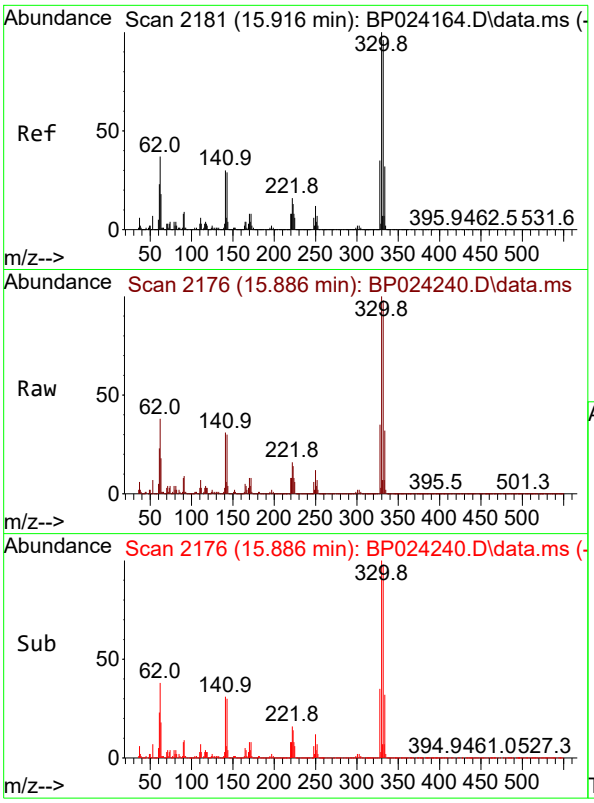


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.375 min Scan# 1919
Delta R.T. -0.030 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:164 Resp: 675246

Ion	Ratio	Lower	Upper
164	100		
162	102.2	80.6	121.0
160	45.0	35.4	53.2



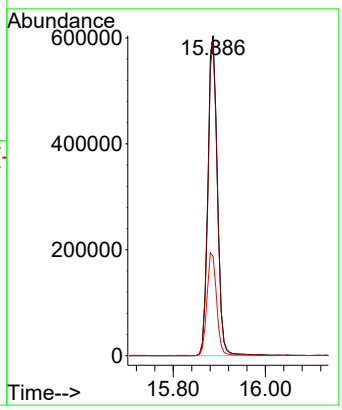


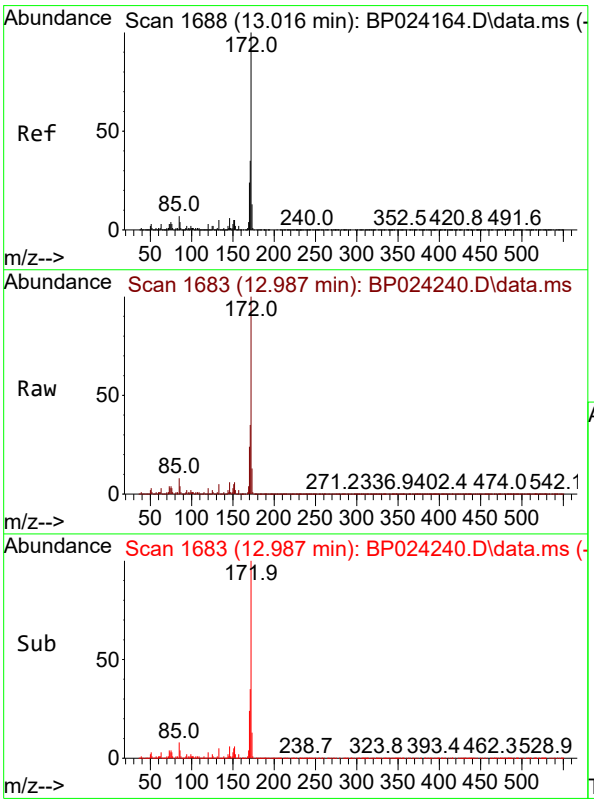
#42
2,4,6-Tribromophenol
Concen: 102.902 ng
RT: 15.886 min Scan# 2
Delta R.T. -0.030 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:330 Resp: 875242

Ion	Ratio	Lower	Upper
330	100		
332	96.8	77.6	116.4
141	32.3	25.0	37.6

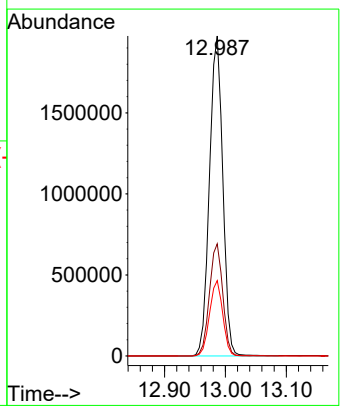


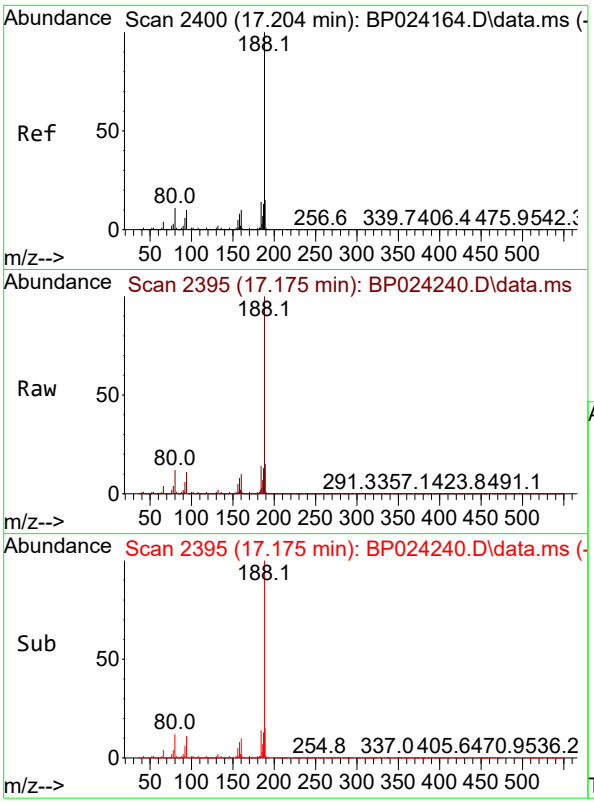


#45
2-Fluorobiphenyl
Concen: 65.568 ng
RT: 12.987 min Scan# 1683
Delta R.T. -0.030 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:172 Resp: 3002639

Ion	Ratio	Lower	Upper
172	100		
171	35.1	28.3	42.5
170	23.6	19.0	28.4



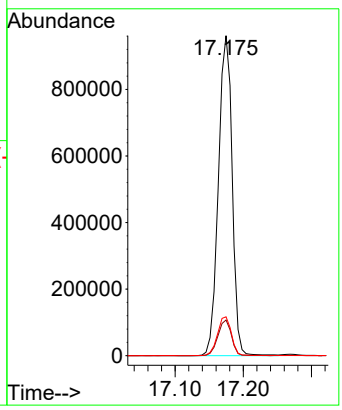


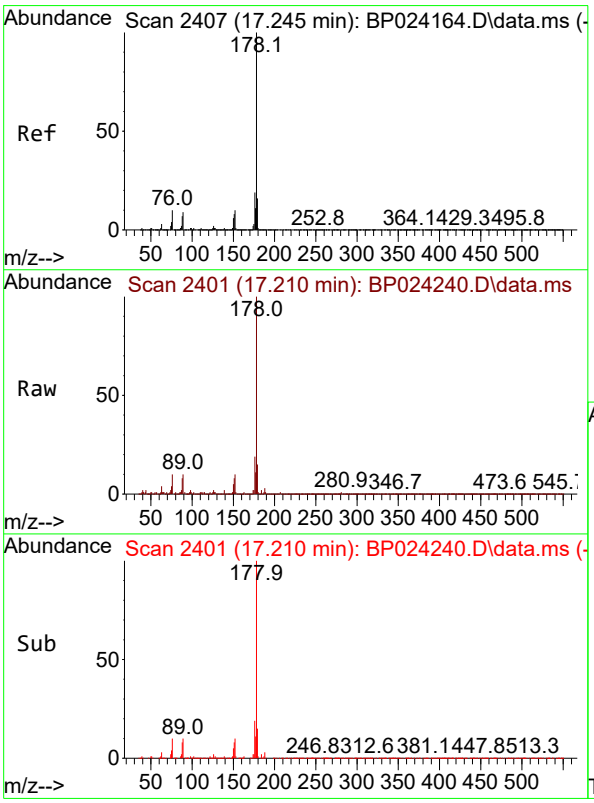
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.175 min Scan# 2
Delta R.T. -0.030 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:188 Resp: 1351996

Ion	Ratio	Lower	Upper
188	100		
94	11.1	8.1	12.1
80	12.2	8.9	13.3

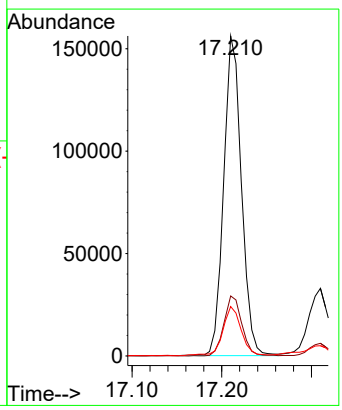


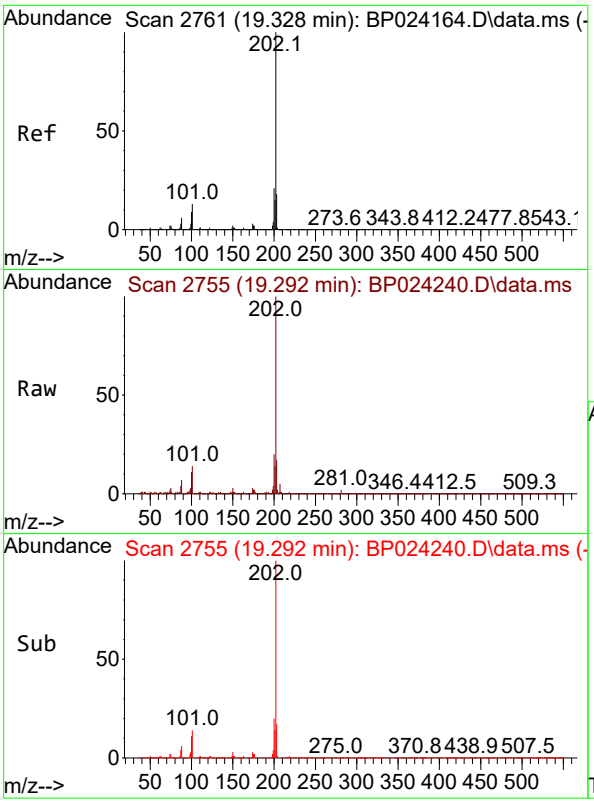


#71
Phenanthrene
Concen: 2.910 ng
RT: 17.210 min Scan# 2401
Delta R.T. -0.035 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:178 Resp: 214910

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.6	23.4
179	15.4	12.5	18.7



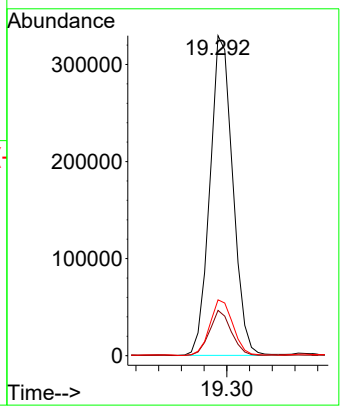


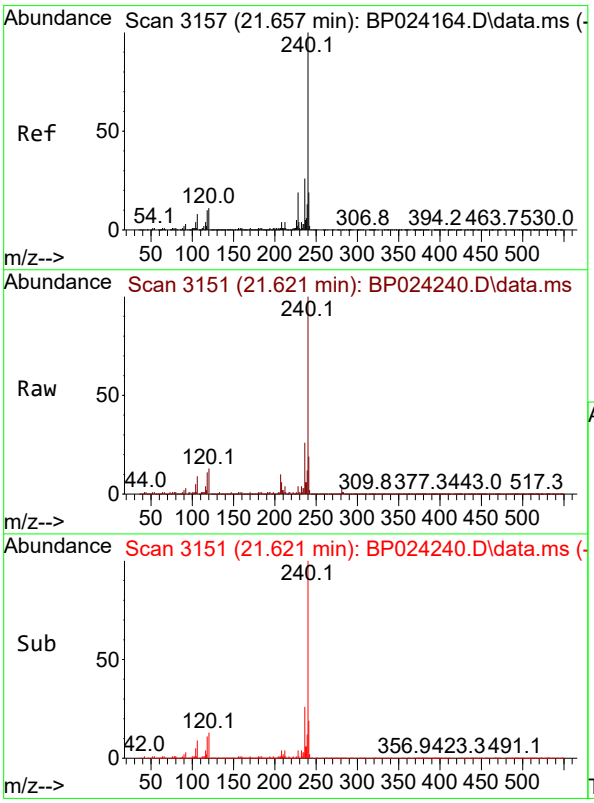
#75
Fluoranthene
Concen: 5.385 ng
RT: 19.292 min Scan# 2
Delta R.T. -0.035 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:202 Resp: 460658

Ion	Ratio	Lower	Upper
202	100		
101	14.2	0.0	32.5
203	17.5	0.0	37.9

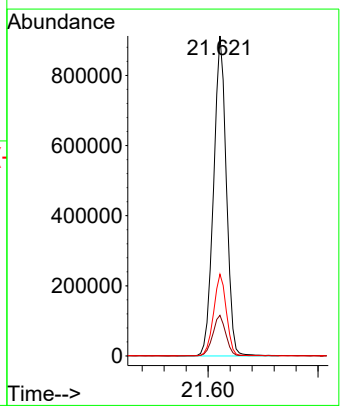


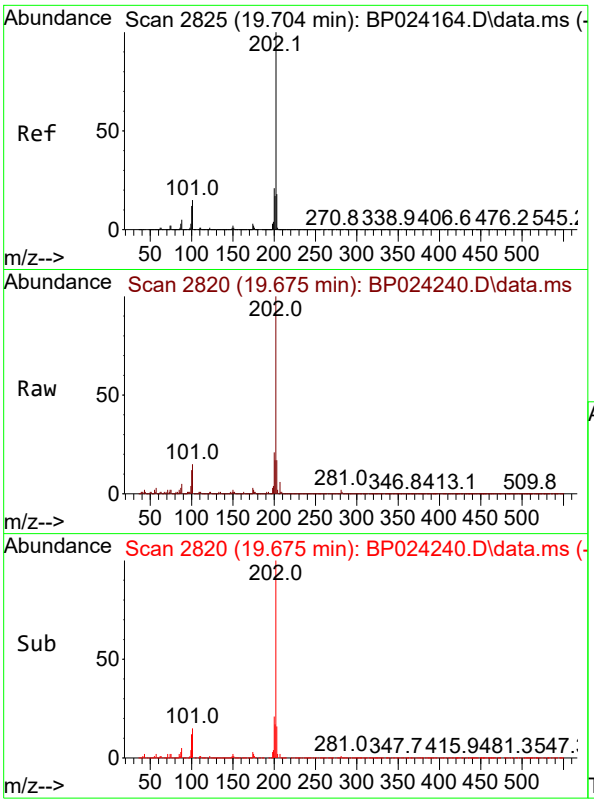


#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.621 min Scan# 3151
Delta R.T. -0.035 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:240 Resp: 1469545

Ion	Ratio	Lower	Upper
240	100		
120	12.7	9.2	13.8
236	25.6	20.4	30.6



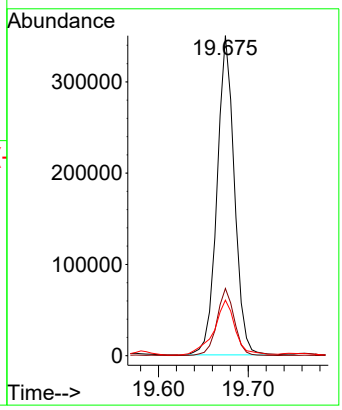


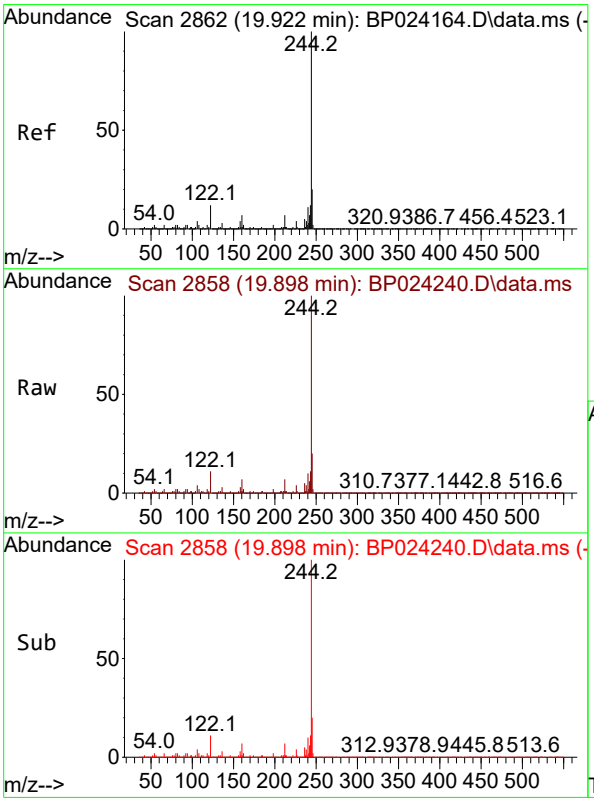
#78
Pyrene
Concen: 5.140 ng
RT: 19.675 min Scan# 2
Delta R.T. -0.030 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:202 Resp: 469635

Ion	Ratio	Lower	Upper
202	100		
200	21.0	17.1	25.7
203	17.3	14.2	21.4

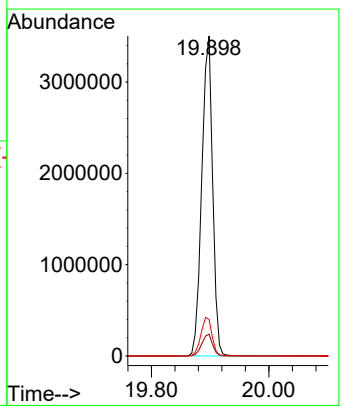


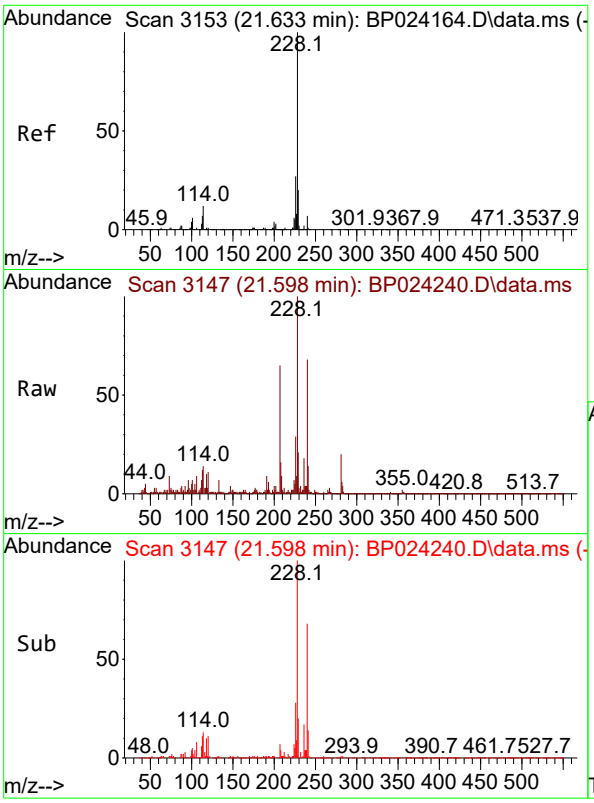


#79
Terphenyl-d14
Concen: 62.860 ng
RT: 19.898 min Scan# 2858
Delta R.T. -0.024 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:244 Resp: 4475088

Ion	Ratio	Lower	Upper
244	100		
212	6.8	5.7	8.5
122	11.4	9.6	14.4



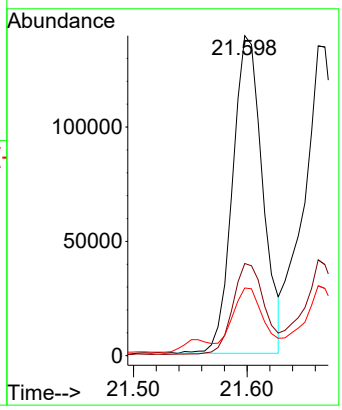


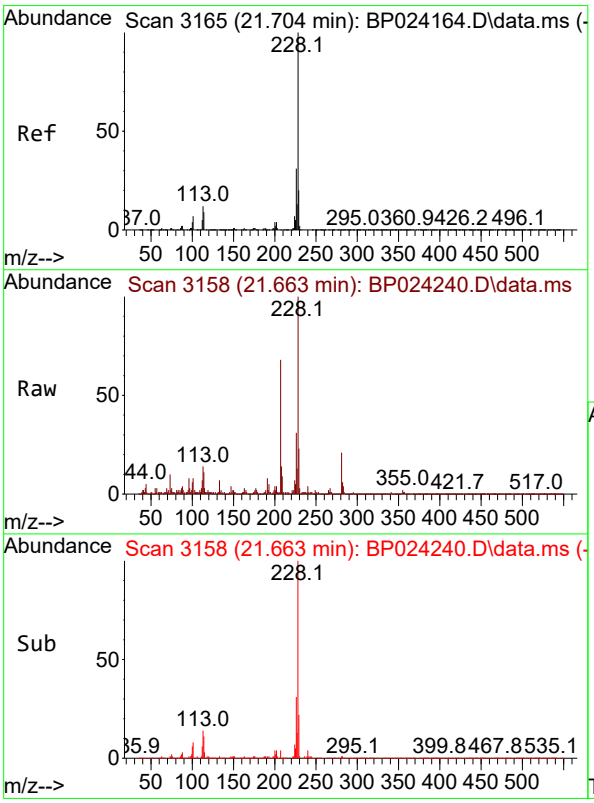
#81
Benzo(a)anthracene
Concen: 2.796 ng
RT: 21.598 min Scan# 3
Delta R.T. -0.035 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:228 Resp: 255473

Ion	Ratio	Lower	Upper
228	100		
226	28.8	21.8	32.8
229	21.2	16.0	24.0

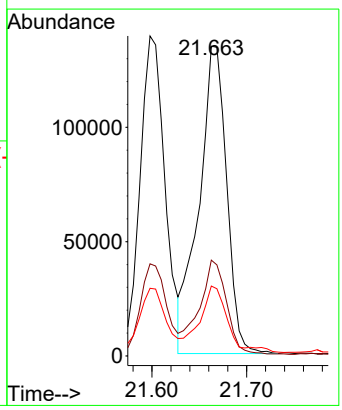


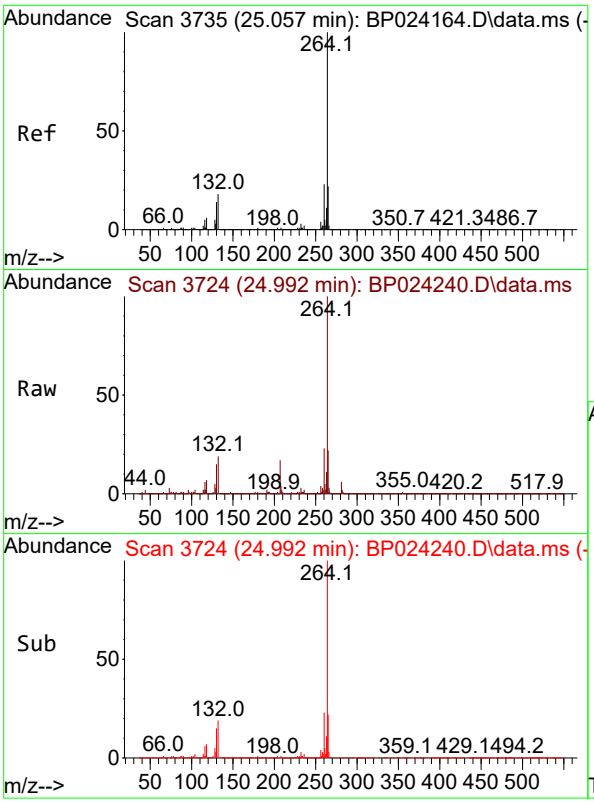


#83
Chrysene
Concen: 3.118 ng
RT: 21.663 min Scan# 3158
Delta R.T. -0.041 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:228 Resp: 273819

Ion	Ratio	Lower	Upper
228	100		
226	30.9	24.5	36.7
229	22.6	16.2	24.2



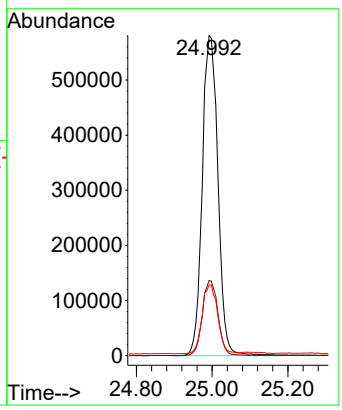


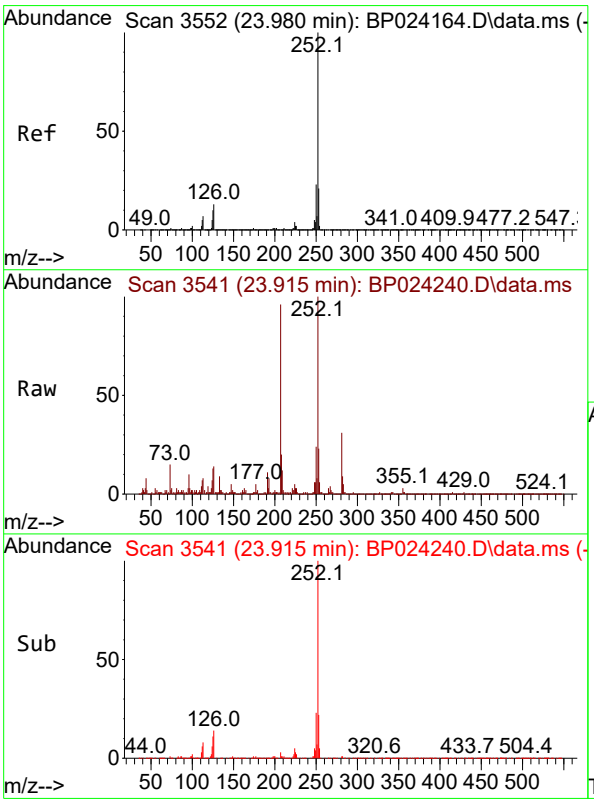
#86
Perylene-d12
Concen: 20.000 ng
RT: 24.992 min Scan# 3
Delta R.T. -0.065 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:264 Resp: 1665459

Ion	Ratio	Lower	Upper
264	100		
260	23.5	18.5	27.7
265	22.1	17.7	26.5

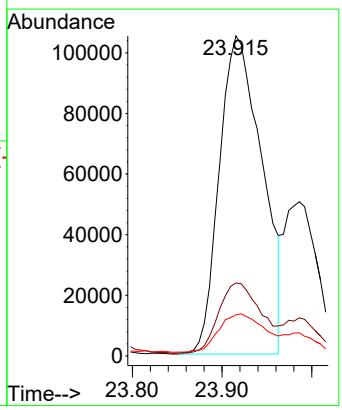


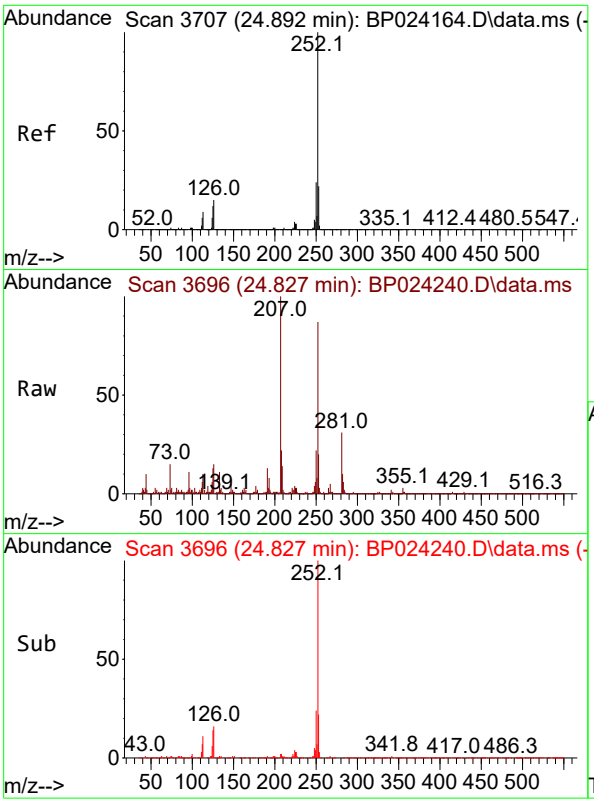


#88
Benzo(b)fluoranthene
Concen: 3.456 ng
RT: 23.915 min Scan# 3541
Delta R.T. -0.065 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Tgt Ion:252 Resp: 347008

Ion	Ratio	Lower	Upper
252	100		
253	22.8	17.2	25.8
125	12.8	8.2	12.4#



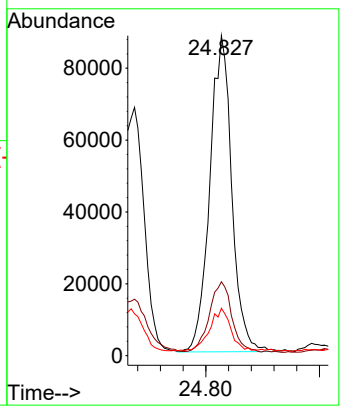


#90
Benzo(a)pyrene
Concen: 2.710 ng
RT: 24.827 min Scan# 3
Delta R.T. -0.065 min
Lab File: BP024240.D
Acq: 09 Apr 2025 18:22

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Tgt Ion:252 Resp: 236671

Ion	Ratio	Lower	Upper
252	100		
253	23.1	17.4	26.0
125	14.8	9.6	14.4#



Sample Results: **BP024240.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

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_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BP024240.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.899	303	308	319	rVB	516946	739410	5.60%	1.016%
2	5.358	379	386	394	rBV	4159870	5806304	43.95%	7.977%
3	6.922	643	652	669	rBV	4014465	6245061	47.28%	8.580%
4	7.740	784	791	798	rBV	1056052	1563765	11.84%	2.148%
5	8.887	979	986	996	rBV	2500125	3907865	29.58%	5.369%
6	9.446	1074	1081	1094	rVB	80028	140502	1.06%	0.193%
7	10.516	1254	1263	1269	rBV	1345537	2218376	16.79%	3.048%
8	12.987	1674	1683	1701	rBV	5664759	8703197	65.88%	11.957%
9	14.375	1910	1919	1925	rBV	2108560	2922775	22.13%	4.015%
10	15.751	2147	2153	2161	rBV	775094	1129671	8.55%	1.552%
11	15.886	2169	2176	2185	rBV	4306445	6446570	48.80%	8.856%
12	17.175	2388	2395	2399	rBV2	2419788	3441649	26.05%	4.728%
13	17.210	2399	2401	2408	rVB	376376	464620	3.52%	0.638%
14	18.116	2550	2555	2565	rBV2	660838	977827	7.40%	1.343%
15	18.275	2577	2582	2586	rBV2	96098	187969	1.42%	0.258%
16	19.292	2750	2755	2764	rBV	797023	1191185	9.02%	1.636%
17	19.439	2776	2780	2786	rBV2	195263	254327	1.93%	0.349%
18	19.580	2800	2804	2810	rVB	672534	768787	5.82%	1.056%
19	19.675	2812	2820	2825	rVV	824209	1250285	9.46%	1.718%
20	19.898	2852	2858	2869	rVB	9471598	13209906	100.00%	18.148%
21	20.710	2992	2996	3002	rBV	834841	1030218	7.80%	1.415%
22	21.292	3091	3095	3100	rBV3	295818	487454	3.69%	0.670%
23	21.621	3143	3151	3156	rBV2	2602647	4831752	36.58%	6.638%
24	21.663	3156	3158	3170	rVB	373073	621547	4.71%	0.854%
25	24.998	3716	3725	3734	rBV	1527773	4248736	32.16%	5.837%

Sum of corrected areas: 72789758

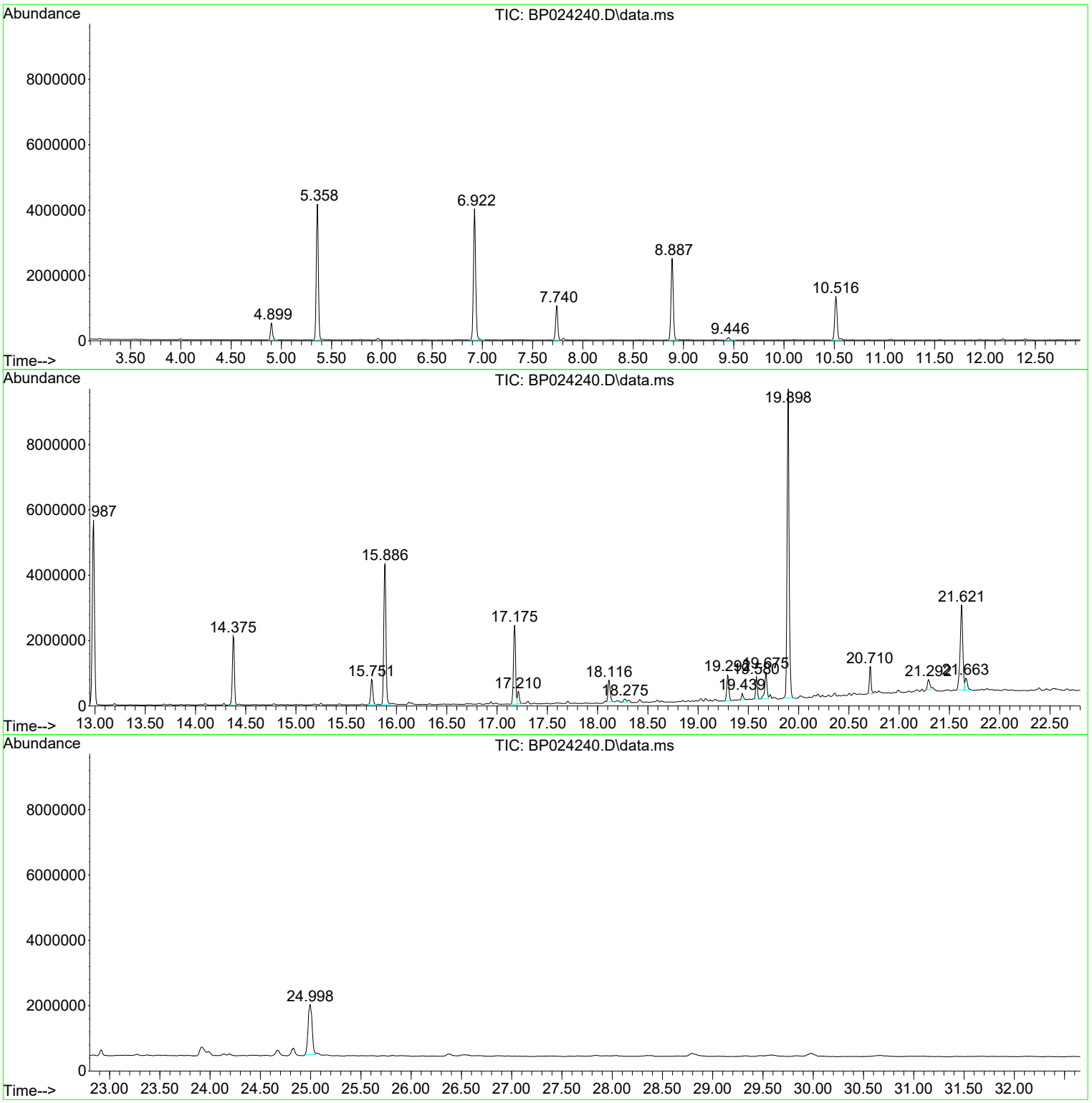
Sample Results: **BP024240.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

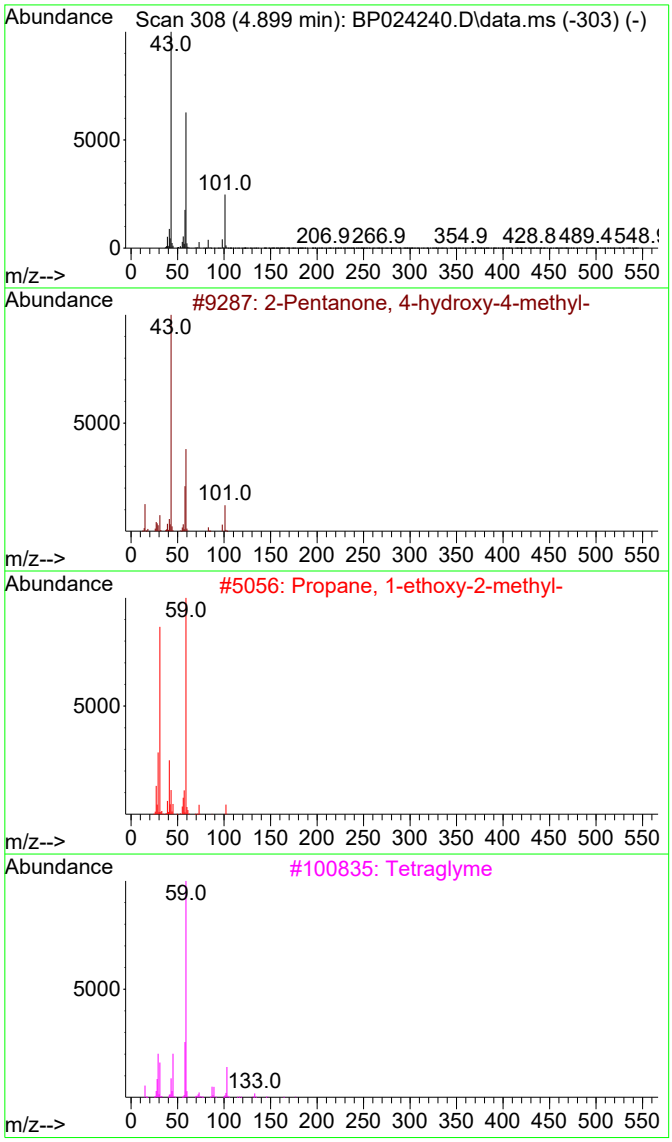
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

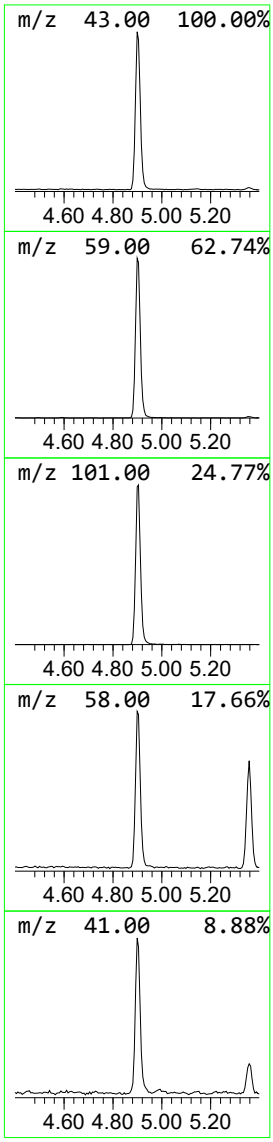
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.899	9.46 ng	739410	1,4-Dichlorobenzene-d4	7.740

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	Propane, 1-ethoxy-2-methyl-	102	C6H14O	000627-02-1	38
3	Tetraglyme	222	C10H22O5	000143-24-8	25
4	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	23
5	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

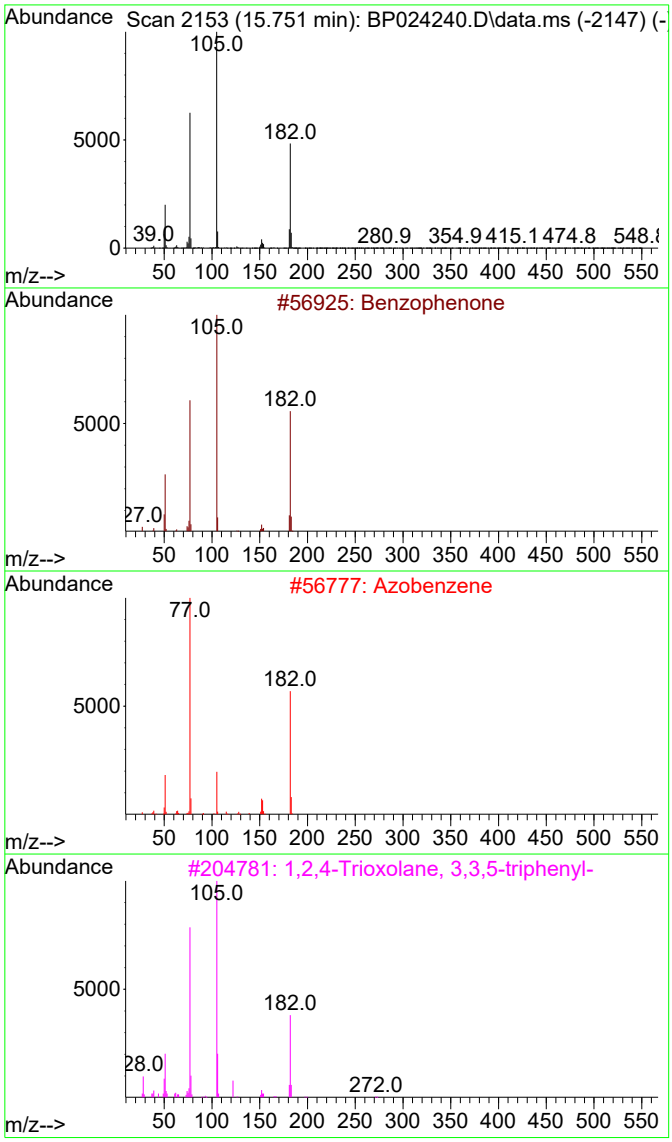
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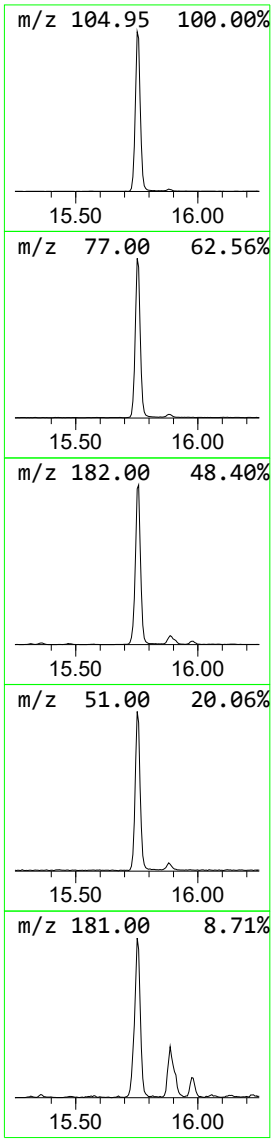
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Peak Number 2 Benzophenone Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.751	7.73 ng	1129670	Acenaphthene-d10	14.375

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	Azobenzene	182	C12H10N2	000103-33-3	53
3	1,2,4-Trioxolane, 3,3,5-triphenyl-	304	C20H16O3	023246-12-0	50
4	Methanone, phenyl-2-pyridinyl-	183	C12H9NO	000091-02-1	50
5	Benzene, 4-methyl-1,2-dinitro-	182	C7H6N2O4	000610-39-9	43





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

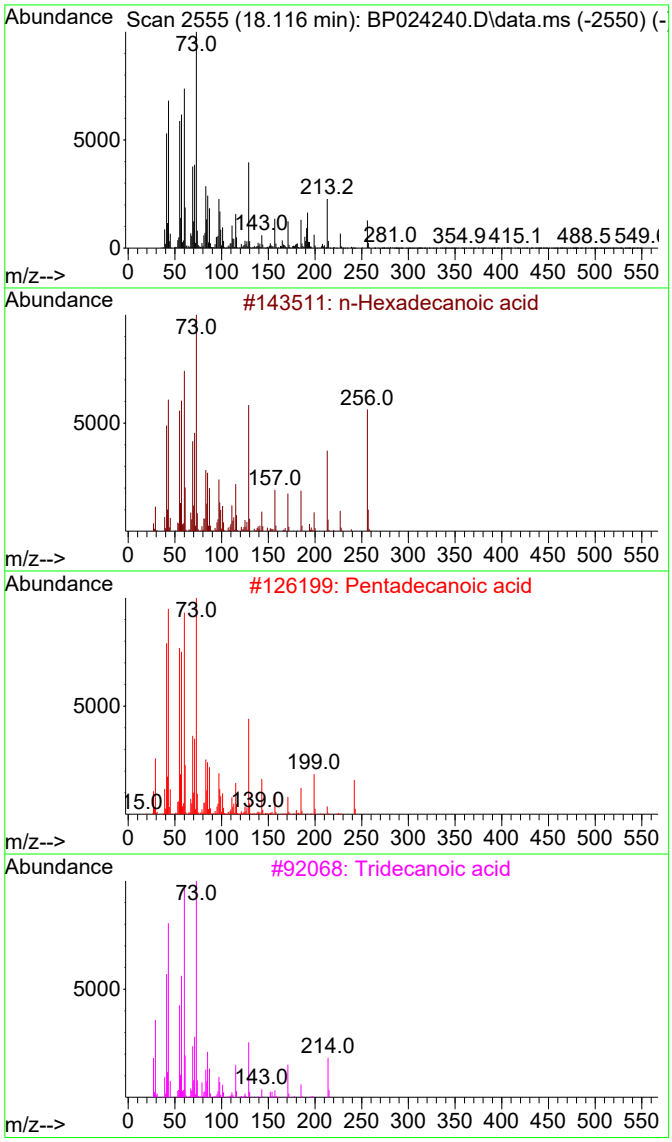
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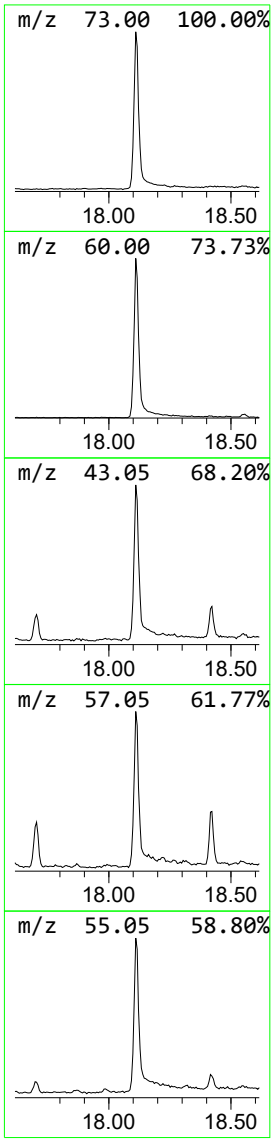
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Peak Number 3 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.116	5.68 ng	977827	Phenanthrene-d10	17.175

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	76
3	Tridecanoic acid	214	C13H26O2	000638-53-9	70
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	64
5	n-Decanoic acid	172	C10H20O2	000334-48-5	58





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

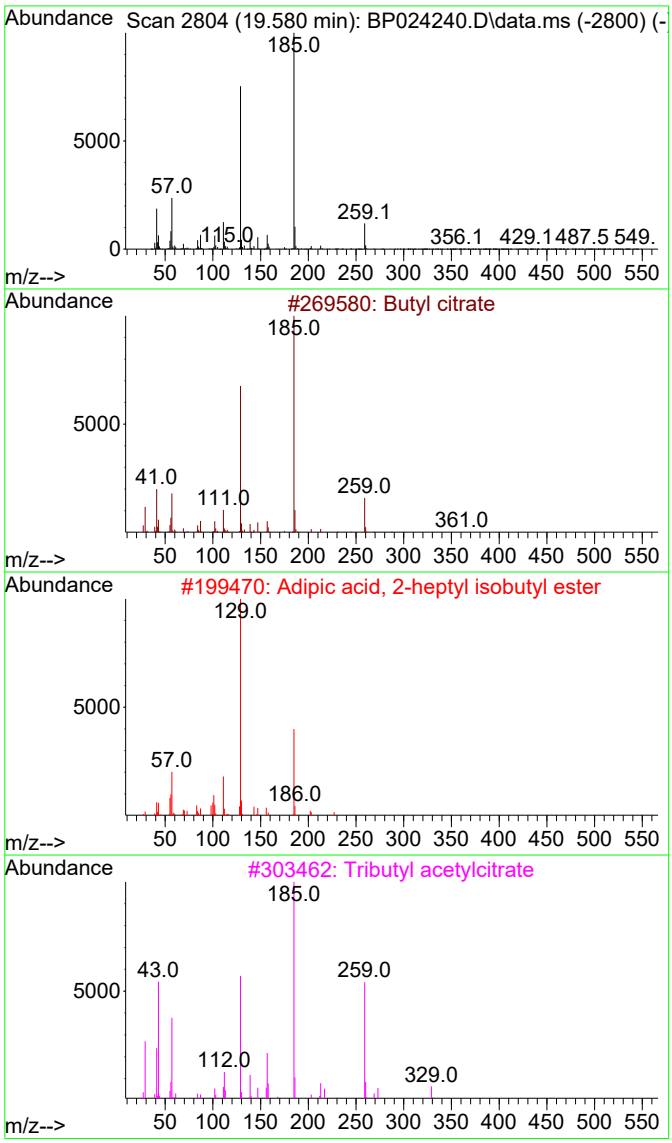
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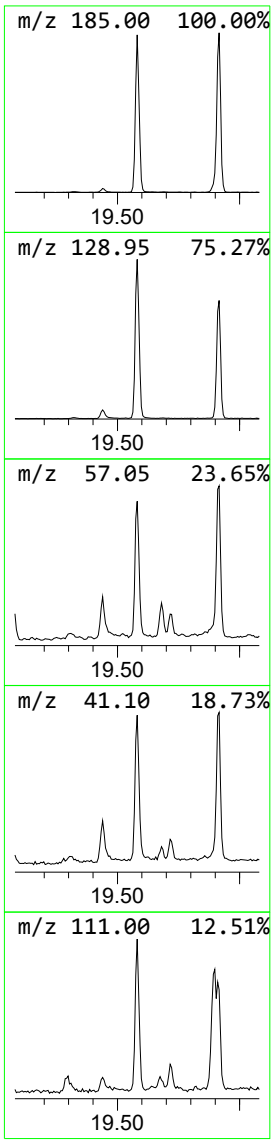
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Peak Number 4 Butyl citrate Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.580	3.18 ng	768787	Chrysene-d12	21.622

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butyl citrate	360	C18H32O7	000077-94-1	91
2	Adipic acid, 2-heptyl isobutyl e...	300	C17H32O4	1000353-64-3	64
3	Tributyl acetylcitrate	402	C20H34O8	000077-90-7	59
4	Adipic acid, 3,3-dimethylbut-2-y...	286	C16H30O4	1000353-66-7	56
5	Adipic acid, 4-bromophenyl butyl...	356	C16H21BrO4	1000324-37-9	56





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

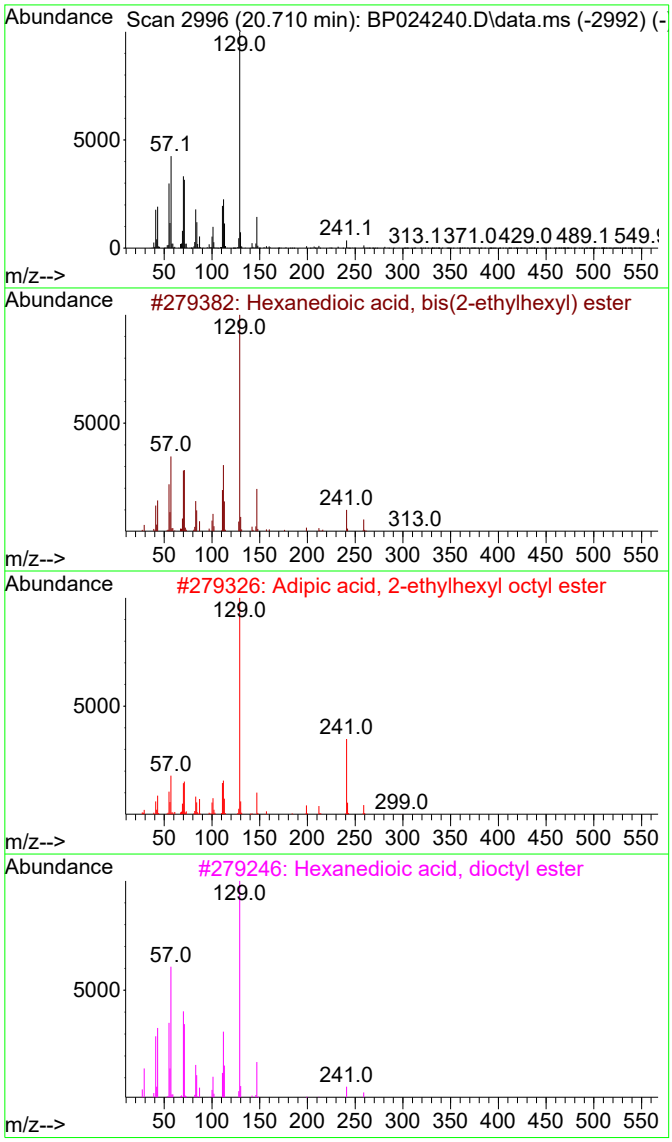
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

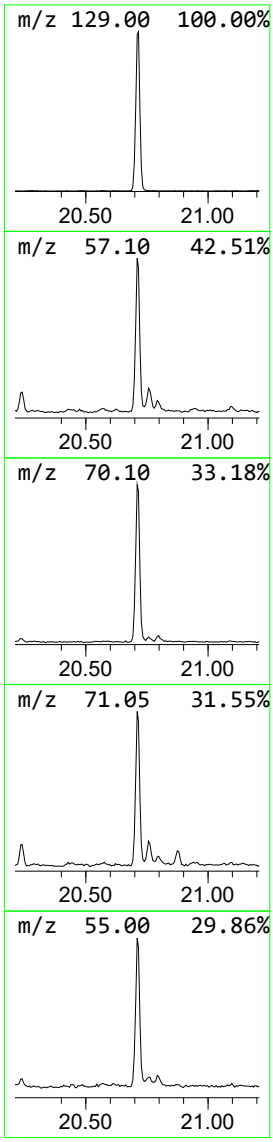
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Hexanedioic acid, bis(2-eth... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.710	4.26 ng	1030220	Chrysene-d12	21.622

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhex...	370	C22H42O4	000103-23-1	91
2	Adipic acid, 2-ethylhexyl octyl ...	370	C22H42O4	1000324-48-6	90
3	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	70
4	Hexanedioic acid, mono(2-ethylhe...	258	C14H26O4	004337-65-9	64
5	Adipic acid, 2-ethylhexyl isobut...	314	C18H34O4	1010324-48-0	59





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

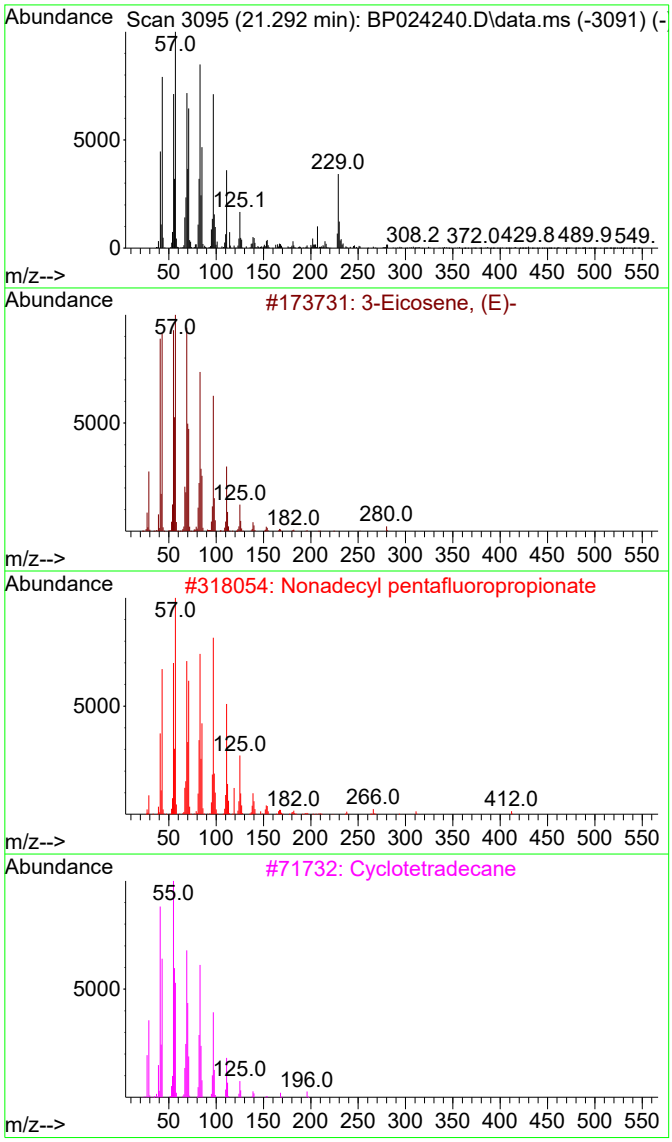
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

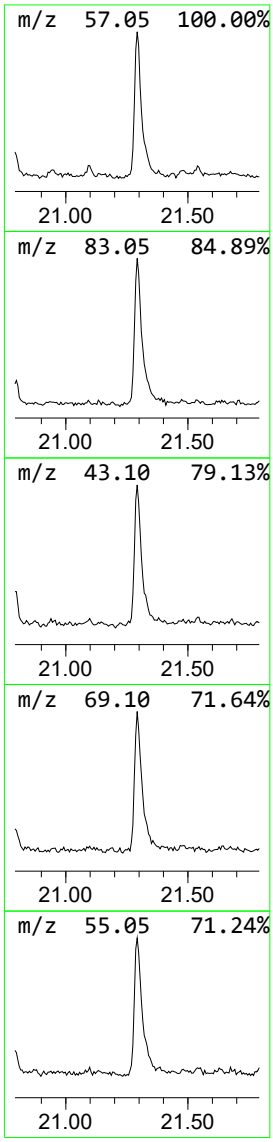
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Peak Number 6 3-Eicosene, (E)- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.292	2.02 ng	487454	Chrysene-d12	21.622

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Eicosene, (E)-	280	C20H40	074685-33-9	96
2	Nonadecyl pentafluoropropionate	430	C22H39F5O2	1000351-88-8	87
3	Cyclotetradecane	196	C14H28	000295-17-0	81
4	Heptafluorobutyric acid, pentade...	424	C19H31F7O2	959261-23-5	76
5	Heptadecyl heptafluorobutyrate	452	C21H35F7O2	959085-66-6	76





Sample Results: **BP024240.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024240.D
Acq On : 09 Apr 2025 18:22
Operator : RC/JU
Sample : Q1746-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-SB01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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-...	4.899	9.5	ng	739410	1	7.740	1563770	20.0
Benzophenone	15.751	7.7	ng	1129670	3	14.375	2922780	20.0
n-Hexadecanoic ...	18.116	5.7	ng	977827	4	17.175	3441650	20.0
Butyl citrate	19.580	3.2	ng	768787	5	21.622	4831750	20.0
Hexanedioic aci...	20.710	4.3	ng	1030220	5	21.622	4831750	20.0
3-Eicosene, (E)-	21.292	2.0	ng	487454	5	21.622	4831750	20.0

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB02	SDG No.:	Q1746
Lab Sample ID:	Q1746-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
Sample Wt/Vol:	30.07 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
BM049868.D	1	04/08/25 08:59	04/09/25 15:05	PB167509

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	26.0	U	26.0	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.6	U	28.6	200	ug/Kg
95-57-8	2-Chlorophenol	28.7	U	28.7	200	ug/Kg
95-48-7	2-Methylphenol	35.2	U	35.2	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	44.1	U	44.1	200	ug/Kg
98-86-2	Acetophenone	34.7	U	34.7	200	ug/Kg
65794-96-9	3+4-Methylphenols	48.4	U	48.4	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	55.8	U	55.8	94.1	ug/Kg
67-72-1	Hexachloroethane	20.7	U	20.7	200	ug/Kg
98-95-3	Nitrobenzene	21.5	U	21.5	200	ug/Kg
78-59-1	Isophorone	38.6	U	38.6	200	ug/Kg
88-75-5	2-Nitrophenol	68.5	U	68.5	200	ug/Kg
105-67-9	2,4-Dimethylphenol	76.2	U	76.2	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	36.2	U	36.2	200	ug/Kg
120-83-2	2,4-Dichlorophenol	33.3	U	33.3	200	ug/Kg
91-20-3	Naphthalene	26.7	U	26.7	200	ug/Kg
106-47-8	4-Chloroaniline	41.6	UQ	41.6	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.8	U	29.8	200	ug/Kg
105-60-2	Caprolactam	61.3	U	61.3	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.8	U	33.8	200	ug/Kg
91-57-6	2-Methylnaphthalene	30.1	U	30.1	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	UQ	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.3	U	23.3	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	34.2	U	34.2	200	ug/Kg
92-52-4	1,1-Biphenyl	25.6	U	25.6	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.5	U	26.5	200	ug/Kg
88-74-4	2-Nitroaniline	56.6	U	56.6	200	ug/Kg
131-11-3	Dimethylphthalate	31.9	U	31.9	200	ug/Kg

Raw Data: **BM049868.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB02	SDG No.:	Q1746
Lab Sample ID:	Q1746-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
Sample Wt/Vol:	30.07 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
BM049868.D	1	04/08/25 08:59	04/09/25 15:05	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	34.0	U	34.0	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	39.5	U	39.5	200	ug/Kg
99-09-2	3-Nitroaniline	54.1	UQ	54.1	200	ug/Kg
83-32-9	Acenaphthene	25.1	U	25.1	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	26.7	U	26.7	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.9	U	58.9	200	ug/Kg
84-66-2	Diethylphthalate	33.3	U	33.3	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.4	U	31.4	200	ug/Kg
86-73-7	Fluorene	29.8	U	29.8	200	ug/Kg
100-01-6	4-Nitroaniline	75.5	U	75.5	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.7	U	38.7	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.7	U	32.7	200	ug/Kg
118-74-1	Hexachlorobenzene	29.8	U	29.8	200	ug/Kg
1912-24-9	Atrazine	40.0	U	40.0	200	ug/Kg
87-86-5	Pentachlorophenol	60.4	U	60.4	390	ug/Kg
85-01-8	Phenanthrene	24.6	U	24.6	200	ug/Kg
120-12-7	Anthracene	39.2	U	39.2	200	ug/Kg
86-74-8	Carbazole	36.7	U	36.7	200	ug/Kg
84-74-2	Di-n-butylphthalate	56.4	U	56.4	200	ug/Kg
206-44-0	Fluoranthene	35.3	U	35.3	200	ug/Kg
129-00-0	Pyrene	42.4	U	42.4	200	ug/Kg
85-68-7	Butylbenzylphthalate	84.0	U	84.0	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	43.2	U	43.2	390	ug/Kg
56-55-3	Benzo(a)anthracene	27.1	U	27.1	200	ug/Kg
218-01-9	Chrysene	86.4	J	23.4	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	69.6	U	69.6	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	110	J	22.4	200	ug/Kg

Raw Data: **BM049868.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB02	SDG No.:	Q1746
Lab Sample ID:	Q1746-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
Sample Wt/Vol:	30.07 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
BM049868.D	1	04/08/25 08:59	04/09/25 15:05	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	100	J	26.4	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.7	U	34.7	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	34.2	U	34.2	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	32.2	U	32.2	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	30.2	U	30.2	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	30.1	U	30.1	200	ug/Kg
123-91-1	1,4-Dioxane	53.2	U	53.2	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	32.2	U	32.2	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	152		30 (18) - 130 (112)	102%	SPK: 150
13127-88-3	Phenol-d6	155		30 (15) - 130 (107)	104%	SPK: 150
4165-60-0	Nitrobenzene-d5	105		30 (18) - 130 (107)	105%	SPK: 100
321-60-8	2-Fluorobiphenyl	101		30 (20) - 130 (109)	101%	SPK: 100
118-79-6	2,4,6-Tribromophenol	177		30 (10) - 130 (116)	118%	SPK: 150
1718-51-0	Terphenyl-d14	109		30 (10) - 130 (105)	109%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	322000	7.781			
1146-65-2	Naphthalene-d8	1150000	10.575			
15067-26-2	Acenaphthene-d10	771000	14.421			
1517-22-2	Phenanthrene-d10	1530000	17.162			
1719-03-5	Chrysene-d12	1430000	21.397			
1520-96-3	Perylene-d12	1580000	24.397			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	530	AB		4.90	ug/Kg
000119-61-9	Benzophenone	410	J		15.8	ug/Kg
000057-10-3	n-Hexadecanoic acid	450	JB		18.1	ug/Kg
000057-11-4	Octadecanoic acid	140	JB		19.3	ug/Kg
000297-03-0	Cyclotetracosane	160	J		21.1	ug/Kg

Raw Data: **BM049868.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB02	SDG No.:	Q1746
Lab Sample ID:	Q1746-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
Sample Wt/Vol:	30.07 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
BM049868.D	1	04/08/25 08:59	04/09/25 15:05	PB167509

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_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Time: Apr 09 15:55:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

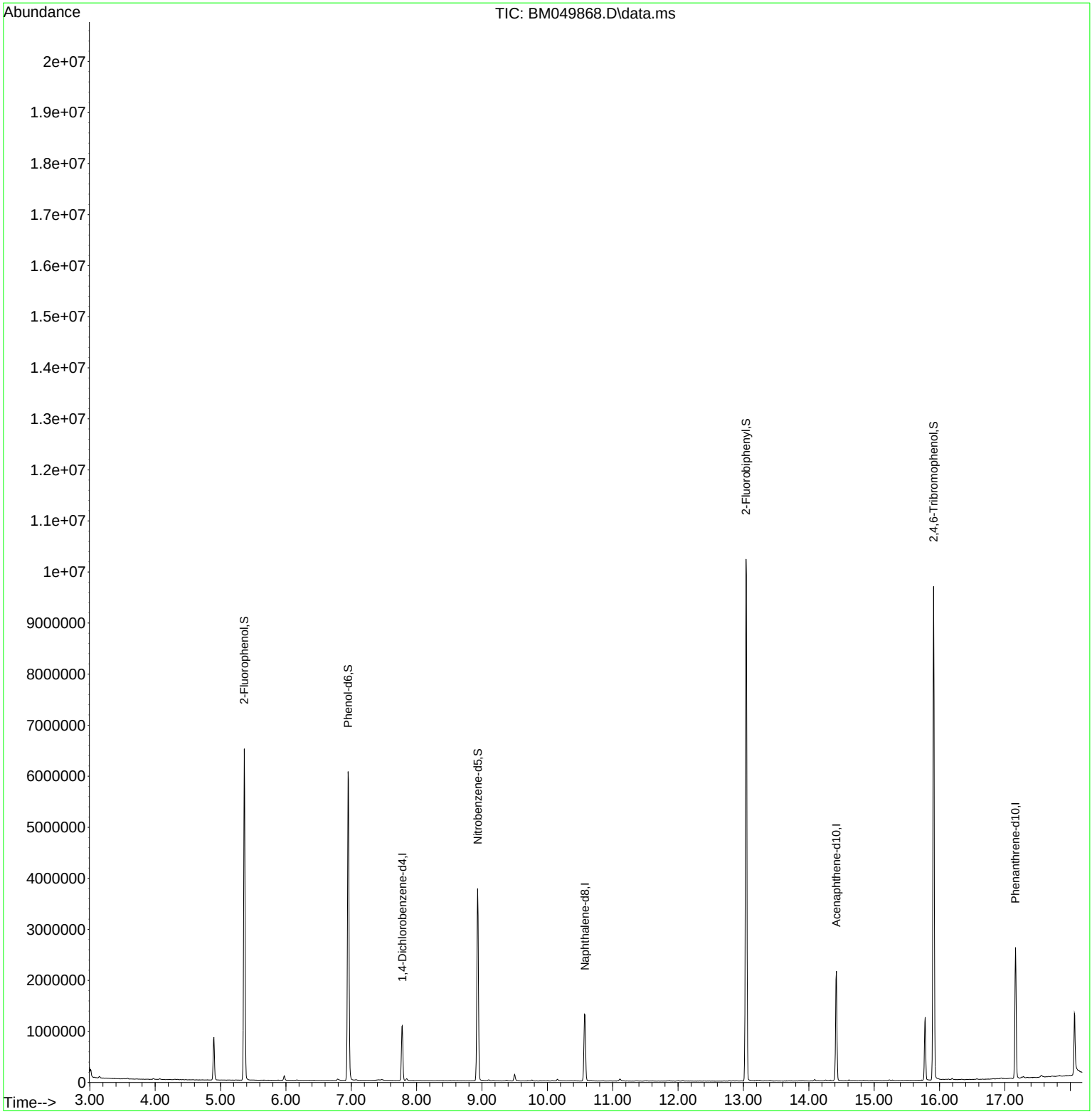
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.781	152	322464	20.000	ng		0.00
21) Naphthalene-d8	10.575	136	1148080	20.000	ng		0.00
39) Acenaphthene-d10	14.421	164	770952	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1525445	20.000	ng		0.00
76) Chrysene-d12	21.397	240	1431866	20.000	ng		0.00
86) Perylene-d12	24.397	264	1579355	20.000	ng		-0.01
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	2892852	152.336	ng		0.00
7) Phenol-d6	6.951	99	3668334	155.260	ng		0.00
23) Nitrobenzene-d5	8.934	82	2156634	104.603	ng		0.00
42) 2,4,6-Tribromophenol	15.910	330	1983101	176.845	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	5729173	100.769	ng		0.00
79) Terphenyl-d14	19.792	244	8296901	108.591	ng		0.00
Target Compounds							Qvalue
83) Chrysene	21.439	228	199224	2.202	ng		99
88) Benzo(b)fluoranthene	23.450	252	292483	2.900	ng	#	97
89) Benzo(k)fluoranthene	23.509	252	255087	2.610	ng	#	96

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Time: Apr 09 15:55:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

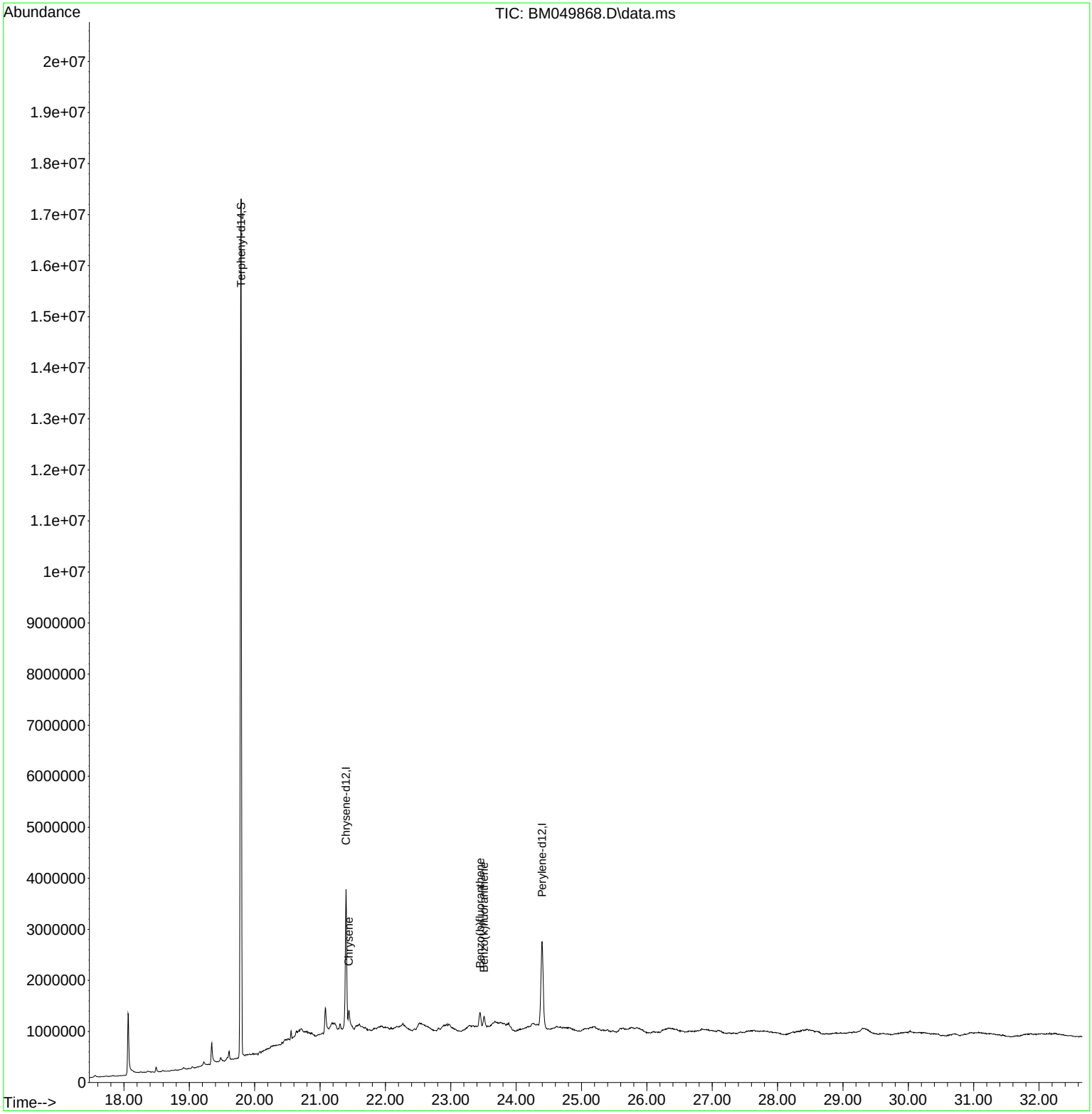


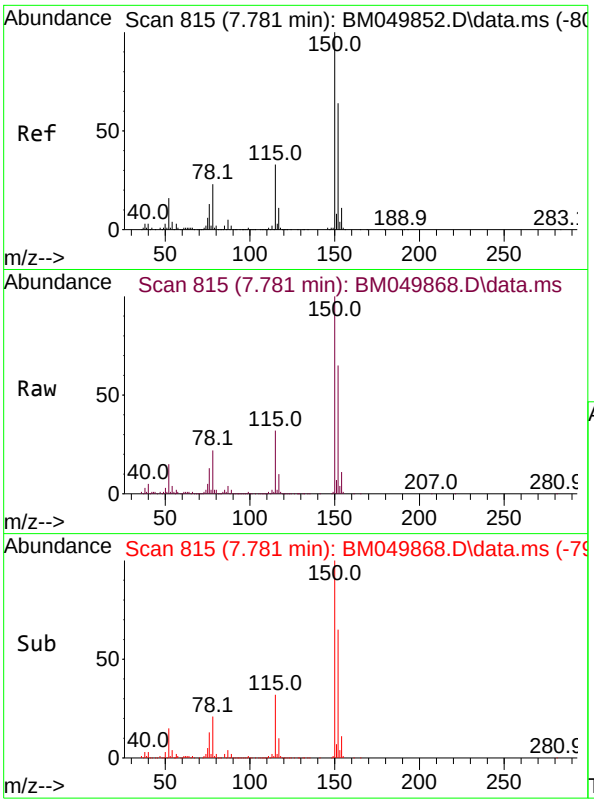
Sample Results: **BM049868.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Time: Apr 09 15:55:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



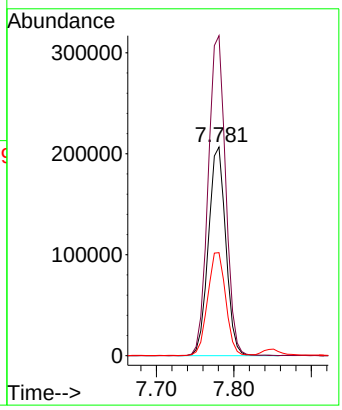


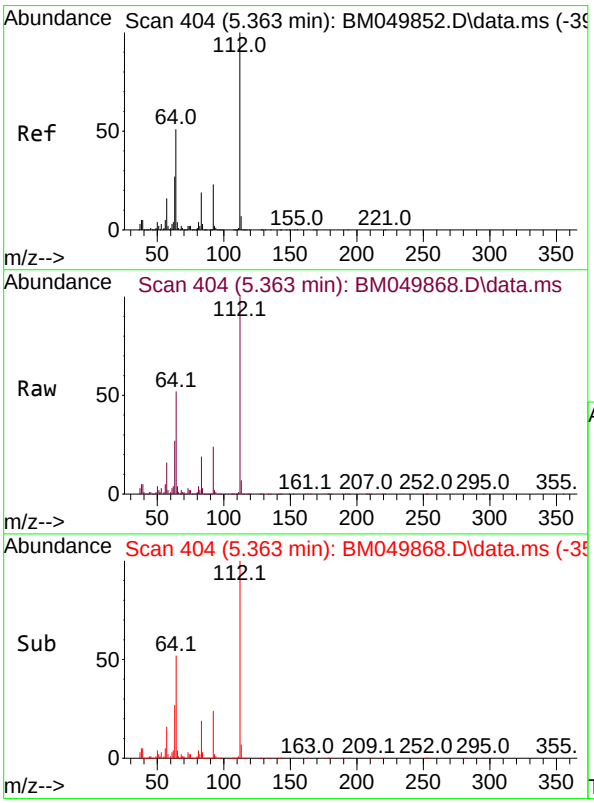
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.781 min Scan# 81
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion:152 Resp: 322464

Ion	Ratio	Lower	Upper
152	100		
150	153.3	124.3	186.5
115	49.4	41.1	61.7

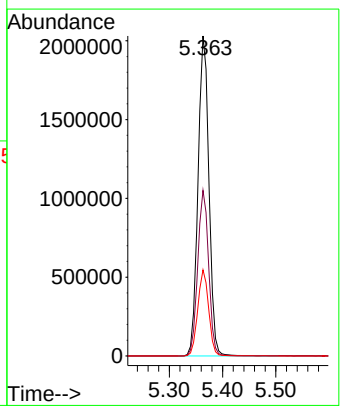


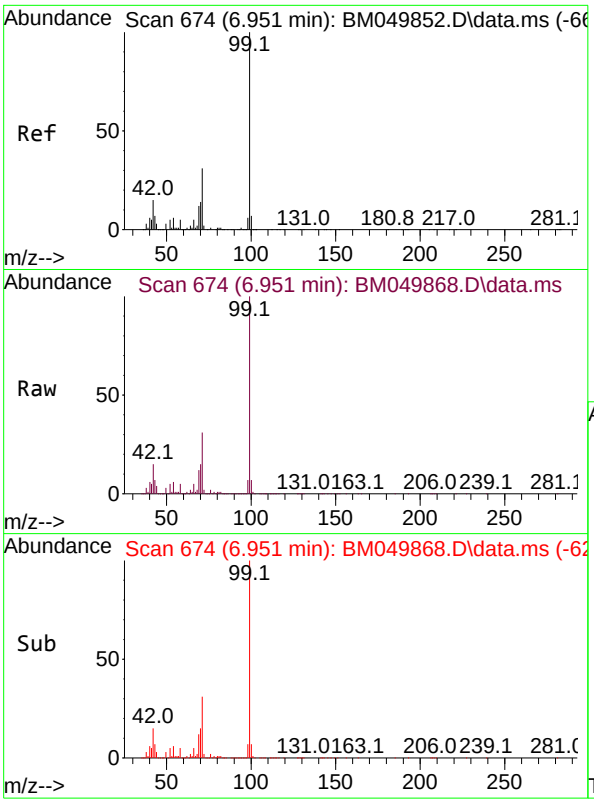


#5
2-Fluorophenol
Concen: 152.336 ng
RT: 5.363 min Scan# 404
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Tgt Ion:112 Resp: 2892852

Ion	Ratio	Lower	Upper
112	100		
64	51.8	41.0	61.6
63	26.9	21.5	32.3



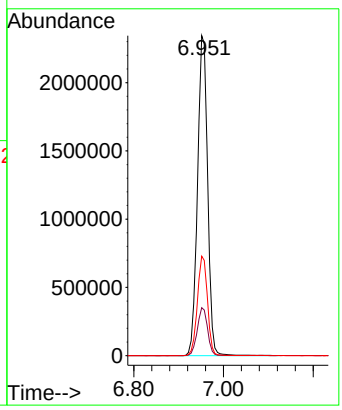


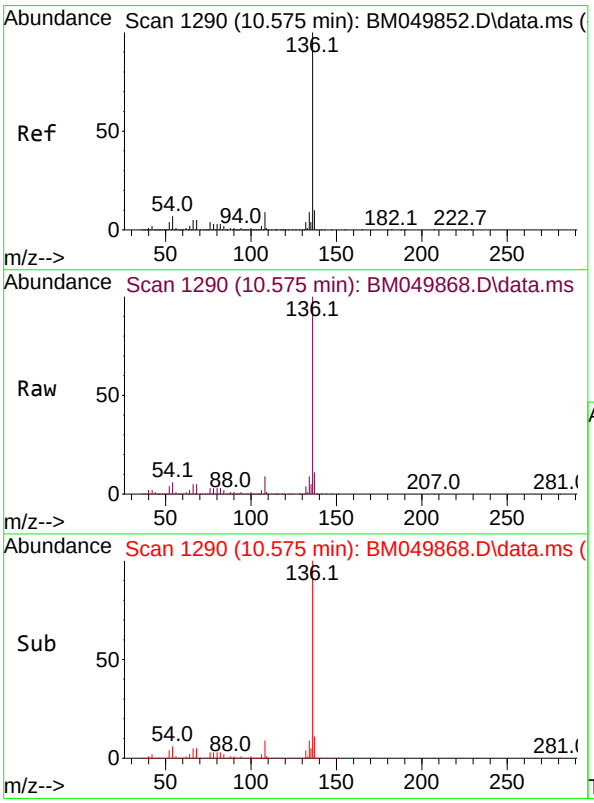
#7
Phenol-d6
Concen: 155.260 ng
RT: 6.951 min Scan# 6
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion: 99 Resp: 3668334

Ion	Ratio	Lower	Upper
99	100		
42	15.0	12.1	18.1
71	31.1	24.9	37.3

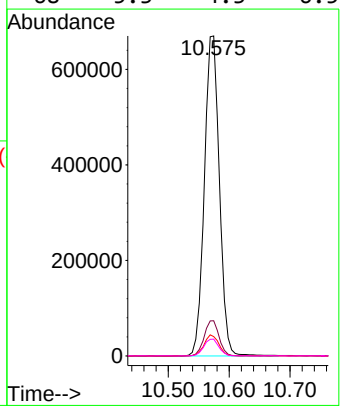


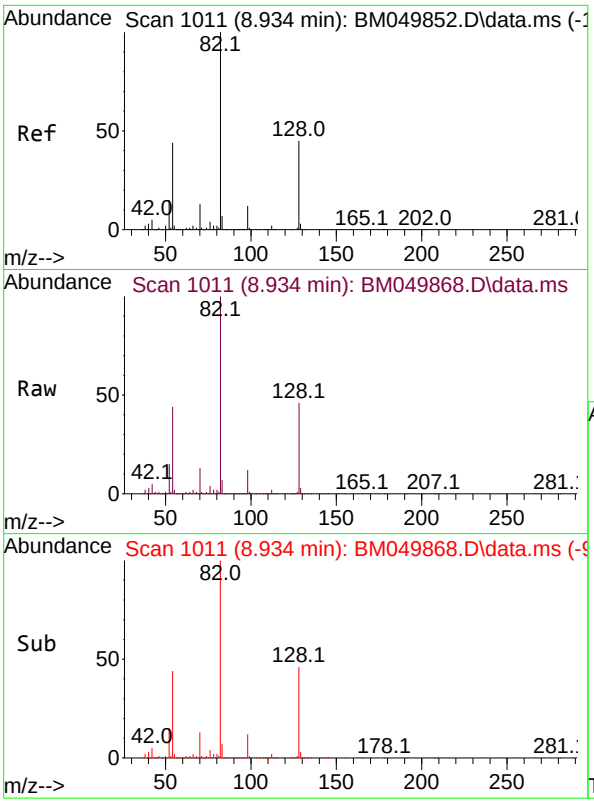


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.575 min Scan# 1290
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Tgt Ion:136 Resp: 1148080

Ion	Ratio	Lower	Upper
136	100		
137	11.0	8.4	12.6
54	6.1	5.3	7.9
68	5.3	4.3	6.5



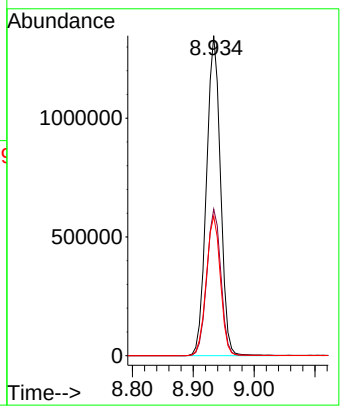


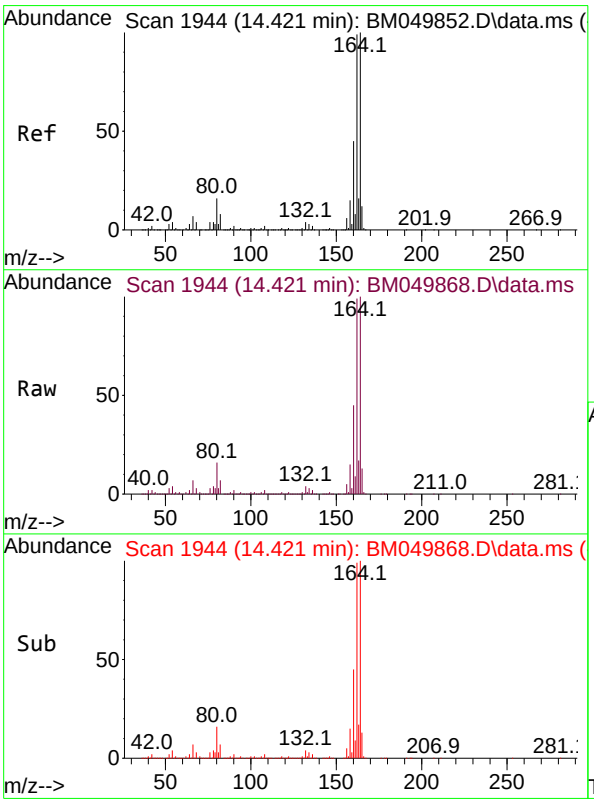
#23
Nitrobenzene-d5
Concen: 104.603 ng
RT: 8.934 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion: 82 Resp: 2156634

Ion	Ratio	Lower	Upper
82	100		
128	45.8	36.2	54.2
54	43.6	35.0	52.6

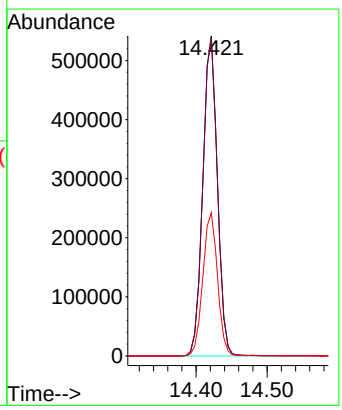


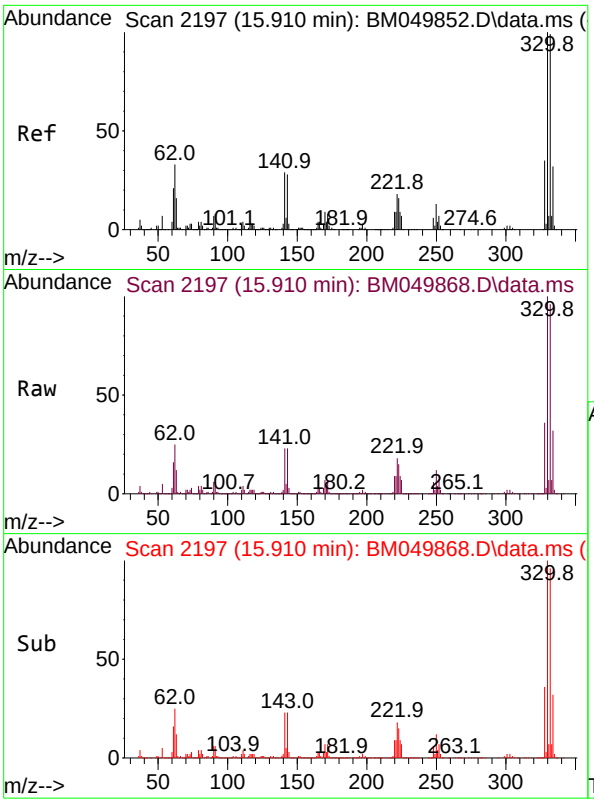


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.421 min Scan# 1944
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Tgt Ion:164 Resp: 770952

Ion	Ratio	Lower	Upper
164	100		
162	99.0	79.4	119.0
160	44.8	36.2	54.2



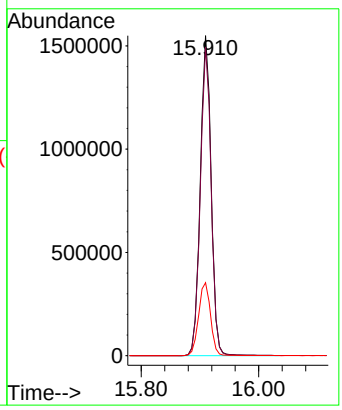


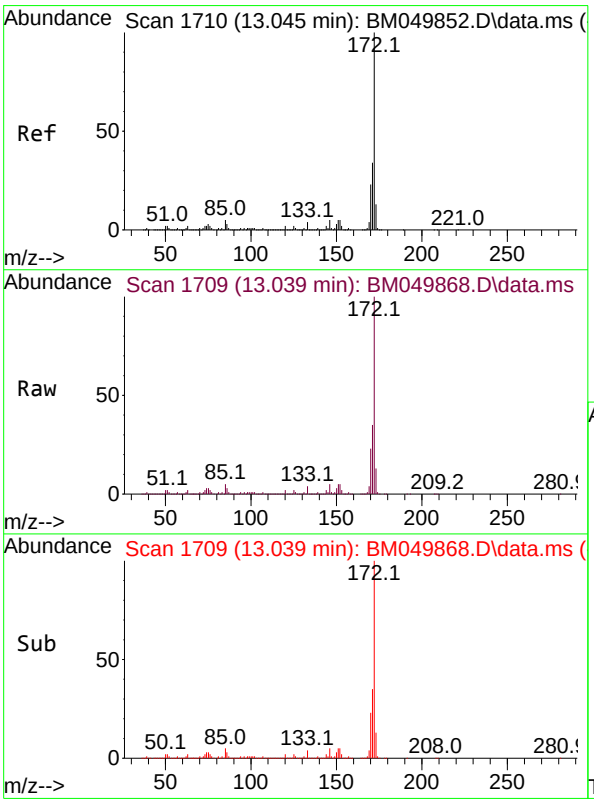
#42
2,4,6-Tribromophenol
Concen: 176.845 ng
RT: 15.910 min Scan# 21
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion:330 Resp: 1983101

Ion	Ratio	Lower	Upper
330	100		
332	96.2	78.0	117.0
141	25.0	23.5	35.3

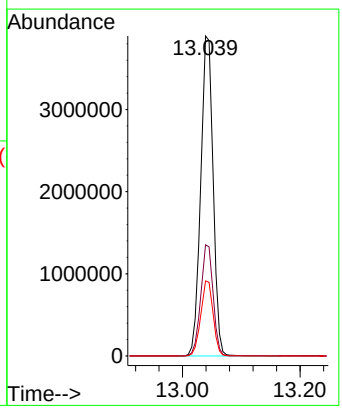


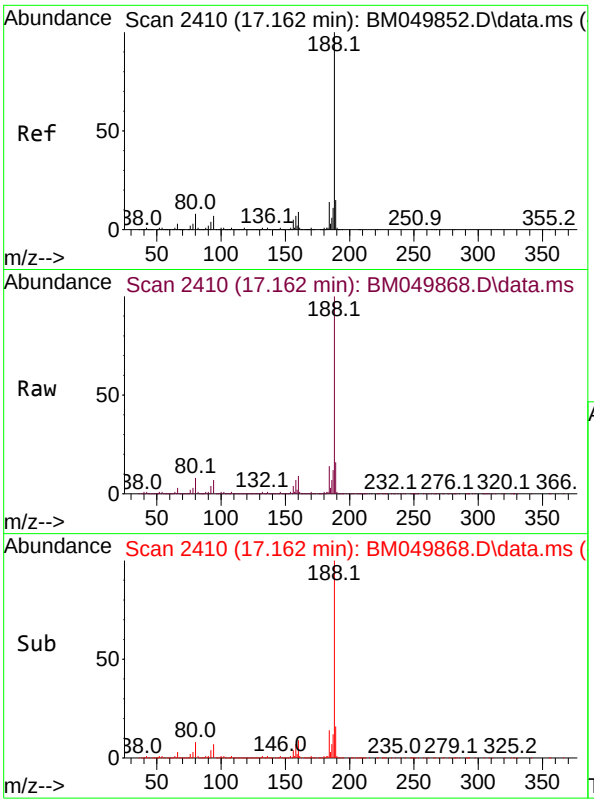


#45
2-Fluorobiphenyl
Concen: 100.769 ng
RT: 13.039 min Scan# 1709
Delta R.T. -0.006 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Tgt Ion:172 Resp: 5729173

Ion	Ratio	Lower	Upper
172	100		
171	34.8	27.4	41.2
170	23.5	18.6	28.0



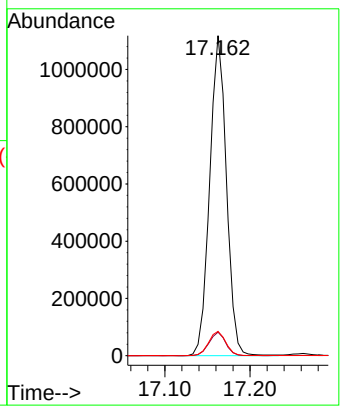


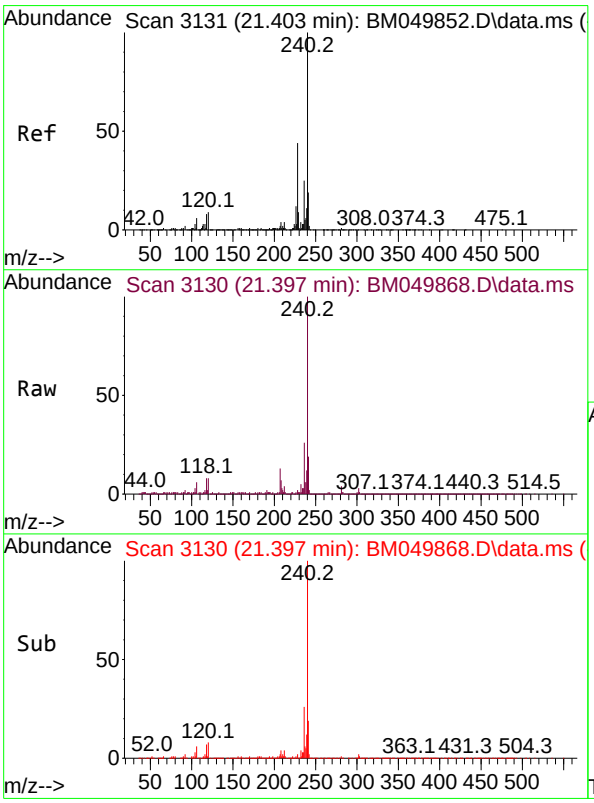
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.162 min Scan# 24
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion:188 Resp: 1525445

Ion	Ratio	Lower	Upper
188	100		
94	7.4	5.8	8.6
80	7.6	6.4	9.6

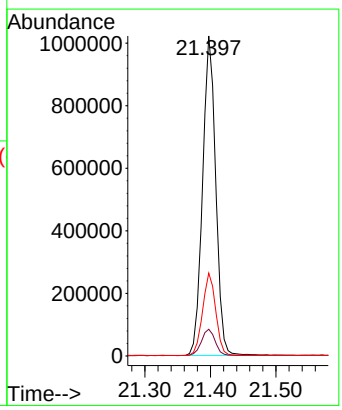


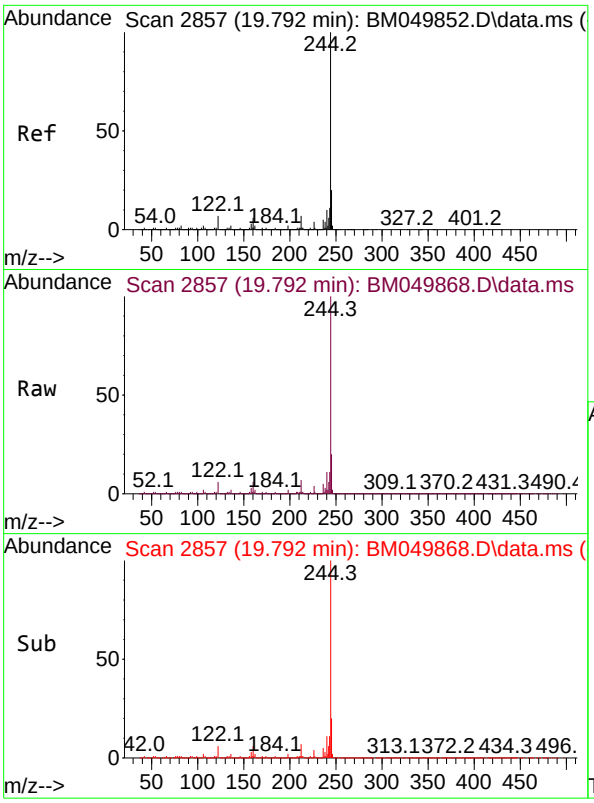


#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.397 min Scan# 3130
Delta R.T. -0.006 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Tgt Ion:240 Resp: 1431866

Ion	Ratio	Lower	Upper
240	100		
120	8.3	6.9	10.3
236	25.9	20.4	30.6



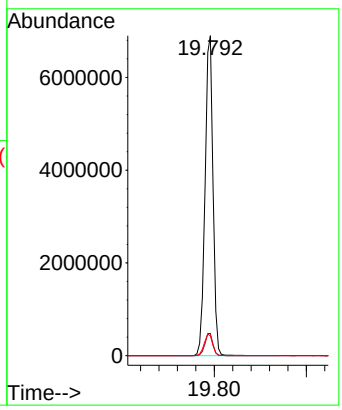


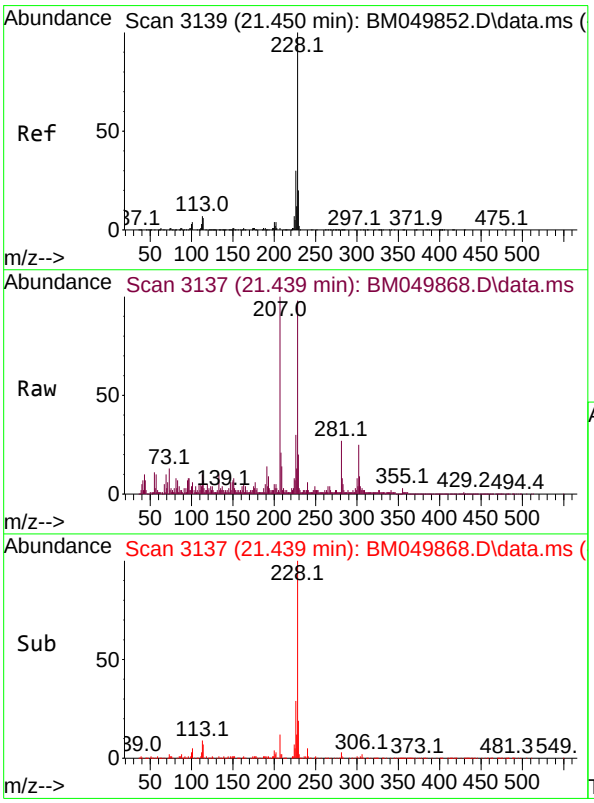
#79
Terphenyl-d14
Concen: 108.591 ng
RT: 19.792 min Scan# 2
Delta R.T. -0.000 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion:244 Resp: 8296901

Ion	Ratio	Lower	Upper
244	100		
212	6.9	5.5	8.3
122	6.2	5.4	8.0

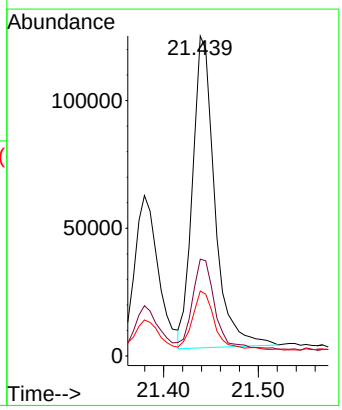


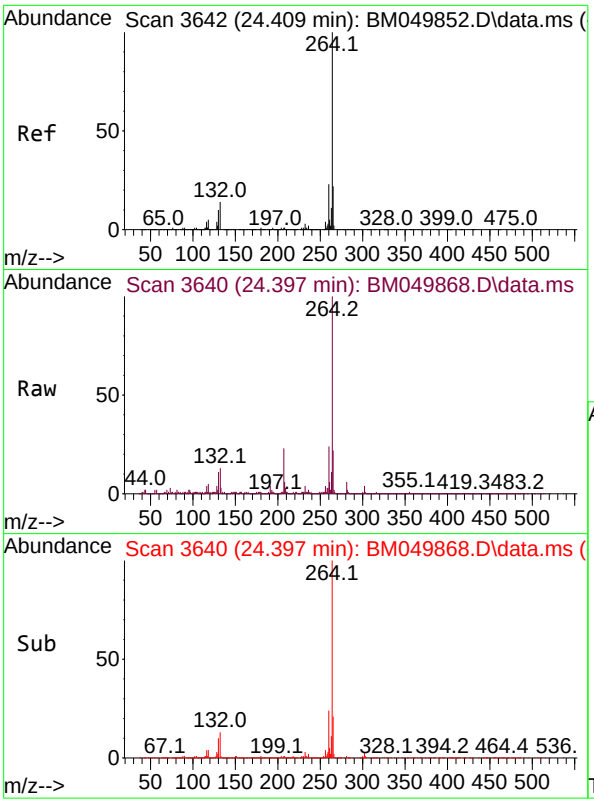


#83
Chrysene
Concen: 2.202 ng
RT: 21.439 min Scan# 3137
Delta R.T. -0.012 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Tgt Ion:228 Resp: 199224

Ion	Ratio	Lower	Upper
228	100		
226	30.3	24.1	36.1
229	20.3	15.8	23.6



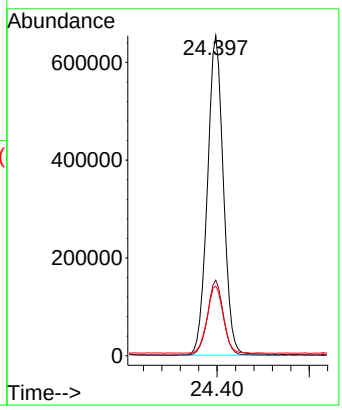


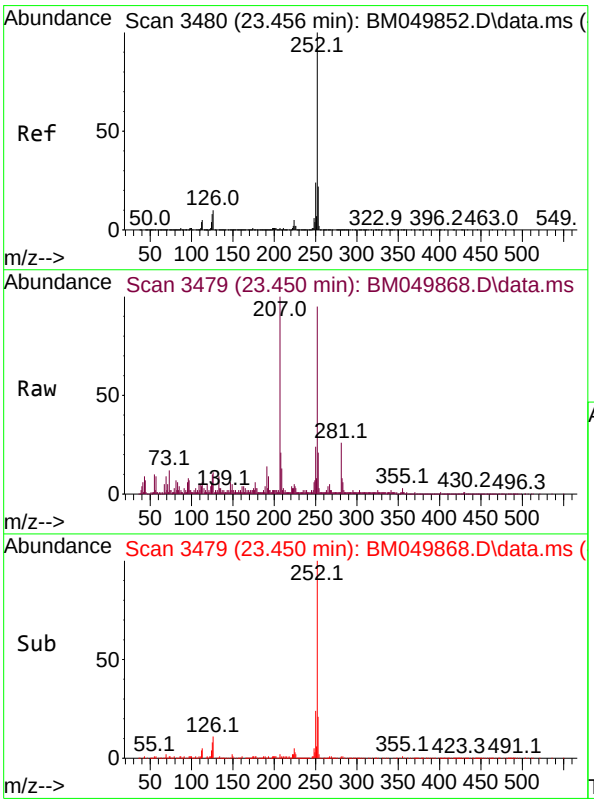
#86
Perylene-d12
Concen: 20.000 ng
RT: 24.397 min Scan# 3
Delta R.T. -0.012 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion:264 Resp: 1579355

Ion	Ratio	Lower	Upper
264	100		
260	23.6	18.6	28.0
265	21.8	17.8	26.8

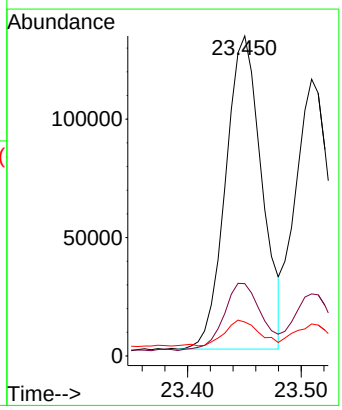


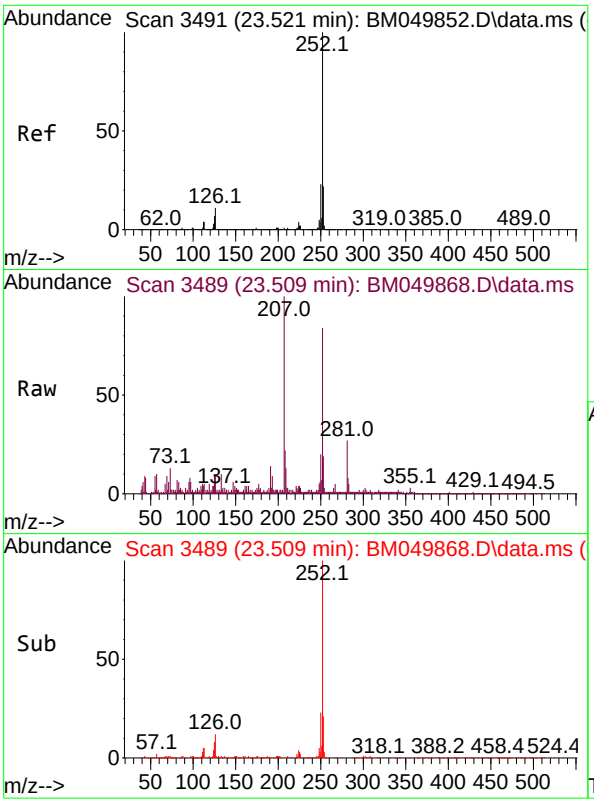


#88
Benzo(b)fluoranthene
Concen: 2.900 ng
RT: 23.450 min Scan# 3479
Delta R.T. -0.006 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Tgt Ion:252 Resp: 292483

Ion	Ratio	Lower	Upper
252	100		
253	22.6	17.5	26.3
125	10.6	6.2	9.4#



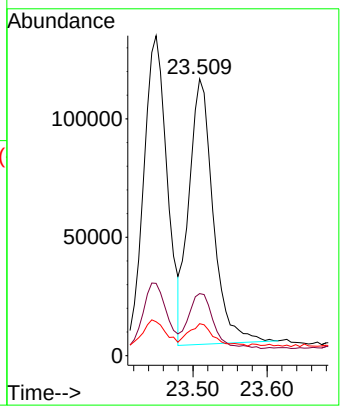


#89
Benzo(k)fluoranthene
Concen: 2.610 ng
RT: 23.509 min Scan# 34
Delta R.T. -0.012 min
Lab File: BM049868.D
Acq: 09 Apr 2025 15:05

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Tgt Ion:252 Resp: 255087

Ion	Ratio	Lower	Upper
252	100		
253	22.4	17.4	26.2
125	11.5	5.8	8.8#



Sample Results: **BM049868.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

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_M\Methods\8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BM049868.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.898	319	325	333	rVB	836722	1167673	5.68%	1.183%
2	5.363	397	404	421	rBV	6491424	9235392	44.90%	9.353%
3	6.951	667	674	689	rBV	6050820	9739153	47.35%	9.864%
4	7.781	808	815	822	rBV	1075610	1711934	8.32%	1.734%
5	8.934	1003	1011	1022	rBV	3767301	6067154	29.50%	6.145%
6	9.498	1101	1107	1115	rBV	127286	205984	1.00%	0.209%
7	10.569	1282	1289	1298	rBV	1309087	2241002	10.89%	2.270%
8	13.039	1702	1709	1722	rBV	10226591	15050381	73.17%	15.243%
9	14.421	1935	1944	1953	rBV	2146658	3128350	15.21%	3.168%
10	15.780	2168	2175	2180	rBV	1237394	1647178	8.01%	1.668%
11	15.910	2189	2197	2217	rBV	9669961	12949492	62.95%	13.115%
12	17.162	2404	2410	2421	rBV2	2564725	3547430	17.25%	3.593%
13	18.062	2558	2563	2578	rBV	1206746	2015496	9.80%	2.041%
14	19.345	2777	2781	2789	rBV	401179	647957	3.15%	0.656%
15	19.792	2851	2857	2862	rBV	16816039	20569600	100.00%	20.833%
16	21.080	3073	3076	3085	rBV	452092	781321	3.80%	0.791%
17	21.397	3125	3130	3135	rBV	2622489	3725512	18.11%	3.773%
18	24.397	3633	3640	3654	rVB	1717128	4306655	20.94%	4.362%

Sum of corrected areas: 98737664

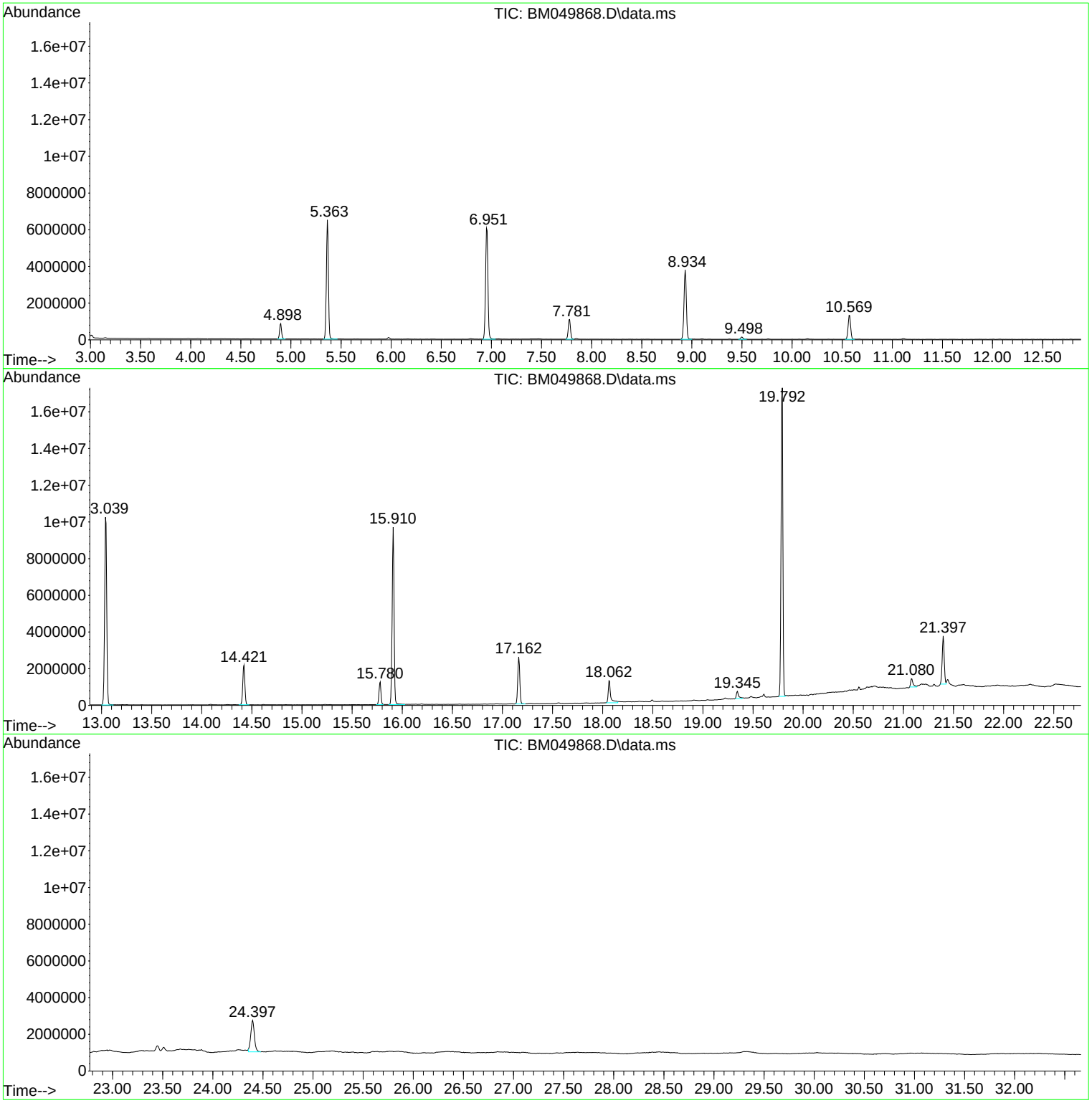
Sample Results: **BM049868.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.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_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

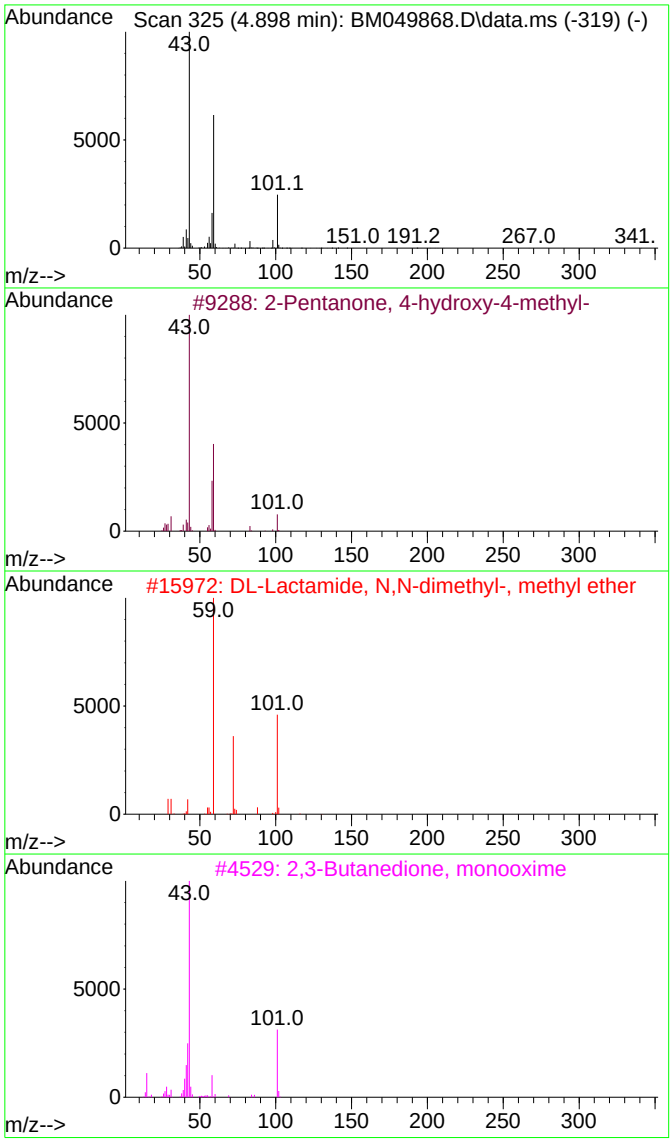
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

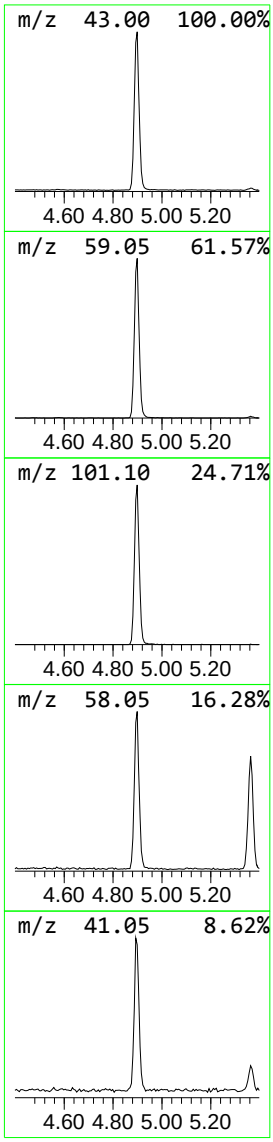
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.898	13.64 ng	1167670	1,4-Dichlorobenzene-d4	7.781

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	72
2	DL-Lactamide, N,N-dimethyl-, met...	131	C6H13NO2	1000452-57-0	33
3	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	25
4	1,3-Dioxolane-2-methanol, 2,4-di...	132	C6H12O3	053951-43-2	25
5	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17





Sample Results: **BM049868.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

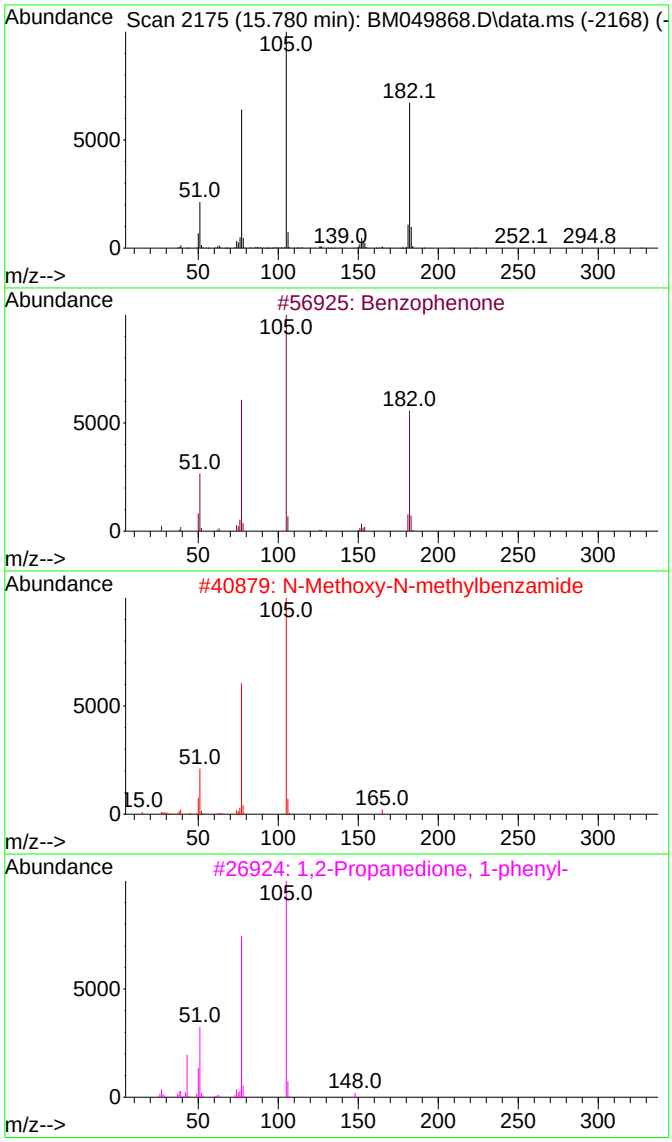
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

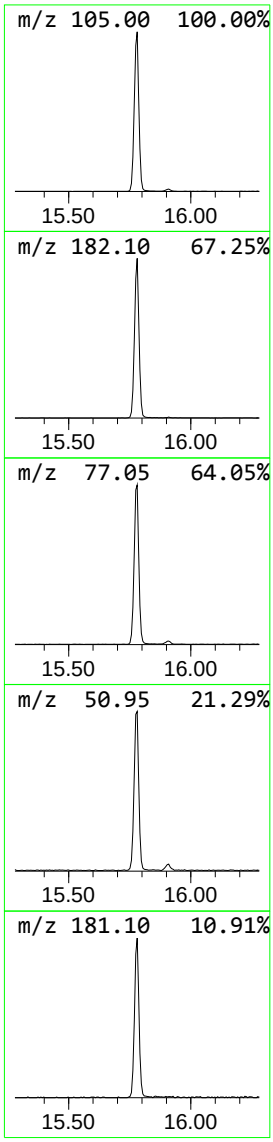
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Peak Number 2 Benzophenone Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.780	10.53 ng	1647180	Acenaphthene-d10	14.421

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	97
2	N-Methoxy-N-methylbenzamide	165	C9H11NO2	006919-61-5	43
3	1,2-Propanedione, 1-phenyl-	148	C9H8O2	000579-07-7	43
4	1-Propanone, 3-chloro-1-phenyl-	168	C9H9ClO	000936-59-4	43
5	Ethanone, 2-hydroxy-1-phenyl-	136	C8H8O2	000582-24-1	43





Sample Results: **BM049868.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

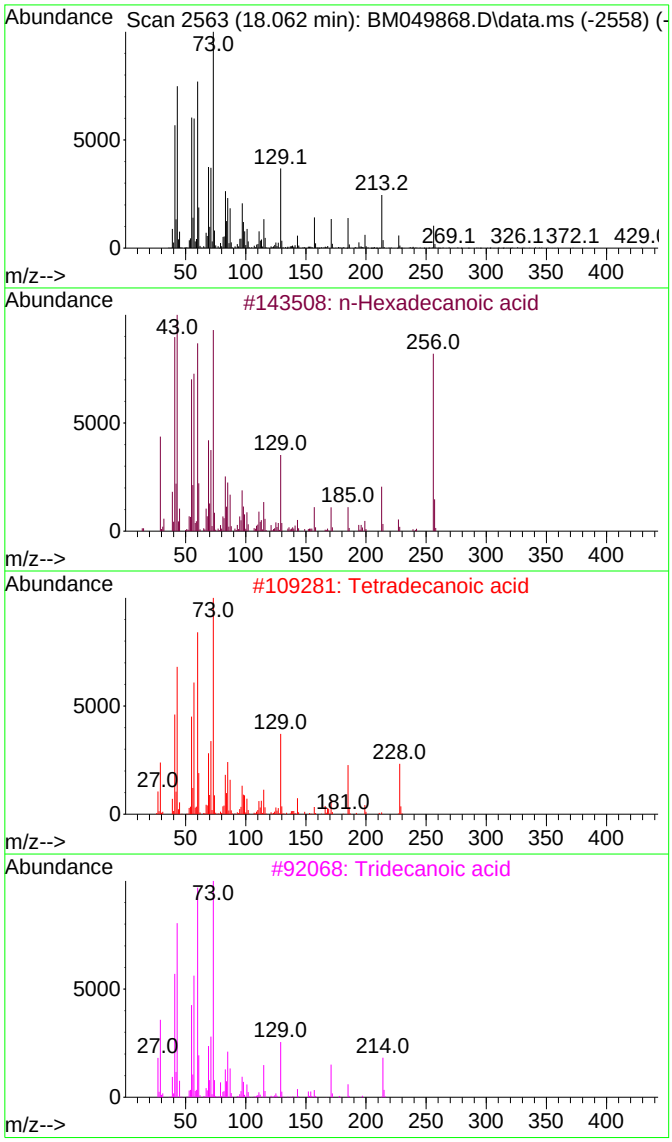
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

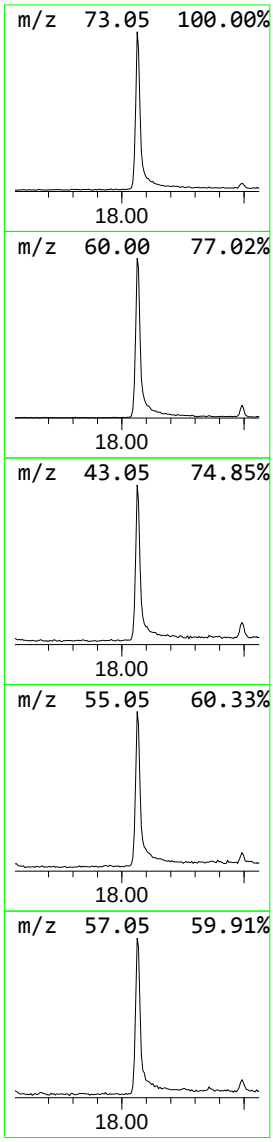
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Peak Number 3 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.062	11.36 ng	2015500	Phenanthrene-d10	17.162

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	94
3	Tridecanoic acid	214	C13H26O2	000638-53-9	90
4	Octadecanoic acid	284	C18H36O2	000057-11-4	81
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	81





Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

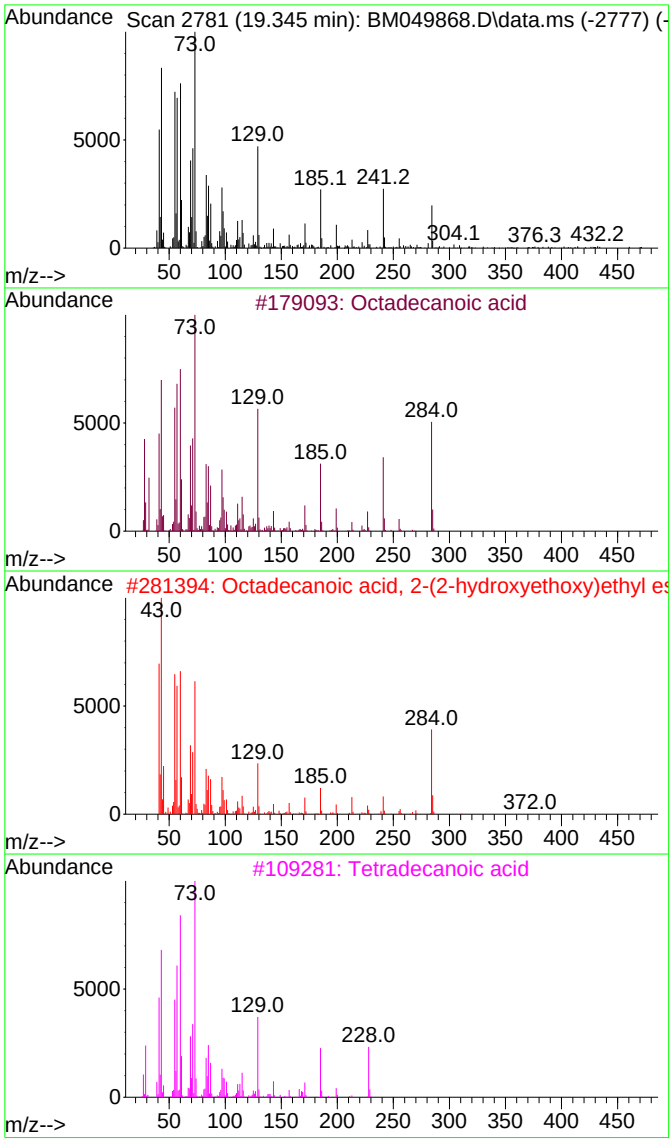
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

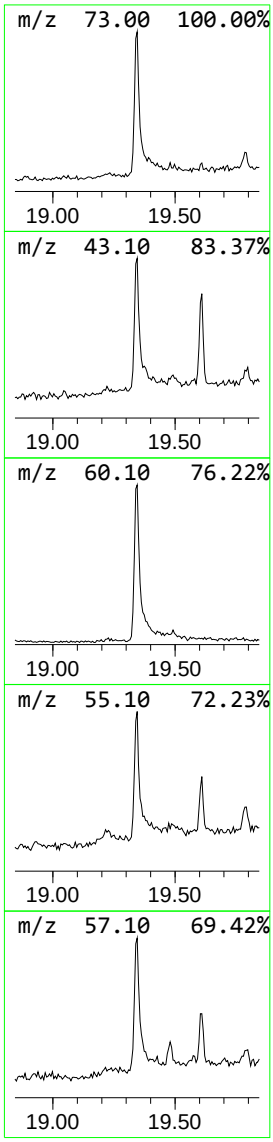
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Peak Number 4 Octadecanoic acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.345	3.48 ng	647957	Chrysene-d12	21.397

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	72
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	68
4	Undecanoic acid	186	C11H22O2	000112-37-8	68
5	n-Decanoic acid	172	C10H20O2	000334-48-5	64





Sample Results: **BM049868.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

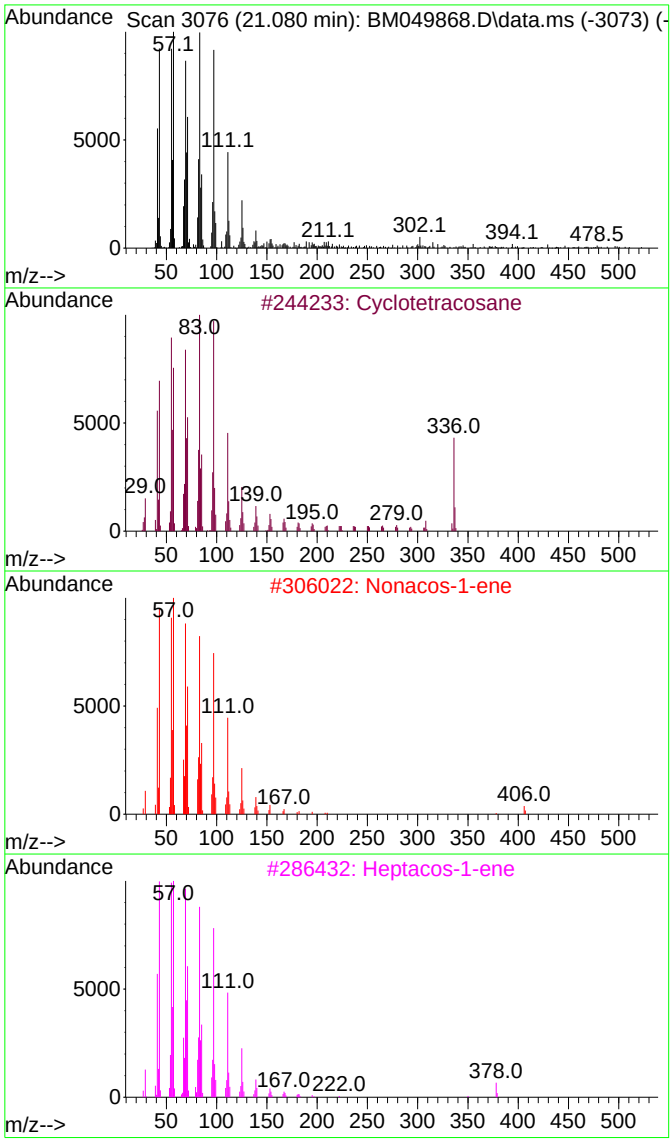
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

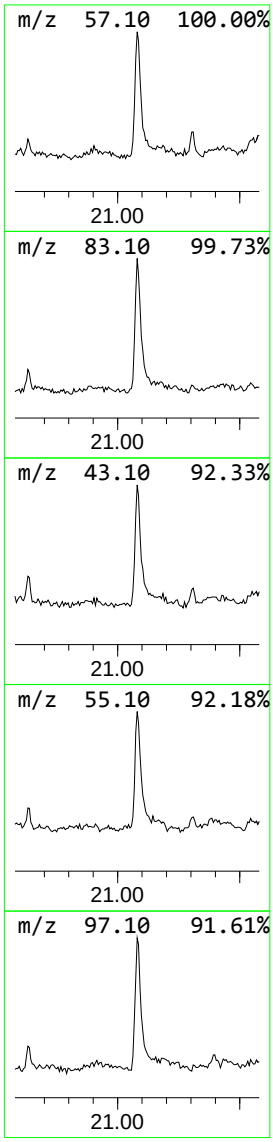
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Peak Number 5 Cyclotetracosane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.080	4.19 ng	781321	Chrysene-d12	21.397

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetracosane	336	C24H48	000297-03-0	99
2	Nonacos-1-ene	406	C29H58	018835-35-3	94
3	Heptacos-1-ene	378	C27H54	015306-27-1	94
4	n-Tetracosanol-1	354	C24H50O	000506-51-4	94
5	1-Heneicosanol	312	C21H44O	015594-90-8	94





Sample Results: **BM049868.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049868.D
Acq On : 09 Apr 2025 15:05
Operator : RC/JU
Sample : Q1746-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-149-SB02

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.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-...	4.898	13.6	ng	1167670	1	7.781	1711930	20.0
Benzophenone	15.780	10.5	ng	1647180	3	14.421	3128350	20.0
n-Hexadecanoic ...	18.062	11.4	ng	2015500	4	17.162	3547430	20.0
Octadecanoic acid	19.345	3.5	ng	647957	5	21.397	3725510	20.0
Cyclotetracosane	21.080	4.2	ng	781321	5	21.397	3725510	20.0

Raw Data: **BP024252.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-05	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024252.D	1	04/08/25 11:55	04/10/25 14:36	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.00	U	4.00	10.2	ug/L
108-95-2	Phenol	0.93	U	0.93	5.10	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.83	U	0.83	5.10	ug/L
95-57-8	2-Chlorophenol	0.59	U	0.59	5.10	ug/L
95-48-7	2-Methylphenol	1.10	U	1.10	5.10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.30	U	1.30	5.10	ug/L
98-86-2	Acetophenone	0.76	U	0.76	5.10	ug/L
65794-96-9	3+4-Methylphenols	1.10	U	1.10	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.40	U	1.40	2.60	ug/L
67-72-1	Hexachloroethane	0.66	U	0.66	5.10	ug/L
98-95-3	Nitrobenzene	0.78	U	0.78	5.10	ug/L
78-59-1	Isophorone	0.77	U	0.77	5.10	ug/L
88-75-5	2-Nitrophenol	1.80	U	1.80	5.10	ug/L
105-67-9	2,4-Dimethylphenol	1.90	U	1.90	5.10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	0.69	U	0.69	5.10	ug/L
120-83-2	2,4-Dichlorophenol	0.53	U	0.53	5.10	ug/L
91-20-3	Naphthalene	0.51	U	0.51	5.10	ug/L
106-47-8	4-Chloroaniline	0.86	UQ	0.86	5.10	ug/L
87-68-3	Hexachlorobutadiene	0.55	U	0.55	5.10	ug/L
105-60-2	Caprolactam	1.20	U	1.20	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	0.60	U	0.60	5.10	ug/L
91-57-6	2-Methylnaphthalene	0.57	U	0.57	5.10	ug/L
77-47-4	Hexachlorocyclopentadiene	3.70	UQ	3.70	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	0.52	U	0.52	5.10	ug/L
95-95-4	2,4,5-Trichlorophenol	0.63	U	0.63	5.10	ug/L
92-52-4	1,1-Biphenyl	0.54	U	0.54	5.10	ug/L
91-58-7	2-Chloronaphthalene	0.62	U	0.62	5.10	ug/L
88-74-4	2-Nitroaniline	1.30	U	1.30	5.10	ug/L
131-11-3	Dimethylphthalate	0.62	U	0.62	5.10	ug/L

Raw Data: **BP024252.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-05	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024252.D	1	04/08/25 11:55	04/10/25 14:36	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	0.77	U	0.77	5.10	ug/L
606-20-2	2,6-Dinitrotoluene	0.94	U	0.94	5.10	ug/L
99-09-2	3-Nitroaniline	1.10	UQ	1.10	5.10	ug/L
83-32-9	Acenaphthene	0.56	U	0.56	5.10	ug/L
51-28-5	2,4-Dinitrophenol	6.10	U	6.10	10.2	ug/L
100-02-7	4-Nitrophenol	2.40	U	2.40	10.2	ug/L
132-64-9	Dibenzofuran	0.62	U	0.62	5.10	ug/L
121-14-2	2,4-Dinitrotoluene	1.20	U	1.20	5.10	ug/L
84-66-2	Diethylphthalate	0.70	U	0.70	5.10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	0.69	U	0.69	5.10	ug/L
86-73-7	Fluorene	0.64	U	0.64	5.10	ug/L
100-01-6	4-Nitroaniline	1.50	U	1.50	5.10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	2.90	U	2.90	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	0.59	U	0.59	5.10	ug/L
101-55-3	4-Bromophenyl-phenylether	0.41	U	0.41	5.10	ug/L
118-74-1	Hexachlorobenzene	0.53	U	0.53	5.10	ug/L
1912-24-9	Atrazine	1.00	UQ	1.00	5.10	ug/L
87-86-5	Pentachlorophenol	1.60	U	1.60	10.2	ug/L
85-01-8	Phenanthrene	0.51	U	0.51	5.10	ug/L
120-12-7	Anthracene	0.62	U	0.62	5.10	ug/L
86-74-8	Carbazole	0.73	U	0.73	5.10	ug/L
84-74-2	Di-n-butylphthalate	1.20	U	1.20	5.10	ug/L
206-44-0	Fluoranthene	0.84	U	0.84	5.10	ug/L
129-00-0	Pyrene	0.51	U	0.51	5.10	ug/L
85-68-7	Butylbenzylphthalate	2.00	U	2.00	5.10	ug/L
91-94-1	3,3-Dichlorobenzidine	0.95	UQ	0.95	10.2	ug/L
56-55-3	Benzo(a)anthracene	0.46	U	0.46	5.10	ug/L
218-01-9	Chrysene	0.45	U	0.45	5.10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.60	U	1.60	5.10	ug/L
117-84-0	Di-n-octyl phthalate	2.40	U	2.40	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	0.50	U	0.50	5.10	ug/L

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-05	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024252.D	1	04/08/25 11:55	04/10/25 14:36	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	0.49	U	0.49	5.10	ug/L
50-32-8	Benzo(a)pyrene	0.56	U	0.56	5.10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.60	U	0.60	5.10	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.68	U	0.68	5.10	ug/L
191-24-2	Benzo(g,h,i)perylene	0.70	U	0.70	5.10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	0.53	U	0.53	5.10	ug/L
123-91-1	1,4-Dioxane	1.00	U	1.00	5.10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.73	U	0.73	5.10	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	37.1		15 (10) - 110 (139)	25%	SPK: 150
13127-88-3	Phenol-d6	23.0		15 (10) - 110 (134)	15%	SPK: 150
4165-60-0	Nitrobenzene-d5	65.7		30 (49) - 130 (133)	66%	SPK: 100
321-60-8	2-Fluorobiphenyl	61.4		30 (52) - 130 (132)	61%	SPK: 100
118-79-6	2,4,6-Tribromophenol	83.8		15 (44) - 110 (137)	56%	SPK: 150
1718-51-0	Terphenyl-d14	58.4		30 (48) - 130 (125)	58%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	263000	7.74			
1146-65-2	Naphthalene-d8	1030000	10.516			
15067-26-2	Acenaphthene-d10	601000	14.369			
1517-22-2	Phenanthrene-d10	1140000	17.175			
1719-03-5	Chrysene-d12	1210000	21.616			
1520-96-3	Perylene-d12	1470000	24.974			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	3.60	AB		4.90	ug/L
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	2.30	J		8.37	ug/L
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	2.80	J		9.35	ug/L
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	4.70	J		9.41	ug/L
000824-90-8	1-Phenyl-1-butene	3.50	J		9.92	ug/L
000112-34-5	Ethanol, 2-(2-butoxyethoxy)-	24.4	J		10.3	ug/L
000119-61-9	Benzophenone	11.1	J		15.8	ug/L

Raw Data: **BP024252.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-05	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024252.D	1	04/08/25 11:55	04/10/25 14:36	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
000057-10-3	n-Hexadecanoic acid	17.7	J		18.1	ug/L
000057-11-4	Octadecanoic acid	20.8	J		19.4	ug/L
000077-94-1	Butyl citrate	8.90	J		19.6	ug/L
015594-90-8	1-Heneicosanol	10.5	J		21.3	ug/L

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_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Time: Apr 10 15:01:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration

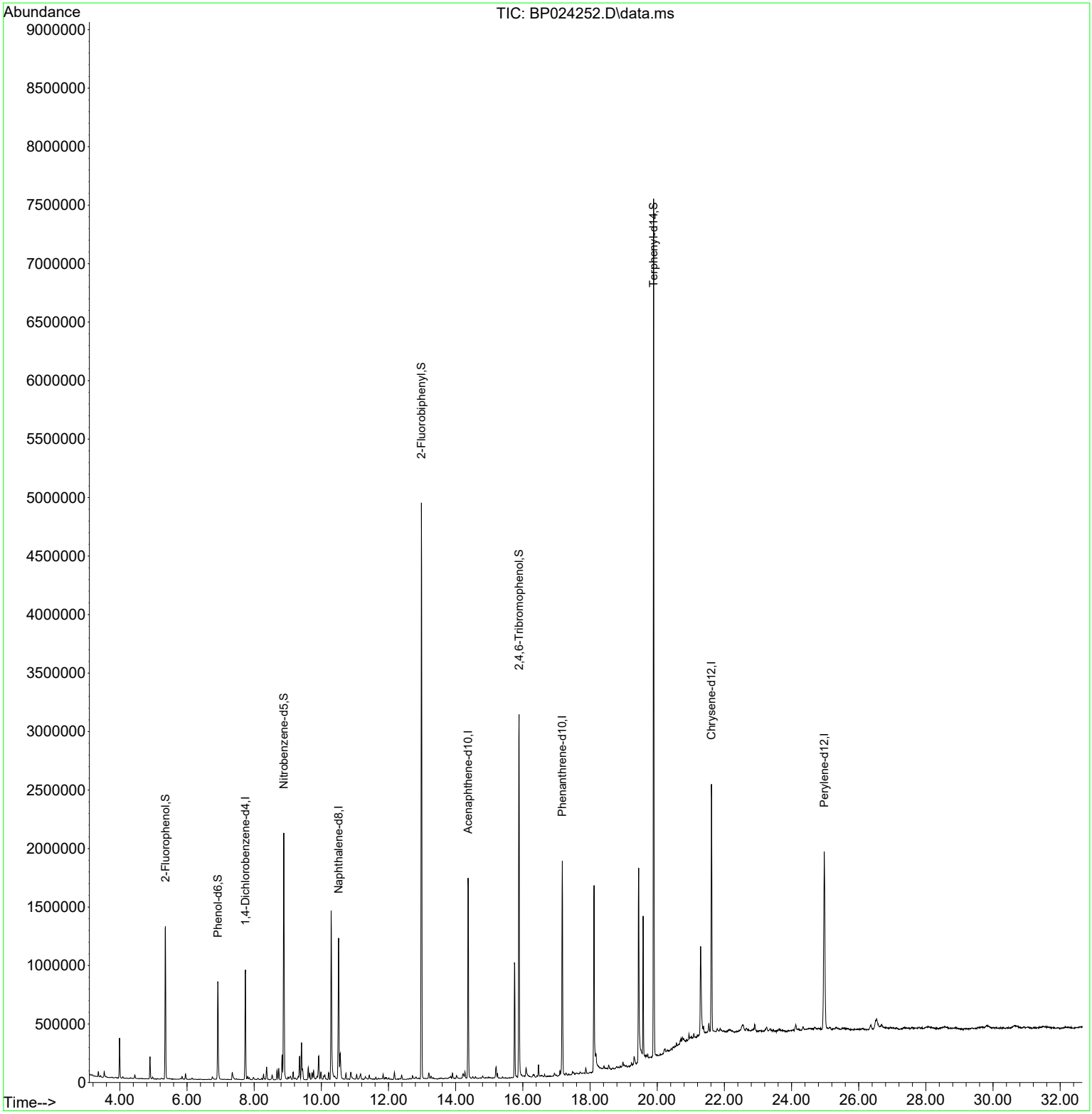
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.740	152	262571	20.000	ng	0.00
21) Naphthalene-d8	10.516	136	1031585	20.000	ng	-0.01
39) Acenaphthene-d10	14.369	164	601225	20.000	ng	-0.02
64) Phenanthrene-d10	17.175	188	1138233	20.000	ng	-0.02
76) Chrysene-d12	21.616	240	1210776	20.000	ng	-0.03
86) Perylene-d12	24.974	264	1465709	20.000	ng	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	5.358	112	610148	37.094	ng	0.00
7) Phenol-d6	6.916	99	505067	22.961	ng	-0.01
23) Nitrobenzene-d5	8.881	82	1201824	65.732	ng	-0.01
42) 2,4,6-Tribromophenol	15.887	330	634476	83.779	ng	-0.01
45) 2-Fluorobiphenyl	12.981	172	2505509	61.449	ng	-0.02
79) Terphenyl-d14	19.892	244	3422578	58.351	ng	-0.02
Target Compounds						Qvalue

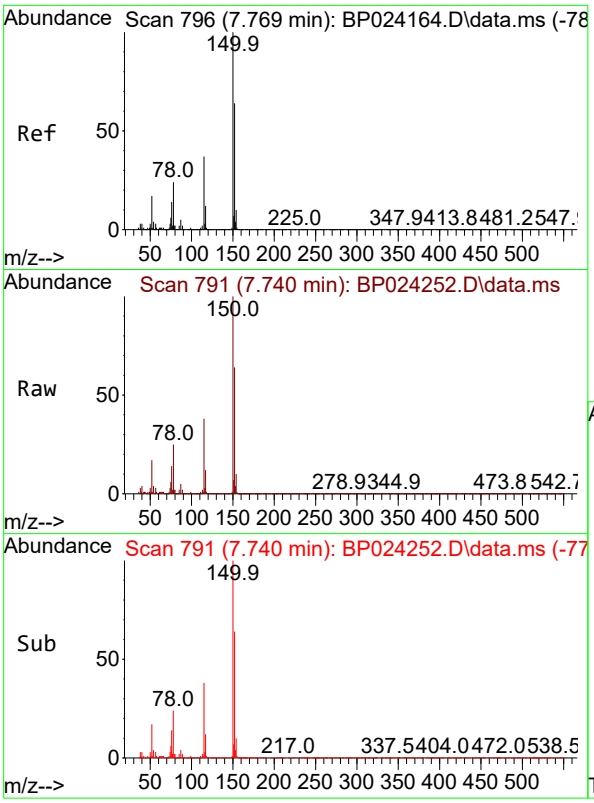
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Time: Apr 10 15:01:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration



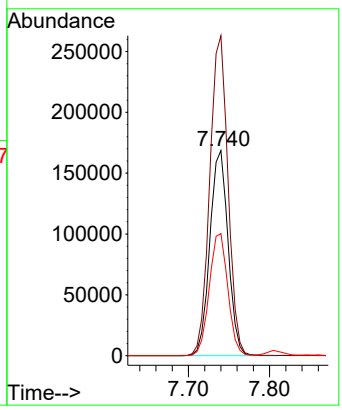


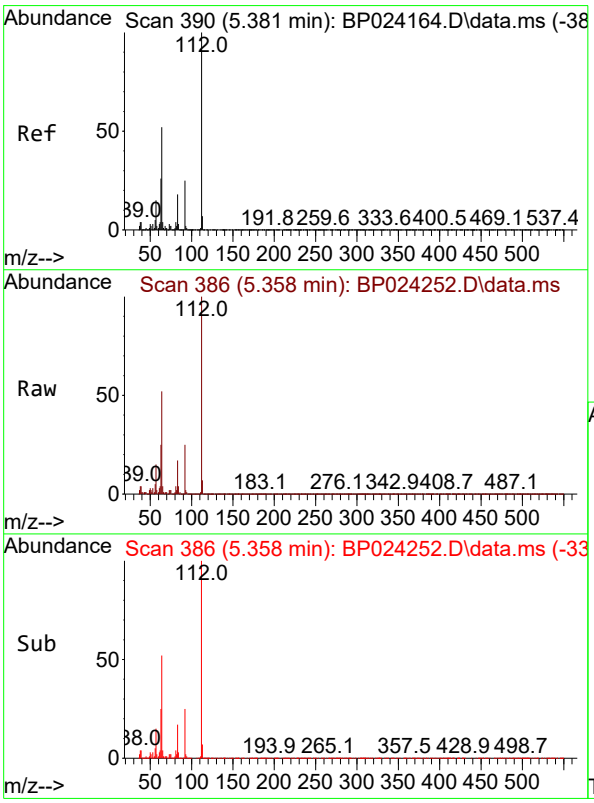
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.740 min Scan# 7
Delta R.T. -0.006 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Tgt Ion:152 Resp: 262571

Ion	Ratio	Lower	Upper
152	100		
150	156.1	125.5	188.3
115	59.6	46.3	69.5

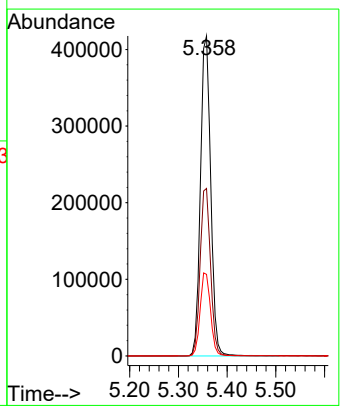


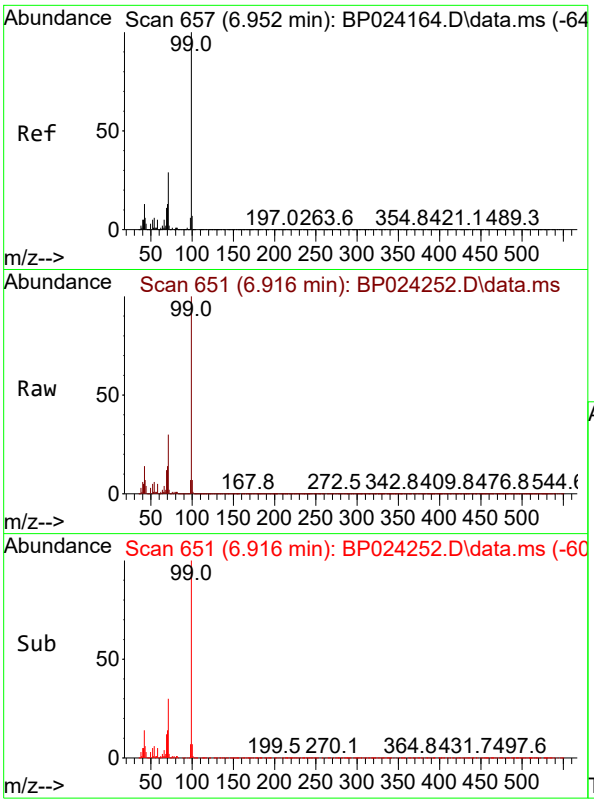


#5
2-Fluorophenol
Concen: 37.094 ng
RT: 5.358 min Scan# 386
Delta R.T. 0.000 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Tgt Ion:112 Resp: 610148

Ion	Ratio	Lower	Upper
112	100		
64	52.4	41.3	61.9
63	25.5	20.6	31.0



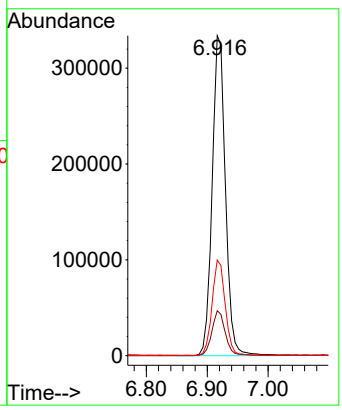


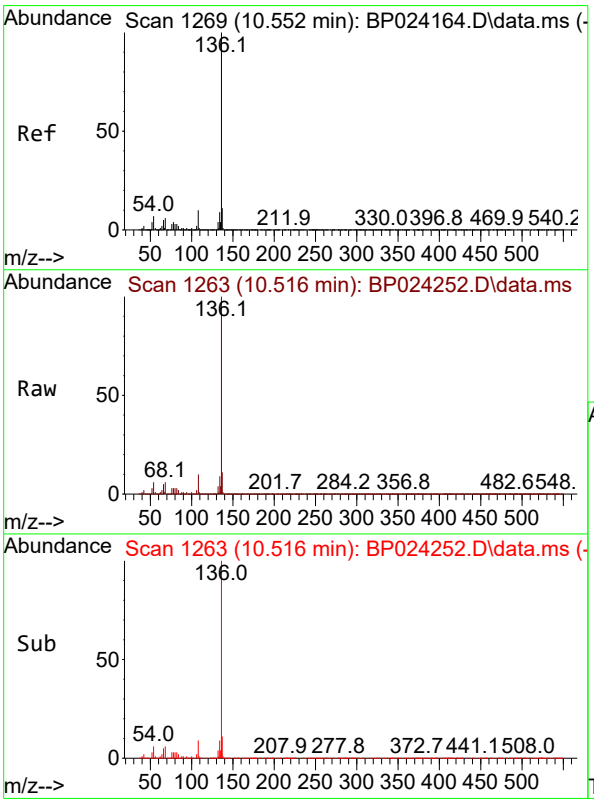
#7
Phenol-d6
Concen: 22.961 ng
RT: 6.916 min Scan# 6
Delta R.T. -0.012 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Tgt Ion: 99 Resp: 505067

Ion	Ratio	Lower	Upper
99	100		
42	14.1	10.6	16.0
71	29.9	23.3	34.9

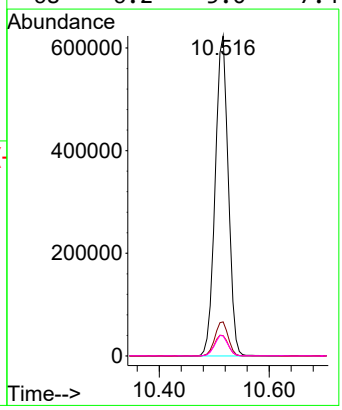


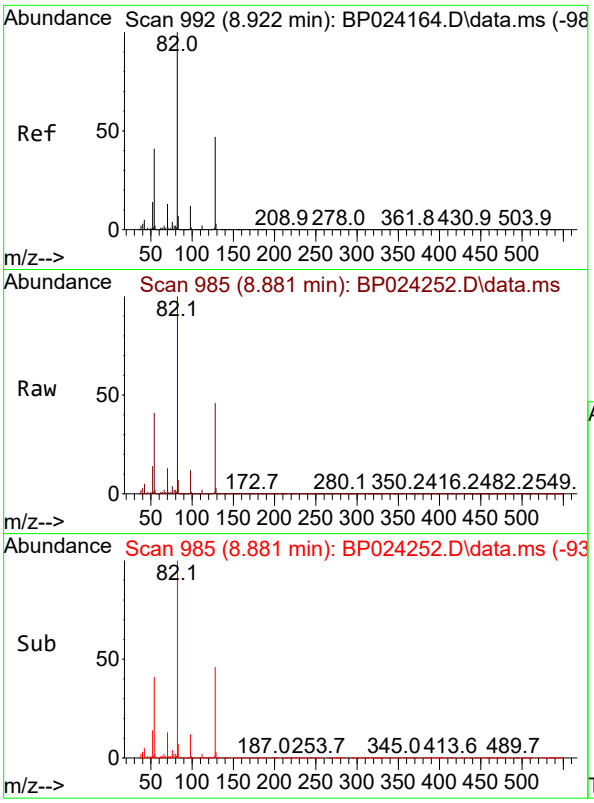


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.516 min Scan# 1263
Delta R.T. -0.012 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Tgt Ion:136 Resp: 1031585

Ion	Ratio	Lower	Upper
136	100		
137	10.7	9.0	13.4
54	6.4	5.3	7.9
68	6.2	5.0	7.4



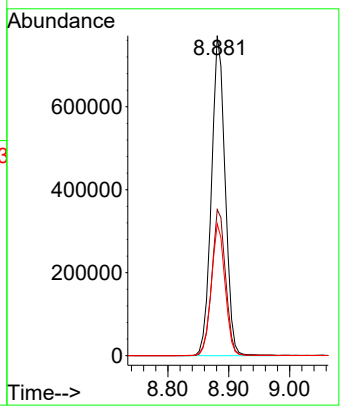


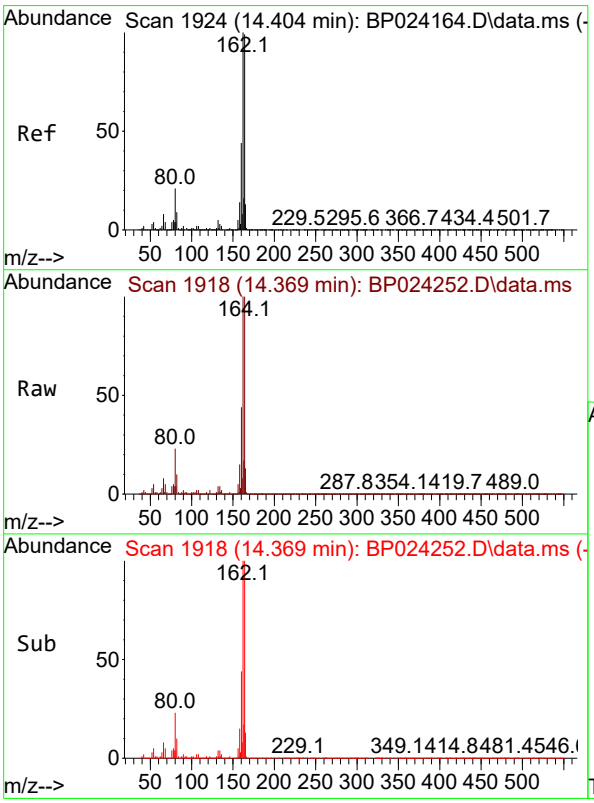
#23
Nitrobenzene-d5
Concen: 65.732 ng
RT: 8.881 min Scan# 9
Delta R.T. -0.012 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Tgt Ion: 82 Resp: 1201824

Ion	Ratio	Lower	Upper
82	100		
128	45.6	37.4	56.0
54	41.2	32.5	48.7

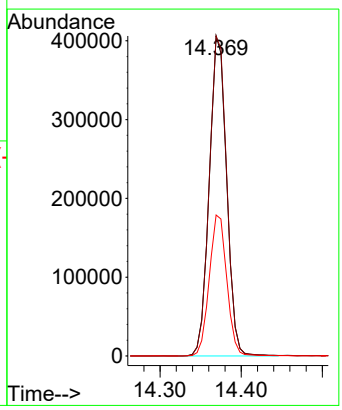


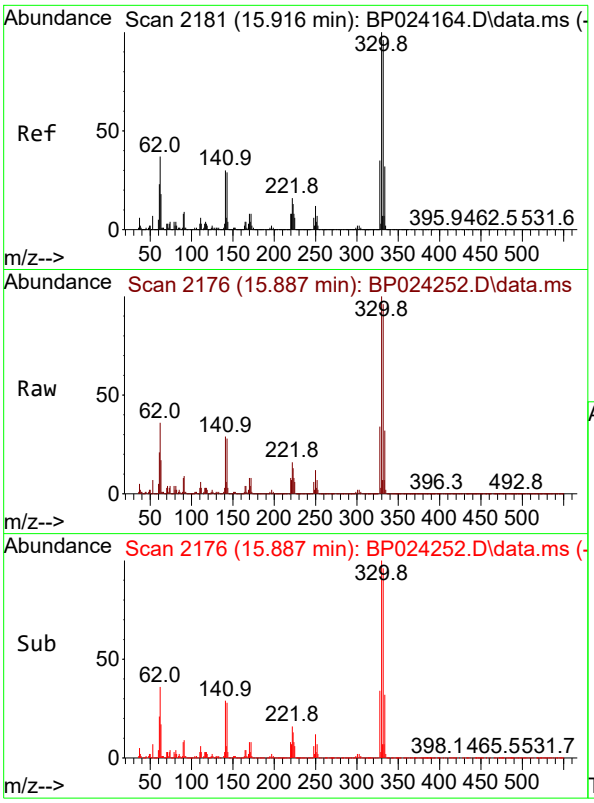


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.369 min Scan# 1918
Delta R.T. -0.023 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Tgt Ion:164 Resp: 601225

Ion	Ratio	Lower	Upper
164	100		
162	100.0	80.6	121.0
160	44.1	35.4	53.2



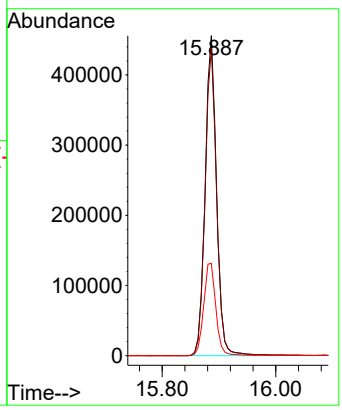


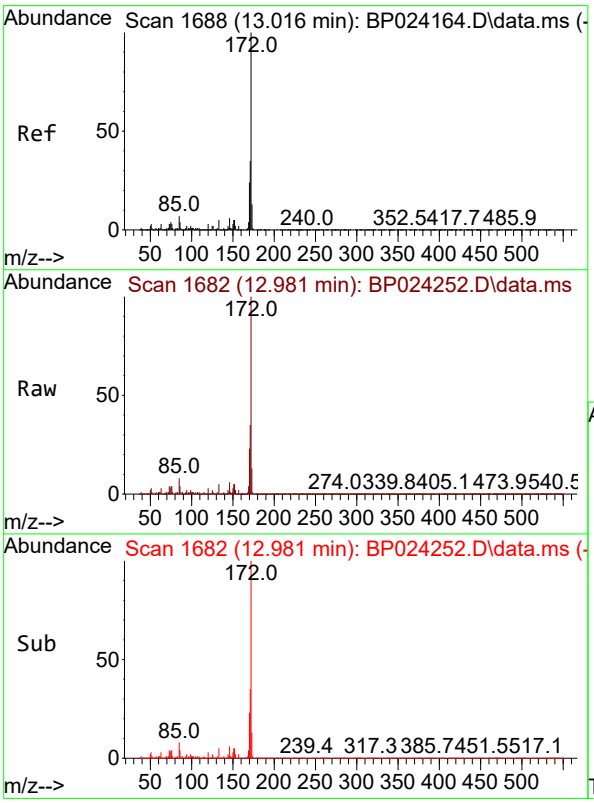
#42
2,4,6-Tribromophenol
Concen: 83.779 ng
RT: 15.887 min Scan# 2
Delta R.T. -0.012 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Tgt Ion:330 Resp: 634476

Ion	Ratio	Lower	Upper
330	100		
332	96.2	77.6	116.4
141	30.8	25.0	37.6

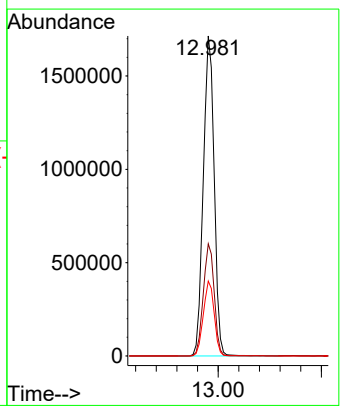


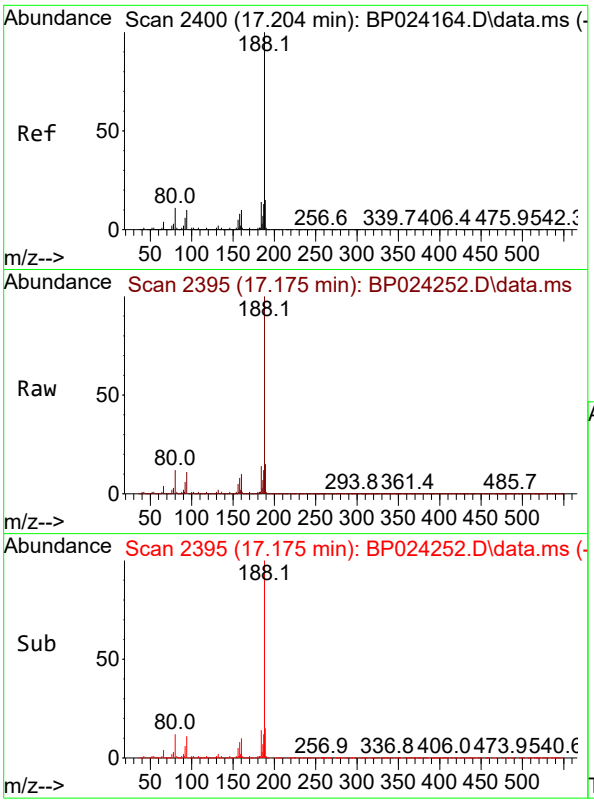


#45
2-Fluorobiphenyl
Concen: 61.449 ng
RT: 12.981 min Scan# 1682
Delta R.T. -0.017 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Tgt Ion:172 Resp: 2505509

Ion	Ratio	Lower	Upper
172	100		
171	35.0	28.3	42.5
170	23.4	19.0	28.4



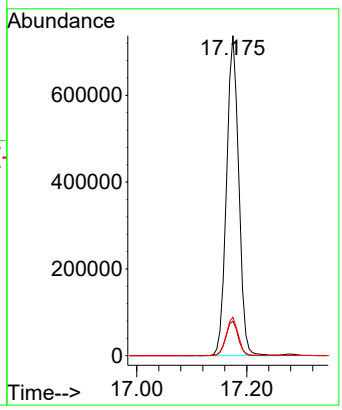


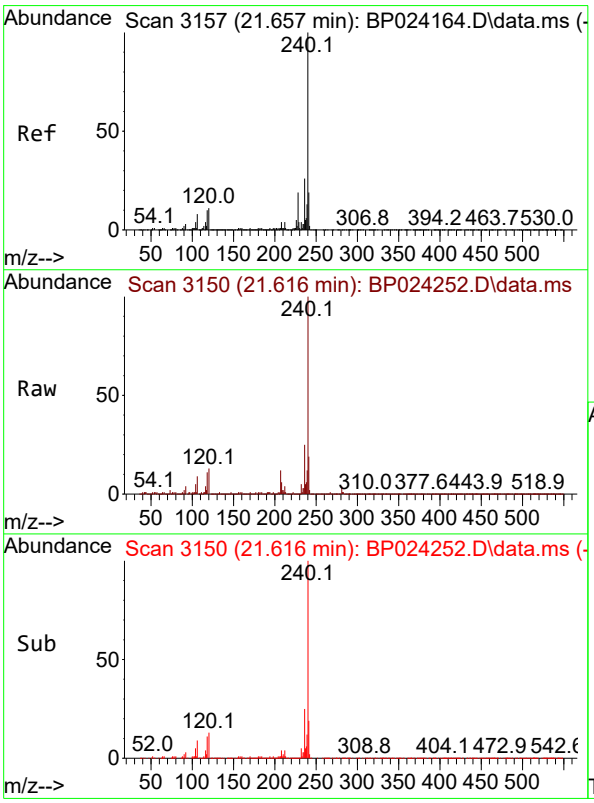
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.175 min Scan# 2
Delta R.T. -0.017 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Tgt Ion:188 Resp: 1138233

Ion	Ratio	Lower	Upper
188	100		
94	10.8	8.1	12.1
80	12.0	8.9	13.3

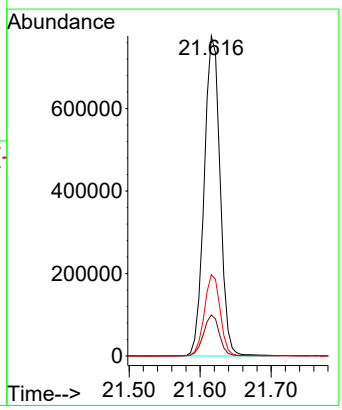


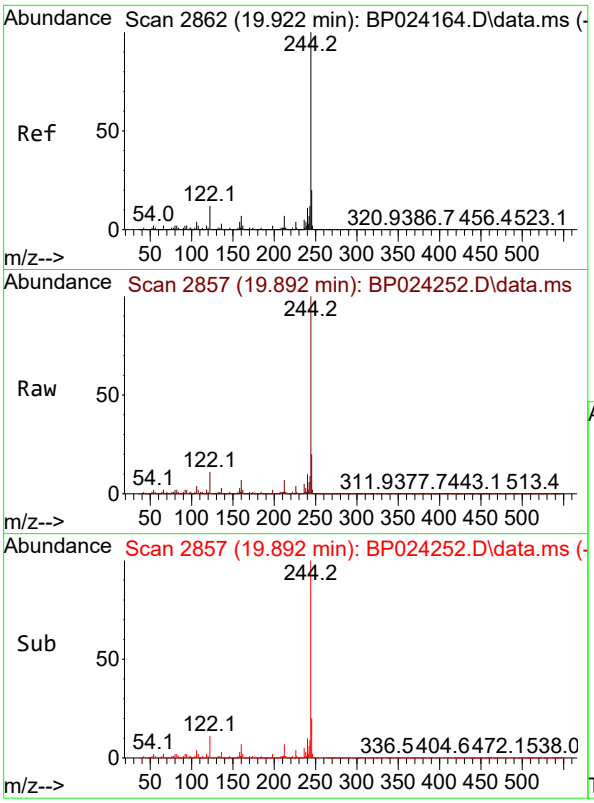


#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.616 min Scan# 3150
Delta R.T. -0.029 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Tgt Ion:240 Resp: 1210776

Ion	Ratio	Lower	Upper
240	100		
120	12.8	9.2	13.8
236	25.4	20.4	30.6



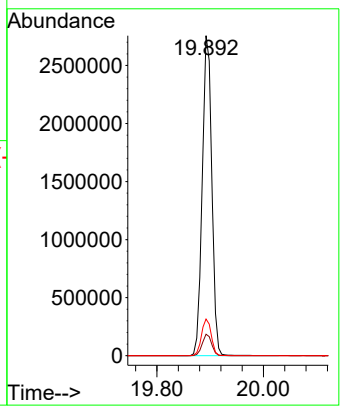


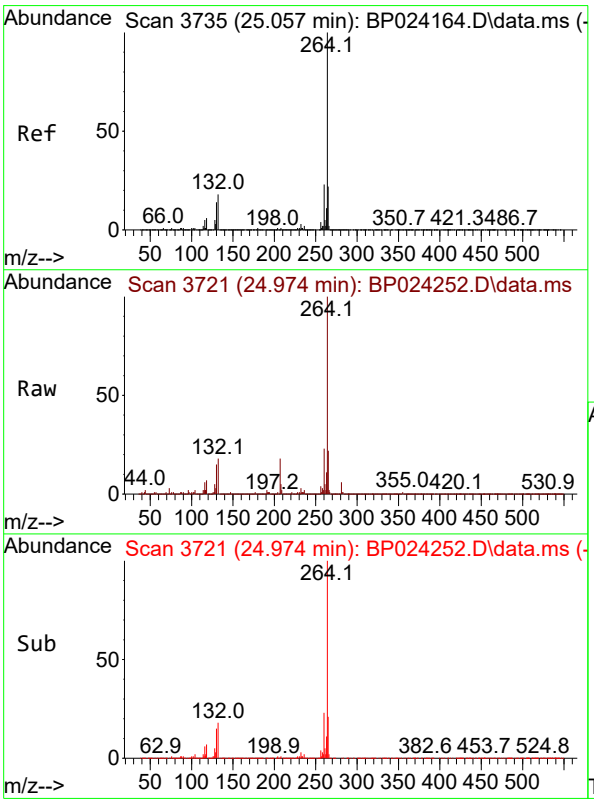
#79
Terphenyl-d14
Concen: 58.351 ng
RT: 19.892 min Scan# 2
Delta R.T. -0.023 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Tgt Ion:244 Resp: 3422578

Ion	Ratio	Lower	Upper
244	100		
212	6.7	5.7	8.5
122	11.4	9.6	14.4

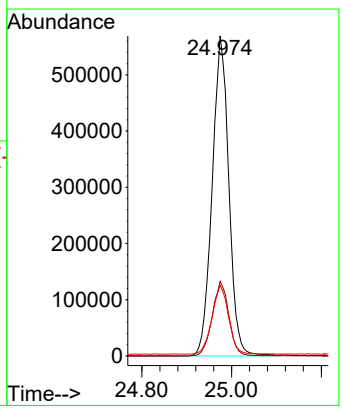




#86
Perylene-d12
Concen: 20.000 ng
RT: 24.974 min Scan# 3721
Delta R.T. -0.035 min
Lab File: BP024252.D
Acq: 10 Apr 2025 14:36

Tgt Ion:264 Resp: 1465709

Ion	Ratio	Lower	Upper
264	100		
260	23.3	18.5	27.7
265	22.0	17.7	26.5



Sample Results: **BP024252.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

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_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BP024252.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.993	149	154	162	rVB	343593	438753	4.57%	0.713%
2	4.899	302	308	316	rBV	190075	261415	2.72%	0.425%
3	5.358	379	386	398	rBV	1306613	1933965	20.12%	3.144%
4	6.916	643	651	665	rBV	835706	1347024	14.02%	2.190%
5	7.352	719	725	737	rBV	60721	146786	1.53%	0.239%
6	7.740	782	791	797	rBV	937172	1471746	15.31%	2.393%
7	8.369	892	898	905	rVB	107028	169312	1.76%	0.275%
8	8.681	945	951	955	rBV	82214	123909	1.29%	0.201%
9	8.734	955	960	967	rVB	94790	147020	1.53%	0.239%
10	8.834	970	977	980	rBV	213149	332402	3.46%	0.540%
11	8.881	980	985	996	rVB	2099929	3285998	34.19%	5.342%
12	9.352	1060	1065	1070	rVB	192155	283989	2.96%	0.462%
13	9.410	1070	1075	1079	rBV	308718	476983	4.96%	0.775%
14	9.610	1104	1109	1113	rBV	104229	159275	1.66%	0.259%
15	9.722	1122	1128	1132	rBV3	57659	104469	1.09%	0.170%
16	9.769	1132	1136	1145	rVB	73030	124656	1.30%	0.203%
17	9.922	1156	1162	1168	rVB3	195659	350330	3.65%	0.570%
18	9.987	1168	1173	1182	rVB2	62231	108108	1.12%	0.176%
19	10.293	1218	1225	1240	rBV	1444969	2455281	25.55%	3.992%
20	10.516	1254	1263	1267	rBV	1202361	2056004	21.39%	3.342%
21	10.563	1267	1271	1282	rVB2	215843	423125	4.40%	0.688%
22	10.875	1318	1324	1331	rBV2	62989	142839	1.49%	0.232%
23	11.169	1362	1374	1380	rVB5	45189	113588	1.18%	0.185%
24	12.175	1536	1545	1551	rBV	63314	104942	1.09%	0.171%
25	12.981	1675	1682	1693	rBV	4925318	7208552	75.01%	11.719%
26	14.369	1911	1918	1935	rVB	1711210	2581411	26.86%	4.197%
27	15.204	2053	2060	2064	rBV2	93884	179088	1.86%	0.291%
28	15.751	2147	2153	2161	rBV	984271	1400509	14.57%	2.277%
29	15.887	2169	2176	2195	rBV	3102110	4578713	47.65%	7.444%
30	16.098	2205	2212	2225	rBV3	76492	184840	1.92%	0.300%
31	16.463	2270	2274	2280	rBV	98771	142181	1.48%	0.231%
32	17.175	2386	2395	2408	rVB2	1830661	2889719	30.07%	4.698%
33	18.122	2549	2556	2563	rBV	1593490	2512277	26.14%	4.084%
34	19.310	2755	2758	2769	rVB7	62287	146057	1.52%	0.237%
35	19.445	2776	2781	2800	rBV	1662091	3337861	34.73%	5.426%
36	19.581	2800	2804	2812	rVB	1204780	1426892	14.85%	2.320%

Sample Results: **BP024252.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

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_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

37	19.892	2852	2857	2868	rBV	7326736	9610036	100.00%	15.623%
38	21.292	3090	3095	3107	rBV	747952	1684709	17.53%	2.739%
39	21.616	3144	3150	3159	rBV2	2111306	3275539	34.08%	5.325%
40	24.974	3713	3721	3733	rVB	1506023	3791930	39.46%	6.165%

Sum of corrected areas: 61512233

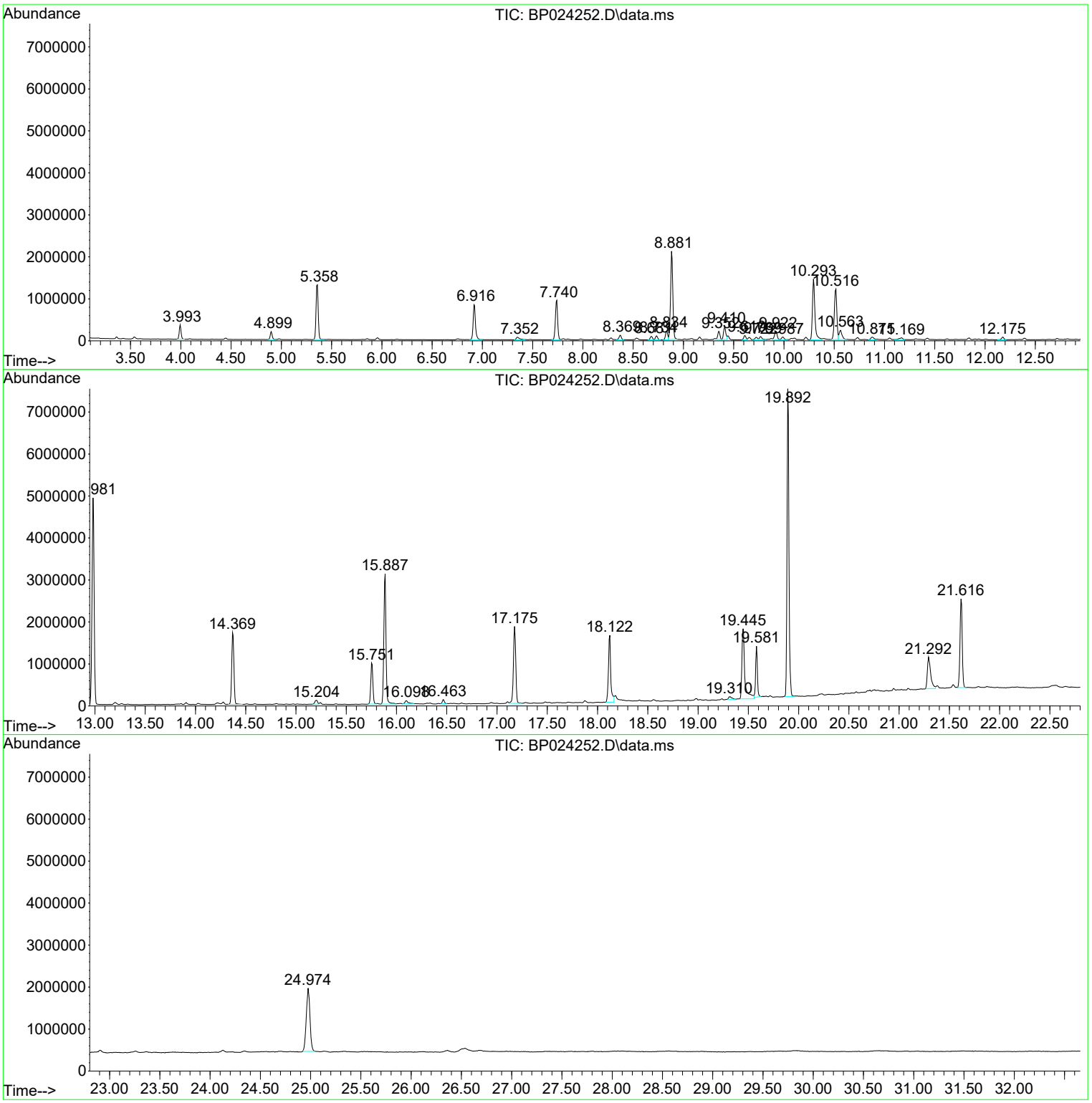
Sample Results: **BP024252.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

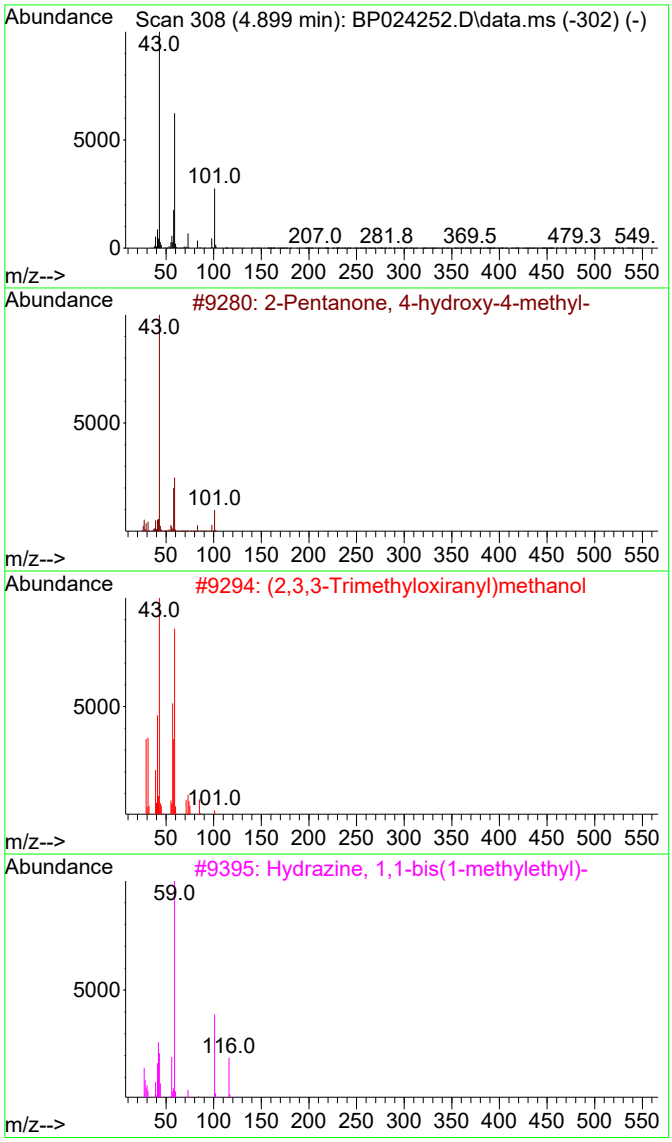
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

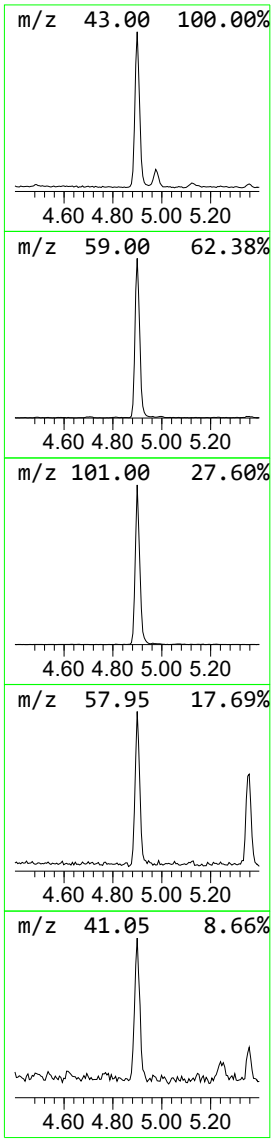
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.899	3.55 ng	261415	1,4-Dichlorobenzene-d4	7.740

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	(2,3,3-Trimethyloxiranyl)methanol	116	C6H12O2	1000306-64-7	33
3	Hydrazine, 1,1-bis(1-methylethyl)-	116	C6H16N2	000921-14-2	28
4	Succinic acid, heptyl 2-methoxye...	274	C14H26O5	1000325-80-7	28
5	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	25





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

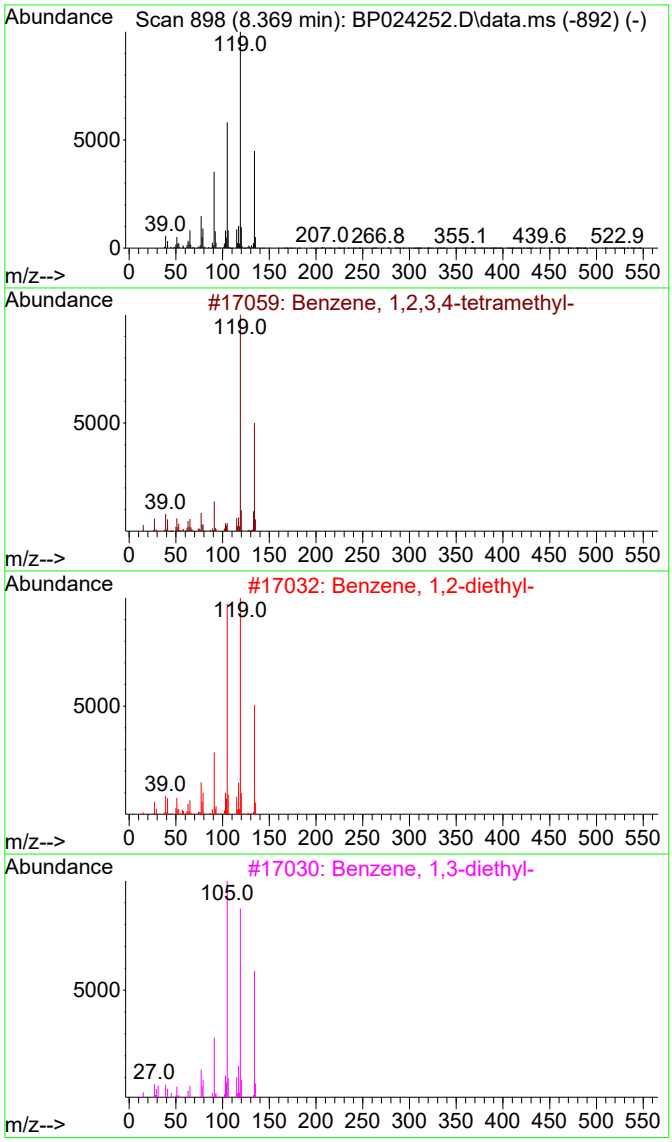
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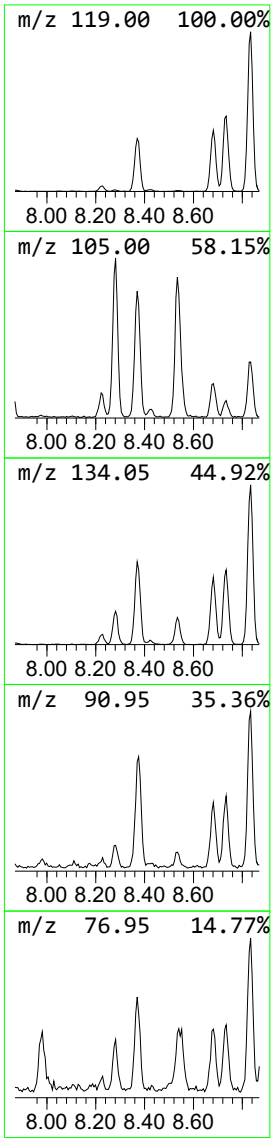
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Peak Number 3 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.369	2.30 ng	169312	1,4-Dichlorobenzene-d4	7.740

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
2	Benzene, 1,2-diethyl-	134	C10H14	000135-01-3	93
3	Benzene, 1,3-diethyl-	134	C10H14	000141-93-5	93
4	o-Cymene	134	C10H14	000527-84-4	93
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	91





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

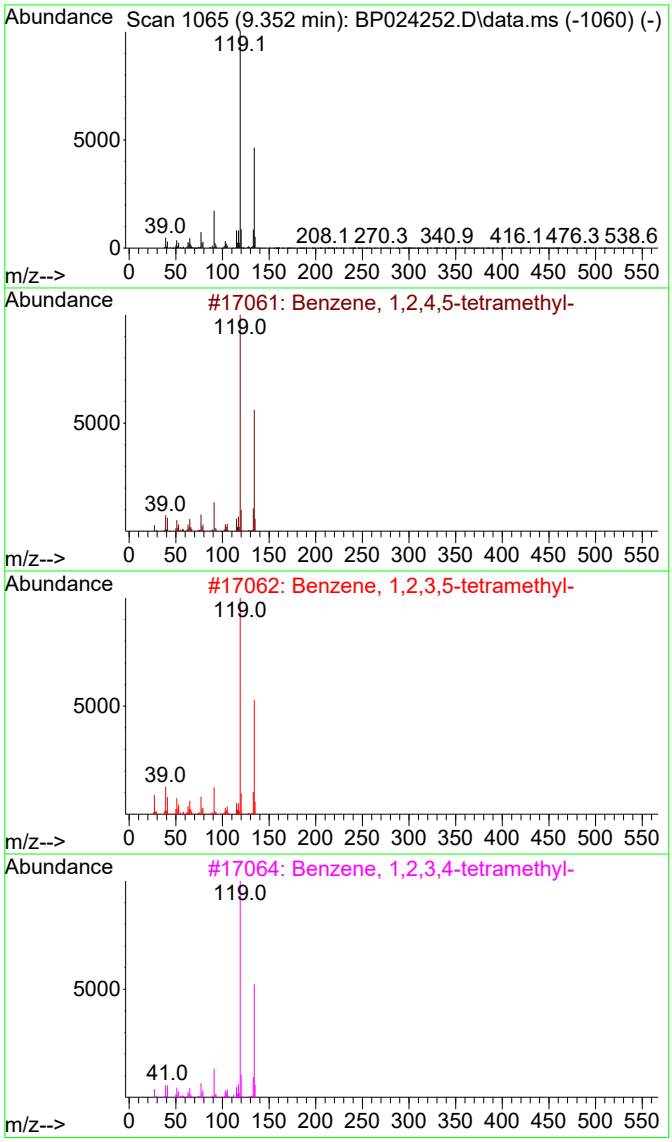
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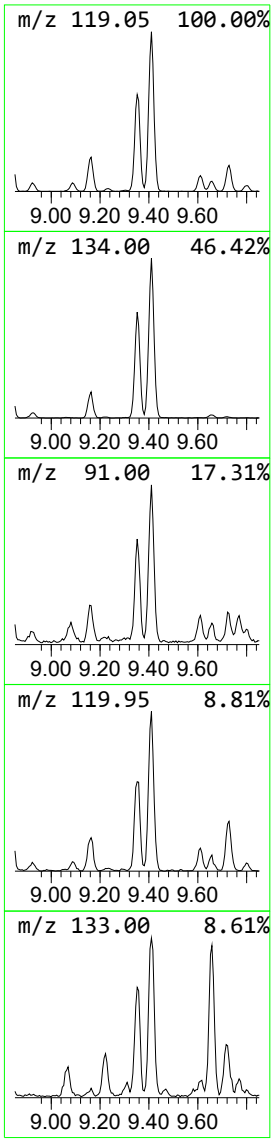
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Peak Number 4 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.352	2.76 ng	283989	Naphthalene-d8	10.516

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
4	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	91
5	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	91





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

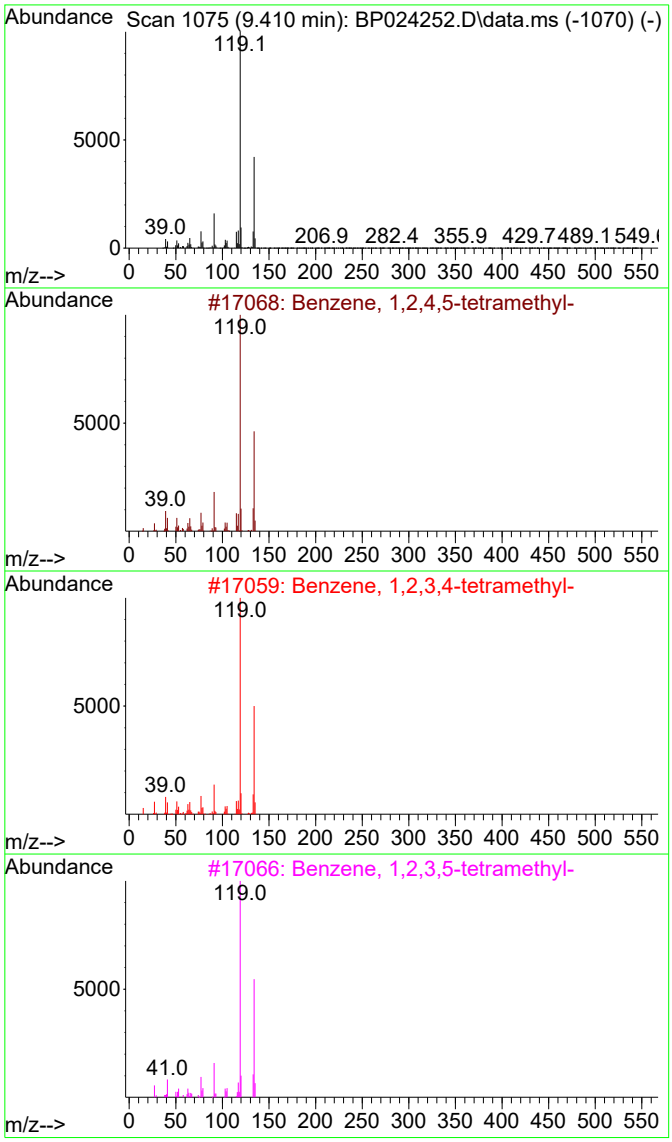
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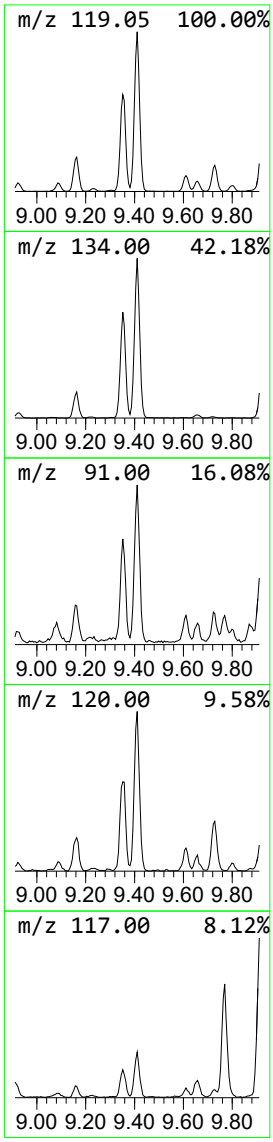
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.410	4.64 ng	476983	Naphthalene-d8	10.516

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	96
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	95
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	94





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

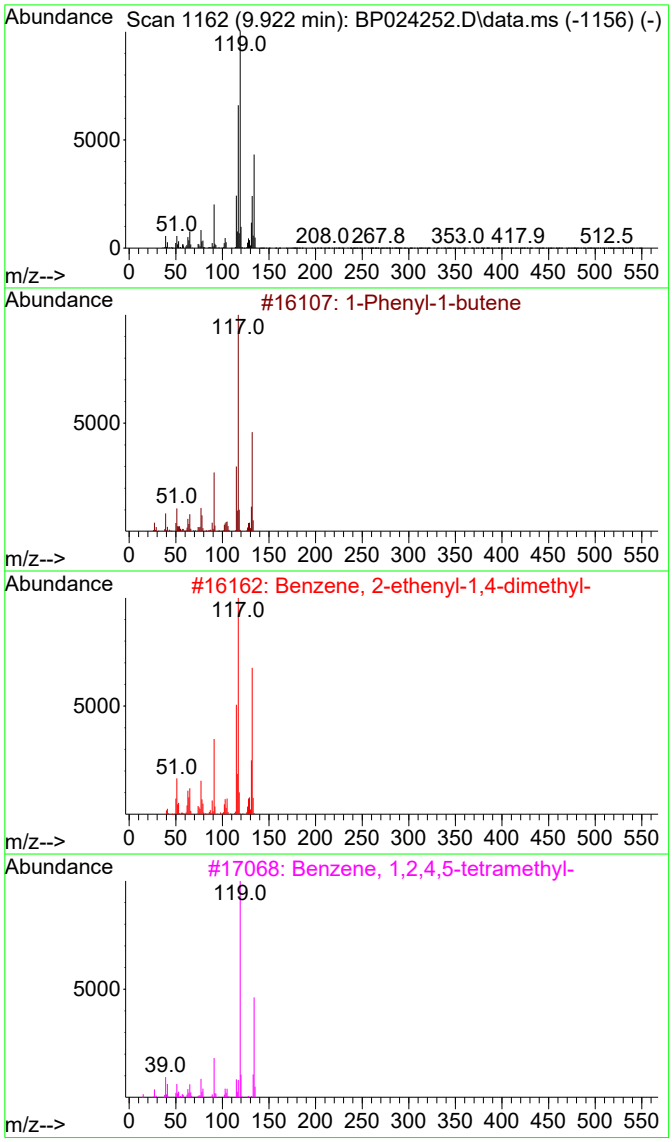
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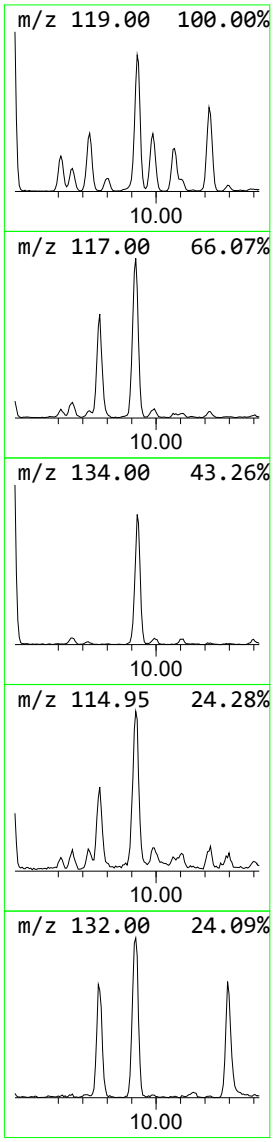
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Peak Number 6 1-Phenyl-1-butene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.922	3.41 ng	350330	Naphthalene-d8	10.516

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Phenyl-1-butene	132	C10H12	000824-90-8	74
2	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	70
3	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	60
4	Ethanone, 1-(4-methylphenyl)-	134	C9H10O	000122-00-9	55
5	o-Cymene	134	C10H14	000527-84-4	53





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

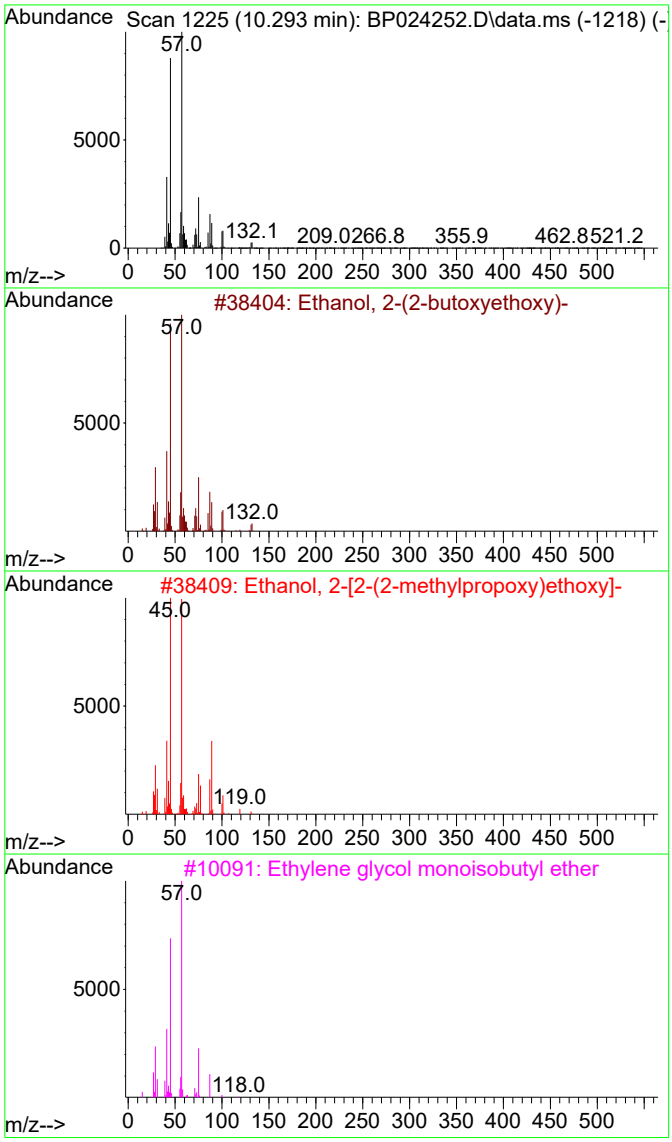
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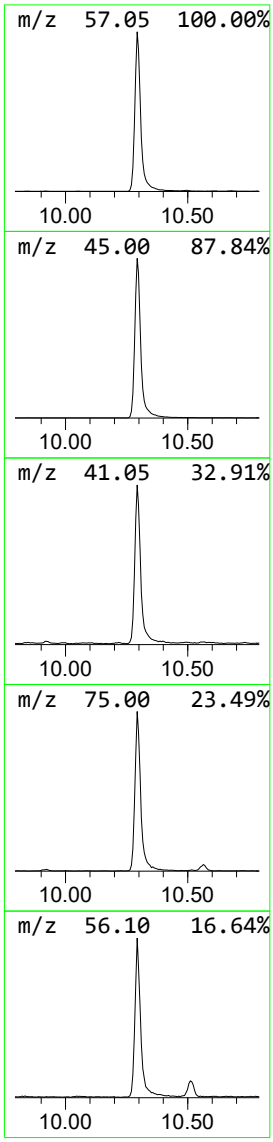
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 7 Ethanol, 2-(2-butoxyethoxy)- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.293	23.88 ng	2455280	Naphthalene-d8	10.516

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(2-butoxyethoxy)-	162	C8H18O3	000112-34-5	91
2	Ethanol, 2-[2-(2-methylpropoxy)e...	162	C8H18O3	018912-80-6	64
3	Ethylene glycol monoisobutyl ether	118	C6H14O2	004439-24-1	59
4	Ethanol, 1-(2-butoxyethoxy)-	162	C8H18O3	054446-78-5	50
5	3,3-Dimethylbutane-2-ol	102	C6H14O	000464-07-3	50





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

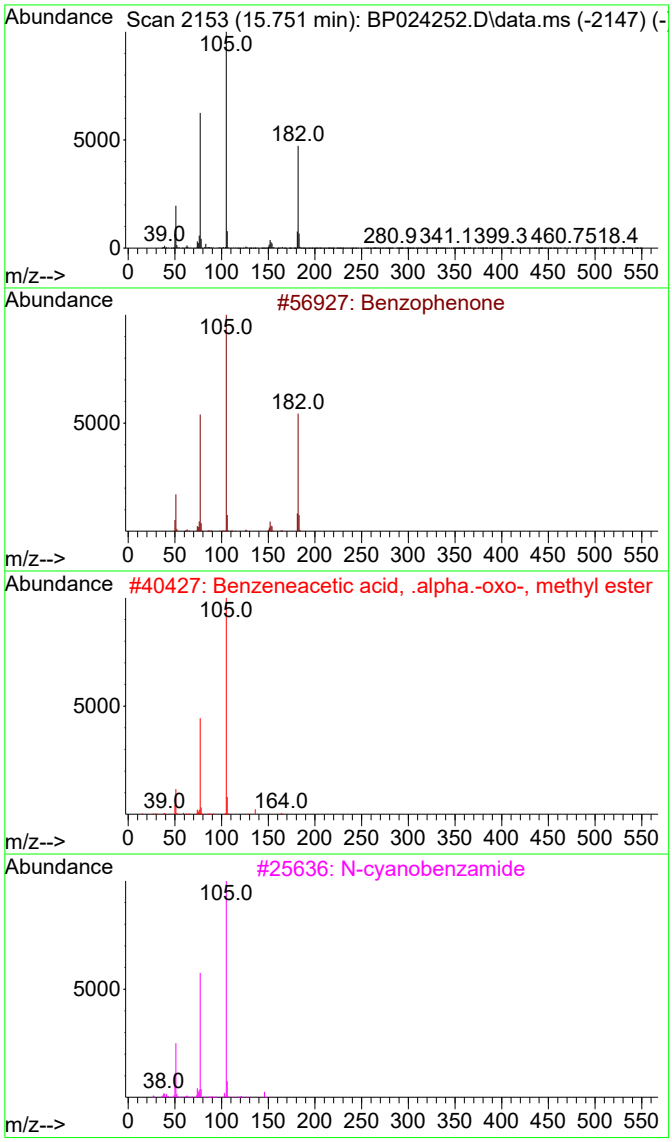
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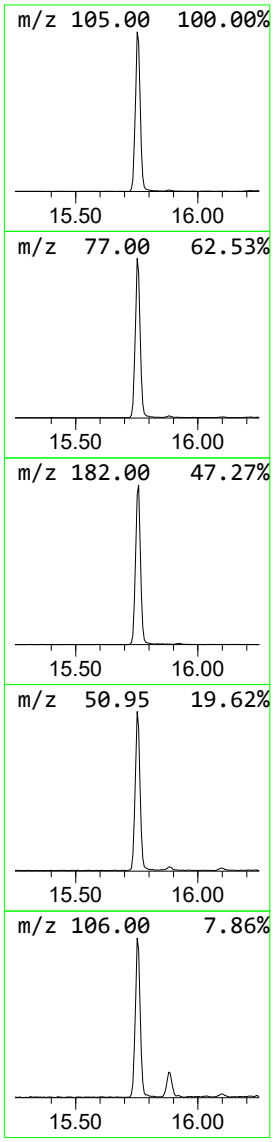
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Peak Number 8 Benzophenone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.751	10.85 ng	1400510	Acenaphthene-d10	14.369

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	96
2	Benzeneacetic acid, .alpha.-oxo-...	164	C9H8O3	015206-55-0	47
3	N-cyanobenzamide	146	C8H6N2O	015150-25-1	47
4	1,2-Propanedione, 1-phenyl-	148	C9H8O2	000579-07-7	47
5	Ethanone, 2-hydroxy-1-phenyl-	136	C8H8O2	000582-24-1	47





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

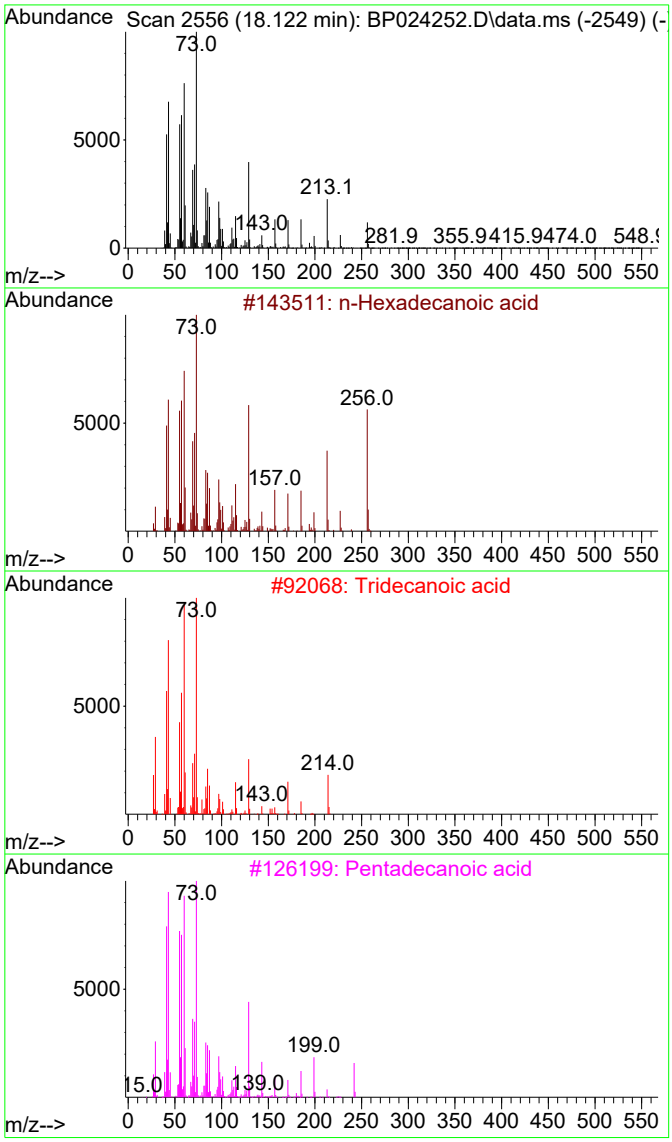
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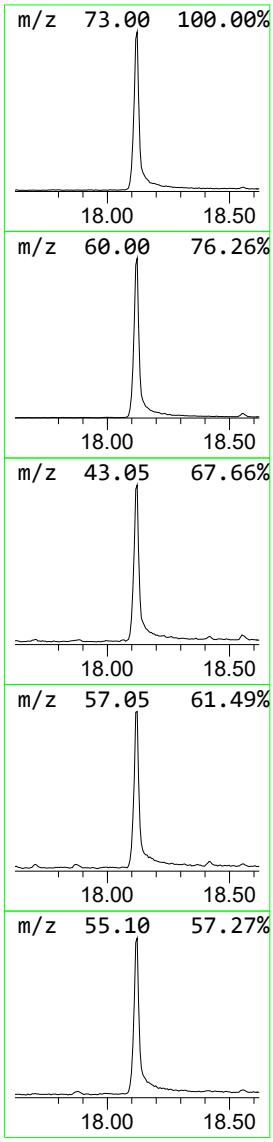
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Peak Number 9 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.122	17.39 ng	2512280	Phenanthrene-d10	17.175

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	87
4	n-Decanoic acid	172	C10H20O2	000334-48-5	76
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	72





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

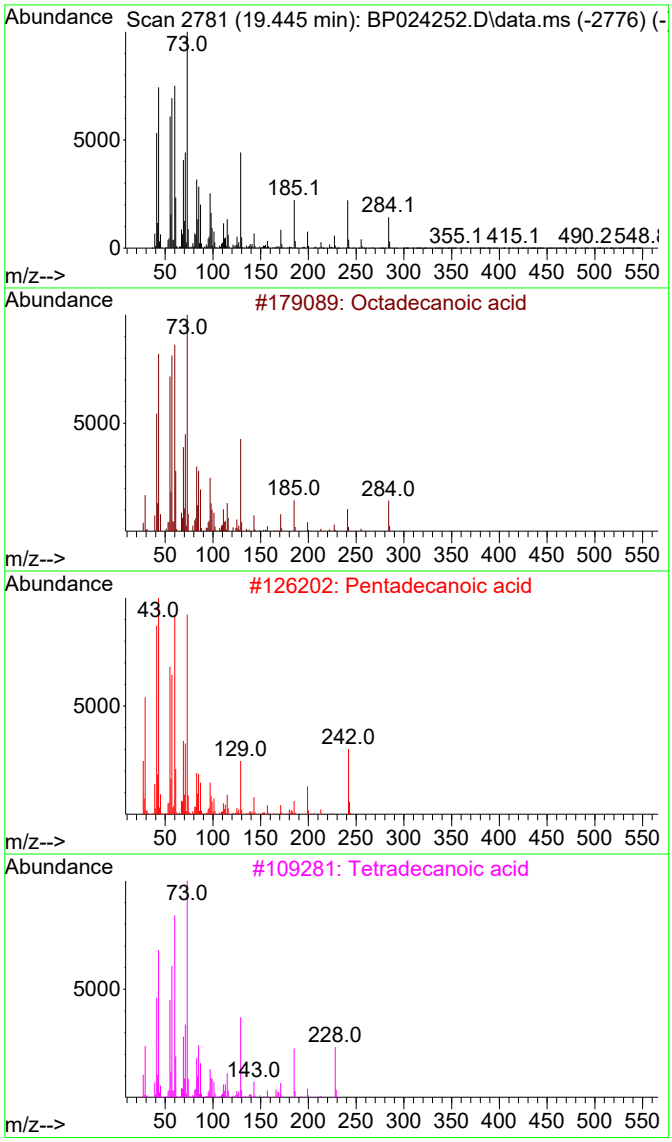
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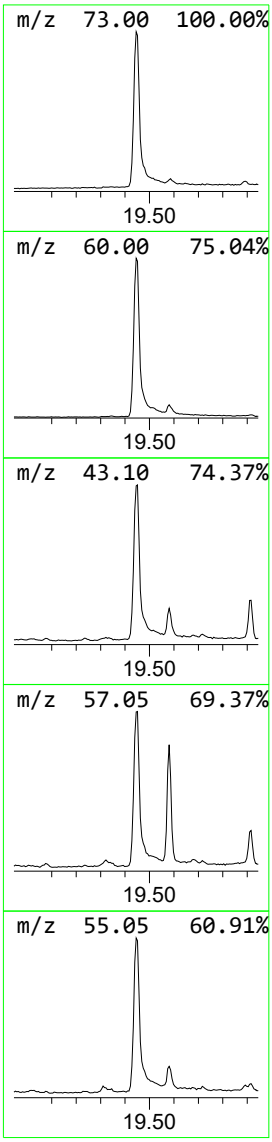
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Peak Number 10 Octadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.445	20.38 ng	3337860	Chrysene-d12	21.616

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	91
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	87
4	Octadecanoic acid, 2-(2-hydroxye...	372	C22H44O4	000106-11-6	80
5	Tridecanoic acid	214	C13H26O2	000638-53-9	68





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

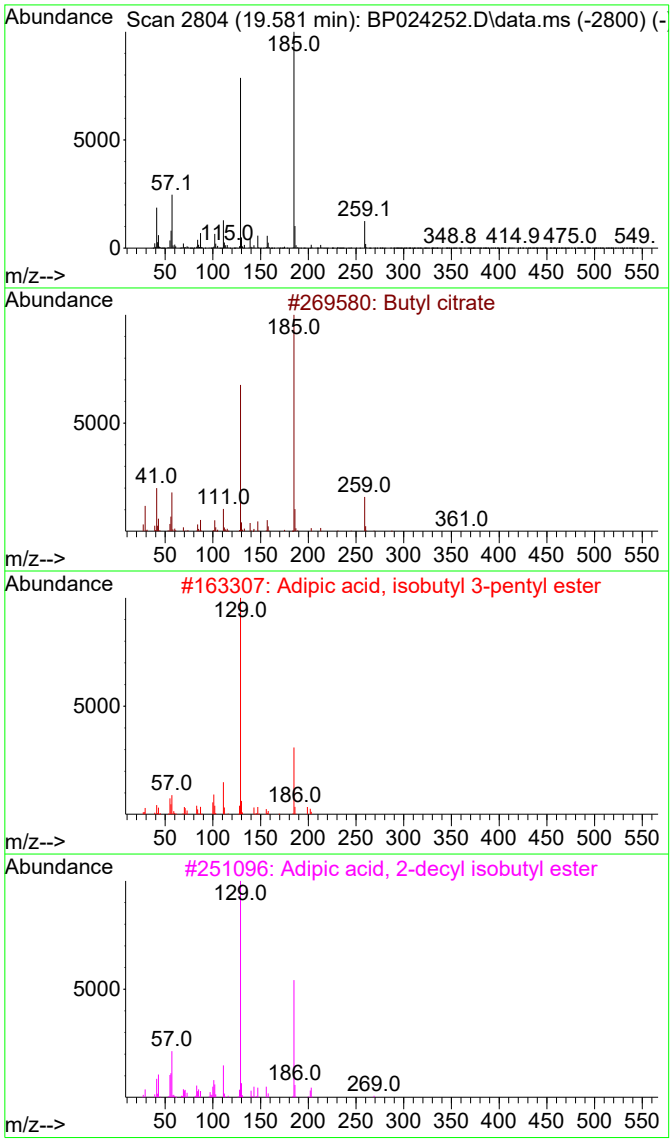
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TIC Integration Parameters: LSCINT.P

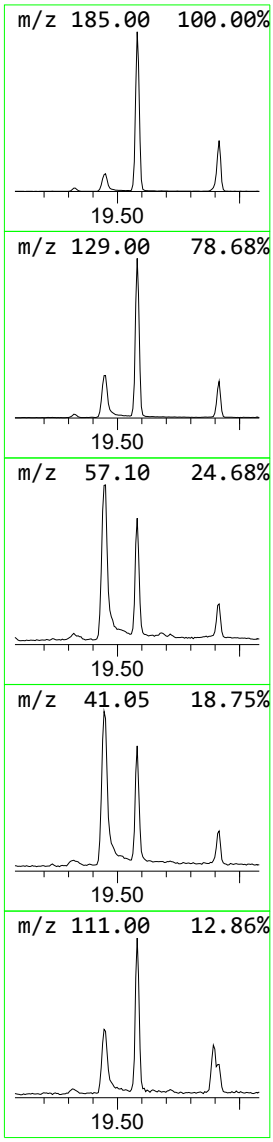
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Peak Number 11 Butyl citrate Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.581	8.71 ng	1426890	Chrysene-d12	21.616

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butyl citrate	360	C18H32O7	000077-94-1	91
2	Adipic acid, isobutyl 3-pentyl e...	272	C15H28O4	1000324-60-4	78
3	Adipic acid, 2-decyl isobutyl ester	342	C20H38O4	1000353-59-6	64
4	Adipic acid, butyl 3-pentyl ester	272	C15H28O4	1000324-60-5	64
5	Adipic acid, isobutyl 2-octyl ester	314	C18H34O4	1000324-44-5	64





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

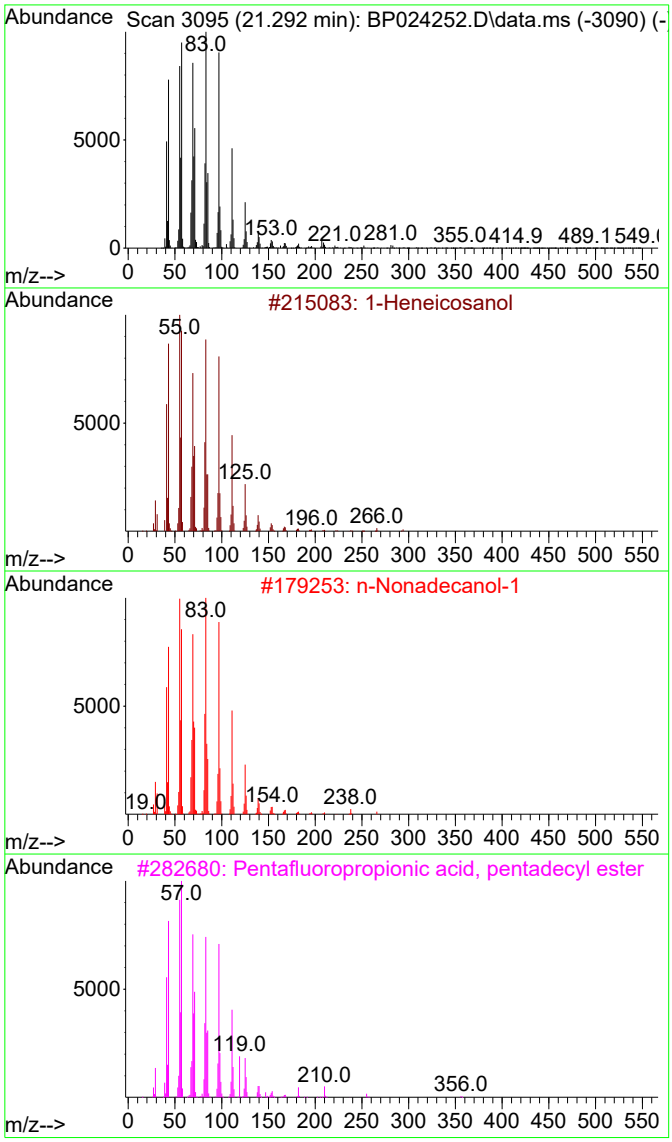
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TIC Integration Parameters: LSCINT.P

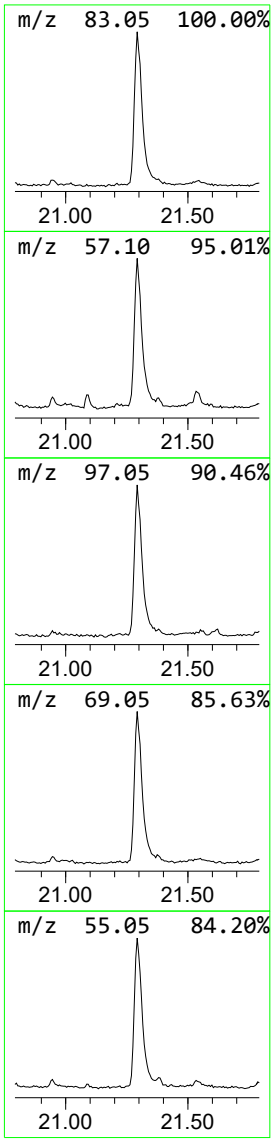
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Peak Number 12 1-Heneicosanol Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.292	10.29 ng	1684710	Chrysene-d12	21.616

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Heneicosanol	312	C21H44O	015594-90-8	95
2	n-Nonadecanol-1	284	C19H40O	001454-84-8	94
3	Pentafluoropropionic acid, penta...	374	C18H31F5O2	959092-08-1	94
4	Behenic alcohol	326	C22H46O	000661-19-8	94
5	Pentacos-1-ene	350	C25H50	016980-85-1	94





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024252.D
Acq On : 10 Apr 2025 14:36
Operator : RC/JU
Sample : Q1746-05
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-158-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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-...	4.899	3.5	ng	261415	1	7.740	1471750	20.0
Benzene, 1,2,3,...	8.369	2.3	ng	169312	1	7.740	1471750	20.0
Benzene, 1,2,4,...	9.352	2.8	ng	283989	2	10.516	2056000	20.0
Benzene, 1,2,3,...	9.410	4.6	ng	476983	2	10.516	2056000	20.0
1-Phenyl-1-butene	9.922	3.4	ng	350330	2	10.516	2056000	20.0
Ethanol, 2-(2-b...	10.293	23.9	ng	2455280	2	10.516	2056000	20.0
Benzophenone	15.751	10.9	ng	1400510	3	14.369	2581410	20.0
n-Hexadecanoic ...	18.122	17.4	ng	2512280	4	17.175	2889720	20.0
Octadecanoic acid	19.445	20.4	ng	3337860	5	21.616	3275540	20.0
Butyl citrate	19.581	8.7	ng	1426890	5	21.616	3275540	20.0
1-Heneicosanol	21.292	10.3	ng	1684710	5	21.616	3275540	20.0

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-06	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024253.D	1	04/08/25 11:55	04/10/25 15:17	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.00	U	4.00	10.3	ug/L
108-95-2	Phenol	0.94	U	0.94	5.20	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.84	U	0.84	5.20	ug/L
95-57-8	2-Chlorophenol	0.60	U	0.60	5.20	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.20	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.30	U	1.30	5.20	ug/L
98-86-2	Acetophenone	0.76	U	0.76	5.20	ug/L
65794-96-9	3+4-Methylphenols	1.10	U	1.10	10.3	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.50	U	1.50	2.60	ug/L
67-72-1	Hexachloroethane	0.67	U	0.67	5.20	ug/L
98-95-3	Nitrobenzene	0.78	U	0.78	5.20	ug/L
78-59-1	Isophorone	0.77	U	0.77	5.20	ug/L
88-75-5	2-Nitrophenol	1.80	U	1.80	5.20	ug/L
105-67-9	2,4-Dimethylphenol	1.90	U	1.90	5.20	ug/L
111-91-1	bis(2-Chloroethoxy)methane	0.70	U	0.70	5.20	ug/L
120-83-2	2,4-Dichlorophenol	0.54	U	0.54	5.20	ug/L
91-20-3	Naphthalene	0.52	U	0.52	5.20	ug/L
106-47-8	4-Chloroaniline	0.87	UQ	0.87	5.20	ug/L
87-68-3	Hexachlorobutadiene	0.56	U	0.56	5.20	ug/L
105-60-2	Caprolactam	1.20	U	1.20	10.3	ug/L
59-50-7	4-Chloro-3-methylphenol	0.61	U	0.61	5.20	ug/L
91-57-6	2-Methylnaphthalene	0.58	U	0.58	5.20	ug/L
77-47-4	Hexachlorocyclopentadiene	3.70	UQ	3.70	10.3	ug/L
88-06-2	2,4,6-Trichlorophenol	0.53	U	0.53	5.20	ug/L
95-95-4	2,4,5-Trichlorophenol	0.64	U	0.64	5.20	ug/L
92-52-4	1,1-Biphenyl	0.55	U	0.55	5.20	ug/L
91-58-7	2-Chloronaphthalene	0.63	U	0.63	5.20	ug/L
88-74-4	2-Nitroaniline	1.30	U	1.30	5.20	ug/L
131-11-3	Dimethylphthalate	0.63	U	0.63	5.20	ug/L

Raw Data: **BP024253.D**

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-06	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024253.D	1	04/08/25 11:55	04/10/25 15:17	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	0.77	U	0.77	5.20	ug/L
606-20-2	2,6-Dinitrotoluene	0.95	U	0.95	5.20	ug/L
99-09-2	3-Nitroaniline	1.10	UQ	1.10	5.20	ug/L
83-32-9	Acenaphthene	0.57	U	0.57	5.20	ug/L
51-28-5	2,4-Dinitrophenol	6.20	U	6.20	10.3	ug/L
100-02-7	4-Nitrophenol	2.50	U	2.50	10.3	ug/L
132-64-9	Dibenzofuran	0.63	U	0.63	5.20	ug/L
121-14-2	2,4-Dinitrotoluene	1.30	U	1.30	5.20	ug/L
84-66-2	Diethylphthalate	0.71	U	0.71	5.20	ug/L
7005-72-3	4-Chlorophenyl-phenylether	0.70	U	0.70	5.20	ug/L
86-73-7	Fluorene	0.65	U	0.65	5.20	ug/L
100-01-6	4-Nitroaniline	1.50	U	1.50	5.20	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	3.00	U	3.00	10.3	ug/L
86-30-6	n-Nitrosodiphenylamine	0.60	U	0.60	5.20	ug/L
101-55-3	4-Bromophenyl-phenylether	0.41	U	0.41	5.20	ug/L
118-74-1	Hexachlorobenzene	0.54	U	0.54	5.20	ug/L
1912-24-9	Atrazine	1.00	UQ	1.00	5.20	ug/L
87-86-5	Pentachlorophenol	1.60	U	1.60	10.3	ug/L
85-01-8	Phenanthrene	0.52	U	0.52	5.20	ug/L
120-12-7	Anthracene	0.63	U	0.63	5.20	ug/L
86-74-8	Carbazole	0.74	U	0.74	5.20	ug/L
84-74-2	Di-n-butylphthalate	4.10	J	1.30	5.20	ug/L
206-44-0	Fluoranthene	0.85	U	0.85	5.20	ug/L
129-00-0	Pyrene	0.52	U	0.52	5.20	ug/L
85-68-7	Butylbenzylphthalate	2.00	U	2.00	5.20	ug/L
91-94-1	3,3-Dichlorobenzidine	0.96	UQ	0.96	10.3	ug/L
56-55-3	Benzo(a)anthracene	0.46	U	0.46	5.20	ug/L
218-01-9	Chrysene	0.45	U	0.45	5.20	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.60	U	1.60	5.20	ug/L
117-84-0	Di-n-octyl phthalate	2.40	U	2.40	10.3	ug/L
205-99-2	Benzo(b)fluoranthene	0.51	U	0.51	5.20	ug/L

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-06	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024253.D	1	04/08/25 11:55	04/10/25 15:17	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	0.49	U	0.49	5.20	ug/L
50-32-8	Benzo(a)pyrene	0.57	U	0.57	5.20	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.61	U	0.61	5.20	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.69	U	0.69	5.20	ug/L
191-24-2	Benzo(g,h,i)perylene	0.71	U	0.71	5.20	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	0.54	U	0.54	5.20	ug/L
123-91-1	1,4-Dioxane	1.00	U	1.00	5.20	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.74	U	0.74	5.20	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	68.5		15 (10) - 110 (139)	46%	SPK: 150
13127-88-3	Phenol-d6	40.8		15 (10) - 110 (134)	27%	SPK: 150
4165-60-0	Nitrobenzene-d5	99.7		30 (49) - 130 (133)	100%	SPK: 100
321-60-8	2-Fluorobiphenyl	94.1		30 (52) - 130 (132)	94%	SPK: 100
118-79-6	2,4,6-Tribromophenol	172	*	15 (44) - 110 (137)	114%	SPK: 150
1718-51-0	Terphenyl-d14	96.3		30 (48) - 130 (125)	96%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	263000	7.74			
1146-65-2	Naphthalene-d8	1040000	10.516			
15067-26-2	Acenaphthene-d10	640000	14.375			
1517-22-2	Phenanthrene-d10	1290000	17.175			
1719-03-5	Chrysene-d12	1390000	21.622			
1520-96-3	Perylene-d12	1580000	24.992			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.90	AB		4.90	ug/L
000149-57-5	Hexanoic acid, 2-ethyl-	31.1	J		9.07	ug/L
65-85-0	Benzoic acid	5.00	J		9.78	ug/L
000112-34-5	Ethanol, 2-(2-butoxyethoxy)-	8.90	J		10.3	ug/L
000143-22-6	Ethanol, 2-[2-(2-butoxyethoxy)etho	2.30	J		13.9	ug/L
1000140-77-5	Pentanoic acid, 2,2,4-trimethyl-3-	5.70	J		15.2	ug/L
000119-61-9	Benzophenone	3.60	J		15.8	ug/L

Raw Data: **BP024253.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-GW01	SDG No.:	Q1746
Lab Sample ID:	Q1746-06	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024253.D	1	04/08/25 11:55	04/10/25 15:17	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
000084-69-5	1,2-Benzenedicarboxylic acid, bis(	2.50	J		17.5	ug/L
001962-75-0	1,4-Dibutyl benzene-1,4-dicarboxyl	4.60	J		17.8	ug/L
000057-10-3	n-Hexadecanoic acid	31.2	J		18.1	ug/L
000077-94-1	Butyl citrate	5.80	J		19.3	ug/L
000057-11-4	Octadecanoic acid	51.5	J		19.5	ug/L
1000324-60-5	Adipic acid, butyl 3-pentyl ester	69.5	J		19.6	ug/L
018835-33-1	1-Hexacosene	3.20	J		21.3	ug/L

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: **BP024253.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

Quant Time: Apr 10 15:48:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.740	152	262973	20.000	ng	0.00
21) Naphthalene-d8	10.516	136	1043722	20.000	ng	-0.01
39) Acenaphthene-d10	14.375	164	640452	20.000	ng	-0.02
64) Phenanthrene-d10	17.175	188	1285267	20.000	ng	-0.02
76) Chrysene-d12	21.622	240	1386094	20.000	ng	-0.02
86) Perylene-d12	24.992	264	1576982	20.000	ng	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.358	112	1128096	68.477	ng	0.00
7) Phenol-d6	6.922	99	898829	40.800	ng	0.00
23) Nitrobenzene-d5	8.887	82	1844811	99.726	ng	0.00
42) 2,4,6-Tribromophenol	15.893	330	1385077	171.690	ng	0.00
45) 2-Fluorobiphenyl	12.987	172	4085839	94.069	ng	-0.01
79) Terphenyl-d14	19.904	244	6465473	96.286	ng	-0.01
Target Compounds						Qvalue
32) Benzoic acid	9.781	122	52954m	4.844	ng	
74) Di-n-butylphthalate	18.192	149	313010	3.998	ng	99

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

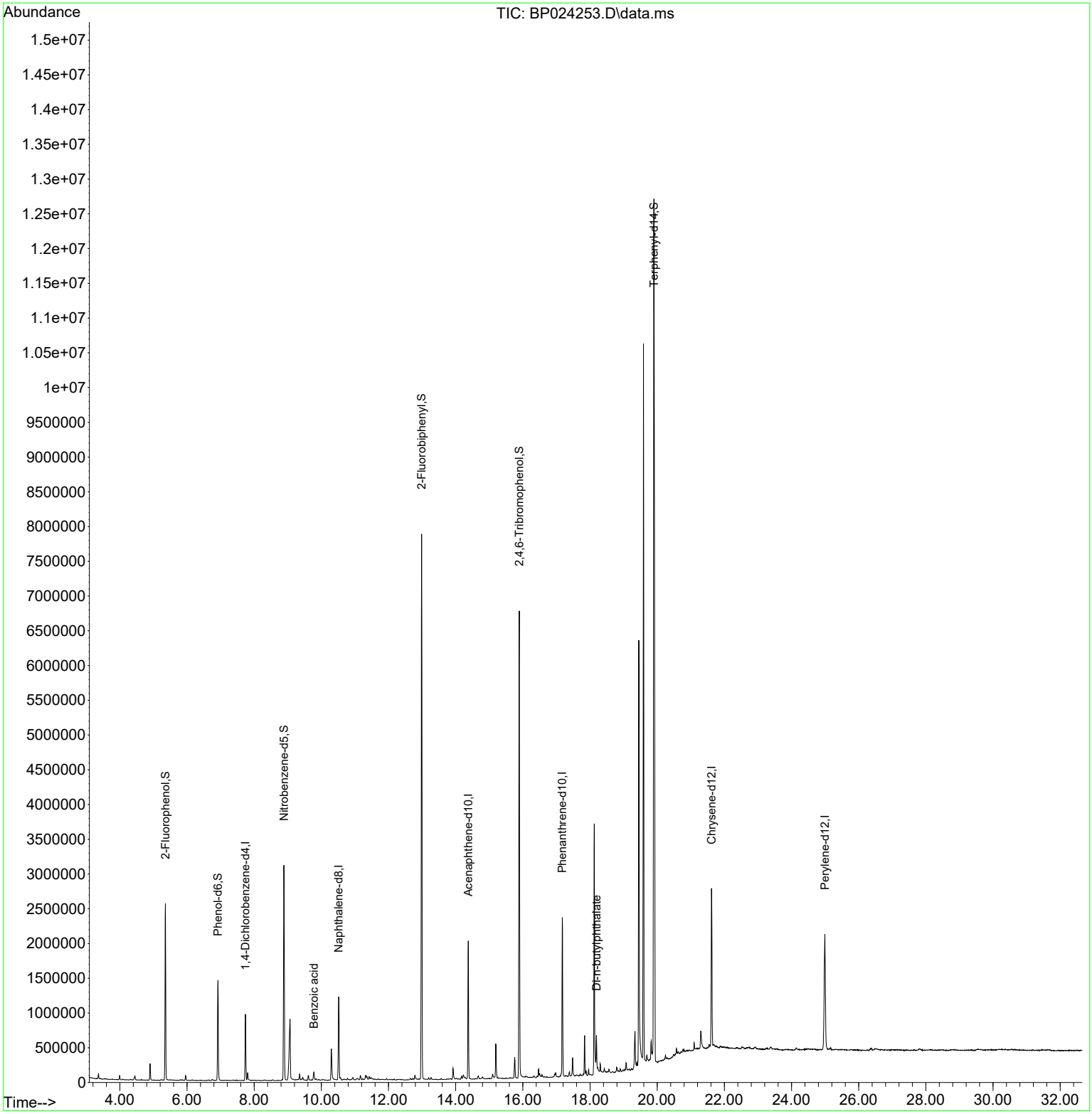
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Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

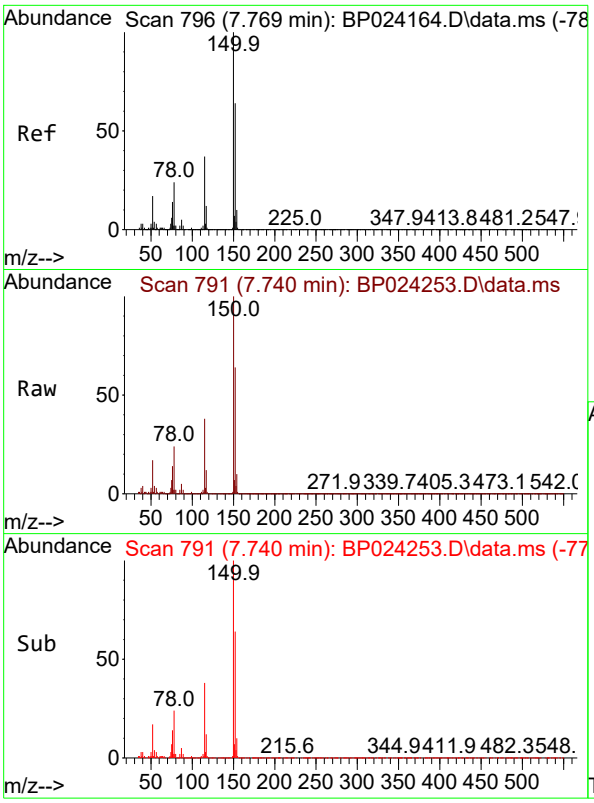
Quant Time: Apr 10 15:48:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

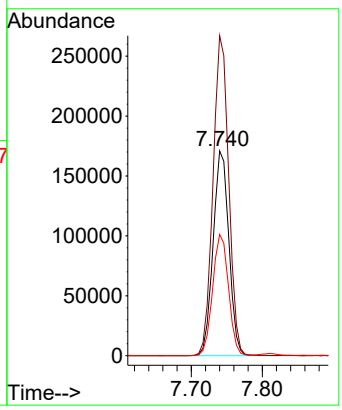




#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.740 min Scan# 7
Delta R.T. -0.006 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:152 Resp: 26297

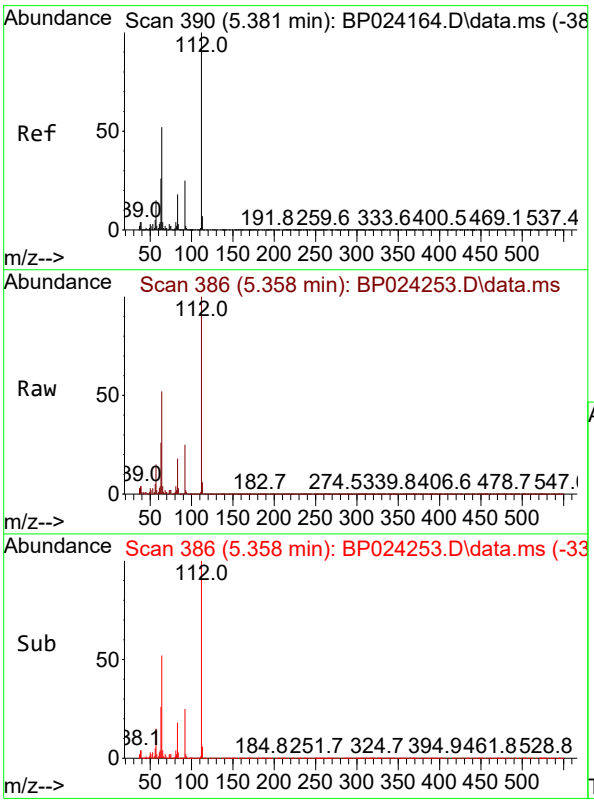
Ion	Ratio	Lower	Upper
152	100		
150	156.3	125.5	188.3
115	59.2	46.3	69.5



Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations
APPROVED

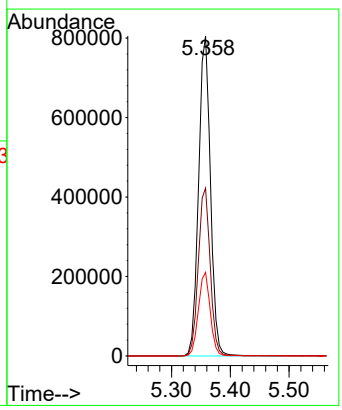
Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

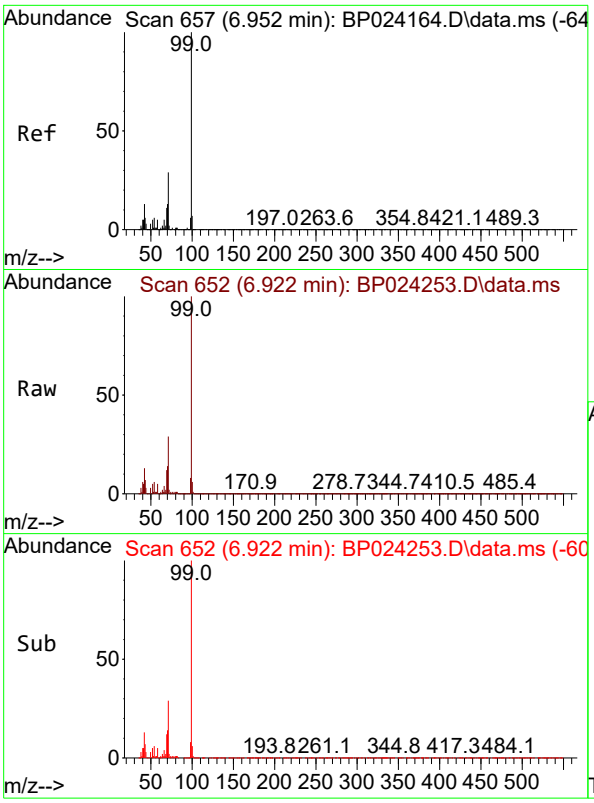


#5
2-Fluorophenol
Concen: 68.477 ng
RT: 5.358 min Scan# 386
Delta R.T. 0.000 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:112 Resp: 1128096

Ion	Ratio	Lower	Upper
112	100		
64	52.5	41.3	61.9
63	26.1	20.6	31.0

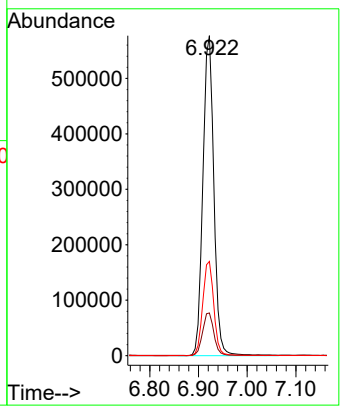




#7
Phenol-d6
Concen: 40.800 ng
RT: 6.922 min Scan# 6
Delta R.T. -0.006 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion: 99 Resp: 89882

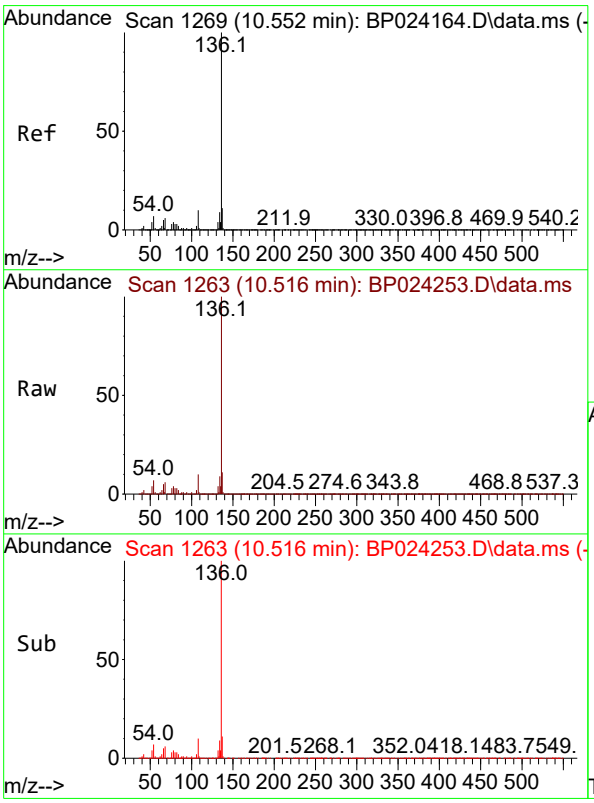
Ion	Ratio	Lower	Upper
99	100		
42	13.4	10.6	16.0
71	29.5	23.3	34.9



Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations
APPROVED

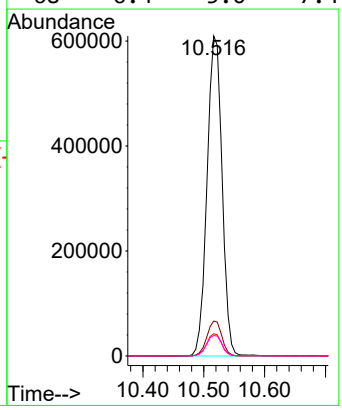
Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

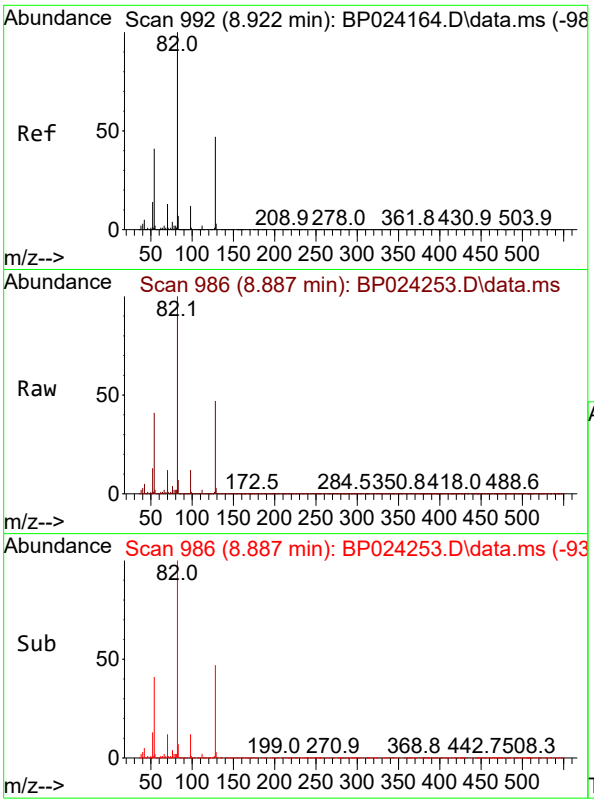


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.516 min Scan# 1263
Delta R.T. -0.011 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:136 Resp: 1043722

Ion	Ratio	Lower	Upper
136	100		
137	10.9	9.0	13.4
54	7.0	5.3	7.9
68	6.4	5.0	7.4





#23
Nitrobenzene-d5
Concen: 99.726 ng
RT: 8.887 min Scan# 9
Delta R.T. -0.006 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

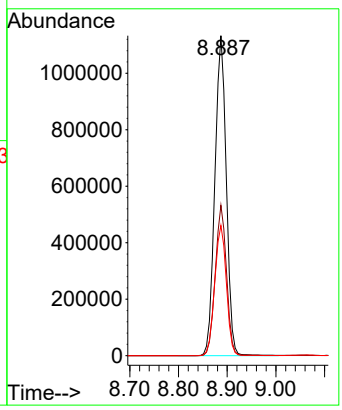
Instrument :
BNA_P
ClientSampleId :
B-149-GW01

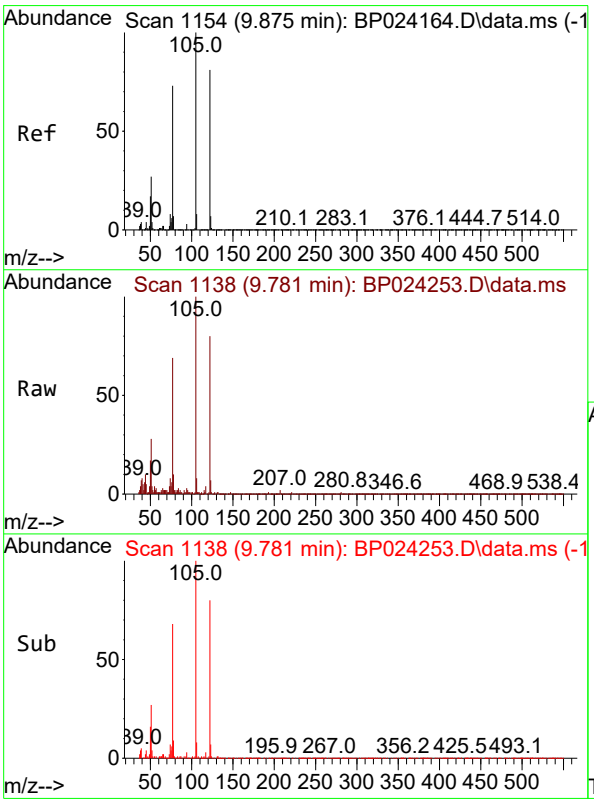
Tgt Ion: 82 Resp: 184481

Ion	Ratio	Lower	Upper
82	100		
128	47.0	37.4	56.0
54	40.7	32.5	48.7

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

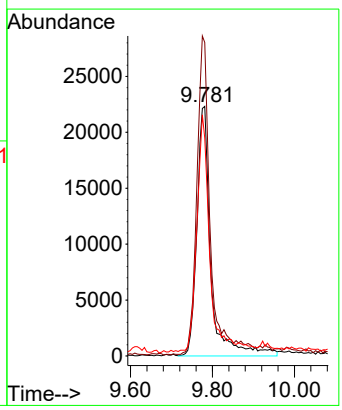


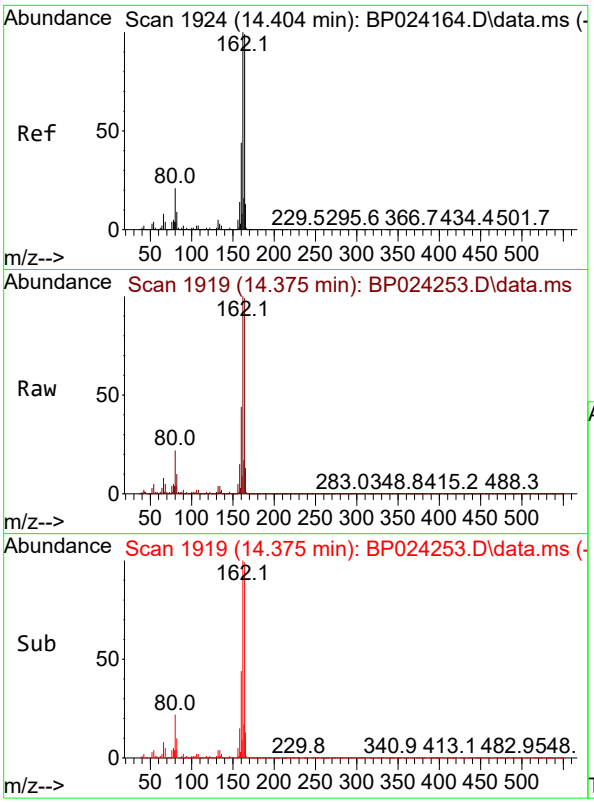


#32
Benzoic acid
Concen: 4.844 ng m
RT: 9.781 min Scan# 1138
Delta R.T. -0.070 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:122 Resp: 52954

Ion	Ratio	Lower	Upper
122	100		
105	125.6	100.3	140.3
77	87.3	69.1	109.1

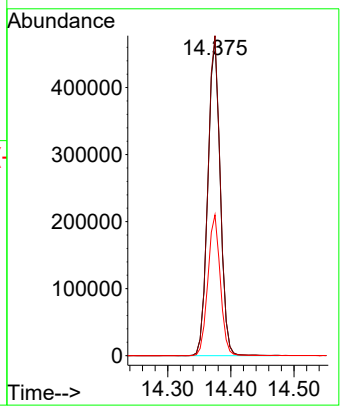




#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.375 min Scan# 1
Delta R.T. -0.017 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:164 Resp: 64045

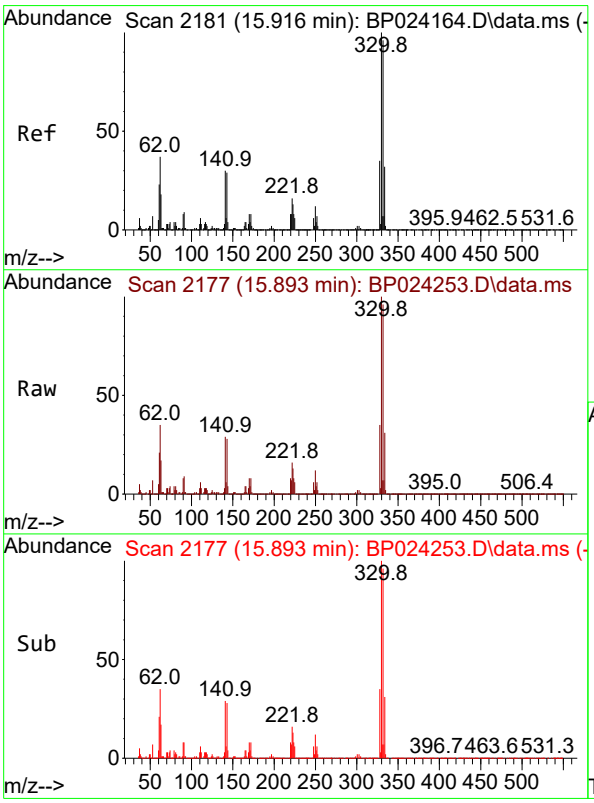
Ion	Ratio	Lower	Upper
164	100		
162	101.3	80.6	121.0
160	44.6	35.4	53.2



Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations
APPROVED

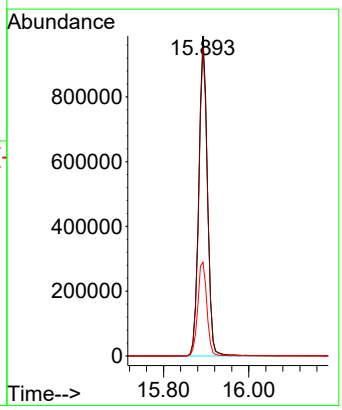
Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

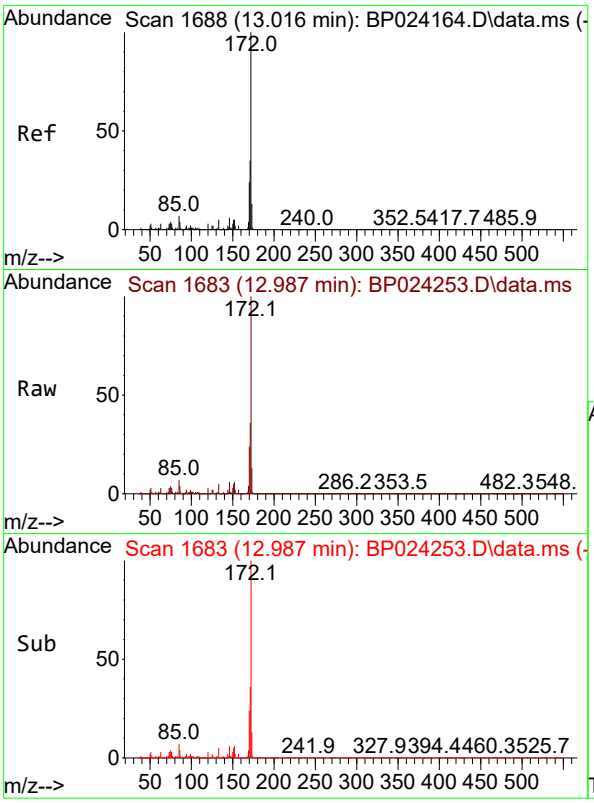


#42
2,4,6-Tribromophenol
Concen: 171.690 ng
RT: 15.893 min Scan# 2177
Delta R.T. -0.006 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:330 Resp: 1385077

Ion	Ratio	Lower	Upper
330	100		
332	96.7	77.6	116.4
141	30.9	25.0	37.6

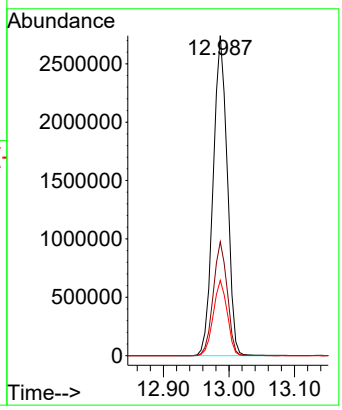




#45
2-Fluorobiphenyl
Concen: 94.069 ng
RT: 12.987 min Scan# 1
Delta R.T. -0.011 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:172 Resp: 408583

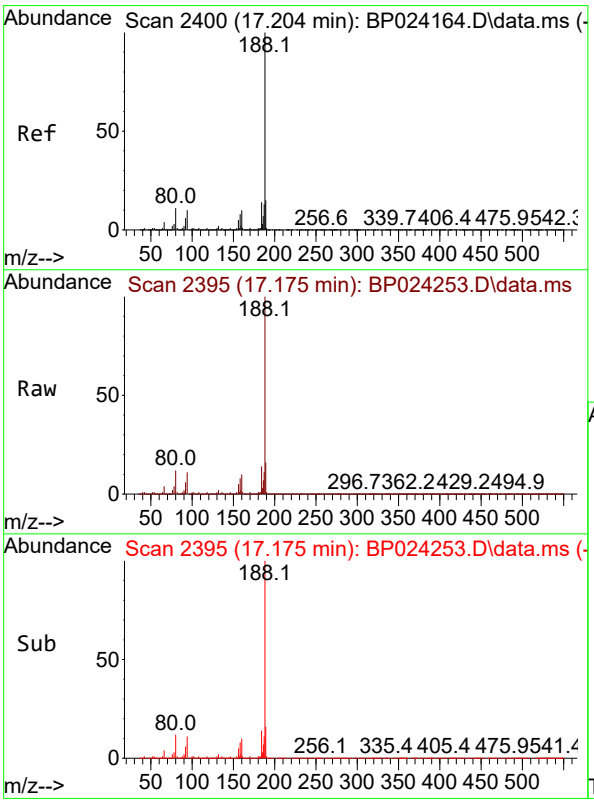
Ion	Ratio	Lower	Upper
172	100		
171	35.6	28.3	42.5
170	23.6	19.0	28.4



Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations
APPROVED

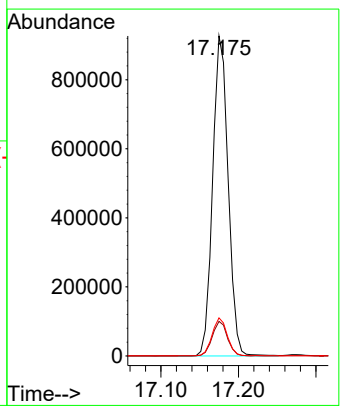
Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

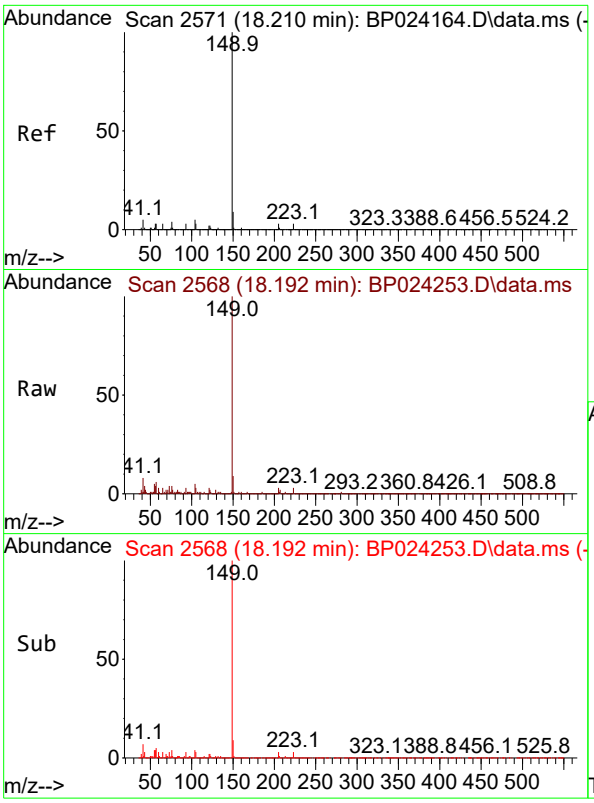


#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.175 min Scan# 2395
Delta R.T. -0.017 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:188 Resp: 1285267

Ion	Ratio	Lower	Upper
188	100		
94	10.8	8.1	12.1
80	11.9	8.9	13.3





#74
Di-n-butylphthalate
Concen: 3.998 ng
RT: 18.192 min Scan# 2
Delta R.T. -0.011 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

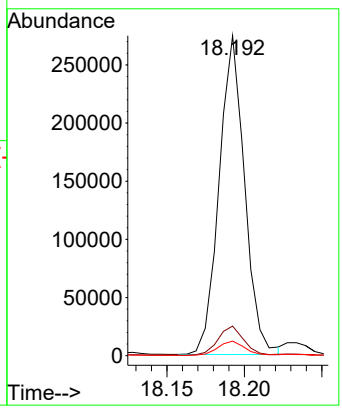
Tgt Ion:149 Resp: 31301

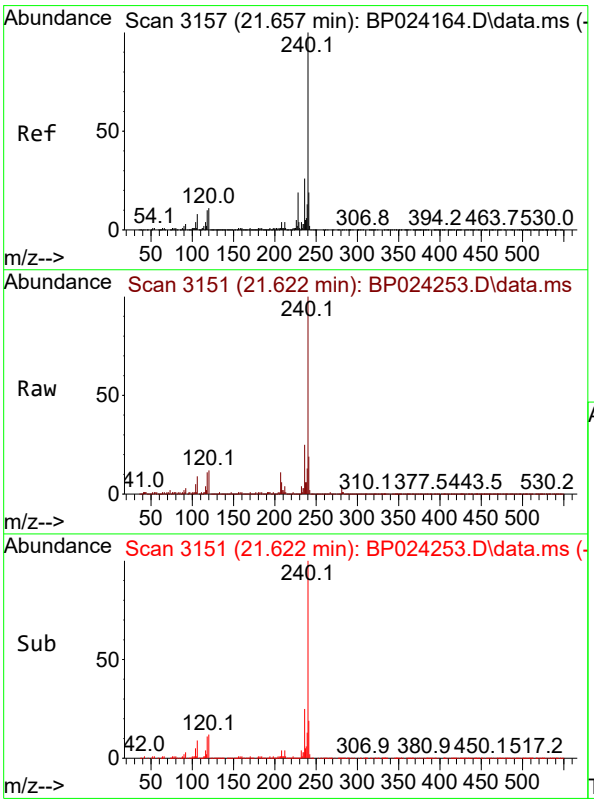
Ion	Ratio	Lower	Upper
149	100		
150	9.2	7.6	11.4
104	4.6	3.9	5.9

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025

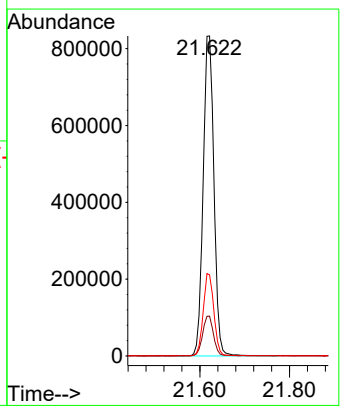


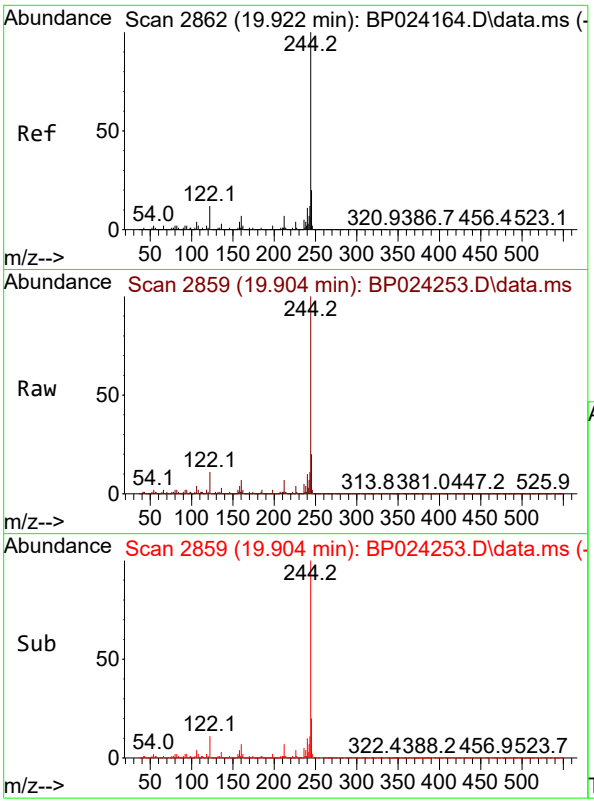


#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.622 min Scan# 3151
Delta R.T. -0.023 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:240 Resp: 1386094

Ion	Ratio	Lower	Upper
240	100		
120	12.4	9.2	13.8
236	25.4	20.4	30.6

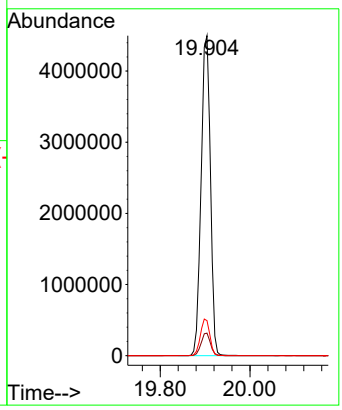




#79
Terphenyl-d14
Concen: 96.286 ng
RT: 19.904 min Scan# 2
Delta R.T. -0.011 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:244 Resp: 646547

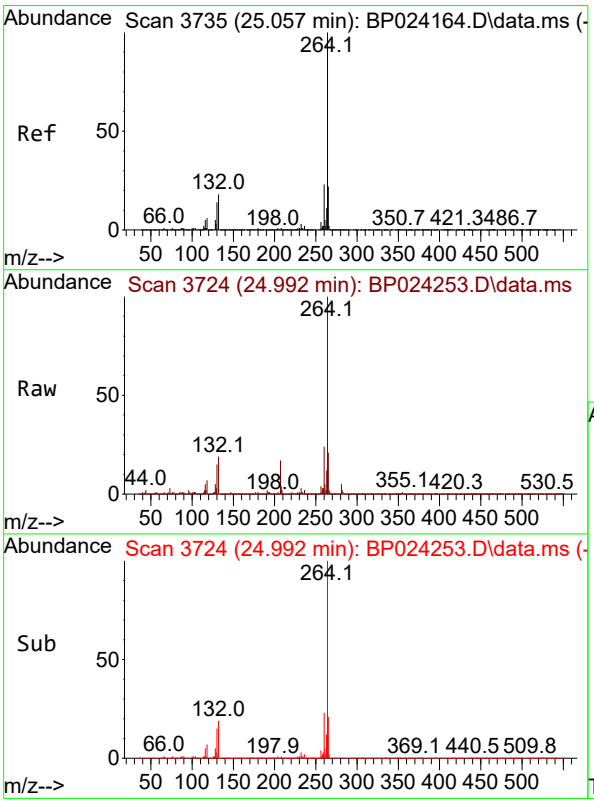
Ion	Ratio	Lower	Upper
244	100		
212	7.0	5.7	8.5
122	10.9	9.6	14.4



Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Manual Integrations
APPROVED

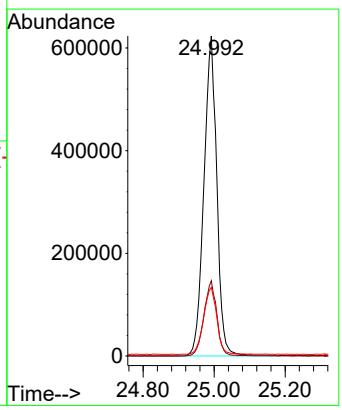
Reviewed By :Anahy Claudio 04/11/2025
Supervised By :Jagrut Upadhyay 04/11/2025



#86
Perylene-d12
Concen: 20.000 ng
RT: 24.992 min Scan# 3724
Delta R.T. -0.017 min
Lab File: BP024253.D
Acq: 10 Apr 2025 15:17

Tgt Ion:264 Resp: 1576982

Ion	Ratio	Lower	Upper
264	100		
260	23.5	18.5	27.7
265	21.5	17.7	26.5



Sample Results: **BP024253.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

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_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BP024253.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.899	300	308	317	rBV	241377	348645	1.40%	0.318%
2	5.358	379	386	402	rBV	2541603	3566321	14.29%	3.251%
3	6.922	643	652	667	rBV	1441888	2298472	9.21%	2.095%
4	7.740	782	791	798	rBV	954225	1473423	5.90%	1.343%
5	8.887	979	986	997	rBV	3088961	5008040	20.07%	4.565%
6	9.069	1003	1017	1028	rBV	876415	2225212	8.92%	2.029%
7	10.299	1219	1226	1241	rBV	455556	884774	3.55%	0.807%
8	10.516	1256	1263	1269	rBV	1193915	2051177	8.22%	1.870%
9	12.987	1675	1683	1698	rVB	7845489	11700819	46.89%	10.667%
10	13.922	1835	1842	1850	rBV	161296	303139	1.21%	0.276%
11	14.375	1913	1919	1926	rVB	1979511	2686864	10.77%	2.449%
12	15.193	2053	2058	2066	rVB2	493694	746146	2.99%	0.680%
13	15.757	2148	2154	2162	rBV	302646	470488	1.89%	0.429%
14	15.893	2170	2177	2197	rBV	6721930	9892528	39.64%	9.018%
15	17.175	2390	2395	2406	rVB2	2285811	3203941	12.84%	2.921%
16	17.481	2442	2447	2456	rVB	263456	386521	1.55%	0.352%
17	17.839	2503	2508	2512	rBV	566479	717564	2.88%	0.654%
18	18.128	2551	2557	2564	rBV	3604023	4849310	19.43%	4.421%
19	18.192	2564	2568	2573	rVB	483265	629956	2.52%	0.574%
20	19.339	2756	2763	2769	rBV	516572	899305	3.60%	0.820%
21	19.451	2777	2782	2800	rBV	6105900	9229938	36.99%	8.414%
22	19.592	2800	2806	2819	rVB	10331271	12449703	49.89%	11.349%
23	19.822	2841	2845	2848	rBV	258526	364379	1.46%	0.332%
24	19.904	2852	2859	2868	rVB2	12413558	24955647	100.00%	22.750%
25	21.298	3092	3096	3115	rVB2	250337	572196	2.29%	0.522%
26	21.616	3145	3150	3157	rBV2	2255241	3693701	14.80%	3.367%
27	24.992	3715	3724	3736	rVB	1649588	4086896	16.38%	3.726%

Sum of corrected areas: 109695105

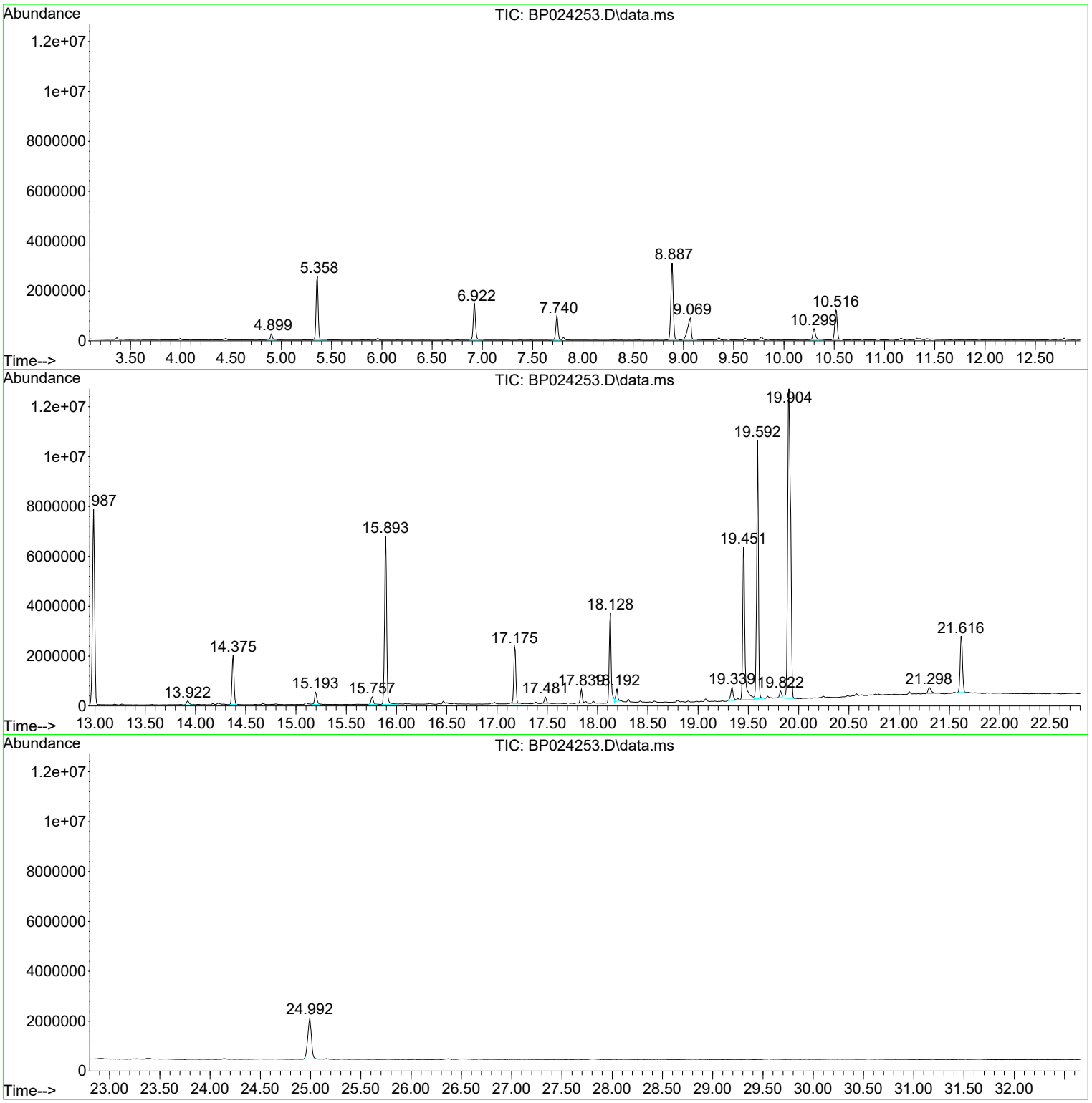
Sample Results: **BP024253.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

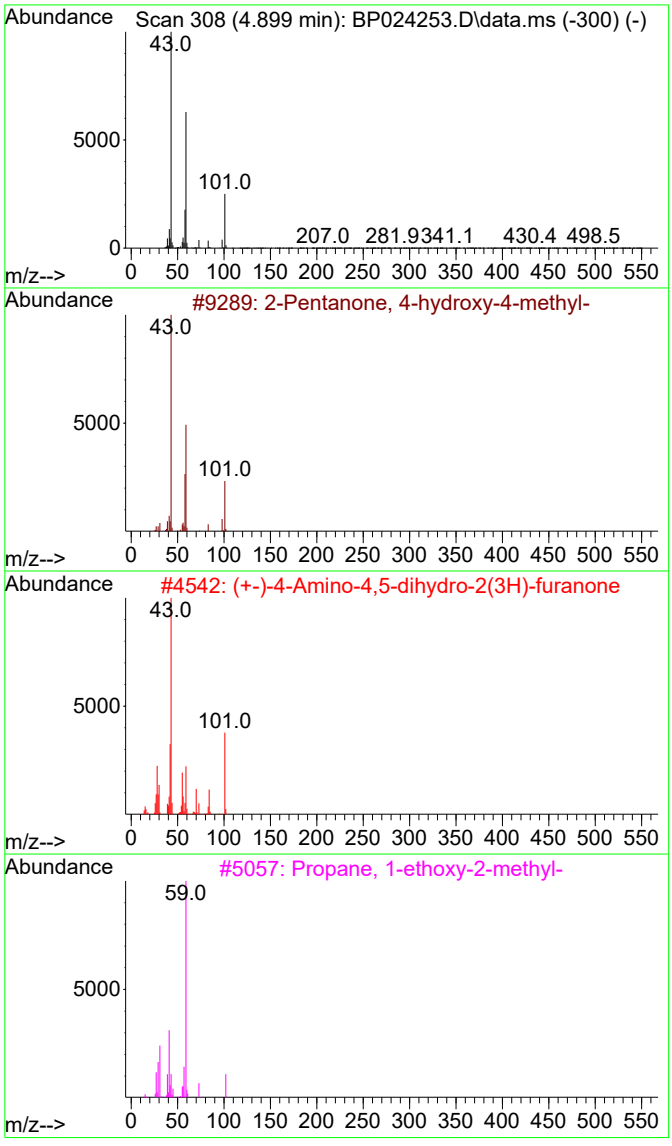
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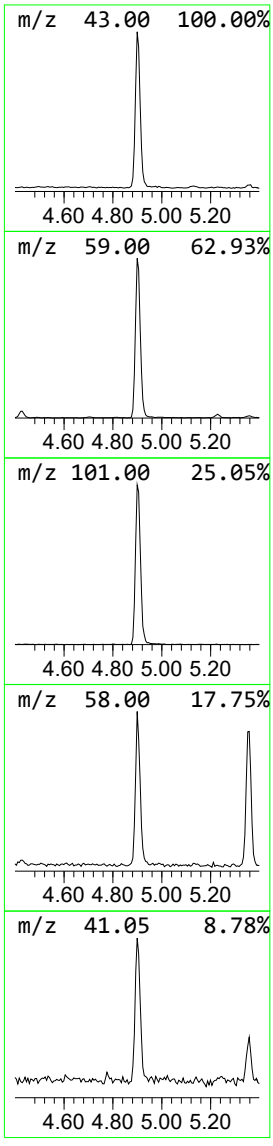
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TIC Integration Parameters: LSCINT.P

****
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.899	4.73 ng	348645	1,4-Dichlorobenzene-d4	7.740

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	53
2	(+-)-4-Amino-4,5-dihydro-2(3H)-f...	101	C4H7NO2	016504-58-8	37
3	Propane, 1-ethoxy-2-methyl-	102	C6H14O	000627-02-1	35
4	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	25
5	2-Pentanol, 2,4-dimethyl-	116	C7H16O	000625-06-9	25





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
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ClientSampleId :
B-149-GW01

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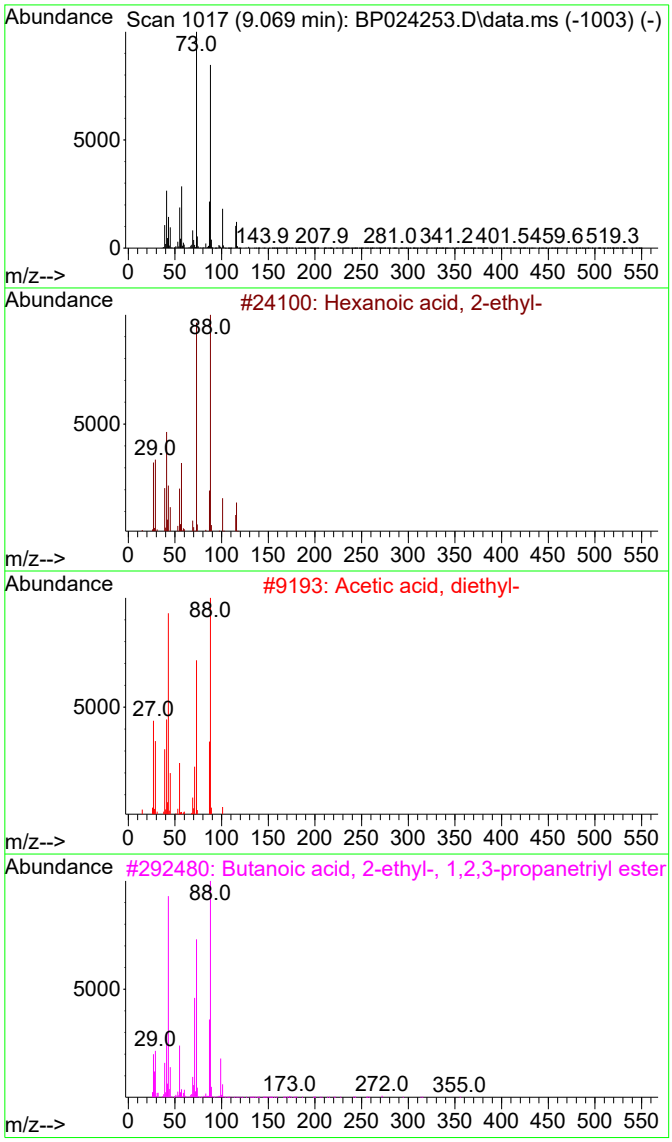
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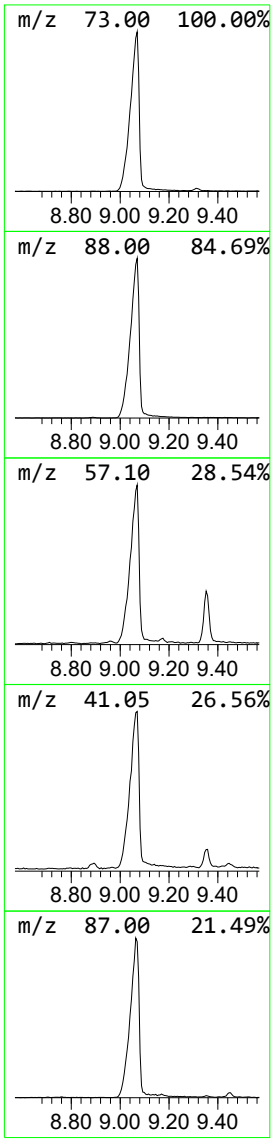
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Peak Number 2 Hexanoic acid, 2-ethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.069	30.20 ng	2225210	1,4-Dichlorobenzene-d4	7.740

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	90
2	Acetic acid, diethyl-	116	C6H12O2	000088-09-5	59
3	Butanoic acid, 2-ethyl-, 1,2,3-p...	386	C21H38O6	056554-54-2	45
4	2-Ethyl-4-methylpentanoic acid	144	C8H16O2	000108-81-6	43
5	Heptanoic acid, 2-ethyl-	158	C9H18O2	003274-29-1	42





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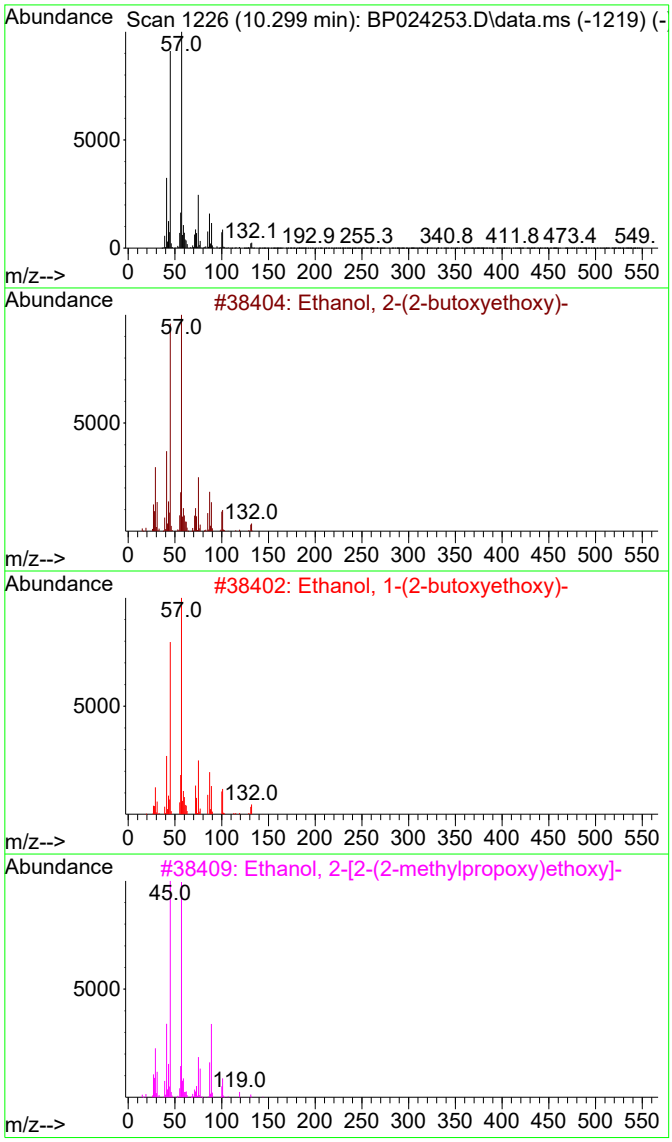
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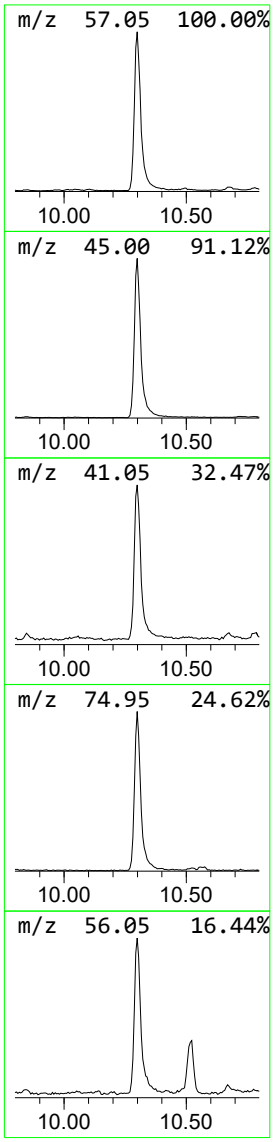
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TIC Integration Parameters: LSCINT.P

****
Peak Number 3 Ethanol, 2-(2-butoxyethoxy)- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.299	8.63 ng	884774	Naphthalene-d8	10.516

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(2-butoxyethoxy)-	162	C8H18O3	000112-34-5	91
2	Ethanol, 1-(2-butoxyethoxy)-	162	C8H18O3	054446-78-5	83
3	Ethanol, 2-[2-(2-methylpropoxy)e...	162	C8H18O3	018912-80-6	72
4	Ethylene glycol monoisobutyl ether	118	C6H14O2	004439-24-1	64
5	Di-sec-Butyl ether	130	C8H18O	006863-58-7	50





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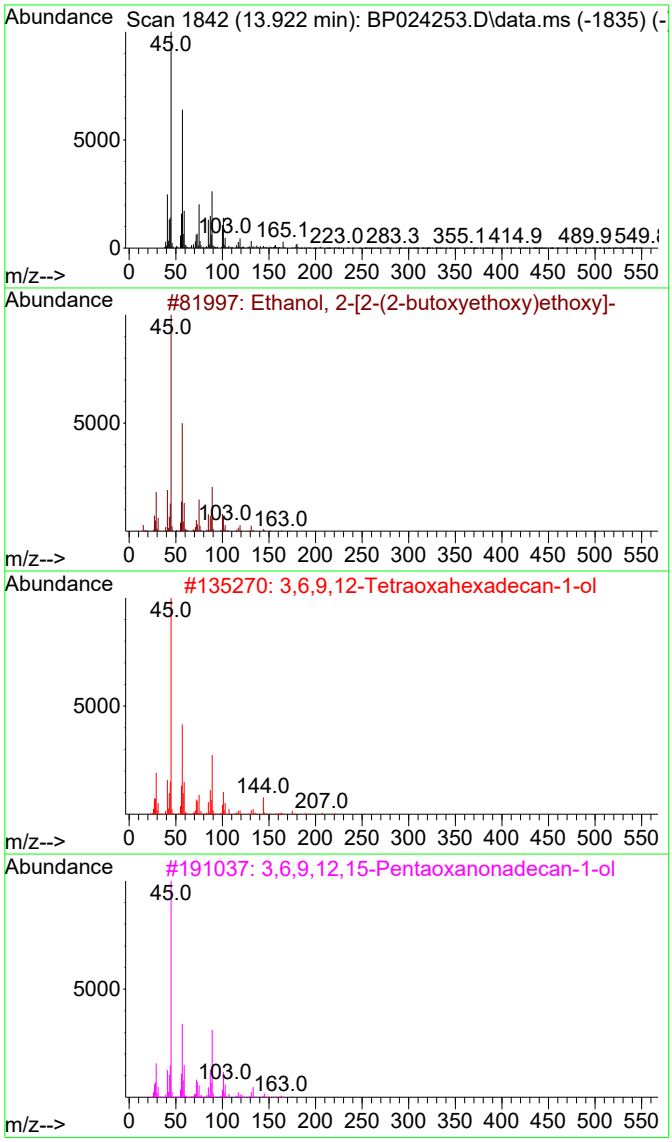
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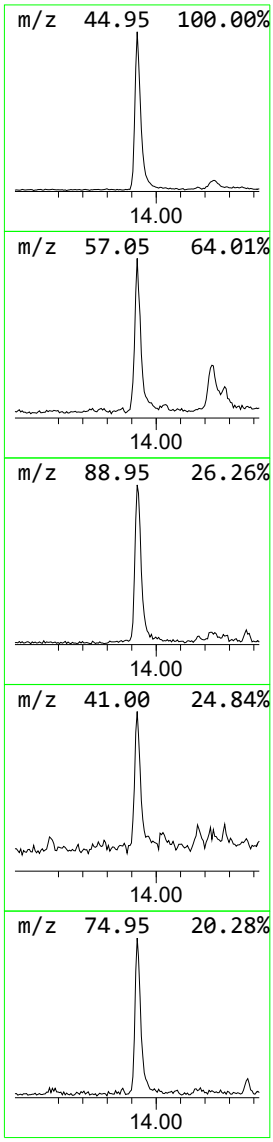
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****
Peak Number 4 Ethanol, 2-[2-(2-butoxyetho... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.922	2.26 ng	303139	Acenaphthene-d10	14.375

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-[2-(2-butoxyethoxy)et...	206	C10H22O4	000143-22-6	91
2	3,6,9,12-Tetraoxahexadecan-1-ol	250	C12H26O5	001559-34-8	72
3	3,6,9,12,15-Pentaoxanonadecan-1-ol	294	C14H30O6	001786-94-3	64
4	Ethanol, 2-(2-butoxyethoxy)-	162	C8H18O3	000112-34-5	64
5	Ethanol, 2-[2-(2-methylpropoxy)e...	162	C8H18O3	018912-80-6	64





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ClientSampleId :
B-149-GW01

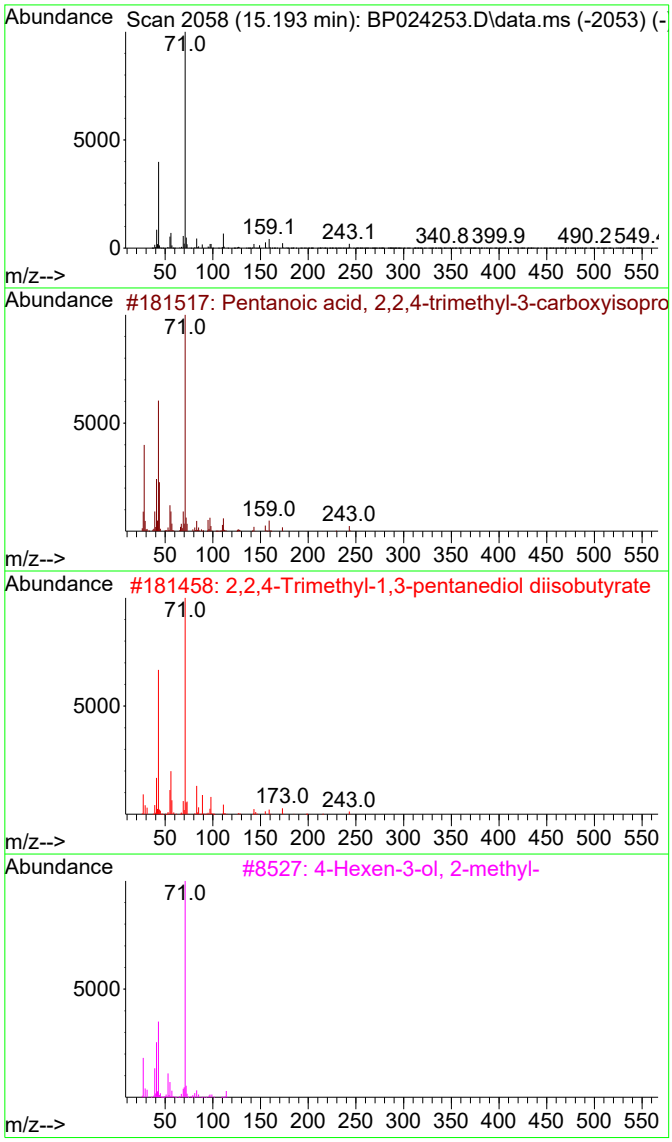
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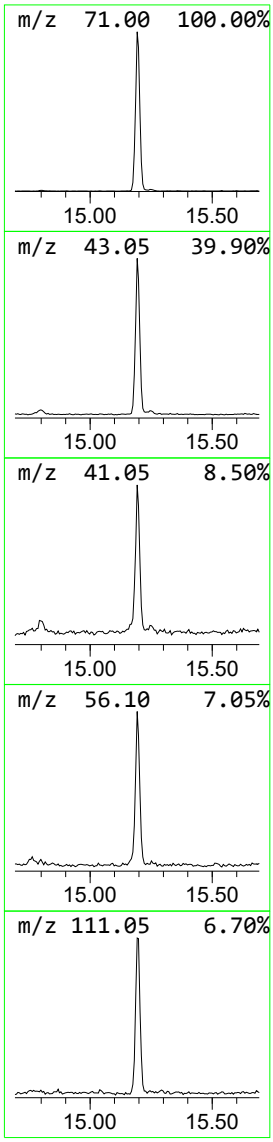
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TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Pentanoic acid, 2,2,4-trime... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.193	5.55 ng	746146	Acenaphthene-d10	14.375

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentanoic acid, 2,2,4-trimethyl-...	286	C16H30O4	1000140-77-5	74
2	2,2,4-Trimethyl-1,3-pentanediol ...	286	C16H30O4	006846-50-0	56
3	4-Hexen-3-ol, 2-methyl-	114	C7H14O	004798-60-1	45
4	Fumaric acid, nonyl tetrahydrofu...	326	C18H30O5	1000330-58-3	45
5	Diethylmalonic acid, monochlorid...	262	C12H19ClO4	1000370-65-0	45





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ClientSampleId :
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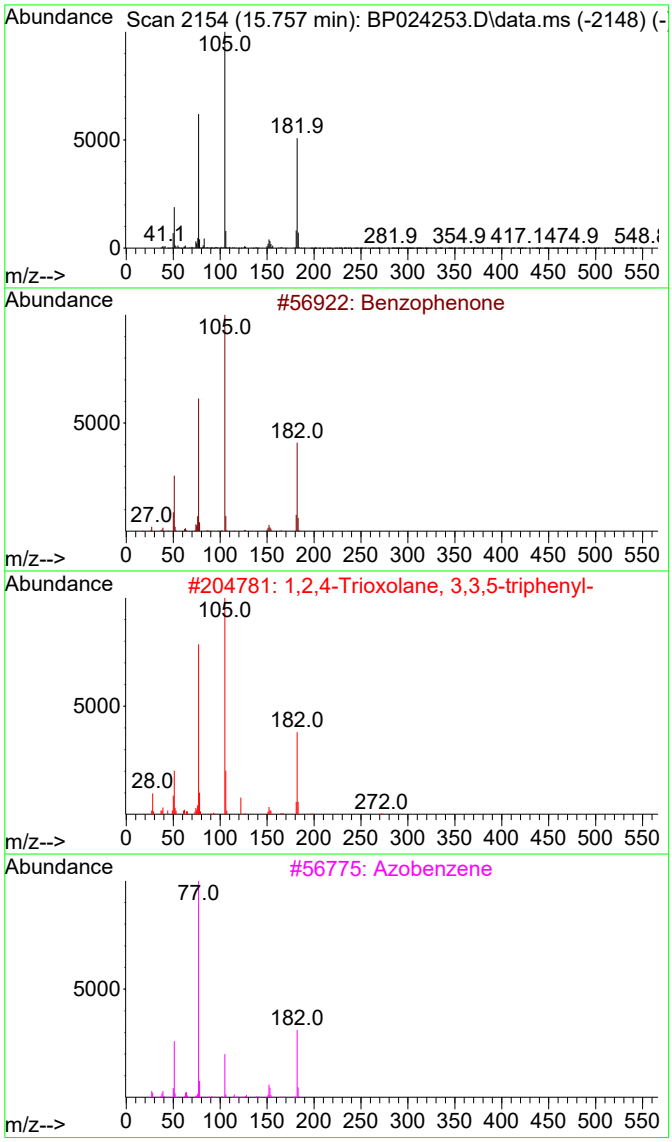
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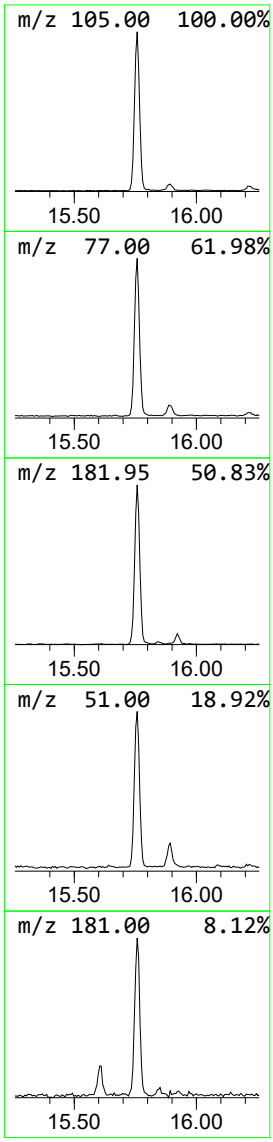
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Peak Number 6 Benzophenone Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.757	3.50 ng	470488	Acenaphthene-d10	14.375

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	97
2	1,2,4-Trioxolane, 3,3,5-triphenyl-	304	C20H16O3	023246-12-0	50
3	Azobenzene	182	C12H10N2	000103-33-3	45
4	Azobenzene, (E)-	182	C12H10N2	017082-12-1	42
5	1,1-Diphenyl-2-phenylthiobut-3-e...	332	C22H20OS	097370-20-2	38





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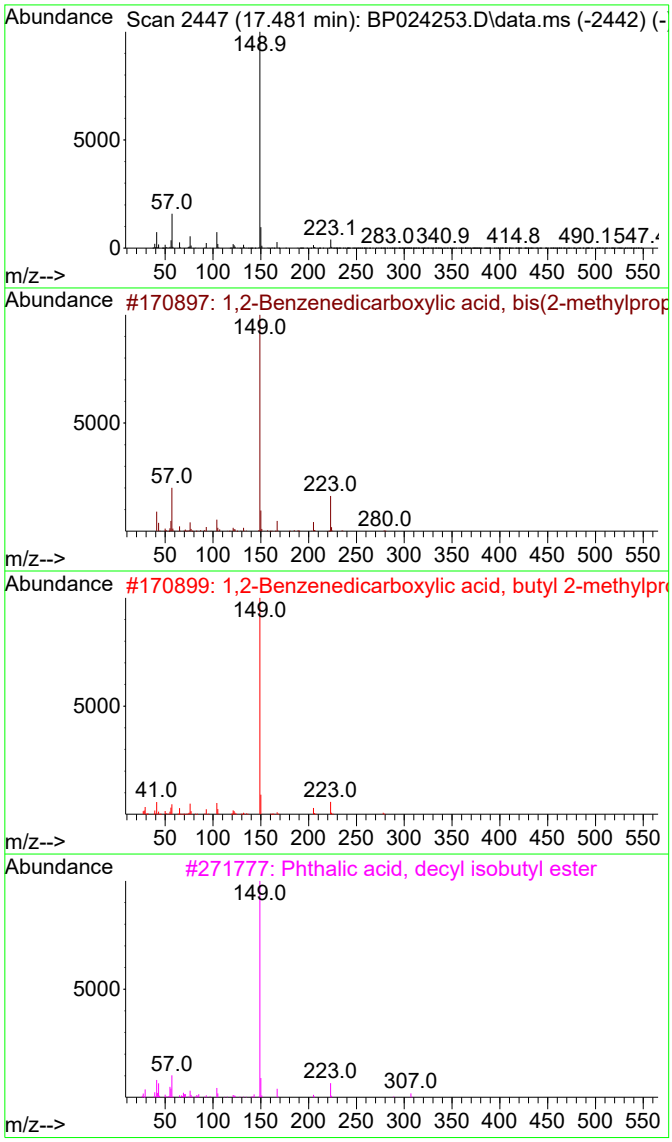
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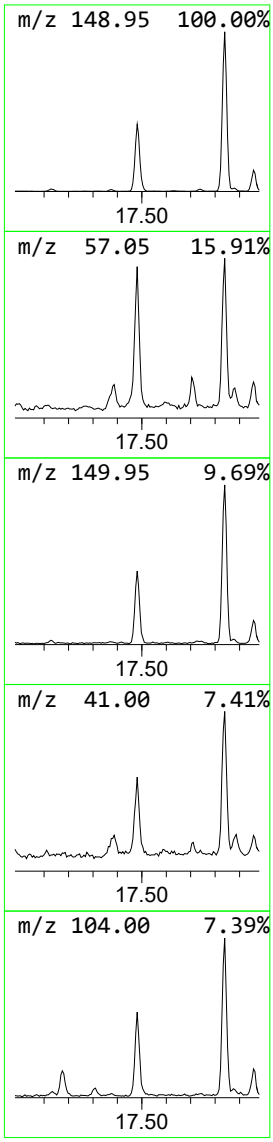
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TIC Integration Parameters: LSCINT.P

****
Peak Number 7 1,2-Benzenedicarboxylic aci... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.481	2.41 ng	386521	Phenanthrene-d10	17.175

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Benzenedicarboxylic acid, bi...	278	C16H22O4	000084-69-5	91
2	1,2-Benzenedicarboxylic acid, bu...	278	C16H22O4	017851-53-5	86
3	Phthalic acid, decyl isobutyl ester	362	C22H34O4	1000308-94-2	83
4	Phthalic acid, butyl 2-ethylbuty...	306	C18H26O4	1000356-89-0	80
5	Dibutyl phthalate	278	C16H22O4	000084-74-2	78





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
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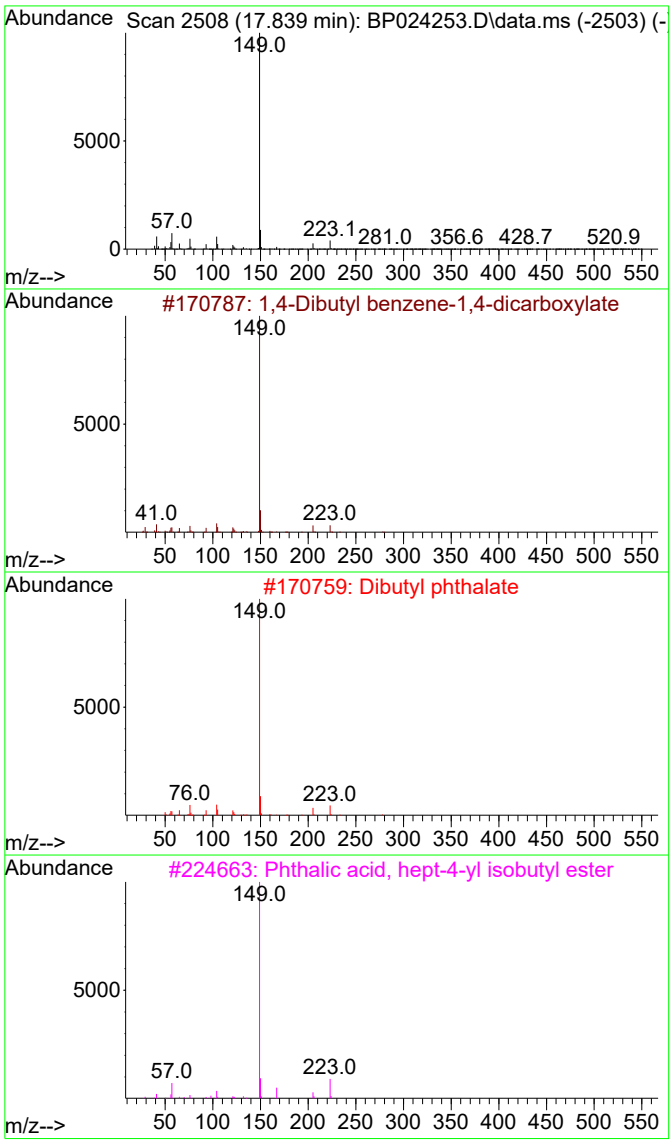
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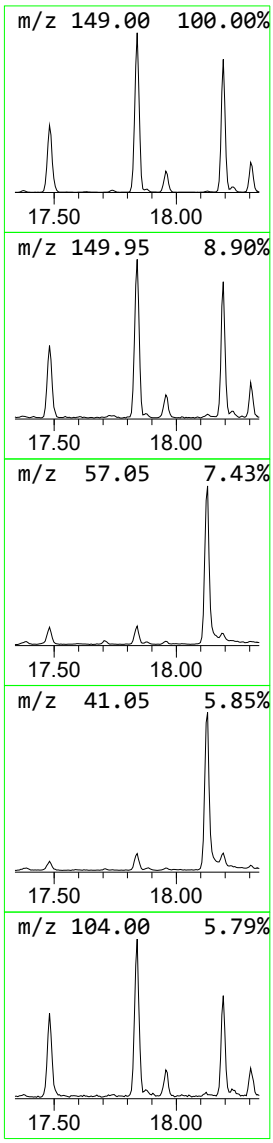
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****
Peak Number 8 1,4-Dibutyl benzene-1,4-dic... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.839	4.48 ng	717564	Phenanthrene-d10	17.175

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dibutyl benzene-1,4-dicarbox...	278	C16H22O4	001962-75-0	90
2	Dibutyl phthalate	278	C16H22O4	000084-74-2	90
3	Phthalic acid, hept-4-yl isobuty...	320	C19H28O4	1000356-78-3	83
4	Phthalic acid, cyclohexylmethyl ...	318	C19H26O4	1000309-08-6	83
5	1,2-Benzenedicarboxylic acid, bi...	278	C16H22O4	000084-69-5	83





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
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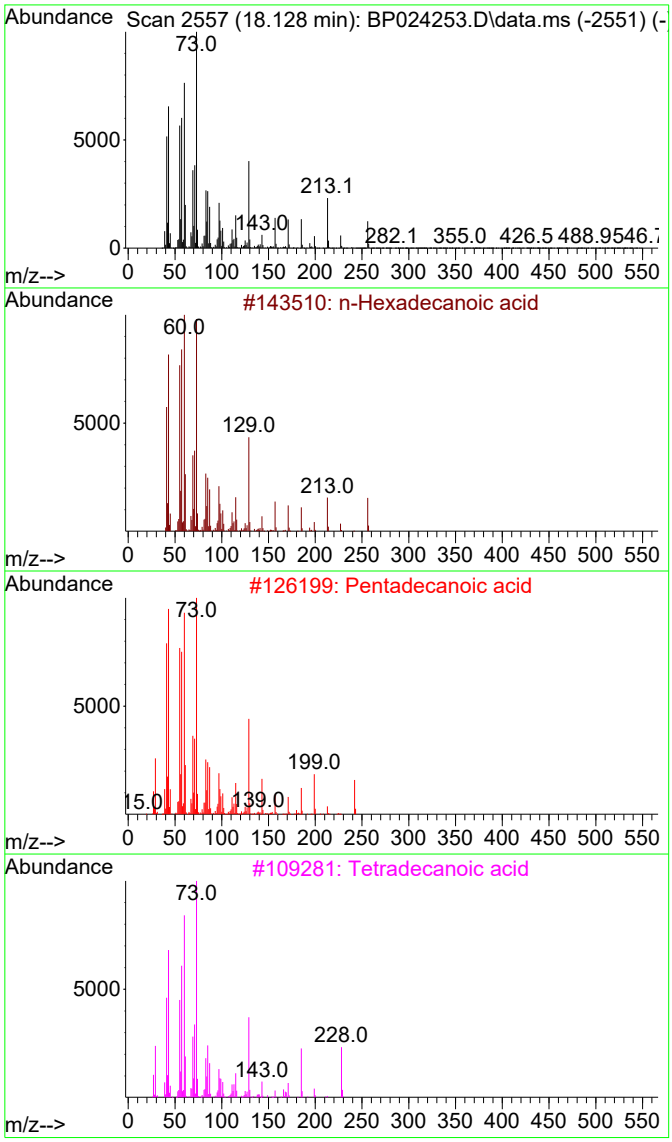
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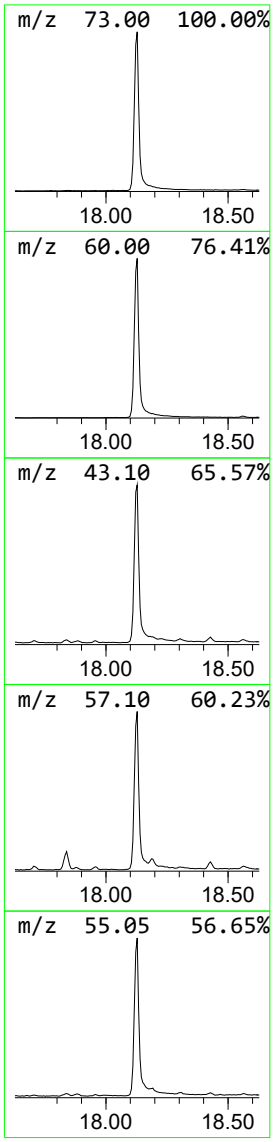
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Peak Number 9 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.128	30.27 ng	4849310	Phenanthrene-d10	17.175

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	90
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	80
4	n-Decanoic acid	172	C10H20O2	000334-48-5	68
5	Tridecanoic acid	214	C13H26O2	000638-53-9	60





Sample Results: **BP024253.D**

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Acq On : 10 Apr 2025 15:17
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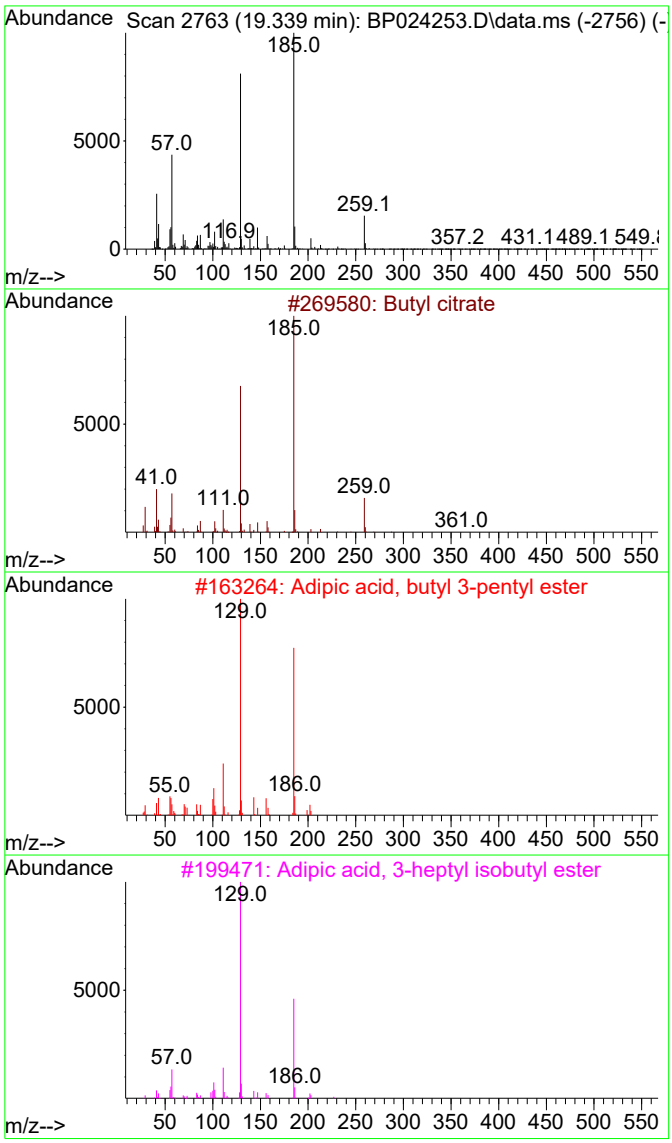
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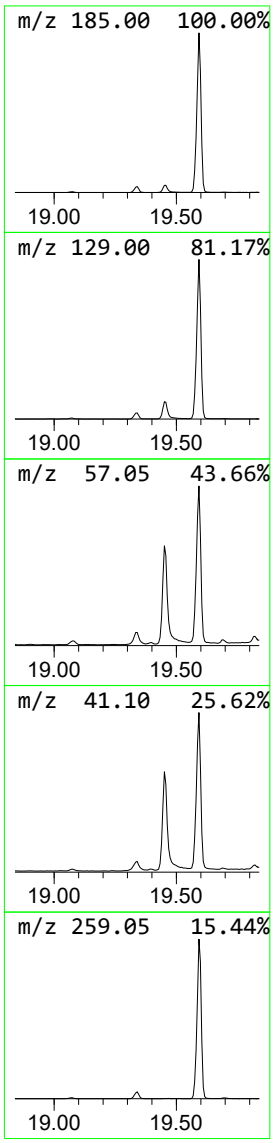
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Peak Number 10 Butyl citrate Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.339	5.61 ng	899305	Phenanthrene-d10	17.175

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butyl citrate	360	C18H32O7	000077-94-1	91
2	Adipic acid, butyl 3-pentyl ester	272	C15H28O4	1000324-60-5	72
3	Adipic acid, 3-heptyl isobutyl e...	300	C17H32O4	1000353-64-8	72
4	Adipic acid, 4-heptyl isobutyl e...	300	C17H32O4	1000349-73-6	72
5	Adipic acid, 2-hexyl isobutyl ester	286	C16H30O4	1000353-70-9	72





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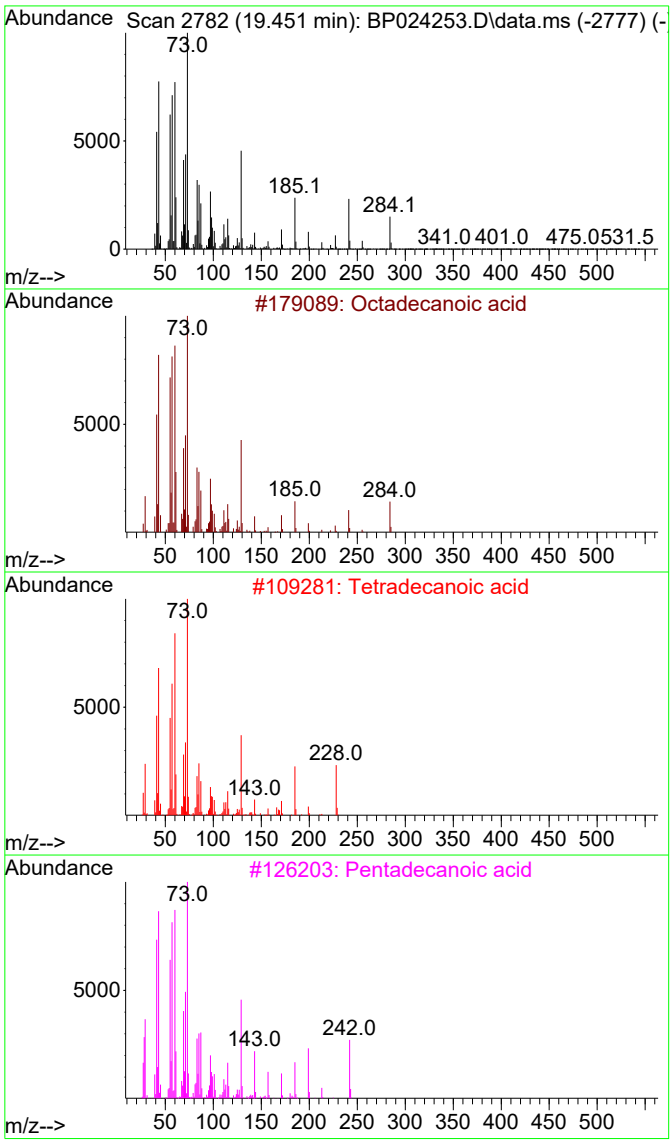
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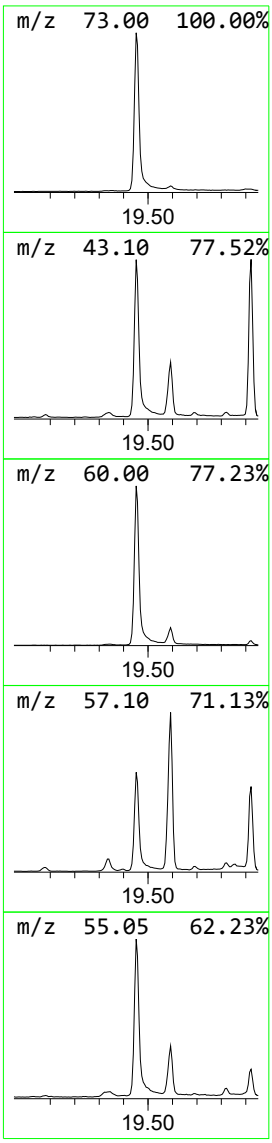
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Peak Number 11 Octadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.451	49.98 ng	9229940	Chrysene-d12	21.622

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	87
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	81
4	Octadecanoic acid, 2-(2-hydroxye...	372	C22H44O4	000106-11-6	80
5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	64





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ALS Vial : 10 Sample Multiplier: 1

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ClientSampleId :
B-149-GW01

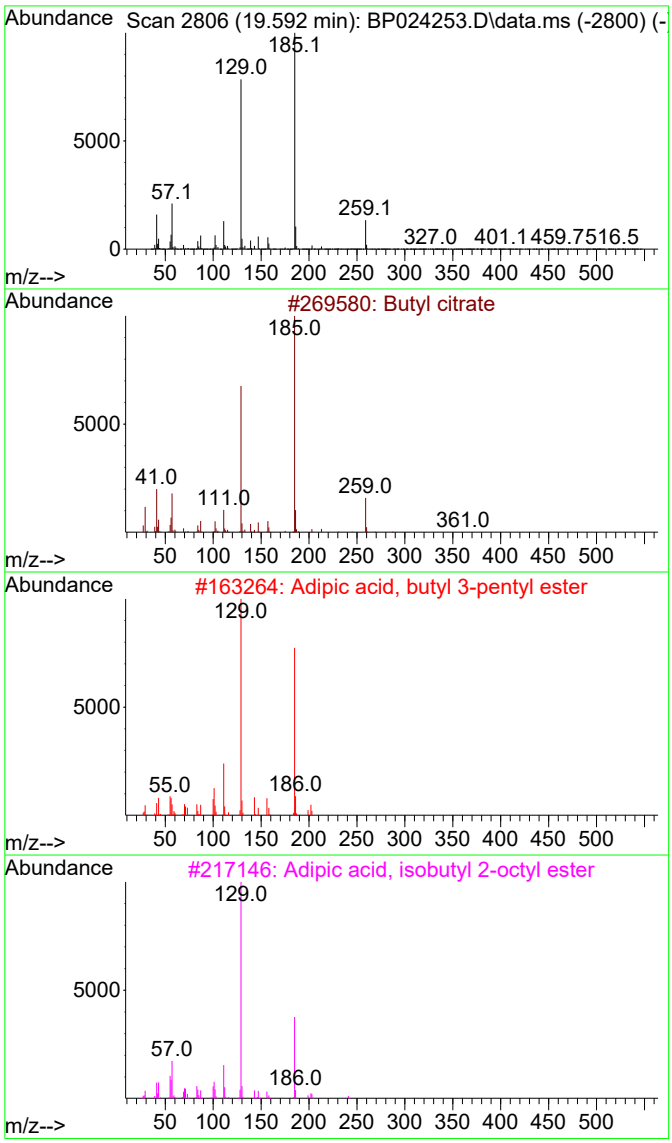
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

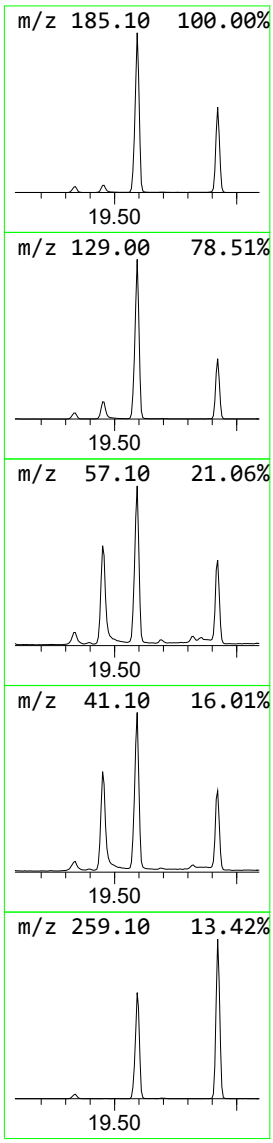
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 12 Adipic acid, butyl 3-pentyl... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.592	67.41 ng	12449700	Chrysene-d12	21.622

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butyl citrate	360	C18H32O7	000077-94-1	94
2	Adipic acid, butyl 3-pentyl ester	272	C15H28O4	1000324-60-5	64
3	Adipic acid, isobutyl 2-octyl ester	314	C18H34O4	1000324-44-5	64
4	Adipic acid, isobutyl pent-4-en-...	270	C15H26O4	1000354-11-8	56
5	Adipic acid, cycloheptyl isobuty...	298	C17H30O4	1000324-71-5	56





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

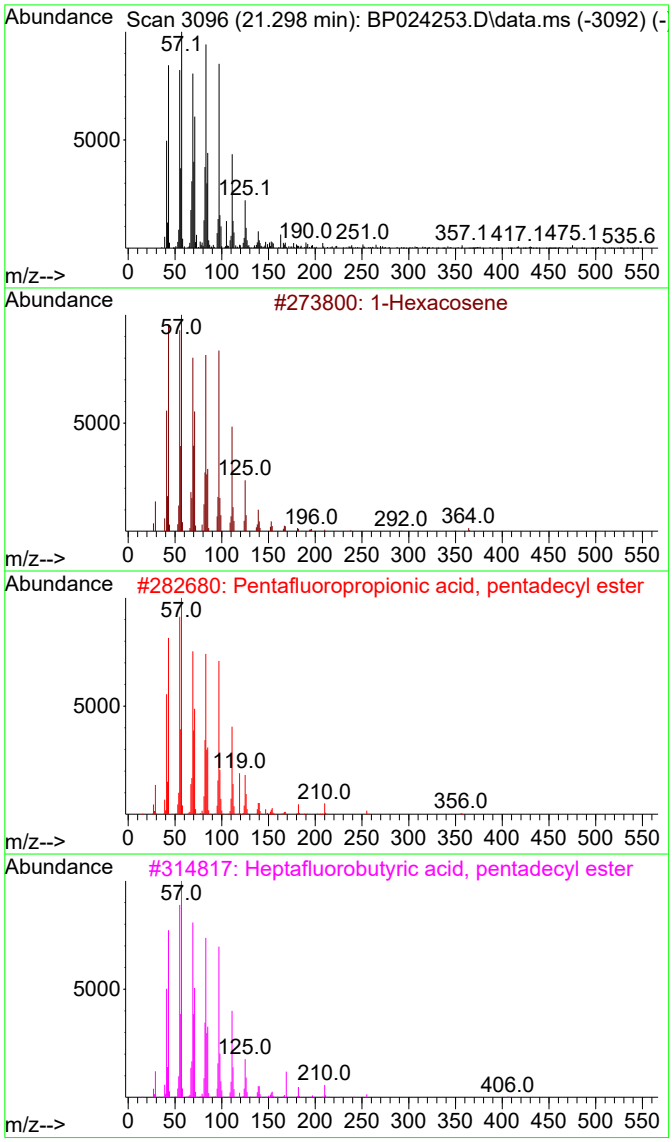
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TIC Integration Parameters: LSCINT.P

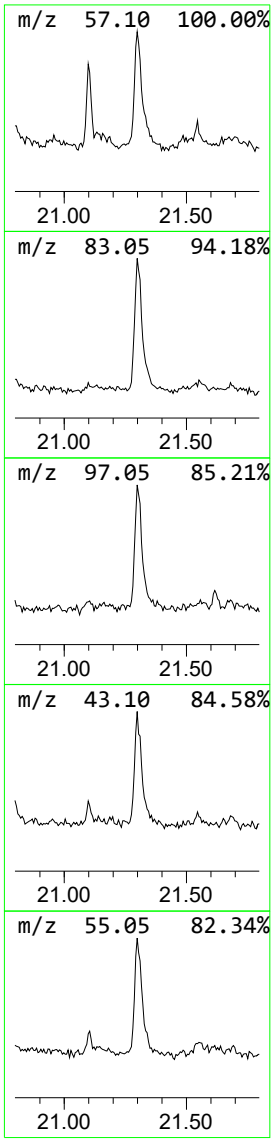
****

Peak Number 13 1-Hexacosene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.298	3.10 ng	572196	Chrysene-d12	21.622

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexacosene	364	C26H52	018835-33-1	94
2	Pentafluoropropionic acid, penta...	374	C18H31F5O2	959092-08-1	91
3	Heptafluorobutyric acid, pentade...	424	C19H31F7O2	959261-23-5	91
4	Pentacos-1-ene	350	C25H50	016980-85-1	91
5	Trifluoroacetic acid, pentadecyl...	324	C17H31F3O2	959010-23-2	91





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024253.D
Acq On : 10 Apr 2025 15:17
Operator : RC/JU
Sample : Q1746-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
B-149-GW01

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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-...	4.899	4.7	ng	348645	1	7.740	1473420	20.0
Hexanoic acid, ...	9.069	30.2	ng	2225210	1	7.740	1473420	20.0
Ethanol, 2-(2-b...	10.299	8.6	ng	884774	2	10.516	2051180	20.0
Ethanol, 2-[2-(...	13.922	2.3	ng	303139	3	14.375	2686860	20.0
Pentanoic acid,...	15.193	5.5	ng	746146	3	14.375	2686860	20.0
Benzophenone	15.757	3.5	ng	470488	3	14.375	2686860	20.0
1,2-Benzenedica...	17.481	2.4	ng	386521	4	17.175	3203940	20.0
1,4-Dibutyl ben...	17.839	4.5	ng	717564	4	17.175	3203940	20.0
n-Hexadecanoic ...	18.128	30.3	ng	4849310	4	17.175	3203940	20.0
Butyl citrate	19.339	5.6	ng	899305	4	17.175	3203940	20.0
Octadecanoic acid	19.451	50.0	ng	9229940	5	21.622	3693700	20.0
Adipic acid, bu...	19.592	67.4	ng	12449700	5	21.622	3693700	20.0
1-Hexacosene	21.298	3.1	ng	572196	5	21.622	3693700	20.0

Raw Data: **BP024239.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/07/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	EB-2025-4-7	SDG No.:	Q1746
Lab Sample ID:	Q1746-07	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024239.D	1	04/08/25 11:55	04/09/25 17:41	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.00	U	4.00	10.3	ug/L
108-95-2	Phenol	0.94	U	0.94	5.20	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.84	U	0.84	5.20	ug/L
95-57-8	2-Chlorophenol	0.60	U	0.60	5.20	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.20	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.30	U	1.30	5.20	ug/L
98-86-2	Acetophenone	0.76	U	0.76	5.20	ug/L
65794-96-9	3+4-Methylphenols	1.10	U	1.10	10.3	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.50	U	1.50	2.60	ug/L
67-72-1	Hexachloroethane	0.67	U	0.67	5.20	ug/L
98-95-3	Nitrobenzene	0.78	U	0.78	5.20	ug/L
78-59-1	Isophorone	0.77	U	0.77	5.20	ug/L
88-75-5	2-Nitrophenol	1.80	U	1.80	5.20	ug/L
105-67-9	2,4-Dimethylphenol	1.90	U	1.90	5.20	ug/L
111-91-1	bis(2-Chloroethoxy)methane	0.70	U	0.70	5.20	ug/L
120-83-2	2,4-Dichlorophenol	0.54	U	0.54	5.20	ug/L
91-20-3	Naphthalene	0.52	U	0.52	5.20	ug/L
106-47-8	4-Chloroaniline	0.87	UQ	0.87	5.20	ug/L
87-68-3	Hexachlorobutadiene	0.56	U	0.56	5.20	ug/L
105-60-2	Caprolactam	1.20	U	1.20	10.3	ug/L
59-50-7	4-Chloro-3-methylphenol	0.61	U	0.61	5.20	ug/L
91-57-6	2-Methylnaphthalene	0.58	U	0.58	5.20	ug/L
77-47-4	Hexachlorocyclopentadiene	3.70	UQ	3.70	10.3	ug/L
88-06-2	2,4,6-Trichlorophenol	0.53	U	0.53	5.20	ug/L
95-95-4	2,4,5-Trichlorophenol	0.64	U	0.64	5.20	ug/L
92-52-4	1,1-Biphenyl	0.55	U	0.55	5.20	ug/L
91-58-7	2-Chloronaphthalene	0.63	U	0.63	5.20	ug/L
88-74-4	2-Nitroaniline	1.30	U	1.30	5.20	ug/L
131-11-3	Dimethylphthalate	0.63	U	0.63	5.20	ug/L

Raw Data: **BP024239.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/07/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	EB-2025-4-7	SDG No.:	Q1746
Lab Sample ID:	Q1746-07	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024239.D	1	04/08/25 11:55	04/09/25 17:41	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	0.77	U	0.77	5.20	ug/L
606-20-2	2,6-Dinitrotoluene	0.95	U	0.95	5.20	ug/L
99-09-2	3-Nitroaniline	1.10	UQ	1.10	5.20	ug/L
83-32-9	Acenaphthene	0.57	U	0.57	5.20	ug/L
51-28-5	2,4-Dinitrophenol	6.20	U	6.20	10.3	ug/L
100-02-7	4-Nitrophenol	2.50	U	2.50	10.3	ug/L
132-64-9	Dibenzofuran	0.63	U	0.63	5.20	ug/L
121-14-2	2,4-Dinitrotoluene	1.30	U	1.30	5.20	ug/L
84-66-2	Diethylphthalate	0.71	U	0.71	5.20	ug/L
7005-72-3	4-Chlorophenyl-phenylether	0.70	U	0.70	5.20	ug/L
86-73-7	Fluorene	0.65	U	0.65	5.20	ug/L
100-01-6	4-Nitroaniline	1.50	U	1.50	5.20	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	3.00	U	3.00	10.3	ug/L
86-30-6	n-Nitrosodiphenylamine	0.60	U	0.60	5.20	ug/L
101-55-3	4-Bromophenyl-phenylether	0.41	U	0.41	5.20	ug/L
118-74-1	Hexachlorobenzene	0.54	U	0.54	5.20	ug/L
1912-24-9	Atrazine	1.00	UQ	1.00	5.20	ug/L
87-86-5	Pentachlorophenol	1.60	U	1.60	10.3	ug/L
85-01-8	Phenanthrene	0.52	U	0.52	5.20	ug/L
120-12-7	Anthracene	0.63	U	0.63	5.20	ug/L
86-74-8	Carbazole	0.74	U	0.74	5.20	ug/L
84-74-2	Di-n-butylphthalate	1.30	U	1.30	5.20	ug/L
206-44-0	Fluoranthene	0.85	U	0.85	5.20	ug/L
129-00-0	Pyrene	0.52	U	0.52	5.20	ug/L
85-68-7	Butylbenzylphthalate	2.00	U	2.00	5.20	ug/L
91-94-1	3,3-Dichlorobenzidine	0.96	UQ	0.96	10.3	ug/L
56-55-3	Benzo(a)anthracene	0.46	U	0.46	5.20	ug/L
218-01-9	Chrysene	0.45	U	0.45	5.20	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.60	U	1.60	5.20	ug/L
117-84-0	Di-n-octyl phthalate	2.40	U	2.40	10.3	ug/L
205-99-2	Benzo(b)fluoranthene	0.51	U	0.51	5.20	ug/L

Raw Data: **BP024239.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/07/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	EB-2025-4-7	SDG No.:	Q1746
Lab Sample ID:	Q1746-07	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024239.D	1	04/08/25 11:55	04/09/25 17:41	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	0.49	U	0.49	5.20	ug/L
50-32-8	Benzo(a)pyrene	0.57	U	0.57	5.20	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.61	U	0.61	5.20	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.69	U	0.69	5.20	ug/L
191-24-2	Benzo(g,h,i)perylene	0.71	U	0.71	5.20	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	0.54	U	0.54	5.20	ug/L
123-91-1	1,4-Dioxane	1.00	U	1.00	5.20	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.74	U	0.74	5.20	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	68.3		15 (10) - 110 (139)	46%	SPK: 150
13127-88-3	Phenol-d6	38.6		15 (10) - 110 (134)	26%	SPK: 150
4165-60-0	Nitrobenzene-d5	105		30 (49) - 130 (133)	105%	SPK: 100
321-60-8	2-Fluorobiphenyl	92.4		30 (52) - 130 (132)	92%	SPK: 100
118-79-6	2,4,6-Tribromophenol	172	*	15 (44) - 110 (137)	115%	SPK: 150
1718-51-0	Terphenyl-d14	104		30 (48) - 130 (125)	104%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	236000	7.74			
1146-65-2	Naphthalene-d8	911000	10.516			
15067-26-2	Acenaphthene-d10	559000	14.381			
1517-22-2	Phenanthrene-d10	1170000	17.175			
1719-03-5	Chrysene-d12	1380000	21.616			
1520-96-3	Perylene-d12	1470000	24.992			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	5.40	AB		4.90	ug/L
082304-66-3	7,9-Di-tert-butyl-1-oxaspiro(4,5)d	4.20	J		17.9	ug/L
000693-71-0	trans-13-Octadecenoic acid	2.50	J		19.3	ug/L

Raw Data: **BP024239.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/07/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	EB-2025-4-7	SDG No.:	Q1746
Lab Sample ID:	Q1746-07	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024239.D	1	04/08/25 11:55	04/09/25 17:41	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Quant Time: Apr 09 18:26:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

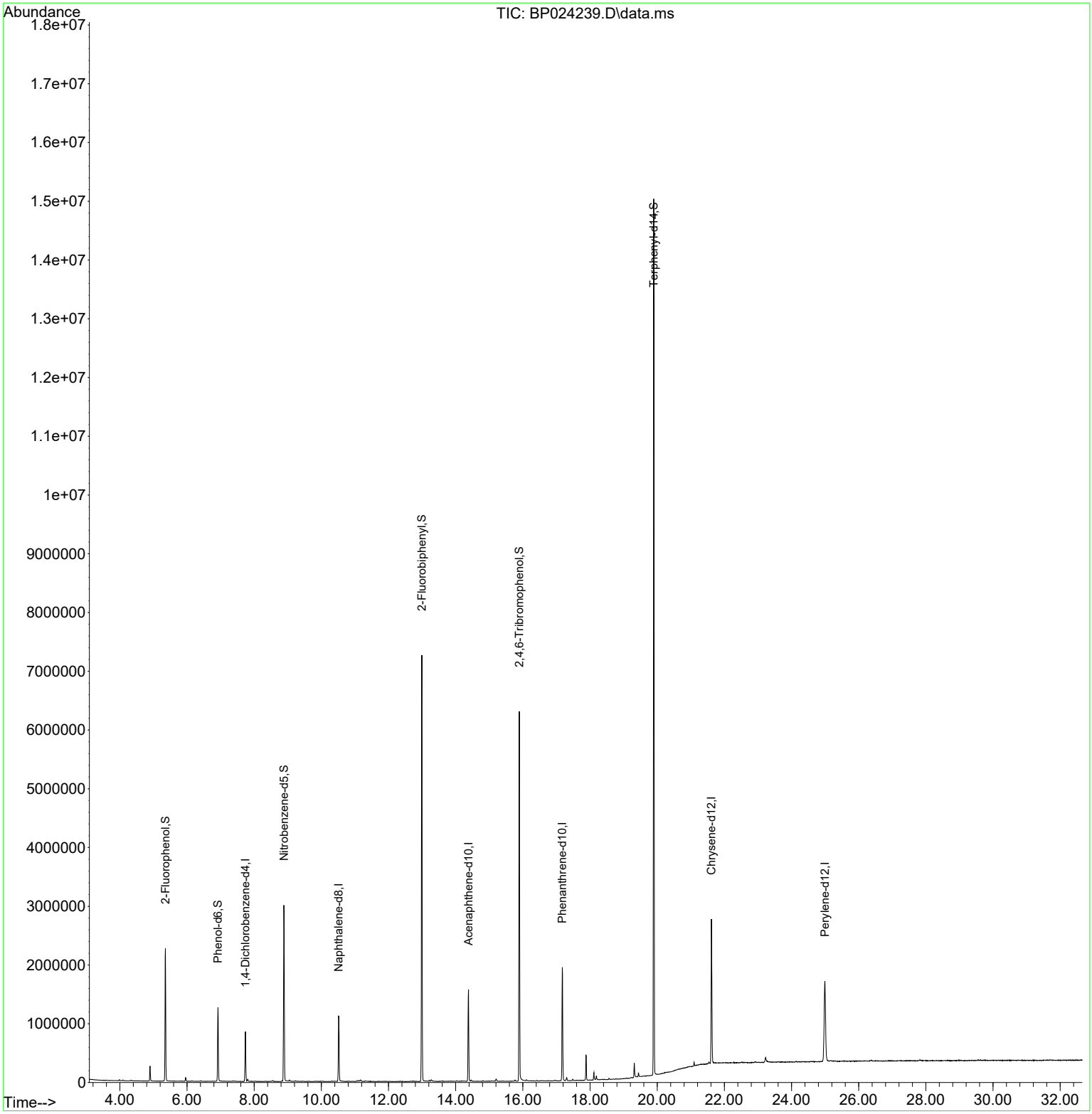
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.740	152	235704	20.000	ng	-0.03
21) Naphthalene-d8	10.516	136	911036	20.000	ng	-0.04
39) Acenaphthene-d10	14.381	164	559100	20.000	ng	-0.02
64) Phenanthrene-d10	17.175	188	1174144	20.000	ng	-0.03
76) Chrysene-d12	21.616	240	1378627	20.000	ng	-0.04
86) Perylene-d12	24.992	264	1470675	20.000	ng	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	5.358	112	1007759	68.250	ng	-0.02
7) Phenol-d6	6.922	99	762285	38.605	ng	-0.03
23) Nitrobenzene-d5	8.887	82	1695704	105.016	ng	-0.04
42) 2,4,6-Tribromophenol	15.892	330	1210524	171.887	ng	-0.02
45) 2-Fluorobiphenyl	12.993	172	3503535	92.399	ng	-0.02
79) Terphenyl-d14	19.898	244	6947270	104.022	ng	-0.02
Target Compounds						Qvalue

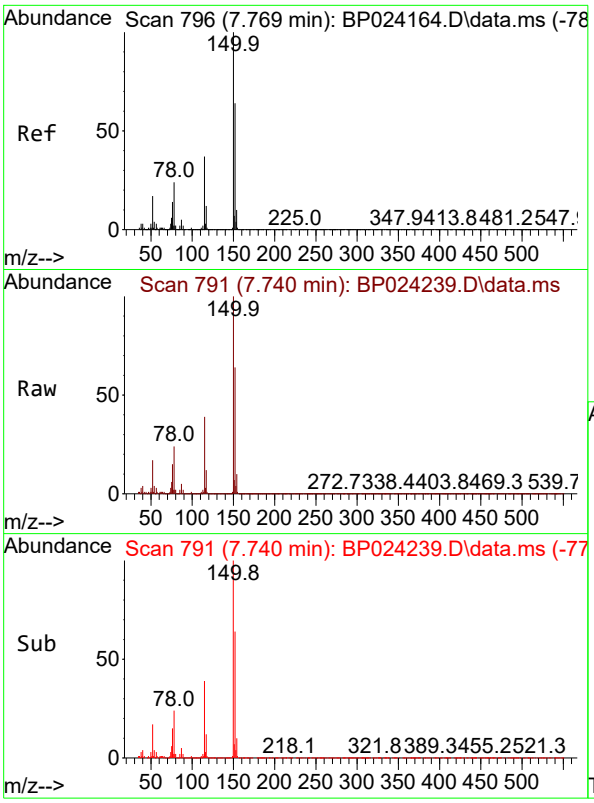
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Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Quant Time: Apr 09 18:26:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration



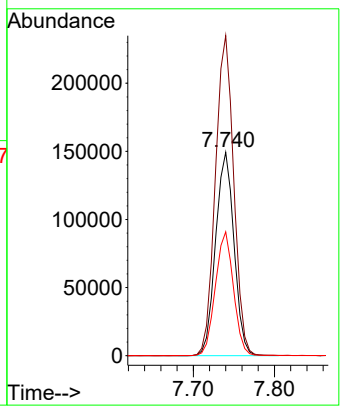


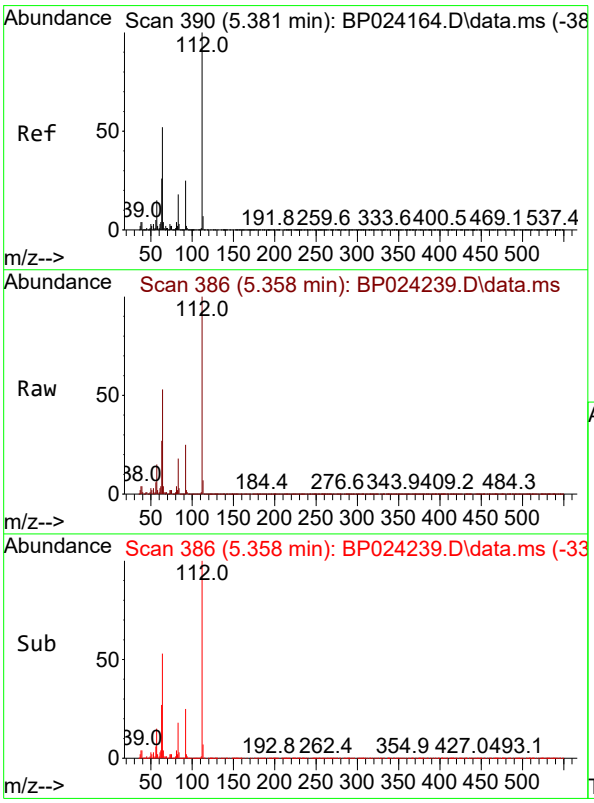
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.740 min Scan# 7
Delta R.T. -0.029 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Tgt Ion:152 Resp: 235704

Ion	Ratio	Lower	Upper
152	100		
150	157.4	125.5	188.3
115	60.9	46.3	69.5

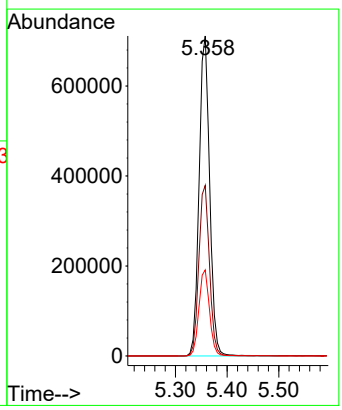


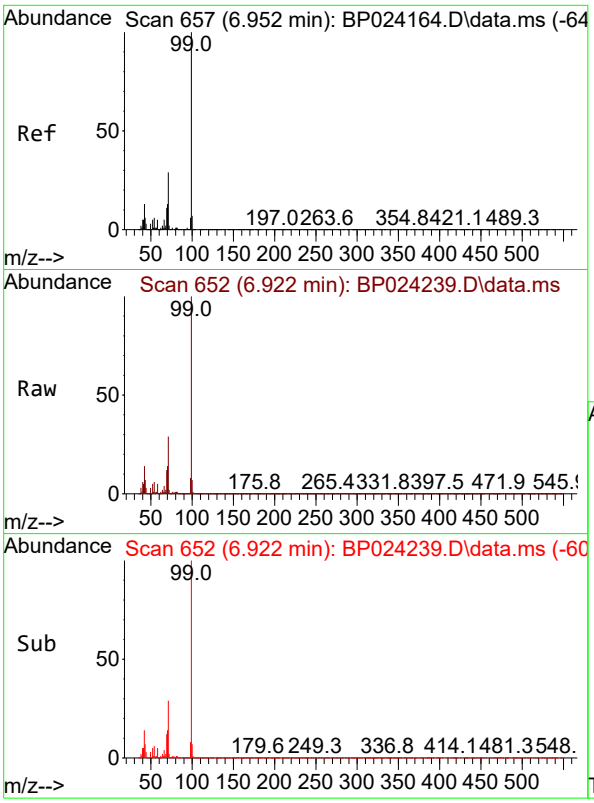


#5
2-Fluorophenol
Concen: 68.250 ng
RT: 5.358 min Scan# 386
Delta R.T. -0.024 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Tgt Ion:112 Resp: 1007759

Ion	Ratio	Lower	Upper
112	100		
64	53.3	41.3	61.9
63	26.9	20.6	31.0



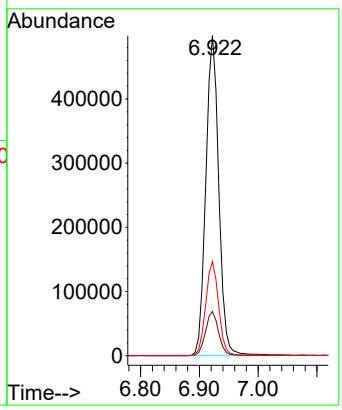


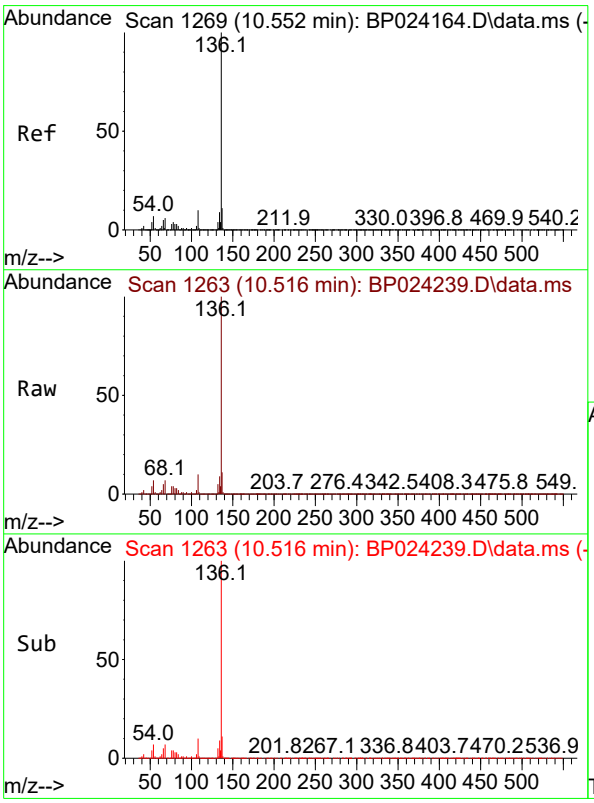
#7
Phenol-d6
Concen: 38.605 ng
RT: 6.922 min Scan# 6
Delta R.T. -0.030 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Tgt Ion: 99 Resp: 762285

Ion	Ratio	Lower	Upper
99	100		
42	13.8	10.6	16.0
71	29.4	23.3	34.9

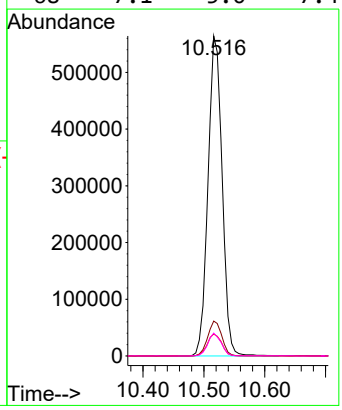


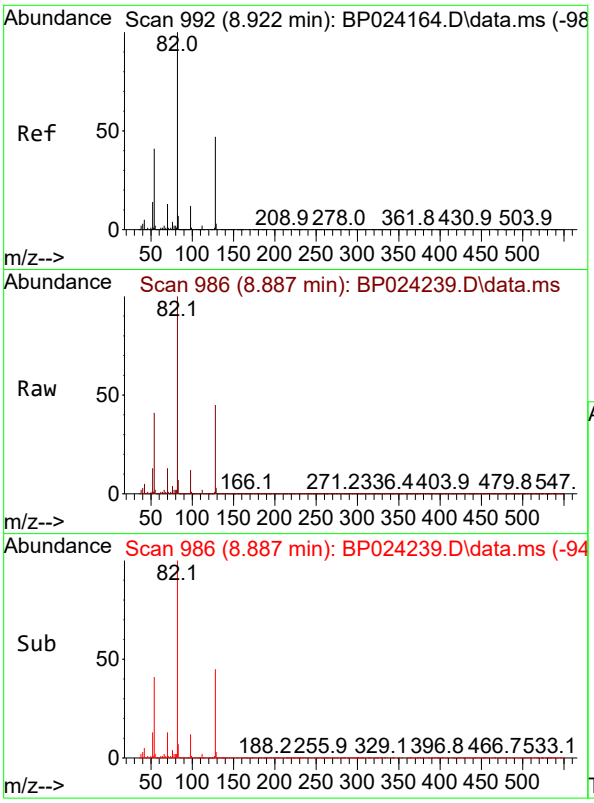


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.516 min Scan# 1263
Delta R.T. -0.035 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Tgt Ion:136 Resp: 911036

Ion	Ratio	Lower	Upper
136	100		
137	10.9	9.0	13.4
54	6.8	5.3	7.9
68	7.1	5.0	7.4



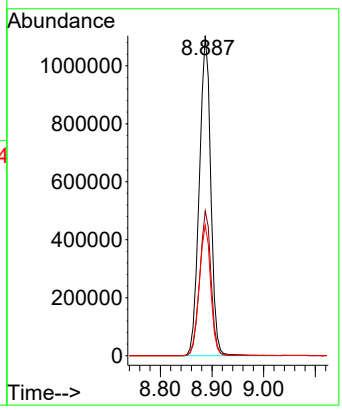


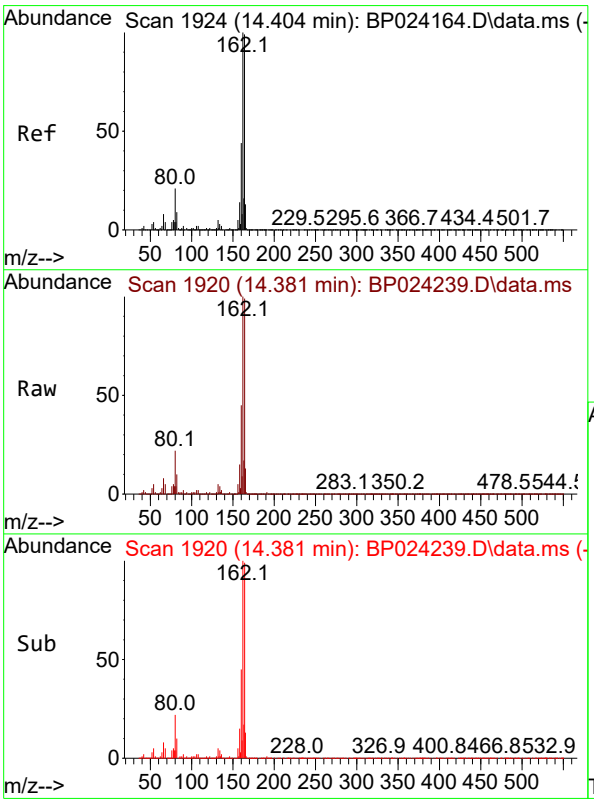
#23
Nitrobenzene-d5
Concen: 105.016 ng
RT: 8.887 min Scan# 9
Delta R.T. -0.035 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Tgt Ion: 82 Resp: 1695704

Ion	Ratio	Lower	Upper
82	100		
128	45.3	37.4	56.0
54	40.8	32.5	48.7

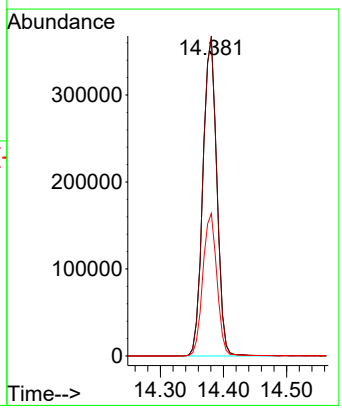


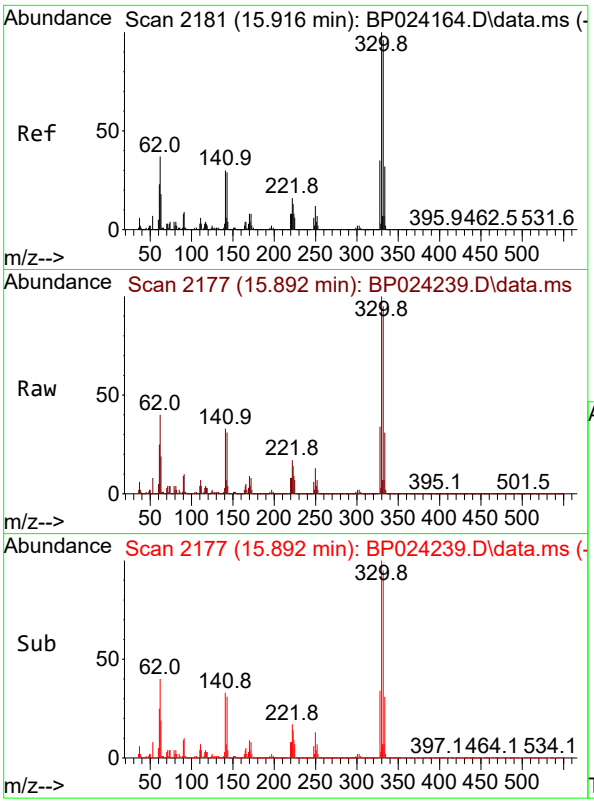


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.381 min Scan# 1920
Delta R.T. -0.024 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Tgt Ion:164 Resp: 559100

Ion	Ratio	Lower	Upper
164	100		
162	101.0	80.6	121.0
160	45.0	35.4	53.2



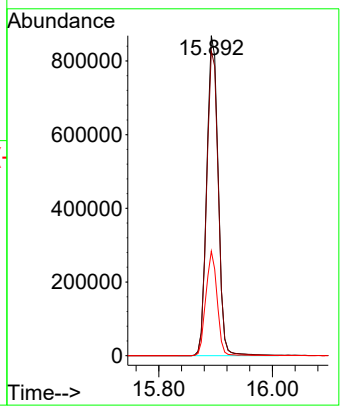


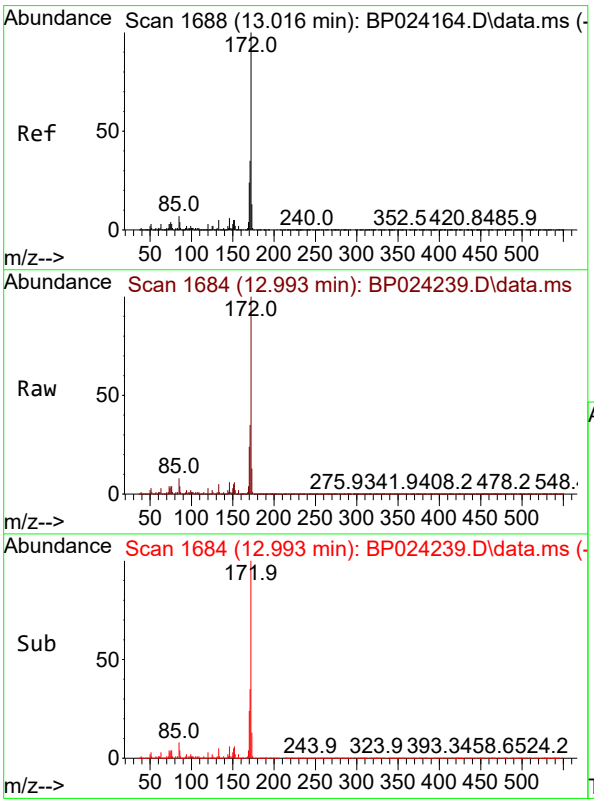
#42
2,4,6-Tribromophenol
Concen: 171.887 ng
RT: 15.892 min Scan# 2
Delta R.T. -0.024 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Tgt Ion:330 Resp: 1210524

Ion	Ratio	Lower	Upper
330	100		
332	96.5	77.6	116.4
141	32.2	25.0	37.6

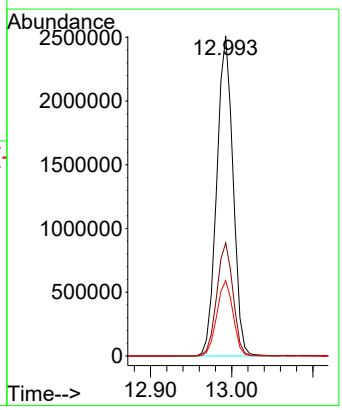


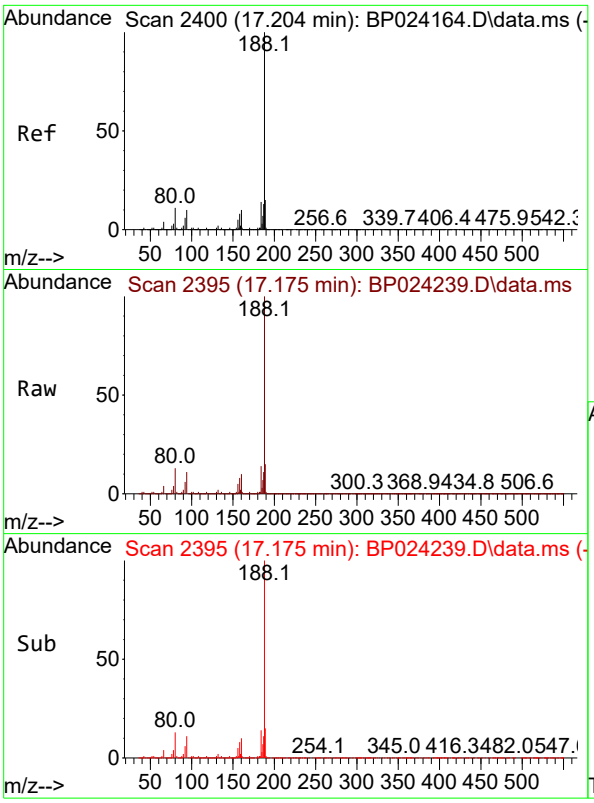


#45
2-Fluorobiphenyl
Concen: 92.399 ng
RT: 12.993 min Scan# 1684
Delta R.T. -0.024 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Tgt Ion:172 Resp: 3503535

Ion	Ratio	Lower	Upper
172	100		
171	35.3	28.3	42.5
170	23.6	19.0	28.4



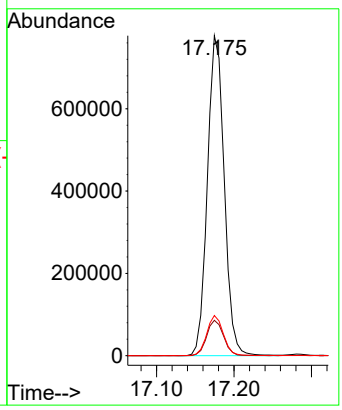


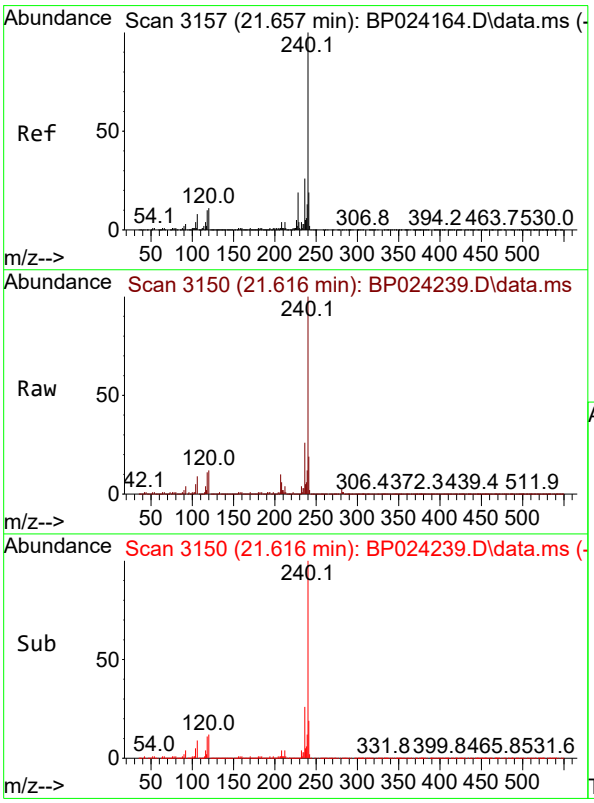
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.175 min Scan# 2
Delta R.T. -0.030 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Tgt Ion:188 Resp: 1174144

Ion	Ratio	Lower	Upper
188	100		
94	11.0	8.1	12.1
80	12.6	8.9	13.3

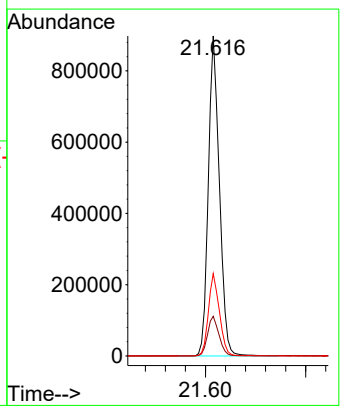


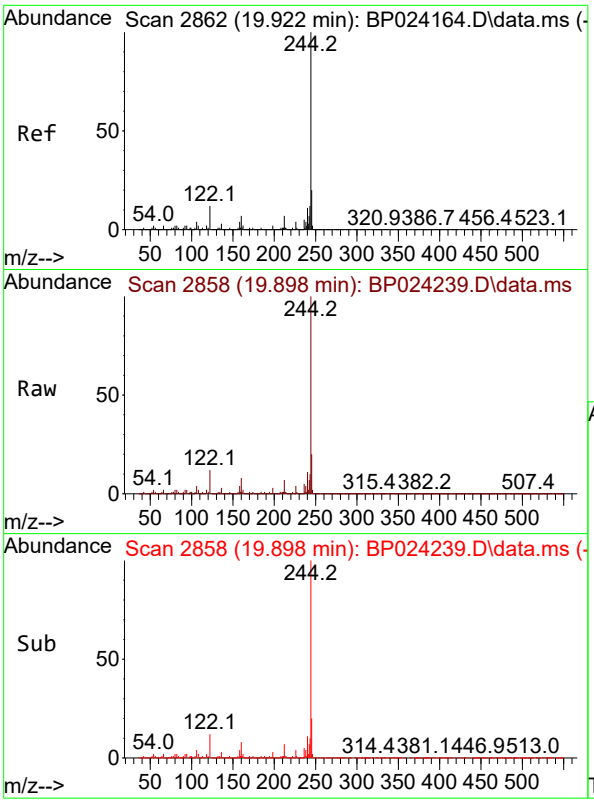


#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.616 min Scan# 3150
Delta R.T. -0.041 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Tgt Ion:240 Resp: 1378627

Ion	Ratio	Lower	Upper
240	100		
120	12.4	9.2	13.8
236	25.8	20.4	30.6



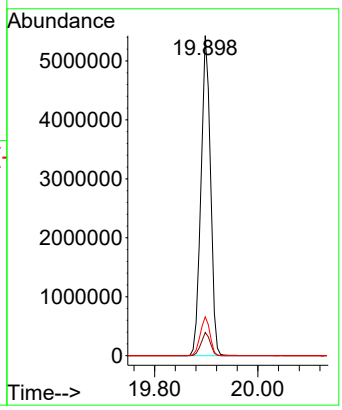


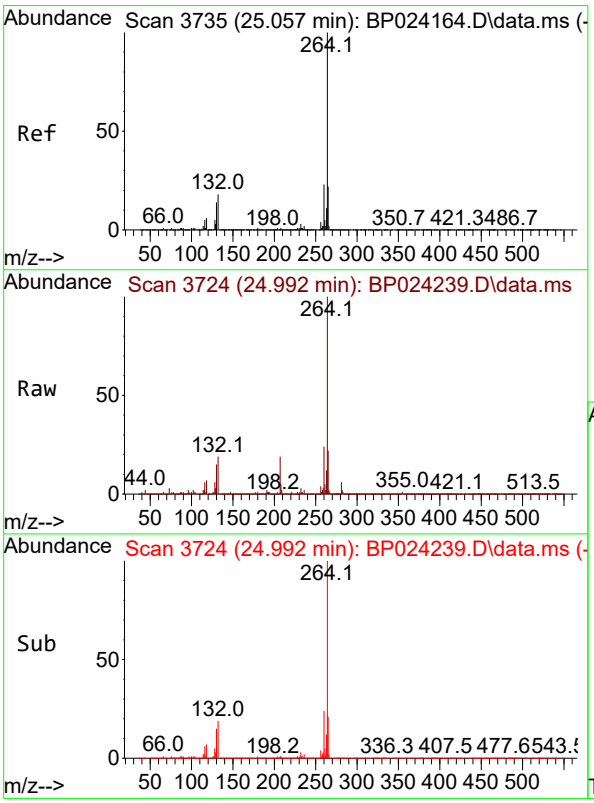
#79
Terphenyl-d14
Concen: 104.022 ng
RT: 19.898 min Scan# 2
Delta R.T. -0.024 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Tgt Ion:244 Resp: 6947270

Ion	Ratio	Lower	Upper
244	100		
212	7.3	5.7	8.5
122	12.1	9.6	14.4

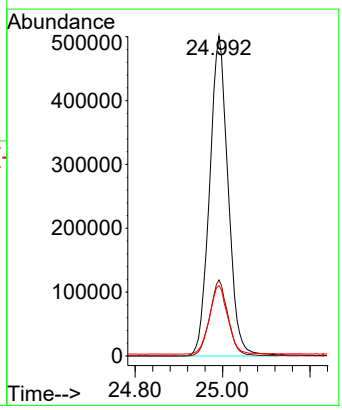




#86
Perylene-d12
Concen: 20.000 ng
RT: 24.992 min Scan# 3724
Delta R.T. -0.065 min
Lab File: BP024239.D
Acq: 09 Apr 2025 17:41

Tgt Ion:264 Resp: 1470675

Ion	Ratio	Lower	Upper
264	100		
260	23.7	18.5	27.7
265	22.0	17.7	26.5



Sample Results: **BP024239.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

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_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BP024239.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.899	302	308	318	rBV	256976	352636	1.85%	0.539%
2	5.358	379	386	402	rVB	2257672	3201655	16.77%	4.891%
3	6.922	643	652	664	rBV	1254661	1942775	10.18%	2.968%
4	7.740	782	791	798	rBV	846439	1341031	7.03%	2.049%
5	8.887	979	986	999	rBV	2996158	4610863	24.16%	7.043%
6	10.516	1256	1263	1271	rBV	1117604	1804065	9.45%	2.756%
7	12.993	1676	1684	1695	rBV	7257286	10153429	53.20%	15.510%
8	14.381	1910	1920	1930	rBV	1559647	2425654	12.71%	3.705%
9	15.892	2170	2177	2196	rBV	6293738	8876721	46.51%	13.560%
10	17.175	2387	2395	2407	rBV2	1927931	2955079	15.48%	4.514%
11	17.880	2509	2515	2525	rVB2	426490	595523	3.12%	0.910%
12	19.316	2755	2759	2769	rBV	245186	362638	1.90%	0.554%
13	19.898	2852	2858	2868	rBV	14913362	19086203	100.00%	29.156%
14	21.616	3144	3150	3162	rBV	2457177	3849444	20.17%	5.880%
15	24.992	3715	3724	3739	rVB	1357336	3905058	20.46%	5.965%

Sum of corrected areas: 65462774

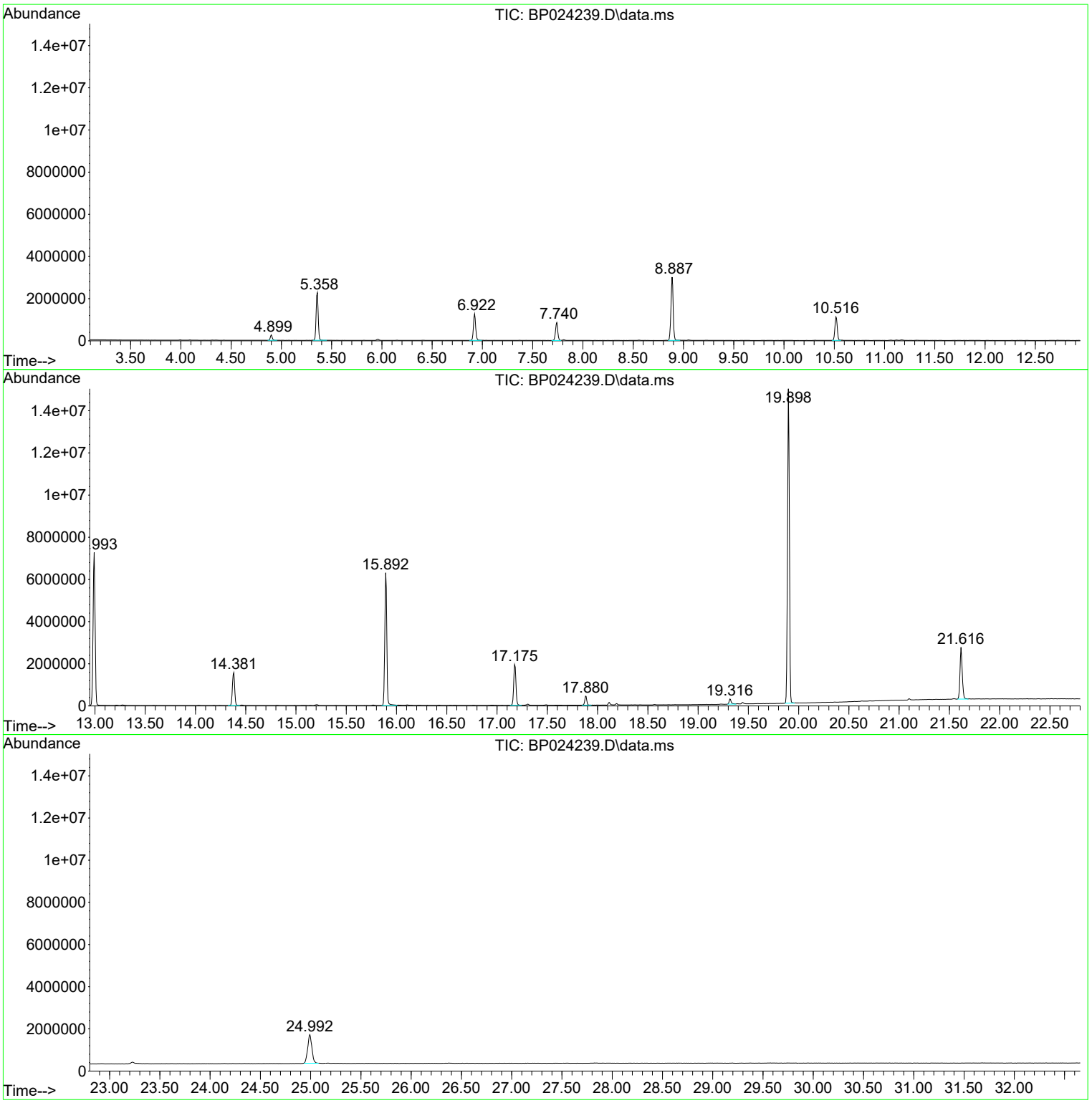
Sample Results: **BP024239.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

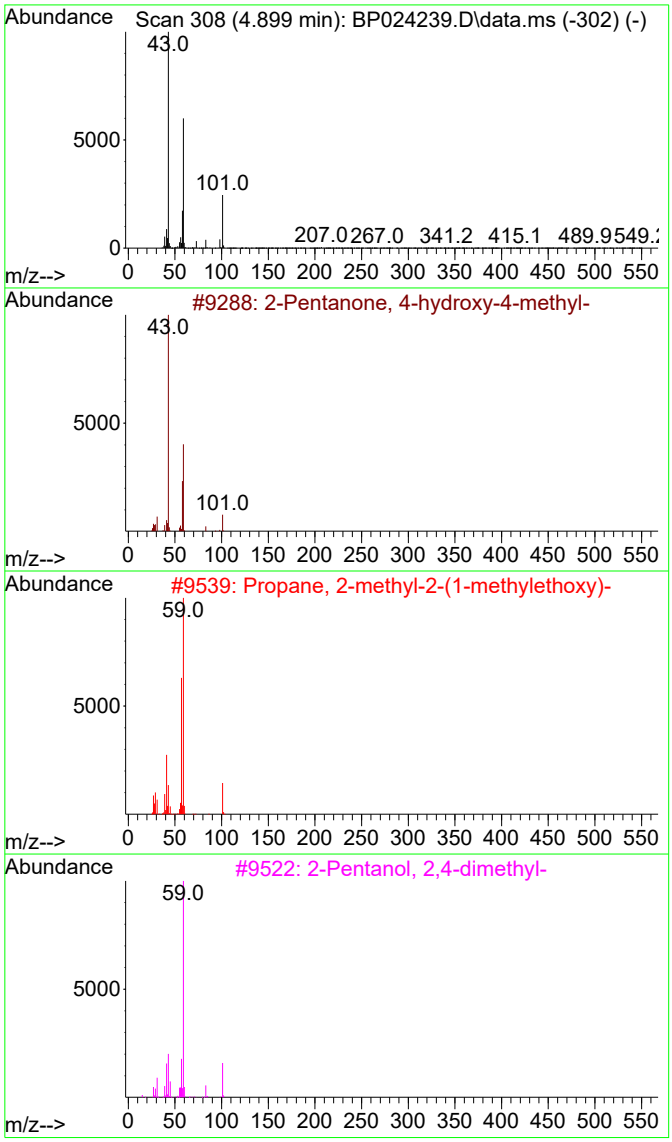
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

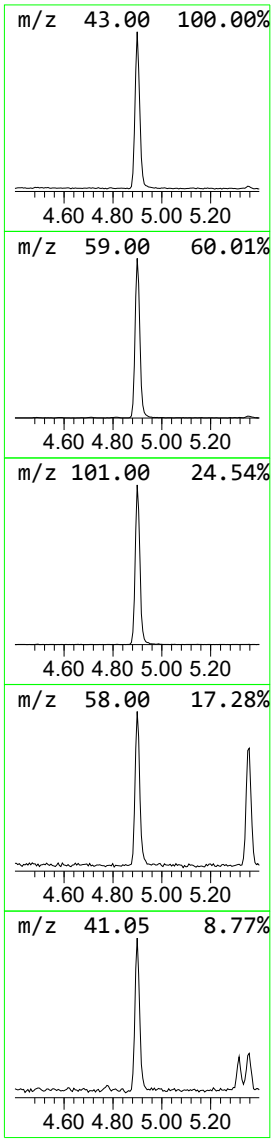
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.899	5.26 ng	352636	1,4-Dichlorobenzene-d4	7.740

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	64
2	Propane, 2-methyl-2-(1-methyleth...	116	C7H16O	017348-59-3	50
3	2-Pentanol, 2,4-dimethyl-	116	C7H16O	000625-06-9	25
4	Propane, 1-ethoxy-2-methyl-	102	C6H14O	000627-02-1	25
5	Methyl 2-(2-(2-methoxyethoxy)eth...	192	C8H16O5	1000366-88-2	23





Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

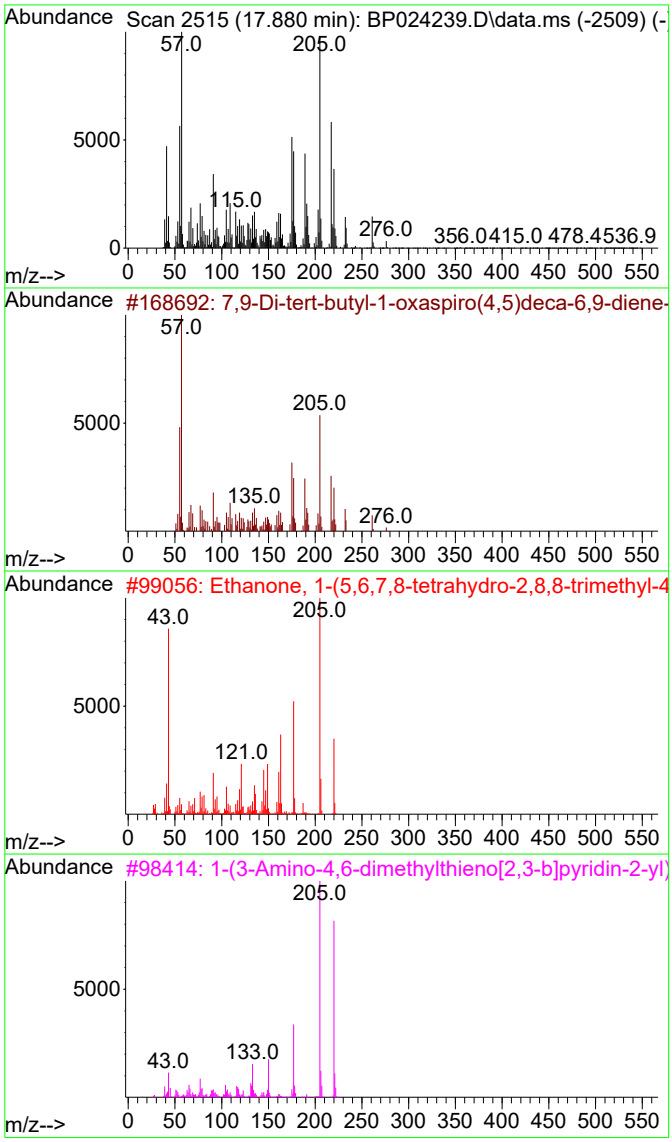
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

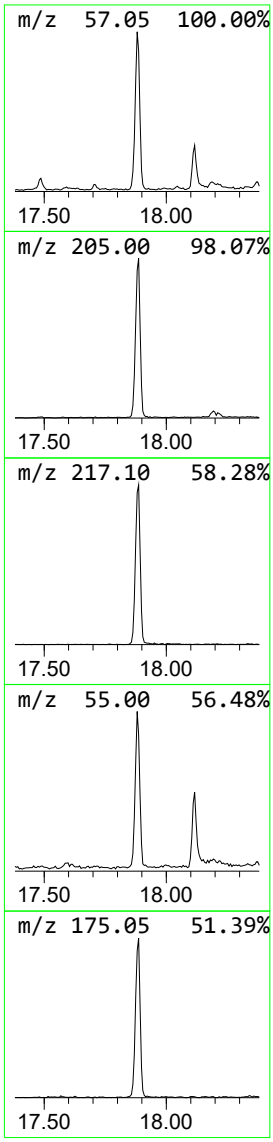
****

Peak Number 2 7,9-Di-tert-butyl-1-oxaspir... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.881	4.03 ng	595523	Phenanthrene-d10	17.175

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	7,9-Di-tert-butyl-1-oxaspiro(4,5...	276	C17H24O3	082304-66-3	99
2	Ethanone, 1-(5,6,7,8-tetrahydro-...	220	C14H20O2	071596-88-8	64
3	1-(3-Amino-4,6-dimethylthieno[2,...	220	C11H12N2OS	052505-42-7	50
4	2,5-Cyclohexadien-1-one, 2,6-bis...	232	C16H24O	006738-27-8	42
5	2,4-Diamino-6-nitroquinazoline	205	C8H7N5O2	007154-34-9	38





Sample Results: **BP024239.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

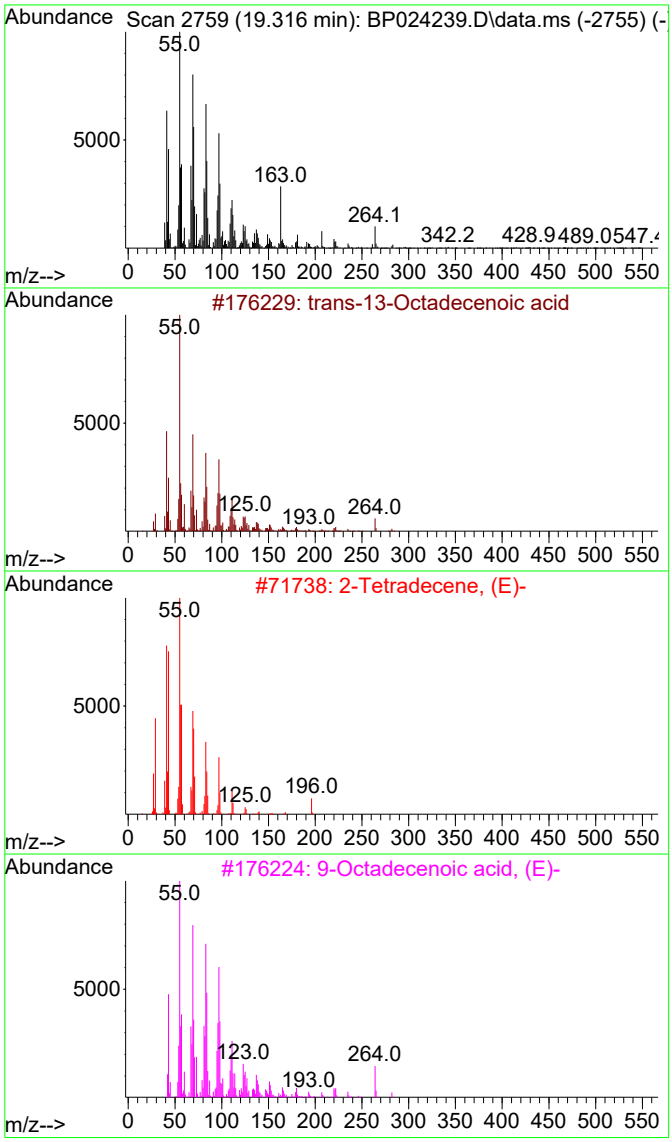
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

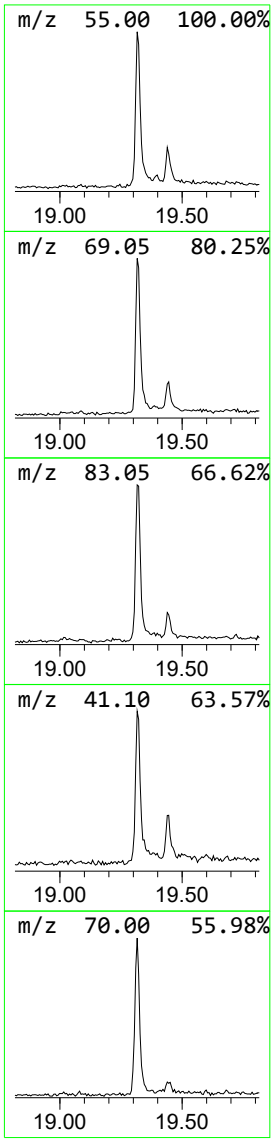
****

Peak Number 3 trans-13-Octadecenoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.316	2.45 ng	362638	Phenanthrene-d10	17.175

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-13-Octadecenoic acid	282	C18H34O2	000693-71-0	95
2	2-Tetradecene, (E)-	196	C14H28	035953-54-9	90
3	9-Octadecenoic acid, (E)-	282	C18H34O2	000112-79-8	90
4	Oleic Acid	282	C18H34O2	000112-80-1	86
5	2-Butenedioic acid (Z)-, monodod...	284	C16H28O4	002424-61-5	83





Sample Results: **BP024239.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024239.D
Acq On : 09 Apr 2025 17:41
Operator : RC/JU
Sample : Q1746-07
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
EB-2025-4-7

Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.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-...	4.899	5.3	ng	352636	1	7.740	1341030	20.0
7,9-Di-tert-but...	17.881	4.0	ng	595523	4	17.175	2955080	20.0
trans-13-Octade...	19.316	2.5	ng	362638	4	17.175	2955080	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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date(s): 04/08/2025 04/08/2025

Calibration Time(s): 13:35 20:07

LAB FILE ID: RRF2.5 = BM049848.D RRF005 = BM049849.D RRF010 = BM049850.D
RRF020 = BM049851.D RRF040 = BM049852.D RRF050 = BM049853.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2-Fluorophenol		1.145	1.144	1.213	1.191	1.165	1.178	2.4
Benzaldehyde		0.874	0.830	0.838	0.750	0.712	0.752	14.3
Phenol-d6		1.391	1.392	1.523	1.491	1.433	1.465	4.2
Phenol		1.376	1.370	1.482	1.441	1.394	1.430	3.6
bis(2-Chloroethyl)ether		1.113	1.084	1.147	1.135	1.096	1.121	2.4
2-Chlorophenol		1.180	1.191	1.250	1.218	1.174	1.207	2.4
2-Methylphenol		0.858	0.856	0.916	0.891	0.850	0.881	3.3
2,2-oxybis(1-Chloropropane)		1.268	1.235	1.312	1.267	1.192	1.250	3.2
Acetophenone		0.463	0.477	0.496	0.498	0.482	0.486	2.6
3+4-Methylphenols		1.140	1.142	1.246	1.224	1.170	1.201	4.3
n-Nitroso-di-n-propylamine	0.760	0.786	0.783	0.860	0.836	0.793	0.812	4.6
Nitrobenzene-d5		0.335	0.344	0.366	0.368	0.361	0.359	4.0
Hexachloroethane		0.505	0.494	0.520	0.504	0.486	0.500	2.3
Nitrobenzene		0.329	0.329	0.354	0.356	0.345	0.346	3.5
Isophorone		0.569	0.568	0.613	0.616	0.598	0.602	4.0
2-Nitrophenol		0.162	0.165	0.183	0.189	0.190	0.183	7.9
2,4-Dimethylphenol		0.185	0.194	0.208	0.213	0.212	0.208	6.5
bis(2-Chloroethoxy)methane		0.386	0.386	0.411	0.410	0.399	0.403	3.1
2,4-Dichlorophenol		0.319	0.320	0.348	0.353	0.349	0.345	5.5
Naphthalene		1.004	0.990	1.045	1.042	1.019	1.028	2.3
4-Chloroaniline		0.348	0.351	0.376	0.380	0.359	0.363	3.3
Hexachlorobutadiene		0.238	0.236	0.245	0.249	0.249	0.247	3.3
Caprolactam		0.093	0.089	0.100	0.102	0.099	0.099	6.3
4-Chloro-3-methylphenol		0.277	0.276	0.305	0.309	0.303	0.302	6.4
2-Methylnaphthalene		0.683	0.685	0.729	0.734	0.721	0.724	4.2
Hexachlorocyclopentadiene		0.214	0.223	0.247	0.264	0.260	0.245	7.9
2,4,6-Trichlorophenol		0.417	0.420	0.444	0.459	0.449	0.445	4.5
2-Fluorobiphenyl		1.425	1.414	1.499	1.515	1.486	1.475	2.7
2,4,5-Trichlorophenol		0.465	0.452	0.472	0.500	0.483	0.484	4.5
1,1-Biphenyl		1.451	1.429	1.514	1.528	1.480	1.487	2.5
2-Chloronaphthalene		1.140	1.144	1.188	1.194	1.163	1.169	1.9
2-Nitroaniline		0.232	0.242	0.272	0.283	0.281	0.270	8.8
Dimethylphthalate		1.366	1.331	1.430	1.438	1.411	1.411	3.3
Acenaphthylene		1.627	1.613	1.718	1.742	1.711	1.702	3.5

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date(s): 04/08/2025 04/08/2025

Calibration Time(s): 13:35 20:07

LAB FILE ID: RRF2.5 = BM049848.D RRF005 = BM049849.D RRF010 = BM049850.D
RRF020 = BM049851.D RRF040 = BM049852.D RRF050 = BM049853.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2,6-Dinitrotoluene		0.249	0.265	0.303	0.310	0.305	0.296	9.4
3-Nitroaniline		0.236	0.253	0.290	0.310	0.295	0.286	10.6
Acenaphthene		1.027	1.023	1.089	1.113	1.089	1.083	3.8
2,4-Dinitrophenol			0.097	0.148	0.184	0.194	0.175	26.0
4-Nitrophenol		0.195	0.213	0.257	0.270	0.273	0.255	14.3
Dibenzofuran		1.737	1.709	1.821	1.845	1.815	1.810	3.5
2,4-Dinitrotoluene		0.309	0.333	0.395	0.421	0.420	0.394	13.4
Diethylphthalate		1.311	1.270	1.378	1.390	1.347	1.353	3.5
4-Chlorophenyl-phenylether		0.699	0.694	0.761	0.789	0.791	0.771	7.4
Fluorene		1.354	1.335	1.450	1.481	1.456	1.439	4.7
4-Nitroaniline		0.227	0.247	0.301	0.320	0.316	0.295	14.0
4,6-Dinitro-2-methylphenol			0.094	0.119	0.132	0.133	0.126	13.6
n-Nitrosodiphenylamine		0.561	0.578	0.606	0.619	0.602	0.599	3.5
2,4,6-Tribromophenol		0.258	0.255	0.280	0.294	0.298	0.291	9.9
4-Bromophenyl-phenylether		0.212	0.212	0.227	0.239	0.237	0.232	6.8
Hexachlorobenzene		0.249	0.250	0.262	0.273	0.268	0.266	5.1
Atrazine		0.186	0.177	0.142	0.130	0.142	0.155	15.9
Pentachlorophenol		0.181	0.186	0.191	0.204	0.197	0.196	5.5
Phenanthrene		1.031	1.030	1.095	1.133	1.104	1.096	4.4
Anthracene		0.997	1.004	1.074	1.125	1.099	1.081	5.4
Carbazole		0.922	0.952	1.024	1.059	1.038	1.018	5.7
Di-n-butylphthalate		1.119	1.120	1.189	1.216	1.176	1.172	3.2
Fluoranthene		1.187	1.206	1.310	1.387	1.395	1.348	8.8
Pyrene		1.310	1.280	1.395	1.408	1.393	1.378	4.3
Terphenyl-d14		0.988	1.004	1.139	1.187	1.142	1.067	7.9
Butylbenzylphthalate		0.502	0.500	0.537	0.536	0.511	0.518	2.9
3,3-Dichlorobenzidine		0.428	0.450	0.492	0.526	0.516	0.502	9.7
Benzo(a)anthracene		1.237	1.226	1.335	1.362	1.345	1.329	5.4
Chrysene		1.179	1.173	1.261	1.292	1.277	1.264	5.2
Bis(2-ethylhexyl)phthalate		0.758	0.747	0.790	0.783	0.740	0.755	3.2
Di-n-octyl phthalate		1.291	1.287	1.366	1.362	1.307	1.320	2.4
Benzo(b)fluoranthene		1.141	1.157	1.223	1.308	1.313	1.277	8.4
Benzo(k)fluoranthene		1.132	1.122	1.209	1.242	1.263	1.238	7.5
Benzo(a)pyrene		1.011	1.026	1.096	1.130	1.154	1.122	7.5
Indeno(1,2,3-cd)pyrene		1.375	1.368	1.480	1.507	1.523	1.491	6.2

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,
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6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date(s): 04/08/2025 04/08/2025

Calibration Time(s): 13:35 20:07

LAB FILE ID: RRF2.5 = BM049848.D RRF005 = BM049849.D RRF010 = BM049850.D
RRF020 = BM049851.D RRF040 = BM049852.D RRF050 = BM049853.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
Dibenzo(a,h)anthracene		1.128	1.128	1.205	1.244	1.258	1.228	6.4
Benzo(g,h,i)perylene		1.178	1.179	1.255	1.265	1.269	1.255	4.7
1,2,4,5-Tetrachlorobenzene		0.664	0.662	0.697	0.706	0.711	0.700	4.0
1,4-Dioxane		0.497	0.470	0.501	0.488	0.486	0.485	2.5
2,3,4,6-Tetrachlorophenol		0.418	0.397	0.416	0.427	0.420	0.424	4.2

All other compounds must meet a minimum RRF of 0.010.

Response Factor Report BNA_M

Method Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\
Method File : 8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Apr 09 04:00:55 2025
Response Via : Initial Calibration

Calibration Files
2.5 =BM049848.D 5 =BM049849.D 10 =BM049850.D 20 =BM049851.D 40 =BM049852.D 50 =BM049853.D 60 =BM049854.D 80 =BM0498
55.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------							
2)		1,4-Dioxane		0.497	0.470	0.501	0.488	0.486	0.471	0.483	0.485	2.47
3)		Pyridine		1.262	1.220	1.322	1.287	1.276	1.278	1.276	1.274	2.40
4)		n-Nitrosodimet...		0.478	0.461	0.496	0.489	0.484	0.500	0.488	0.485	2.67
5)	S	2-Fluorophenol		1.145	1.144	1.213	1.191	1.165	1.210	1.177	1.178	2.40
6)		Aniline		1.304	1.315	1.396	1.325	1.153	1.142	1.154	1.256	8.22
7)	S	Phenol-d6		1.391	1.392	1.523	1.491	1.433	1.543	1.485	1.465	4.15
8)		2-Chlorophenol		1.180	1.191	1.250	1.218	1.174	1.239	1.199	1.207	2.42
9)		Benzaldehyde		0.873	0.830	0.838	0.750	0.712	0.701	0.561	0.752	14.25
10)	C	Phenol		1.376	1.370	1.482	1.441	1.394	1.496	1.451	1.430	3.56
11)		bis(2-Chloroet...		1.113	1.084	1.147	1.135	1.096	1.160	1.114	1.121	2.45
12)		1,3-Dichlorobe...		1.417	1.391	1.475	1.438	1.418	1.441	1.409	1.427	1.90
13)	C	1,4-Dichlorobe...		1.418	1.399	1.488	1.453	1.412	1.455	1.426	1.436	2.15
14)		1,2-Dichlorobe...		1.348	1.325	1.402	1.374	1.324	1.359	1.334	1.352	2.12
15)		Benzyl Alcohol		0.852	0.857	0.950	0.953	0.904	0.993	0.951	0.923	5.79
16)		2,2'-oxybis(1-...		1.268	1.235	1.312	1.267	1.192	1.261	1.214	1.250	3.18
17)		2-Methylphenol		0.858	0.856	0.916	0.891	0.850	0.920	0.877	0.881	3.29
18)		Hexachloroethane		0.505	0.494	0.520	0.504	0.486	0.501	0.488	0.500	2.32
19)	P	n-Nitroso-di-n...	0.760	0.786	0.783	0.860	0.836	0.793	0.859	0.816	0.812	4.60
20)		3+4-Methylphenols		1.140	1.142	1.246	1.224	1.170	1.272	1.215	1.201	4.31
21)	I	Naphthalene-d8	----------	ISTD	----------							
22)		Acetophenone		0.463	0.477	0.496	0.498	0.482	0.494	0.493	0.486	2.64
23)	S	Nitrobenzene-d5		0.335	0.344	0.366	0.368	0.361	0.370	0.371	0.359	3.96
24)		Nitrobenzene		0.329	0.329	0.354	0.356	0.345	0.353	0.354	0.346	3.49
25)		Isophorone		0.569	0.568	0.613	0.616	0.598	0.628	0.620	0.602	4.05
26)	C	2-Nitrophenol		0.162	0.165	0.183	0.189	0.190	0.197	0.197	0.183	7.91
27)		2,4-Dimethylph...		0.185	0.194	0.208	0.213	0.212	0.221	0.221	0.208	6.48
28)		bis(2-Chloroet...		0.386	0.386	0.411	0.410	0.399	0.415	0.412	0.403	3.08
29)	C	2,4-Dichloroph...		0.319	0.320	0.348	0.353	0.349	0.364	0.364	0.345	5.45
30)		1,2,4-Trichlor...		0.386	0.380	0.401	0.404	0.399	0.412	0.413	0.399	3.11
31)		Naphthalene		1.004	0.990	1.045	1.042	1.019	1.050	1.045	1.028	2.32
32)		Benzoic acid			0.109	0.175	0.230	0.240	0.283	0.283	0.220	30.63
33)		4-Chloroaniline		0.348	0.351	0.376	0.380	0.359	0.359	0.366	0.363	3.34
34)	C	Hexachlorobuta...		0.238	0.236	0.245	0.249	0.249	0.255	0.258	0.247	3.33
35)		Caprolactam		0.093	0.089	0.100	0.102	0.099	0.107	0.104	0.099	6.29
36)	C	4-Chloro-3-met...		0.277	0.276	0.305	0.309	0.303	0.326	0.321	0.302	6.41
37)		2-Methylnaphth...		0.683	0.685	0.729	0.734	0.721	0.762	0.755	0.724	4.23
38)		1-Methylnaphth...		0.680	0.659	0.711	0.713	0.703	0.739	0.732	0.705	3.97

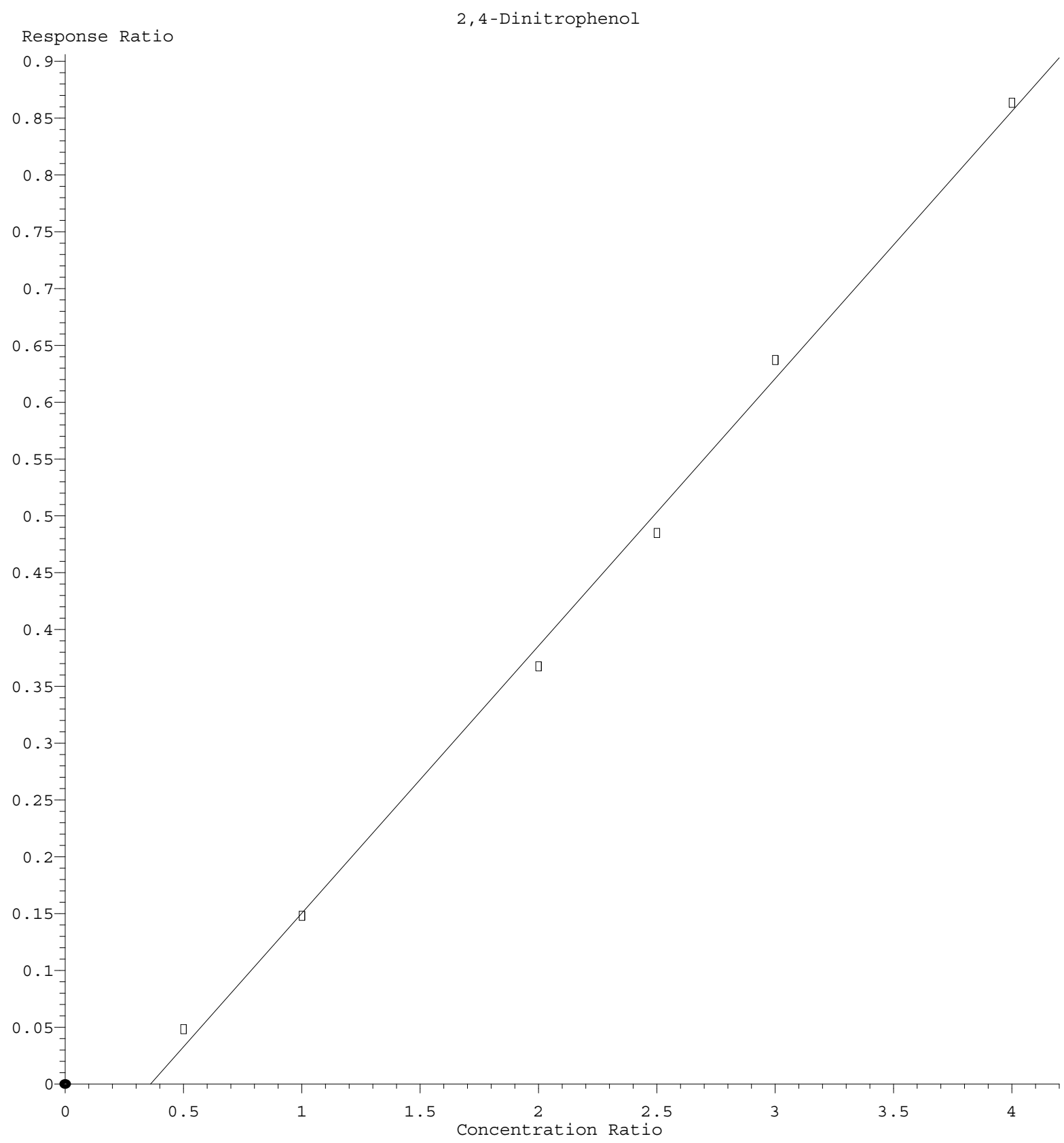
Method Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\
Method File : 8270-BM040825.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.664	0.662	0.697	0.706	0.711	0.721	0.737	0.700	4.02
41)	P	Hexachlorocycl...	0.214	0.223	0.247	0.264	0.260	0.258	0.251	0.245	7.86
42)	S	2,4,6-Tribromo...	0.258	0.255	0.280	0.294	0.298	0.323	0.328	0.291	9.94
43)	C	2,4,6-Trichlor...	0.417	0.420	0.444	0.459	0.449	0.459	0.468	0.445	4.46
44)		2,4,5-Trichlor...	0.465	0.452	0.472	0.500	0.483	0.504	0.510	0.484	4.52
45)	S	2-Fluorobiphenyl	1.425	1.414	1.499	1.515	1.486	1.482	1.504	1.475	2.68
46)		1,1'-Biphenyl	1.451	1.429	1.514	1.528	1.480	1.490	1.515	1.487	2.45
47)		2-Chloronaphth...	1.140	1.144	1.188	1.194	1.163	1.162	1.189	1.169	1.88
48)		2-Nitroaniline	0.232	0.242	0.272	0.283	0.281	0.286	0.295	0.270	8.83
49)		Acenaphthylene	1.627	1.613	1.718	1.742	1.711	1.735	1.768	1.702	3.46
50)		Dimethylphthalate	1.366	1.331	1.430	1.438	1.411	1.446	1.455	1.411	3.27
51)		2,6-Dinitrotol...	0.249	0.265	0.303	0.310	0.305	0.317	0.320	0.296	9.38
52)	C	Acenaphthene	1.027	1.023	1.089	1.113	1.089	1.110	1.127	1.083	3.83
53)		3-Nitroaniline	0.236	0.253	0.290	0.310	0.295	0.295	0.321	0.286	10.64
54)	P	2,4-Dinitrophenol		0.097	0.148	0.184	0.194	0.212	0.216	0.175	26.04
55)		Dibenzofuran	1.737	1.709	1.821	1.845	1.815	1.862	1.879	1.810	3.52
56)	P	4-Nitrophenol	0.195	0.213	0.257	0.270	0.273	0.286	0.288	0.255	14.34
57)		2,4-Dinitrotol...	0.309	0.333	0.395	0.421	0.420	0.440	0.443	0.394	13.45
58)		Fluorene	1.354	1.335	1.450	1.481	1.456	1.489	1.505	1.439	4.67
59)		2,3,4,6-Tetrac...	0.418	0.397	0.416	0.427	0.420	0.440	0.452	0.424	4.21
60)		Diethylphthalate	1.311	1.270	1.378	1.390	1.347	1.378	1.397	1.353	3.46
61)		4-Chlorophenyl...	0.699	0.694	0.761	0.789	0.791	0.830	0.836	0.771	7.43
62)		4-Nitroaniline	0.227	0.247	0.301	0.320	0.316	0.327	0.331	0.295	14.02
63)		Azobenzene	1.077	1.085	1.185	1.202	1.167	1.192	1.200	1.158	4.67
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...		0.094	0.119	0.132	0.133	0.138	0.140	0.126	13.60
66)	c	n-Nitrosodiphe...	0.561	0.578	0.606	0.619	0.602	0.610	0.614	0.599	3.54
67)		4-Bromophenyl-...	0.212	0.212	0.227	0.239	0.237	0.247	0.252	0.232	6.83
68)		Hexachlorobenzene	0.249	0.250	0.262	0.273	0.268	0.279	0.284	0.266	5.08
69)		Atrazine	0.186	0.177	0.142	0.130	0.142		0.155		15.89
70)	C	Pentachlorophenol	0.181	0.186	0.191	0.204	0.197	0.204	0.210	0.196	5.46
71)		Phenanthrene	1.031	1.030	1.095	1.133	1.104	1.135	1.147	1.096	4.41
72)		Anthracene	0.997	1.004	1.074	1.125	1.099	1.125	1.140	1.081	5.41
73)		Carbazole	0.922	0.952	1.024	1.059	1.038	1.060	1.071	1.018	5.69
74)		Di-n-butylphth...	1.119	1.120	1.189	1.216	1.176	1.191	1.196	1.172	3.22
75)	C	Fluoranthene	1.187	1.206	1.310	1.387	1.395	1.463	1.488	1.348	8.78
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine	0.319	0.260	0.205	0.403	0.163	0.150	0.357	0.265	36.93
78)		Pyrene	1.310	1.280	1.395	1.408	1.393	1.419	1.443	1.378	4.35
79)	S	Terphenyl-d14	0.988	1.004	1.139	1.187	1.142	1.007	1.004	1.067	7.91
80)		Butylbenzylpht...	0.502	0.500	0.537	0.536	0.511	0.516	0.523	0.518	2.88
81)		Benzo(a)anthra...	1.237	1.226	1.335	1.362	1.345	1.391	1.408	1.329	5.38
82)		3,3'-Dichlorob...	0.428	0.450	0.492	0.526	0.516	0.538	0.565	0.502	9.74
83)		Chrysene	1.179	1.173	1.261	1.292	1.277	1.318	1.346	1.264	5.21
84)		Bis(2-ethylhex...	0.758	0.747	0.790	0.783	0.740	0.727	0.737	0.755	3.16
85)	c	Di-n-octyl pht...	1.291	1.287	1.366	1.362	1.307	1.311	1.316	1.320	2.42

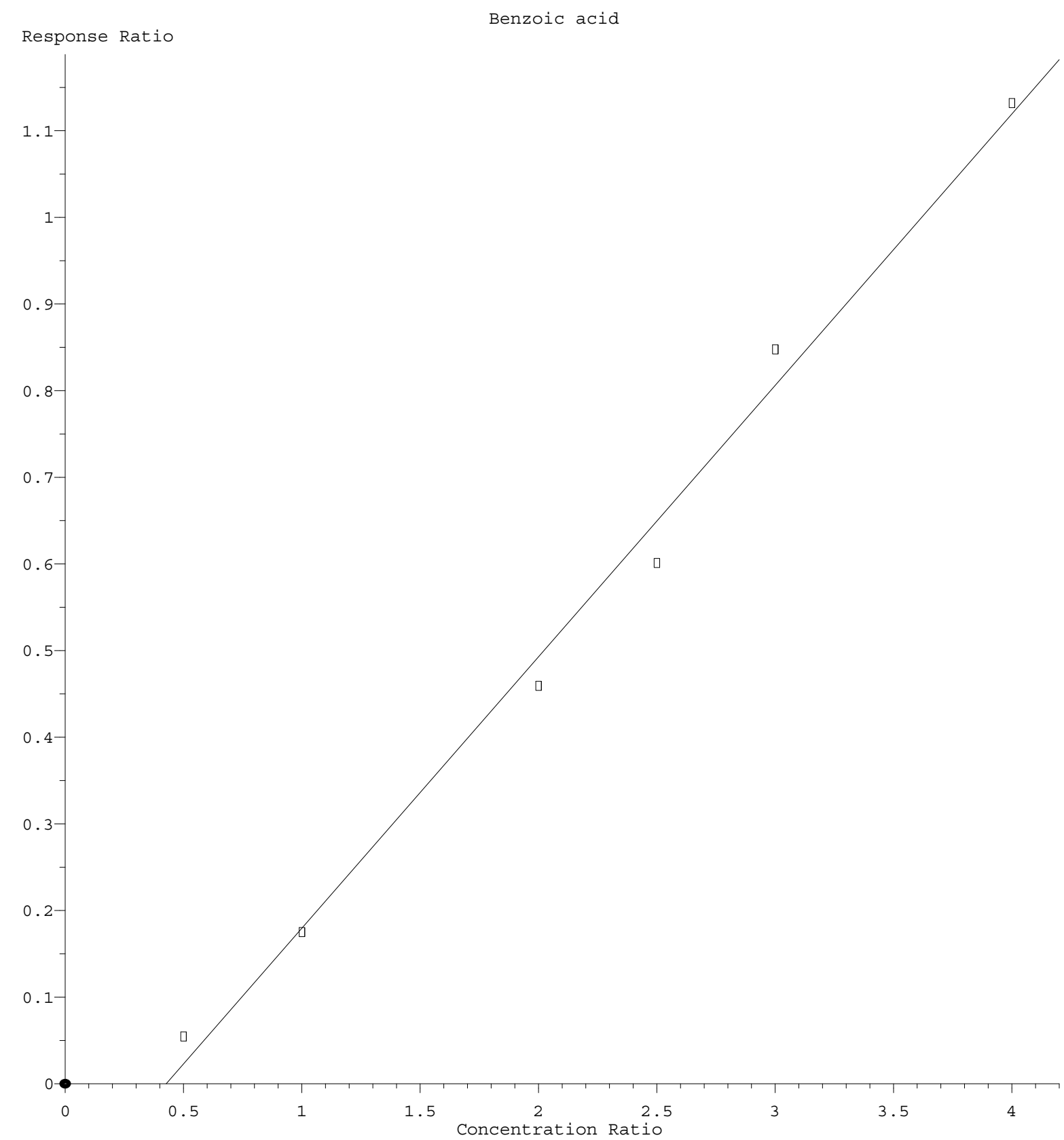
Method Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\
Method File : 8270-BM040825.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.375	1.368	1.480	1.507	1.523	1.577	1.606	1.491	6.16
88)		Benzo(b)fluora...	1.141	1.157	1.223	1.308	1.313	1.379	1.420	1.277	8.40
89)		Benzo(k)fluora...	1.132	1.122	1.209	1.242	1.263	1.336	1.362	1.238	7.46
90)	C	Benzo(a)pyrene	1.011	1.026	1.096	1.130	1.154	1.209	1.230	1.122	7.50
91)		Dibenzo(a,h)an...	1.128	1.128	1.205	1.244	1.258	1.301	1.331	1.228	6.43
92)		Benzo(g,h,i)pe...	1.178	1.179	1.255	1.265	1.269	1.310	1.328	1.255	4.65

(#) = Out of Range



Response = 2.353e-001 * Amt - 8.501e-002
Coef of Det (r^2) = 0.997352 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA M\Methods\8270-BM040825.M
Calibration Table Last Updated: Wed Apr 09 04:00:55 2025



Response = 3.132e-001 * Amt - 1.337e-001
Coef of Det (r^2) = 0.992281 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA M\Methods\8270-BM040825.M
Calibration Table Last Updated: Wed Apr 09 04:00:55 2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049848.D
Acq On : 08 Apr 2025 13:35
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC2.5

Quant Time: Apr 09 02:59:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.781	152	320498	20.000	ng	0.00
21) Naphthalene-d8	10.574	136	1104487	20.000	ng	0.00
39) Acenaphthene-d10	14.421	164	681841	20.000	ng	0.00
64) Phenanthrene-d10	17.162	188	1325316	20.000	ng	0.00
76) Chrysene-d12	21.403	240	1306777	20.000	ng	0.00
86) Perylene-d12	24.409	264	1436109	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...	8.580	70	30460	2.342	ng	98

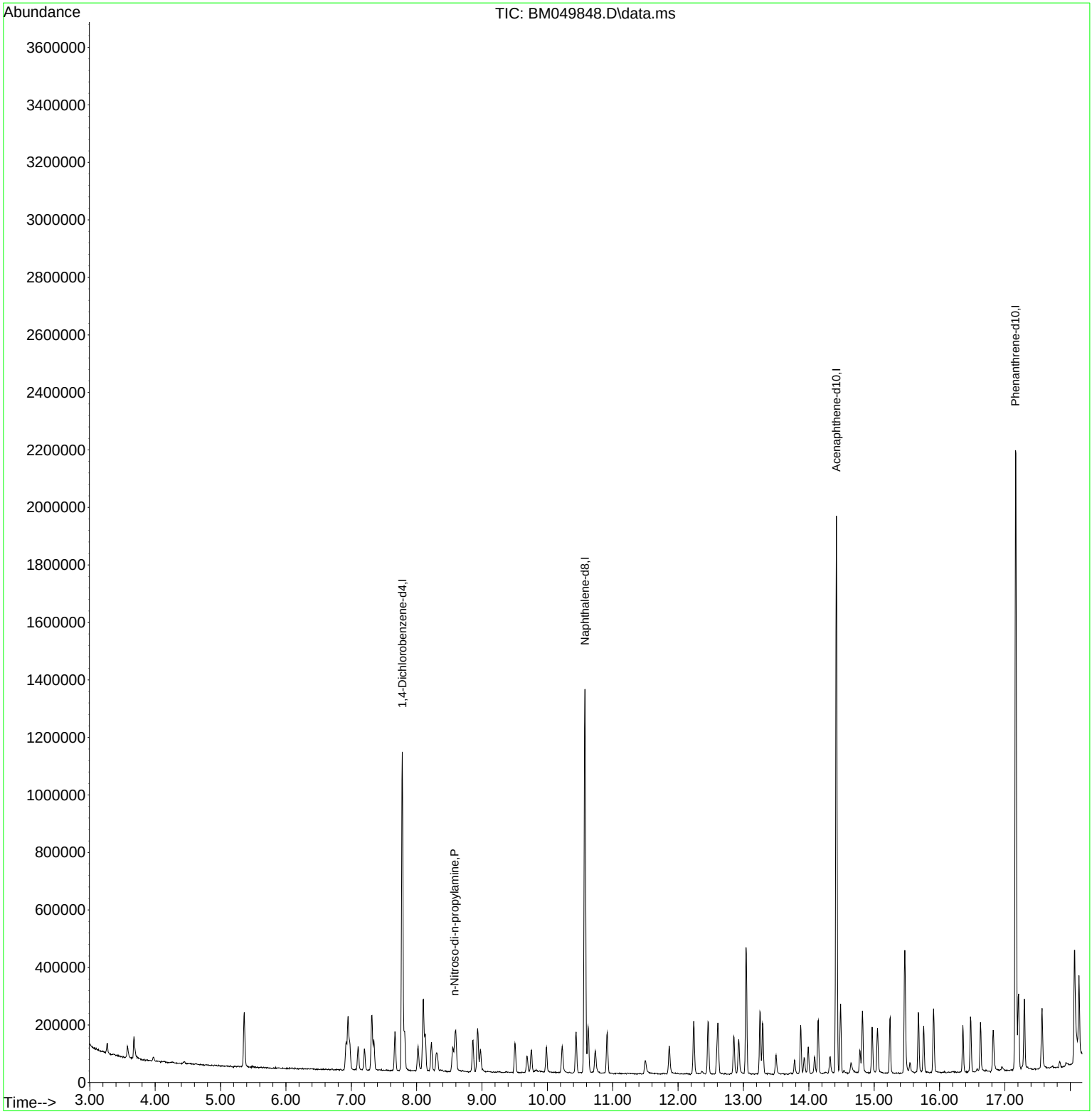
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049848.D
Acq On : 08 Apr 2025 13:35
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC2.5

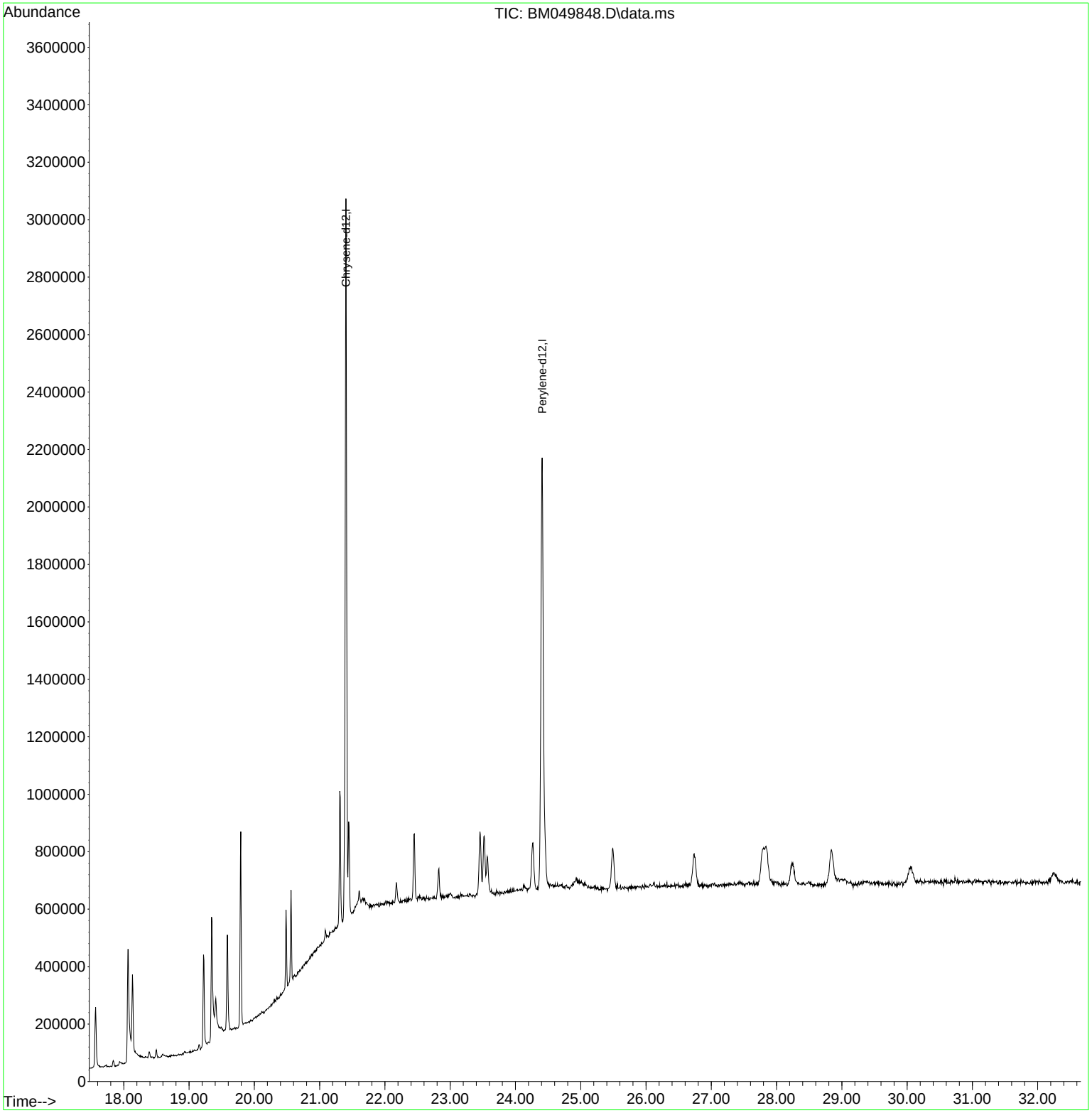
Quant Time: Apr 09 02:59:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049848.D
Acq On : 08 Apr 2025 13:35
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC2.5

Quant Time: Apr 09 02:59:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049849.D
Acq On : 08 Apr 2025 14:14
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC005

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Quant Time: Apr 09 02:59:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.781	152	315494	20.000	ng		0.00
21) Naphthalene-d8	10.575	136	1095995	20.000	ng		0.00
39) Acenaphthene-d10	14.421	164	671126	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1305854	20.000	ng		0.00
76) Chrysene-d12	21.403	240	1255417	20.000	ng		0.00
86) Perylene-d12	24.403	264	1363674	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	180654	9.723	ng		0.00
7) Phenol-d6	6.951	99	219444	9.493	ng		0.00
23) Nitrobenzene-d5	8.933	82	183508	9.324	ng		0.00
42) 2,4,6-Tribromophenol	15.909	330	86574	8.869	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	478149	9.661	ng		0.00
79) Terphenyl-d14	19.792	244	620191	9.258	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.263	88	39196	5.123	ng		99
3) Pyridine	3.669	79	99537	4.953	ng		93
4) n-Nitrosodimethylamine	3.575	42	37684	4.926	ng	#	91
6) Aniline	7.104	93	102863	5.193	ng		98
8) 2-Chlorophenol	7.345	128	93043	4.887	ng		99
9) Benzaldehyde	6.922	77	68896m	5.813	ng		
10) Phenol	6.975	94	108517	4.811	ng		100
11) bis(2-Chloroethyl)ether	7.204	93	87813	4.964	ng		99
12) 1,3-Dichlorobenzene	7.669	146	111770	4.965	ng		98
13) 1,4-Dichlorobenzene	7.816	146	111836	4.937	ng		99
14) 1,2-Dichlorobenzene	8.133	146	106307	4.983	ng		96
15) Benzyl Alcohol	8.022	79	67196	4.616	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.310	45	100016	5.073	ng		97
17) 2-Methylphenol	8.228	107	67662	4.867	ng		99
18) Hexachloroethane	8.863	117	39805	5.051	ng		96
19) n-Nitroso-di-n-propyla...	8.581	70	61968	4.840	ng		97
20) 3+4-Methylphenols	8.551	107	89903	4.744	ng		99
22) Acetophenone	8.598	105	126780	4.760	ng		96
24) Nitrobenzene	8.975	77	90100	4.754	ng		99
25) Isophorone	9.504	82	156018	4.732	ng		99
26) 2-Nitrophenol	9.686	139	44371	4.417	ng		96
27) 2,4-Dimethylphenol	9.757	122	50734	4.457	ng		98
28) bis(2-Chloroethoxy)met...	9.986	93	105841	4.795	ng		98
29) 2,4-Dichlorophenol	10.227	162	87444	4.621	ng		97
30) 1,2,4-Trichlorobenzene	10.439	180	105742	4.830	ng		99
31) Naphthalene	10.622	128	274967	4.883	ng		99
33) 4-Chloroaniline	10.733	127	95317	4.793	ng		99
34) Hexachlorobutadiene	10.916	225	65197	4.815	ng		98
35) Caprolactam	11.498	113	25608	4.718	ng		91
36) 4-Chloro-3-methylphenol	11.869	107	75972	4.583	ng		99
37) 2-Methylnaphthalene	12.239	142	187208	4.718	ng		99
38) 1-Methylnaphthalene	12.457	142	186332	4.820	ng		99
40) 1,2,4,5-Tetrachloroben...	12.610	216	111415	4.745	ng		99
41) Hexachlorocyclopentadiene	12.592	237	35937	4.368	ng		98
43) 2,4,6-Trichlorophenol	12.851	196	69935	4.681	ng		97
44) 2,4,5-Trichlorophenol	12.927	196	78011	4.805	ng		98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049849.D
Acq On : 08 Apr 2025 14:14
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC005

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Quant Time: Apr 09 02:59:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	1,1'-Biphenyl	13.257	154	243448	4.880	ng		99
47)	2-Chloronaphthalene	13.292	162	191299	4.879	ng		98
48)	2-Nitroaniline	13.498	65	38874	4.285	ng		94
49)	Acenaphthylene	14.145	152	272990	4.779	ng		99
50)	Dimethylphthalate	13.874	163	229200	4.841	ng		99
51)	2,6-Dinitrotoluene	13.992	165	41712	4.205	ng		93
52)	Acenaphthene	14.486	154	172362	4.744	ng		100
53)	3-Nitroaniline	14.321	138	39627	4.133	ng	#	99
55)	Dibenzofuran	14.821	168	291515	4.800	ng		99
56)	4-Nitrophenol	14.639	139	32685	3.826	ng		95
57)	2,4-Dinitrotoluene	14.780	165	51881	3.920	ng	#	94
58)	Fluorene	15.468	166	227189	4.706	ng		99
59)	2,3,4,6-Tetrachlorophenol	15.051	232	70065	4.924	ng		98
60)	Diethylphthalate	15.239	149	220014	4.846	ng		98
61)	4-Chlorophenyl-phenyle...	15.468	204	117238	4.529	ng		97
62)	4-Nitroaniline	15.480	138	38105	3.843	ng		95
63)	Azobenzene	15.757	77	180758	4.650	ng		98
66)	n-Nitrosodiphenylamine	15.674	169	183131	4.686	ng		100
67)	4-Bromophenyl-phenylether	16.356	248	69182	4.564	ng		98
68)	Hexachlorobenzene	16.474	284	81189	4.669	ng		95
69)	Atrazine	16.627	200	60729	5.993	ng		98
70)	Pentachlorophenol	16.821	266	59080	4.615	ng		98
71)	Phenanthrene	17.203	178	336674	4.703	ng		100
72)	Anthracene	17.298	178	325638	4.616	ng		99
73)	Carbazole	17.568	167	301001	4.530	ng		99
74)	Di-n-butylphthalate	18.133	149	365358	4.773	ng		100
75)	Fluoranthene	19.221	202	387674	4.404	ng		100
77)	Benzidine	19.409	184	100183	6.015	ng		97
78)	Pyrene	19.586	202	411233	4.753	ng		99
80)	Butylbenzylphthalate	20.486	149	157696	4.851	ng		98
81)	Benzo(a)anthracene	21.386	228	388113	4.652	ng		100
82)	3,3'-Dichlorobenzidine	21.309	252	134300	4.262	ng	#	98
83)	Chrysene	21.444	228	370038	4.665	ng		100
84)	Bis(2-ethylhexyl)phtha...	21.315	149	237828	5.021	ng		100
85)	Di-n-octyl phthalate	22.444	149	405083	4.889	ng		99
87)	Indeno(1,2,3-cd)pyrene	27.785	276	468774	4.612	ng	#	93
88)	Benzo(b)fluoranthene	23.456	252	389022	4.467	ng		98
89)	Benzo(k)fluoranthene	23.521	252	385821	4.571	ng		98
90)	Benzo(a)pyrene	24.262	252	344800	4.505	ng		98
91)	Dibenzo(a,h)anthracene	27.844	278	384717	4.595	ng		99
92)	Benzo(g,h,i)perylene	28.838	276	401539	4.693	ng		99

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

ICAL Form

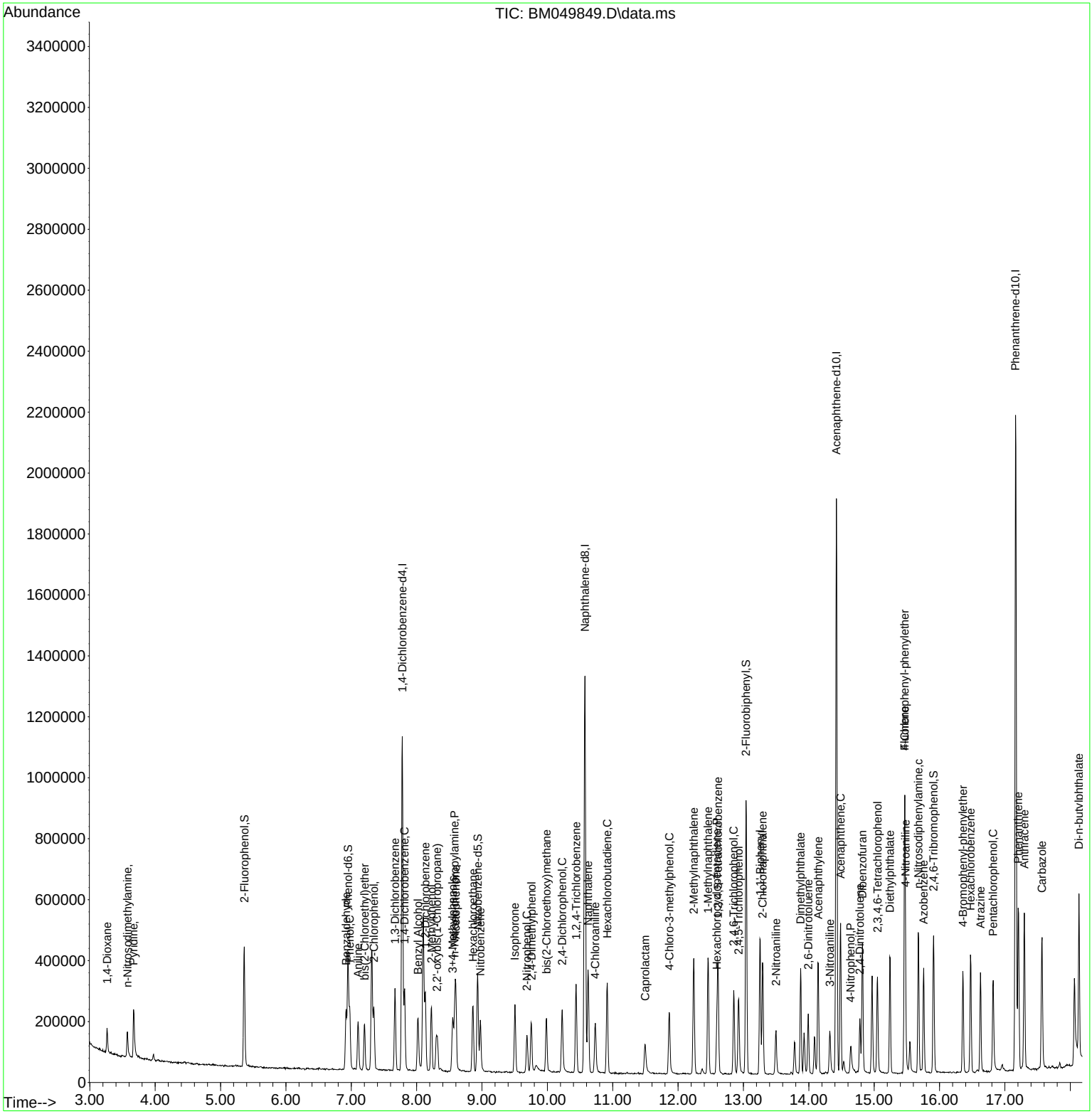
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049849.D
Acq On : 08 Apr 2025 14:14
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 09 02:59:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC005

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



ICAL Form

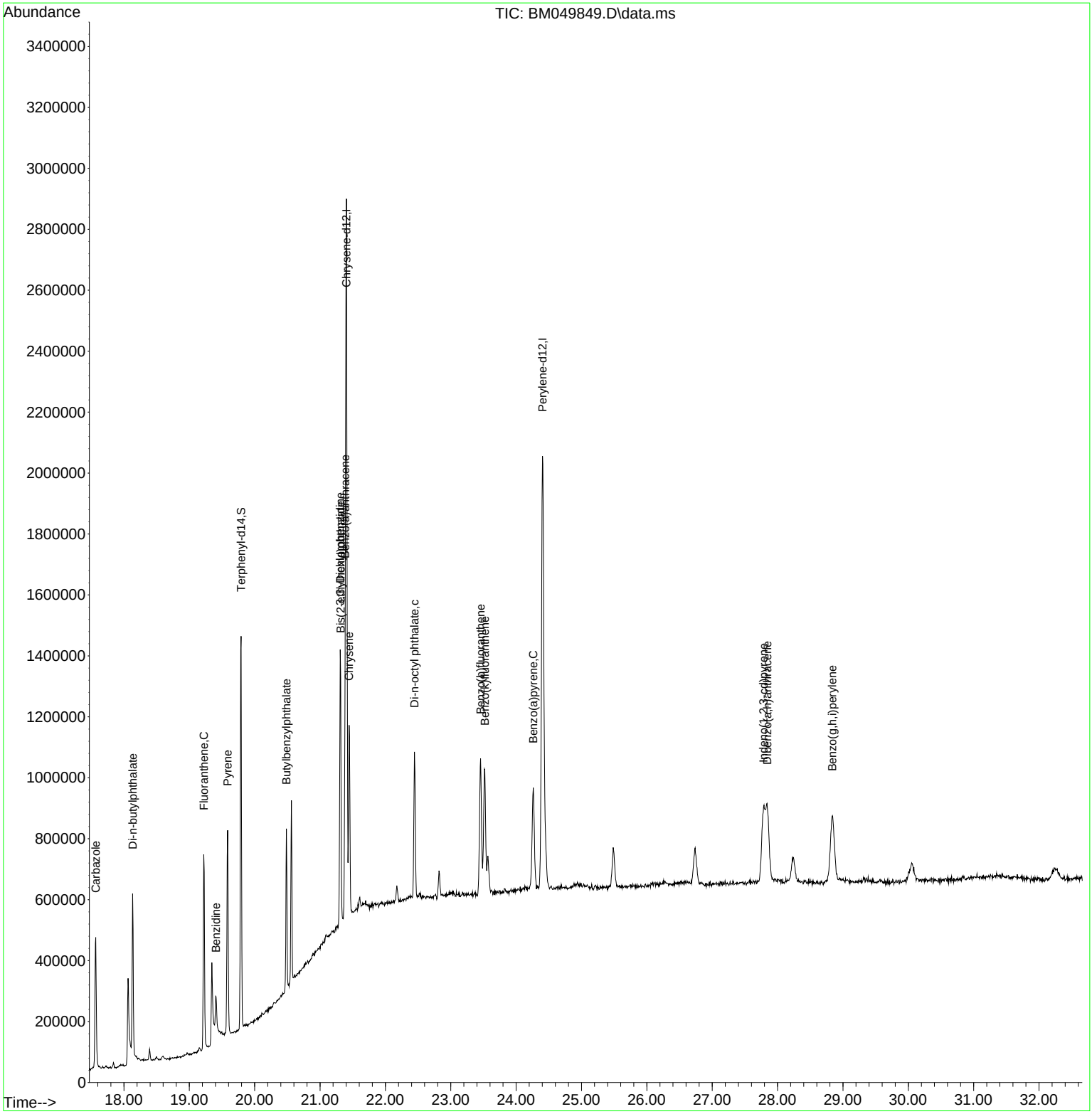
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Data File : BM049849.D
Acq On : 08 Apr 2025 14:14
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 09 02:59:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC005

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049850.D
Acq On : 08 Apr 2025 14:53
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC010

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Quant Time: Apr 09 03:00:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.781	152	318993	20.000	ng		0.00
21) Naphthalene-d8	10.575	136	1091615	20.000	ng		0.00
39) Acenaphthene-d10	14.422	164	671187	20.000	ng		0.00
64) Phenanthrene-d10	17.163	188	1281742	20.000	ng		0.00
76) Chrysene-d12	21.403	240	1251521	20.000	ng		0.00
86) Perylene-d12	24.403	264	1360976	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	364921	19.426	ng		0.00
7) Phenol-d6	6.951	99	444096	19.001	ng		0.00
23) Nitrobenzene-d5	8.934	82	375019	19.130	ng		0.00
42) 2,4,6-Tribromophenol	15.910	330	171135	17.530	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	949122	19.175	ng		0.00
79) Terphenyl-d14	19.792	244	1257136	18.825	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.263	88	74941	9.687	ng		99
3) Pyridine	3.669	79	194530	9.574	ng		98
4) n-Nitrosodimethylamine	3.569	42	73514	9.503	ng	#	92
6) Aniline	7.104	93	209739	10.473	ng		98
8) 2-Chlorophenol	7.346	128	189954	9.867	ng		98
9) Benzaldehyde	6.916	77	132319	11.041	ng		97
10) Phenol	6.975	94	218482	9.579	ng		99
11) bis(2-Chloroethyl)ether	7.199	93	172950	9.669	ng		98
12) 1,3-Dichlorobenzene	7.669	146	221893	9.749	ng		99
13) 1,4-Dichlorobenzene	7.816	146	223068	9.740	ng		97
14) 1,2-Dichlorobenzene	8.134	146	211403	9.800	ng		99
15) Benzyl Alcohol	8.016	79	136655	9.285	ng		98
16) 2,2'-oxybis(1-Chloropr...	8.304	45	197037	9.884	ng		98
17) 2-Methylphenol	8.228	107	136469	9.709	ng		98
18) Hexachloroethane	8.857	117	78782	9.888	ng		99
19) n-Nitroso-di-n-propyla...	8.581	70	124842	9.644	ng		99
20) 3+4-Methylphenols	8.551	107	182163	9.506	ng		94
22) Acetophenone	8.598	105	260553	9.821	ng	#	99
24) Nitrobenzene	8.975	77	179572	9.513	ng		99
25) Isophorone	9.504	82	309763	9.433	ng		99
26) 2-Nitrophenol	9.687	139	90001	8.996	ng		98
27) 2,4-Dimethylphenol	9.751	122	105908	9.341	ng		98
28) bis(2-Chloroethoxy)met...	9.987	93	210772	9.587	ng		100
29) 2,4-Dichlorophenol	10.228	162	174408	9.254	ng		98
30) 1,2,4-Trichlorobenzene	10.439	180	207530	9.518	ng		97
31) Naphthalene	10.622	128	540149	9.630	ng		98
32) Benzoic acid	9.828	122	59585m	12.140	ng		
33) 4-Chloroaniline	10.734	127	191655	9.676	ng		100
34) Hexachlorobutadiene	10.916	225	128662	9.540	ng		98
35) Caprolactam	11.492	113	48349	8.944	ng		91
36) 4-Chloro-3-methylphenol	11.863	107	150861	9.138	ng		99
37) 2-Methylnaphthalene	12.239	142	374075	9.465	ng		99
38) 1-Methylnaphthalene	12.457	142	359844	9.346	ng		99
40) 1,2,4,5-Tetrachloroben...	12.610	216	222088	9.458	ng		99
41) Hexachlorocyclopentadiene	12.592	237	74731	9.083	ng		95
43) 2,4,6-Trichlorophenol	12.851	196	141088	9.442	ng		96

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049850.D
Acq On : 08 Apr 2025 14:53
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC010

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Quant Time: Apr 09 03:00:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	12.922	196	151683	9.342	ng		96
46) 1,1'-Biphenyl	13.251	154	479426	9.609	ng		99
47) 2-Chloronaphthalene	13.292	162	383880	9.789	ng		99
48) 2-Nitroaniline	13.492	65	81359	8.968	ng		94
49) Acenaphthylene	14.139	152	541476	9.479	ng		100
50) Dimethylphthalate	13.875	163	446549	9.431	ng		99
51) 2,6-Dinitrotoluene	13.992	165	88819	8.953	ng		98
52) Acenaphthene	14.486	154	343452	9.452	ng		98
53) 3-Nitroaniline	14.322	138	84915	8.856	ng	#	96
54) 2,4-Dinitrophenol	14.533	184	32385	11.325	ng		97
55) Dibenzofuran	14.822	168	573562	9.443	ng		99
56) 4-Nitrophenol	14.639	139	71545	8.373	ng		99
57) 2,4-Dinitrotoluene	14.780	165	111615	8.433	ng	#	97
58) Fluorene	15.469	166	448037	9.279	ng		99
59) 2,3,4,6-Tetrachlorophenol	15.051	232	133086	9.351	ng		98
60) Diethylphthalate	15.239	149	426265	9.387	ng		100
61) 4-Chlorophenyl-phenyle...	15.463	204	232768	8.992	ng		94
62) 4-Nitroaniline	15.480	138	82838	8.354	ng		95
63) Azobenzene	15.757	77	364112	9.366	ng		98
65) 4,6-Dinitro-2-methylph...	15.545	198	60497	7.490	ng		92
66) n-Nitrosodiphenylamine	15.674	169	370438	9.657	ng		98
67) 4-Bromophenyl-phenylether	16.357	248	135983	9.139	ng		99
68) Hexachlorobenzene	16.474	284	160142	9.383	ng		95
69) Atrazine	16.627	200	113289	11.391	ng		99
70) Pentachlorophenol	16.821	266	119030	9.473	ng		99
71) Phenanthrene	17.204	178	660141	9.394	ng		100
72) Anthracene	17.298	178	643575	9.294	ng		100
73) Carbazole	17.568	167	610225	9.356	ng		100
74) Di-n-butylphthalate	18.133	149	717993	9.557	ng		99
75) Fluoranthene	19.221	202	772987	8.947	ng		98
77) Benzidine	19.404	184	162949	9.814	ng		98
78) Pyrene	19.586	202	800964	9.286	ng		100
80) Butylbenzylphthalate	20.486	149	312899	9.654	ng		99
81) Benzo(a)anthracene	21.386	228	767126	9.223	ng		100
82) 3,3'-Dichlorobenzidine	21.309	252	281424	8.960	ng		98
83) Chrysene	21.445	228	734074	9.283	ng		100
84) Bis(2-ethylhexyl)phtha...	21.309	149	467613	9.903	ng		99
85) Di-n-octyl phthalate	22.445	149	805410	9.750	ng		100
87) Indeno(1,2,3-cd)pyrene	27.785	276	931006	9.177	ng		99
88) Benzo(b)fluoranthene	23.456	252	787043	9.055	ng		99
89) Benzo(k)fluoranthene	23.515	252	763407	9.063	ng		99
90) Benzo(a)pyrene	24.262	252	698269	9.142	ng		98
91) Dibenzo(a,h)anthracene	27.844	278	767800	9.188	ng		98
92) Benzo(g,h,i)perylene	28.832	276	802183	9.394	ng		99

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

ICAL Form

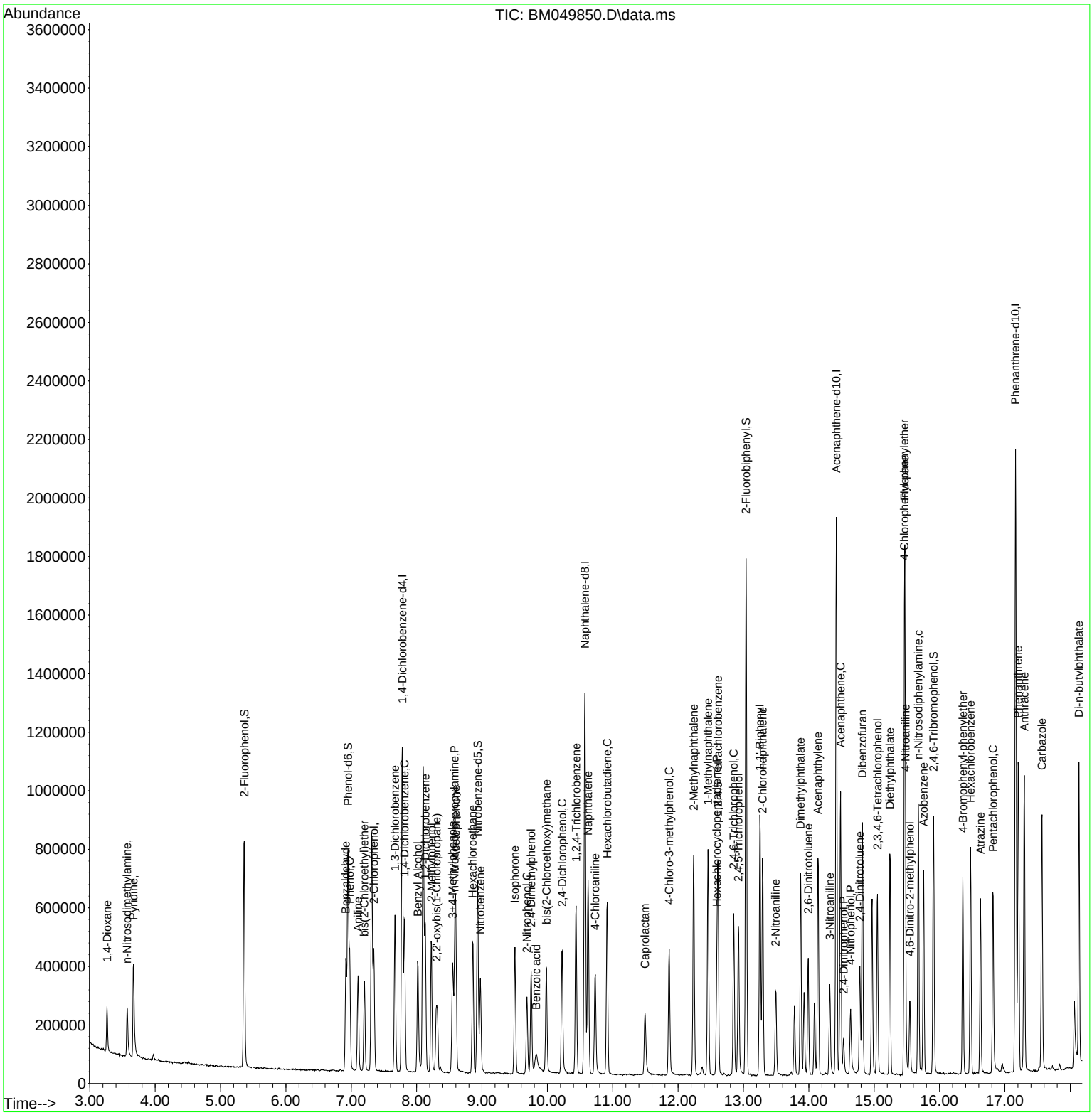
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049850.D
Acq On : 08 Apr 2025 14:53
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 09 03:00:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC010

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



ICAL Form

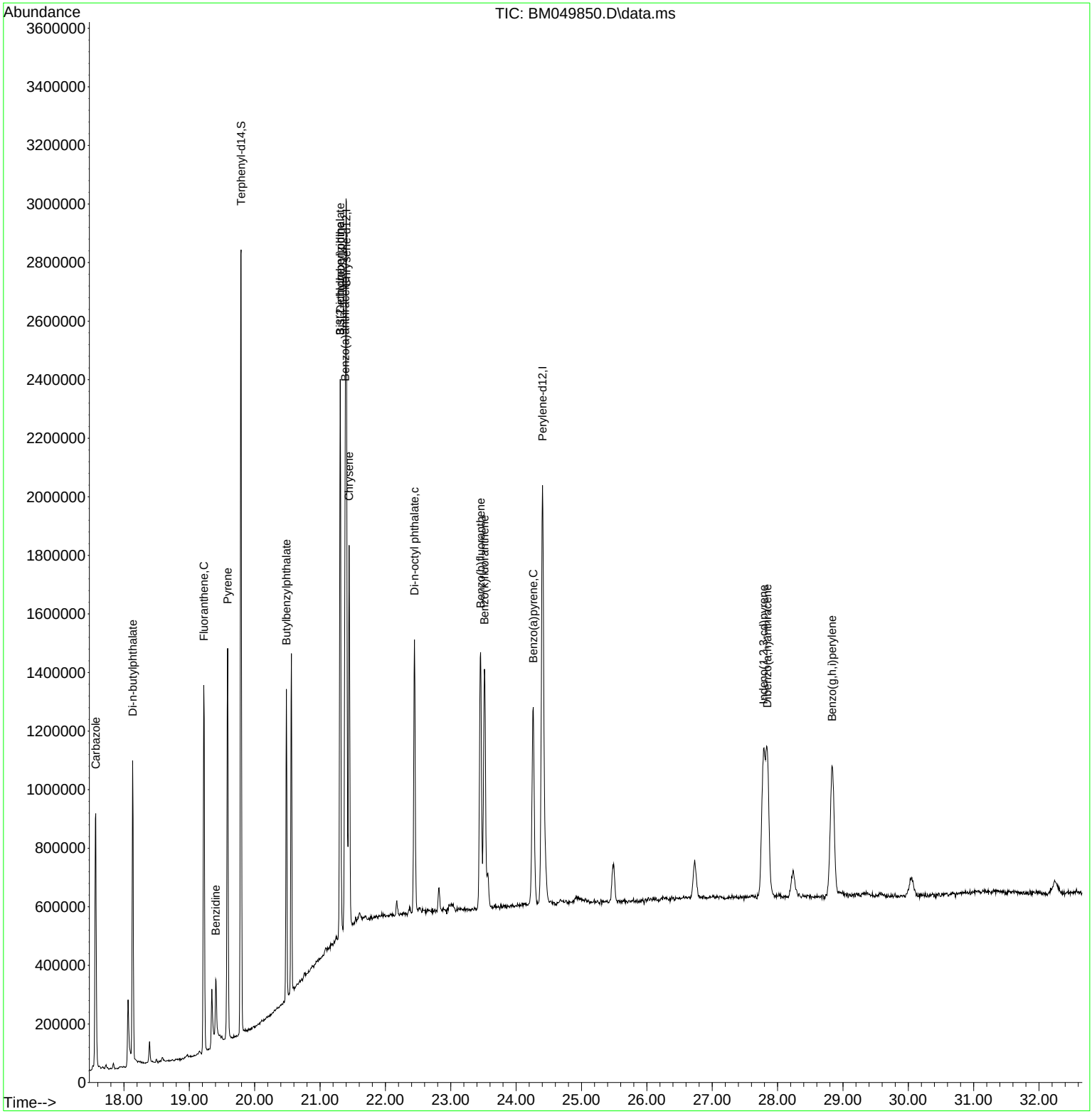
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049850.D
Acq On : 08 Apr 2025 14:53
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 09 03:00:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC010

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049851.D
Acq On : 08 Apr 2025 15:32
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC020

Quant Time: Apr 09 03:01:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.781	152	318059	20.000	ng		0.00
21) Naphthalene-d8	10.575	136	1116195	20.000	ng		0.00
39) Acenaphthene-d10	14.422	164	702854	20.000	ng		0.00
64) Phenanthrene-d10	17.163	188	1378813	20.000	ng		0.00
76) Chrysene-d12	21.403	240	1339758	20.000	ng		0.00
86) Perylene-d12	24.403	264	1486954	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	771430	41.186	ng		0.00
7) Phenol-d6	6.951	99	968531	41.560	ng		0.00
23) Nitrobenzene-d5	8.934	82	817733	40.795	ng		0.00
42) 2,4,6-Tribromophenol	15.910	330	393158	38.457	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	2107153	40.653	ng		0.00
79) Terphenyl-d14	19.792	244	3051000	42.677	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.263	88	159450	20.670	ng		99
3) Pyridine	3.663	79	420529	20.757	ng		99
4) n-Nitrosodimethylamine	3.569	42	157731	20.450	ng		96
6) Aniline	7.104	93	443873	22.228	ng		100
8) 2-Chlorophenol	7.346	128	397524	20.710	ng		99
9) Benzaldehyde	6.916	77	266386	22.294	ng		99
10) Phenol	6.975	94	471508	20.733	ng		99
11) bis(2-Chloroethyl)ether	7.198	93	364893	20.461	ng		98
12) 1,3-Dichlorobenzene	7.669	146	469124	20.672	ng		100
13) 1,4-Dichlorobenzene	7.816	146	473136	20.720	ng		100
14) 1,2-Dichlorobenzene	8.134	146	446077	20.740	ng		99
15) Benzyl Alcohol	8.016	79	302185	20.592	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.310	45	417355	20.996	ng		99
17) 2-Methylphenol	8.222	107	291405	20.793	ng		99
18) Hexachloroethane	8.857	117	165304	20.807	ng		98
19) n-Nitroso-di-n-propyla...	8.581	70	273519	21.191	ng		99
20) 3+4-Methylphenols	8.551	107	396422	20.748	ng		98
22) Acetophenone	8.598	105	554070	20.425	ng	#	99
24) Nitrobenzene	8.975	77	395594	20.496	ng		99
25) Isophorone	9.504	82	683707	20.361	ng		100
26) 2-Nitrophenol	9.687	139	203797	19.922	ng		97
27) 2,4-Dimethylphenol	9.751	122	231983	20.010	ng		100
28) bis(2-Chloroethoxy)met...	9.981	93	459217	20.427	ng		99
29) 2,4-Dichlorophenol	10.222	162	388584	20.164	ng		99
30) 1,2,4-Trichlorobenzene	10.439	180	448099	20.099	ng		100
31) Naphthalene	10.622	128	1166673	20.341	ng		99
32) Benzoic acid	9.839	122	195350	19.812	ng		97
33) 4-Chloroaniline	10.728	127	420078	20.742	ng		99
34) Hexachlorobutadiene	10.916	225	273841	19.857	ng		99
35) Caprolactam	11.504	113	111645	20.199	ng		98
36) 4-Chloro-3-methylphenol	11.863	107	340457	20.168	ng		98
37) 2-Methylnaphthalene	12.239	142	813541	20.132	ng		100
38) 1-Methylnaphthalene	12.457	142	793590	20.158	ng		99
40) 1,2,4,5-Tetrachloroben...	12.610	216	489705	19.915	ng		99
41) Hexachlorocyclopentadiene	12.592	237	173683	20.158	ng		99
43) 2,4,6-Trichlorophenol	12.851	196	311742	19.924	ng		97

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049851.D
Acq On : 08 Apr 2025 15:32
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC020

Quant Time: Apr 09 03:01:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.922	196	332054	19.528	ng	96
46) 1,1'-Biphenyl	13.251	154	1063836	20.361	ng	99
47) 2-Chloronaphthalene	13.292	162	835052	20.334	ng	100
48) 2-Nitroaniline	13.492	65	191426	20.149	ng	94
49) Acenaphthylene	14.145	152	1207654	20.189	ng	99
50) Dimethylphthalate	13.880	163	1005157	20.271	ng	100
51) 2,6-Dinitrotoluene	13.992	165	212702	20.474	ng	98
52) Acenaphthene	14.486	154	765635	20.122	ng	99
53) 3-Nitroaniline	14.322	138	203884	20.306	ng	98
54) 2,4-Dinitrophenol	14.533	184	104048	19.806	ng	97
55) Dibenzofuran	14.822	168	1280124	20.125	ng	99
56) 4-Nitrophenol	14.639	139	180482	20.171	ng	98
57) 2,4-Dinitrotoluene	14.780	165	277724	20.039	ng	99
58) Fluorene	15.469	166	1019442	20.163	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.051	232	292142	19.603	ng	99
60) Diethylphthalate	15.245	149	968568	20.369	ng	100
61) 4-Chlorophenyl-phenyle...	15.463	204	535017	19.737	ng	96
62) 4-Nitroaniline	15.480	138	211717	20.390	ng	93
63) Azobenzene	15.757	77	832670	20.453	ng	99
65) 4,6-Dinitro-2-methylph...	15.545	198	164040	18.880	ng	94
66) n-Nitrosodiphenylamine	15.680	169	835415	20.246	ng	100
67) 4-Bromophenyl-phenylether	16.357	248	312714	19.537	ng	97
68) Hexachlorobenzene	16.474	284	361698	19.701	ng	96
69) Atrazine	16.627	200	195306	18.255	ng	98
70) Pentachlorophenol	16.821	266	263410	19.488	ng	99
71) Phenanthrene	17.210	178	1510233	19.979	ng	99
72) Anthracene	17.298	178	1481463	19.887	ng	100
73) Carbazole	17.568	167	1411278	20.114	ng	98
74) Di-n-butylphthalate	18.133	149	1638787	20.278	ng	99
75) Fluoranthene	19.221	202	1806131	19.433	ng	99
77) Benzidine	19.409	184	274181	15.426	ng	99
78) Pyrene	19.586	202	1868988	20.242	ng	99
80) Butylbenzylphthalate	20.486	149	719491	20.738	ng	98
81) Benzo(a)anthracene	21.386	228	1788846	20.090	ng	100
82) 3,3'-Dichlorobenzidine	21.309	252	658767	19.592	ng	99
83) Chrysene	21.445	228	1689336	19.957	ng	100
84) Bis(2-ethylhexyl)phtha...	21.309	149	1058190	20.934	ng	99
85) Di-n-octyl phthalate	22.445	149	1830449	20.699	ng	100
87) Indeno(1,2,3-cd)pyrene	27.785	276	2199957	19.848	ng	99
88) Benzo(b)fluoranthene	23.456	252	1818051	19.144	ng	99
89) Benzo(k)fluoranthene	23.521	252	1797007	19.527	ng	99
90) Benzo(a)pyrene	24.262	252	1629441	19.526	ng	99
91) Dibenzo(a,h)anthracene	27.844	278	1792231	19.631	ng	100
92) Benzo(g,h,i)perylene	28.844	276	1866337	20.005	ng	98

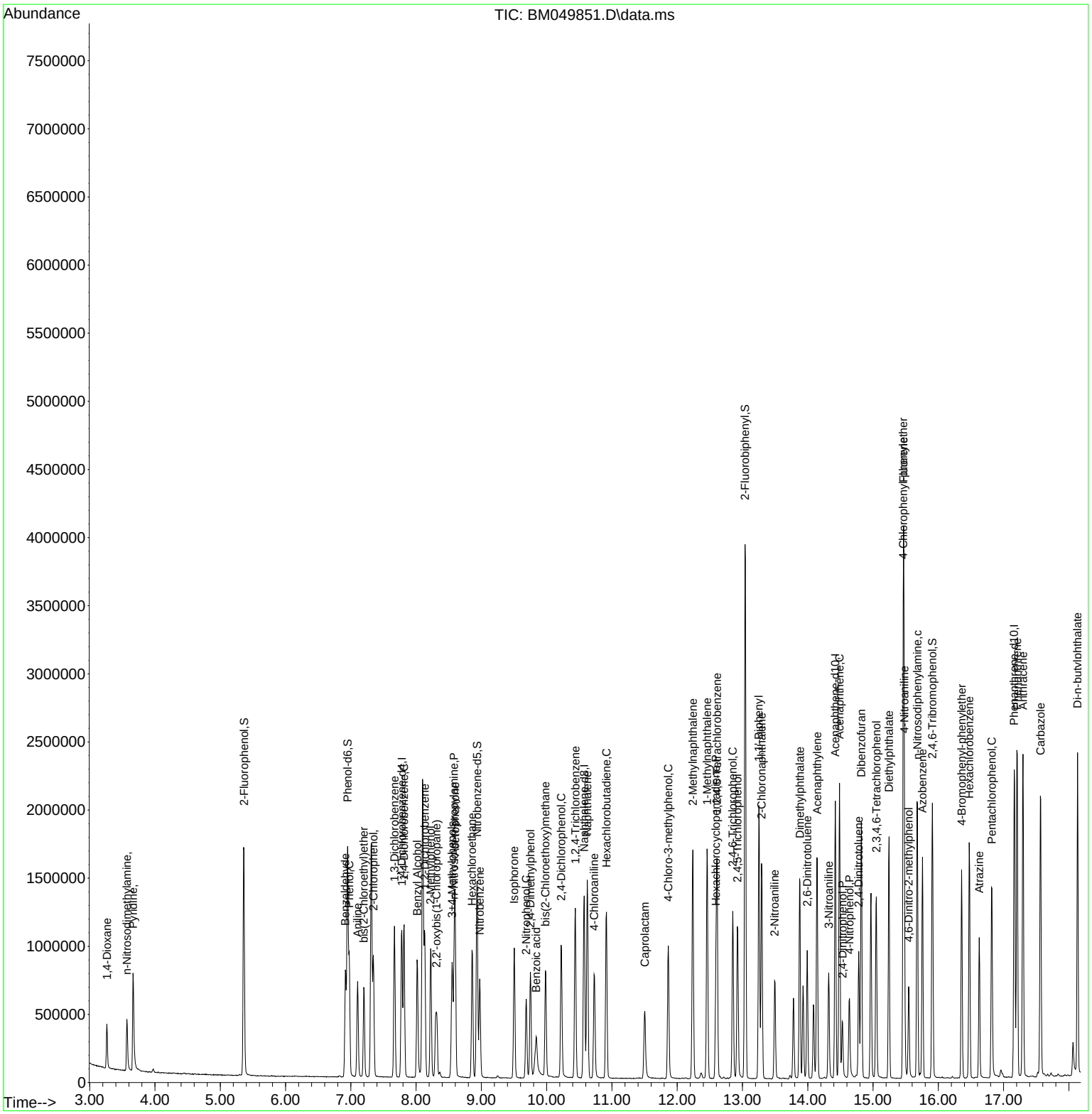
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049851.D
Acq On : 08 Apr 2025 15:32
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC020

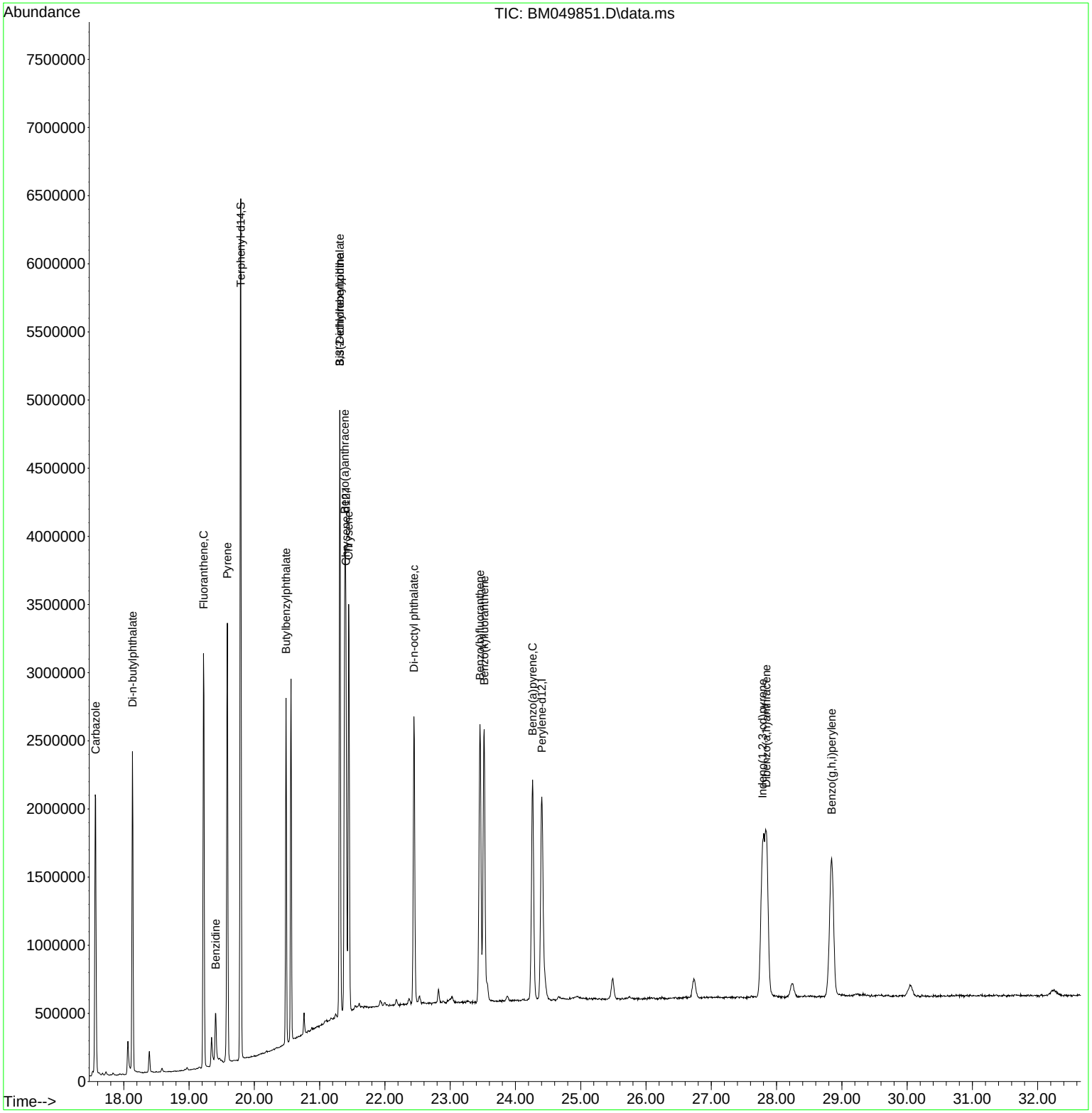
Quant Time: Apr 09 03:01:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049851.D
Acq On : 08 Apr 2025 15:32
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC020

Quant Time: Apr 09 03:01:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049852.D
Acq On : 08 Apr 2025 16:12
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICCC040

Quant Time: Apr 09 03:01:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.781	152	302331	20.000	ng	0.00
21) Naphthalene-d8	10.575	136	1026791	20.000	ng	0.00
39) Acenaphthene-d10	14.421	164	644538	20.000	ng	0.00
64) Phenanthrene-d10	17.162	188	1259832	20.000	ng	0.00
76) Chrysene-d12	21.403	240	1277117	20.000	ng	0.00
86) Perylene-d12	24.409	264	1383369	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.363	112	1440504	80.908	ng	0.00
7) Phenol-d6	6.951	99	1802855	81.386	ng	0.00
23) Nitrobenzene-d5	8.934	82	1510046	81.893	ng	0.00
42) 2,4,6-Tribromophenol	15.910	330	757084	80.755	ng	0.00
45) 2-Fluorobiphenyl	13.045	172	3905323	82.162	ng	0.00
79) Terphenyl-d14	19.792	244	6061535	88.947	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.263	88	295123	40.249	ng	100
3) Pyridine	3.663	79	778424	40.422	ng	100
4) n-Nitrosodimethylamine	3.569	42	295528	40.309	ng	100
6) Aniline	7.104	93	801408	42.221	ng	100
8) 2-Chlorophenol	7.345	128	736217	40.349	ng	100
9) Benzaldehyde	6.916	77	453694	39.945	ng	100
10) Phenol	6.975	94	871619	40.321	ng	100
11) bis(2-Chloroethyl)ether	7.204	93	686377	40.490	ng	100
12) 1,3-Dichlorobenzene	7.669	146	869556	40.310	ng	100
13) 1,4-Dichlorobenzene	7.816	146	878856	40.490	ng	100
14) 1,2-Dichlorobenzene	8.134	146	830948	40.644	ng	100
15) Benzyl Alcohol	8.016	79	576334	41.317	ng	100
16) 2,2'-oxybis(1-Chloropr...	8.310	45	766170	40.550	ng	100
17) 2-Methylphenol	8.228	107	539006	40.462	ng	100
18) Hexachloroethane	8.857	117	304783	40.360	ng	100
19) n-Nitroso-di-n-propyla...	8.586	70	505613	41.211	ng	100
20) 3+4-Methylphenols	8.551	107	739987	40.745	ng	100
22) Acetophenone	8.598	105	1021725	40.944	ng	100
24) Nitrobenzene	8.975	77	731712	41.211	ng	100
25) Isophorone	9.504	82	1264620	40.940	ng	100
26) 2-Nitrophenol	9.686	139	389011	41.338	ng	100
27) 2,4-Dimethylphenol	9.751	122	438345	41.102	ng	100
28) bis(2-Chloroethoxy)met...	9.986	93	842494	40.740	ng	100
29) 2,4-Dichlorophenol	10.222	162	725384	40.918	ng	100
30) 1,2,4-Trichlorobenzene	10.439	180	829411	40.442	ng	100
31) Naphthalene	10.622	128	2139433	40.550	ng	100
32) Benzoic acid	9.875	122	471552	37.918	ng	100
33) 4-Chloroaniline	10.728	127	780602	41.899	ng	100
34) Hexachlorobutadiene	10.916	225	511599	40.329	ng	100
35) Caprolactam	11.516	113	208829	41.071	ng	100
36) 4-Chloro-3-methylphenol	11.863	107	635013	40.893	ng	100
37) 2-Methylnaphthalene	12.239	142	1506744	40.533	ng	100
38) 1-Methylnaphthalene	12.457	142	1464829	40.448	ng	100
40) 1,2,4,5-Tetrachloroben...	12.610	216	910125	40.362	ng	100
41) Hexachlorocyclopentadiene	12.592	237	340037	43.036	ng	100
43) 2,4,6-Trichlorophenol	12.851	196	592155	41.269	ng	100

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049852.D
Acq On : 08 Apr 2025 16:12
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICCC040

Quant Time: Apr 09 03:01:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.927	196	645125	41.373	ng	100
46) 1,1'-Biphenyl	13.251	154	1969872	41.114	ng	100
47) 2-Chloronaphthalene	13.292	162	1538747	40.860	ng	100
48) 2-Nitroaniline	13.498	65	365393	41.941	ng	100
49) Acenaphthylene	14.145	152	2245605	40.937	ng	100
50) Dimethylphthalate	13.880	163	1853920	40.771	ng	100
51) 2,6-Dinitrotoluene	13.992	165	400110	41.998	ng	100
52) Acenaphthene	14.486	154	1434901	41.123	ng	100
53) 3-Nitroaniline	14.321	138	399172	43.352	ng	100
54) 2,4-Dinitrophenol	14.533	184	236910	38.463	ng	100
55) Dibenzofuran	14.821	168	2378962	40.784	ng	100
56) 4-Nitrophenol	14.639	139	348645	42.490	ng	100
57) 2,4-Dinitrotoluene	14.780	165	542212	42.662	ng	100
58) Fluorene	15.468	166	1908871	41.170	ng	100
59) 2,3,4,6-Tetrachlorophenol	15.051	232	550595	40.287	ng	100
60) Diethylphthalate	15.245	149	1791575	41.085	ng	100
61) 4-Chlorophenyl-phenyle...	15.468	204	1016885	40.907	ng	100
62) 4-Nitroaniline	15.486	138	411956	43.263	ng	100
63) Azobenzene	15.757	77	1549968	41.517	ng	100
65) 4,6-Dinitro-2-methylph...	15.551	198	332394	41.869	ng	100
66) n-Nitrosodiphenylamine	15.680	169	1560374	41.387	ng	100
67) 4-Bromophenyl-phenylether	16.357	248	601282	41.113	ng	100
68) Hexachlorobenzene	16.480	284	686665	40.933	ng	100
69) Atrazine	16.627	200	326609	33.411	ng	100
70) Pentachlorophenol	16.815	266	514744	41.678	ng	100
71) Phenanthrene	17.209	178	2854182	41.324	ng	100
72) Anthracene	17.298	178	2833652	41.631	ng	100
73) Carbazole	17.562	167	2667570	41.609	ng	100
74) Di-n-butylphthalate	18.133	149	3062695	41.476	ng	100
75) Fluoranthene	19.221	202	3495877	41.165	ng	100
77) Benzidine	19.403	184	1028267	60.691	ng	100
78) Pyrene	19.586	202	3596605	40.863	ng	100
80) Butylbenzylphthalate	20.486	149	1368958	41.392	ng	100
81) Benzo(a)anthracene	21.386	228	3478165	40.979	ng	100
82) 3,3'-Dichlorobenzidine	21.309	252	1342391	41.880	ng	100
83) Chrysene	21.450	228	3299571	40.890	ng	100
84) Bis(2-ethylhexyl)phtha...	21.309	149	2000260	41.512	ng	100
85) Di-n-octyl phthalate	22.444	149	3479444	41.276	ng	100
87) Indeno(1,2,3-cd)pyrene	27.797	276	4168171	40.421	ng	100
88) Benzo(b)fluoranthene	23.456	252	3619584	40.968	ng	100
89) Benzo(k)fluoranthene	23.521	252	3436549	40.138	ng	100
90) Benzo(a)pyrene	24.268	252	3127065	40.278	ng	100
91) Dibenzo(a,h)anthracene	27.850	278	3441534	40.519	ng	100
92) Benzo(g,h,i)perylene	28.856	276	3500110	40.326	ng	100

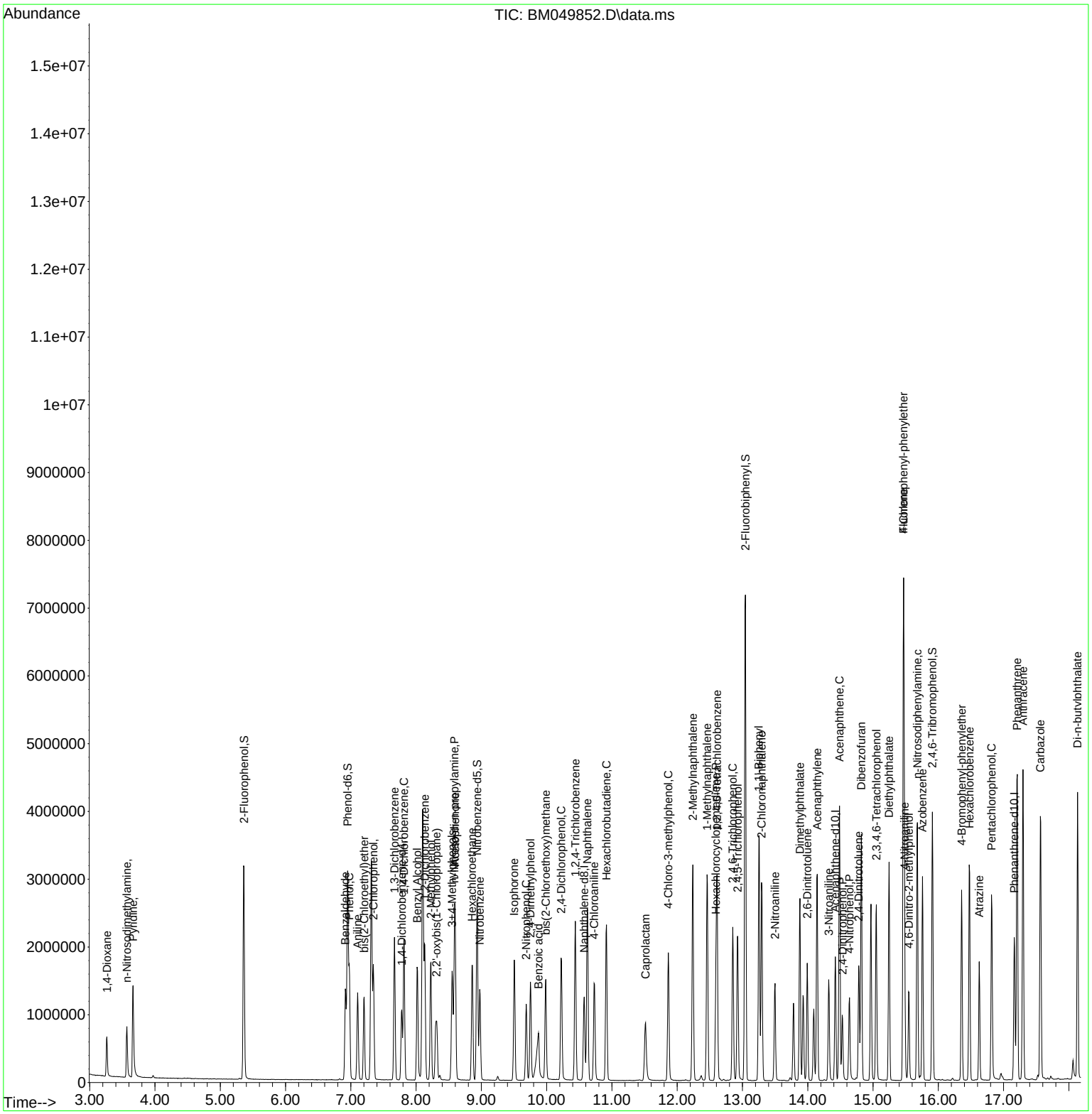
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049852.D
Acq On : 08 Apr 2025 16:12
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICCC040

Quant Time: Apr 09 03:01:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

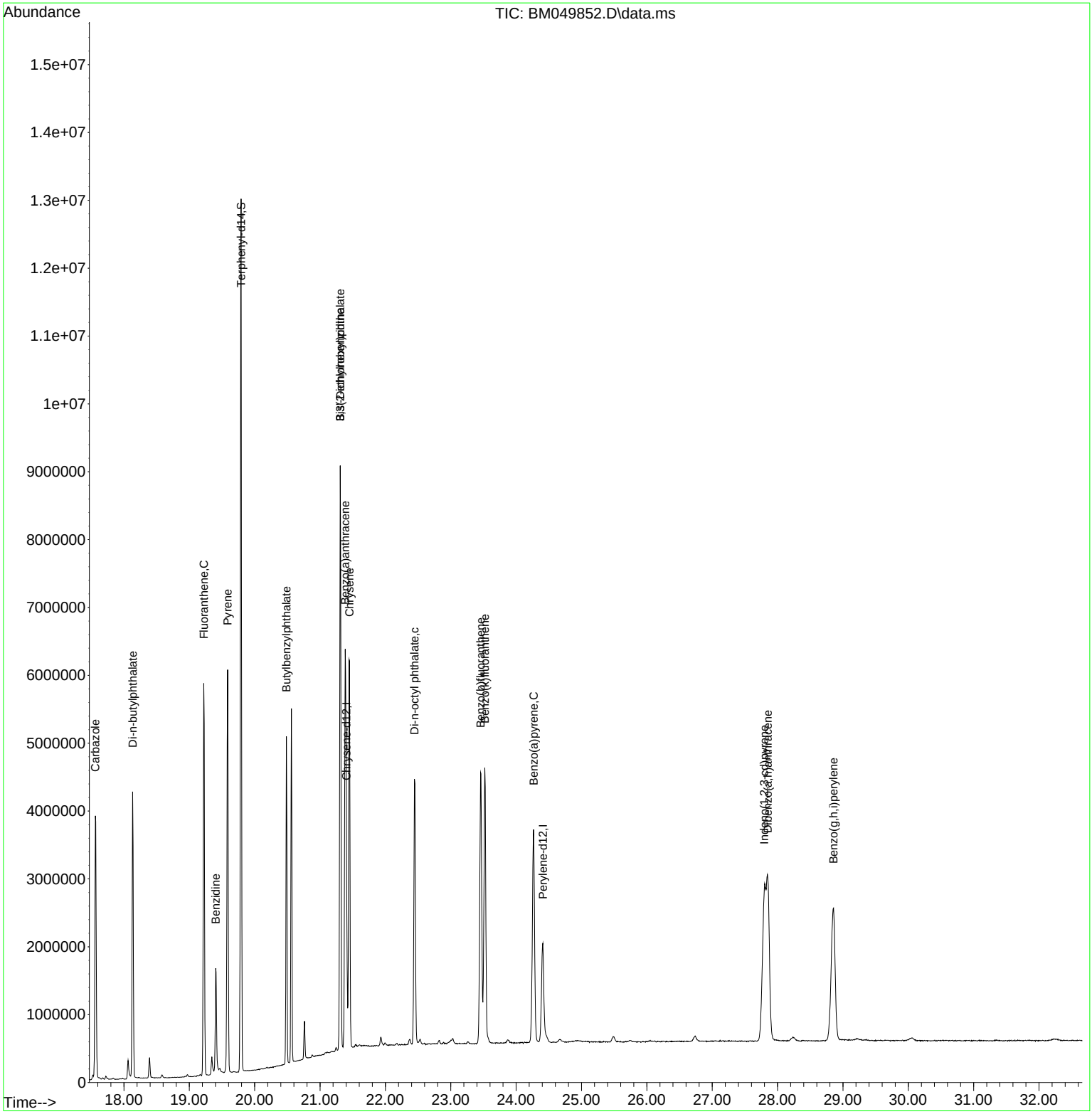


ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049852.D
Acq On : 08 Apr 2025 16:12
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICCC040

Quant Time: Apr 09 03:01:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049853.D
Acq On : 08 Apr 2025 17:30
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC050

Quant Time: Apr 09 03:02:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.781	152	389192	20.000	ng		0.00
21) Naphthalene-d8	10.575	136	1287434	20.000	ng		0.00
39) Acenaphthene-d10	14.421	164	808126	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1599813	20.000	ng		0.00
76) Chrysene-d12	21.403	240	1661195	20.000	ng		0.00
86) Perylene-d12	24.409	264	1751474	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	2266168	98.875	ng		0.00
7) Phenol-d6	6.951	99	2789069	97.806	ng		0.00
23) Nitrobenzene-d5	8.939	82	2323989	100.519	ng		0.00
42) 2,4,6-Tribromophenol	15.909	330	1205724	102.576	ng		0.00
45) 2-Fluorobiphenyl	13.045	172	6004539	100.754	ng		0.00
79) Terphenyl-d14	19.792	244	9482895	106.980	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.263	88	472538	50.062	ng		99
3) Pyridine	3.663	79	1241357	50.075	ng		99
4) n-Nitrosodimethylamine	3.569	42	470712	49.875	ng		100
6) Aniline	7.104	93	1121872	45.913	ng		99
8) 2-Chlorophenol	7.345	128	1141976	48.619	ng		99
9) Benzaldehyde	6.916	77	692302	47.349	ng		99
10) Phenol	6.981	94	1356163	48.734	ng		98
11) bis(2-Chloroethyl)ether	7.204	93	1066103	48.854	ng		100
12) 1,3-Dichlorobenzene	7.669	146	1379847	49.689	ng		98
13) 1,4-Dichlorobenzene	7.816	146	1373896	49.170	ng		100
14) 1,2-Dichlorobenzene	8.134	146	1288439	48.956	ng		99
15) Benzyl Alcohol	8.022	79	879326	48.969	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.316	45	1159497	47.671	ng		99
17) 2-Methylphenol	8.228	107	827157	48.234	ng		99
18) Hexachloroethane	8.857	117	472771	48.633	ng		99
19) n-Nitroso-di-n-propyla...	8.586	70	771317	48.837	ng		100
20) 3+4-Methylphenols	8.551	107	1138439	48.694	ng		100
22) Acetophenone	8.598	105	1550166	49.544	ng	#	99
24) Nitrobenzene	8.981	77	1111675	49.935	ng		98
25) Isophorone	9.504	82	1926268	49.735	ng		100
26) 2-Nitrophenol	9.686	139	611215	51.801	ng		99
27) 2,4-Dimethylphenol	9.757	122	682677	51.053	ng		98
28) bis(2-Chloroethoxy)met...	9.986	93	1283751	49.510	ng		99
29) 2,4-Dichlorophenol	10.227	162	1124321	50.582	ng		99
30) 1,2,4-Trichlorobenzene	10.439	180	1285402	49.988	ng		99
31) Naphthalene	10.622	128	3278244	49.555	ng		99
32) Benzoic acid	9.904	122	773909	46.956	ng		96
33) 4-Chloroaniline	10.733	127	1155438	49.463	ng		98
34) Hexachlorobutadiene	10.916	225	800154	50.305	ng		99
35) Caprolactam	11.522	113	317444	49.794	ng		98
36) 4-Chloro-3-methylphenol	11.869	107	973959	50.022	ng		99
37) 2-Methylnaphthalene	12.239	142	2320947	49.796	ng		99
38) 1-Methylnaphthalene	12.457	142	2263493	49.847	ng		99
40) 1,2,4,5-Tetrachloroben...	12.610	216	1436460	50.808	ng		99
41) Hexachlorocyclopentadiene	12.592	237	526124	53.108	ng		98
43) 2,4,6-Trichlorophenol	12.851	196	907433	50.440	ng		98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049853.D
Acq On : 08 Apr 2025 17:30
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC050

Quant Time: Apr 09 03:02:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

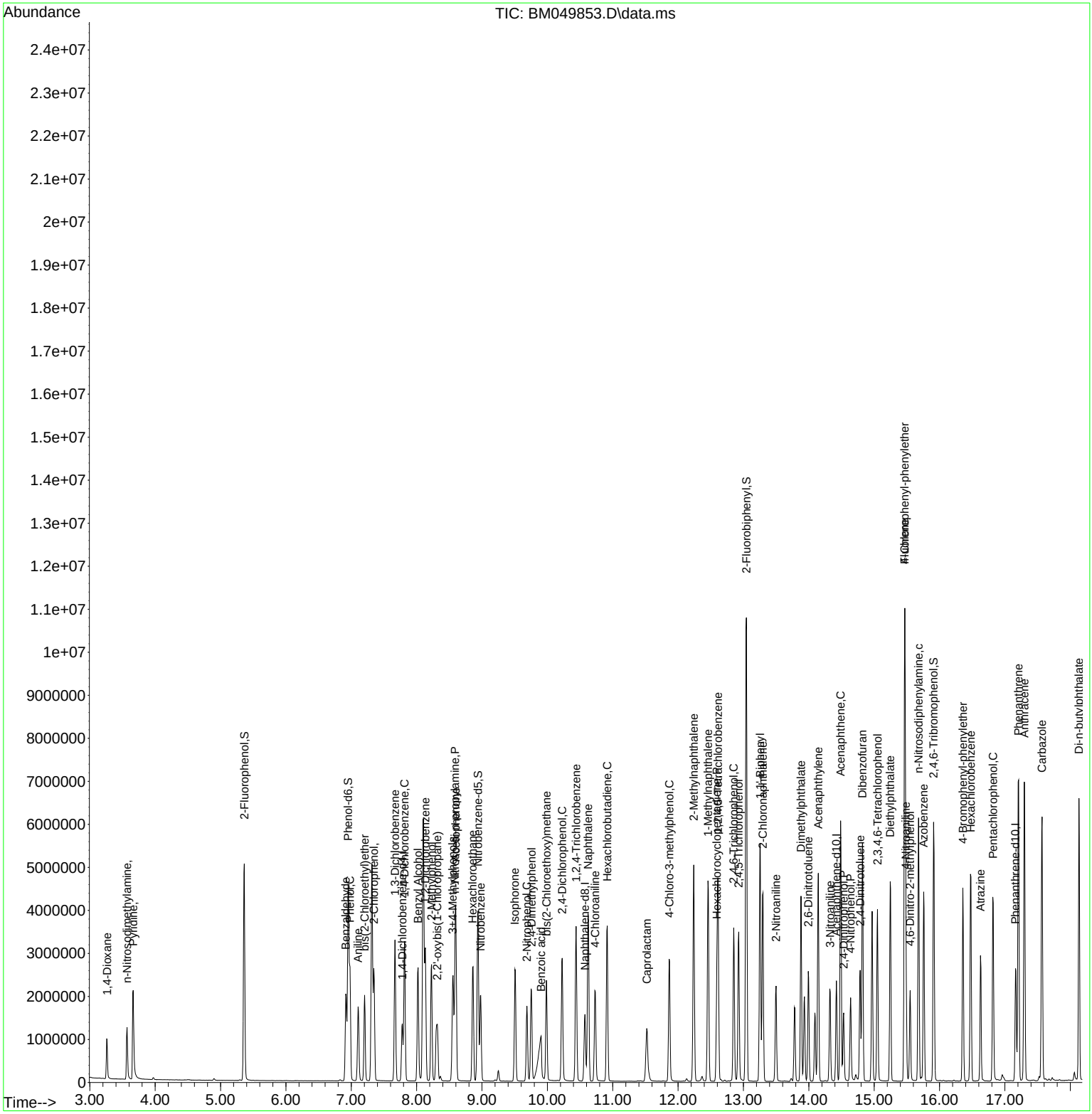
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.927	196	976092	49.927	ng	99
46) 1,1'-Biphenyl	13.257	154	2990362	49.778	ng	100
47) 2-Chloronaphthalene	13.298	162	2349832	49.767	ng	99
48) 2-Nitroaniline	13.498	65	568681	52.061	ng	98
49) Acenaphthylene	14.145	152	3456837	50.260	ng	100
50) Dimethylphthalate	13.880	163	2850200	49.993	ng	99
51) 2,6-Dinitrotoluene	13.992	165	616905	51.646	ng	99
52) Acenaphthene	14.486	154	2199854	50.284	ng	100
53) 3-Nitroaniline	14.327	138	595646	51.595	ng	94
54) 2,4-Dinitrophenol	14.533	184	391855	48.434	ng	98
55) Dibenzofuran	14.821	168	3667823	50.151	ng	99
56) 4-Nitrophenol	14.639	139	550813	53.540	ng	98
57) 2,4-Dinitrotoluene	14.786	165	847929	53.211	ng	95
58) Fluorene	15.468	166	2942325	50.613	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.051	232	848529	49.519	ng	98
60) Diethylphthalate	15.245	149	2722291	49.792	ng	99
61) 4-Chlorophenyl-phenyle...	15.468	204	1598783	51.296	ng	98
62) 4-Nitroaniline	15.486	138	638370	53.470	ng	100
63) Azobenzene	15.757	77	2357839	50.372	ng	99
65) 4,6-Dinitro-2-methylph...	15.551	198	531880	52.759	ng	99
66) n-Nitrosodiphenylamine	15.680	169	2406908	50.273	ng	100
67) 4-Bromophenyl-phenylether	16.357	248	946616	50.970	ng	98
68) Hexachlorobenzene	16.480	284	1072736	50.357	ng	99
69) Atrazine	16.627	200	567392	45.708	ng	99
70) Pentachlorophenol	16.821	266	786228	50.132	ng	99
71) Phenanthrene	17.209	178	4416317	50.352	ng	100
72) Anthracene	17.298	178	4394410	50.841	ng	100
73) Carbazole	17.568	167	4149752	50.973	ng	99
74) Di-n-butylphthalate	18.133	149	4702392	50.149	ng	100
75) Fluoranthene	19.221	202	5578449	51.729	ng	99
77) Benzidine	19.403	184	677381	30.737	ng	100
78) Pyrene	19.586	202	5785386	50.533	ng	100
80) Butylbenzylphthalate	20.486	149	2121299	49.311	ng	98
81) Benzo(a)anthracene	21.386	228	5586396	50.600	ng	100
82) 3,3'-Dichlorobenzidine	21.309	252	2142953	51.399	ng	99
83) Chrysene	21.450	228	5305401	50.547	ng	99
84) Bis(2-ethylhexyl)phtha...	21.309	149	3073374	49.035	ng	98
85) Di-n-octyl phthalate	22.444	149	5429342	49.516	ng	100
87) Indeno(1,2,3-cd)pyrene	27.797	276	6670738	51.094	ng	99
88) Benzo(b)fluoranthene	23.462	252	5751381	51.416	ng	99
89) Benzo(k)fluoranthene	23.527	252	5530993	51.024	ng	100
90) Benzo(a)pyrene	24.268	252	5052750	51.404	ng	98
91) Dibenzo(a,h)anthracene	27.856	278	5509091	51.229	ng	99
92) Benzo(g,h,i)perylene	28.862	276	5555532	50.555	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049853.D
Acq On : 08 Apr 2025 17:30
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC050

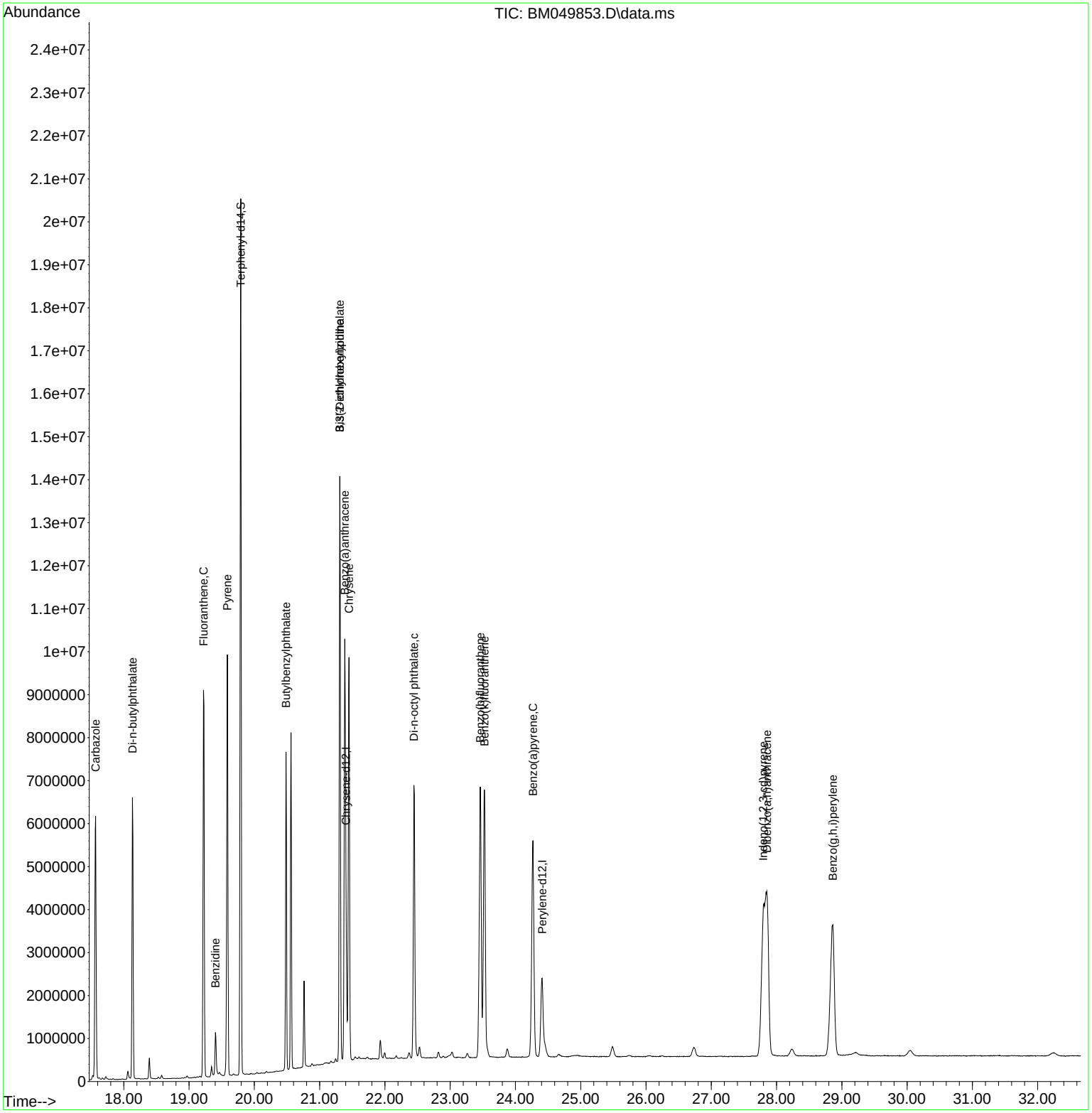
Quant Time: Apr 09 03:02:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049853.D
Acq On : 08 Apr 2025 17:30
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC050

Quant Time: Apr 09 03:02:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049854.D
Acq On : 08 Apr 2025 19:28
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC060

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Quant Time: Apr 09 03:03:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.781	152	401721	20.000	ng	0.00
21) Naphthalene-d8	10.574	136	1393866	20.000	ng	0.00
39) Acenaphthene-d10	14.421	164	925425	20.000	ng	0.00
64) Phenanthrene-d10	17.162	188	1882039	20.000	ng	0.00
76) Chrysene-d12	21.403	240	2018201	20.000	ng	0.00
86) Perylene-d12	24.403	264	2103239	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.363	112	2915551	123.240	ng	0.00
7) Phenol-d6	6.957	99	3719224	126.357	ng	0.00
23) Nitrobenzene-d5	8.939	82	3092938	123.564	ng	0.00
42) 2,4,6-Tribromophenol	15.915	330	1794801	133.337	ng	0.00
45) 2-Fluorobiphenyl	13.045	172	8226257	120.538	ng	0.00
79) Terphenyl-d14	19.792	244	12189474	113.188	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.263	88	567230	58.219	ng	99
3) Pyridine	3.663	79	1539926m	60.181	ng	
4) n-Nitrosodimethylamine	3.569	42	602879	61.887	ng	99
6) Aniline	7.110	93	1376743	54.586	ng	99
8) 2-Chlorophenol	7.351	128	1492657	61.567	ng	98
9) Benzaldehyde	6.916	77	844385	55.949	ng	98
10) Phenol	6.981	94	1803027	62.772	ng	99
11) bis(2-Chloroethyl)ether	7.204	93	1398201	62.074	ng	99
12) 1,3-Dichlorobenzene	7.669	146	1736609	60.586	ng	99
13) 1,4-Dichlorobenzene	7.816	146	1753895	60.812	ng	99
14) 1,2-Dichlorobenzene	8.133	146	1638164	60.303	ng	99
15) Benzyl Alcohol	8.022	79	1196792	64.570	ng	99
16) 2,2'-oxybis(1-Chloropr...	8.310	45	1519404	60.520	ng	99
17) 2-Methylphenol	8.228	107	1109262	62.667	ng	99
18) Hexachloroethane	8.863	117	603367	60.131	ng	95
19) n-Nitroso-di-n-propyla...	8.592	70	1035835	63.539	ng	97
20) 3+4-Methylphenols	8.557	107	1533520	63.547	ng	99
22) Acetophenone	8.604	105	2066135	60.992	ng	99
24) Nitrobenzene	8.980	77	1477263	61.291	ng	98
25) Isophorone	9.510	82	2626388	62.634	ng	99
26) 2-Nitrophenol	9.686	139	824140	64.513	ng	99
27) 2,4-Dimethylphenol	9.757	122	923795	63.809	ng	99
28) bis(2-Chloroethoxy)met...	9.986	93	1734345	61.780	ng	100
29) 2,4-Dichlorophenol	10.227	162	1520625	63.187	ng	99
30) 1,2,4-Trichlorobenzene	10.439	180	1724659	61.949	ng	100
31) Naphthalene	10.627	128	4391063	61.309	ng	100
32) Benzoic acid	9.927	122	1181344	62.653	ng	98
33) 4-Chloroaniline	10.733	127	1503047	59.431	ng	99
34) Hexachlorobutadiene	10.916	225	1064394	61.808	ng	97
35) Caprolactam	11.533	113	445396	64.529	ng	99
36) 4-Chloro-3-methylphenol	11.868	107	1364157	64.713	ng	99
37) 2-Methylnaphthalene	12.239	142	3184369	63.104	ng	99
38) 1-Methylnaphthalene	12.457	142	3091968	62.893	ng	100
40) 1,2,4,5-Tetrachloroben...	12.610	216	2002675	61.857	ng	99
41) Hexachlorocyclopentadiene	12.592	237	714895	63.016	ng	98
43) 2,4,6-Trichlorophenol	12.851	196	1274694	61.873	ng	98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049854.D
Acq On : 08 Apr 2025 19:28
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC060

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Quant Time: Apr 09 03:03:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	12.927	196	1399112	62.494	ng		99
46) 1,1'-Biphenyl	13.257	154	4137656	60.146	ng		99
47) 2-Chloronaphthalene	13.298	162	3226867	59.679	ng		98
48) 2-Nitroaniline	13.498	65	795093	63.562	ng		100
49) Acenaphthylene	14.145	152	4818221	61.175	ng		100
50) Dimethylphthalate	13.886	163	4013924	61.481	ng		100
51) 2,6-Dinitrotoluene	13.998	165	881430	64.439	ng		96
52) Acenaphthene	14.486	154	3082249	61.523	ng		99
53) 3-Nitroaniline	14.327	138	819114	61.958	ng		97
54) 2,4-Dinitrophenol	14.533	184	589583	61.369	ng		97
55) Dibenzofuran	14.821	168	5168643	61.715	ng		98
56) 4-Nitrophenol	14.645	139	793938	67.391	ng		96
57) 2,4-Dinitrotoluene	14.786	165	1222834	67.011	ng		96
58) Fluorene	15.474	166	4134865	62.111	ng		100
59) 2,3,4,6-Tetrachlorophenol	15.051	232	1221259	62.237	ng		97
60) Diethylphthalate	15.251	149	3826285	61.113	ng		98
61) 4-Chlorophenyl-phenyle...	15.468	204	2303745	64.546	ng		96
62) 4-Nitroaniline	15.492	138	906760	66.324	ng		98
63) Azobenzene	15.756	77	3310558	61.760	ng		99
65) 4,6-Dinitro-2-methylph...	15.551	198	778887	65.675	ng		98
66) n-Nitrosodiphenylamine	15.680	169	3444083	61.149	ng		99
67) 4-Bromophenyl-phenylether	16.356	248	1396751	63.930	ng		96
68) Hexachlorobenzene	16.480	284	1574846	62.842	ng		98
70) Pentachlorophenol	16.821	266	1149017	62.277	ng		99
71) Phenanthrene	17.209	178	6405696	62.082	ng		100
72) Anthracene	17.298	178	6349450	62.444	ng		99
73) Carbazole	17.568	167	5982768	62.468	ng		99
74) Di-n-butylphthalate	18.133	149	6724032	60.955	ng		100
75) Fluoranthene	19.227	202	8260007	65.108	ng		98
77) Benzidine	19.403	184	909121	33.955	ng		100
78) Pyrene	19.586	202	8591752	61.771	ng		98
80) Butylbenzylphthalate	20.486	149	3123457	59.763	ng		97
81) Benzo(a)anthracene	21.386	228	8424711	62.811	ng		99
82) 3,3'-Dichlorobenzidine	21.309	252	3254534	64.252	ng		99
83) Chrysene	21.450	228	7979154	62.573	ng		98
84) Bis(2-ethylhexyl)phtha...	21.315	149	4400467	57.790	ng	#	95
85) Di-n-octyl phthalate	22.450	149	7938550	59.593	ng		99
87) Indeno(1,2,3-cd)pyrene	27.809	276	9952687	63.483	ng		99
88) Benzo(b)fluoranthene	23.462	252	8702237	64.785	ng		99
89) Benzo(k)fluoranthene	23.527	252	8428431	64.749	ng		99
90) Benzo(a)pyrene	24.268	252	7629106	64.633	ng		99
91) Dibenzo(a,h)anthracene	27.862	278	8206056	63.546	ng		99
92) Benzo(g,h,i)perylene	28.867	276	8265853	62.639	ng		99

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

ICAL Form

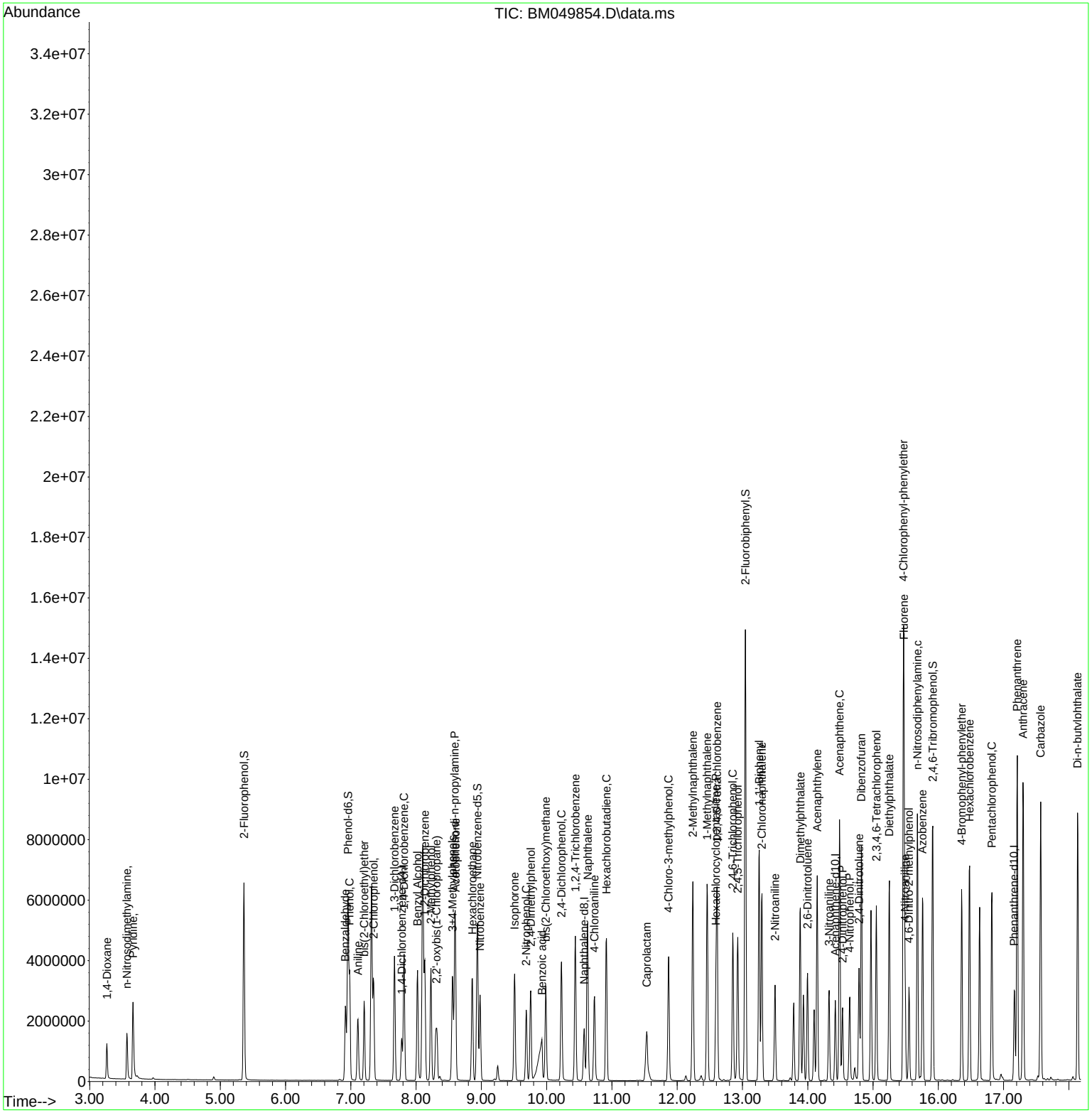
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Data File : BM049854.D
Acq On : 08 Apr 2025 19:28
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 09 03:03:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC060

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



ICAL Form

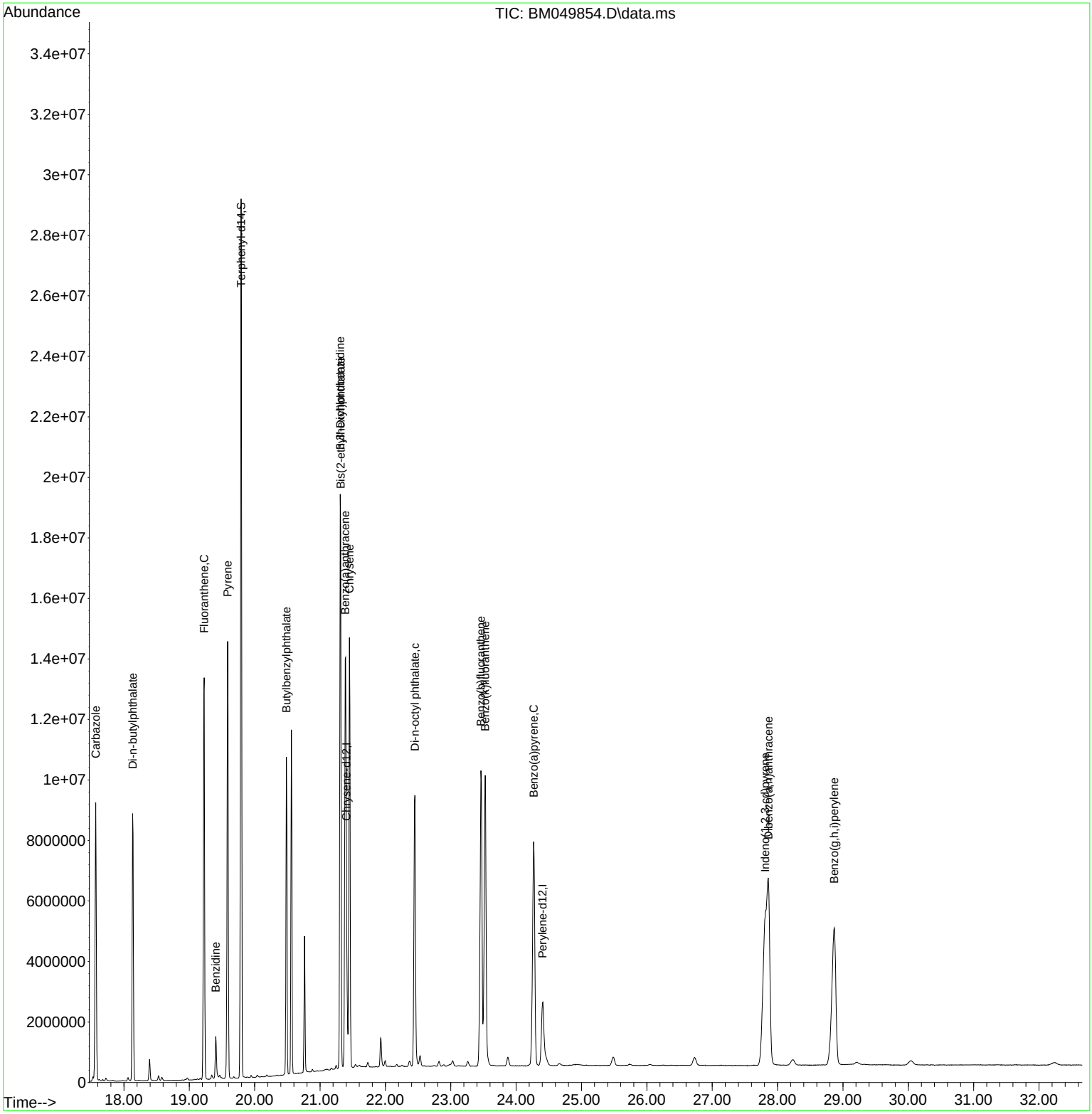
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Data File : BM049854.D
Acq On : 08 Apr 2025 19:28
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 09 03:03:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC060

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049855.D
Acq On : 08 Apr 2025 20:07
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC080

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Quant Time: Apr 09 03:03:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.781	152	337265	20.000	ng	0.00
21) Naphthalene-d8	10.575	136	1122639	20.000	ng	0.00
39) Acenaphthene-d10	14.422	164	724372	20.000	ng	0.00
64) Phenanthrene-d10	17.163	188	1472595	20.000	ng	0.00
76) Chrysene-d12	21.403	240	1558603	20.000	ng	0.00
86) Perylene-d12	24.403	264	1599218	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.363	112	3176757	159.945	ng	0.00
7) Phenol-d6	6.957	99	4006393	162.127	ng	0.00
23) Nitrobenzene-d5	8.940	82	3331067	165.228	ng	0.00
42) 2,4,6-Tribromophenol	15.910	330	1903078	180.622	ng	0.00
45) 2-Fluorobiphenyl	13.045	172	8715915	163.160	ng	0.00
79) Terphenyl-d14	19.786	244	12523857	150.586	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.263	88	651448	79.642	ng	99
3) Pyridine	3.663	79	1721709m	80.145	ng	
4) n-Nitrosodimethylamine	3.569	42	657792	80.428	ng	98
6) Aniline	7.104	93	1557071	73.535	ng	99
8) 2-Chlorophenol	7.346	128	1617379	79.461	ng	99
9) Benzaldehyde	6.916	77	756625	59.716	ng	98
10) Phenol	6.981	94	1957010	81.154	ng	99
11) bis(2-Chloroethyl)ether	7.204	93	1502774	79.467	ng	99
12) 1,3-Dichlorobenzene	7.669	146	1900533	78.977	ng	98
13) 1,4-Dichlorobenzene	7.816	146	1924197	79.467	ng	99
14) 1,2-Dichlorobenzene	8.134	146	1799229	78.890	ng	100
15) Benzyl Alcohol	8.022	79	1282444	82.414	ng	98
16) 2,2'-oxybis(1-Chloropr...	8.316	45	1638145	77.719	ng	99
17) 2-Methylphenol	8.228	107	1183257	79.623	ng	99
18) Hexachloroethane	8.857	117	658294	78.143	ng	97
19) n-Nitroso-di-n-propyla...	8.592	70	1100668	80.420	ng	99
20) 3+4-Methylphenols	8.557	107	1639646	80.930	ng	98
22) Acetophenone	8.604	105	2212514	81.093	ng	98
24) Nitrobenzene	8.981	77	1588049	81.805	ng	99
25) Isophorone	9.510	82	2783323	82.413	ng	99
26) 2-Nitrophenol	9.687	139	885850	86.097	ng	100
27) 2,4-Dimethylphenol	9.757	122	990665	84.960	ng	99
28) bis(2-Chloroethoxy)met...	9.986	93	1849648	81.806	ng	99
29) 2,4-Dichlorophenol	10.228	162	1635110	84.360	ng	99
30) 1,2,4-Trichlorobenzene	10.439	180	1854479	82.705	ng	99
31) Naphthalene	10.622	128	4692325	81.343	ng	99
32) Benzoic acid	9.934	122	1270650	80.764	ng	98
33) 4-Chloroaniline	10.734	127	1644863	80.751	ng	99
34) Hexachlorobutadiene	10.916	225	1160306	83.656	ng	99
35) Caprolactam	11.533	113	468650	84.302	ng	97
36) 4-Chloro-3-methylphenol	11.869	107	1439396	84.779	ng	99
37) 2-Methylnaphthalene	12.239	142	3388769	83.379	ng	100
38) 1-Methylnaphthalene	12.457	142	3285148	82.967	ng	99
40) 1,2,4,5-Tetrachloroben...	12.610	216	2135182	84.255	ng	99
41) Hexachlorocyclopentadiene	12.592	237	725972	81.754	ng	100
43) 2,4,6-Trichlorophenol	12.851	196	1356737	84.134	ng	99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049855.D
Acq On : 08 Apr 2025 20:07
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC080

Quant Time: Apr 09 03:03:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	12.927	196	1477695	84.323	ng		99
46) 1,1'-Biphenyl	13.257	154	4390713	81.540	ng		99
47) 2-Chloronaphthalene	13.298	162	3444094	81.376	ng		98
48) 2-Nitroaniline	13.498	65	853486	87.168	ng		98
49) Acenaphthylene	14.145	152	5122399	83.088	ng		99
50) Dimethylphthalate	13.880	163	4216670	82.512	ng		99
51) 2,6-Dinitrotoluene	13.998	165	927781	86.653	ng		96
52) Acenaphthene	14.486	154	3264918	83.258	ng		100
53) 3-Nitroaniline	14.327	138	930646	89.933	ng		96
54) 2,4-Dinitrophenol	14.533	184	625443	80.604	ng		97
55) Dibenzofuran	14.821	168	5445586	83.068	ng		98
56) 4-Nitrophenol	14.639	139	835691	90.623	ng		99
57) 2,4-Dinitrotoluene	14.786	165	1283341	89.846	ng		96
58) Fluorene	15.469	166	4360823	83.687	ng		99
59) 2,3,4,6-Tetrachlorophenol	15.051	232	1308821	85.213	ng		97
60) Diethylphthalate	15.251	149	4046865	82.577	ng		98
61) 4-Chlorophenyl-phenyle...	15.469	204	2422112	86.698	ng		96
62) 4-Nitroaniline	15.492	138	958937	89.608	ng		98
63) Azobenzene	15.757	77	3477801	82.888	ng		98
65) 4,6-Dinitro-2-methylph...	15.551	198	824411	88.841	ng		99
66) n-Nitrosodiphenylamine	15.680	169	3615164	82.034	ng		100
67) 4-Bromophenyl-phenylether	16.357	248	1482215	86.704	ng		96
68) Hexachlorobenzene	16.474	284	1670677	85.201	ng		100
70) Pentachlorophenol	16.821	266	1238924	85.821	ng		99
71) Phenanthrene	17.210	178	6757399	83.700	ng		99
72) Anthracene	17.298	178	6714186	84.390	ng		100
73) Carbazole	17.568	167	6306654	84.159	ng		99
74) Di-n-butylphthalate	18.133	149	7042435	81.592	ng		100
75) Fluoranthene	19.221	202	8767531	88.324	ng		99
77) Benzidine	19.404	184	2227000	107.704	ng		100
78) Pyrene	19.586	202	8996687	83.755	ng		98
80) Butylbenzylphthalate	20.486	149	3262795	80.838	ng		97
81) Benzo(a)anthracene	21.386	228	8779936	84.761	ng		99
82) 3,3'-Dichlorobenzidine	21.309	252	3524132	90.091	ng		99
83) Chrysene	21.450	228	8388518	85.181	ng		98
84) Bis(2-ethylhexyl)phtha...	21.309	149	4596937	78.171	ng	#	96
85) Di-n-octyl phthalate	22.445	149	8204703	79.753	ng		99
87) Indeno(1,2,3-cd)pyrene	27.809	276	10271777	86.167	ng		98
88) Benzo(b)fluoranthene	23.462	252	9083493	88.935	ng		99
89) Benzo(k)fluoranthene	23.527	252	8710029	88.000	ng		99
90) Benzo(a)pyrene	24.268	252	7870455	87.693	ng		99
91) Dibenzo(a,h)anthracene	27.862	278	8515147	86.721	ng		99
92) Benzo(g,h,i)perylene	28.868	276	8495950	84.674	ng		98

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

ICAL Form

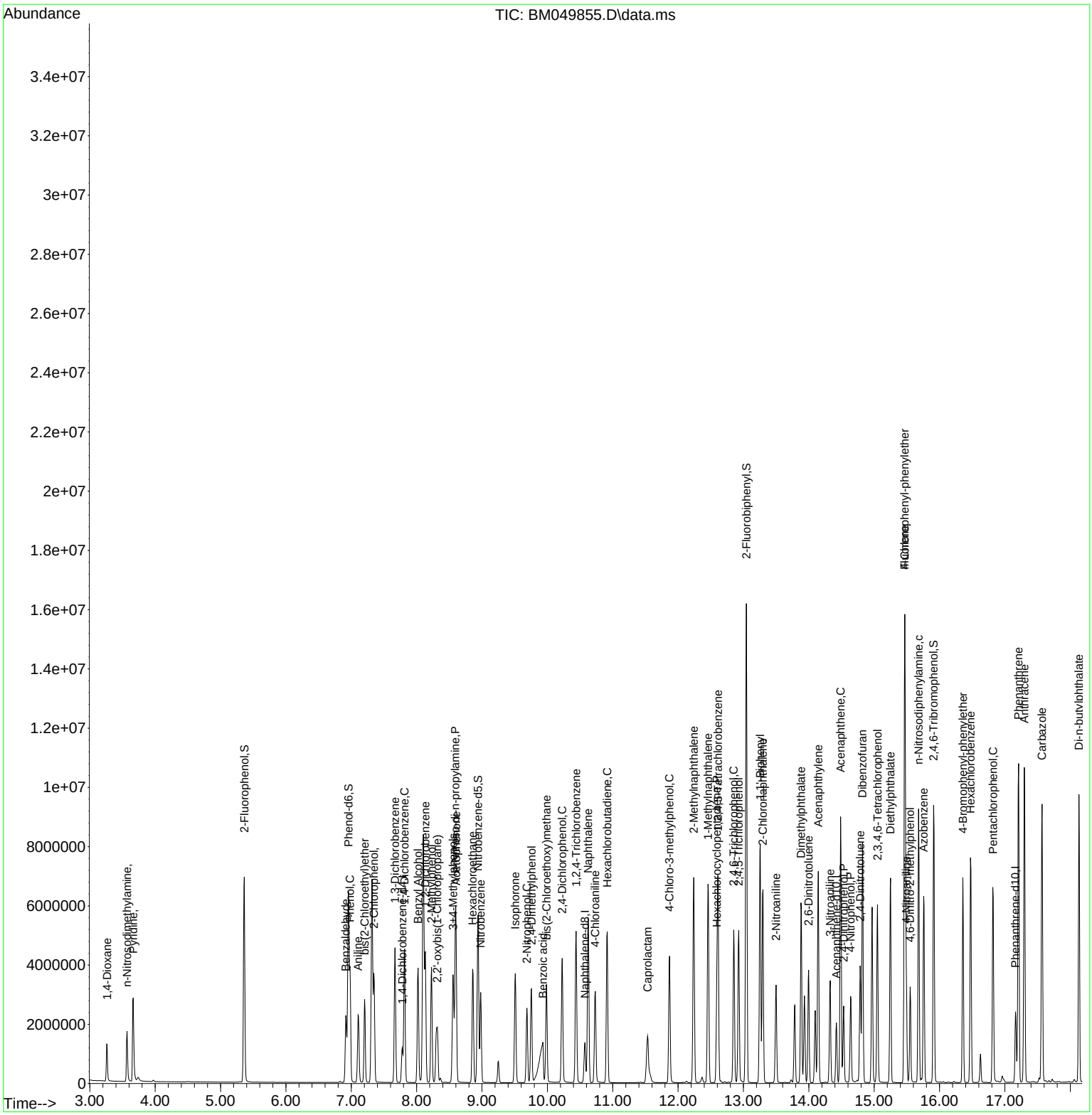
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049855.D
Acq On : 08 Apr 2025 20:07
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 09 03:03:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC080

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



ICAL Form

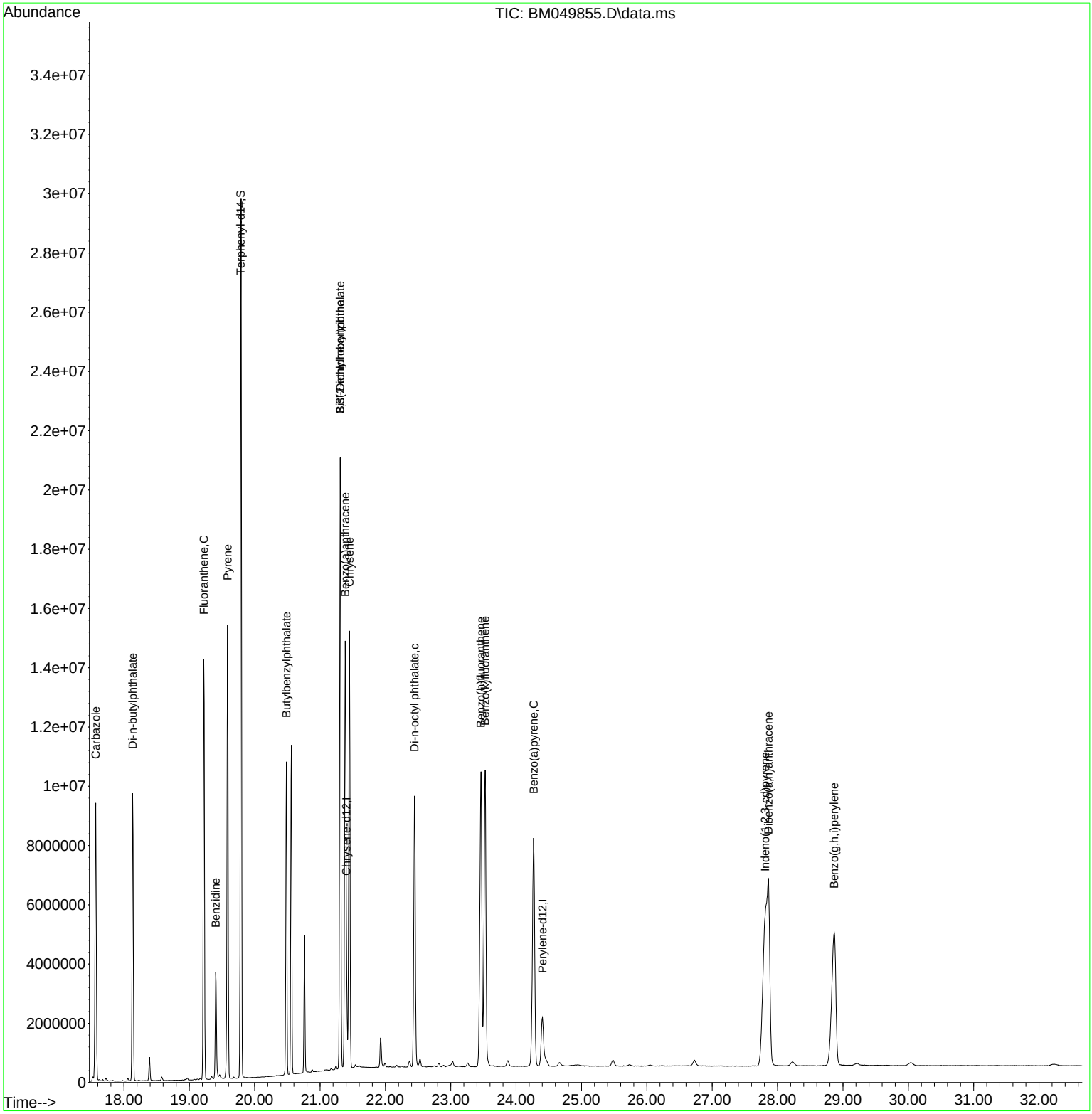
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Acq On : 08 Apr 2025 20:07
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 09 03:03:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 02:53:19 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDICC080

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/09/2025
Supervised By :Jagrut Upadhyay 04/09/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.781	152	315403	20.000	ng	0.00
21) Naphthalene-d8	10.575	136	1065845	20.000	ng	0.00
39) Acenaphthene-d10	14.421	164	683720	20.000	ng	0.00
64) Phenanthrene-d10	17.162	188	1374499	20.000	ng	0.00
76) Chrysene-d12	21.403	240	1374864	20.000	ng	0.00
86) Perylene-d12	24.397	264	1454417	20.000	ng	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.357	112	1477323	79.537	ng	0.00
7) Phenol-d6	6.951	99	1843667	79.779	ng	0.00
23) Nitrobenzene-d5	8.934	82	1580621	82.580	ng	0.00
42) 2,4,6-Tribromophenol	15.910	330	830905	83.550	ng	0.00
45) 2-Fluorobiphenyl	13.039	172	4148227	82.271	ng	0.00
79) Terphenyl-d14	19.792	244	6672291	90.949	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.263	88	298756	39.056	ng	100
3) Pyridine	3.663	79	788453	39.231	ng	97
4) n-Nitrosodimethylamine	3.569	42	302128	39.502	ng	100
6) Aniline	7.104	93	824180	41.621	ng	99
8) 2-Chlorophenol	7.345	128	758833	39.865	ng	99
9) Benzaldehyde	6.916	77	479003	40.391	ng	97
10) Phenol	6.975	94	895478	39.708	ng	99
11) bis(2-Chloroethyl)ether	7.198	93	705217	39.877	ng	98
12) 1,3-Dichlorobenzene	7.669	146	897350	39.874	ng	98
13) 1,4-Dichlorobenzene	7.810	146	898553	39.681	ng	98
14) 1,2-Dichlorobenzene	8.128	146	855104	40.092	ng	99
15) Benzyl Alcohol	8.016	79	585871	40.260	ng	99
16) 2,2'-oxybis(1-Chloropr...	8.304	45	787669	39.960	ng	99
17) 2-Methylphenol	8.222	107	557174	40.092	ng	99
18) Hexachloroethane	8.857	117	312580	39.677	ng	98
19) n-Nitroso-di-n-propyla...	8.586	70	525287	41.040	ng	99
20) 3+4-Methylphenols	8.551	107	760368	40.132	ng	98
22) Acetophenone	8.598	105	1065111	41.119	ng	99
24) Nitrobenzene	8.975	77	750719	40.732	ng	99
25) Isophorone	9.504	82	1319919	41.165	ng	99
26) 2-Nitrophenol	9.686	139	405206	41.481	ng	98
27) 2,4-Dimethylphenol	9.751	122	454139	41.022	ng	100
28) bis(2-Chloroethoxy)met...	9.986	93	877287	40.868	ng	99
29) 2,4-Dichlorophenol	10.222	162	759071	41.249	ng	99
30) 1,2,4-Trichlorobenzene	10.439	180	860242	40.409	ng	99
31) Naphthalene	10.622	128	2222571	40.582	ng	99
32) Benzoic acid	9.886	122	548954	41.427	ng	97
33) 4-Chloroaniline	10.728	127	815667	42.177	ng	98
34) Hexachlorobutadiene	10.916	225	535791	40.688	ng	98
35) Caprolactam	11.510	113	219136	41.519	ng	96
36) 4-Chloro-3-methylphenol	11.863	107	670620	41.604	ng	99
37) 2-Methylnaphthalene	12.239	142	1589046	41.181	ng	99
38) 1-Methylnaphthalene	12.457	142	1536235	40.865	ng	100
40) 1,2,4,5-Tetrachloroben...	12.610	216	974104	40.724	ng	99
41) Hexachlorocyclopentadiene	12.592	237	348434	41.571	ng	100
43) 2,4,6-Trichlorophenol	12.851	196	629554	41.361	ng	97

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.922	196	684953	41.410	ng	99
46) 1,1'-Biphenyl	13.251	154	2088758	41.097	ng	100
47) 2-Chloronaphthalene	13.292	162	1626662	40.719	ng	98
48) 2-Nitroaniline	13.492	65	386594	41.831	ng	96
49) Acenaphthylene	14.139	152	2404483	41.321	ng	100
50) Dimethylphthalate	13.880	163	2006252	41.593	ng	99
51) 2,6-Dinitrotoluene	13.992	165	430765	42.625	ng	99
52) Acenaphthene	14.486	154	1537342	41.534	ng	99
53) 3-Nitroaniline	14.321	138	430166	44.041	ng	96
54) 2,4-Dinitrophenol	14.527	184	261179	39.689	ng	97
55) Dibenzofuran	14.821	168	2572884	41.581	ng	99
56) 4-Nitrophenol	14.639	139	380237	43.685	ng	97
57) 2,4-Dinitrotoluene	14.780	165	588187	43.627	ng	99
58) Fluorene	15.468	166	2052408	41.729	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.051	232	604398	41.690	ng	99
60) Diethylphthalate	15.245	149	1935360	41.839	ng	100
61) 4-Chlorophenyl-phenyle...	15.463	204	1107114	41.984	ng	99
62) 4-Nitroaniline	15.486	138	445025	44.058	ng	99
63) Azobenzene	15.757	77	1658136	41.869	ng	99
65) 4,6-Dinitro-2-methylph...	15.545	198	355438	41.037	ng	97
66) n-Nitrosodiphenylamine	15.674	169	1689818	41.081	ng	99
67) 4-Bromophenyl-phenylether	16.357	248	654585	41.024	ng	98
68) Hexachlorobenzene	16.474	284	746406	40.782	ng	98
69) Atrazine	16.627	200	351283	32.937	ng	100
70) Pentachlorophenol	16.815	266	547416	40.626	ng	99
71) Phenanthrene	17.204	178	3110670	41.280	ng	100
72) Anthracene	17.298	178	3081134	41.490	ng	100
73) Carbazole	17.562	167	2897408	41.424	ng	100
74) Di-n-butylphthalate	18.133	149	3282090	40.739	ng	100
75) Fluoranthene	19.221	202	3829085	41.327	ng	99
77) Benzidine	19.403	184	690660	37.866	ng	99
78) Pyrene	19.586	202	3930574	41.482	ng	100
80) Butylbenzylphthalate	20.486	149	1452887	40.807	ng	97
81) Benzo(a)anthracene	21.386	228	3774940	41.314	ng	99
82) 3,3'-Dichlorobenzidine	21.303	252	1404639	40.707	ng	99
83) Chrysene	21.444	228	3564842	41.037	ng	99
84) Bis(2-ethylhexyl)phtha...	21.309	149	2130265	41.067	ng	99
85) Di-n-octyl phthalate	22.444	149	3614929	39.835	ng	100
87) Indeno(1,2,3-cd)pyrene	27.785	276	4377775	40.380	ng	100
88) Benzo(b)fluoranthene	23.456	252	3807278	40.988	ng	100
89) Benzo(k)fluoranthene	23.515	252	3640395	40.442	ng	99
90) Benzo(a)pyrene	24.262	252	3296735	40.389	ng	98
91) Dibenzo(a,h)anthracene	27.844	278	3588859	40.189	ng	100
92) Benzo(g,h,i)perylene	28.844	276	3657794	40.085	ng	100

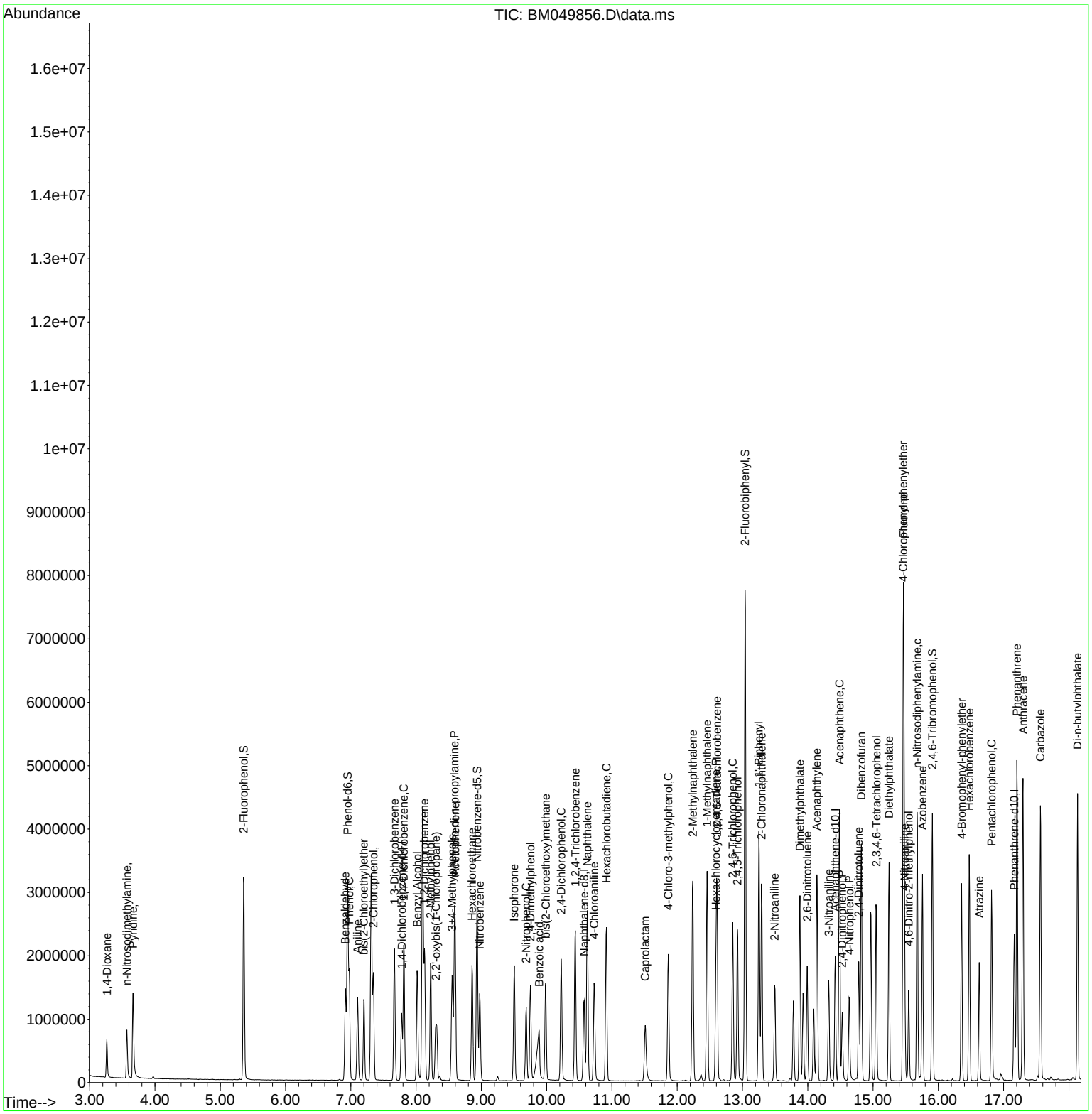
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

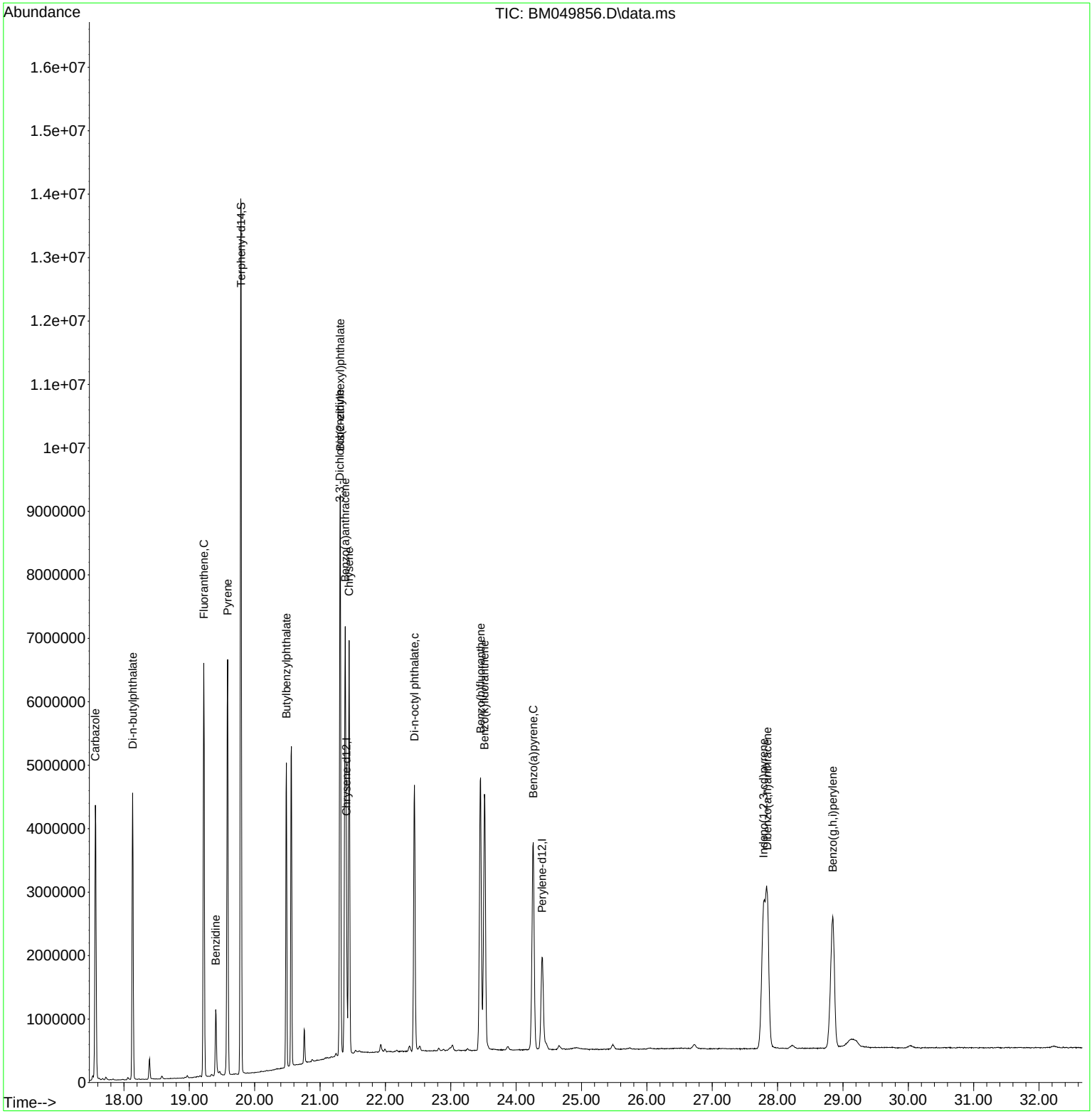


ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	104	0.00
2		1,4-Dioxane	0.485	0.474	2.3	101	0.00
3		Pyridine	1.274	1.250	1.9	101	0.00
4		n-Nitrosodimethylamine	0.485	0.479	1.2	102	0.00
5	S	2-Fluorophenol	1.178	1.171	0.6	103	0.00
6		Aniline	1.256	1.307	-4.1	103	0.00
7	S	Phenol-d6	1.465	1.461	0.3	102	0.00
8		2-Chlorophenol	1.207	1.203	0.3	103	0.00
9		Benzaldehyde	0.752	0.759	-0.9	106	0.00
10	C	Phenol	1.430	1.420	0.7	103	0.00
11		bis(2-Chloroethyl)ether	1.121	1.118	0.3	103	0.00
12		1,3-Dichlorobenzene	1.427	1.423	0.3	103	0.00
13	C	1,4-Dichlorobenzene	1.436	1.424	0.8	102	0.00
14		1,2-Dichlorobenzene	1.352	1.356	-0.3	103	0.00
15		Benzyl Alcohol	0.923	0.929	-0.7	102	0.00
16		2,2'-oxybis(1-Chloropropane	1.250	1.249	0.1	103	0.00
17		2-Methylphenol	0.881	0.883	-0.2	103	0.00
18		Hexachloroethane	0.500	0.496	0.8	103	0.00
19	P	n-Nitroso-di-n-propylamine	0.812	0.833	-2.6	104	0.00
20		3+4-Methylphenols	1.201	1.205	-0.3	103	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	104	0.00
22		Acetophenone	0.486	0.500	-2.9	104	0.00
23	S	Nitrobenzene-d5	0.359	0.371	-3.3	105	0.00
24		Nitrobenzene	0.346	0.352	-1.7	103	0.00
25		Isophorone	0.602	0.619	-2.8	104	0.00
26	C	2-Nitrophenol	0.183	0.190	-3.8	104	0.00
27		2,4-Dimethylphenol	0.208	0.213	-2.4	104	0.00
28		bis(2-Chloroethoxy)methane	0.403	0.412	-2.2	104	0.00
29	C	2,4-Dichlorophenol	0.345	0.356	-3.2	105	0.00
30		1,2,4-Trichlorobenzene	0.399	0.404	-1.3	104	0.00
31		Naphthalene	1.028	1.043	-1.5	104	0.00
32		Benzoic acid	0.220	0.258	-17.3	116	0.01
33		4-Chloroaniline	0.363	0.383	-5.5	104	0.00
34	C	Hexachlorobutadiene	0.247	0.251	-1.6	105	0.00
35		Caprolactam	0.099	0.103	-4.0	105	0.00
36	C	4-Chloro-3-methylphenol	0.302	0.315	-4.3	106	0.00
37		2-Methylnaphthalene	0.724	0.745	-2.9	105	0.00
38		1-Methylnaphthalene	0.705	0.721	-2.3	105	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	106	0.00
40		1,2,4,5-Tetrachlorobenzene	0.700	0.712	-1.7	107	0.00
41	P	Hexachlorocyclopentadiene	0.245	0.255	-4.1	102	0.00
42	S	2,4,6-Tribromophenol	0.291	0.304	-4.5	110	0.00
43	C	2,4,6-Trichlorophenol	0.445	0.460	-3.4	106	0.00
44		2,4,5-Trichlorophenol	0.484	0.501	-3.5	106	0.00
45	S	2-Fluorobiphenyl	1.475	1.517	-2.8	106	0.00
46		1,1'-Biphenyl	1.487	1.527	-2.7	106	0.00
47		2-Chloronaphthalene	1.169	1.190	-1.8	106	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	0.270	0.283	-4.8	106	0.00
49		Acenaphthylene	1.702	1.758	-3.3	107	0.00
50		Dimethylphthalate	1.411	1.467	-4.0	108	0.00
51		2,6-Dinitrotoluene	0.296	0.315	-6.4	108	0.00
52	C	Acenaphthene	1.083	1.124	-3.8	107	0.00
53		3-Nitroaniline	0.286	0.315	-10.1	108	0.00
54	P	2,4-Dinitrophenol	0.175	0.191	-9.1	110	0.00
55		Dibenzofuran	1.810	1.882	-4.0	108	0.00
56	P	4-Nitrophenol	0.255	0.278	-9.0	109	0.00
57		2,4-Dinitrotoluene	0.394	0.430	-9.1	108	0.00
58		Fluorene	1.439	1.501	-4.3	108	0.00
59		2,3,4,6-Tetrachlorophenol	0.424	0.442	-4.2	110	0.00
60		Diethylphthalate	1.353	1.415	-4.6	108	0.00
61		4-Chlorophenyl-phenylether	0.771	0.810	-5.1	109	0.00
62		4-Nitroaniline	0.295	0.325	-10.2	108	0.00
63		Azobenzene	1.158	1.213	-4.7	107	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00
65		4,6-Dinitro-2-methylphenol	0.126	0.129	-2.4	107	0.00
66	c	n-Nitrosodiphenylamine	0.599	0.615	-2.7	108	0.00
67		4-Bromophenyl-phenylether	0.232	0.238	-2.6	109	0.00
68		Hexachlorobenzene	0.266	0.272	-2.3	109	0.00
69		Atrazine	0.155	0.128	17.4	108	0.00
70	C	Pentachlorophenol	0.196	0.199	-1.5	106	0.00
71		Phenanthrene	1.096	1.132	-3.3	109	0.00
72		Anthracene	1.081	1.121	-3.7	109	0.00
73		Carbazole	1.018	1.054	-3.5	109	0.00
74		Di-n-butylphthalate	1.172	1.194	-1.9	107	0.00
75	C	Fluoranthene	1.348	1.393	-3.3	110	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	108	0.00
77		Benzidine	0.265	0.251	5.3	67	0.00
78		Pyrene	1.378	1.429	-3.7	109	0.00
79	S	Terphenyl-d14	1.067	1.213	-13.7	110	0.00
80		Butylbenzylphthalate	0.518	0.528	-1.9	106	0.00
81		Benzo(a)anthracene	1.329	1.373	-3.3	109	0.00
82		3,3'-Dichlorobenzidine	0.502	0.511	-1.8	105	0.00
83		Chrysene	1.264	1.296	-2.5	108	0.00
84		Bis(2-ethylhexyl)phthalate	0.755	0.775	-2.6	106	0.00
85	c	Di-n-octyl phthalate	1.320	1.315	0.4	104	0.00
86	I	Perylene-d12	1.000	1.000	0.0	105	-0.01
87		Indeno(1,2,3-cd)pyrene	1.491	1.505	-0.9	105	-0.01
88		Benzo(b)fluoranthene	1.277	1.309	-2.5	105	0.00
89		Benzo(k)fluoranthene	1.238	1.251	-1.1	106	0.00
90	C	Benzo(a)pyrene	1.122	1.133	-1.0	105	0.00
91		Dibenzo(a,h)anthracene	1.228	1.234	-0.5	104	0.00
92		Benzo(g,h,i)perylene	1.255	1.257	-0.2	105	-0.01

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	104	0.00
2		1,4-Dioxane	40.000	39.056	2.4	101	0.00
3		Pyridine	40.000	39.231	1.9	101	0.00
4		n-Nitrosodimethylamine	40.000	39.502	1.2	102	0.00
5	S	2-Fluorophenol	80.000	79.537	0.6	103	0.00
6		Aniline	40.000	41.621	-4.1	103	0.00
7	S	Phenol-d6	80.000	79.779	0.3	102	0.00
8		2-Chlorophenol	40.000	39.865	0.3	103	0.00
9		Benzaldehyde	40.000	40.391	-1.0	106	0.00
10	C	Phenol	40.000	39.708	0.7	103	0.00
11		bis(2-Chloroethyl)ether	40.000	39.877	0.3	103	0.00
12		1,3-Dichlorobenzene	40.000	39.874	0.3	103	0.00
13	C	1,4-Dichlorobenzene	40.000	39.681	0.8	102	0.00
14		1,2-Dichlorobenzene	40.000	40.092	-0.2	103	0.00
15		Benzyl Alcohol	40.000	40.260	-0.6	102	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	39.960	0.1	103	0.00
17		2-Methylphenol	40.000	40.092	-0.2	103	0.00
18		Hexachloroethane	40.000	39.677	0.8	103	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	41.040	-2.6	104	0.00
20		3+4-Methylphenols	40.000	40.132	-0.3	103	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	104	0.00
22		Acetophenone	40.000	41.119	-2.8	104	0.00
23	S	Nitrobenzene-d5	80.000	82.580	-3.2	105	0.00
24		Nitrobenzene	40.000	40.732	-1.8	103	0.00
25		Isophorone	40.000	41.165	-2.9	104	0.00
26	C	2-Nitrophenol	40.000	41.481	-3.7	104	0.00
27		2,4-Dimethylphenol	40.000	41.022	-2.6	104	0.00
28		bis(2-Chloroethoxy)methane	40.000	40.868	-2.2	104	0.00
29	C	2,4-Dichlorophenol	40.000	41.249	-3.1	105	0.00
30		1,2,4-Trichlorobenzene	40.000	40.409	-1.0	104	0.00
31		Naphthalene	40.000	40.582	-1.5	104	0.00
32		Benzoic acid	40.000	41.427	-3.6	116	0.01
33		4-Chloroaniline	40.000	42.177	-5.4	104	0.00
34	C	Hexachlorobutadiene	40.000	40.688	-1.7	105	0.00
35		Caprolactam	40.000	41.519	-3.8	105	0.00
36	C	4-Chloro-3-methylphenol	40.000	41.604	-4.0	106	0.00
37		2-Methylnaphthalene	40.000	41.181	-3.0	105	0.00
38		1-Methylnaphthalene	40.000	40.865	-2.2	105	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	106	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	40.724	-1.8	107	0.00
41	P	Hexachlorocyclopentadiene	40.000	41.571	-3.9	102	0.00
42	S	2,4,6-Tribromophenol	80.000	83.550	-4.4	110	0.00
43	C	2,4,6-Trichlorophenol	40.000	41.361	-3.4	106	0.00
44		2,4,5-Trichlorophenol	40.000	41.410	-3.5	106	0.00
45	S	2-Fluorobiphenyl	80.000	82.271	-2.8	106	0.00
46		1,1'-Biphenyl	40.000	41.097	-2.7	106	0.00
47		2-Chloronaphthalene	40.000	40.719	-1.8	106	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	41.831	-4.6	106	0.00
49		Acenaphthylene	40.000	41.321	-3.3	107	0.00
50		Dimethylphthalate	40.000	41.593	-4.0	108	0.00
51		2,6-Dinitrotoluene	40.000	42.625	-6.6	108	0.00
52	C	Acenaphthene	40.000	41.534	-3.8	107	0.00
53		3-Nitroaniline	40.000	44.041	-10.1	108	0.00
54	P	2,4-Dinitrophenol	40.000	39.689	0.8	110	0.00
55		Dibenzofuran	40.000	41.581	-4.0	108	0.00
56	P	4-Nitrophenol	40.000	43.685	-9.2	109	0.00
57		2,4-Dinitrotoluene	40.000	43.627	-9.1	108	0.00
58		Fluorene	40.000	41.729	-4.3	108	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	41.690	-4.2	110	0.00
60		Diethylphthalate	40.000	41.839	-4.6	108	0.00
61		4-Chlorophenyl-phenylether	40.000	41.984	-5.0	109	0.00
62		4-Nitroaniline	40.000	44.058	-10.1	108	0.00
63		Azobenzene	40.000	41.869	-4.7	107	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	109	0.00
65		4,6-Dinitro-2-methylphenol	40.000	41.037	-2.6	107	0.00
66	c	n-Nitrosodiphenylamine	40.000	41.081	-2.7	108	0.00
67		4-Bromophenyl-phenylether	40.000	41.024	-2.6	109	0.00
68		Hexachlorobenzene	40.000	40.782	-2.0	109	0.00
69		Atrazine	40.000	32.937	17.7	108	0.00
70	C	Pentachlorophenol	40.000	40.626	-1.6	106	0.00
71		Phenanthrene	40.000	41.280	-3.2	109	0.00
72		Anthracene	40.000	41.490	-3.7	109	0.00
73		Carbazole	40.000	41.424	-3.6	109	0.00
74		Di-n-butylphthalate	40.000	40.739	-1.8	107	0.00
75	C	Fluoranthene	40.000	41.327	-3.3	110	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	108	0.00
77		Benzidine	40.000	37.866	5.3	67	0.00
78		Pyrene	40.000	41.482	-3.7	109	0.00
79	S	Terphenyl-d14	80.000	90.949	-13.7	110	0.00
80		Butylbenzylphthalate	40.000	40.807	-2.0	106	0.00
81		Benzo(a)anthracene	40.000	41.314	-3.3	109	0.00
82		3,3'-Dichlorobenzidine	40.000	40.707	-1.8	105	0.00
83		Chrysene	40.000	41.037	-2.6	108	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	41.067	-2.7	106	0.00
85	c	Di-n-octyl phthalate	40.000	39.835	0.4	104	0.00
86	I	Perylene-d12	20.000	20.000	0.0	105	-0.01
87		Indeno(1,2,3-cd)pyrene	40.000	40.380	-1.0	105	-0.01
88		Benzo(b)fluoranthene	40.000	40.988	-2.5	105	0.00
89		Benzo(k)fluoranthene	40.000	40.442	-1.1	106	0.00
90	C	Benzo(a)pyrene	40.000	40.389	-1.0	105	0.00
91		Dibenzo(a,h)anthracene	40.000	40.189	-0.5	104	0.00
92		Benzo(g,h,i)perylene	40.000	40.085	-0.2	105	-0.01

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049856.D
Acq On : 08 Apr 2025 20:47
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM040825

Quant Time: Apr 09 04:03:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_P Calibration Date(s): 03/12/2025 03/12/2025

Calibration Time(s): 16:17 21:02

LAB FILE ID: RRF2.5 = BP024160.D RRF005 = BP024161.D RRF010 = BP024162.D
RRF020 = BP024163.D RRF040 = BP024164.D RRF050 = BP024165.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2-Fluorophenol		1.158	1.194	1.307	1.211	1.291	1.253	5.1
Benzaldehyde		0.971	0.949	0.930	0.780	0.751	0.809	18.2
Phenol-d6		1.518	1.581	1.747	1.631	1.749	1.675	5.9
Phenol		1.579	1.632	1.754	1.628	1.744	1.691	4.5
bis(2-Chloroethyl)ether		1.286	1.317	1.407	1.273	1.341	1.334	3.5
2-Chlorophenol		1.257	1.310	1.413	1.306	1.391	1.353	4.5
2-Methylphenol		0.932	0.997	1.120	1.038	1.116	1.061	7.0
2,2-oxybis(1-Chloropropane)		1.374	1.367	1.434	1.293	1.365	1.361	3.1
Acetophenone		0.483	0.490	0.531	0.496	0.508	0.506	3.4
3+4-Methylphenols		1.265	1.360	1.530	1.433	1.547	1.457	7.5
n-Nitroso-di-n-propylamine	0.869	0.910	0.956	1.048	0.962	1.026	0.972	6.2
Nitrobenzene-d5		0.330	0.338	0.366	0.351	0.362	0.354	4.3
Hexachloroethane		0.533	0.512	0.547	0.508	0.533	0.529	2.7
Nitrobenzene		0.330	0.336	0.362	0.341	0.355	0.350	3.9
Isophorone		0.532	0.562	0.631	0.602	0.635	0.608	7.3
2-Nitrophenol		0.126	0.141	0.167	0.171	0.182	0.167	14.9
2,4-Dimethylphenol		0.186	0.198	0.220	0.215	0.223	0.215	7.9
bis(2-Chloroethoxy)methane		0.414	0.418	0.438	0.418	0.429	0.427	2.5
2,4-Dichlorophenol		0.237	0.263	0.298	0.296	0.306	0.291	10.2
Naphthalene		1.041	1.037	1.099	1.029	1.069	1.060	2.4
4-Chloroaniline		0.344	0.356	0.397	0.377	0.394	0.379	5.6
Hexachlorobutadiene		0.177	0.178	0.187	0.180	0.187	0.185	3.4
Caprolactam		0.072	0.079	0.097	0.097	0.107	0.095	15.6
4-Chloro-3-methylphenol		0.261	0.283	0.324	0.314	0.333	0.313	9.8
2-Methylnaphthalene		0.689	0.684	0.737	0.704	0.731	0.716	3.3
Hexachlorocyclopentadiene		0.169	0.189	0.214	0.212	0.220	0.208	10.6
2,4,6-Trichlorophenol		0.291	0.324	0.379	0.372	0.391	0.367	12.0
2-Fluorobiphenyl		1.364	1.358	1.420	1.319	1.335	1.356	2.4
2,4,5-Trichlorophenol		0.331	0.362	0.414	0.409	0.422	0.403	10.2
1,1-Biphenyl		1.467	1.475	1.566	1.462	1.493	1.503	2.6
2-Chloronaphthalene		1.108	1.100	1.180	1.095	1.115	1.130	3.0
2-Nitroaniline		0.228	0.252	0.300	0.292	0.311	0.289	12.3
Dimethylphthalate		1.351	1.349	1.459	1.358	1.417	1.399	3.3
Acenaphthylene		1.586	1.628	1.776	1.661	1.749	1.710	4.9

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_P Calibration Date(s): 03/12/2025 03/12/2025

Calibration Time(s): 16:17 21:02

LAB FILE ID: RRF2.5 = BP024160.D RRF005 = BP024161.D RRF010 = BP024162.D
RRF020 = BP024163.D RRF040 = BP024164.D RRF050 = BP024165.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2,6-Dinitrotoluene		0.248	0.266	0.303	0.294	0.312	0.294	9.4
3-Nitroaniline		0.253	0.276	0.328	0.322	0.344	0.318	12.2
Acenaphthene		1.057	1.056	1.136	1.061	1.096	1.093	3.2
2,4-Dinitrophenol			0.108	0.146	0.160	0.179	0.156	20.0
4-Nitrophenol		0.187	0.218	0.271	0.277	0.299	0.266	17.4
Dibenzofuran		1.759	1.751	1.835	1.711	1.768	1.770	2.2
2,4-Dinitrotoluene		0.295	0.334	0.400	0.394	0.423	0.389	14.2
Diethylphthalate		1.297	1.336	1.437	1.358	1.422	1.394	4.5
4-Chlorophenyl-phenylether		0.658	0.660	0.696	0.658	0.685	0.676	2.5
Fluorene		1.309	1.343	1.442	1.345	1.407	1.379	3.4
4-Nitroaniline		0.246	0.292	0.348	0.343	0.362	0.334	14.2
4,6-Dinitro-2-methylphenol			0.085	0.111	0.120	0.127	0.119	15.9
n-Nitrosodiphenylamine		0.564	0.583	0.629	0.600	0.617	0.607	4.3
2,4,6-Tribromophenol		0.203	0.222	0.256	0.252	0.270	0.252	11.7
4-Bromophenyl-phenylether		0.206	0.207	0.222	0.217	0.224	0.220	4.6
Hexachlorobenzene		0.248	0.249	0.263	0.254	0.263	0.260	3.8
Atrazine		0.165	0.171	0.157	0.135	0.105	0.147	18.5
Pentachlorophenol		0.121	0.140	0.166	0.177	0.184	0.168	16.6
Phenanthrene		1.068	1.059	1.126	1.083	1.100	1.093	2.2
Anthracene		0.993	1.012	1.101	1.063	1.092	1.064	4.2
Carbazole		0.920	0.975	1.060	1.041	1.060	1.026	5.5
Di-n-butylphthalate		1.026	1.121	1.247	1.260	1.272	1.218	8.6
Fluoranthene		1.173	1.220	1.287	1.264	1.305	1.265	4.1
Pyrene		1.177	1.190	1.299	1.204	1.266	1.243	4.1
Terphenyl-d14		0.967	0.973	1.033	0.948	0.966	0.969	3.4
Butylbenzylphthalate		0.399	0.441	0.513	0.524	0.554	0.513	13.5
3,3-Dichlorobenzidine		0.340	0.369	0.429	0.428	0.434	0.417	10.9
Benzo(a)anthracene		1.194	1.194	1.291	1.208	1.261	1.243	3.5
Chrysene		1.185	1.159	1.224	1.158	1.212	1.195	2.4
Bis(2-ethylhexyl)phthalate		0.613	0.678	0.784	0.792	0.819	0.774	12.3
Di-n-octyl phthalate		0.922	1.033	1.224	1.272	1.357	1.240	16.0
Benzo(b)fluoranthene		1.103	1.116	1.258	1.190	1.244	1.206	5.9
Benzo(k)fluoranthene		1.092	1.136	1.213	1.130	1.203	1.180	5.1
Benzo(a)pyrene		0.953	0.959	1.065	1.029	1.094	1.049	6.8
Indeno(1,2,3-cd)pyrene		1.274	1.289	1.421	1.366	1.442	1.396	6.4

All other compounds must meet a minimum RRF of 0.010.

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_P Calibration Date(s): 03/12/2025 03/12/2025

Calibration Time(s): 16:17 21:02

LAB FILE ID: RRF2.5 = BP024160.D RRF005 = BP024161.D RRF010 = BP024162.D
RRF020 = BP024163.D RRF040 = BP024164.D RRF050 = BP024165.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
Dibenzo(a,h)anthracene		1.063	1.083	1.184	1.137	1.191	1.161	6.0
Benzo(g,h,i)perylene		1.097	1.107	1.199	1.154	1.202	1.180	5.4
1,2,4,5-Tetrachlorobenzene		0.548	0.560	0.596	0.558	0.580	0.578	4.0
1,4-Dioxane		0.503	0.499	0.518	0.469	0.496	0.497	2.9
2,3,4,6-Tetrachlorophenol		0.316	0.323	0.365	0.356	0.371	0.356	7.5

All other compounds must meet a minimum RRF of 0.010.

Response Factor Report MSBNA_P

Method Path : Z:\svoasrv\HPCHEM1\BNA_P\Methods\
Method File : 8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Mar 13 05:55:58 2025
Response Via : Initial Calibration

Calibration Files
2.5 =BP024160.D 5 =BP024161.D 10 =BP024162.D 20 =BP024163.D 40 =BP024164.D 50 =BP024165.D 60 =BP024166.D 80 =BP0241
67.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------									
2)		1,4-Dioxane		0.503	0.499	0.518	0.469	0.496	0.498	0.493	0.497	2.93
3)		Pyridine		1.296	1.269	1.406	1.311	1.396	1.398	1.429	1.358	4.69
4)		n-Nitrosodimet...		0.444	0.436	0.476	0.431	0.461	0.466	0.461	0.454	3.66
5)	S	2-Fluorophenol		1.158	1.194	1.307	1.211	1.291	1.307	1.303	1.253	5.06
6)		Aniline		1.508	1.531	1.656	1.484	1.548	1.512	1.447	1.527	4.31
7)	S	Phenol-d6		1.518	1.581	1.747	1.631	1.749	1.754	1.748	1.675	5.86
8)		2-Chlorophenol		1.257	1.310	1.413	1.306	1.391	1.400	1.397	1.353	4.52
9)		Benzaldehyde		0.971	0.949	0.930	0.780	0.751	0.702	0.577	0.809	18.20
10)	C	Phenol		1.579	1.632	1.754	1.628	1.744	1.752	1.751	1.691	4.46
11)		bis(2-Chloroet...		1.286	1.317	1.407	1.273	1.341	1.358	1.356	1.334	3.45
12)		1,3-Dichlorobe...		1.466	1.448	1.522	1.387	1.477	1.471	1.445	1.459	2.79
13)	C	1,4-Dichlorobe...		1.507	1.474	1.562	1.413	1.493	1.503	1.479	1.490	3.01
14)		1,2-Dichlorobe...		1.446	1.426	1.494	1.358	1.435	1.440	1.411	1.430	2.85
15)		Benzyl Alcohol		0.934	0.966	1.096	1.042	1.122	1.126	1.139	1.061	7.77
16)		2,2'-oxybis(1-...		1.374	1.367	1.434	1.293	1.365	1.362	1.336	1.361	3.11
17)		2-Methylphenol		0.932	0.997	1.120	1.038	1.116	1.113	1.109	1.061	6.96
18)		Hexachloroethane		0.533	0.512	0.547	0.508	0.533	0.538	0.529	0.529	2.67
19)	P	n-Nitroso-di-n...	0.869	0.910	0.956	1.048	0.962	1.026	1.007	0.997	0.972	6.18
20)		3+4-Methylphenols		1.265	1.360	1.530	1.433	1.547	1.530	1.534	1.457	7.50
21)	I	Naphthalene-d8	----------ISTD----------									
22)		Acetophenone		0.483	0.490	0.531	0.496	0.508	0.519	0.512	0.506	3.37
23)	S	Nitrobenzene-d5		0.330	0.338	0.366	0.351	0.362	0.368	0.367	0.354	4.34
24)		Nitrobenzene		0.330	0.336	0.362	0.341	0.355	0.363	0.361	0.350	3.88
25)		Isophorone		0.532	0.562	0.631	0.602	0.635	0.642	0.649	0.608	7.33
26)	C	2-Nitrophenol		0.126	0.141	0.167	0.171	0.182	0.189	0.192	0.167	14.92
27)		2,4-Dimethylph...		0.186	0.198	0.220	0.215	0.223	0.229	0.232	0.215	7.94
28)		bis(2-Chloroet...		0.414	0.418	0.438	0.418	0.429	0.437	0.439	0.427	2.55
29)	C	2,4-Dichloroph...		0.237	0.263	0.298	0.296	0.306	0.314	0.319	0.291	10.21
30)		1,2,4-Trichlor...		0.310	0.312	0.329	0.312	0.322	0.331	0.331	0.321	2.94
31)		Naphthalene		1.041	1.037	1.099	1.029	1.069	1.078	1.069	1.060	2.38
32)		Benzoic acid			0.148	0.190	0.218	0.239	0.252		0.209	19.82
33)		4-Chloroaniline		0.344	0.356	0.397	0.377	0.394	0.389	0.398	0.379	5.63
34)	C	Hexachlorobuta...		0.177	0.178	0.187	0.180	0.187	0.192	0.191	0.185	3.36
35)		Caprolactam		0.072	0.079	0.097	0.097	0.107	0.104	0.111	0.095	15.56
36)	C	4-Chloro-3-met...		0.261	0.283	0.324	0.314	0.333	0.332	0.348	0.313	9.83
37)		2-Methylnaphth...		0.689	0.684	0.737	0.704	0.731	0.734	0.735	0.716	3.27
38)		1-Methylnaphth...		0.674	0.673	0.728	0.673	0.704	0.705	0.720	0.697	3.32

Method Path : Z:\svoasrv\HPCHEM1\BNA_P\Methods\
Method File : 8270E-BP031225.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.548	0.560	0.596	0.558	0.580	0.608	0.596	0.578	3.98
41)	P	Hexachlorocycl...	0.169	0.189	0.214	0.212	0.220	0.234	0.222	0.208	10.65
42)	S	2,4,6-Tribromo...	0.203	0.222	0.256	0.252	0.270	0.275	0.285	0.252	11.69
43)	C	2,4,6-Trichlor...	0.291	0.324	0.379	0.372	0.391	0.409	0.406	0.367	11.98
44)		2,4,5-Trichlor...	0.331	0.362	0.414	0.409	0.422	0.439	0.443	0.403	10.23
45)	S	2-Fluorobiphenyl	1.364	1.358	1.420	1.319	1.335	1.367	1.332	1.356	2.44
46)		1,1'-Biphenyl	1.467	1.475	1.566	1.462	1.493	1.536	1.521	1.503	2.60
47)		2-Chloronaphth...	1.108	1.100	1.180	1.095	1.115	1.164	1.152	1.130	3.01
48)		2-Nitroaniline	0.228	0.252	0.300	0.292	0.311	0.317	0.324	0.289	12.34
49)		Acenaphthylene	1.586	1.628	1.776	1.661	1.749	1.789	1.784	1.710	4.91
50)		Dimethylphthalate	1.351	1.349	1.459	1.358	1.417	1.424	1.439	1.399	3.27
51)		2,6-Dinitrotol...	0.248	0.266	0.303	0.294	0.312	0.316	0.322	0.294	9.40
52)	C	Acenaphthene	1.057	1.056	1.136	1.061	1.096	1.123	1.121	1.093	3.18
53)		3-Nitroaniline	0.253	0.276	0.328	0.322	0.344	0.343	0.359	0.318	12.24
54)	P	2,4-Dinitrophenol		0.108	0.146	0.160	0.179	0.186		0.156	19.97
55)		Dibenzofuran	1.759	1.751	1.835	1.711	1.768	1.799	1.769	1.770	2.18
56)	P	4-Nitrophenol	0.187	0.218	0.271	0.277	0.299	0.296	0.312	0.266	17.41
57)		2,4-Dinitrotol...	0.295	0.334	0.400	0.394	0.423	0.431	0.446	0.389	14.19
58)		Fluorene	1.309	1.343	1.442	1.345	1.407	1.407	1.402	1.379	3.43
59)		2,3,4,6-Tetrac...	0.316	0.323	0.365	0.356	0.371	0.376	0.386	0.356	7.54
60)		Diethylphthalate	1.297	1.336	1.437	1.358	1.422	1.435	1.469	1.394	4.53
61)		4-Chlorophenyl...	0.658	0.660	0.696	0.658	0.685	0.689	0.690	0.676	2.53
62)		4-Nitroaniline	0.246	0.292	0.348	0.343	0.362	0.365	0.379	0.334	14.22
63)		Azobenzene	1.215	1.251	1.369	1.291	1.341	1.363	1.365	1.314	4.73
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...		0.085	0.111	0.120	0.127	0.132	0.137	0.119	15.85
66)	c	n-Nitrosodiphe...	0.564	0.583	0.629	0.600	0.617	0.632	0.626	0.607	4.27
67)		4-Bromophenyl-...	0.206	0.207	0.222	0.217	0.224	0.229	0.231	0.220	4.60
68)		Hexachlorobenzene	0.248	0.249	0.263	0.254	0.263	0.270	0.272	0.260	3.76
69)		Atrazine	0.165	0.171	0.157	0.135	0.105			0.147	18.49
70)	C	Pentachlorophenol	0.121	0.140	0.166	0.177	0.184	0.190	0.197	0.168	16.61
71)		Phenanthrene	1.068	1.059	1.126	1.083	1.100	1.111	1.102	1.093	2.19
72)		Anthracene	0.993	1.012	1.101	1.063	1.092	1.090	1.098	1.064	4.16
73)		Carbazole	0.920	0.975	1.060	1.041	1.060	1.061	1.066	1.026	5.50
74)		Di-n-butylphth...	1.026	1.121	1.247	1.260	1.272	1.297	1.304	1.218	8.57
75)	C	Fluoranthene	1.173	1.220	1.287	1.264	1.305	1.298	1.312	1.265	4.07
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine	0.222	0.199	0.178	0.258	0.173	0.278	0.222	0.219	17.88
78)		Pyrene	1.177	1.190	1.299	1.204	1.266	1.293	1.274	1.243	4.12
79)	S	Terphenyl-d14	0.967	0.973	1.033	0.948	0.966	0.971	0.924	0.969	3.45
80)		Butylbenzylpht...	0.399	0.441	0.513	0.524	0.554	0.581	0.576	0.513	13.49
81)		Benzo(a)anthra...	1.194	1.194	1.291	1.208	1.261	1.285	1.271	1.243	3.47
82)		3,3'-Dichlorob...	0.340	0.369	0.429	0.428	0.434	0.467	0.450	0.417	10.94
83)		Chrysene	1.185	1.159	1.224	1.158	1.212	1.220	1.209	1.195	2.36
84)		Bis(2-ethylhex...	0.613	0.678	0.784	0.792	0.819	0.878	0.851	0.774	12.30
85)	c	Di-n-octyl pht...	0.922	1.033	1.224	1.272	1.357	1.435	1.433	1.240	15.95

Method Path : Z:\svoasrv\HPCHEM1\BNA_P\Methods\
Method File : 8270E-BP031225.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.274	1.289	1.421	1.366	1.442	1.479	1.499	1.396	6.38
88)		Benzo(b)fluora...	1.103	1.116	1.258	1.190	1.244	1.266	1.264	1.206	5.85
89)		Benzo(k)fluora...	1.092	1.136	1.213	1.130	1.203	1.251	1.232	1.180	5.07
90)	C	Benzo(a)pyrene	0.953	0.959	1.065	1.029	1.094	1.119	1.122	1.049	6.77
91)		Dibenzo(a,h)an...	1.063	1.083	1.184	1.137	1.191	1.226	1.244	1.161	5.97
92)		Benzo(g,h,i)pe...	1.097	1.107	1.199	1.154	1.202	1.246	1.259	1.180	5.39

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024160.D
Acq On : 12 Mar 2025 16:17
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC2.5

Quant Time: Mar 13 04:04:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.769	152	323931	20.000	ng	0.00
21) Naphthalene-d8	10.546	136	1324397	20.000	ng	0.00
39) Acenaphthene-d10	14.410	164	805172	20.000	ng	0.00
64) Phenanthrene-d10	17.216	188	1551813	20.000	ng	0.01
76) Chrysene-d12	21.669	240	1615554	20.000	ng	0.01
86) Perylene-d12	25.074	264	1740877	20.000	ng	0.02
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...	8.569	70	35203	2.454	ng	98

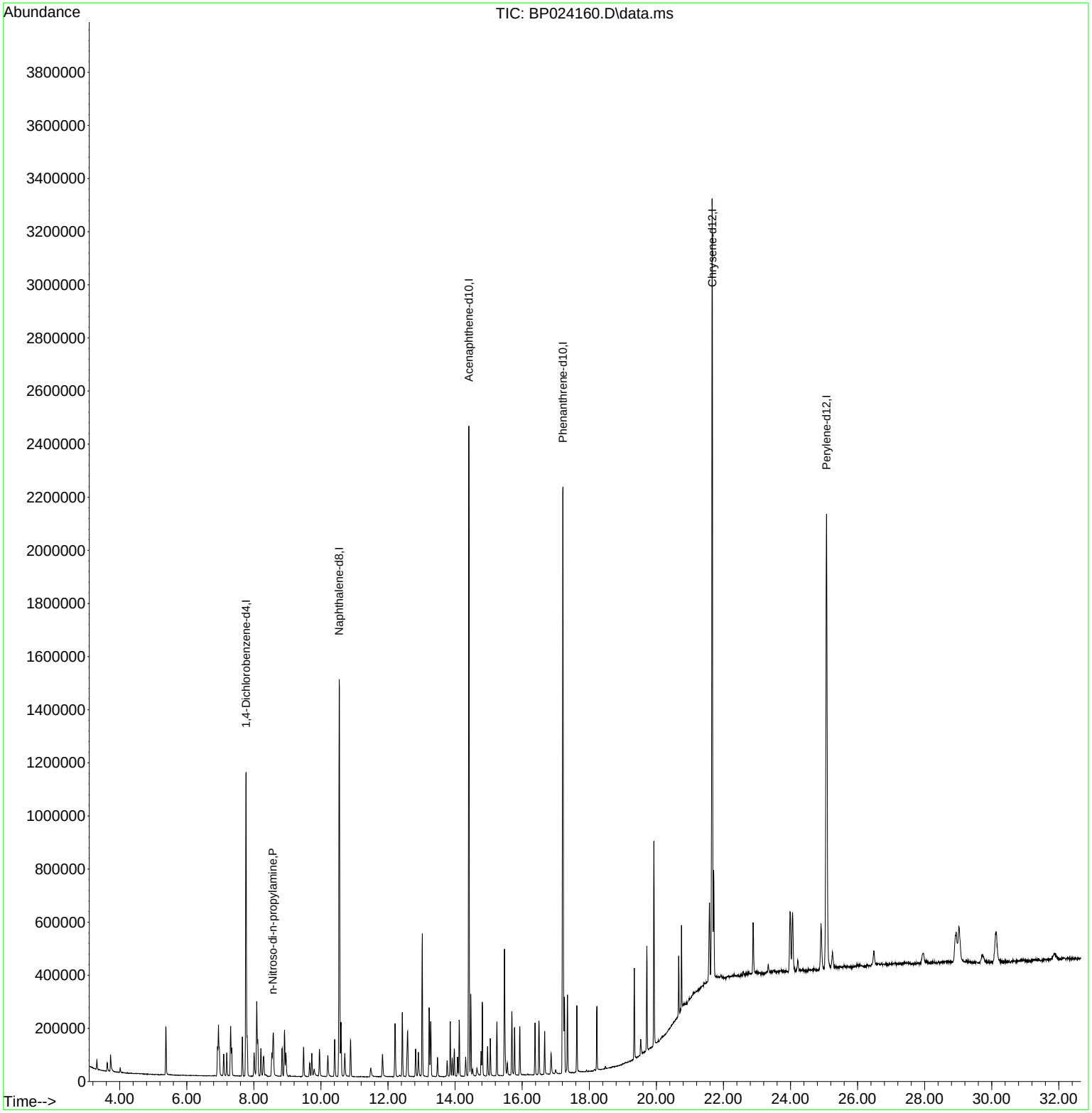
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024160.D
Acq On : 12 Mar 2025 16:17
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC2.5

Quant Time: Mar 13 04:04:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024161.D
Acq On : 12 Mar 2025 16:57
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC005

Quant Time: Mar 13 04:05:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.769	152	318045	20.000	ng		0.00
21) Naphthalene-d8	10.552	136	1309940	20.000	ng		0.00
39) Acenaphthene-d10	14.410	164	799469	20.000	ng		0.00
64) Phenanthrene-d10	17.222	188	1516956	20.000	ng		0.02
76) Chrysene-d12	21.669	240	1578855	20.000	ng		0.01
86) Perylene-d12	25.080	264	1694453	20.000	ng		0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.381	112	184089	9.032	ng		0.00
7) Phenol-d6	6.952	99	241350	9.213	ng		0.00
23) Nitrobenzene-d5	8.916	82	216074	9.202	ng		0.00
42) 2,4,6-Tribromophenol	15.934	330	81159	8.288	ng		0.02
45) 2-Fluorobiphenyl	13.016	172	545120	9.532	ng		0.00
79) Terphenyl-d14	19.951	244	763023	9.563	ng		0.03
Target Compounds							Qvalue
2) 1,4-Dioxane	3.323	88	40006	5.003	ng		97
3) Pyridine	3.723	79	103023	4.956	ng		97
4) n-Nitrosodimethylamine	3.628	42	35306	4.788	ng	#	92
6) Aniline	7.105	93	119908	4.998	ng		100
8) 2-Chlorophenol	7.340	128	99927	4.632	ng		98
9) Benzaldehyde	6.922	77	77223m	6.456	ng		
10) Phenol	6.975	94	125574	4.767	ng		98
11) bis(2-Chloroethyl)ether	7.199	93	102214	4.926	ng		98
12) 1,3-Dichlorobenzene	7.664	146	116531	4.917	ng		100
13) 1,4-Dichlorobenzene	7.805	146	119798	4.998	ng		99
14) 1,2-Dichlorobenzene	8.122	146	114960	4.998	ng		99
15) Benzyl Alcohol	8.011	79	74252	4.630	ng		96
16) 2,2'-oxybis(1-Chloropr...	8.287	45	109209	5.422	ng		98
17) 2-Methylphenol	8.216	107	74107	4.616	ng		96
18) Hexachloroethane	8.846	117	42376	4.909	ng		96
19) n-Nitroso-di-n-propyla...	8.569	70	72383	5.139	ng		98
20) 3+4-Methylphenols	8.540	107	100588	4.606	ng		98
22) Acetophenone	8.587	105	158185	4.699	ng	#	99
24) Nitrobenzene	8.958	77	108086	4.677	ng		96
25) Isophorone	9.487	82	174338	4.540	ng		100
26) 2-Nitrophenol	9.669	139	41305	3.880	ng		98
27) 2,4-Dimethylphenol	9.734	122	60843	4.354	ng		96
28) bis(2-Chloroethoxy)met...	9.957	93	135529	4.872	ng		99
29) 2,4-Dichlorophenol	10.205	162	77653	4.072	ng		99
30) 1,2,4-Trichlorobenzene	10.416	180	101518	4.646	ng		99
31) Naphthalene	10.599	128	340918	4.840	ng		99
33) 4-Chloroaniline	10.710	127	112776	4.545	ng		98
34) Hexachlorobutadiene	10.887	225	58080	4.589	ng		97
35) Caprolactam	11.475	113	23432	4.057	ng		95
36) 4-Chloro-3-methylphenol	11.840	107	85333	4.352	ng		99
37) 2-Methylnaphthalene	12.216	142	225485	4.817	ng		100
38) 1-Methylnaphthalene	12.434	142	220784	4.848	ng		99
40) 1,2,4,5-Tetrachloroben...	12.587	216	109528	4.459	ng		99
41) Hexachlorocyclopentadiene	12.569	237	33755	3.693	ng		100
43) 2,4,6-Trichlorophenol	12.822	196	58172	3.883	ng		98
44) 2,4,5-Trichlorophenol	12.904	196	66250	4.044	ng		98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024161.D
Acq On : 12 Mar 2025 16:57
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC005

Quant Time: Mar 13 04:05:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46)	1,1'-Biphenyl	13.234	154	293289	4.721	ng	98
47)	2-Chloronaphthalene	13.275	162	221413	4.715	ng	98
48)	2-Nitroaniline	13.475	65	45667	4.117	ng	88
49)	Acenaphthylene	14.128	152	316902	4.580	ng	99
50)	Dimethylphthalate	13.857	163	270053	4.789	ng	100
51)	2,6-Dinitrotoluene	13.975	165	49593	4.317	ng	97
52)	Acenaphthene	14.475	154	211290	4.742	ng	99
53)	3-Nitroaniline	14.310	138	50611	4.129	ng	99
55)	Dibenzofuran	14.822	168	351651	4.858	ng	100
56)	4-Nitrophenol	14.645	139	37281	3.521	ng	93
57)	2,4-Dinitrotoluene	14.775	165	58882	3.946	ng	90
58)	Fluorene	15.481	166	261676	4.629	ng	99
59)	2,3,4,6-Tetrachlorophenol	15.045	232	63120	4.441	ng	98
60)	Diethylphthalate	15.251	149	259242	4.631	ng	98
61)	4-Chlorophenyl-phenyle...	15.481	204	131441	4.724	ng	99
62)	4-Nitroaniline	15.498	138	49239	3.871	ng	95
63)	Azobenzene	15.775	77	242768	4.628	ng	97
66)	n-Nitrosodiphenylamine	15.692	169	213927	4.522	ng	99
67)	4-Bromophenyl-phenylether	16.392	248	78309	4.597	ng	93
68)	Hexachlorobenzene	16.510	284	94130	4.696	ng	98
69)	Atrazine	16.669	200	62551	5.152	ng	98
70)	Pentachlorophenol	16.869	266	45885	3.525	ng	99
71)	Phenanthrene	17.263	178	404881	4.734	ng	99
72)	Anthracene	17.357	178	376601	4.595	ng	99
73)	Carbazole	17.634	167	349000	4.469	ng	99
74)	Di-n-butylphthalate	18.234	149	389057	4.270	ng	99
75)	Fluoranthene	19.351	202	444670	4.597	ng	97
77)	Benzidine	19.545	184	87777	4.562	ng	98
78)	Pyrene	19.722	202	464704	4.634	ng	99
80)	Butylbenzylphthalate	20.675	149	157601	4.101	ng	99
81)	Benzo(a)anthracene	21.651	228	471347	4.761	ng	99
82)	3,3'-Dichlorobenzidine	21.580	252	134146	4.336	ng	99
83)	Chrysene	21.722	228	467600	4.898	ng	99
84)	Bis(2-ethylhexyl)phtha...	21.598	149	242048	4.153	ng	99
85)	Di-n-octyl phthalate	22.898	149	363786	3.905	ng	98
87)	Indeno(1,2,3-cd)pyrene	28.945	276	539523	4.476	ng	97
88)	Benzo(b)fluoranthene	24.004	252	467406	4.344	ng	99
89)	Benzo(k)fluoranthene	24.069	252	462653	4.417	ng	99
90)	Benzo(a)pyrene	24.910	252	403692	4.421	ng	99
91)	Dibenzo(a,h)anthracene	29.015	278	450461	4.444	ng	98
92)	Benzo(g,h,i)perylene	30.133	276	464721	4.518	ng	99

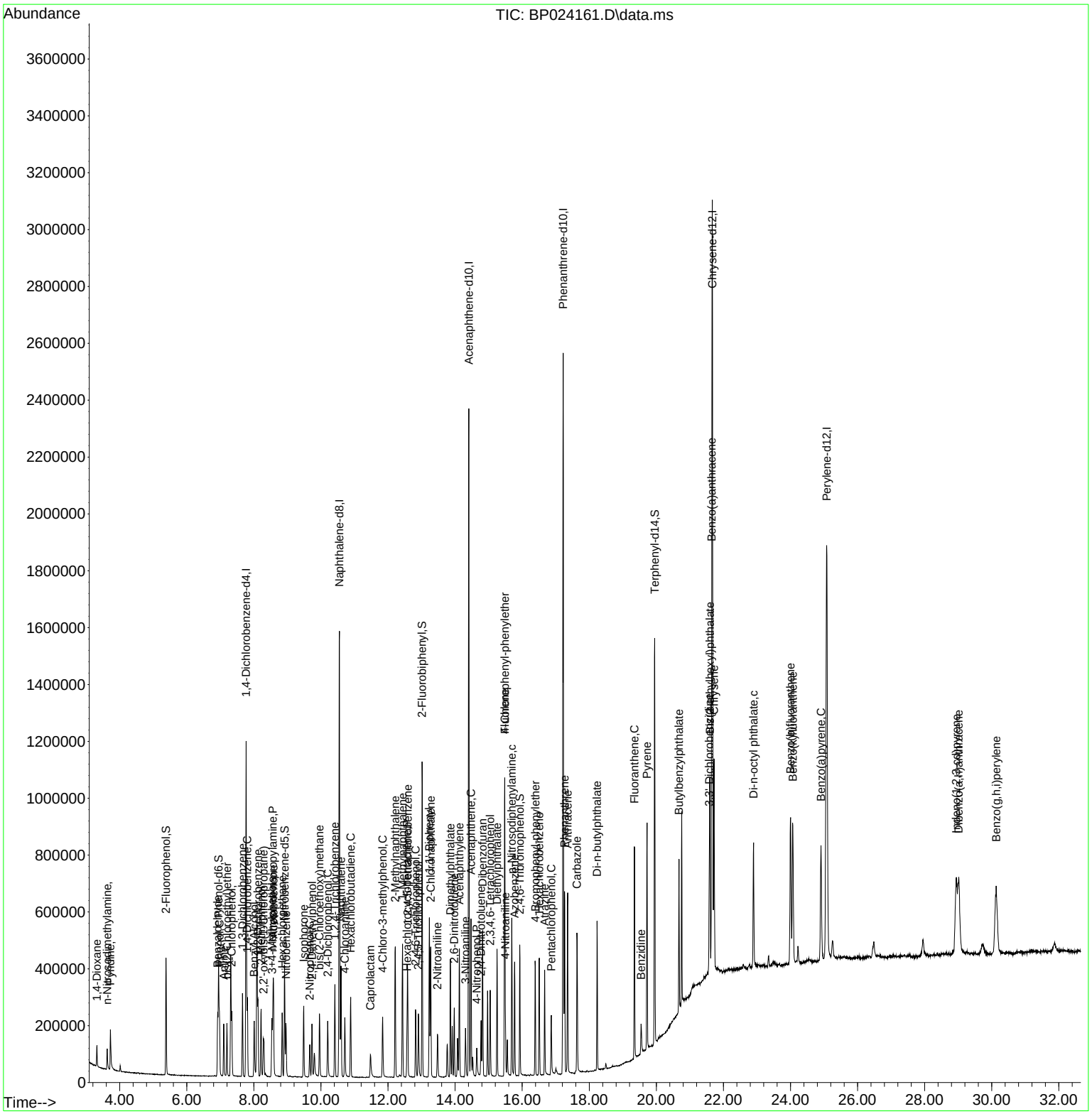
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024161.D
Acq On : 12 Mar 2025 16:57
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC005

Quant Time: Mar 13 04:05:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024162.D
Acq On : 12 Mar 2025 17:38
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC010

Quant Time: Mar 13 04:06:29 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.769	152	350891	20.000	ng		0.00
21) Naphthalene-d8	10.546	136	1459823	20.000	ng		0.00
39) Acenaphthene-d10	14.404	164	878356	20.000	ng		0.00
64) Phenanthrene-d10	17.210	188	1659965	20.000	ng		0.00
76) Chrysene-d12	21.680	240	1774754	20.000	ng		0.02
86) Perylene-d12	25.074	264	1895165	20.000	ng		0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.381	112	419093	18.636	ng		0.00
7) Phenol-d6	6.946	99	554588	19.188	ng		0.00
23) Nitrobenzene-d5	8.916	82	493399	18.856	ng		0.00
42) 2,4,6-Tribromophenol	15.916	330	195393	18.161	ng		0.00
45) 2-Fluorobiphenyl	13.010	172	1192744	18.984	ng		0.00
79) Terphenyl-d14	19.939	244	1726609	19.251	ng		0.02
Target Compounds							Qvalue
2) 1,4-Dioxane	3.323	88	87630	9.934	ng		99
3) Pyridine	3.723	79	222685	9.709	ng		99
4) n-Nitrosodimethylamine	3.623	42	76580	9.413	ng	#	93
6) Aniline	7.105	93	268532	10.145	ng		99
8) 2-Chlorophenol	7.340	128	229815	9.655	ng		99
9) Benzaldehyde	6.922	77	166528	12.620	ng		99
10) Phenol	6.975	94	286246	9.849	ng		99
11) bis(2-Chloroethyl)ether	7.199	93	231087	10.095	ng		98
12) 1,3-Dichlorobenzene	7.658	146	254039	9.715	ng		99
13) 1,4-Dichlorobenzene	7.805	146	258553	9.777	ng		100
14) 1,2-Dichlorobenzene	8.122	146	250124	9.856	ng		100
15) Benzyl Alcohol	8.005	79	169563	9.584	ng		100
16) 2,2'-oxybis(1-Chloropr...	8.293	45	239855	10.794	ng		99
17) 2-Methylphenol	8.211	107	174913	9.876	ng		99
18) Hexachloroethane	8.840	117	89894	9.439	ng		98
19) n-Nitroso-di-n-propyla...	8.563	70	167789	10.797	ng		98
20) 3+4-Methylphenols	8.534	107	238685	9.906	ng		97
22) Acetophenone	8.581	105	357738	9.536	ng	#	99
24) Nitrobenzene	8.958	77	245585	9.536	ng		96
25) Isophorone	9.481	82	410357	9.590	ng		100
26) 2-Nitrophenol	9.669	139	103123	8.692	ng		98
27) 2,4-Dimethylphenol	9.728	122	144292	9.265	ng		99
28) bis(2-Chloroethoxy)met...	9.957	93	304956	9.838	ng		99
29) 2,4-Dichlorophenol	10.199	162	192263	9.046	ng		99
30) 1,2,4-Trichlorobenzene	10.410	180	227800	9.355	ng		98
31) Naphthalene	10.599	128	756826	9.642	ng		99
32) Benzoic acid	9.816	122	108330	7.587	ng		94
33) 4-Chloroaniline	10.705	127	260033	9.404	ng		98
34) Hexachlorobutadiene	10.887	225	130104	9.224	ng		98
35) Caprolactam	11.481	113	57479	8.931	ng		96
36) 4-Chloro-3-methylphenol	11.840	107	206744	9.462	ng		98
37) 2-Methylnaphthalene	12.210	142	498967	9.564	ng		99
38) 1-Methylnaphthalene	12.434	142	491304	9.680	ng		100
40) 1,2,4,5-Tetrachloroben...	12.581	216	246009	9.116	ng		100
41) Hexachlorocyclopentadiene	12.557	237	82803	8.245	ng		100
43) 2,4,6-Trichlorophenol	12.822	196	142353	8.649	ng		100

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024162.D
Acq On : 12 Mar 2025 17:38
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC010

Quant Time: Mar 13 04:06:29 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

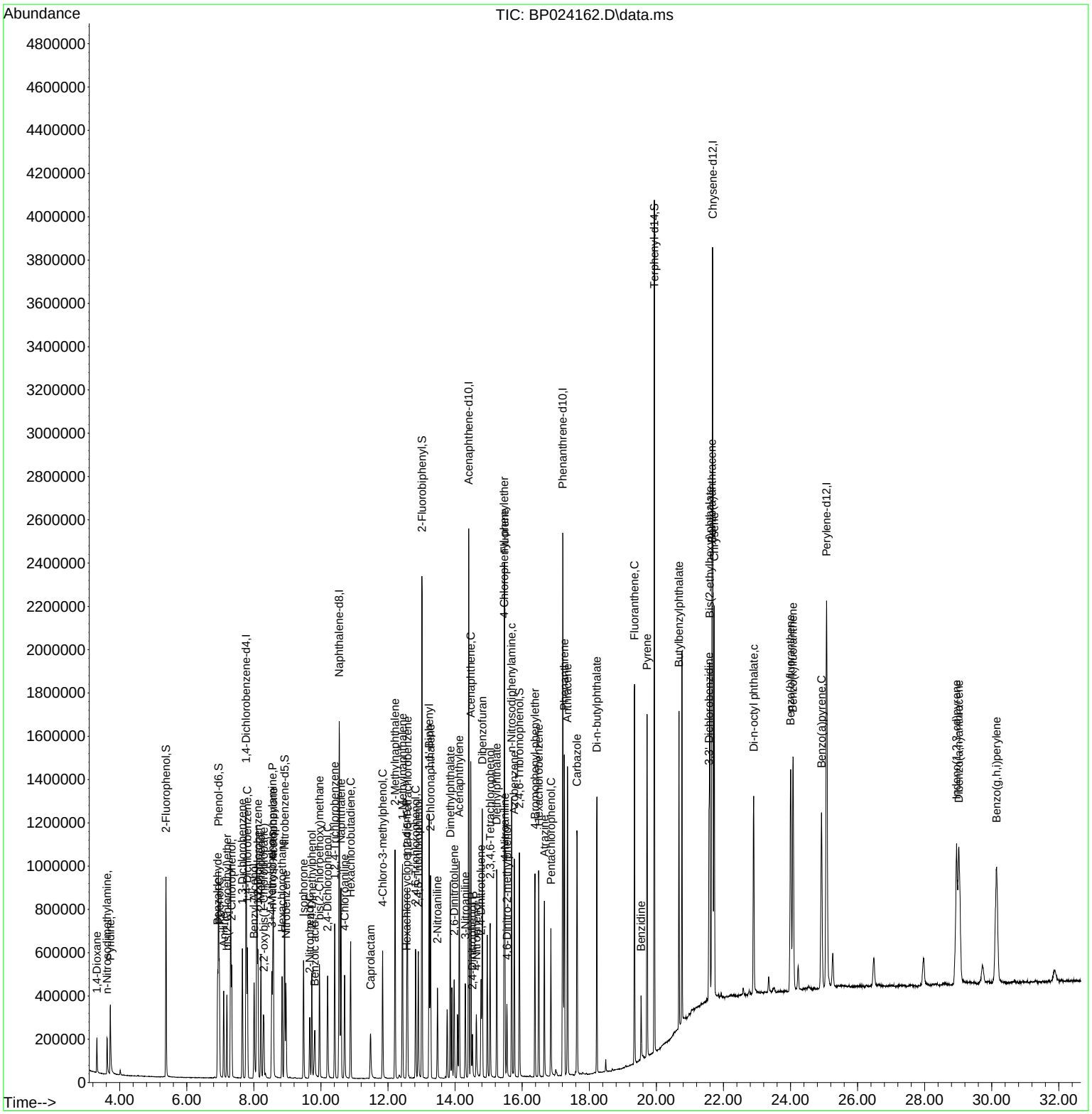
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	12.904	196	159135	8.841	ng		98
46) 1,1'-Biphenyl	13.228	154	647980	9.494	ng		99
47) 2-Chloronaphthalene	13.269	162	483199	9.365	ng		98
48) 2-Nitroaniline	13.475	65	110660	9.079	ng		94
49) Acenaphthylene	14.122	152	714937	9.405	ng		99
50) Dimethylphthalate	13.857	163	592520	9.563	ng		100
51) 2,6-Dinitrotoluene	13.975	165	116661	9.243	ng		95
52) Acenaphthene	14.469	154	463749	9.473	ng		99
53) 3-Nitroaniline	14.304	138	121229	9.001	ng		90
54) 2,4-Dinitrophenol	14.516	184	47409	7.053	ng		94
55) Dibenzofuran	14.810	168	769059	9.671	ng		99
56) 4-Nitrophenol	14.634	139	95936	8.246	ng		92
57) 2,4-Dinitrotoluene	14.775	165	146673	8.946	ng		93
58) Fluorene	15.475	166	589720	9.495	ng		100
59) 2,3,4,6-Tetrachlorophenol	15.045	232	141666	9.071	ng		99
60) Diethylphthalate	15.240	149	586933	9.543	ng		100
61) 4-Chlorophenyl-phenyle...	15.463	204	289728	9.478	ng		99
62) 4-Nitroaniline	15.487	138	128152	9.169	ng		99
63) Azobenzene	15.763	77	549569	9.535	ng		97
65) 4,6-Dinitro-2-methylph...	15.545	198	70717	7.361	ng		92
66) n-Nitrosodiphenylamine	15.687	169	484111	9.352	ng		98
67) 4-Bromophenyl-phenylether	16.381	248	171620	9.207	ng		97
68) Hexachlorobenzene	16.492	284	206475	9.414	ng		98
69) Atrazine	16.663	200	142226	10.706	ng		99
70) Pentachlorophenol	16.857	266	116455	8.175	ng		100
71) Phenanthrene	17.257	178	878834	9.391	ng		99
72) Anthracene	17.351	178	839953	9.366	ng		99
73) Carbazole	17.634	167	809266	9.471	ng		99
74) Di-n-butylphthalate	18.228	149	930693	9.335	ng		99
75) Fluoranthene	19.351	202	1012600	9.566	ng		98
77) Benzidine	19.545	184	176282	8.151	ng		99
78) Pyrene	19.722	202	1056004	9.367	ng		99
80) Butylbenzylphthalate	20.675	149	390890	9.049	ng		99
81) Benzo(a)anthracene	21.657	228	1059397	9.520	ng		99
82) 3,3'-Dichlorobenzidine	21.569	252	327195	9.409	ng		99
83) Chrysene	21.727	228	1028579	9.585	ng		98
84) Bis(2-ethylhexyl)phtha...	21.592	149	601388	9.181	ng		99
85) Di-n-octyl phthalate	22.904	149	916941	8.757	ng		99
87) Indeno(1,2,3-cd)pyrene	28.951	276	1221650	9.061	ng	#	93
88) Benzo(b)fluoranthene	24.004	252	1057737	8.789	ng		99
89) Benzo(k)fluoranthene	24.074	252	1076560	9.190	ng		99
90) Benzo(a)pyrene	24.927	252	908542	8.896	ng		99
91) Dibenzo(a,h)anthracene	29.021	278	1026140	9.052	ng		99
92) Benzo(g,h,i)perylene	30.145	276	1049241	9.121	ng		99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024162.D
Acq On : 12 Mar 2025 17:38
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC010

Quant Time: Mar 13 04:06:29 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024163.D
Acq On : 12 Mar 2025 18:19
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC020

Quant Time: Mar 13 04:07:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.775	152	353514	20.000	ng		0.00
21) Naphthalene-d8	10.545	136	1479701	20.000	ng		0.00
39) Acenaphthene-d10	14.398	164	895871	20.000	ng		0.00
64) Phenanthrene-d10	17.204	188	1698224	20.000	ng		0.00
76) Chrysene-d12	21.657	240	1778727	20.000	ng		0.00
86) Perylene-d12	25.062	264	1914395	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.381	112	924270	40.796	ng		0.00
7) Phenol-d6	6.952	99	1235081	42.415	ng		0.00
23) Nitrobenzene-d5	8.916	82	1081750	40.785	ng		0.00
42) 2,4,6-Tribromophenol	15.922	330	459354	41.861	ng		0.00
45) 2-Fluorobiphenyl	13.016	172	2543735	39.695	ng		0.00
79) Terphenyl-d14	19.927	244	3676388	40.898	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.316	88	183072	20.599	ng		99
3) Pyridine	3.716	79	496891	21.504	ng		99
4) n-Nitrosodimethylamine	3.622	42	168162	20.517	ng		96
6) Aniline	7.104	93	585428	21.953	ng		99
8) 2-Chlorophenol	7.340	128	499424	20.827	ng		99
9) Benzaldehyde	6.922	77	328740	24.728	ng		99
10) Phenol	6.975	94	619974	21.173	ng		100
11) bis(2-Chloroethyl)ether	7.199	93	497357	21.565	ng		100
12) 1,3-Dichlorobenzene	7.663	146	537900	20.418	ng		99
13) 1,4-Dichlorobenzene	7.804	146	552358	20.733	ng		99
14) 1,2-Dichlorobenzene	8.122	146	528080	20.654	ng		99
15) Benzyl Alcohol	8.004	79	387410	21.735	ng		98
16) 2,2'-oxybis(1-Chloropr...	8.287	45	506774	22.636	ng		97
17) 2-Methylphenol	8.210	107	395947	22.190	ng		99
18) Hexachloroethane	8.846	117	193543	20.172	ng		98
19) n-Nitroso-di-n-propyla...	8.569	70	370486	23.663	ng		100
20) 3+4-Methylphenols	8.534	107	541047	22.289	ng		98
22) Acetophenone	8.587	105	786239	20.677	ng	#	100
24) Nitrobenzene	8.963	77	535855	20.529	ng		99
25) Isophorone	9.487	82	933509	21.523	ng		99
26) 2-Nitrophenol	9.669	139	246943	20.534	ng		99
27) 2,4-Dimethylphenol	9.728	122	325916	20.646	ng		100
28) bis(2-Chloroethoxy)met...	9.957	93	648792	20.649	ng		100
29) 2,4-Dichlorophenol	10.204	162	440705	20.457	ng		99
30) 1,2,4-Trichlorobenzene	10.416	180	486293	19.702	ng		99
31) Naphthalene	10.598	128	1625925	20.436	ng		99
32) Benzoic acid	9.845	122	280702	19.396	ng		99
33) 4-Chloroaniline	10.704	127	588052	20.980	ng		99
34) Hexachlorobutadiene	10.887	225	276905	19.369	ng		98
35) Caprolactam	11.487	113	143023	21.924	ng		98
36) 4-Chloro-3-methylphenol	11.839	107	479996	21.674	ng		99
37) 2-Methylnaphthalene	12.210	142	1090957	20.630	ng		98
38) 1-Methylnaphthalene	12.434	142	1077045	20.936	ng		99
40) 1,2,4,5-Tetrachloroben...	12.581	216	533843	19.394	ng		100
41) Hexachlorocyclopentadiene	12.563	237	191514	18.697	ng		99
43) 2,4,6-Trichlorophenol	12.822	196	339357	20.216	ng		99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024163.D
Acq On : 12 Mar 2025 18:19
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC020

Quant Time: Mar 13 04:07:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	12.904	196	370561	20.184	ng		98
46) 1,1'-Biphenyl	13.228	154	1402874	20.152	ng		99
47) 2-Chloronaphthalene	13.269	162	1056861	20.083	ng		99
48) 2-Nitroaniline	13.469	65	268455	21.595	ng		98
49) Acenaphthylene	14.122	152	1590772	20.517	ng		100
50) Dimethylphthalate	13.857	163	1306638	20.677	ng		99
51) 2,6-Dinitrotoluene	13.969	165	271891	21.122	ng		97
52) Acenaphthene	14.469	154	1017503	20.379	ng		99
53) 3-Nitroaniline	14.304	138	293921	21.397	ng		97
54) 2,4-Dinitrophenol	14.516	184	130759	19.074	ng		99
55) Dibenzofuran	14.810	168	1643604	20.264	ng		99
56) 4-Nitrophenol	14.628	139	242843	20.466	ng		99
57) 2,4-Dinitrotoluene	14.769	165	358405	21.433	ng		97
58) Fluorene	15.469	166	1291744	20.392	ng		100
59) 2,3,4,6-Tetrachlorophenol	15.039	232	326758	20.514	ng		99
60) Diethylphthalate	15.233	149	1287503	20.524	ng		99
61) 4-Chlorophenyl-phenyle...	15.469	204	623454	19.996	ng		99
62) 4-Nitroaniline	15.486	138	311347	21.841	ng		99
63) Azobenzene	15.763	77	1226441	20.864	ng		99
65) 4,6-Dinitro-2-methylph...	15.551	198	188346	19.162	ng		97
66) n-Nitrosodiphenylamine	15.680	169	1068735	20.181	ng		100
67) 4-Bromophenyl-phenylether	16.375	248	377534	19.797	ng		99
68) Hexachlorobenzene	16.498	284	447016	19.921	ng		96
69) Atrazine	16.657	200	265940	19.568	ng		99
70) Pentachlorophenol	16.851	266	282344	19.373	ng		99
71) Phenanthrene	17.251	178	1911548	19.965	ng		99
72) Anthracene	17.345	178	1870471	20.386	ng		100
73) Carbazole	17.622	167	1799842	20.589	ng		100
74) Di-n-butylphthalate	18.210	149	2118089	20.765	ng		100
75) Fluoranthene	19.327	202	2186012	20.186	ng		99
77) Benzidine	19.527	184	317361	14.642	ng		99
78) Pyrene	19.704	202	2310992	20.454	ng		100
80) Butylbenzylphthalate	20.657	149	912738	21.082	ng		99
81) Benzo(a)anthracene	21.639	228	2295776	20.583	ng		99
82) 3,3'-Dichlorobenzidine	21.557	252	762665	21.882	ng		100
83) Chrysene	21.704	228	2177924	20.250	ng		99
84) Bis(2-ethylhexyl)phtha...	21.574	149	1395096	21.249	ng		99
85) Di-n-octyl phthalate	22.874	149	2177750	20.752	ng		100
87) Indeno(1,2,3-cd)pyrene	28.939	276	2721144	19.980	ng	#	92
88) Benzo(b)fluoranthene	23.980	252	2407773	19.806	ng		100
89) Benzo(k)fluoranthene	24.051	252	2322149	19.624	ng		99
90) Benzo(a)pyrene	24.892	252	2038106	19.755	ng		99
91) Dibenzo(a,h)anthracene	28.997	278	2267016	19.797	ng		99
92) Benzo(g,h,i)perylene	30.127	276	2294574	19.746	ng		100

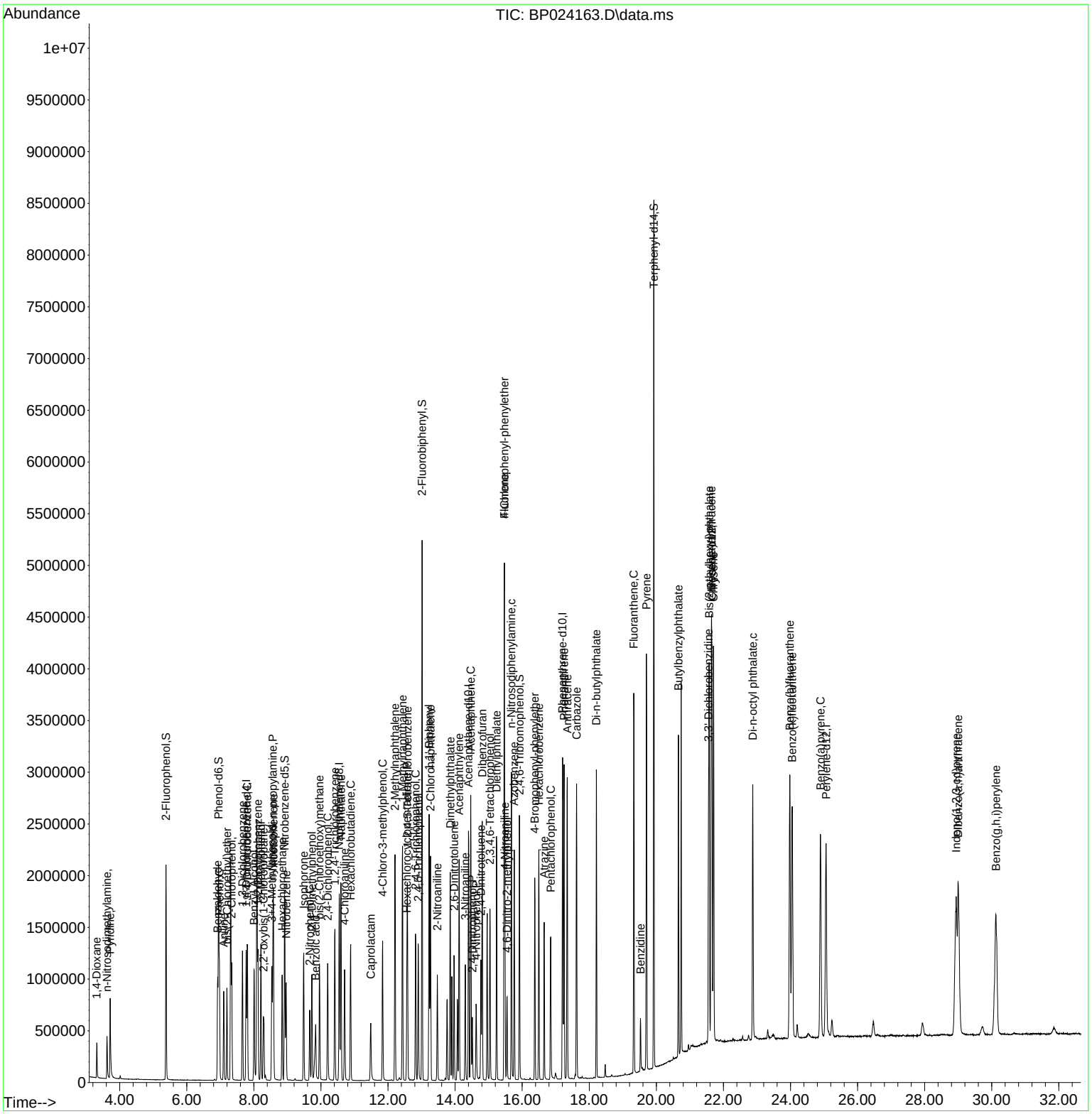
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024163.D
Acq On : 12 Mar 2025 18:19
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC020

Quant Time: Mar 13 04:07:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024164.D
Acq On : 12 Mar 2025 19:00
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICCC040

Quant Time: Mar 13 04:08:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.769	152	383350	20.000	ng	0.00
21) Naphthalene-d8	10.552	136	1538579	20.000	ng	0.00
39) Acenaphthene-d10	14.404	164	930584	20.000	ng	0.00
64) Phenanthrene-d10	17.204	188	1720919	20.000	ng	0.00
76) Chrysene-d12	21.657	240	1881172	20.000	ng	0.00
86) Perylene-d12	25.057	264	2043442	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.381	112	1856351	75.560	ng	0.00
7) Phenol-d6	6.952	99	2501405	79.217	ng	0.00
23) Nitrobenzene-d5	8.922	82	2157744	78.240	ng	0.00
42) 2,4,6-Tribromophenol	15.916	330	938209	82.309	ng	0.00
45) 2-Fluorobiphenyl	13.016	172	4911554	73.785	ng	0.00
79) Terphenyl-d14	19.922	244	7133778	75.038	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.323	88	359722	37.325	ng	100
3) Pyridine	3.717	79	1004903	40.105	ng	100
4) n-Nitrosodimethylamine	3.623	42	330244	37.156	ng	100
6) Aniline	7.111	93	1138144	39.358	ng	100
8) 2-Chlorophenol	7.346	128	1001335	38.507	ng	100
9) Benzaldehyde	6.922	77	597740	41.462	ng	100
10) Phenol	6.975	94	1248029	39.305	ng	100
11) bis(2-Chloroethyl)ether	7.199	93	976195	39.033	ng	100
12) 1,3-Dichlorobenzene	7.664	146	1063428	37.225	ng	100
13) 1,4-Dichlorobenzene	7.811	146	1083221	37.495	ng	100
14) 1,2-Dichlorobenzene	8.122	146	1041511	37.564	ng	100
15) Benzyl Alcohol	8.011	79	798656	41.320	ng	100
16) 2,2'-oxybis(1-Chloropr...	8.305	45	991099	40.824	ng	100
17) 2-Methylphenol	8.216	107	795971	41.136	ng	100
18) Hexachloroethane	8.846	117	389110	37.399	ng	100
19) n-Nitroso-di-n-propyla...	8.575	70	737233	43.423	ng	100
20) 3+4-Methylphenols	8.540	107	1098375	41.727	ng	100
22) Acetophenone	8.587	105	1525122	38.574	ng	100
24) Nitrobenzene	8.963	77	1049347	38.662	ng	100
25) Isophorone	9.487	82	1853580	41.100	ng	100
26) 2-Nitrophenol	9.669	139	525614	42.034	ng	100
27) 2,4-Dimethylphenol	9.734	122	661755	40.316	ng	100
28) bis(2-Chloroethoxy)met...	9.963	93	1285698	39.353	ng	100
29) 2,4-Dichlorophenol	10.205	162	912137	40.720	ng	100
30) 1,2,4-Trichlorobenzene	10.416	180	960872	37.439	ng	100
31) Naphthalene	10.605	128	3167478	38.287	ng	100
32) Benzoic acid	9.875	122	670600	44.564	ng	100
33) 4-Chloroaniline	10.710	127	1159633	39.789	ng	100
34) Hexachlorobutadiene	10.893	225	553609	37.241	ng	100
35) Caprolactam	11.499	113	299017	44.083	ng	100
36) 4-Chloro-3-methylphenol	11.840	107	966642	41.977	ng	100
37) 2-Methylnaphthalene	12.210	142	2167502	39.419	ng	100
38) 1-Methylnaphthalene	12.434	142	2071946	38.734	ng	100
40) 1,2,4,5-Tetrachloroben...	12.587	216	1039275	36.348	ng	100
41) Hexachlorocyclopentadiene	12.563	237	395145	37.139	ng	100
43) 2,4,6-Trichlorophenol	12.828	196	692810	39.731	ng	100

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024164.D
Acq On : 12 Mar 2025 19:00
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICCC040

Quant Time: Mar 13 04:08:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.899	196	760360	39.872	ng	100
46) 1,1'-Biphenyl	13.228	154	2720465	37.621	ng	100
47) 2-Chloronaphthalene	13.269	162	2037284	37.269	ng	100
48) 2-Nitroaniline	13.475	65	543429	42.085	ng	100
49) Acenaphthylene	14.128	152	3091813	38.389	ng	100
50) Dimethylphthalate	13.857	163	2526732	38.493	ng	100
51) 2,6-Dinitrotoluene	13.975	165	546912	40.901	ng	100
52) Acenaphthene	14.469	154	1973969	38.061	ng	100
53) 3-Nitroaniline	14.310	138	599822	42.038	ng	100
54) 2,4-Dinitrophenol	14.522	184	297379	41.760	ng	100
55) Dibenzofuran	14.810	168	3184940	37.802	ng	100
56) 4-Nitrophenol	14.634	139	515335	41.811	ng	100
57) 2,4-Dinitrotoluene	14.775	165	732669	42.180	ng	100
58) Fluorene	15.469	166	2502924	38.039	ng	100
59) 2,3,4,6-Tetrachlorophenol	15.040	232	662947	40.068	ng	100
60) Diethylphthalate	15.240	149	2527904	38.794	ng	100
61) 4-Chlorophenyl-phenyle...	15.463	204	1225168	37.829	ng	100
62) 4-Nitroaniline	15.487	138	638694	43.134	ng	100
63) Azobenzene	15.763	77	2401881	39.335	ng	100
65) 4,6-Dinitro-2-methylph...	15.551	198	412313	41.395	ng	100
66) n-Nitrosodiphenylamine	15.681	169	2063452	38.450	ng	100
67) 4-Bromophenyl-phenylether	16.375	248	745376	38.570	ng	100
68) Hexachlorobenzene	16.492	284	873989	38.435	ng	100
69) Atrazine	16.657	200	466258	33.855	ng	100
70) Pentachlorophenol	16.845	266	610729	41.352	ng	100
71) Phenanthrene	17.245	178	3727050	38.414	ng	100
72) Anthracene	17.339	178	3658135	39.344	ng	100
73) Carbazole	17.616	167	3584494	40.463	ng	100
74) Di-n-butylphthalate	18.210	149	4336969	41.958	ng	100
75) Fluoranthene	19.328	202	4349734	39.636	ng	100
77) Benzidine	19.522	184	968916	42.268	ng	100
78) Pyrene	19.704	202	4529960	37.911	ng	100
80) Butylbenzylphthalate	20.651	149	1972887	43.087	ng	100
81) Benzo(a)anthracene	21.633	228	4546432	38.542	ng	100
82) 3,3'-Dichlorobenzidine	21.551	252	1610565	43.694	ng	100
83) Chrysene	21.704	228	4356257	38.298	ng	100
84) Bis(2-ethylhexyl)phtha...	21.569	149	2980735	42.929	ng	100
85) Di-n-octyl phthalate	22.869	149	4786749	43.129	ng	100
87) Indeno(1,2,3-cd)pyrene	28.927	276	5583803	38.410	ng	100
88) Benzo(b)fluoranthene	23.980	252	4864855	37.490	ng	100
89) Benzo(k)fluoranthene	24.051	252	4618537	36.566	ng	100
90) Benzo(a)pyrene	24.892	252	4204610	38.180	ng	100
91) Dibenzo(a,h)anthracene	29.009	278	4646524	38.014	ng	100
92) Benzo(g,h,i)perylene	30.127	276	4714749	38.011	ng	100

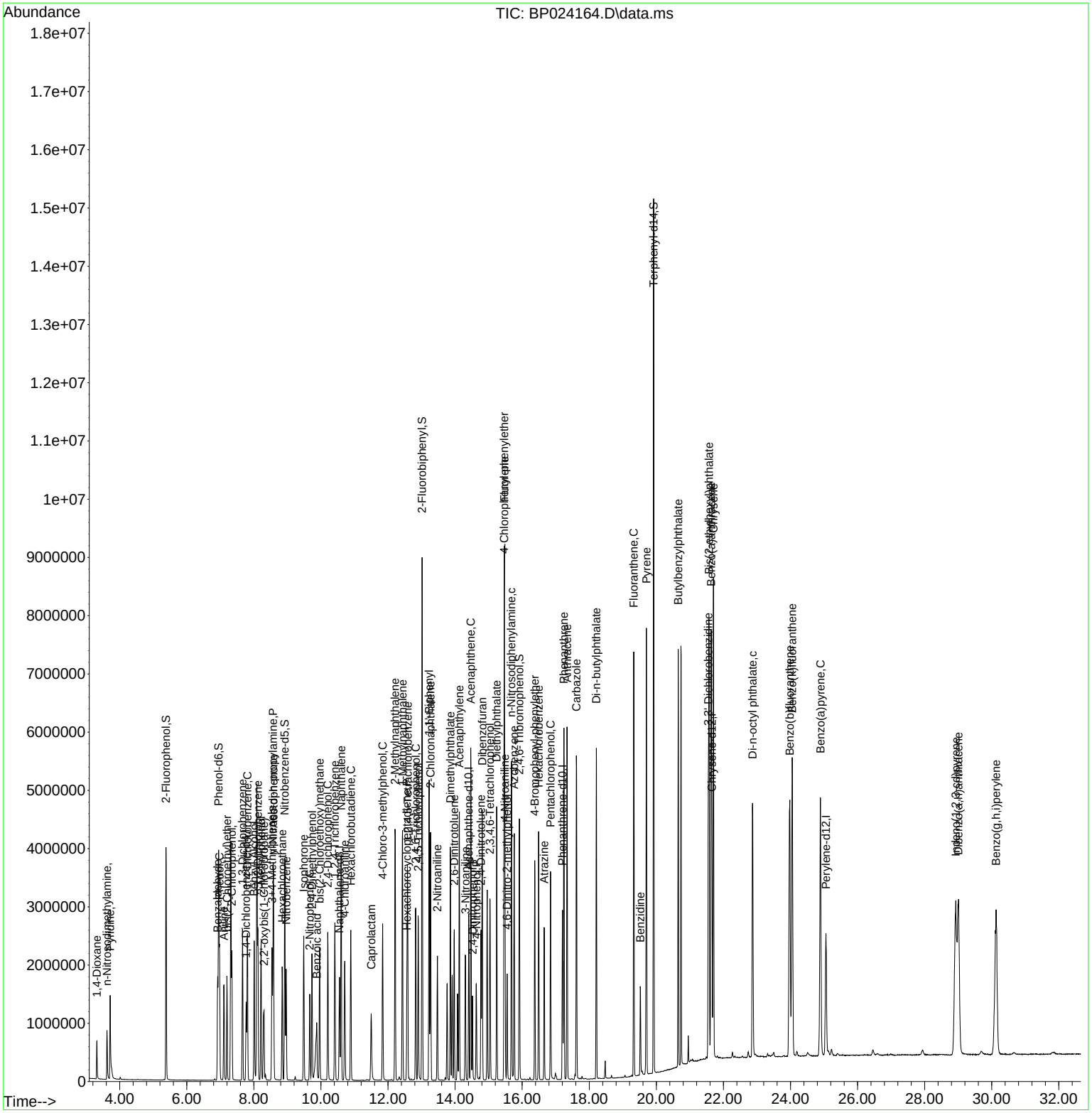
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024164.D
Acq On : 12 Mar 2025 19:00
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICCC040

Quant Time: Mar 13 04:08:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024165.D
Acq On : 12 Mar 2025 19:41
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC050

Quant Time: Mar 13 04:09:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.775	152	362382	20.000	ng		0.00
21) Naphthalene-d8	10.551	136	1504882	20.000	ng		0.00
39) Acenaphthene-d10	14.410	164	918204	20.000	ng		0.00
64) Phenanthrene-d10	17.216	188	1730200	20.000	ng		0.01
76) Chrysene-d12	21.674	240	1856010	20.000	ng		0.02
86) Perylene-d12	25.086	264	2039908	20.000	ng		0.03
System Monitoring Compounds							
5) 2-Fluorophenol	5.381	112	2339783	100.747	ng		0.00
7) Phenol-d6	6.952	99	3169724	106.191	ng		0.00
23) Nitrobenzene-d5	8.928	82	2723412	100.962	ng		0.00
42) 2,4,6-Tribromophenol	15.928	330	1240173	110.267	ng		0.01
45) 2-Fluorobiphenyl	13.022	172	6129086	93.318	ng		0.00
79) Terphenyl-d14	19.945	244	8967575	95.606	ng		0.02
Target Compounds							Qvalue
2) 1,4-Dioxane	3.316	88	449736	49.365	ng		100
3) Pyridine	3.716	79	1264797m	53.398	ng		
4) n-Nitrosodimethylamine	3.622	42	417922	49.741	ng		99
6) Aniline	7.110	93	1402509	51.307	ng		100
8) 2-Chlorophenol	7.346	128	1260095	51.262	ng		98
9) Benzaldehyde	6.922	77	680024	49.899	ng		99
10) Phenol	6.981	94	1580281	52.648	ng		98
11) bis(2-Chloroethyl)ether	7.199	93	1214752	51.383	ng		99
12) 1,3-Dichlorobenzene	7.663	146	1338137	49.552	ng		99
13) 1,4-Dichlorobenzene	7.810	146	1352373	49.520	ng		100
14) 1,2-Dichlorobenzene	8.122	146	1299613	49.586	ng		99
15) Benzyl Alcohol	8.010	79	1016261	55.621	ng		100
16) 2,2'-oxybis(1-Chloropr...	8.299	45	1236313	53.871	ng		99
17) 2-Methylphenol	8.216	107	1010720	55.257	ng		100
18) Hexachloroethane	8.846	117	482437	49.052	ng		97
19) n-Nitroso-di-n-propyla...	8.575	70	929876	57.939	ng		99
20) 3+4-Methylphenols	8.540	107	1401754	56.333	ng		99
22) Acetophenone	8.587	105	1912289	49.450	ng	#	99
24) Nitrobenzene	8.969	77	1335288	50.299	ng		99
25) Isophorone	9.487	82	2389410	54.168	ng		100
26) 2-Nitrophenol	9.669	139	686089	56.096	ng		99
27) 2,4-Dimethylphenol	9.734	122	840657	52.362	ng		99
28) bis(2-Chloroethoxy)met...	9.963	93	1612977	50.476	ng		100
29) 2,4-Dichlorophenol	10.210	162	1152247	52.591	ng		98
30) 1,2,4-Trichlorobenzene	10.416	180	1212617	48.306	ng		99
31) Naphthalene	10.604	128	4020722	49.689	ng		100
32) Benzoic acid	9.893	122	900054	61.152	ng		99
33) 4-Chloroaniline	10.710	127	1481634	51.976	ng		99
34) Hexachlorobutadiene	10.893	225	703606	48.392	ng		99
35) Caprolactam	11.510	113	402356	60.646	ng		98
36) 4-Chloro-3-methylphenol	11.845	107	1251209	55.551	ng		100
37) 2-Methylnaphthalene	12.216	142	2749915	51.131	ng		100
38) 1-Methylnaphthalene	12.434	142	2647375	50.600	ng		99
40) 1,2,4,5-Tetrachloroben...	12.587	216	1331287	47.188	ng		100
41) Hexachlorocyclopentadiene	12.569	237	503901	47.999	ng		99
43) 2,4,6-Trichlorophenol	12.828	196	896606	52.112	ng		100

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024165.D
Acq On : 12 Mar 2025 19:41
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC050

Quant Time: Mar 13 04:09:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.904	196	969372	51.517	ng	99
46) 1,1'-Biphenyl	13.234	154	3427883	48.043	ng	100
47) 2-Chloronaphthalene	13.275	162	2559098	47.446	ng	99
48) 2-Nitroaniline	13.475	65	714343	56.066	ng	97
49) Acenaphthylene	14.128	152	4015684	50.533	ng	100
50) Dimethylphthalate	13.869	163	3252950	50.224	ng	100
51) 2,6-Dinitrotoluene	13.981	165	715171	54.206	ng	99
52) Acenaphthene	14.481	154	2516832	49.182	ng	99
53) 3-Nitroaniline	14.310	138	790217	56.128	ng	98
54) 2,4-Dinitrophenol	14.528	184	410616	58.439	ng	99
55) Dibenzofuran	14.816	168	4058172	48.816	ng	99
56) 4-Nitrophenol	14.639	139	685687	56.382	ng	98
57) 2,4-Dinitrotoluene	14.781	165	971087	56.659	ng	99
58) Fluorene	15.481	166	3230571	49.759	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.045	232	851401	52.152	ng	100
60) Diethylphthalate	15.251	149	3265289	50.786	ng	99
61) 4-Chlorophenyl-phenyle...	15.475	204	1572773	49.216	ng	99
62) 4-Nitroaniline	15.504	138	831169	56.889	ng	99
63) Azobenzene	15.769	77	3077821	51.085	ng	98
65) 4,6-Dinitro-2-methylph...	15.563	198	551280	55.051	ng	97
66) n-Nitrosodiphenylamine	15.686	169	2670636	49.497	ng	99
67) 4-Bromophenyl-phenylether	16.386	248	968698	49.858	ng	98
68) Hexachlorobenzene	16.510	284	1136445	49.709	ng	99
69) Atrazine	16.669	200	452391	32.672	ng	99
70) Pentachlorophenol	16.863	266	796545	53.644	ng	99
71) Phenanthrene	17.257	178	4759945	48.797	ng	100
72) Anthracene	17.351	178	4723119	50.526	ng	100
73) Carbazole	17.633	167	4585466	51.485	ng	100
74) Di-n-butylphthalate	18.222	149	5502824	52.951	ng	100
75) Fluoranthene	19.345	202	5644914	51.163	ng	99
77) Benzidine	19.539	184	804810	35.585	ng	99
78) Pyrene	19.727	202	5876091	49.843	ng	100
80) Butylbenzylphthalate	20.674	149	2571381	56.920	ng	99
81) Benzo(a)anthracene	21.657	228	5851357	50.277	ng	100
82) 3,3'-Dichlorobenzidine	21.580	252	2015249	55.414	ng	99
83) Chrysene	21.727	228	5625314	50.126	ng	100
84) Bis(2-ethylhexyl)phtha...	21.592	149	3802016	55.499	ng	100
85) Di-n-octyl phthalate	22.904	149	6298049	57.516	ng	100
87) Indeno(1,2,3-cd)pyrene	28.956	276	7354717	50.680	ng	99
88) Benzo(b)fluoranthene	24.004	252	6342083	48.959	ng	98
89) Benzo(k)fluoranthene	24.080	252	6136938	48.672	ng	99
90) Benzo(a)pyrene	24.927	252	5581393	50.770	ng	99
91) Dibenzo(a,h)anthracene	29.045	278	6072440	49.766	ng	99
92) Benzo(g,h,i)perylene	30.168	276	6130219	49.509	ng	99

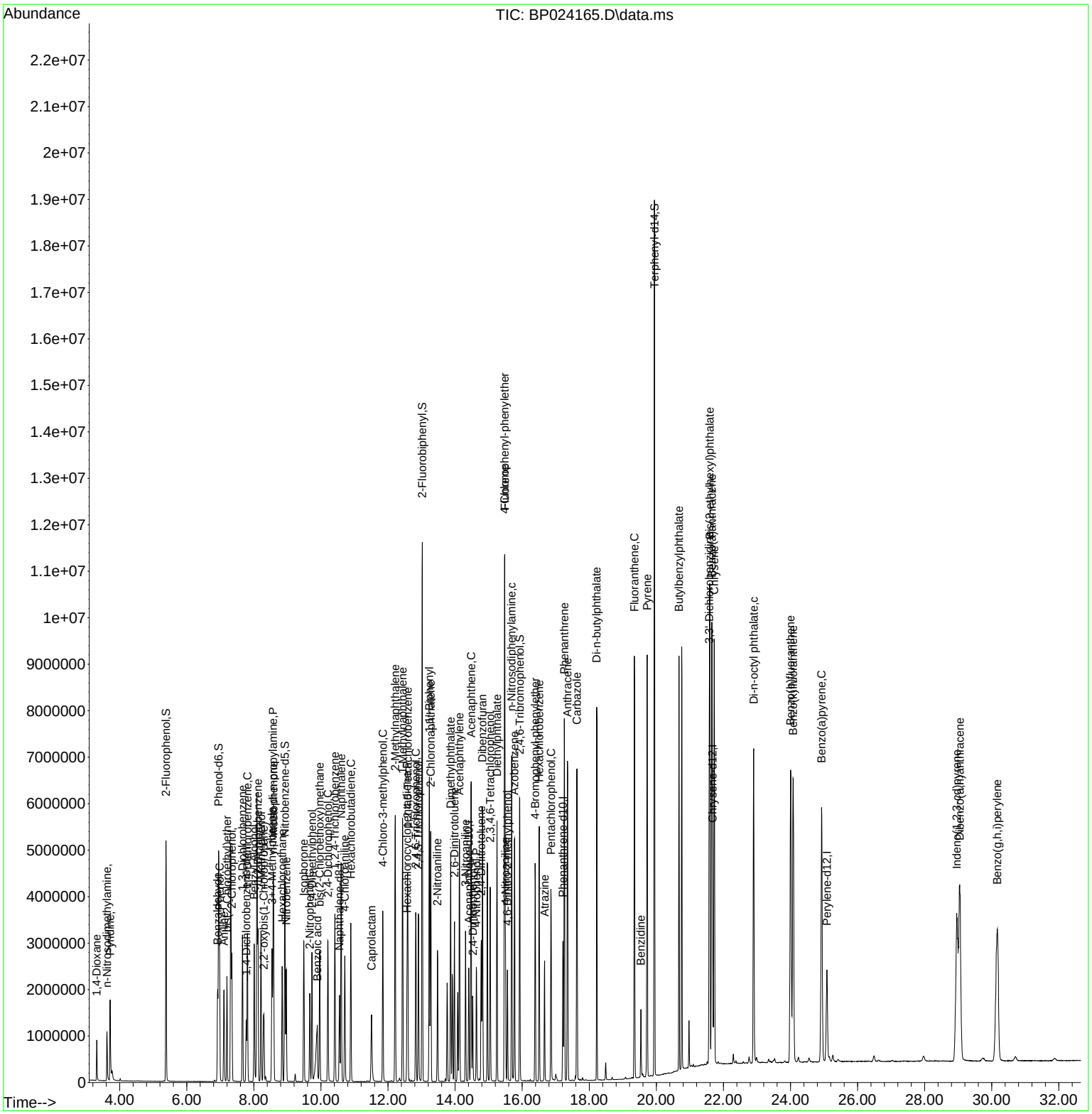
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024165.D
Acq On : 12 Mar 2025 19:41
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC050

Quant Time: Mar 13 04:09:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024166.D
Acq On : 12 Mar 2025 20:21
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC060

Quant Time: Mar 13 04:09:55 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.769	152	394376	20.000	ng	0.00
21) Naphthalene-d8	10.552	136	1591612	20.000	ng	0.00
39) Acenaphthene-d10	14.404	164	936110	20.000	ng	0.00
64) Phenanthrene-d10	17.210	188	1759587	20.000	ng	0.00
76) Chrysene-d12	21.669	240	1817869	20.000	ng	0.01
86) Perylene-d12	25.074	264	2003229	20.000	ng	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.381	112	3091896	122.332	ng	0.00
7) Phenol-d6	6.958	99	4151063	127.785	ng	0.00
23) Nitrobenzene-d5	8.922	82	3516139	123.247	ng	0.00
42) 2,4,6-Tribromophenol	15.922	330	1542341	134.511	ng	0.00
45) 2-Fluorobiphenyl	13.016	172	7675412	114.626	ng	0.00
79) Terphenyl-d14	19.933	244	10595349	115.330	ng	0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	3.322	88	588784	59.385	ng	100
3) Pyridine	3.717	79	1653707m	64.153	ng	
4) n-Nitrosodimethylamine	3.622	42	551093	60.270	ng	99
6) Aniline	7.111	93	1788370	60.115	ng	99
8) 2-Chlorophenol	7.346	128	1656453	61.919	ng	99
9) Benzaldehyde	6.922	77	830475	55.995	ng	99
10) Phenol	6.981	94	2072585	63.448	ng	99
11) bis(2-Chloroethyl)ether	7.199	93	1606110	62.425	ng	99
12) 1,3-Dichlorobenzene	7.663	146	1740829	59.234	ng	100
13) 1,4-Dichlorobenzene	7.805	146	1778400	59.836	ng	100
14) 1,2-Dichlorobenzene	8.122	146	1703894	59.737	ng	100
15) Benzyl Alcohol	8.010	79	1332675	67.021	ng	100
16) 2,2'-oxybis(1-Chloropr...	8.293	45	1610981	64.502	ng	99
17) 2-Methylphenol	8.210	107	1316438	66.132	ng	99
18) Hexachloroethane	8.846	117	636840	59.498	ng	96
19) n-Nitroso-di-n-propyla...	8.575	70	1191669	68.227	ng	99
20) 3+4-Methylphenols	8.540	107	1809984	66.838	ng	100
22) Acetophenone	8.587	105	2478568	60.600	ng	99
24) Nitrobenzene	8.963	77	1731589	61.673	ng	99
25) Isophorone	9.487	82	3063158	65.658	ng	100
26) 2-Nitrophenol	9.669	139	904714	69.941	ng	97
27) 2,4-Dimethylphenol	9.734	122	1095778	64.534	ng	99
28) bis(2-Chloroethoxy)met...	9.963	93	2086687	61.742	ng	99
29) 2,4-Dichlorophenol	10.204	162	1497152	64.609	ng	99
30) 1,2,4-Trichlorobenzene	10.416	180	1578453	59.453	ng	100
31) Naphthalene	10.604	128	5145859	60.129	ng	100
32) Benzoic acid	9.904	122	1203679	77.325	ng	98
33) 4-Chloroaniline	10.710	127	1859148	61.665	ng	99
34) Hexachlorobutadiene	10.887	225	918034	59.699	ng	98
35) Caprolactam	11.510	113	496683	70.784	ng	99
36) 4-Chloro-3-methylphenol	11.846	107	1582952	66.451	ng	98
37) 2-Methylnaphthalene	12.216	142	3504891	61.618	ng	100
38) 1-Methylnaphthalene	12.434	142	3364504	60.802	ng	100
40) 1,2,4,5-Tetrachloroben...	12.587	216	1707961	59.382	ng	100
41) Hexachlorocyclopentadiene	12.563	237	656781	61.365	ng	98
43) 2,4,6-Trichlorophenol	12.828	196	1148545	65.478	ng	100

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024166.D
Acq On : 12 Mar 2025 20:21
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC060

Quant Time: Mar 13 04:09:55 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

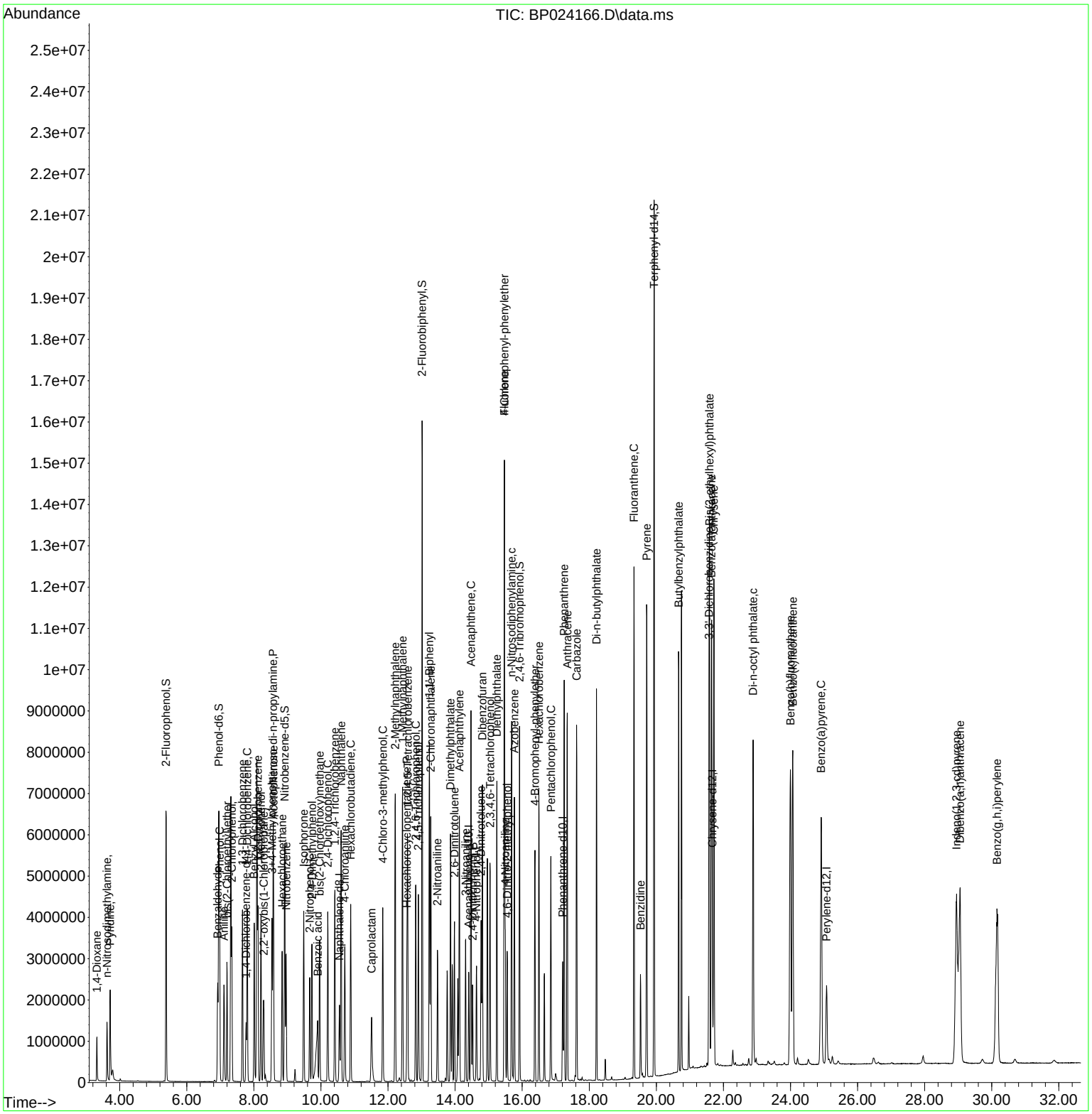
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.904	196	1233147	64.282	ng	99
46) 1,1'-Biphenyl	13.234	154	4312903	59.291	ng	99
47) 2-Chloronaphthalene	13.275	162	3269176	59.452	ng	100
48) 2-Nitroaniline	13.475	65	890207	68.533	ng	99
49) Acenaphthylene	14.128	152	5025011	62.024	ng	100
50) Dimethylphthalate	13.863	163	3997694	60.542	ng	100
51) 2,6-Dinitrotoluene	13.981	165	887706	65.996	ng	96
52) Acenaphthene	14.475	154	3153799	60.450	ng	99
53) 3-Nitroaniline	14.316	138	963434	67.123	ng	99
54) 2,4-Dinitrophenol	14.522	184	523590	73.093	ng	97
55) Dibenzofuran	14.816	168	5051493	59.602	ng	100
56) 4-Nitrophenol	14.640	139	831765	67.086	ng	99
57) 2,4-Dinitrotoluene	14.775	165	1211692	69.346	ng	98
58) Fluorene	15.469	166	3951671	59.702	ng	100
59) 2,3,4,6-Tetrachlorophenol	15.045	232	1055860	63.439	ng	99
60) Diethylphthalate	15.245	149	4030341	61.486	ng	99
61) 4-Chlorophenyl-phenyle...	15.469	204	1934265	59.370	ng	100
62) 4-Nitroaniline	15.498	138	1025149	68.824	ng	98
63) Azobenzene	15.769	77	3829148	62.340	ng	98
65) 4,6-Dinitro-2-methylph...	15.557	198	698260	68.563	ng	93
66) n-Nitrosodiphenylamine	15.687	169	3334914	60.776	ng	100
67) 4-Bromophenyl-phenylether	16.381	248	1211468	61.311	ng	97
68) Hexachlorobenzene	16.498	284	1425714	61.320	ng	97
70) Pentachlorophenol	16.857	266	1002726	66.402	ng	100
71) Phenanthrene	17.251	178	5863198	59.103	ng	99
72) Anthracene	17.345	178	5754537	60.532	ng	100
73) Carbazole	17.622	167	5598533	61.810	ng	99
74) Di-n-butylphthalate	18.216	149	6844468	64.761	ng	100
75) Fluoranthene	19.333	202	6849338	61.042	ng	99
77) Benzidine	19.528	184	1518742	68.561	ng	100
78) Pyrene	19.710	202	7049649	61.052	ng	99
80) Butylbenzylphthalate	20.663	149	3170269	71.649	ng	99
81) Benzo(a)anthracene	21.645	228	7010330	61.500	ng	99
82) 3,3'-Dichlorobenzidine	21.569	252	2547922	71.531	ng	99
83) Chrysene	21.716	228	6653811	60.535	ng	99
84) Bis(2-ethylhexyl)phtha...	21.586	149	4788368	71.363	ng	98
85) Di-n-octyl phthalate	22.886	149	7825427	72.964	ng	100
87) Indeno(1,2,3-cd)pyrene	28.951	276	8887645m	62.364	ng	
88) Benzo(b)fluoranthene	23.998	252	7606878	59.798	ng	99
89) Benzo(k)fluoranthene	24.068	252	7515459	60.696	ng	99
90) Benzo(a)pyrene	24.915	252	6723161	62.275	ng	99
91) Dibenzo(a,h)anthracene	29.056	278	7370514	61.510	ng	99
92) Benzo(g,h,i)perylene	30.156	276	7489359	61.593	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024166.D
Acq On : 12 Mar 2025 20:21
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC060

Quant Time: Mar 13 04:09:55 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024167.D
Acq On : 12 Mar 2025 21:02
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC080

Quant Time: Mar 13 04:10:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.769	152	364999	20.000	ng		0.00
21) Naphthalene-d8	10.551	136	1468727	20.000	ng		0.00
39) Acenaphthene-d10	14.404	164	888748	20.000	ng		0.00
64) Phenanthrene-d10	17.210	188	1690241	20.000	ng		0.00
76) Chrysene-d12	21.674	240	1785678	20.000	ng		0.02
86) Perylene-d12	25.080	264	1974592	20.000	ng		0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.381	112	3803317	162.591	ng		0.00
7) Phenol-d6	6.957	99	5104893	169.796	ng		0.00
23) Nitrobenzene-d5	8.922	82	4314346	163.878	ng		0.00
42) 2,4,6-Tribromophenol	15.922	330	2025211	186.035	ng		0.00
45) 2-Fluorobiphenyl	13.016	172	9471932	148.993	ng		0.00
79) Terphenyl-d14	19.939	244	13193577	146.201	ng		0.02
Target Compounds							Qvalue
2) 1,4-Dioxane	3.317	88	719424	78.401	ng		99
3) Pyridine	3.716	79	2086180m	87.444	ng		
4) n-Nitrosodimethylamine	3.622	42	672598	79.479	ng		98
6) Aniline	7.110	93	2112268	76.717	ng		98
8) 2-Chlorophenol	7.346	128	2039550	82.376	ng		99
9) Benzaldehyde	6.922	77	842969	61.412	ng		98
10) Phenol	6.987	94	2556863	84.573	ng		99
11) bis(2-Chloroethyl)ether	7.199	93	1979282	83.121	ng		100
12) 1,3-Dichlorobenzene	7.663	146	2110081	77.577	ng		99
13) 1,4-Dichlorobenzene	7.810	146	2159502	78.507	ng		99
14) 1,2-Dichlorobenzene	8.122	146	2060216	78.042	ng		99
15) Benzyl Alcohol	8.010	79	1663098	90.370	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.299	45	1950889	84.398	ng		99
17) 2-Methylphenol	8.216	107	1619006	87.877	ng		99
18) Hexachloroethane	8.846	117	773060	78.037	ng		97
19) n-Nitroso-di-n-propyla...	8.575	70	1455297	90.027	ng		99
20) 3+4-Methylphenols	8.546	107	2240243	89.384	ng		98
22) Acetophenone	8.587	105	3007941	79.697	ng	#	99
24) Nitrobenzene	8.969	77	2118548	81.768	ng		98
25) Isophorone	9.493	82	3813082	88.570	ng		98
26) 2-Nitrophenol	9.669	139	1129770	94.646	ng		97
27) 2,4-Dimethylphenol	9.734	122	1361694	86.904	ng		99
28) bis(2-Chloroethoxy)met...	9.963	93	2576867	82.625	ng		100
29) 2,4-Dichlorophenol	10.204	162	1875825	87.724	ng		99
30) 1,2,4-Trichlorobenzene	10.416	180	1946046	79.431	ng		99
31) Naphthalene	10.604	128	6278869	79.507	ng		100
33) 4-Chloroaniline	10.716	127	2336710	83.990	ng		99
34) Hexachlorobutadiene	10.887	225	1124081	79.213	ng		99
35) Caprolactam	11.528	113	654999	101.156	ng		97
36) 4-Chloro-3-methylphenol	11.845	107	2042687	92.924	ng		99
37) 2-Methylnaphthalene	12.210	142	4316966	82.244	ng		99
38) 1-Methylnaphthalene	12.434	142	4227550	82.791	ng		99
40) 1,2,4,5-Tetrachloroben...	12.581	216	2120251	77.644	ng		100
41) Hexachlorocyclopentadiene	12.563	237	788854	77.633	ng		99
43) 2,4,6-Trichlorophenol	12.822	196	1443797	86.697	ng		99
44) 2,4,5-Trichlorophenol	12.904	196	1575527	86.506	ng		99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024167.D
Acq On : 12 Mar 2025 21:02
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC080

Quant Time: Mar 13 04:10:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) 1,1'-Biphenyl	13.228	154	5406424	78.284	ng		99
47) 2-Chloronaphthalene	13.269	162	4094698	78.432	ng		100
48) 2-Nitroaniline	13.475	65	1150637	93.303	ng		98
49) Acenaphthylene	14.122	152	6343598	82.473	ng		99
50) Dimethylphthalate	13.857	163	5115780	81.603	ng		100
51) 2,6-Dinitrotoluene	13.975	165	1146015	89.740	ng		97
52) Acenaphthene	14.469	154	3985981	80.473	ng		99
53) 3-Nitroaniline	14.310	138	1277036	93.713	ng		98
55) Dibenzofuran	14.810	168	6287848	78.144	ng		99
56) 4-Nitrophenol	14.639	139	1110260	94.320	ng		99
57) 2,4-Dinitrotoluene	14.775	165	1584658	95.524	ng		97
58) Fluorene	15.469	166	4983161	79.298	ng		100
59) 2,3,4,6-Tetrachlorophenol	15.045	232	1371535	86.797	ng		100
60) Diethylphthalate	15.245	149	5221159	83.898	ng		98
61) 4-Chlorophenyl-phenyle...	15.463	204	2453010	79.305	ng		99
62) 4-Nitroaniline	15.498	138	1346814	95.238	ng		95
63) Azobenzene	15.763	77	4851665	83.196	ng		99
65) 4,6-Dinitro-2-methylph...	15.557	198	924643	94.517	ng		97
66) n-Nitrosodiphenylamine	15.686	169	4231796	80.285	ng		99
67) 4-Bromophenyl-phenylether	16.381	248	1565037	82.455	ng		94
68) Hexachlorobenzene	16.498	284	1841149	82.437	ng		99
70) Pentachlorophenol	16.851	266	1334567	92.003	ng		100
71) Phenanthrene	17.251	178	7450840	78.188	ng		99
72) Anthracene	17.345	178	7420971	81.264	ng		99
73) Carbazole	17.628	167	7209600	82.862	ng		98
74) Di-n-butylphthalate	18.216	149	8819030	86.868	ng		99
75) Fluoranthene	19.339	202	8868502	82.280	ng		99
77) Benzidine	19.533	184	1583965	72.794	ng		100
78) Pyrene	19.722	202	9100075	80.230	ng		99
80) Butylbenzylphthalate	20.669	149	4117551	94.735	ng		97
81) Benzo(a)anthracene	21.657	228	9075269	81.050	ng		98
82) 3,3'-Dichlorobenzidine	21.574	252	3216378	91.925	ng		99
83) Chrysene	21.721	228	8635685	79.981	ng		99
84) Bis(2-ethylhexyl)phtha...	21.592	149	6077881	92.215	ng	#	98
85) Di-n-octyl phthalate	22.898	149	10239008	97.189	ng		100
87) Indeno(1,2,3-cd)pyrene	28.962	276	11842118	84.301	ng		100
88) Benzo(b)fluoranthene	24.004	252	9984031	79.623	ng		98
89) Benzo(k)fluoranthene	24.080	252	9728938	79.712	ng		98
90) Benzo(a)pyrene	24.921	252	8860063	83.259	ng		99
91) Dibenzo(a,h)anthracene	29.039	278	9828241	83.210	ng		98
92) Benzo(g,h,i)perylene	30.180	276	9940803	82.940	ng		98

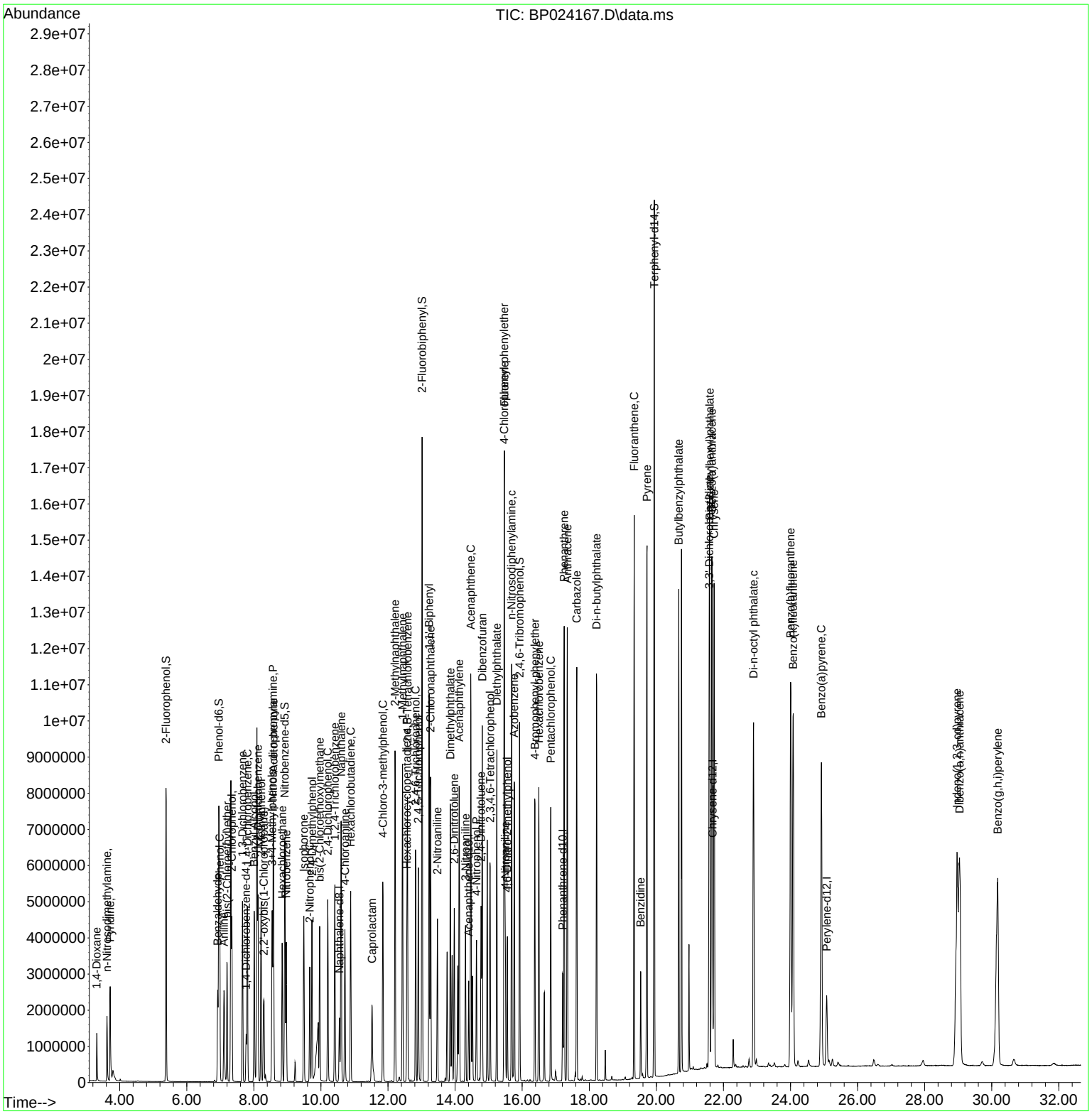
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024167.D
Acq On : 12 Mar 2025 21:02
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDICC080

Quant Time: Mar 13 04:10:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:01:12 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.769	152	399821	20.000	ng	0.00
21) Naphthalene-d8	10.552	136	1631941	20.000	ng	0.00
39) Acenaphthene-d10	14.404	164	966525	20.000	ng	0.00
64) Phenanthrene-d10	17.204	188	1810172	20.000	ng	0.00
76) Chrysene-d12	21.669	240	1903114	20.000	ng	0.01
86) Perylene-d12	25.069	264	2127367	20.000	ng	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.381	112	1959434	78.230	ng	0.00
7) Phenol-d6	6.952	99	2636154	78.704	ng	0.00
23) Nitrobenzene-d5	8.922	82	2274955	78.652	ng	0.00
42) 2,4,6-Tribromophenol	15.922	330	995466	81.766	ng	0.00
45) 2-Fluorobiphenyl	13.022	172	5105223	77.885	ng	0.00
79) Terphenyl-d14	19.933	244	7241807	78.549	ng	0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	3.317	88	376087	37.880	ng	99
3) Pyridine	3.717	79	1050879	38.718	ng	99
4) n-Nitrosodimethylamine	3.623	42	350385	38.646	ng	98
6) Aniline	7.111	93	1202738	39.413	ng	100
8) 2-Chlorophenol	7.346	128	1059150	39.149	ng	100
9) Benzaldehyde	6.922	77	652848	40.389	ng	99
10) Phenol	6.981	94	1314283	38.869	ng	99
11) bis(2-Chloroethyl)ether	7.199	93	1018670	38.203	ng	99
12) 1,3-Dichlorobenzene	7.664	146	1118950	38.353	ng	99
13) 1,4-Dichlorobenzene	7.805	146	1130770	37.960	ng	99
14) 1,2-Dichlorobenzene	8.122	146	1089564	38.116	ng	100
15) Benzyl Alcohol	8.011	79	848187	39.999	ng	100
16) 2,2'-oxybis(1-Chloropr...	8.299	45	1043834	38.356	ng	99
17) 2-Methylphenol	8.216	107	840413	39.636	ng	100
18) Hexachloroethane	8.846	117	407804	38.587	ng	98
19) n-Nitroso-di-n-propyla...	8.575	70	771380	39.697	ng	99
20) 3+4-Methylphenols	8.540	107	1154401	39.629	ng	100
22) Acetophenone	8.587	105	1593044	38.611	ng	100
24) Nitrobenzene	8.963	77	1114096	39.045	ng	99
25) Isophorone	9.487	82	1967247	39.677	ng	99
26) 2-Nitrophenol	9.669	139	570971	41.892	ng	98
27) 2,4-Dimethylphenol	9.734	122	697163	39.779	ng	98
28) bis(2-Chloroethoxy)met...	9.963	93	1346656	38.608	ng	100
29) 2,4-Dichlorophenol	10.205	162	961583	40.558	ng	99
30) 1,2,4-Trichlorobenzene	10.416	180	1002302	38.264	ng	99
31) Naphthalene	10.605	128	3306535	38.223	ng	100
32) Benzoic acid	9.881	122	745543	43.618	ng	98
33) 4-Chloroaniline	10.710	127	1222820	39.499	ng	100
34) Hexachlorobutadiene	10.887	225	585728	38.854	ng	98
35) Caprolactam	11.499	113	317484	40.859	ng	97
36) 4-Chloro-3-methylphenol	11.840	107	1015423	39.702	ng	99
37) 2-Methylnaphthalene	12.210	142	2265320	38.762	ng	99
38) 1-Methylnaphthalene	12.434	142	2209719	38.874	ng	99
40) 1,2,4,5-Tetrachloroben...	12.581	216	1089303	38.988	ng	100
41) Hexachlorocyclopentadiene	12.569	237	413181	41.026	ng	100
43) 2,4,6-Trichlorophenol	12.828	196	727105	40.950	ng	99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 2025
Response via : Initial Calibration

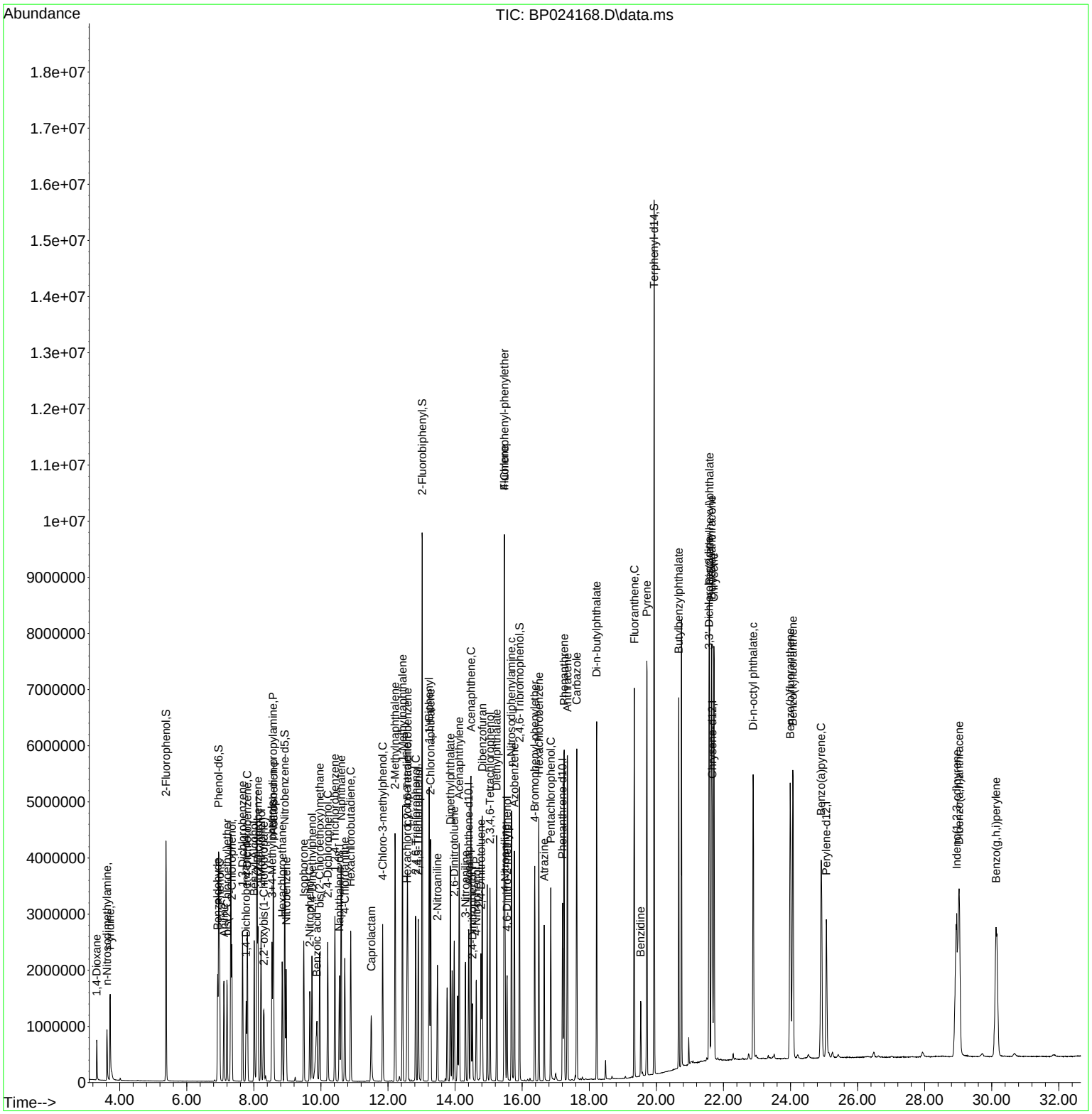
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.904	196	798076	40.985	ng	98
46) 1,1'-Biphenyl	13.228	154	2821370	38.846	ng	99
47) 2-Chloronaphthalene	13.269	162	2130879	39.006	ng	100
48) 2-Nitroaniline	13.475	65	574806	41.137	ng	99
49) Acenaphthylene	14.122	152	3245488	39.262	ng	100
50) Dimethylphthalate	13.863	163	2606961	38.548	ng	99
51) 2,6-Dinitrotoluene	13.975	165	563651	39.611	ng	98
52) Acenaphthene	14.475	154	2053476	38.881	ng	98
53) 3-Nitroaniline	14.310	138	625803	40.719	ng	99
54) 2,4-Dinitrophenol	14.516	184	322185	42.791	ng	98
55) Dibenzofuran	14.810	168	3273448	38.264	ng	100
56) 4-Nitrophenol	14.634	139	543119	42.293	ng	98
57) 2,4-Dinitrotoluene	14.769	165	772629	41.106	ng	99
58) Fluorene	15.469	166	2603595	39.061	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.040	232	685479	39.844	ng	100
60) Diethylphthalate	15.240	149	2595505	38.539	ng	100
61) 4-Chlorophenyl-phenyle...	15.469	204	1261005	38.572	ng	99
62) 4-Nitroaniline	15.493	138	664956	41.253	ng	99
63) Azobenzene	15.769	77	2497600	39.347	ng	99
65) 4,6-Dinitro-2-methylph...	15.551	198	434596	40.442	ng	95
66) n-Nitrosodiphenylamine	15.681	169	2156617	39.234	ng	99
67) 4-Bromophenyl-phenylether	16.375	248	772937	38.892	ng	98
68) Hexachlorobenzene	16.498	284	919105	39.073	ng	97
69) Atrazine	16.657	200	481443	36.287	ng	99
70) Pentachlorophenol	16.851	266	626146	41.161	ng	100
71) Phenanthrene	17.251	178	3795212	38.379	ng	99
72) Anthracene	17.351	178	3790779	39.358	ng	99
73) Carbazole	17.628	167	3684202	39.665	ng	100
74) Di-n-butylphthalate	18.222	149	4505984	40.866	ng	100
75) Fluoranthene	19.345	202	4467370	39.006	ng	99
77) Benzidine	19.534	184	827654	39.777	ng	99
78) Pyrene	19.716	202	4681182	39.565	ng	100
80) Butylbenzylphthalate	20.669	149	1991838	40.824	ng	98
81) Benzo(a)anthracene	21.651	228	4652183	39.318	ng	99
82) 3,3'-Dichlorobenzidine	21.569	252	1655655	41.750	ng	99
83) Chrysene	21.716	228	4393252	38.624	ng	99
84) Bis(2-ethylhexyl)phtha...	21.586	149	3060349	41.569	ng	99
85) Di-n-octyl phthalate	22.886	149	5007462	42.452	ng	100
87) Indeno(1,2,3-cd)pyrene	28.957	276	5699470	38.387	ng	100
88) Benzo(b)fluoranthene	23.992	252	4988392	38.891	ng	98
89) Benzo(k)fluoranthene	24.069	252	4803010	38.280	ng	99
90) Benzo(a)pyrene	24.916	252	4306060	38.607	ng	100
91) Dibenzo(a,h)anthracene	29.027	278	4752357	38.474	ng	99
92) Benzo(g,h,i)perylene	30.127	276	4782473m	38.087	ng	

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 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	104	0.00
2		1,4-Dioxane	0.497	0.470	5.4	105	0.00
3		Pyridine	1.358	1.314	3.2	105	0.00
4		n-Nitrosodimethylamine	0.454	0.438	3.5	106	0.00
5	S	2-Fluorophenol	1.253	1.225	2.2	106	0.00
6		Aniline	1.527	1.504	1.5	106	0.00
7	S	Phenol-d6	1.675	1.648	1.6	105	0.00
8		2-Chlorophenol	1.353	1.325	2.1	106	0.00
9		Benzaldehyde	0.809	0.816	-0.9	109	0.00
10	C	Phenol	1.691	1.644	2.8	105	0.00
11		bis(2-Chloroethyl)ether	1.334	1.274	4.5	104	0.00
12		1,3-Dichlorobenzene	1.459	1.399	4.1	105	0.00
13	C	1,4-Dichlorobenzene	1.490	1.414	5.1	104	0.00
14		1,2-Dichlorobenzene	1.430	1.363	4.7	105	0.00
15		Benzyl Alcohol	1.061	1.061	0.0	106	0.00
16		2,2'-oxybis(1-Chloropropane	1.361	1.305	4.1	105	0.00
17		2-Methylphenol	1.061	1.051	0.9	106	0.00
18		Hexachloroethane	0.529	0.510	3.6	105	0.00
19	P	n-Nitroso-di-n-propylamine	0.972	0.965	0.7	105	0.00
20		3+4-Methylphenols	1.457	1.444	0.9	105	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00
22		Acetophenone	0.506	0.488	3.6	104	0.00
23	S	Nitrobenzene-d5	0.354	0.349	1.4	105	0.00
24		Nitrobenzene	0.350	0.341	2.6	106	0.00
25		Isophorone	0.608	0.603	0.8	106	0.00
26	C	2-Nitrophenol	0.167	0.175	-4.8	109	0.00
27		2,4-Dimethylphenol	0.215	0.214	0.5	105	0.00
28		bis(2-Chloroethoxy)methane	0.427	0.413	3.3	105	0.00
29	C	2,4-Dichlorophenol	0.291	0.295	-1.4	105	0.00
30		1,2,4-Trichlorobenzene	0.321	0.307	4.4	104	0.00
31		Naphthalene	1.060	1.013	4.4	104	0.00
32		Benzoic acid	0.209	0.228	-9.1	111	0.00
33		4-Chloroaniline	0.379	0.375	1.1	105	0.00
34	C	Hexachlorobutadiene	0.185	0.179	3.2	106	0.00
35		Caprolactam	0.095	0.097	-2.1	106	0.00
36	C	4-Chloro-3-methylphenol	0.313	0.311	0.6	105	0.00
37		2-Methylnaphthalene	0.716	0.694	3.1	105	0.00
38		1-Methylnaphthalene	0.697	0.677	2.9	107	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	104	0.00
40		1,2,4,5-Tetrachlorobenzene	0.578	0.564	2.4	105	0.00
41	P	Hexachlorocyclopentadiene	0.208	0.214	-2.9	105	0.00
42	S	2,4,6-Tribromophenol	0.252	0.257	-2.0	106	0.00
43	C	2,4,6-Trichlorophenol	0.367	0.376	-2.5	105	0.00
44		2,4,5-Trichlorophenol	0.403	0.413	-2.5	105	0.00
45	S	2-Fluorobiphenyl	1.356	1.321	2.6	104	0.00
46		1,1'-Biphenyl	1.503	1.460	2.9	104	0.00
47		2-Chloronaphthalene	1.130	1.102	2.5	105	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 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	0.289	0.297	-2.8	106	0.00
49		Acenaphthylene	1.710	1.679	1.8	105	0.00
50		Dimethylphthalate	1.399	1.349	3.6	103	0.00
51		2,6-Dinitrotoluene	0.294	0.292	0.7	103	0.00
52	C	Acenaphthene	1.093	1.062	2.8	104	0.00
53		3-Nitroaniline	0.318	0.324	-1.9	104	0.00
54	P	2,4-Dinitrophenol	0.156	0.167	-7.1	108	0.00
55		Dibenzofuran	1.770	1.693	4.4	103	0.00
56	P	4-Nitrophenol	0.266	0.281	-5.6	105	0.00
57		2,4-Dinitrotoluene	0.389	0.400	-2.8	105	0.00
58		Fluorene	1.379	1.347	2.3	104	0.00
59		2,3,4,6-Tetrachlorophenol	0.356	0.355	0.3	103	0.00
60		Diethylphthalate	1.394	1.343	3.7	103	0.00
61		4-Chlorophenyl-phenylether	0.676	0.652	3.6	103	0.00
62		4-Nitroaniline	0.334	0.344	-3.0	104	0.00
63		Azobenzene	1.314	1.292	1.7	104	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	105	0.00
65		4,6-Dinitro-2-methylphenol	0.119	0.120	-0.8	105	0.00
66	c	n-Nitrosodiphenylamine	0.607	0.596	1.8	105	0.00
67		4-Bromophenyl-phenylether	0.220	0.213	3.2	104	0.00
68		Hexachlorobenzene	0.260	0.254	2.3	105	0.00
69		Atrazine	0.147	0.133	9.5	103	0.00
70	C	Pentachlorophenol	0.168	0.173	-3.0	103	0.00
71		Phenanthrene	1.093	1.048	4.1	102	0.00
72		Anthracene	1.064	1.047	1.6	104	0.01
73		Carbazole	1.026	1.018	0.8	103	0.01
74		Di-n-butylphthalate	1.218	1.245	-2.2	104	0.01
75	C	Fluoranthene	1.265	1.234	2.5	103	0.02
76	I	Chrysene-d12	1.000	1.000	0.0	101	0.01
77		Benzidine	0.219	0.217	0.9	85	0.01
78		Pyrene	1.243	1.230	1.0	103	0.01
79	S	Terphenyl-d14	0.969	0.951	1.9	102	0.01
80		Butylbenzylphthalate	0.513	0.523	-1.9	101	0.02
81		Benzo(a)anthracene	1.243	1.222	1.7	102	0.02
82		3,3'-Dichlorobenzidine	0.417	0.435	-4.3	103	0.02
83		Chrysene	1.195	1.154	3.4	101	0.01
84		Bis(2-ethylhexyl)phthalate	0.774	0.804	-3.9	103	0.02
85	c	Di-n-octyl phthalate	1.240	1.316	-6.1	105	0.02
86	I	Perylene-d12	1.000	1.000	0.0	104	0.01
87		Indeno(1,2,3-cd)pyrene	1.396	1.340	4.0	102	0.03
88		Benzo(b)fluoranthene	1.206	1.172	2.8	103	0.01
89		Benzo(k)fluoranthene	1.180	1.129	4.3	104	0.02
90	C	Benzo(a)pyrene	1.049	1.012	3.5	102	0.02
91		Dibenzo(a,h)anthracene	1.161	1.117	3.8	102	0.02
92		Benzo(g,h,i)perylene	1.180	1.124	4.7	101	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 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_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
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Instrument :
BNA_P
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ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 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	104	0.00
2		1,4-Dioxane	40.000	37.880	5.3	105	0.00
3		Pyridine	40.000	38.718	3.2	105	0.00
4		n-Nitrosodimethylamine	40.000	38.646	3.4	106	0.00
5	S	2-Fluorophenol	80.000	78.230	2.2	106	0.00
6		Aniline	40.000	39.413	1.5	106	0.00
7	S	Phenol-d6	80.000	78.704	1.6	105	0.00
8		2-Chlorophenol	40.000	39.149	2.1	106	0.00
9		Benzaldehyde	40.000	40.389	-1.0	109	0.00
10	C	Phenol	40.000	38.869	2.8	105	0.00
11		bis(2-Chloroethyl)ether	40.000	38.203	4.5	104	0.00
12		1,3-Dichlorobenzene	40.000	38.353	4.1	105	0.00
13	C	1,4-Dichlorobenzene	40.000	37.960	5.1	104	0.00
14		1,2-Dichlorobenzene	40.000	38.116	4.7	105	0.00
15		Benzyl Alcohol	40.000	39.999	0.0	106	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	38.356	4.1	105	0.00
17		2-Methylphenol	40.000	39.636	0.9	106	0.00
18		Hexachloroethane	40.000	38.587	3.5	105	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	39.697	0.8	105	0.00
20		3+4-Methylphenols	40.000	39.629	0.9	105	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	106	0.00
22		Acetophenone	40.000	38.611	3.5	104	0.00
23	S	Nitrobenzene-d5	80.000	78.652	1.7	105	0.00
24		Nitrobenzene	40.000	39.045	2.4	106	0.00
25		Isophorone	40.000	39.677	0.8	106	0.00
26	C	2-Nitrophenol	40.000	41.892	-4.7	109	0.00
27		2,4-Dimethylphenol	40.000	39.779	0.6	105	0.00
28		bis(2-Chloroethoxy)methane	40.000	38.608	3.5	105	0.00
29	C	2,4-Dichlorophenol	40.000	40.558	-1.4	105	0.00
30		1,2,4-Trichlorobenzene	40.000	38.264	4.3	104	0.00
31		Naphthalene	40.000	38.223	4.4	104	0.00
32		Benzoic acid	40.000	43.618	-9.0	111	0.00
33		4-Chloroaniline	40.000	39.499	1.3	105	0.00
34	C	Hexachlorobutadiene	40.000	38.854	2.9	106	0.00
35		Caprolactam	40.000	40.859	-2.1	106	0.00
36	C	4-Chloro-3-methylphenol	40.000	39.702	0.7	105	0.00
37		2-Methylnaphthalene	40.000	38.762	3.1	105	0.00
38		1-Methylnaphthalene	40.000	38.874	2.8	107	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	104	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	38.988	2.5	105	0.00
41	P	Hexachlorocyclopentadiene	40.000	41.026	-2.6	105	0.00
42	S	2,4,6-Tribromophenol	80.000	81.766	-2.2	106	0.00
43	C	2,4,6-Trichlorophenol	40.000	40.950	-2.4	105	0.00
44		2,4,5-Trichlorophenol	40.000	40.985	-2.5	105	0.00
45	S	2-Fluorobiphenyl	80.000	77.885	2.6	104	0.00
46		1,1'-Biphenyl	40.000	38.846	2.9	104	0.00
47		2-Chloronaphthalene	40.000	39.006	2.5	105	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 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	41.137	-2.8	106	0.00
49		Acenaphthylene	40.000	39.262	1.8	105	0.00
50		Dimethylphthalate	40.000	38.548	3.6	103	0.00
51		2,6-Dinitrotoluene	40.000	39.611	1.0	103	0.00
52	C	Acenaphthene	40.000	38.881	2.8	104	0.00
53		3-Nitroaniline	40.000	40.719	-1.8	104	0.00
54	P	2,4-Dinitrophenol	40.000	42.791	-7.0	108	0.00
55		Dibenzofuran	40.000	38.264	4.3	103	0.00
56	P	4-Nitrophenol	40.000	42.293	-5.7	105	0.00
57		2,4-Dinitrotoluene	40.000	41.106	-2.8	105	0.00
58		Fluorene	40.000	39.061	2.3	104	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	39.844	0.4	103	0.00
60		Diethylphthalate	40.000	38.539	3.7	103	0.00
61		4-Chlorophenyl-phenylether	40.000	38.572	3.6	103	0.00
62		4-Nitroaniline	40.000	41.253	-3.1	104	0.00
63		Azobenzene	40.000	39.347	1.6	104	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	105	0.00
65		4,6-Dinitro-2-methylphenol	40.000	40.442	-1.1	105	0.00
66	c	n-Nitrosodiphenylamine	40.000	39.234	1.9	105	0.00
67		4-Bromophenyl-phenylether	40.000	38.892	2.8	104	0.00
68		Hexachlorobenzene	40.000	39.073	2.3	105	0.00
69		Atrazine	40.000	36.287	9.3	103	0.00
70	C	Pentachlorophenol	40.000	41.161	-2.9	103	0.00
71		Phenanthrene	40.000	38.379	4.1	102	0.00
72		Anthracene	40.000	39.358	1.6	104	0.01
73		Carbazole	40.000	39.665	0.8	103	0.01
74		Di-n-butylphthalate	40.000	40.866	-2.2	104	0.01
75	C	Fluoranthene	40.000	39.006	2.5	103	0.02
76	I	Chrysene-d12	20.000	20.000	0.0	101	0.01
77		Benzidine	40.000	39.777	0.6	85	0.01
78		Pyrene	40.000	39.565	1.1	103	0.01
79	S	Terphenyl-d14	80.000	78.549	1.8	102	0.01
80		Butylbenzylphthalate	40.000	40.824	-2.1	101	0.02
81		Benzo(a)anthracene	40.000	39.318	1.7	102	0.02
82		3,3'-Dichlorobenzidine	40.000	41.750	-4.4	103	0.02
83		Chrysene	40.000	38.624	3.4	101	0.01
84		Bis(2-ethylhexyl)phthalate	40.000	41.569	-3.9	103	0.02
85	c	Di-n-octyl phthalate	40.000	42.452	-6.1	105	0.02
86	I	Perylene-d12	20.000	20.000	0.0	104	0.01
87		Indeno(1,2,3-cd)pyrene	40.000	38.387	4.0	102	0.03
88		Benzo(b)fluoranthene	40.000	38.891	2.8	103	0.01
89		Benzo(k)fluoranthene	40.000	38.280	4.3	104	0.02
90	C	Benzo(a)pyrene	40.000	38.607	3.5	102	0.02
91		Dibenzo(a,h)anthracene	40.000	38.474	3.8	102	0.02
92		Benzo(g,h,i)perylene	40.000	38.087	4.8	101	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024168.D
Acq On : 12 Mar 2025 21:43
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
ICVBP031225

Quant Time: Mar 13 04:44:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 04:38:17 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

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date/Time: 04/09/2025 09:09

Lab File ID: BM049859.D Init. Calib. Date(s): 04/08/2025 04/08/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:35 20:07

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.178	1.196		1.5	
Benzaldehyde	0.752	0.661		-12.1	
Phenol-d6	1.465	1.508		2.9	
Phenol	1.430	1.460		2.1	20.0
bis(2-Chloroethyl)ether	1.121	1.160		3.5	
2-Chlorophenol	1.207	1.229		1.8	
2-Methylphenol	0.881	0.897		1.8	
2,2-oxybis(1-Chloropropane)	1.250	1.279		2.3	
Acetophenone	0.486	0.499		2.7	
3+4-Methylphenols	1.201	1.214		1.1	
n-Nitroso-di-n-propylamine	0.812	0.846	0.050	4.2	
Nitrobenzene-d5	0.359	0.370		3.1	
Hexachloroethane	0.500	0.504		0.8	
Nitrobenzene	0.346	0.354		2.3	
Isophorone	0.602	0.610		1.3	
2-Nitrophenol	0.183	0.186		1.6	20.0
2,4-Dimethylphenol	0.208	0.214		2.9	
bis(2-Chloroethoxy)methane	0.403	0.417		3.5	
2,4-Dichlorophenol	0.345	0.348		0.9	20.0
Naphthalene	1.028	1.045		1.7	
4-Chloroaniline	0.363	0.379		4.4	
Hexachlorobutadiene	0.247	0.252		2.0	20.0
Caprolactam	0.099	0.097		-2.0	
4-Chloro-3-methylphenol	0.302	0.306		1.3	20.0
2-Methylnaphthalene	0.724	0.748		3.3	
Hexachlorocyclopentadiene	0.245	0.263	0.050	7.3	
2,4,6-Trichlorophenol	0.445	0.457		2.7	20.0
2-Fluorobiphenyl	1.475	1.541		4.5	
2,4,5-Trichlorophenol	0.484	0.490		1.2	
1,1-Biphenyl	1.487	1.543		3.8	
2-Chloronaphthalene	1.169	1.198		2.5	
2-Nitroaniline	0.270	0.281		4.1	
Dimethylphthalate	1.411	1.453		3.0	
Acenaphthylene	1.702	1.748		2.7	
2,6-Dinitrotoluene	0.296	0.310		4.7	
3-Nitroaniline	0.286	0.305		6.6	
Acenaphthene	1.083	1.114		2.9	20.0
2,4-Dinitrophenol	0.175	0.181	0.050	3.4	
4-Nitrophenol	0.255	0.271	0.050	6.3	

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date/Time: 04/09/2025 09:09

Lab File ID: BM049859.D Init. Calib. Date(s): 04/08/2025 04/08/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:35 20:07

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.810	1.863		2.9	
2,4-Dinitrotoluene	0.394	0.418		6.1	
Diethylphthalate	1.353	1.394		3.0	
4-Chlorophenyl-phenylether	0.771	0.808		4.8	
Fluorene	1.439	1.500		4.2	
4-Nitroaniline	0.295	0.317		7.5	
4,6-Dinitro-2-methylphenol	0.126	0.128		1.6	
n-Nitrosodiphenylamine	0.599	0.620		3.5	20.0
2,4,6-Tribromophenol	0.291	0.294		1.0	
4-Bromophenyl-phenylether	0.232	0.238		2.6	
Hexachlorobenzene	0.266	0.274		3.0	
Atrazine	0.155	0.137		-11.6	
Pentachlorophenol	0.196	0.192		-2.0	20.0
Phenanthrene	1.096	1.136		3.7	
Anthracene	1.081	1.120		3.6	
Carbazole	1.018	1.055		3.6	
Di-n-butylphthalate	1.172	1.208		3.1	
Fluoranthene	1.348	1.391		3.2	20.0
Pyrene	1.378	1.446		4.9	
Terphenyl-d14	1.067	1.223		14.6	
Butylbenzylphthalate	0.518	0.527		1.7	
3,3-Dichlorobenzidine	0.502	0.507		1.0	
Benzo(a)anthracene	1.329	1.372		3.2	
Chrysene	1.264	1.297		2.6	
Bis(2-ethylhexyl)phthalate	0.755	0.791		4.8	
Di-n-octyl phthalate	1.320	1.321		0.1	20.0
Benzo(b)fluoranthene	1.277	1.298		1.6	
Benzo(k)fluoranthene	1.238	1.290		4.2	
Benzo(a)pyrene	1.122	1.138		1.4	20.0
Indeno(1,2,3-cd)pyrene	1.491	1.514		1.5	
Dibenzo(a,h)anthracene	1.228	1.243		1.2	
Benzo(g,h,i)perylene	1.255	1.265		0.8	
1,2,4,5-Tetrachlorobenzene	0.700	0.722		3.1	
1,4-Dioxane	0.485	0.491		1.2	20.0
2,3,4,6-Tetrachlorophenol	0.424	0.427		0.7	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.775	152	296698	20.000	ng		0.00
21) Naphthalene-d8	10.569	136	1015269	20.000	ng		0.00
39) Acenaphthene-d10	14.422	164	639621	20.000	ng		0.00
64) Phenanthrene-d10	17.163	188	1259632	20.000	ng		0.00
76) Chrysene-d12	21.398	240	1253559	20.000	ng		0.00
86) Perylene-d12	24.397	264	1316817	20.000	ng		-0.01
System Monitoring Compounds							
5) 2-Fluorophenol	5.357	112	1419493	81.241	ng		0.00
7) Phenol-d6	6.951	99	1790241	82.351	ng		0.00
23) Nitrobenzene-d5	8.934	82	1503388	82.457	ng		0.00
42) 2,4,6-Tribromophenol	15.910	330	753144	80.953	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	3942276	83.577	ng		0.00
79) Terphenyl-d14	19.786	244	6133685	91.698	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.263	88	291398	40.495	ng		99
3) Pyridine	3.663	79	753004	39.829	ng		100
4) n-Nitrosodimethylamine	3.569	42	296600	41.224	ng		96
6) Aniline	7.104	93	796200	42.743	ng		99
8) 2-Chlorophenol	7.346	128	729446	40.737	ng		100
9) Benzaldehyde	6.916	77	392292	35.165	ng		99
10) Phenol	6.975	94	866162	40.829	ng		98
11) bis(2-Chloroethyl)ether	7.198	93	688177	41.367	ng		100
12) 1,3-Dichlorobenzene	7.669	146	862092	40.722	ng		98
13) 1,4-Dichlorobenzene	7.810	146	864579	40.588	ng		98
14) 1,2-Dichlorobenzene	8.128	146	818032	40.772	ng		100
15) Benzyl Alcohol	8.016	79	554408	40.500	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.304	45	759071	40.937	ng		100
17) 2-Methylphenol	8.222	107	532364	40.722	ng		99
18) Hexachloroethane	8.857	117	299242	40.379	ng		98
19) n-Nitroso-di-n-propyla...	8.581	70	502308	41.719	ng		99
20) 3+4-Methylphenols	8.551	107	720564	40.429	ng		98
22) Acetophenone	8.598	105	1012423	41.032	ng	#	99
24) Nitrobenzene	8.975	77	719142	40.963	ng		98
25) Isophorone	9.504	82	1237624	40.521	ng		99
26) 2-Nitrophenol	9.687	139	378566	40.684	ng		98
27) 2,4-Dimethylphenol	9.751	122	434235	41.179	ng		98
28) bis(2-Chloroethoxy)met...	9.981	93	846304	41.389	ng		98
29) 2,4-Dichlorophenol	10.222	162	706425	40.301	ng		99
30) 1,2,4-Trichlorobenzene	10.434	180	817401	40.309	ng		98
31) Naphthalene	10.622	128	2122646	40.688	ng		99
32) Benzoic acid	9.881	122	489631	39.334	ng		98
33) 4-Chloroaniline	10.728	127	770178	41.809	ng		99
34) Hexachlorobutadiene	10.910	225	510989	40.738	ng		99
35) Caprolactam	11.510	113	197131	39.211	ng		98
36) 4-Chloro-3-methylphenol	11.863	107	621964	40.507	ng		99
37) 2-Methylnaphthalene	12.233	142	1519024	41.327	ng		99
38) 1-Methylnaphthalene	12.457	142	1470447	41.064	ng		100
40) 1,2,4,5-Tetrachloroben...	12.610	216	923807	41.284	ng		99
41) Hexachlorocyclopentadiene	12.592	237	336985	42.977	ng		98
43) 2,4,6-Trichlorophenol	12.851	196	584357	41.039	ng		98

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

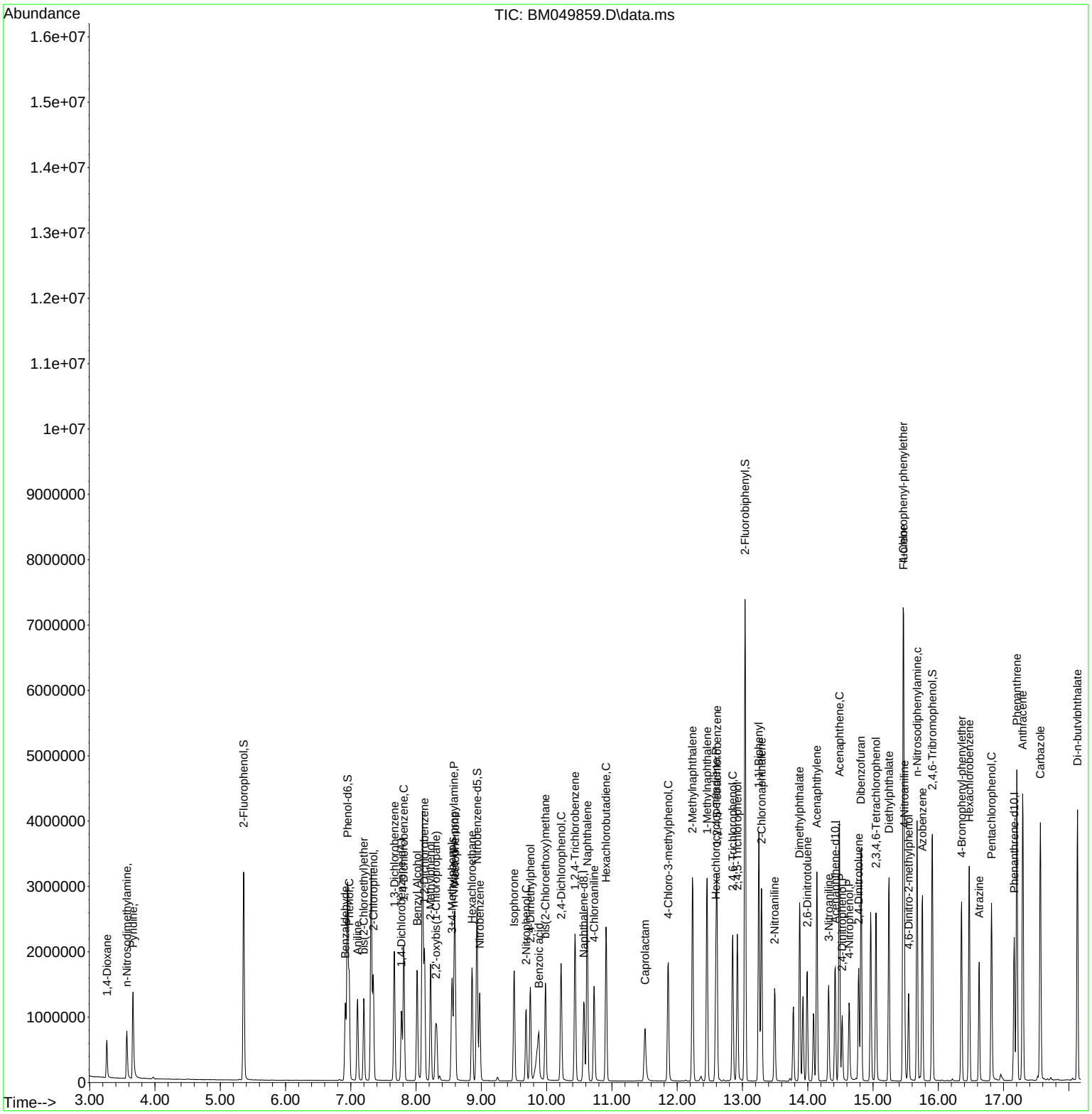
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.922	196	627159	40.530	ng	99
46) 1,1'-Biphenyl	13.251	154	1974373	41.524	ng	99
47) 2-Chloronaphthalene	13.292	162	1532791	41.015	ng	99
48) 2-Nitroaniline	13.492	65	359600	41.593	ng	97
49) Acenaphthylene	14.139	152	2235881	41.073	ng	100
50) Dimethylphthalate	13.874	163	1858623	41.189	ng	99
51) 2,6-Dinitrotoluene	13.992	165	397040	41.996	ng	100
52) Acenaphthene	14.486	154	1425611	41.171	ng	99
53) 3-Nitroaniline	14.322	138	390179	42.701	ng	97
54) 2,4-Dinitrophenol	14.527	184	232138	38.069	ng	98
55) Dibenzofuran	14.816	168	2383415	41.175	ng	100
56) 4-Nitrophenol	14.633	139	347174	42.636	ng	98
57) 2,4-Dinitrotoluene	14.780	165	534617	42.388	ng	98
58) Fluorene	15.469	166	1918474	41.695	ng	100
59) 2,3,4,6-Tetrachlorophenol	15.045	232	545791	40.243	ng	99
60) Diethylphthalate	15.245	149	1783776	41.221	ng	100
61) 4-Chlorophenyl-phenyle...	15.463	204	1033755	41.905	ng	99
62) 4-Nitroaniline	15.480	138	405060	42.866	ng	98
63) Azobenzene	15.757	77	1547471	41.769	ng	98
65) 4,6-Dinitro-2-methylph...	15.545	198	321288	40.477	ng	98
66) n-Nitrosodiphenylamine	15.674	169	1561601	41.426	ng	100
67) 4-Bromophenyl-phenylether	16.357	248	598914	40.958	ng	98
68) Hexachlorobenzene	16.474	284	689312	41.097	ng	100
69) Atrazine	16.627	200	344885	35.286	ng	99
70) Pentachlorophenol	16.815	266	483011	39.115	ng	99
71) Phenanthrene	17.204	178	2860783	41.426	ng	100
72) Anthracene	17.292	178	2820342	41.442	ng	100
73) Carbazole	17.563	167	2656943	41.450	ng	100
74) Di-n-butylphthalate	18.133	149	3044210	41.232	ng	100
75) Fluoranthene	19.221	202	3503995	41.267	ng	99
77) Benzidine	19.404	184	1099441	66.111	ng	100
78) Pyrene	19.580	202	3626164	41.973	ng	99
80) Butylbenzylphthalate	20.486	149	1321828	40.718	ng	96
81) Benzo(a)anthracene	21.380	228	3439017	41.279	ng	99
82) 3,3'-Dichlorobenzidine	21.303	252	1270196	40.373	ng	100
83) Chrysene	21.445	228	3252778	41.068	ng	100
84) Bis(2-ethylhexyl)phtha...	21.309	149	1982392	41.914	ng	99
85) Di-n-octyl phthalate	22.445	149	3312050	40.029	ng	100
87) Indeno(1,2,3-cd)pyrene	27.774	276	3987202	40.621	ng	100
88) Benzo(b)fluoranthene	23.450	252	3418004	40.642	ng	100
89) Benzo(k)fluoranthene	23.515	252	3398151	41.696	ng	99
90) Benzo(a)pyrene	24.256	252	2996579	40.548	ng	99
91) Dibenzo(a,h)anthracene	27.832	278	3274793	40.504	ng	100
92) Benzo(g,h,i)perylene	28.838	276	3330873	40.316	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

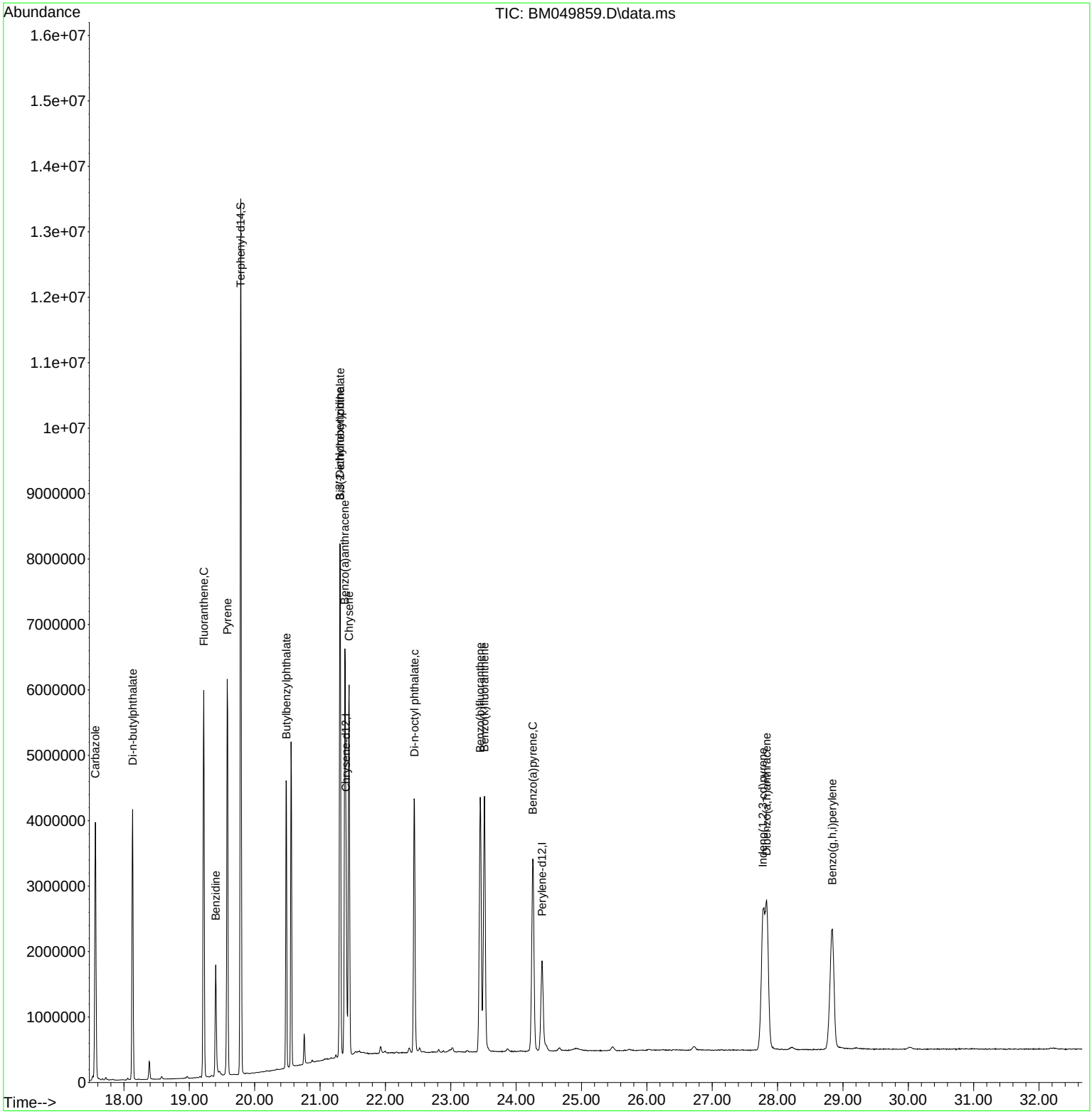
Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Sample Results: **BM049859.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	98	0.00
2		1,4-Dioxane	0.485	0.491	-1.2	99	0.00
3		Pyridine	1.274	1.269	0.4	97	0.00
4		n-Nitrosodimethylamine	0.485	0.500	-3.1	100	0.00
5	S	2-Fluorophenol	1.178	1.196	-1.5	99	0.00
6		Aniline	1.256	1.342	-6.8	99	0.00
7	S	Phenol-d6	1.465	1.508	-2.9	99	0.00
8		2-Chlorophenol	1.207	1.229	-1.8	99	0.00
9		Benzaldehyde	0.752	0.661	12.1	86	0.00
10	C	Phenol	1.430	1.460	-2.1	99	0.00
11		bis(2-Chloroethyl)ether	1.121	1.160	-3.5	100	0.00
12		1,3-Dichlorobenzene	1.427	1.453	-1.8	99	0.00
13	C	1,4-Dichlorobenzene	1.436	1.457	-1.5	98	0.00
14		1,2-Dichlorobenzene	1.352	1.379	-2.0	98	0.00
15		Benzyl Alcohol	0.923	0.934	-1.2	96	0.00
16		2,2'-oxybis(1-Chloropropane	1.250	1.279	-2.3	99	0.00
17		2-Methylphenol	0.881	0.897	-1.8	99	0.00
18		Hexachloroethane	0.500	0.504	-0.8	98	0.00
19	P	n-Nitroso-di-n-propylamine	0.812	0.846	-4.2	99	0.00
20		3+4-Methylphenols	1.201	1.214	-1.1	97	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	99	0.00
22		Acetophenone	0.486	0.499	-2.7	99	0.00
23	S	Nitrobenzene-d5	0.359	0.370	-3.1	100	0.00
24		Nitrobenzene	0.346	0.354	-2.3	98	0.00
25		Isophorone	0.602	0.610	-1.3	98	0.00
26	C	2-Nitrophenol	0.183	0.186	-1.6	97	0.00
27		2,4-Dimethylphenol	0.208	0.214	-2.9	99	0.00
28		bis(2-Chloroethoxy)methane	0.403	0.417	-3.5	100	0.00
29	C	2,4-Dichlorophenol	0.345	0.348	-0.9	97	0.00
30		1,2,4-Trichlorobenzene	0.399	0.403	-1.0	99	0.00
31		Naphthalene	1.028	1.045	-1.7	99	0.00
32		Benzoic acid	0.220	0.241	-9.5	104	0.00
33		4-Chloroaniline	0.363	0.379	-4.4	99	0.00
34	C	Hexachlorobutadiene	0.247	0.252	-2.0	100	0.00
35		Caprolactam	0.099	0.097	2.0	94	0.00
36	C	4-Chloro-3-methylphenol	0.302	0.306	-1.3	98	0.00
37		2-Methylnaphthalene	0.724	0.748	-3.3	101	0.00
38		1-Methylnaphthalene	0.705	0.724	-2.7	100	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00
40		1,2,4,5-Tetrachlorobenzene	0.700	0.722	-3.1	102	0.00
41	P	Hexachlorocyclopentadiene	0.245	0.263	-7.3	99	0.00
42	S	2,4,6-Tribromophenol	0.291	0.294	-1.0	99	0.00
43	C	2,4,6-Trichlorophenol	0.445	0.457	-2.7	99	0.00
44		2,4,5-Trichlorophenol	0.484	0.490	-1.2	97	0.00
45	S	2-Fluorobiphenyl	1.475	1.541	-4.5	101	0.00
46		1,1'-Biphenyl	1.487	1.543	-3.8	100	0.00
47		2-Chloronaphthalene	1.169	1.198	-2.5	100	0.00

Sample Results: **BM049859.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	0.270	0.281	-4.1	98	0.00
49		Acenaphthylene	1.702	1.748	-2.7	100	0.00
50		Dimethylphthalate	1.411	1.453	-3.0	100	0.00
51		2,6-Dinitrotoluene	0.296	0.310	-4.7	99	0.00
52	C	Acenaphthene	1.083	1.114	-2.9	99	0.00
53		3-Nitroaniline	0.286	0.305	-6.6	98	0.00
54	P	2,4-Dinitrophenol	0.175	0.181	-3.4	98	0.00
55		Dibenzofuran	1.810	1.863	-2.9	100	0.00
56	P	4-Nitrophenol	0.255	0.271	-6.3	100	0.00
57		2,4-Dinitrotoluene	0.394	0.418	-6.1	99	0.00
58		Fluorene	1.439	1.500	-4.2	101	0.00
59		2,3,4,6-Tetrachlorophenol	0.424	0.427	-0.7	99	0.00
60		Diethylphthalate	1.353	1.394	-3.0	100	0.00
61		4-Chlorophenyl-phenylether	0.771	0.808	-4.8	102	0.00
62		4-Nitroaniline	0.295	0.317	-7.5	98	0.00
63		Azobenzene	1.158	1.210	-4.5	100	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
65		4,6-Dinitro-2-methylphenol	0.126	0.128	-1.6	97	0.00
66	c	n-Nitrosodiphenylamine	0.599	0.620	-3.5	100	0.00
67		4-Bromophenyl-phenylether	0.232	0.238	-2.6	100	0.00
68		Hexachlorobenzene	0.266	0.274	-3.0	100	0.00
69		Atrazine	0.155	0.137	11.6	106	0.00
70	C	Pentachlorophenol	0.196	0.192	2.0	94	0.00
71		Phenanthrene	1.096	1.136	-3.6	100	0.00
72		Anthracene	1.081	1.120	-3.6	100	0.00
73		Carbazole	1.018	1.055	-3.6	100	0.00
74		Di-n-butylphthalate	1.172	1.208	-3.1	99	0.00
75	C	Fluoranthene	1.348	1.391	-3.2	100	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	98	0.00
77		Benzidine	0.265	0.439	-65.7#	107	0.00
78		Pyrene	1.378	1.446	-4.9	101	0.00
79	S	Terphenyl-d14	1.067	1.223	-14.6	101	0.00
80		Butylbenzylphthalate	0.518	0.527	-1.7	97	0.00
81		Benzo(a)anthracene	1.329	1.372	-3.2	99	0.00
82		3,3'-Dichlorobenzidine	0.502	0.507	-1.0	95	0.00
83		Chrysene	1.264	1.297	-2.6	99	0.00
84		Bis(2-ethylhexyl)phthalate	0.755	0.791	-4.8	99	0.00
85	c	Di-n-octyl phthalate	1.320	1.321	-0.1	95	0.00
86	I	Perylene-d12	1.000	1.000	0.0	95	-0.01
87		Indeno(1,2,3-cd)pyrene	1.491	1.514	-1.5	96	-0.02
88		Benzo(b)fluoranthene	1.277	1.298	-1.6	94	0.00
89		Benzo(k)fluoranthene	1.238	1.290	-4.2	99	0.00
90	C	Benzo(a)pyrene	1.122	1.138	-1.4	96	-0.01
91		Dibenzo(a,h)anthracene	1.228	1.243	-1.2	95	-0.02
92		Benzo(g,h,i)perylene	1.255	1.265	-0.8	95	-0.02

Sample Results: **BM049859.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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: **BM049859.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
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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	98	0.00
2		1,4-Dioxane	40.000	40.495	-1.2	99	0.00
3		Pyridine	40.000	39.829	0.4	97	0.00
4		n-Nitrosodimethylamine	40.000	41.224	-3.1	100	0.00
5	S	2-Fluorophenol	80.000	81.241	-1.6	99	0.00
6		Aniline	40.000	42.743	-6.9	99	0.00
7	S	Phenol-d6	80.000	82.351	-2.9	99	0.00
8		2-Chlorophenol	40.000	40.737	-1.8	99	0.00
9		Benzaldehyde	40.000	35.165	12.1	86	0.00
10	C	Phenol	40.000	40.829	-2.1	99	0.00
11		bis(2-Chloroethyl)ether	40.000	41.367	-3.4	100	0.00
12		1,3-Dichlorobenzene	40.000	40.722	-1.8	99	0.00
13	C	1,4-Dichlorobenzene	40.000	40.588	-1.5	98	0.00
14		1,2-Dichlorobenzene	40.000	40.772	-1.9	98	0.00
15		Benzyl Alcohol	40.000	40.500	-1.3	96	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	40.937	-2.3	99	0.00
17		2-Methylphenol	40.000	40.722	-1.8	99	0.00
18		Hexachloroethane	40.000	40.379	-0.9	98	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	41.719	-4.3	99	0.00
20		3+4-Methylphenols	40.000	40.429	-1.1	97	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	99	0.00
22		Acetophenone	40.000	41.032	-2.6	99	0.00
23	S	Nitrobenzene-d5	80.000	82.457	-3.1	100	0.00
24		Nitrobenzene	40.000	40.963	-2.4	98	0.00
25		Isophorone	40.000	40.521	-1.3	98	0.00
26	C	2-Nitrophenol	40.000	40.684	-1.7	97	0.00
27		2,4-Dimethylphenol	40.000	41.179	-2.9	99	0.00
28		bis(2-Chloroethoxy)methane	40.000	41.389	-3.5	100	0.00
29	C	2,4-Dichlorophenol	40.000	40.301	-0.8	97	0.00
30		1,2,4-Trichlorobenzene	40.000	40.309	-0.8	99	0.00
31		Naphthalene	40.000	40.688	-1.7	99	0.00
32		Benzoic acid	40.000	39.334	1.7	104	0.00
33		4-Chloroaniline	40.000	41.809	-4.5	99	0.00
34	C	Hexachlorobutadiene	40.000	40.738	-1.8	100	0.00
35		Caprolactam	40.000	39.211	2.0	94	0.00
36	C	4-Chloro-3-methylphenol	40.000	40.507	-1.3	98	0.00
37		2-Methylnaphthalene	40.000	41.327	-3.3	101	0.00
38		1-Methylnaphthalene	40.000	41.064	-2.7	100	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	99	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	41.284	-3.2	102	0.00
41	P	Hexachlorocyclopentadiene	40.000	42.977	-7.4	99	0.00
42	S	2,4,6-Tribromophenol	80.000	80.953	-1.2	99	0.00
43	C	2,4,6-Trichlorophenol	40.000	41.039	-2.6	99	0.00
44		2,4,5-Trichlorophenol	40.000	40.530	-1.3	97	0.00
45	S	2-Fluorobiphenyl	80.000	83.577	-4.5	101	0.00
46		1,1'-Biphenyl	40.000	41.524	-3.8	100	0.00
47		2-Chloronaphthalene	40.000	41.015	-2.5	100	0.00

Sample Results: **BM049859.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	41.593	-4.0	98	0.00
49		Acenaphthylene	40.000	41.073	-2.7	100	0.00
50		Dimethylphthalate	40.000	41.189	-3.0	100	0.00
51		2,6-Dinitrotoluene	40.000	41.996	-5.0	99	0.00
52	C	Acenaphthene	40.000	41.171	-2.9	99	0.00
53		3-Nitroaniline	40.000	42.701	-6.8	98	0.00
54	P	2,4-Dinitrophenol	40.000	38.069	4.8	98	0.00
55		Dibenzofuran	40.000	41.175	-2.9	100	0.00
56	P	4-Nitrophenol	40.000	42.636	-6.6	100	0.00
57		2,4-Dinitrotoluene	40.000	42.388	-6.0	99	0.00
58		Fluorene	40.000	41.695	-4.2	101	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	40.243	-0.6	99	0.00
60		Diethylphthalate	40.000	41.221	-3.1	100	0.00
61		4-Chlorophenyl-phenylether	40.000	41.905	-4.8	102	0.00
62		4-Nitroaniline	40.000	42.866	-7.2	98	0.00
63		Azobenzene	40.000	41.769	-4.4	100	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	100	0.00
65		4,6-Dinitro-2-methylphenol	40.000	40.477	-1.2	97	0.00
66	c	n-Nitrosodiphenylamine	40.000	41.426	-3.6	100	0.00
67		4-Bromophenyl-phenylether	40.000	40.958	-2.4	100	0.00
68		Hexachlorobenzene	40.000	41.097	-2.7	100	0.00
69		Atrazine	40.000	35.286	11.8	106	0.00
70	C	Pentachlorophenol	40.000	39.115	2.2	94	0.00
71		Phenanthrene	40.000	41.426	-3.6	100	0.00
72		Anthracene	40.000	41.442	-3.6	100	0.00
73		Carbazole	40.000	41.450	-3.6	100	0.00
74		Di-n-butylphthalate	40.000	41.232	-3.1	99	0.00
75	C	Fluoranthene	40.000	41.267	-3.2	100	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	98	0.00
77		Benzidine	40.000	66.111	-65.3#	107	0.00
78		Pyrene	40.000	41.973	-4.9	101	0.00
79	S	Terphenyl-d14	80.000	91.698	-14.6	101	0.00
80		Butylbenzylphthalate	40.000	40.718	-1.8	97	0.00
81		Benzo(a)anthracene	40.000	41.279	-3.2	99	0.00
82		3,3'-Dichlorobenzidine	40.000	40.373	-0.9	95	0.00
83		Chrysene	40.000	41.068	-2.7	99	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	41.914	-4.8	99	0.00
85	c	Di-n-octyl phthalate	40.000	40.029	-0.1	95	0.00
86	I	Perylene-d12	20.000	20.000	0.0	95	-0.01
87		Indeno(1,2,3-cd)pyrene	40.000	40.621	-1.6	96	-0.02
88		Benzo(b)fluoranthene	40.000	40.642	-1.6	94	0.00
89		Benzo(k)fluoranthene	40.000	41.696	-4.2	99	0.00
90	C	Benzo(a)pyrene	40.000	40.548	-1.4	96	-0.01
91		Dibenzo(a,h)anthracene	40.000	40.504	-1.3	95	-0.02
92		Benzo(g,h,i)perylene	40.000	40.316	-0.8	95	-0.02

Sample Results: **BM049859.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049859.D
Acq On : 09 Apr 2025 09:09
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 11:48:36 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date/Time: 04/10/2025 09:32

Lab File ID: BM049876.D Init. Calib. Date(s): 04/08/2025 04/08/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:35 20:07

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.178	1.166		-1.0	
Benzaldehyde	0.752	0.687		-8.6	
Phenol-d6	1.465	1.437		-1.9	
Phenol	1.430	1.404		-1.8	20.0
bis(2-Chloroethyl)ether	1.121	1.103		-1.6	
2-Chlorophenol	1.207	1.188		-1.6	
2-Methylphenol	0.881	0.857		-2.7	
2,2-oxybis(1-Chloropropane)	1.250	1.227		-1.8	
Acetophenone	0.486	0.492		1.2	
3+4-Methylphenols	1.201	1.171		-2.5	
n-Nitroso-di-n-propylamine	0.812	0.797	0.050	-1.8	
Nitrobenzene-d5	0.359	0.367		2.2	
Hexachloroethane	0.500	0.490		-2.0	
Nitrobenzene	0.346	0.348		0.6	
Isophorone	0.602	0.607		0.8	
2-Nitrophenol	0.183	0.190		3.8	20.0
2,4-Dimethylphenol	0.208	0.213		2.4	
bis(2-Chloroethoxy)methane	0.403	0.407		1.0	
2,4-Dichlorophenol	0.345	0.354		2.6	20.0
Naphthalene	1.028	1.040		1.2	
4-Chloroaniline	0.363	0.372		2.5	
Hexachlorobutadiene	0.247	0.257		4.0	20.0
Caprolactam	0.099	0.097		-2.0	
4-Chloro-3-methylphenol	0.302	0.304		0.7	20.0
2-Methylnaphthalene	0.724	0.739		2.1	
Hexachlorocyclopentadiene	0.245	0.267	0.050	9.0	
2,4,6-Trichlorophenol	0.445	0.462		3.8	20.0
2-Fluorobiphenyl	1.475	1.523		3.3	
2,4,5-Trichlorophenol	0.484	0.499		3.1	
1,1-Biphenyl	1.487	1.523		2.4	
2-Chloronaphthalene	1.169	1.192		2.0	
2-Nitroaniline	0.270	0.275		1.9	
Dimethylphthalate	1.411	1.436		1.8	
Acenaphthylene	1.702	1.738		2.1	
2,6-Dinitrotoluene	0.296	0.308		4.1	
3-Nitroaniline	0.286	0.303		5.9	
Acenaphthene	1.083	1.105		2.0	20.0
2,4-Dinitrophenol	0.175	0.186	0.050	6.3	
4-Nitrophenol	0.255	0.263	0.050	3.1	

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date/Time: 04/10/2025 09:32

Lab File ID: BM049876.D Init. Calib. Date(s): 04/08/2025 04/08/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:35 20:07

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.810	1.845		1.9	
2,4-Dinitrotoluene	0.394	0.418		6.1	
Diethylphthalate	1.353	1.368		1.1	
4-Chlorophenyl-phenylether	0.771	0.783		1.6	
Fluorene	1.439	1.462		1.6	
4-Nitroaniline	0.295	0.311		5.4	
4,6-Dinitro-2-methylphenol	0.126	0.129		2.4	
n-Nitrosodiphenylamine	0.599	0.614		2.5	20.0
2,4,6-Tribromophenol	0.291	0.295		1.4	
4-Bromophenyl-phenylether	0.232	0.240		3.4	
Hexachlorobenzene	0.266	0.274		3.0	
Atrazine	0.155	0.167		7.7	
Pentachlorophenol	0.196	0.195		-0.5	20.0
Phenanthrene	1.096	1.123		2.5	
Anthracene	1.081	1.111		2.8	
Carbazole	1.018	1.043		2.5	
Di-n-butylphthalate	1.172	1.210		3.2	
Fluoranthene	1.348	1.368		1.5	20.0
Pyrene	1.378	1.448		5.1	
Terphenyl-d14	1.067	1.192		11.7	
Butylbenzylphthalate	0.518	0.545		5.2	
3,3-Dichlorobenzidine	0.502	0.524		4.4	
Benzo(a)anthracene	1.329	1.351		1.7	
Chrysene	1.264	1.292		2.2	
Bis(2-ethylhexyl)phthalate	0.755	0.777		2.9	
Di-n-octyl phthalate	1.320	1.367		3.6	20.0
Benzo(b)fluoranthene	1.277	1.267		-0.8	
Benzo(k)fluoranthene	1.238	1.241		0.2	
Benzo(a)pyrene	1.122	1.131		0.8	20.0
Indeno(1,2,3-cd)pyrene	1.491	1.512		1.4	
Dibenzo(a,h)anthracene	1.228	1.240		1.0	
Benzo(g,h,i)perylene	1.255	1.269		1.1	
1,2,4,5-Tetrachlorobenzene	0.700	0.726		3.7	
1,4-Dioxane	0.485	0.475		-2.1	20.0
2,3,4,6-Tetrachlorophenol	0.424	0.428		0.9	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.781	152	319220	20.000	ng		0.00
21) Naphthalene-d8	10.574	136	1042650	20.000	ng		0.00
39) Acenaphthene-d10	14.421	164	653251	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1279702	20.000	ng		0.00
76) Chrysene-d12	21.397	240	1240973	20.000	ng		0.00
86) Perylene-d12	24.397	264	1368352	20.000	ng		-0.01
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	1489448	79.230	ng		0.00
7) Phenol-d6	6.951	99	1835259	78.466	ng		0.00
23) Nitrobenzene-d5	8.933	82	1528609	81.639	ng		0.00
42) 2,4,6-Tribromophenol	15.909	330	771794	81.226	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	3980551	82.628	ng		0.00
79) Terphenyl-d14	19.786	244	5918915	89.384	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.263	88	303115	39.152	ng		99
3) Pyridine	3.663	79	796815	39.173	ng		98
4) n-Nitrosodimethylamine	3.569	42	307458	39.718	ng		95
6) Aniline	7.104	93	806150	40.224	ng		100
8) 2-Chlorophenol	7.345	128	758611	39.377	ng		99
9) Benzaldehyde	6.916	77	438868	36.564	ng		100
10) Phenol	6.981	94	896341	39.271	ng		98
11) bis(2-Chloroethyl)ether	7.204	93	704248	39.346	ng		99
12) 1,3-Dichlorobenzene	7.669	146	912645	40.069	ng		98
13) 1,4-Dichlorobenzene	7.816	146	911298	39.763	ng		99
14) 1,2-Dichlorobenzene	8.128	146	857096	39.705	ng		99
15) Benzyl Alcohol	8.016	79	578059	39.248	ng		98
16) 2,2'-oxybis(1-Chloropr...	8.310	45	783113	39.254	ng		100
17) 2-Methylphenol	8.222	107	547247	38.907	ng		100
18) Hexachloroethane	8.857	117	312572	39.202	ng		97
19) n-Nitroso-di-n-propyla...	8.586	70	508773	39.274	ng		99
20) 3+4-Methylphenols	8.551	107	747832	38.998	ng		99
22) Acetophenone	8.598	105	1025739	40.480	ng	#	98
24) Nitrobenzene	8.975	77	725038	40.214	ng		97
25) Isophorone	9.504	82	1266219	40.369	ng		99
26) 2-Nitrophenol	9.686	139	396697	41.513	ng		99
27) 2,4-Dimethylphenol	9.751	122	445043	41.095	ng		100
28) bis(2-Chloroethoxy)met...	9.986	93	848995	40.430	ng		99
29) 2,4-Dichlorophenol	10.222	162	737969	40.995	ng		100
30) 1,2,4-Trichlorobenzene	10.439	180	853822	40.999	ng		100
31) Naphthalene	10.622	128	2168888	40.483	ng		100
32) Benzoic acid	9.886	122	507659	39.630	ng		98
33) 4-Chloroaniline	10.727	127	776309	41.035	ng		99
34) Hexachlorobutadiene	10.910	225	536216	41.626	ng		97
35) Caprolactam	11.510	113	201494	39.026	ng		98
36) 4-Chloro-3-methylphenol	11.863	107	632987	40.143	ng		100
37) 2-Methylnaphthalene	12.239	142	1541101	40.827	ng		99
38) 1-Methylnaphthalene	12.457	142	1487131	40.439	ng		100
40) 1,2,4,5-Tetrachloroben...	12.610	216	948924	41.521	ng		99
41) Hexachlorocyclopentadiene	12.592	237	348379	43.503	ng		99
43) 2,4,6-Trichlorophenol	12.851	196	603479	41.497	ng		99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

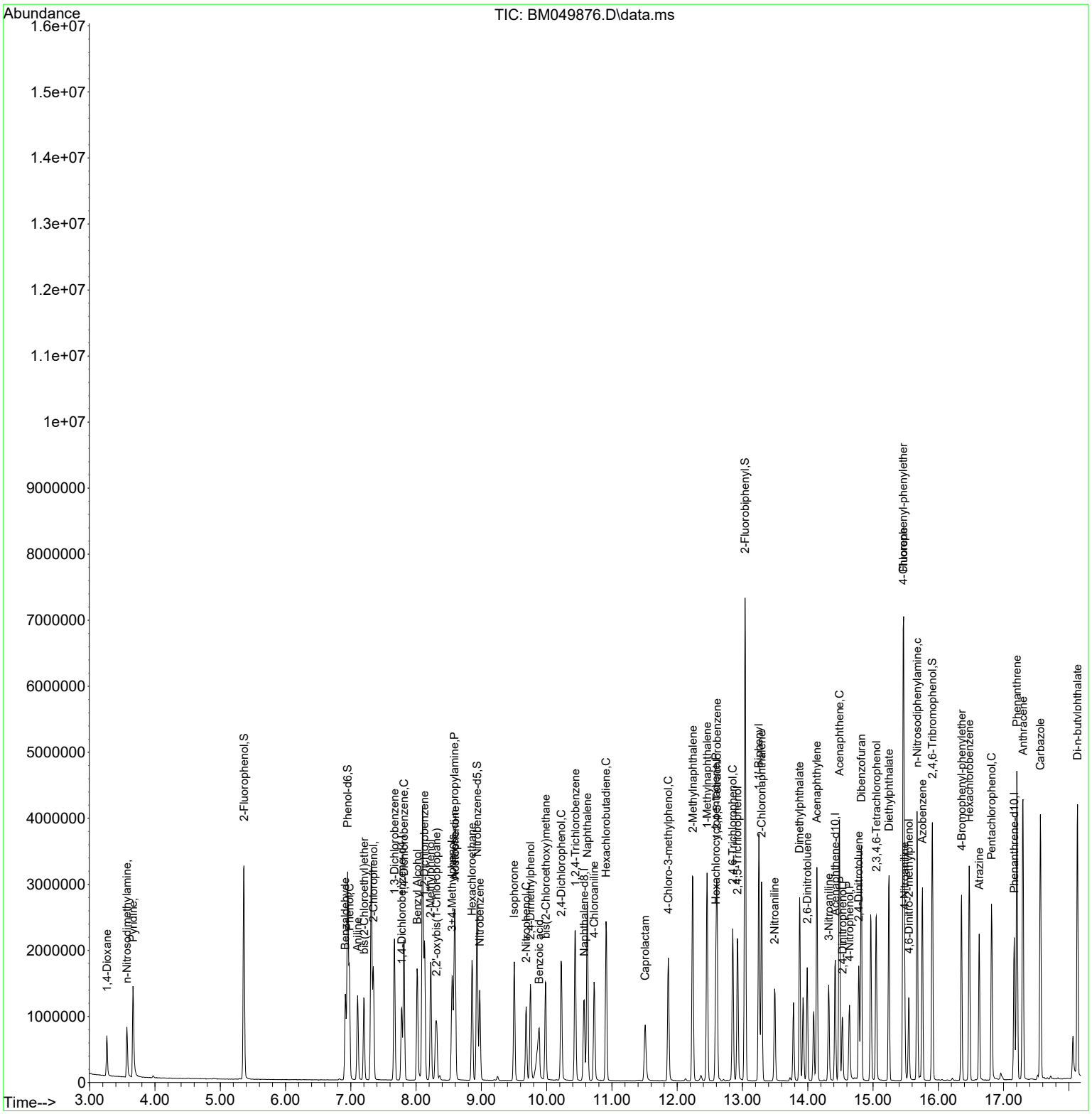
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.921	196	651481	41.224	ng	98
46) 1,1'-Biphenyl	13.251	154	1989806	40.976	ng	99
47) 2-Chloronaphthalene	13.292	162	1556856	40.790	ng	99
48) 2-Nitroaniline	13.492	65	359891	40.758	ng	97
49) Acenaphthylene	14.139	152	2270125	40.832	ng	100
50) Dimethylphthalate	13.874	163	1875746	40.701	ng	99
51) 2,6-Dinitrotoluene	13.992	165	402852	41.722	ng	98
52) Acenaphthene	14.486	154	1444316	40.841	ng	99
53) 3-Nitroaniline	14.321	138	396394	42.476	ng	97
54) 2,4-Dinitrophenol	14.533	184	243202	38.865	ng	97
55) Dibenzofuran	14.821	168	2410617	40.776	ng	99
56) 4-Nitrophenol	14.639	139	343910	41.354	ng	98
57) 2,4-Dinitrotoluene	14.780	165	546172	42.400	ng	96
58) Fluorene	15.468	166	1910592	40.657	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.051	232	558780	40.341	ng	99
60) Diethylphthalate	15.245	149	1786820	40.430	ng	99
61) 4-Chlorophenyl-phenyle...	15.462	204	1022448	40.582	ng	99
62) 4-Nitroaniline	15.486	138	405788	42.047	ng	99
63) Azobenzene	15.756	77	1535782	40.588	ng	97
65) 4,6-Dinitro-2-methylph...	15.551	198	329580	40.870	ng	98
66) n-Nitrosodiphenylamine	15.674	169	1572499	41.061	ng	100
67) 4-Bromophenyl-phenylether	16.356	248	613620	41.305	ng	97
68) Hexachlorobenzene	16.474	284	700815	41.127	ng	98
69) Atrazine	16.627	200	427194	43.022	ng	99
70) Pentachlorophenol	16.815	266	498137	39.707	ng	99
71) Phenanthrene	17.203	178	2875162	40.981	ng	100
72) Anthracene	17.298	178	2843094	41.121	ng	99
73) Carbazole	17.562	167	2670007	41.001	ng	100
74) Di-n-butylphthalate	18.133	149	3096383	41.281	ng	100
75) Fluoranthene	19.221	202	3501102	40.587	ng	99
77) Benzidine	19.403	184	1135587	68.977	ng	99
78) Pyrene	19.586	202	3594146	42.024	ng	99
80) Butylbenzylphthalate	20.480	149	1352556	42.088	ng	100
81) Benzo(a)anthracene	21.380	228	3353051	40.656	ng	100
82) 3,3'-Dichlorobenzidine	21.303	252	1301185	41.777	ng	100
83) Chrysene	21.444	228	3206035	40.889	ng	99
84) Bis(2-ethylhexyl)phtha...	21.303	149	1929348	41.206	ng	99
85) Di-n-octyl phthalate	22.438	149	3392272	41.414	ng	100
87) Indeno(1,2,3-cd)pyrene	27.785	276	4138430	40.573	ng	99
88) Benzo(b)fluoranthene	23.450	252	3467341	39.676	ng	100
89) Benzo(k)fluoranthene	23.515	252	3396697	40.108	ng	100
90) Benzo(a)pyrene	24.256	252	3095192	40.305	ng	99
91) Dibenzo(a,h)anthracene	27.838	278	3392168	40.376	ng	100
92) Benzo(g,h,i)perylene	28.844	276	3473125	40.455	ng	100

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

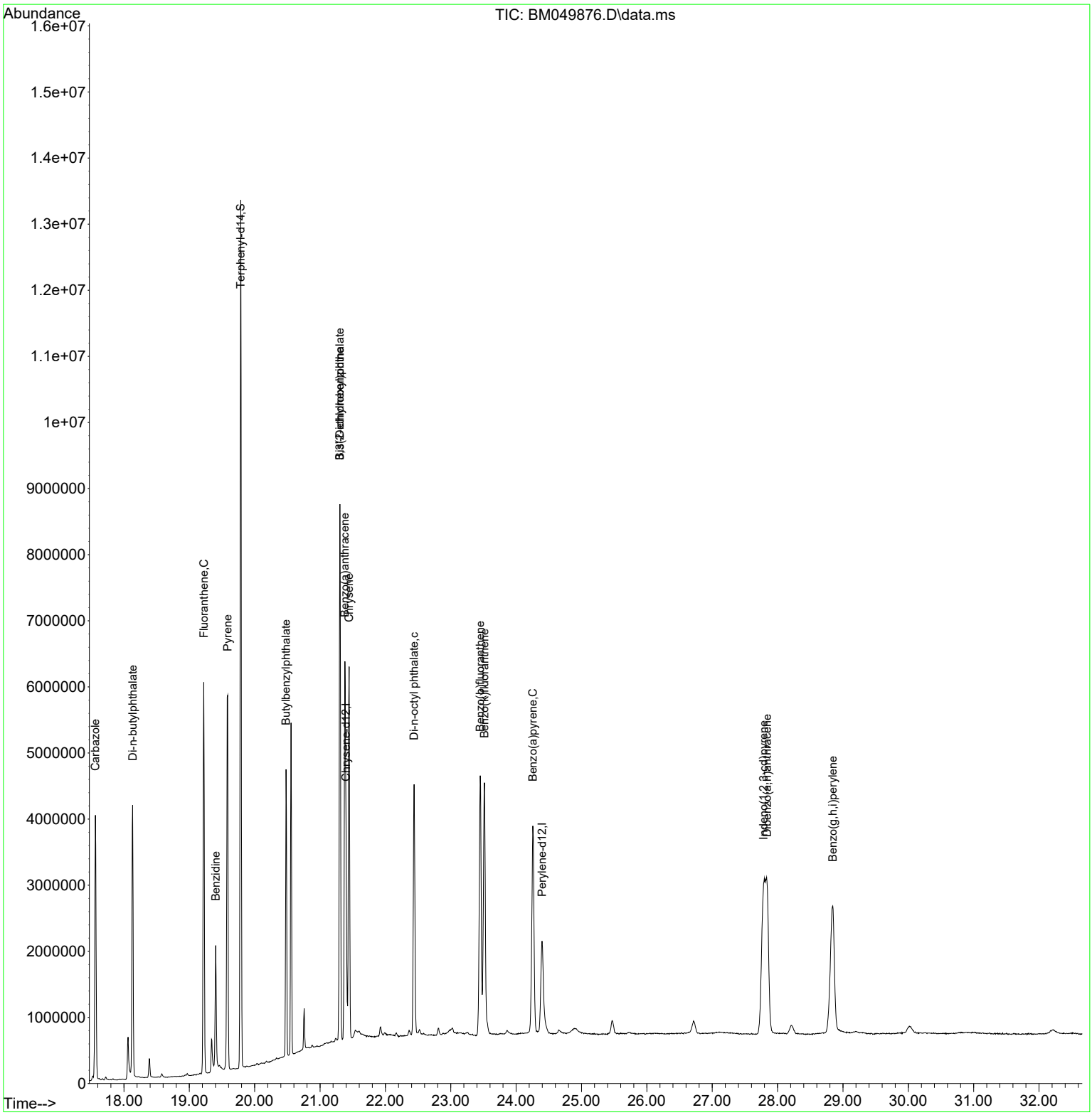
Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Sample Results: **BM049876.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	106	0.00
2		1,4-Dioxane	0.485	0.475	2.1	103	0.00
3		Pyridine	1.274	1.248	2.0	102	0.00
4		n-Nitrosodimethylamine	0.485	0.482	0.6	104	0.00
5	S	2-Fluorophenol	1.178	1.166	1.0	103	0.00
6		Aniline	1.256	1.263	-0.6	101	0.00
7	S	Phenol-d6	1.465	1.437	1.9	102	0.00
8		2-Chlorophenol	1.207	1.188	1.6	103	0.00
9		Benzaldehyde	0.752	0.687	8.6	97	0.00
10	C	Phenol	1.430	1.404	1.8	103	0.00
11		bis(2-Chloroethyl)ether	1.121	1.103	1.6	103	0.00
12		1,3-Dichlorobenzene	1.427	1.429	-0.1	105	0.00
13	C	1,4-Dichlorobenzene	1.436	1.427	0.6	104	0.00
14		1,2-Dichlorobenzene	1.352	1.342	0.7	103	0.00
15		Benzyl Alcohol	0.923	0.905	2.0	100	0.00
16		2,2'-oxybis(1-Chloropropane	1.250	1.227	1.8	102	0.00
17		2-Methylphenol	0.881	0.857	2.7	102	0.00
18		Hexachloroethane	0.500	0.490	2.0	103	0.00
19	P	n-Nitroso-di-n-propylamine	0.812	0.797	1.8	101	0.00
20		3+4-Methylphenols	1.201	1.171	2.5	101	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
22		Acetophenone	0.486	0.492	-1.2	100	0.00
23	S	Nitrobenzene-d5	0.359	0.367	-2.2	101	0.00
24		Nitrobenzene	0.346	0.348	-0.6	99	0.00
25		Isophorone	0.602	0.607	-0.8	100	0.00
26	C	2-Nitrophenol	0.183	0.190	-3.8	102	0.00
27		2,4-Dimethylphenol	0.208	0.213	-2.4	102	0.00
28		bis(2-Chloroethoxy)methane	0.403	0.407	-1.0	101	0.00
29	C	2,4-Dichlorophenol	0.345	0.354	-2.6	102	0.00
30		1,2,4-Trichlorobenzene	0.399	0.409	-2.5	103	0.00
31		Naphthalene	1.028	1.040	-1.2	101	0.00
32		Benzoic acid	0.220	0.243	-10.5	108	0.01
33		4-Chloroaniline	0.363	0.372	-2.5	99	0.00
34	C	Hexachlorobutadiene	0.247	0.257	-4.0	105	0.00
35		Caprolactam	0.099	0.097	2.0	96	0.00
36	C	4-Chloro-3-methylphenol	0.302	0.304	-0.7	100	0.00
37		2-Methylnaphthalene	0.724	0.739	-2.1	102	0.00
38		1-Methylnaphthalene	0.705	0.713	-1.1	102	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00
40		1,2,4,5-Tetrachlorobenzene	0.700	0.726	-3.7	104	0.00
41	P	Hexachlorocyclopentadiene	0.245	0.267	-9.0	102	0.00
42	S	2,4,6-Tribromophenol	0.291	0.295	-1.4	102	0.00
43	C	2,4,6-Trichlorophenol	0.445	0.462	-3.8	102	0.00
44		2,4,5-Trichlorophenol	0.484	0.499	-3.1	101	0.00
45	S	2-Fluorobiphenyl	1.475	1.523	-3.3	102	0.00
46		1,1'-Biphenyl	1.487	1.523	-2.4	101	0.00
47		2-Chloronaphthalene	1.169	1.192	-2.0	101	0.00

Sample Results: **BM049876.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	0.270	0.275	-1.9	98	0.00
49		Acenaphthylene	1.702	1.738	-2.1	101	0.00
50		Dimethylphthalate	1.411	1.436	-1.8	101	0.00
51		2,6-Dinitrotoluene	0.296	0.308	-4.1	101	0.00
52	C	Acenaphthene	1.083	1.105	-2.0	101	0.00
53		3-Nitroaniline	0.286	0.303	-5.9	99	0.00
54	P	2,4-Dinitrophenol	0.175	0.186	-6.3	103	0.00
55		Dibenzofuran	1.810	1.845	-1.9	101	0.00
56	P	4-Nitrophenol	0.255	0.263	-3.1	99	0.00
57		2,4-Dinitrotoluene	0.394	0.418	-6.1	101	0.00
58		Fluorene	1.439	1.462	-1.6	100	0.00
59		2,3,4,6-Tetrachlorophenol	0.424	0.428	-0.9	101	0.00
60		Diethylphthalate	1.353	1.368	-1.1	100	0.00
61		4-Chlorophenyl-phenylether	0.771	0.783	-1.6	101	0.00
62		4-Nitroaniline	0.295	0.311	-5.4	99	0.00
63		Azobenzene	1.158	1.175	-1.5	99	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00
65		4,6-Dinitro-2-methylphenol	0.126	0.129	-2.4	99	0.00
66	c	n-Nitrosodiphenylamine	0.599	0.614	-2.5	101	0.00
67		4-Bromophenyl-phenylether	0.232	0.240	-3.4	102	0.00
68		Hexachlorobenzene	0.266	0.274	-3.0	102	0.00
69		Atrazine	0.155	0.167	-7.7	131	0.00
70	C	Pentachlorophenol	0.196	0.195	0.5	97	0.00
71		Phenanthrene	1.096	1.123	-2.5	101	0.00
72		Anthracene	1.081	1.111	-2.8	100	0.00
73		Carbazole	1.018	1.043	-2.5	100	0.00
74		Di-n-butylphthalate	1.172	1.210	-3.2	101	0.00
75	C	Fluoranthene	1.348	1.368	-1.5	100	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	97	0.00
77		Benzidine	0.265	0.458	-72.8#	110	0.00
78		Pyrene	1.378	1.448	-5.1	100	0.00
79	S	Terphenyl-d14	1.067	1.192	-11.7	98	0.00
80		Butylbenzylphthalate	0.518	0.545	-5.2	99	0.00
81		Benzo(a)anthracene	1.329	1.351	-1.7	96	0.00
82		3,3'-Dichlorobenzidine	0.502	0.524	-4.4	97	0.00
83		Chrysene	1.264	1.292	-2.2	97	0.00
84		Bis(2-ethylhexyl)phthalate	0.755	0.777	-2.9	96	0.00
85	c	Di-n-octyl phthalate	1.320	1.367	-3.6	97	0.00
86	I	Perylene-d12	1.000	1.000	0.0	99	-0.01
87		Indeno(1,2,3-cd)pyrene	1.491	1.512	-1.4	99	-0.01
88		Benzo(b)fluoranthene	1.277	1.267	0.8	96	0.00
89		Benzo(k)fluoranthene	1.238	1.241	-0.2	99	0.00
90	C	Benzo(a)pyrene	1.122	1.131	-0.8	99	-0.01
91		Dibenzo(a,h)anthracene	1.228	1.240	-1.0	99	-0.01
92		Benzo(g,h,i)perylene	1.255	1.269	-1.1	99	-0.01

Sample Results: **BM049876.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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: **BM049876.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	106	0.00
2		1,4-Dioxane	40.000	39.152	2.1	103	0.00
3		Pyridine	40.000	39.173	2.1	102	0.00
4		n-Nitrosodimethylamine	40.000	39.718	0.7	104	0.00
5	S	2-Fluorophenol	80.000	79.230	1.0	103	0.00
6		Aniline	40.000	40.224	-0.6	101	0.00
7	S	Phenol-d6	80.000	78.466	1.9	102	0.00
8		2-Chlorophenol	40.000	39.377	1.6	103	0.00
9		Benzaldehyde	40.000	36.564	8.6	97	0.00
10	C	Phenol	40.000	39.271	1.8	103	0.00
11		bis(2-Chloroethyl)ether	40.000	39.346	1.6	103	0.00
12		1,3-Dichlorobenzene	40.000	40.069	-0.2	105	0.00
13	C	1,4-Dichlorobenzene	40.000	39.763	0.6	104	0.00
14		1,2-Dichlorobenzene	40.000	39.705	0.7	103	0.00
15		Benzyl Alcohol	40.000	39.248	1.9	100	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	39.254	1.9	102	0.00
17		2-Methylphenol	40.000	38.907	2.7	102	0.00
18		Hexachloroethane	40.000	39.202	2.0	103	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	39.274	1.8	101	0.00
20		3+4-Methylphenols	40.000	38.998	2.5	101	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	102	0.00
22		Acetophenone	40.000	40.480	-1.2	100	0.00
23	S	Nitrobenzene-d5	80.000	81.639	-2.0	101	0.00
24		Nitrobenzene	40.000	40.214	-0.5	99	0.00
25		Isophorone	40.000	40.369	-0.9	100	0.00
26	C	2-Nitrophenol	40.000	41.513	-3.8	102	0.00
27		2,4-Dimethylphenol	40.000	41.095	-2.7	102	0.00
28		bis(2-Chloroethoxy)methane	40.000	40.430	-1.1	101	0.00
29	C	2,4-Dichlorophenol	40.000	40.995	-2.5	102	0.00
30		1,2,4-Trichlorobenzene	40.000	40.999	-2.5	103	0.00
31		Naphthalene	40.000	40.483	-1.2	101	0.00
32		Benzoic acid	40.000	39.630	0.9	108	0.01
33		4-Chloroaniline	40.000	41.035	-2.6	99	0.00
34	C	Hexachlorobutadiene	40.000	41.626	-4.1	105	0.00
35		Caprolactam	40.000	39.026	2.4	96	0.00
36	C	4-Chloro-3-methylphenol	40.000	40.143	-0.4	100	0.00
37		2-Methylnaphthalene	40.000	40.827	-2.1	102	0.00
38		1-Methylnaphthalene	40.000	40.439	-1.1	102	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	101	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	41.521	-3.8	104	0.00
41	P	Hexachlorocyclopentadiene	40.000	43.503	-8.8	102	0.00
42	S	2,4,6-Tribromophenol	80.000	81.226	-1.5	102	0.00
43	C	2,4,6-Trichlorophenol	40.000	41.497	-3.7	102	0.00
44		2,4,5-Trichlorophenol	40.000	41.224	-3.1	101	0.00
45	S	2-Fluorobiphenyl	80.000	82.628	-3.3	102	0.00
46		1,1'-Biphenyl	40.000	40.976	-2.4	101	0.00
47		2-Chloronaphthalene	40.000	40.790	-2.0	101	0.00

Sample Results: **BM049876.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	40.758	-1.9	98	0.00
49		Acenaphthylene	40.000	40.832	-2.1	101	0.00
50		Dimethylphthalate	40.000	40.701	-1.8	101	0.00
51		2,6-Dinitrotoluene	40.000	41.722	-4.3	101	0.00
52	C	Acenaphthene	40.000	40.841	-2.1	101	0.00
53		3-Nitroaniline	40.000	42.476	-6.2	99	0.00
54	P	2,4-Dinitrophenol	40.000	38.865	2.8	103	0.00
55		Dibenzofuran	40.000	40.776	-1.9	101	0.00
56	P	4-Nitrophenol	40.000	41.354	-3.4	99	0.00
57		2,4-Dinitrotoluene	40.000	42.400	-6.0	101	0.00
58		Fluorene	40.000	40.657	-1.6	100	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	40.341	-0.9	101	0.00
60		Diethylphthalate	40.000	40.430	-1.1	100	0.00
61		4-Chlorophenyl-phenylether	40.000	40.582	-1.5	101	0.00
62		4-Nitroaniline	40.000	42.047	-5.1	99	0.00
63		Azobenzene	40.000	40.588	-1.5	99	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	102	0.00
65		4,6-Dinitro-2-methylphenol	40.000	40.870	-2.2	99	0.00
66	c	n-Nitrosodiphenylamine	40.000	41.061	-2.7	101	0.00
67		4-Bromophenyl-phenylether	40.000	41.305	-3.3	102	0.00
68		Hexachlorobenzene	40.000	41.127	-2.8	102	0.00
69		Atrazine	40.000	43.022	-7.6	131	0.00
70	C	Pentachlorophenol	40.000	39.707	0.7	97	0.00
71		Phenanthrene	40.000	40.981	-2.5	101	0.00
72		Anthracene	40.000	41.121	-2.8	100	0.00
73		Carbazole	40.000	41.001	-2.5	100	0.00
74		Di-n-butylphthalate	40.000	41.281	-3.2	101	0.00
75	C	Fluoranthene	40.000	40.587	-1.5	100	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	97	0.00
77		Benzidine	40.000	68.977	-72.4#	110	0.00
78		Pyrene	40.000	42.024	-5.1	100	0.00
79	S	Terphenyl-d14	80.000	89.384	-11.7	98	0.00
80		Butylbenzylphthalate	40.000	42.088	-5.2	99	0.00
81		Benzo(a)anthracene	40.000	40.656	-1.6	96	0.00
82		3,3'-Dichlorobenzidine	40.000	41.777	-4.4	97	0.00
83		Chrysene	40.000	40.889	-2.2	97	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	41.206	-3.0	96	0.00
85	c	Di-n-octyl phthalate	40.000	41.414	-3.5	97	0.00
86	I	Perylene-d12	20.000	20.000	0.0	99	-0.01
87		Indeno(1,2,3-cd)pyrene	40.000	40.573	-1.4	99	-0.01
88		Benzo(b)fluoranthene	40.000	39.676	0.8	96	0.00
89		Benzo(k)fluoranthene	40.000	40.108	-0.3	99	0.00
90	C	Benzo(a)pyrene	40.000	40.305	-0.8	99	-0.01
91		Dibenzo(a,h)anthracene	40.000	40.376	-0.9	99	-0.01
92		Benzo(g,h,i)perylene	40.000	40.455	-1.1	99	-0.01

Sample Results: **BM049876.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049876.D
Acq On : 10 Apr 2025 09:32
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:29:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date/Time: 04/16/2025 09:28

Lab File ID: BM049944.D Init. Calib. Date(s): 04/08/2025 04/08/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:35 20:07

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.178	1.130		-4.1	
Benzaldehyde	0.752	1.425		89.5	
Phenol-d6	1.465	1.430		-2.4	
Phenol	1.430	1.390		-2.8	20.0
bis(2-Chloroethyl)ether	1.121	1.132		1.0	
2-Chlorophenol	1.207	1.170		-3.1	
2-Methylphenol	0.881	0.869		-1.4	
2,2-oxybis(1-Chloropropane)	1.250	1.250		0.0	
Acetophenone	0.486	0.466		-4.1	
3+4-Methylphenols	1.201	1.188		-1.1	
n-Nitroso-di-n-propylamine	0.812	0.823	0.050	1.4	
Nitrobenzene-d5	0.359	0.349		-2.8	
Hexachloroethane	0.500	0.476		-4.8	
Nitrobenzene	0.346	0.333		-3.8	
Isophorone	0.602	0.598		-0.7	
2-Nitrophenol	0.183	0.184		0.5	20.0
2,4-Dimethylphenol	0.208	0.207		-0.5	
bis(2-Chloroethoxy)methane	0.403	0.396		-1.7	
2,4-Dichlorophenol	0.345	0.338		-2.0	20.0
Naphthalene	1.028	0.990		-3.7	
4-Chloroaniline	0.363	0.343		-5.5	
Hexachlorobutadiene	0.247	0.242		-2.0	20.0
Caprolactam	0.099	0.097		-2.0	
4-Chloro-3-methylphenol	0.302	0.302		0.0	20.0
2-Methylnaphthalene	0.724	0.714		-1.4	
Hexachlorocyclopentadiene	0.245	0.207	0.050	-15.5	
2,4,6-Trichlorophenol	0.445	0.441		-0.9	20.0
2-Fluorobiphenyl	1.475	1.434		-2.8	
2,4,5-Trichlorophenol	0.484	0.481		-0.6	
1,1-Biphenyl	1.487	1.435		-3.5	
2-Chloronaphthalene	1.169	1.113		-4.8	
2-Nitroaniline	0.270	0.275		1.9	
Dimethylphthalate	1.411	1.396		-1.1	
Acenaphthylene	1.702	1.657		-2.6	
2,6-Dinitrotoluene	0.296	0.304		2.7	
3-Nitroaniline	0.286	0.287		0.3	
Acenaphthene	1.083	1.048		-3.2	20.0
2,4-Dinitrophenol	0.175	0.173	0.050	-1.1	
4-Nitrophenol	0.255	0.247	0.050	-3.1	

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_M Calibration Date/Time: 04/16/2025 09:28

Lab File ID: BM049944.D Init. Calib. Date(s): 04/08/2025 04/08/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:35 20:07

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.810	1.768		-2.3	
2,4-Dinitrotoluene	0.394	0.416		5.6	
Diethylphthalate	1.353	1.343		-0.7	
4-Chlorophenyl-phenylether	0.771	0.772		0.1	
Fluorene	1.439	1.410		-2.0	
4-Nitroaniline	0.295	0.296		0.3	
4,6-Dinitro-2-methylphenol	0.126	0.121		-4.0	
n-Nitrosodiphenylamine	0.599	0.573		-4.3	20.0
2,4,6-Tribromophenol	0.291	0.301		3.4	
4-Bromophenyl-phenylether	0.232	0.231		-0.4	
Hexachlorobenzene	0.266	0.264		-0.8	
Atrazine	0.155	0.191		23.2	
Pentachlorophenol	0.196	0.179		-8.7	20.0
Phenanthrene	1.096	1.053		-3.9	
Anthracene	1.081	1.050		-2.9	
Carbazole	1.018	0.972		-4.5	
Di-n-butylphthalate	1.172	1.152		-1.7	
Fluoranthene	1.348	1.334		-1.0	20.0
Pyrene	1.378	1.390		0.9	
Terphenyl-d14	1.067	1.150		7.8	
Butylbenzylphthalate	0.518	0.514		-0.8	
3,3-Dichlorobenzidine	0.502	0.446		-11.2	
Benzo(a)anthracene	1.329	1.294		-2.6	
Chrysene	1.264	1.209		-4.4	
Bis(2-ethylhexyl)phthalate	0.755	0.731		-3.2	
Di-n-octyl phthalate	1.320	1.247		-5.5	20.0
Benzo(b)fluoranthene	1.277	1.237		-3.1	
Benzo(k)fluoranthene	1.238	1.213		-2.0	
Benzo(a)pyrene	1.122	1.079		-3.8	20.0
Indeno(1,2,3-cd)pyrene	1.491	1.332		-10.7	
Dibenzo(a,h)anthracene	1.228	1.092		-11.1	
Benzo(g,h,i)perylene	1.255	1.086		-13.5	
1,2,4,5-Tetrachlorobenzene	0.700	0.678		-3.1	
1,4-Dioxane	0.485	0.447		-7.8	20.0
2,3,4,6-Tetrachlorophenol	0.424	0.416		-1.9	

All other compounds must meet a minimum RRF of 0.010.

Sample Results: **BM049944.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Manual Integrations APPROVED

Reviewed By :Rahul Chavli

04/17/2025
Supervised By :Jagrut Upadhyay

04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.769	152	390253	20.000	ng	-0.01
21) Naphthalene-d8	10.563	136	1356602	20.000	ng	-0.01
39) Acenaphthene-d10	14.416	164	881748	20.000	ng	0.00
64) Phenanthrene-d10	17.163	188	1791608	20.000	ng	0.00
76) Chrysene-d12	21.403	240	1770465	20.000	ng	0.00
86) Perylene-d12	24.409	264	1819920	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.357	112	1763622	76.739	ng	0.00
7) Phenol-d6	6.951	99	2232469	78.075	ng	0.00
23) Nitrobenzene-d5	8.928	82	1892016	77.663	ng	0.00
42) 2,4,6-Tribromophenol	15.910	330	1060612	82.697	ng	0.00
45) 2-Fluorobiphenyl	13.033	172	5056597	77.764	ng	-0.01
79) Terphenyl-d14	19.786	244	8146988	86.236	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.258	88	348813	36.854	ng	99
3) Pyridine	3.663	79	934989	37.599	ng	99
4) n-Nitrosodimethylamine	3.569	42	369099	39.002	ng	99
6) Aniline	7.098	93	920227	37.558	ng	98
8) 2-Chlorophenol	7.340	128	913252	38.776	ng	98
9) Benzaldehyde	6.910	77	1112076	75.788	ng	100
10) Phenol	6.981	94	1084996	38.884	ng	99
11) bis(2-Chloroethyl)ether	7.198	93	883156	40.360	ng	99
12) 1,3-Dichlorobenzene	7.663	146	1063719	38.201	ng	99
13) 1,4-Dichlorobenzene	7.804	146	1069880	38.185	ng	99
14) 1,2-Dichlorobenzene	8.122	146	1012555	38.369	ng	99
15) Benzyl Alcohol	8.016	79	703469	39.069	ng	98
16) 2,2'-oxybis(1-Chloropr...	8.298	45	975629	40.002	ng	99
17) 2-Methylphenol	8.222	107	678504	39.458	ng	100
18) Hexachloroethane	8.851	117	371444	38.106	ng	96
19) n-Nitroso-di-n-propyla...	8.581	70	642121	40.546	ng	98
20) 3+4-Methylphenols	8.551	107	927119	39.547	ng	99
22) Acetophenone	8.592	105	1264535	38.355	ng	98
24) Nitrobenzene	8.969	77	902946	38.492	ng	98
25) Isophorone	9.498	82	1622366	39.753	ng	99
26) 2-Nitrophenol	9.681	139	500064	40.220	ng	99
27) 2,4-Dimethylphenol	9.751	122	561537	39.852	ng	99
28) bis(2-Chloroethoxy)met...	9.975	93	1074197	39.316	ng	99
29) 2,4-Dichlorophenol	10.228	162	915755	39.098	ng	98
30) 1,2,4-Trichlorobenzene	10.434	180	1042406	38.471	ng	99
31) Naphthalene	10.616	128	2685367	38.523	ng	99
32) Benzoic acid	9.904	122	603488m	36.945	ng	
33) 4-Chloroaniline	10.728	127	930880	37.818	ng	98
34) Hexachlorobutadiene	10.904	225	655515	39.111	ng	99
35) Caprolactam	11.522	113	261960	38.995	ng	97
36) 4-Chloro-3-methylphenol	11.869	107	820695	40.002	ng	100
37) 2-Methylnaphthalene	12.233	142	1936228	39.424	ng	99
38) 1-Methylnaphthalene	12.451	142	1882556	39.345	ng	99
40) 1,2,4,5-Tetrachloroben...	12.604	216	1196479	38.787	ng	99
41) Hexachlorocyclopentadiene	12.580	237	365596	33.823	ng	100
43) 2,4,6-Trichlorophenol	12.851	196	778403	39.655	ng	97

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Manual Integrations APPROVED

Reviewed By :Rahul Chavli

04/17/2025

Supervised By :Jagrut Upadhyay

04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.933	196	848241	39.765	ng	99
46) 1,1'-Biphenyl	13.245	154	2529956	38.598	ng	100
47) 2-Chloronaphthalene	13.292	162	1962548	38.094	ng	98
48) 2-Nitroaniline	13.492	65	484897	40.684	ng	95
49) Acenaphthylene	14.139	152	2922215	38.940	ng	99
50) Dimethylphthalate	13.874	163	2462065	39.579	ng	99
51) 2,6-Dinitrotoluene	13.992	165	536706	41.181	ng	98
52) Acenaphthene	14.480	154	1848519	38.725	ng	99
53) 3-Nitroaniline	14.322	138	505526	40.132	ng	96
54) 2,4-Dinitrophenol	14.539	184	304541	36.577	ng	97
55) Dibenzofuran	14.816	168	3118731	39.083	ng	99
56) 4-Nitrophenol	14.663	139	434912	38.745	ng	98
57) 2,4-Dinitrotoluene	14.786	165	733206	42.170	ng	95
58) Fluorene	15.463	166	2486724	39.204	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.051	232	733155	39.214	ng	97
60) Diethylphthalate	15.239	149	2367777	39.691	ng	98
61) 4-Chlorophenyl-phenyle...	15.457	204	1361867	40.047	ng	99
62) 4-Nitroaniline	15.486	138	521444	40.029	ng	98
63) Azobenzene	15.751	77	1997832	39.117	ng	98
65) 4,6-Dinitro-2-methylph...	15.551	198	434604	38.495	ng	97
66) n-Nitrosodiphenylamine	15.674	169	2052165	38.275	ng	100
67) 4-Bromophenyl-phenylether	16.351	248	827207	39.773	ng	97
68) Hexachlorobenzene	16.474	284	946778	39.686	ng	99
69) Atrazine	16.627	200	685798	49.332	ng	98
70) Pentachlorophenol	16.821	266	642624	36.589	ng	99
71) Phenanthrene	17.204	178	3772633	38.409	ng	100
72) Anthracene	17.292	178	3763190	38.877	ng	99
73) Carbazole	17.568	167	3481817	38.190	ng	99
74) Di-n-butylphthalate	18.127	149	4128736	39.317	ng	100
75) Fluoranthene	19.221	202	4780191	39.581	ng	99
77) Benzidine	19.409	184	684877	29.159	ng	99
78) Pyrene	19.586	202	4920548	40.327	ng	99
80) Butylbenzylphthalate	20.480	149	1820063	39.697	ng	99
81) Benzo(a)anthracene	21.386	228	4581472	38.937	ng	99
82) 3,3'-Dichlorobenzidine	21.309	252	1579114	35.538	ng	100
83) Chrysene	21.450	228	4279987	38.260	ng	99
84) Bis(2-ethylhexyl)phtha...	21.303	149	2588841	38.755	ng	99
85) Di-n-octyl phthalate	22.439	149	4416157	37.790	ng	100
87) Indeno(1,2,3-cd)pyrene	27.809	276	4847172	35.731	ng	99
88) Benzo(b)fluoranthene	23.462	252	4502801	38.740	ng	99
89) Benzo(k)fluoranthene	23.527	252	4416499	39.210	ng	100
90) Benzo(a)pyrene	24.274	252	3928643	38.465	ng	99
91) Dibenzo(a,h)anthracene	27.862	278	3974656	35.570	ng	100
92) Benzo(g,h,i)perylene	28.868	276	3954003	34.628	ng	98

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

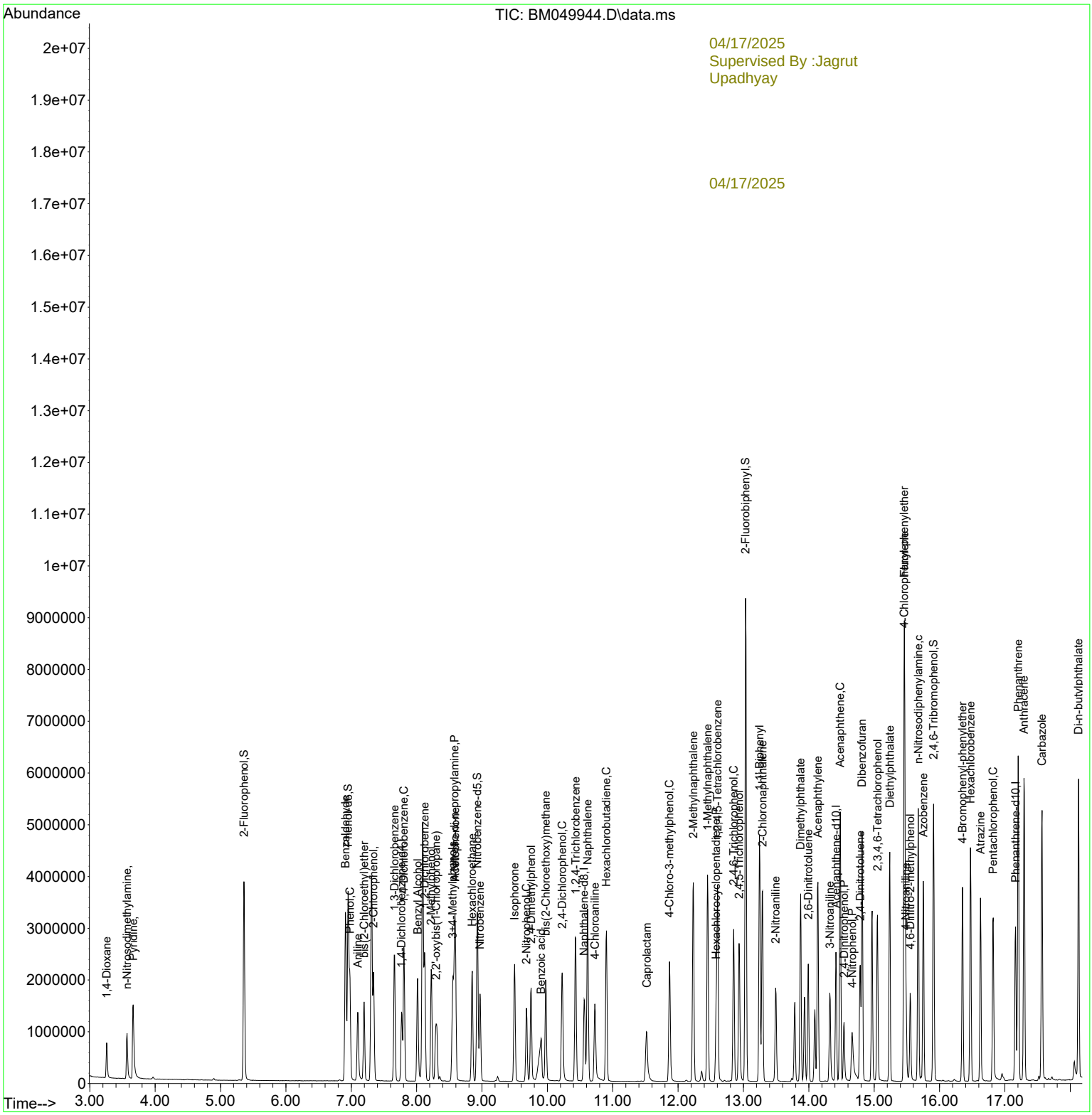
Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Manual Integrations APPROVED

Reviewed By :Rahul Chavli

04/17/2025
Supervised By :Jagrut Upadhyay

04/17/2025



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

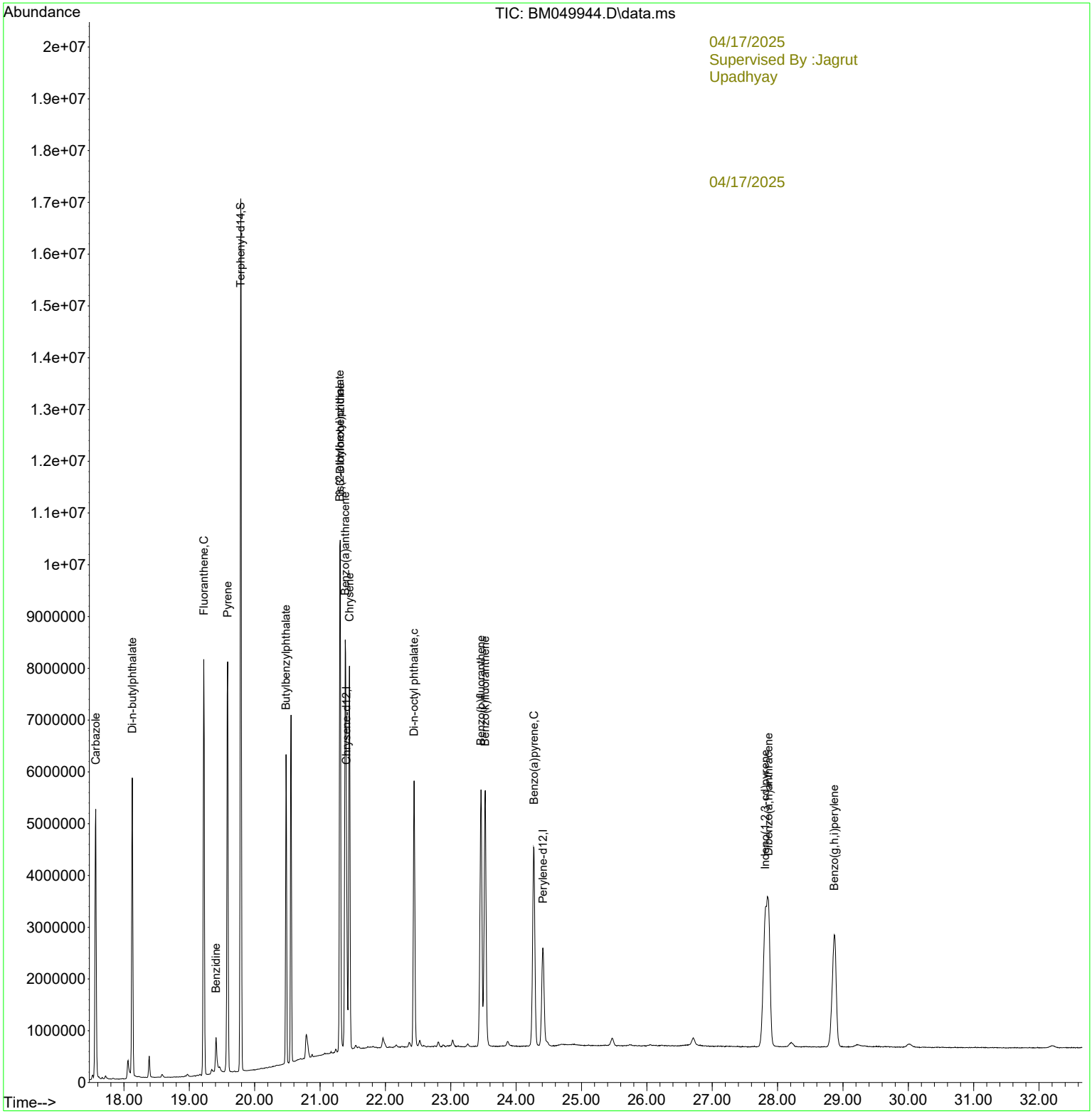
Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Manual Integrations APPROVED

Reviewed By :Rahul Chavli

04/17/2025
Supervised By :Jagrut Upadhyay

04/17/2025



Sample Results: **BM049944.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	129	-0.01
2		1,4-Dioxane	0.485	0.447	7.8	118	0.00
3		Pyridine	1.274	1.198	6.0	120	0.00
4		n-Nitrosodimethylamine	0.485	0.473	2.5	125	0.00
5	S	2-Fluorophenol	1.178	1.130	4.1	122	0.00
6		Aniline	1.256	1.179	6.1	115	0.00
7	S	Phenol-d6	1.465	1.430	2.4	124	0.00
8		2-Chlorophenol	1.207	1.170	3.1	124	0.00
9		Benzaldehyde	0.752	1.425	-89.5#	245#	0.00
10	C	Phenol	1.430	1.390	2.8	124	0.00
11		bis(2-Chloroethyl)ether	1.121	1.132	-1.0	129	0.00
12		1,3-Dichlorobenzene	1.427	1.363	4.5	122	0.00
13	C	1,4-Dichlorobenzene	1.436	1.371	4.5	122	-0.01
14		1,2-Dichlorobenzene	1.352	1.297	4.1	122	-0.01
15		Benzyl Alcohol	0.923	0.901	2.4	122	0.00
16		2,2'-oxybis(1-Chloropropane	1.250	1.250	0.0	127	-0.01
17		2-Methylphenol	0.881	0.869	1.4	126	0.00
18		Hexachloroethane	0.500	0.476	4.8	122	0.00
19	P	n-Nitroso-di-n-propylamine	0.812	0.823	-1.4	127	0.00
20		3+4-Methylphenols	1.201	1.188	1.1	125	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	132	-0.01
22		Acetophenone	0.486	0.466	4.1	124	0.00
23	S	Nitrobenzene-d5	0.359	0.349	2.8	125	0.00
24		Nitrobenzene	0.346	0.333	3.8	123	0.00
25		Isophorone	0.602	0.598	0.7	128	0.00
26	C	2-Nitrophenol	0.183	0.184	-0.5	129	0.00
27		2,4-Dimethylphenol	0.208	0.207	0.5	128	0.00
28		bis(2-Chloroethoxy)methane	0.403	0.396	1.7	128	-0.01
29	C	2,4-Dichlorophenol	0.345	0.338	2.0	126	0.00
30		1,2,4-Trichlorobenzene	0.399	0.384	3.8	126	0.00
31		Naphthalene	1.028	0.990	3.7	126	0.00
32		Benzoic acid	0.220	0.222	-0.9	128	0.03
33		4-Chloroaniline	0.363	0.343	5.5	119	0.00
34	C	Hexachlorobutadiene	0.247	0.242	2.0	128	-0.01
35		Caprolactam	0.099	0.097	2.0	125	0.00
36	C	4-Chloro-3-methylphenol	0.302	0.302	0.0	129	0.00
37		2-Methylnaphthalene	0.724	0.714	1.4	129	0.00
38		1-Methylnaphthalene	0.705	0.694	1.6	129	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	137	0.00
40		1,2,4,5-Tetrachlorobenzene	0.700	0.678	3.1	131	0.00
41	P	Hexachlorocyclopentadiene	0.245	0.207	15.5	108	-0.01
42	S	2,4,6-Tribromophenol	0.291	0.301	-3.4	140	0.00
43	C	2,4,6-Trichlorophenol	0.445	0.441	0.9	131	0.00
44		2,4,5-Trichlorophenol	0.484	0.481	0.6	131	0.00
45	S	2-Fluorobiphenyl	1.475	1.434	2.8	129	-0.01
46		1,1'-Biphenyl	1.487	1.435	3.5	128	0.00
47		2-Chloronaphthalene	1.169	1.113	4.8	128	0.00

Sample Results: **BM049944.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	0.270	0.275	-1.9	133	0.00
49		Acenaphthylene	1.702	1.657	2.6	130	0.00
50		Dimethylphthalate	1.411	1.396	1.1	133	0.00
51		2,6-Dinitrotoluene	0.296	0.304	-2.7	134	0.00
52	C	Acenaphthene	1.083	1.048	3.2	129	0.00
53		3-Nitroaniline	0.286	0.287	-0.3	127	0.00
54	P	2,4-Dinitrophenol	0.175	0.173	1.1	129	0.00
55		Dibenzofuran	1.810	1.768	2.3	131	0.00
56	P	4-Nitrophenol	0.255	0.247	3.1	125	0.02
57		2,4-Dinitrotoluene	0.394	0.416	-5.6	135	0.00
58		Fluorene	1.439	1.410	2.0	130	0.00
59		2,3,4,6-Tetrachlorophenol	0.424	0.416	1.9	133	0.00
60		Diethylphthalate	1.353	1.343	0.7	132	0.00
61		4-Chlorophenyl-phenylether	0.771	0.772	-0.1	134	-0.01
62		4-Nitroaniline	0.295	0.296	-0.3	127	0.00
63		Azobenzene	1.158	1.133	2.2	129	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	142	0.00
65		4,6-Dinitro-2-methylphenol	0.126	0.121	4.0	131	0.00
66	c	n-Nitrosodiphenylamine	0.599	0.573	4.3	132	0.00
67		4-Bromophenyl-phenylether	0.232	0.231	0.4	138	0.00
68		Hexachlorobenzene	0.266	0.264	0.8	138	0.00
69		Atrazine	0.155	0.191	-23.2	210#	0.00
70	C	Pentachlorophenol	0.196	0.179	8.7	125	0.00
71		Phenanthrene	1.096	1.053	3.9	132	0.00
72		Anthracene	1.081	1.050	2.9	133	0.00
73		Carbazole	1.018	0.972	4.5	131	0.00
74		Di-n-butylphthalate	1.172	1.152	1.7	135	0.00
75	C	Fluoranthene	1.348	1.334	1.0	137	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	139	0.00
77		Benzidine	0.265	0.193	27.2#	67	0.00
78		Pyrene	1.378	1.390	-0.9	137	0.00
79	S	Terphenyl-d14	1.067	1.150	-7.8	134	0.00
80		Butylbenzylphthalate	0.518	0.514	0.8	133	0.00
81		Benzo(a)anthracene	1.329	1.294	2.6	132	0.00
82		3,3'-Dichlorobenzidine	0.502	0.446	11.2	118	0.00
83		Chrysene	1.264	1.209	4.4	130	0.00
84		Bis(2-ethylhexyl)phthalate	0.755	0.731	3.2	129	0.00
85	c	Di-n-octyl phthalate	1.320	1.247	5.5	127	0.00
86	I	Perylene-d12	1.000	1.000	0.0	132	0.00
87		Indeno(1,2,3-cd)pyrene	1.491	1.332	10.7	116	0.01
88		Benzo(b)fluoranthene	1.277	1.237	3.1	124	0.00
89		Benzo(k)fluoranthene	1.238	1.213	2.0	129	0.00
90	C	Benzo(a)pyrene	1.122	1.079	3.8	126	0.00
91		Dibenzo(a,h)anthracene	1.228	1.092	11.1	115	0.01
92		Benzo(g,h,i)perylene	1.255	1.086	13.5	113	0.01

Sample Results: **BM049944.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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: **BM049944.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
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Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	129	-0.01
2		1,4-Dioxane	40.000	36.854	7.9	118	0.00
3		Pyridine	40.000	37.599	6.0	120	0.00
4		n-Nitrosodimethylamine	40.000	39.002	2.5	125	0.00
5	S	2-Fluorophenol	80.000	76.739	4.1	122	0.00
6		Aniline	40.000	37.558	6.1	115	0.00
7	S	Phenol-d6	80.000	78.075	2.4	124	0.00
8		2-Chlorophenol	40.000	38.776	3.1	124	0.00
9		Benzaldehyde	40.000	75.788	-89.5#	245	0.00
10	C	Phenol	40.000	38.884	2.8	124	0.00
11		bis(2-Chloroethyl)ether	40.000	40.360	-0.9	129	0.00
12		1,3-Dichlorobenzene	40.000	38.201	4.5	122	0.00
13	C	1,4-Dichlorobenzene	40.000	38.185	4.5	122	-0.01
14		1,2-Dichlorobenzene	40.000	38.369	4.1	122	-0.01
15		Benzyl Alcohol	40.000	39.069	2.3	122	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	40.002	-0.0	127	-0.01
17		2-Methylphenol	40.000	39.458	1.4	126	0.00
18		Hexachloroethane	40.000	38.106	4.7	122	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	40.546	-1.4	127	0.00
20		3+4-Methylphenols	40.000	39.547	1.1	125	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	132	-0.01
22		Acetophenone	40.000	38.355	4.1	124	0.00
23	S	Nitrobenzene-d5	80.000	77.663	2.9	125	0.00
24		Nitrobenzene	40.000	38.492	3.8	123	0.00
25		Isophorone	40.000	39.753	0.6	128	0.00
26	C	2-Nitrophenol	40.000	40.220	-0.5	129	0.00
27		2,4-Dimethylphenol	40.000	39.852	0.4	128	0.00
28		bis(2-Chloroethoxy)methane	40.000	39.316	1.7	128	-0.01
29	C	2,4-Dichlorophenol	40.000	39.098	2.3	126	0.00
30		1,2,4-Trichlorobenzene	40.000	38.471	3.8	126	0.00
31		Naphthalene	40.000	38.523	3.7	126	0.00
32		Benzoic acid	40.000	36.945	7.6	128	0.03
33		4-Chloroaniline	40.000	37.818	5.5	119	0.00
34	C	Hexachlorobutadiene	40.000	39.111	2.2	128	-0.01
35		Caprolactam	40.000	38.995	2.5	125	0.00
36	C	4-Chloro-3-methylphenol	40.000	40.002	-0.0	129	0.00
37		2-Methylnaphthalene	40.000	39.424	1.4	129	0.00
38		1-Methylnaphthalene	40.000	39.345	1.6	129	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	137	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	38.787	3.0	131	0.00
41	P	Hexachlorocyclopentadiene	40.000	33.823	15.4	108	-0.01
42	S	2,4,6-Tribromophenol	80.000	82.697	-3.4	140	0.00
43	C	2,4,6-Trichlorophenol	40.000	39.655	0.9	131	0.00
44		2,4,5-Trichlorophenol	40.000	39.765	0.6	131	0.00
45	S	2-Fluorobiphenyl	80.000	77.764	2.8	129	-0.01
46		1,1'-Biphenyl	40.000	38.598	3.5	128	0.00
47		2-Chloronaphthalene	40.000	38.094	4.8	128	0.00

Sample Results: **BM049944.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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	40.684	-1.7	133	0.00
49		Acenaphthylene	40.000	38.940	2.7	130	0.00
50		Dimethylphthalate	40.000	39.579	1.1	133	0.00
51		2,6-Dinitrotoluene	40.000	41.181	-3.0	134	0.00
52	C	Acenaphthene	40.000	38.725	3.2	129	0.00
53		3-Nitroaniline	40.000	40.132	-0.3	127	0.00
54	P	2,4-Dinitrophenol	40.000	36.577	8.6	129	0.00
55		Dibenzofuran	40.000	39.083	2.3	131	0.00
56	P	4-Nitrophenol	40.000	38.745	3.1	125	0.02
57		2,4-Dinitrotoluene	40.000	42.170	-5.4	135	0.00
58		Fluorene	40.000	39.204	2.0	130	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	39.214	2.0	133	0.00
60		Diethylphthalate	40.000	39.691	0.8	132	0.00
61		4-Chlorophenyl-phenylether	40.000	40.047	-0.1	134	-0.01
62		4-Nitroaniline	40.000	40.029	-0.1	127	0.00
63		Azobenzene	40.000	39.117	2.2	129	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	142	0.00
65		4,6-Dinitro-2-methylphenol	40.000	38.495	3.8	131	0.00
66	c	n-Nitrosodiphenylamine	40.000	38.275	4.3	132	0.00
67		4-Bromophenyl-phenylether	40.000	39.773	0.6	138	0.00
68		Hexachlorobenzene	40.000	39.686	0.8	138	0.00
69		Atrazine	40.000	49.332	-23.3	210	0.00
70	C	Pentachlorophenol	40.000	36.589	8.5	125	0.00
71		Phenanthrene	40.000	38.409	4.0	132	0.00
72		Anthracene	40.000	38.877	2.8	133	0.00
73		Carbazole	40.000	38.190	4.5	131	0.00
74		Di-n-butylphthalate	40.000	39.317	1.7	135	0.00
75	C	Fluoranthene	40.000	39.581	1.0	137	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	139	0.00
77		Benzidine	40.000	29.159	27.1#	67	0.00
78		Pyrene	40.000	40.327	-0.8	137	0.00
79	S	Terphenyl-d14	80.000	86.236	-7.8	134	0.00
80		Butylbenzylphthalate	40.000	39.697	0.8	133	0.00
81		Benzo(a)anthracene	40.000	38.937	2.7	132	0.00
82		3,3'-Dichlorobenzidine	40.000	35.538	11.2	118	0.00
83		Chrysene	40.000	38.260	4.4	130	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	38.755	3.1	129	0.00
85	c	Di-n-octyl phthalate	40.000	37.790	5.5	127	0.00
86	I	Perylene-d12	20.000	20.000	0.0	132	0.00
87		Indeno(1,2,3-cd)pyrene	40.000	35.731	10.7	116	0.01
88		Benzo(b)fluoranthene	40.000	38.740	3.1	124	0.00
89		Benzo(k)fluoranthene	40.000	39.210	2.0	129	0.00
90	C	Benzo(a)pyrene	40.000	38.465	3.8	126	0.00
91		Dibenzo(a,h)anthracene	40.000	35.570	11.1	115	0.01
92		Benzo(g,h,i)perylene	40.000	34.628	13.4	113	0.01

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049944.D
Acq On : 16 Apr 2025 09:28
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Apr 16 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 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

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_P Calibration Date/Time: 04/09/2025 10:08

Lab File ID: BP024228.D Init. Calib. Date(s): 03/12/2025 03/12/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 16:17 21:02

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.253	1.307		4.3	
Benzaldehyde	0.809	0.769		-4.9	
Phenol-d6	1.675	1.739		3.8	
Phenol	1.691	1.750		3.5	20.0
bis(2-Chloroethyl)ether	1.334	1.368		2.5	
2-Chlorophenol	1.353	1.387		2.5	
2-Methylphenol	1.061	1.121		5.7	
2,2-oxybis(1-Chloropropane)	1.361	1.437		5.6	
Acetophenone	0.506	0.525		3.8	
3+4-Methylphenols	1.457	1.527		4.8	
n-Nitroso-di-n-propylamine	0.972	1.033	0.050	6.3	
Nitrobenzene-d5	0.354	0.378		6.8	
Hexachloroethane	0.529	0.541		2.3	
Nitrobenzene	0.350	0.372		6.3	
Isophorone	0.608	0.657		8.1	
2-Nitrophenol	0.167	0.185		10.8	20.0
2,4-Dimethylphenol	0.215	0.225		4.7	
bis(2-Chloroethoxy)methane	0.427	0.449		5.2	
2,4-Dichlorophenol	0.291	0.311		6.9	20.0
Naphthalene	1.060	1.100		3.8	
4-Chloroaniline	0.379	0.401		5.8	
Hexachlorobutadiene	0.185	0.185		0.0	20.0
Caprolactam	0.095	0.110		15.8	
4-Chloro-3-methylphenol	0.313	0.341		8.9	20.0
2-Methylnaphthalene	0.716	0.745		4.1	
Hexachlorocyclopentadiene	0.208	0.215	0.050	3.4	
2,4,6-Trichlorophenol	0.367	0.387		5.4	20.0
2-Fluorobiphenyl	1.356	1.365		0.7	
2,4,5-Trichlorophenol	0.403	0.426		5.7	
1,1-Biphenyl	1.503	1.538		2.3	
2-Chloronaphthalene	1.130	1.141		1.0	
2-Nitroaniline	0.289	0.329		13.8	
Dimethylphthalate	1.399	1.466		4.8	
Acenaphthylene	1.710	1.788		4.6	
2,6-Dinitrotoluene	0.294	0.319		8.5	
3-Nitroaniline	0.318	0.355		11.6	
Acenaphthene	1.093	1.131		3.5	20.0
2,4-Dinitrophenol	0.156	0.179	0.050	14.7	
4-Nitrophenol	0.266	0.308	0.050	15.8	

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_P Calibration Date/Time: 04/09/2025 10:08

Lab File ID: BP024228.D Init. Calib. Date(s): 03/12/2025 03/12/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 16:17 21:02

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.770	1.819		2.8	
2,4-Dinitrotoluene	0.389	0.439		12.9	
Diethylphthalate	1.394	1.496		7.3	
4-Chlorophenyl-phenylether	0.676	0.681		0.7	
Fluorene	1.379	1.420		3.0	
4-Nitroaniline	0.334	0.374		12.0	
4,6-Dinitro-2-methylphenol	0.119	0.126		5.9	
n-Nitrosodiphenylamine	0.607	0.626		3.1	20.0
2,4,6-Tribromophenol	0.252	0.271		7.5	
4-Bromophenyl-phenylether	0.220	0.220		0.0	
Hexachlorobenzene	0.260	0.261		0.4	
Atrazine	0.147	0.157		6.8	
Pentachlorophenol	0.168	0.183		8.9	20.0
Phenanthrene	1.093	1.117		2.2	
Anthracene	1.064	1.101		3.5	
Carbazole	1.026	1.092		6.4	
Di-n-butylphthalate	1.218	1.345		10.4	
Fluoranthene	1.265	1.339		5.8	20.0
Pyrene	1.243	1.315		5.8	
Terphenyl-d14	0.969	1.019		5.2	
Butylbenzylphthalate	0.513	0.579		12.9	
3,3-Dichlorobenzidine	0.417	0.477		14.4	
Benzo(a)anthracene	1.243	1.303		4.8	
Chrysene	1.195	1.236		3.4	
Bis(2-ethylhexyl)phthalate	0.774	0.866		11.9	
Di-n-octyl phthalate	1.240	1.441		16.2	20.0
Benzo(b)fluoranthene	1.206	1.262		4.6	
Benzo(k)fluoranthene	1.180	1.193		1.1	
Benzo(a)pyrene	1.049	1.081		3.1	20.0
Indeno(1,2,3-cd)pyrene	1.396	1.431		2.5	
Dibenzo(a,h)anthracene	1.161	1.190		2.5	
Benzo(g,h,i)perylene	1.180	1.210		2.5	
1,2,4,5-Tetrachlorobenzene	0.578	0.583		0.9	
1,4-Dioxane	0.497	0.516		3.8	20.0
2,3,4,6-Tetrachlorophenol	0.356	0.377		5.9	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.769	152	293576	20.000	ng		0.00
21) Naphthalene-d8	10.552	136	1173450	20.000	ng		0.00
39) Acenaphthene-d10	14.404	164	712048	20.000	ng		0.00
64) Phenanthrene-d10	17.222	188	1380061	20.000	ng		0.02
76) Chrysene-d12	21.651	240	1470276	20.000	ng		0.00
86) Perylene-d12	25.033	264	1654294	20.000	ng		-0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.381	112	1534523	83.438	ng		0.00
7) Phenol-d6	6.952	99	2042327	83.042	ng		0.00
23) Nitrobenzene-d5	8.916	82	1775974	85.391	ng		0.00
42) 2,4,6-Tribromophenol	15.928	330	772690	86.150	ng		0.01
45) 2-Fluorobiphenyl	13.016	172	3887020	80.493	ng		0.00
79) Terphenyl-d14	19.933	244	5993823	84.151	ng		0.01
Target Compounds							Qvalue
2) 1,4-Dioxane	3.323	88	302738	41.527	ng		97
3) Pyridine	3.717	79	838808	42.089	ng		98
4) n-Nitrosodimethylamine	3.628	42	271310	40.754	ng	#	95
6) Aniline	7.105	93	937414	41.835	ng		98
8) 2-Chlorophenol	7.346	128	814334	40.993	ng		100
9) Benzaldehyde	6.922	77	451640	38.053	ng		97
10) Phenol	6.975	94	1027320	41.378	ng		99
11) bis(2-Chloroethyl)ether	7.199	93	803492	41.038	ng		98
12) 1,3-Dichlorobenzene	7.658	146	870803	40.649	ng		100
13) 1,4-Dichlorobenzene	7.805	146	882974	40.368	ng		99
14) 1,2-Dichlorobenzene	8.122	146	839545	39.998	ng		100
15) Benzyl Alcohol	8.011	79	654557	42.039	ng		100
16) 2,2'-oxybis(1-Chloropr...	8.293	45	843711	42.222	ng		98
17) 2-Methylphenol	8.211	107	658169	42.275	ng		98
18) Hexachloroethane	8.840	117	317863	40.961	ng		99
19) n-Nitroso-di-n-propyla...	8.569	70	606716	42.523	ng		100
20) 3+4-Methylphenols	8.534	107	896490	41.913	ng		100
22) Acetophenone	8.581	105	1232083	41.530	ng		100
24) Nitrobenzene	8.958	77	873464	42.572	ng		98
25) Isophorone	9.481	82	1541684	43.243	ng		100
26) 2-Nitrophenol	9.669	139	433004	44.182	ng		98
27) 2,4-Dimethylphenol	9.728	122	528942	41.973	ng		98
28) bis(2-Chloroethoxy)met...	9.963	93	1054466	42.043	ng		99
29) 2,4-Dichlorophenol	10.199	162	729792	42.809	ng		98
30) 1,2,4-Trichlorobenzene	10.410	180	763746	40.549	ng		99
31) Naphthalene	10.605	128	2580706	41.488	ng		100
32) Benzoic acid	9.863	122	597743m	48.635	ng		
33) 4-Chloroaniline	10.705	127	940754	42.261	ng		99
34) Hexachlorobutadiene	10.887	225	434685	40.101	ng		98
35) Caprolactam	11.493	113	257074	46.011	ng		97
36) 4-Chloro-3-methylphenol	11.840	107	799711	43.485	ng		99
37) 2-Methylnaphthalene	12.210	142	1749345	41.629	ng		100
38) 1-Methylnaphthalene	12.428	142	1688556	41.312	ng		99
40) 1,2,4,5-Tetrachloroben...	12.587	216	830463	40.347	ng		100
41) Hexachlorocyclopentadiene	12.563	237	306506	41.311	ng		98
43) 2,4,6-Trichlorophenol	12.828	196	551712	42.177	ng		98

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

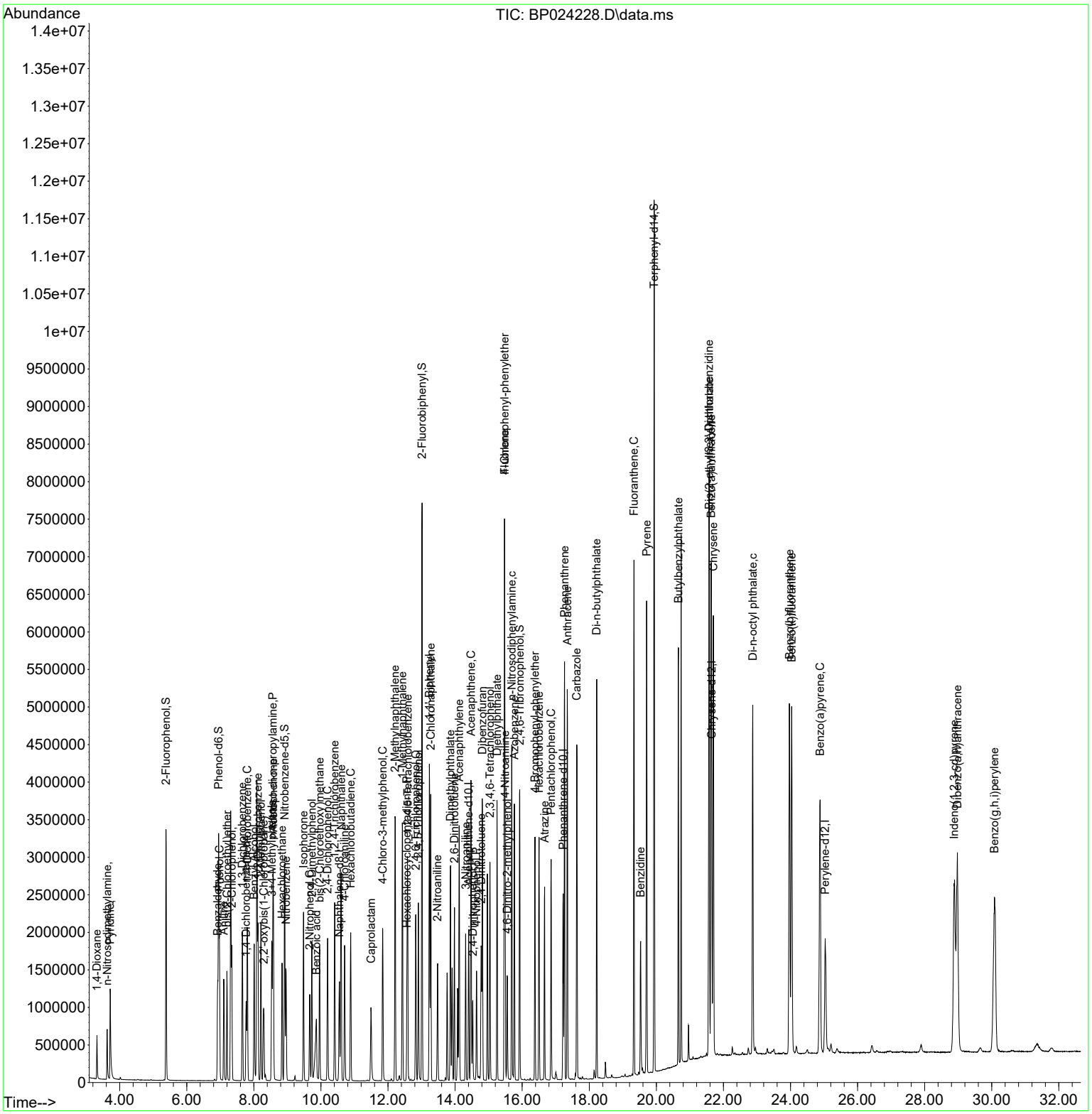
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.904	196	606798	42.299	ng	99
46) 1,1'-Biphenyl	13.234	154	2190701	40.942	ng	99
47) 2-Chloronaphthalene	13.275	162	1624413	40.362	ng	99
48) 2-Nitroaniline	13.475	65	468062	45.470	ng	95
49) Acenaphthylene	14.122	152	2545636	41.802	ng	100
50) Dimethylphthalate	13.863	163	2087636	41.901	ng	100
51) 2,6-Dinitrotoluene	13.981	165	453615	43.271	ng	100
52) Acenaphthene	14.475	154	1611256	41.411	ng	99
53) 3-Nitroaniline	14.316	138	504903	44.593	ng	97
54) 2,4-Dinitrophenol	14.528	184	254373	45.859	ng	97
55) Dibenzofuran	14.810	168	2590493	41.102	ng	98
56) 4-Nitrophenol	14.640	139	438706	46.371	ng	97
57) 2,4-Dinitrotoluene	14.781	165	625765	45.191	ng	98
58) Fluorene	15.475	166	2022327	41.183	ng	100
59) 2,3,4,6-Tetrachlorophenol	15.040	232	536689	42.344	ng	99
60) Diethylphthalate	15.251	149	2130607	42.942	ng	100
61) 4-Chlorophenyl-phenyle...	15.475	204	970246	40.284	ng	98
62) 4-Nitroaniline	15.493	138	532563	44.847	ng	98
63) Azobenzene	15.769	77	2027384	43.353	ng	99
65) 4,6-Dinitro-2-methylph...	15.557	198	347340	42.395	ng	100
66) n-Nitrosodiphenylamine	15.693	169	1728077	41.235	ng	99
67) 4-Bromophenyl-phenylether	16.381	248	606490	40.028	ng	99
68) Hexachlorobenzene	16.504	284	719481	40.119	ng	99
69) Atrazine	16.669	200	433531	42.859	ng	99
70) Pentachlorophenol	16.863	266	503982	43.456	ng	100
71) Phenanthrene	17.263	178	3083668	40.902	ng	100
72) Anthracene	17.345	178	3039833	41.398	ng	100
73) Carbazole	17.628	167	3013012	42.549	ng	99
74) Di-n-butylphthalate	18.222	149	3711096	44.147	ng	100
75) Fluoranthene	19.333	202	3697085	42.341	ng	99
77) Benzidine	19.533	184	1222191	76.030	ng	99
78) Pyrene	19.710	202	3866558	42.301	ng	99
80) Butylbenzylphthalate	20.657	149	1702434	45.164	ng	97
81) Benzo(a)anthracene	21.633	228	3832104	41.922	ng	100
82) 3,3'-Dichlorobenzidine	21.569	252	1401662	45.751	ng	100
83) Chrysene	21.698	228	3634359	41.358	ng	99
84) Bis(2-ethylhexyl)phtha...	21.580	149	2547023	44.781	ng	99
85) Di-n-octyl phthalate	22.874	149	4236142	46.485	ng	99
87) Indeno(1,2,3-cd)pyrene	28.880	276	4733755m	41.000	ng	
88) Benzo(b)fluoranthene	23.969	252	4176870	41.876	ng	99
89) Benzo(k)fluoranthene	24.033	252	3945832	40.442	ng	99
90) Benzo(a)pyrene	24.880	252	3577625	41.248	ng	99
91) Dibenzo(a,h)anthracene	28.974	278	3938270	41.000	ng	98
92) Benzo(g,h,i)perylene	30.080	276	4004395	41.010	ng	97

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration



Sample Results: **BP024228.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	77	0.00
2		1,4-Dioxane	0.497	0.516	-3.8	84	0.00
3		Pyridine	1.358	1.429	-5.2	83	0.00
4		n-Nitrosodimethylamine	0.454	0.462	-1.8	82	0.00
5	S	2-Fluorophenol	1.253	1.307	-4.3	83	0.00
6		Aniline	1.527	1.597	-4.6	82	0.00
7	S	Phenol-d6	1.675	1.739	-3.8	82	0.00
8		2-Chlorophenol	1.353	1.387	-2.5	81	0.00
9		Benzaldehyde	0.809	0.769	4.9	76	0.00
10	C	Phenol	1.691	1.750	-3.5	82	0.00
11		bis(2-Chloroethyl)ether	1.334	1.368	-2.5	82	0.00
12		1,3-Dichlorobenzene	1.459	1.483	-1.6	82	0.00
13	C	1,4-Dichlorobenzene	1.490	1.504	-0.9	82	0.00
14		1,2-Dichlorobenzene	1.430	1.430	0.0	81	0.00
15		Benzyl Alcohol	1.061	1.115	-5.1	82	0.00
16		2,2'-oxybis(1-Chloropropane	1.361	1.437	-5.6	85	-0.01
17		2-Methylphenol	1.061	1.121	-5.7	83	0.00
18		Hexachloroethane	0.529	0.541	-2.3	82	0.00
19	P	n-Nitroso-di-n-propylamine	0.972	1.033	-6.3	82	0.00
20		3+4-Methylphenols	1.457	1.527	-4.8	82	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	76	0.00
22		Acetophenone	0.506	0.525	-3.8	81	0.00
23	S	Nitrobenzene-d5	0.354	0.378	-6.8	82	0.00
24		Nitrobenzene	0.350	0.372	-6.3	83	0.00
25		Isophorone	0.608	0.657	-8.1	83	0.00
26	C	2-Nitrophenol	0.167	0.185	-10.8	82	0.00
27		2,4-Dimethylphenol	0.215	0.225	-4.7	80	0.00
28		bis(2-Chloroethoxy)methane	0.427	0.449	-5.2	82	0.00
29	C	2,4-Dichlorophenol	0.291	0.311	-6.9	80	0.00
30		1,2,4-Trichlorobenzene	0.321	0.325	-1.2	79	0.00
31		Naphthalene	1.060	1.100	-3.8	81	0.00
32		Benzoic acid	0.209	0.255	-22.0	89	-0.01
33		4-Chloroaniline	0.379	0.401	-5.8	81	0.00
34	C	Hexachlorobutadiene	0.185	0.185	0.0	79	0.00
35		Caprolactam	0.095	0.110	-15.8	86	0.00
36	C	4-Chloro-3-methylphenol	0.313	0.341	-8.9	83	0.00
37		2-Methylnaphthalene	0.716	0.745	-4.1	81	0.00
38		1-Methylnaphthalene	0.697	0.719	-3.2	81	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	77	0.00
40		1,2,4,5-Tetrachlorobenzene	0.578	0.583	-0.9	80	0.00
41	P	Hexachlorocyclopentadiene	0.208	0.215	-3.4	78	0.00
42	S	2,4,6-Tribromophenol	0.252	0.271	-7.5	82	0.01
43	C	2,4,6-Trichlorophenol	0.367	0.387	-5.4	80	0.00
44		2,4,5-Trichlorophenol	0.403	0.426	-5.7	80	0.00
45	S	2-Fluorobiphenyl	1.356	1.365	-0.7	79	0.00
46		1,1'-Biphenyl	1.503	1.538	-2.3	81	0.00
47		2-Chloronaphthalene	1.130	1.141	-1.0	80	0.00

Sample Results: **BP024228.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48		2-Nitroaniline	0.289	0.329	-13.8	86	0.00
49		Acenaphthylene	1.710	1.788	-4.6	82	0.00
50		Dimethylphthalate	1.399	1.466	-4.8	83	0.00
51		2,6-Dinitrotoluene	0.294	0.319	-8.5	83	0.00
52	C	Acenaphthene	1.093	1.131	-3.5	82	0.00
53		3-Nitroaniline	0.318	0.355	-11.6	84	0.00
54	P	2,4-Dinitrophenol	0.156	0.179	-14.7	86	0.00
55		Dibenzofuran	1.770	1.819	-2.8	81	0.00
56	P	4-Nitrophenol	0.266	0.308	-15.8	85	0.00
57		2,4-Dinitrotoluene	0.389	0.439	-12.9	85	0.00
58		Fluorene	1.379	1.420	-3.0	81	0.00
59		2,3,4,6-Tetrachlorophenol	0.356	0.377	-5.9	81	0.00
60		Diethylphthalate	1.394	1.496	-7.3	84	0.01
61		4-Chlorophenyl-phenylether	0.676	0.681	-0.7	79	0.01
62		4-Nitroaniline	0.334	0.374	-12.0	83	0.00
63		Azobenzene	1.314	1.424	-8.4	84	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	80	0.02
65		4,6-Dinitro-2-methylphenol	0.119	0.126	-5.9	84	0.00
66	c	n-Nitrosodiphenylamine	0.607	0.626	-3.1	84	0.01
67		4-Bromophenyl-phenylether	0.220	0.220	0.0	81	0.00
68		Hexachlorobenzene	0.260	0.261	-0.4	82	0.01
69		Atrazine	0.147	0.157	-6.8	93	0.01
70	C	Pentachlorophenol	0.168	0.183	-8.9	83	0.02
71		Phenanthrene	1.093	1.117	-2.2	83	0.02
72		Anthracene	1.064	1.101	-3.5	83	0.00
73		Carbazole	1.026	1.092	-6.4	84	0.01
74		Di-n-butylphthalate	1.218	1.345	-10.4	86	0.01
75	C	Fluoranthene	1.265	1.339	-5.8	85	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	78	0.00
77		Benzidine	0.219	0.416	-90.0#	126	0.01
78		Pyrene	1.243	1.315	-5.8	85	0.00
79	S	Terphenyl-d14	0.969	1.019	-5.2	84	0.01
80		Butylbenzylphthalate	0.513	0.579	-12.9	86	0.00
81		Benzo(a)anthracene	1.243	1.303	-4.8	84	0.00
82		3,3'-Dichlorobenzidine	0.417	0.477	-14.4	87	0.02
83		Chrysene	1.195	1.236	-3.4	83	0.00
84		Bis(2-ethylhexyl)phthalate	0.774	0.866	-11.9	85	0.01
85	c	Di-n-octyl phthalate	1.240	1.441	-16.2	88	0.00
86	I	Perylene-d12	1.000	1.000	0.0	81	-0.02
87		Indeno(1,2,3-cd)pyrene	1.396	1.431	-2.5	85	-0.05
88		Benzo(b)fluoranthene	1.206	1.262	-4.6	86	-0.01
89		Benzo(k)fluoranthene	1.180	1.193	-1.1	85	-0.02
90	C	Benzo(a)pyrene	1.049	1.081	-3.1	85	-0.01
91		Dibenzo(a,h)anthracene	1.161	1.190	-2.5	85	-0.04
92		Benzo(g,h,i)perylene	1.180	1.210	-2.5	85	-0.05

Sample Results: **BP024228.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

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

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **BP024228.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	20.000	20.000	0.0	77	0.00
2		1,4-Dioxane	40.000	41.527	-3.8	84	0.00
3		Pyridine	40.000	42.089	-5.2	83	0.00
4		n-Nitrosodimethylamine	40.000	40.754	-1.9	82	0.00
5	S	2-Fluorophenol	80.000	83.438	-4.3	83	0.00
6		Aniline	40.000	41.835	-4.6	82	0.00
7	S	Phenol-d6	80.000	83.042	-3.8	82	0.00
8		2-Chlorophenol	40.000	40.993	-2.5	81	0.00
9		Benzaldehyde	40.000	38.053	4.9	76	0.00
10	C	Phenol	40.000	41.378	-3.4	82	0.00
11		bis(2-Chloroethyl)ether	40.000	41.038	-2.6	82	0.00
12		1,3-Dichlorobenzene	40.000	40.649	-1.6	82	0.00
13	C	1,4-Dichlorobenzene	40.000	40.368	-0.9	82	0.00
14		1,2-Dichlorobenzene	40.000	39.998	0.0	81	0.00
15		Benzyl Alcohol	40.000	42.039	-5.1	82	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	42.222	-5.6	85	-0.01
17		2-Methylphenol	40.000	42.275	-5.7	83	0.00
18		Hexachloroethane	40.000	40.961	-2.4	82	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	42.523	-6.3	82	0.00
20		3+4-Methylphenols	40.000	41.913	-4.8	82	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	76	0.00
22		Acetophenone	40.000	41.530	-3.8	81	0.00
23	S	Nitrobenzene-d5	80.000	85.391	-6.7	82	0.00
24		Nitrobenzene	40.000	42.572	-6.4	83	0.00
25		Isophorone	40.000	43.243	-8.1	83	0.00
26	C	2-Nitrophenol	40.000	44.182	-10.5	82	0.00
27		2,4-Dimethylphenol	40.000	41.973	-4.9	80	0.00
28		bis(2-Chloroethoxy)methane	40.000	42.043	-5.1	82	0.00
29	C	2,4-Dichlorophenol	40.000	42.809	-7.0	80	0.00
30		1,2,4-Trichlorobenzene	40.000	40.549	-1.4	79	0.00
31		Naphthalene	40.000	41.488	-3.7	81	0.00
32		Benzoic acid	40.000	48.635	-21.6	89	-0.01
33		4-Chloroaniline	40.000	42.261	-5.7	81	0.00
34	C	Hexachlorobutadiene	40.000	40.101	-0.3	79	0.00
35		Caprolactam	40.000	46.011	-15.0	86	0.00
36	C	4-Chloro-3-methylphenol	40.000	43.485	-8.7	83	0.00
37		2-Methylnaphthalene	40.000	41.629	-4.1	81	0.00
38		1-Methylnaphthalene	40.000	41.312	-3.3	81	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	77	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	40.347	-0.9	80	0.00
41	P	Hexachlorocyclopentadiene	40.000	41.311	-3.3	78	0.00
42	S	2,4,6-Tribromophenol	80.000	86.150	-7.7	82	0.01
43	C	2,4,6-Trichlorophenol	40.000	42.177	-5.4	80	0.00
44		2,4,5-Trichlorophenol	40.000	42.299	-5.7	80	0.00
45	S	2-Fluorobiphenyl	80.000	80.493	-0.6	79	0.00
46		1,1'-Biphenyl	40.000	40.942	-2.4	81	0.00
47		2-Chloronaphthalene	40.000	40.362	-0.9	80	0.00

Sample Results: **BP024228.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
48		2-Nitroaniline	40.000	45.470	-13.7	86	0.00
49		Acenaphthylene	40.000	41.802	-4.5	82	0.00
50		Dimethylphthalate	40.000	41.901	-4.8	83	0.00
51		2,6-Dinitrotoluene	40.000	43.271	-8.2	83	0.00
52	C	Acenaphthene	40.000	41.411	-3.5	82	0.00
53		3-Nitroaniline	40.000	44.593	-11.5	84	0.00
54	P	2,4-Dinitrophenol	40.000	45.859	-14.6	86	0.00
55		Dibenzofuran	40.000	41.102	-2.8	81	0.00
56	P	4-Nitrophenol	40.000	46.371	-15.9	85	0.00
57		2,4-Dinitrotoluene	40.000	45.191	-13.0	85	0.00
58		Fluorene	40.000	41.183	-3.0	81	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	42.344	-5.9	81	0.00
60		Diethylphthalate	40.000	42.942	-7.4	84	0.01
61		4-Chlorophenyl-phenylether	40.000	40.284	-0.7	79	0.01
62		4-Nitroaniline	40.000	44.847	-12.1	83	0.00
63		Azobenzene	40.000	43.353	-8.4	84	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	80	0.02
65		4,6-Dinitro-2-methylphenol	40.000	42.395	-6.0	84	0.00
66	c	n-Nitrosodiphenylamine	40.000	41.235	-3.1	84	0.01
67		4-Bromophenyl-phenylether	40.000	40.028	-0.1	81	0.00
68		Hexachlorobenzene	40.000	40.119	-0.3	82	0.01
69		Atrazine	40.000	42.859	-7.1	93	0.01
70	C	Pentachlorophenol	40.000	43.456	-8.6	83	0.02
71		Phenanthrene	40.000	40.902	-2.3	83	0.02
72		Anthracene	40.000	41.398	-3.5	83	0.00
73		Carbazole	40.000	42.549	-6.4	84	0.01
74		Di-n-butylphthalate	40.000	44.147	-10.4	86	0.01
75	C	Fluoranthene	40.000	42.341	-5.9	85	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	78	0.00
77		Benzidine	40.000	76.030	-90.1#	126	0.01
78		Pyrene	40.000	42.301	-5.8	85	0.00
79	S	Terphenyl-d14	80.000	84.151	-5.2	84	0.01
80		Butylbenzylphthalate	40.000	45.164	-12.9	86	0.00
81		Benzo(a)anthracene	40.000	41.922	-4.8	84	0.00
82		3,3'-Dichlorobenzidine	40.000	45.751	-14.4	87	0.02
83		Chrysene	40.000	41.358	-3.4	83	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	44.781	-12.0	85	0.01
85	c	Di-n-octyl phthalate	40.000	46.485	-16.2	88	0.00
86	I	Perylene-d12	20.000	20.000	0.0	81	-0.02
87		Indeno(1,2,3-cd)pyrene	40.000	41.000	-2.5	85	-0.05
88		Benzo(b)fluoranthene	40.000	41.876	-4.7	86	-0.01
89		Benzo(k)fluoranthene	40.000	40.442	-1.1	85	-0.02
90	C	Benzo(a)pyrene	40.000	41.248	-3.1	85	-0.01
91		Dibenzo(a,h)anthracene	40.000	41.000	-2.5	85	-0.04
92		Benzo(g,h,i)perylene	40.000	41.010	-2.5	85	-0.05

Sample Results: **BP024228.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024228.D
Acq On : 09 Apr 2025 10:08
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 09 12:20:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration

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

Compound	Amount	Calc.	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_P Calibration Date/Time: 04/10/2025 09:46

Lab File ID: BP024245.D Init. Calib. Date(s): 03/12/2025 03/12/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 16:17 21:02

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.253	1.288		2.8	
Benzaldehyde	0.809	0.754		-6.8	
Phenol-d6	1.675	1.722		2.8	
Phenol	1.691	1.720		1.7	20.0
bis(2-Chloroethyl)ether	1.334	1.345		0.8	
2-Chlorophenol	1.353	1.391		2.8	
2-Methylphenol	1.061	1.118		5.4	
2,2-oxybis(1-Chloropropane)	1.361	1.415		4.0	
Acetophenone	0.506	0.514		1.6	
3+4-Methylphenols	1.457	1.542		5.8	
n-Nitroso-di-n-propylamine	0.972	1.019	0.050	4.8	
Nitrobenzene-d5	0.354	0.366		3.4	
Hexachloroethane	0.529	0.538		1.7	
Nitrobenzene	0.350	0.364		4.0	
Isophorone	0.608	0.646		6.3	
2-Nitrophenol	0.167	0.190		13.8	20.0
2,4-Dimethylphenol	0.215	0.225		4.7	
bis(2-Chloroethoxy)methane	0.427	0.432		1.2	
2,4-Dichlorophenol	0.291	0.309		6.2	20.0
Naphthalene	1.060	1.084		2.3	
4-Chloroaniline	0.379	0.399		5.3	
Hexachlorobutadiene	0.185	0.191		3.2	20.0
Caprolactam	0.095	0.107		12.6	
4-Chloro-3-methylphenol	0.313	0.342		9.3	20.0
2-Methylnaphthalene	0.716	0.736		2.8	
Hexachlorocyclopentadiene	0.208	0.220	0.050	5.8	
2,4,6-Trichlorophenol	0.367	0.401		9.3	20.0
2-Fluorobiphenyl	1.356	1.375		1.4	
2,4,5-Trichlorophenol	0.403	0.437		8.4	
1,1-Biphenyl	1.503	1.546		2.9	
2-Chloronaphthalene	1.130	1.164		3.0	
2-Nitroaniline	0.289	0.328		13.5	
Dimethylphthalate	1.399	1.457		4.1	
Acenaphthylene	1.710	1.814		6.1	
2,6-Dinitrotoluene	0.294	0.319		8.5	
3-Nitroaniline	0.318	0.343		7.9	
Acenaphthene	1.093	1.118		2.3	20.0
2,4-Dinitrophenol	0.156	0.187	0.050	19.9	
4-Nitrophenol	0.266	0.301	0.050	13.2	

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: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG No.: Q1746

Instrument ID: BNA_P Calibration Date/Time: 04/10/2025 09:46

Lab File ID: BP024245.D Init. Calib. Date(s): 03/12/2025 03/12/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 16:17 21:02

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.770	1.831		3.4	
2,4-Dinitrotoluene	0.389	0.440		13.1	
Diethylphthalate	1.394	1.493		7.1	
4-Chlorophenyl-phenylether	0.676	0.677		0.1	
Fluorene	1.379	1.402		1.7	
4-Nitroaniline	0.334	0.365		9.3	
4,6-Dinitro-2-methylphenol	0.119	0.133		11.8	
n-Nitrosodiphenylamine	0.607	0.627		3.3	20.0
2,4,6-Tribromophenol	0.252	0.289		14.7	
4-Bromophenyl-phenylether	0.220	0.233		5.9	
Hexachlorobenzene	0.260	0.272		4.6	
Atrazine	0.147	0.163		10.9	
Pentachlorophenol	0.168	0.196		16.7	20.0
Phenanthrene	1.093	1.113		1.8	
Anthracene	1.064	1.104		3.8	
Carbazole	1.026	1.069		4.2	
Di-n-butylphthalate	1.218	1.344		10.3	
Fluoranthene	1.265	1.307		3.3	20.0
Pyrene	1.243	1.314		5.7	
Terphenyl-d14	0.969	1.006		3.8	
Butylbenzylphthalate	0.513	0.605		17.9	
3,3-Dichlorobenzidine	0.417	0.484		16.1	
Benzo(a)anthracene	1.243	1.289		3.7	
Chrysene	1.195	1.222		2.3	
Bis(2-ethylhexyl)phthalate	0.774	0.886		14.5	
Di-n-octyl phthalate	1.240	1.522		22.7	20.0
Benzo(b)fluoranthene	1.206	1.239		2.7	
Benzo(k)fluoranthene	1.180	1.183		0.3	
Benzo(a)pyrene	1.049	1.081		3.1	20.0
Indeno(1,2,3-cd)pyrene	1.396	1.446		3.6	
Dibenzo(a,h)anthracene	1.161	1.193		2.8	
Benzo(g,h,i)perylene	1.180	1.203		1.9	
1,2,4,5-Tetrachlorobenzene	0.578	0.591		2.2	
1,4-Dioxane	0.497	0.491		-1.2	20.0
2,3,4,6-Tetrachlorophenol	0.356	0.385		8.1	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.746	152	322953	20.000	ng		0.00
21) Naphthalene-d8	10.528	136	1317784	20.000	ng		0.00
39) Acenaphthene-d10	14.392	164	792808	20.000	ng		0.00
64) Phenanthrene-d10	17.192	188	1512089	20.000	ng		0.00
76) Chrysene-d12	21.645	240	1553360	20.000	ng		0.00
86) Perylene-d12	25.009	264	1762598	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.357	112	1663996	82.248	ng		0.00
7) Phenol-d6	6.928	99	2224675	82.228	ng		0.00
23) Nitrobenzene-d5	8.893	82	1928757	82.580	ng		0.00
42) 2,4,6-Tribromophenol	15.898	330	916378	91.762	ng		0.00
45) 2-Fluorobiphenyl	12.998	172	4361802	81.124	ng		0.00
79) Terphenyl-d14	19.916	244	6251322	83.072	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.305	88	317274	39.562	ng		98
3) Pyridine	3.699	79	878247	40.059	ng		99
4) n-Nitrosodimethylamine	3.605	42	296971	40.550	ng		98
6) Aniline	7.081	93	1033633	41.933	ng		99
8) 2-Chlorophenol	7.316	128	898244	41.104	ng		98
9) Benzaldehyde	6.899	77	487196	37.315	ng		99
10) Phenol	6.957	94	1111148	40.683	ng		100
11) bis(2-Chloroethyl)ether	7.175	93	868445	40.321	ng		99
12) 1,3-Dichlorobenzene	7.634	146	955885	40.562	ng		99
13) 1,4-Dichlorobenzene	7.781	146	973547	40.461	ng		99
14) 1,2-Dichlorobenzene	8.099	146	932097	40.368	ng		99
15) Benzyl Alcohol	7.987	79	738749	43.130	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.263	45	914091	41.583	ng		97
17) 2-Methylphenol	8.187	107	722321	42.175	ng		99
18) Hexachloroethane	8.822	117	347698	40.730	ng		96
19) n-Nitroso-di-n-propyla...	8.546	70	658424	41.949	ng		99
20) 3+4-Methylphenols	8.516	107	995787	42.320	ng		99
22) Acetophenone	8.563	105	1355481	40.685	ng	#	99
24) Nitrobenzene	8.934	77	960124	41.671	ng		100
25) Isophorone	9.463	82	1703432	42.547	ng		99
26) 2-Nitrophenol	9.646	139	500483	45.474	ng		99
27) 2,4-Dimethylphenol	9.710	122	594202	41.987	ng		98
28) bis(2-Chloroethoxy)met...	9.940	93	1137398	40.382	ng		100
29) 2,4-Dichlorophenol	10.181	162	814063	42.522	ng		100
30) 1,2,4-Trichlorobenzene	10.387	180	860235	40.670	ng		100
31) Naphthalene	10.581	128	2856444	40.891	ng		100
32) Benzoic acid	9.851	122	691798	50.123	ng		98
33) 4-Chloroaniline	10.687	127	1051754	42.073	ng		100
34) Hexachlorobutadiene	10.863	225	504623	41.454	ng		99
35) Caprolactam	11.475	113	282742	45.063	ng		99
36) 4-Chloro-3-methylphenol	11.822	107	900969	43.625	ng		100
37) 2-Methylnaphthalene	12.192	142	1941032	41.131	ng		99
38) 1-Methylnaphthalene	12.410	142	1890383	41.185	ng		100
40) 1,2,4,5-Tetrachloroben...	12.563	216	937630	40.913	ng		100
41) Hexachlorocyclopentadiene	12.545	237	349194	42.270	ng		99
43) 2,4,6-Trichlorophenol	12.804	196	635900	43.661	ng		98

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration

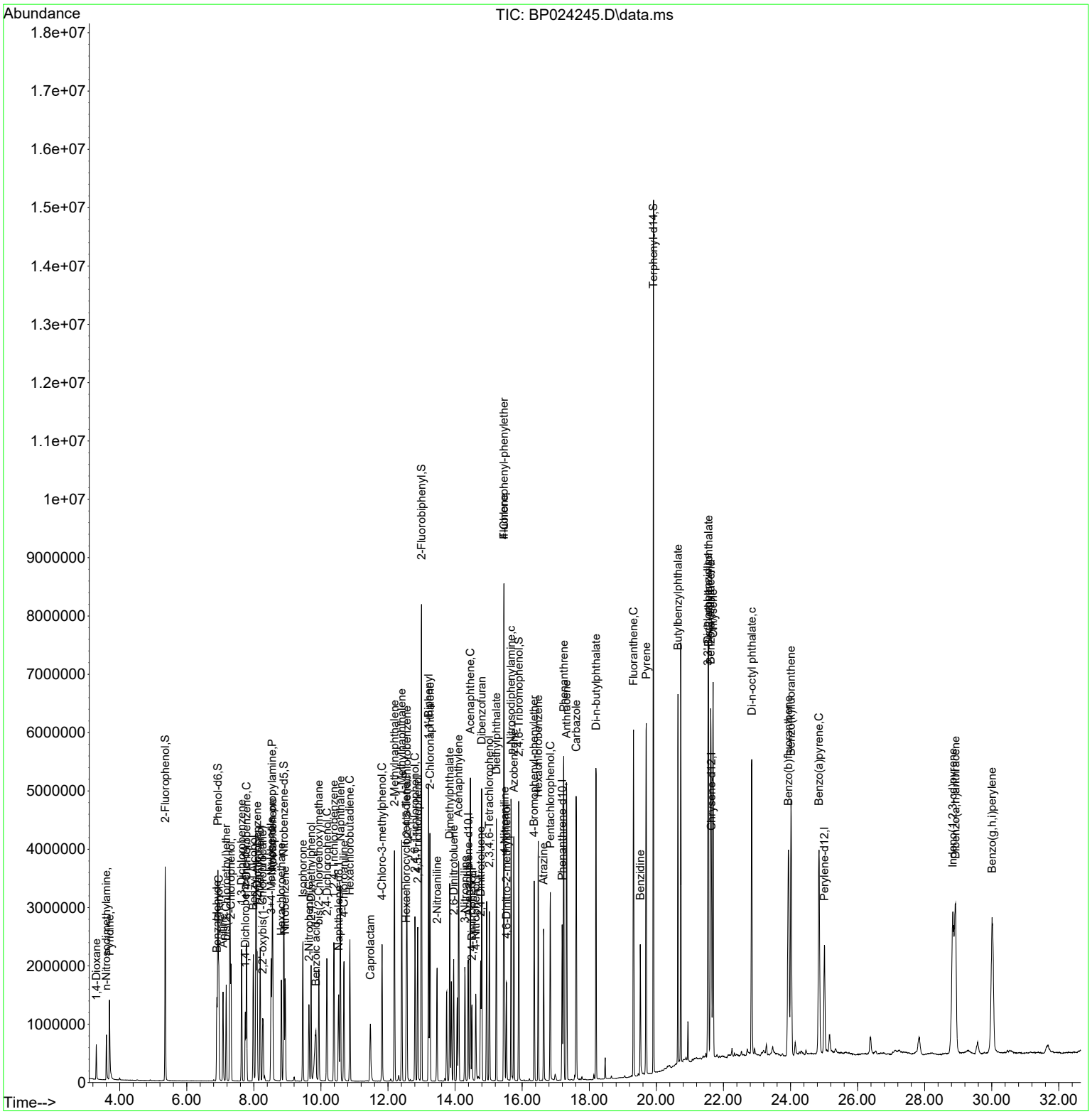
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	12.887	196	693624	43.426	ng		99
46) 1,1'-Biphenyl	13.210	154	2450643	41.135	ng		99
47) 2-Chloronaphthalene	13.251	162	1845112	41.175	ng		99
48) 2-Nitroaniline	13.463	65	519593	45.334	ng		99
49) Acenaphthylene	14.104	152	2875894	42.414	ng		100
50) Dimethylphthalate	13.839	163	2310321	41.647	ng		100
51) 2,6-Dinitrotoluene	13.957	165	506104	43.361	ng		99
52) Acenaphthene	14.457	154	1772003	40.903	ng		100
53) 3-Nitroaniline	14.292	138	543780	43.135	ng		98
54) 2,4-Dinitrophenol	14.504	184	297121	48.109	ng		99
55) Dibenzofuran	14.792	168	2902971	41.368	ng		98
56) 4-Nitrophenol	14.616	139	477043	45.287	ng		98
57) 2,4-Dinitrotoluene	14.763	165	697046	45.211	ng		94
58) Fluorene	15.457	166	2222287	40.645	ng		99
59) 2,3,4,6-Tetrachlorophenol	15.022	232	610555	43.265	ng		99
60) Diethylphthalate	15.228	149	2367427	42.855	ng		100
61) 4-Chlorophenyl-phenyle...	15.457	204	1073818	40.043	ng		98
62) 4-Nitroaniline	15.475	138	579400	43.821	ng		99
63) Azobenzene	15.751	77	2182266	41.912	ng		99
65) 4,6-Dinitro-2-methylph...	15.533	198	403124	44.908	ng		99
66) n-Nitrosodiphenylamine	15.669	169	1896523	41.303	ng		99
67) 4-Bromophenyl-phenylether	16.357	248	703604	42.382	ng		99
68) Hexachlorobenzene	16.480	284	821506	41.808	ng		98
69) Atrazine	16.639	200	493895	44.564	ng		98
70) Pentachlorophenol	16.839	266	593155	46.679	ng		99
71) Phenanthrene	17.239	178	3367198	40.763	ng		99
72) Anthracene	17.322	178	3338895	41.501	ng		100
73) Carbazole	17.610	167	3232369	41.661	ng		99
74) Di-n-butylphthalate	18.204	149	4065165	44.136	ng		99
75) Fluoranthene	19.321	202	3952330	41.312	ng		99
77) Benzidine	19.521	184	1226948	72.243	ng		99
78) Pyrene	19.698	202	4081765	42.267	ng		100
80) Butylbenzylphthalate	20.645	149	1880429	47.218	ng		98
81) Benzo(a)anthracene	21.621	228	4003511	41.454	ng		100
82) 3,3'-Dichlorobenzidine	21.539	252	1504299	46.475	ng		100
83) Chrysene	21.692	228	3795154	40.878	ng		99
84) Bis(2-ethylhexyl)phtha...	21.557	149	2752546	45.806	ng	#	99
85) Di-n-octyl phthalate	22.845	149	4728701	49.115	ng		100
87) Indeno(1,2,3-cd)pyrene	28.839	276	5097812	41.440	ng		94
88) Benzo(b)fluoranthene	23.939	252	4369312	41.114	ng		98
89) Benzo(k)fluoranthene	24.015	252	4169608	40.109	ng		100
90) Benzo(a)pyrene	24.851	252	3811205	41.241	ng		100
91) Dibenzo(a,h)anthracene	28.921	278	4203848	41.076	ng		99
92) Benzo(g,h,i)perylene	30.009	276	4239375	40.749	ng		98

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration



Sample Results: **BP024245.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 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	84	0.00
2		1,4-Dioxane	0.497	0.491	1.2	88	0.00
3		Pyridine	1.358	1.360	-0.1	87	0.00
4		n-Nitrosodimethylamine	0.454	0.460	-1.3	90	0.00
5	S	2-Fluorophenol	1.253	1.288	-2.8	90	0.00
6		Aniline	1.527	1.600	-4.8	91	0.00
7	S	Phenol-d6	1.675	1.722	-2.8	89	0.00
8		2-Chlorophenol	1.353	1.391	-2.8	90	0.00
9		Benzaldehyde	0.809	0.754	6.8	82	0.00
10	C	Phenol	1.691	1.720	-1.7	89	0.00
11		bis(2-Chloroethyl)ether	1.334	1.345	-0.8	89	0.00
12		1,3-Dichlorobenzene	1.459	1.480	-1.4	90	0.00
13	C	1,4-Dichlorobenzene	1.490	1.507	-1.1	90	0.00
14		1,2-Dichlorobenzene	1.430	1.443	-0.9	89	0.00
15		Benzyl Alcohol	1.061	1.144	-7.8	92	0.00
16		2,2'-oxybis(1-Chloropropane	1.361	1.415	-4.0	92	0.00
17		2-Methylphenol	1.061	1.118	-5.4	91	0.00
18		Hexachloroethane	0.529	0.538	-1.7	89	0.00
19	P	n-Nitroso-di-n-propylamine	0.972	1.019	-4.8	89	0.00
20		3+4-Methylphenols	1.457	1.542	-5.8	91	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	86	0.00
22		Acetophenone	0.506	0.514	-1.6	89	0.00
23	S	Nitrobenzene-d5	0.354	0.366	-3.4	89	0.00
24		Nitrobenzene	0.350	0.364	-4.0	91	0.00
25		Isophorone	0.608	0.646	-6.3	92	0.00
26	C	2-Nitrophenol	0.167	0.190	-13.8	95	0.00
27		2,4-Dimethylphenol	0.215	0.225	-4.7	90	0.00
28		bis(2-Chloroethoxy)methane	0.427	0.432	-1.2	88	0.00
29	C	2,4-Dichlorophenol	0.291	0.309	-6.2	89	0.00
30		1,2,4-Trichlorobenzene	0.321	0.326	-1.6	90	0.00
31		Naphthalene	1.060	1.084	-2.3	90	0.00
32		Benzoic acid	0.209	0.262	-25.4#	103	0.00
33		4-Chloroaniline	0.379	0.399	-5.3	91	0.00
34	C	Hexachlorobutadiene	0.185	0.191	-3.2	91	0.00
35		Caprolactam	0.095	0.107	-12.6	95	0.00
36	C	4-Chloro-3-methylphenol	0.313	0.342	-9.3	93	0.00
37		2-Methylnaphthalene	0.716	0.736	-2.8	90	0.00
38		1-Methylnaphthalene	0.697	0.717	-2.9	91	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00
40		1,2,4,5-Tetrachlorobenzene	0.578	0.591	-2.2	90	0.00
41	P	Hexachlorocyclopentadiene	0.208	0.220	-5.8	88	0.00
42	S	2,4,6-Tribromophenol	0.252	0.289	-14.7	98	0.00
43	C	2,4,6-Trichlorophenol	0.367	0.401	-9.3	92	0.00
44		2,4,5-Trichlorophenol	0.403	0.437	-8.4	91	0.00
45	S	2-Fluorobiphenyl	1.356	1.375	-1.4	89	0.00
46		1,1'-Biphenyl	1.503	1.546	-2.9	90	0.00
47		2-Chloronaphthalene	1.130	1.164	-3.0	91	0.00

Sample Results: **BP024245.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 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	0.289	0.328	-13.5	96	0.00
49		Acenaphthylene	1.710	1.814	-6.1	93	0.00
50		Dimethylphthalate	1.399	1.457	-4.1	91	0.00
51		2,6-Dinitrotoluene	0.294	0.319	-8.5	93	0.00
52	C	Acenaphthene	1.093	1.118	-2.3	90	0.00
53		3-Nitroaniline	0.318	0.343	-7.9	91	0.00
54	P	2,4-Dinitrophenol	0.156	0.187	-19.9	100	0.00
55		Dibenzofuran	1.770	1.831	-3.4	91	0.00
56	P	4-Nitrophenol	0.266	0.301	-13.2	93	0.00
57		2,4-Dinitrotoluene	0.389	0.440	-13.1	95	0.00
58		Fluorene	1.379	1.402	-1.7	89	0.00
59		2,3,4,6-Tetrachlorophenol	0.356	0.385	-8.1	92	0.00
60		Diethylphthalate	1.394	1.493	-7.1	94	0.00
61		4-Chlorophenyl-phenylether	0.676	0.677	-0.1	88	0.00
62		4-Nitroaniline	0.334	0.365	-9.3	91	0.00
63		Azobenzene	1.314	1.376	-4.7	91	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00
65		4,6-Dinitro-2-methylphenol	0.119	0.133	-11.8	98	0.00
66	c	n-Nitrosodiphenylamine	0.607	0.627	-3.3	92	0.00
67		4-Bromophenyl-phenylether	0.220	0.233	-5.9	94	0.00
68		Hexachlorobenzene	0.260	0.272	-4.6	94	0.00
69		Atrazine	0.147	0.163	-10.9	106	0.00
70	C	Pentachlorophenol	0.168	0.196	-16.7	97	0.00
71		Phenanthrene	1.093	1.113	-1.8	90	0.00
72		Anthracene	1.064	1.104	-3.8	91	0.00
73		Carbazole	1.026	1.069	-4.2	90	0.00
74		Di-n-butylphthalate	1.218	1.344	-10.3	94	0.00
75	C	Fluoranthene	1.265	1.307	-3.3	91	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	83	0.00
77		Benzidine	0.219	0.395	-80.4#	127	0.00
78		Pyrene	1.243	1.314	-5.7	90	0.00
79	S	Terphenyl-d14	0.969	1.006	-3.8	88	0.00
80		Butylbenzylphthalate	0.513	0.605	-17.9	95	0.00
81		Benzo(a)anthracene	1.243	1.289	-3.7	88	0.00
82		3,3'-Dichlorobenzidine	0.417	0.484	-16.1	93	0.00
83		Chrysene	1.195	1.222	-2.3	87	0.00
84		Bis(2-ethylhexyl)phthalate	0.774	0.886	-14.5	92	0.00
85	c	Di-n-octyl phthalate	1.240	1.522	-22.7#	99	0.00
86	I	Perylene-d12	1.000	1.000	0.0	86	0.00
87		Indeno(1,2,3-cd)pyrene	1.396	1.446	-3.6	91	0.00
88		Benzo(b)fluoranthene	1.206	1.239	-2.7	90	0.00
89		Benzo(k)fluoranthene	1.180	1.183	-0.3	90	0.00
90	C	Benzo(a)pyrene	1.049	1.081	-3.1	91	0.00
91		Dibenzo(a,h)anthracene	1.161	1.193	-2.8	90	0.00
92		Benzo(g,h,i)perylene	1.180	1.203	-1.9	90	0.00

Sample Results: **BP024245.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 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 = 1

Sample Results: **BP024245.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 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	84	0.00
2		1,4-Dioxane	40.000	39.562	1.1	88	0.00
3		Pyridine	40.000	40.059	-0.1	87	0.00
4		n-Nitrosodimethylamine	40.000	40.550	-1.4	90	0.00
5	S	2-Fluorophenol	80.000	82.248	-2.8	90	0.00
6		Aniline	40.000	41.933	-4.8	91	0.00
7	S	Phenol-d6	80.000	82.228	-2.8	89	0.00
8		2-Chlorophenol	40.000	41.104	-2.8	90	0.00
9		Benzaldehyde	40.000	37.315	6.7	82	0.00
10	C	Phenol	40.000	40.683	-1.7	89	0.00
11		bis(2-Chloroethyl)ether	40.000	40.321	-0.8	89	0.00
12		1,3-Dichlorobenzene	40.000	40.562	-1.4	90	0.00
13	C	1,4-Dichlorobenzene	40.000	40.461	-1.2	90	0.00
14		1,2-Dichlorobenzene	40.000	40.368	-0.9	89	0.00
15		Benzyl Alcohol	40.000	43.130	-7.8	92	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	41.583	-4.0	92	0.00
17		2-Methylphenol	40.000	42.175	-5.4	91	0.00
18		Hexachloroethane	40.000	40.730	-1.8	89	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	41.949	-4.9	89	0.00
20		3+4-Methylphenols	40.000	42.320	-5.8	91	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	86	0.00
22		Acetophenone	40.000	40.685	-1.7	89	0.00
23	S	Nitrobenzene-d5	80.000	82.580	-3.2	89	0.00
24		Nitrobenzene	40.000	41.671	-4.2	91	0.00
25		Isophorone	40.000	42.547	-6.4	92	0.00
26	C	2-Nitrophenol	40.000	45.474	-13.7	95	0.00
27		2,4-Dimethylphenol	40.000	41.987	-5.0	90	0.00
28		bis(2-Chloroethoxy)methane	40.000	40.382	-1.0	88	0.00
29	C	2,4-Dichlorophenol	40.000	42.522	-6.3	89	0.00
30		1,2,4-Trichlorobenzene	40.000	40.670	-1.7	90	0.00
31		Naphthalene	40.000	40.891	-2.2	90	0.00
32		Benzoic acid	40.000	50.123	-25.3#	103	0.00
33		4-Chloroaniline	40.000	42.073	-5.2	91	0.00
34	C	Hexachlorobutadiene	40.000	41.454	-3.6	91	0.00
35		Caprolactam	40.000	45.063	-12.7	95	0.00
36	C	4-Chloro-3-methylphenol	40.000	43.625	-9.1	93	0.00
37		2-Methylnaphthalene	40.000	41.131	-2.8	90	0.00
38		1-Methylnaphthalene	40.000	41.185	-3.0	91	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	85	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	40.913	-2.3	90	0.00
41	P	Hexachlorocyclopentadiene	40.000	42.270	-5.7	88	0.00
42	S	2,4,6-Tribromophenol	80.000	91.762	-14.7	98	0.00
43	C	2,4,6-Trichlorophenol	40.000	43.661	-9.2	92	0.00
44		2,4,5-Trichlorophenol	40.000	43.426	-8.6	91	0.00
45	S	2-Fluorobiphenyl	80.000	81.124	-1.4	89	0.00
46		1,1'-Biphenyl	40.000	41.135	-2.8	90	0.00
47		2-Chloronaphthalene	40.000	41.175	-2.9	91	0.00

Sample Results: **BP024245.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 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	45.334	-13.3	96	0.00
49		Acenaphthylene	40.000	42.414	-6.0	93	0.00
50		Dimethylphthalate	40.000	41.647	-4.1	91	0.00
51		2,6-Dinitrotoluene	40.000	43.361	-8.4	93	0.00
52	C	Acenaphthene	40.000	40.903	-2.3	90	0.00
53		3-Nitroaniline	40.000	43.135	-7.8	91	0.00
54	P	2,4-Dinitrophenol	40.000	48.109	-20.3	100	0.00
55		Dibenzofuran	40.000	41.368	-3.4	91	0.00
56	P	4-Nitrophenol	40.000	45.287	-13.2	93	0.00
57		2,4-Dinitrotoluene	40.000	45.211	-13.0	95	0.00
58		Fluorene	40.000	40.645	-1.6	89	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	43.265	-8.2	92	0.00
60		Diethylphthalate	40.000	42.855	-7.1	94	0.00
61		4-Chlorophenyl-phenylether	40.000	40.043	-0.1	88	0.00
62		4-Nitroaniline	40.000	43.821	-9.6	91	0.00
63		Azobenzene	40.000	41.912	-4.8	91	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	88	0.00
65		4,6-Dinitro-2-methylphenol	40.000	44.908	-12.3	98	0.00
66	c	n-Nitrosodiphenylamine	40.000	41.303	-3.3	92	0.00
67		4-Bromophenyl-phenylether	40.000	42.382	-6.0	94	0.00
68		Hexachlorobenzene	40.000	41.808	-4.5	94	0.00
69		Atrazine	40.000	44.564	-11.4	106	0.00
70	C	Pentachlorophenol	40.000	46.679	-16.7	97	0.00
71		Phenanthrene	40.000	40.763	-1.9	90	0.00
72		Anthracene	40.000	41.501	-3.8	91	0.00
73		Carbazole	40.000	41.661	-4.2	90	0.00
74		Di-n-butylphthalate	40.000	44.136	-10.3	94	0.00
75	C	Fluoranthene	40.000	41.312	-3.3	91	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	83	0.00
77		Benzidine	40.000	72.243	-80.6#	127	0.00
78		Pyrene	40.000	42.267	-5.7	90	0.00
79	S	Terphenyl-d14	80.000	83.072	-3.8	88	0.00
80		Butylbenzylphthalate	40.000	47.218	-18.0	95	0.00
81		Benzo(a)anthracene	40.000	41.454	-3.6	88	0.00
82		3,3'-Dichlorobenzidine	40.000	46.475	-16.2	93	0.00
83		Chrysene	40.000	40.878	-2.2	87	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	45.806	-14.5	92	0.00
85	c	Di-n-octyl phthalate	40.000	49.115	-22.8#	99	0.00
86	I	Perylene-d12	20.000	20.000	0.0	86	0.00
87		Indeno(1,2,3-cd)pyrene	40.000	41.440	-3.6	91	0.00
88		Benzo(b)fluoranthene	40.000	41.114	-2.8	90	0.00
89		Benzo(k)fluoranthene	40.000	40.109	-0.3	90	0.00
90	C	Benzo(a)pyrene	40.000	41.241	-3.1	91	0.00
91		Dibenzo(a,h)anthracene	40.000	41.076	-2.7	90	0.00
92		Benzo(g,h,i)perylene	40.000	40.749	-1.9	90	0.00

Sample Results: **BP024245.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024245.D
Acq On : 10 Apr 2025 09:46
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_P
LabSampleId :
SSTDCCC040

Quant Time: Apr 10 11:43:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 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 = 1

QC SAMPLE DATA

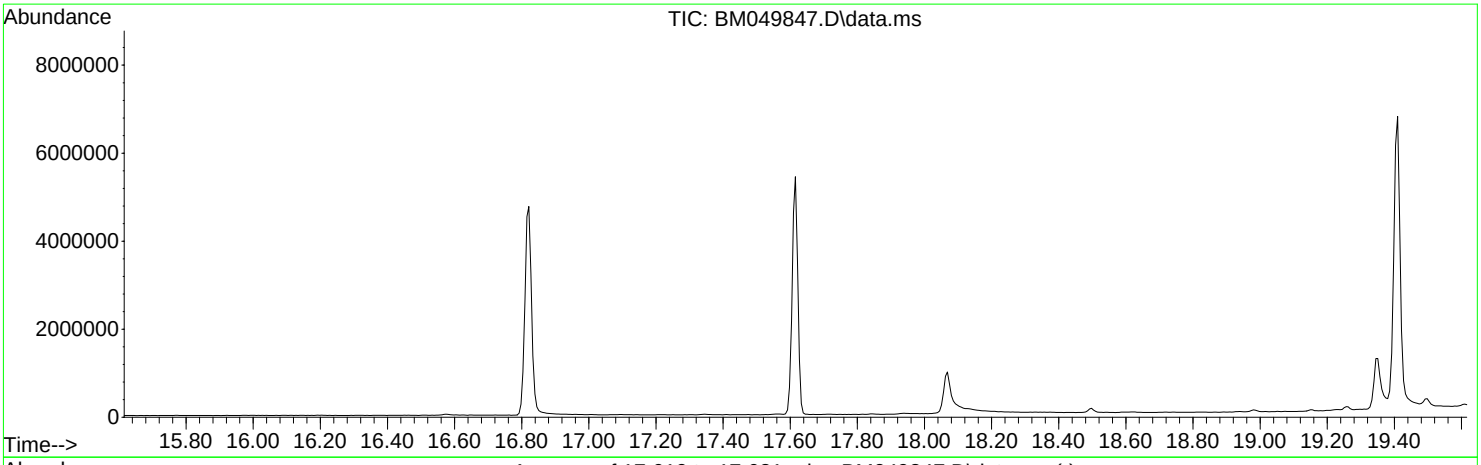
Sample Results: **BM049847.D**

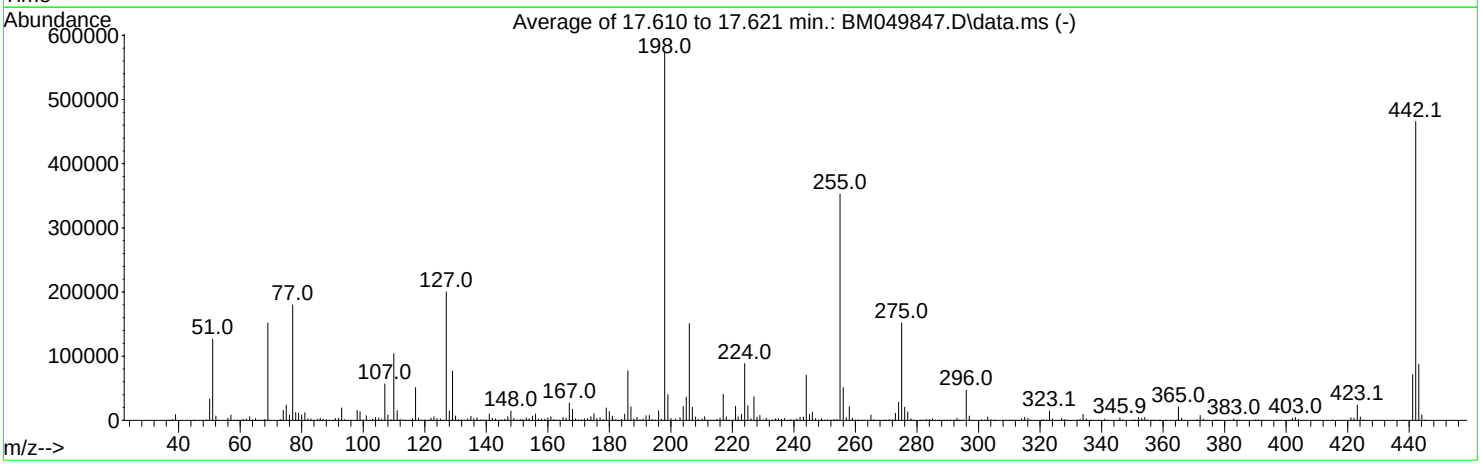
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049847.D
Acq On : 08 Apr 2025 12:55
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Apr 09 04:00:55 2025





AutoFind: Scans 2486, 2487, 2488; Background Corrected with Scan 2479

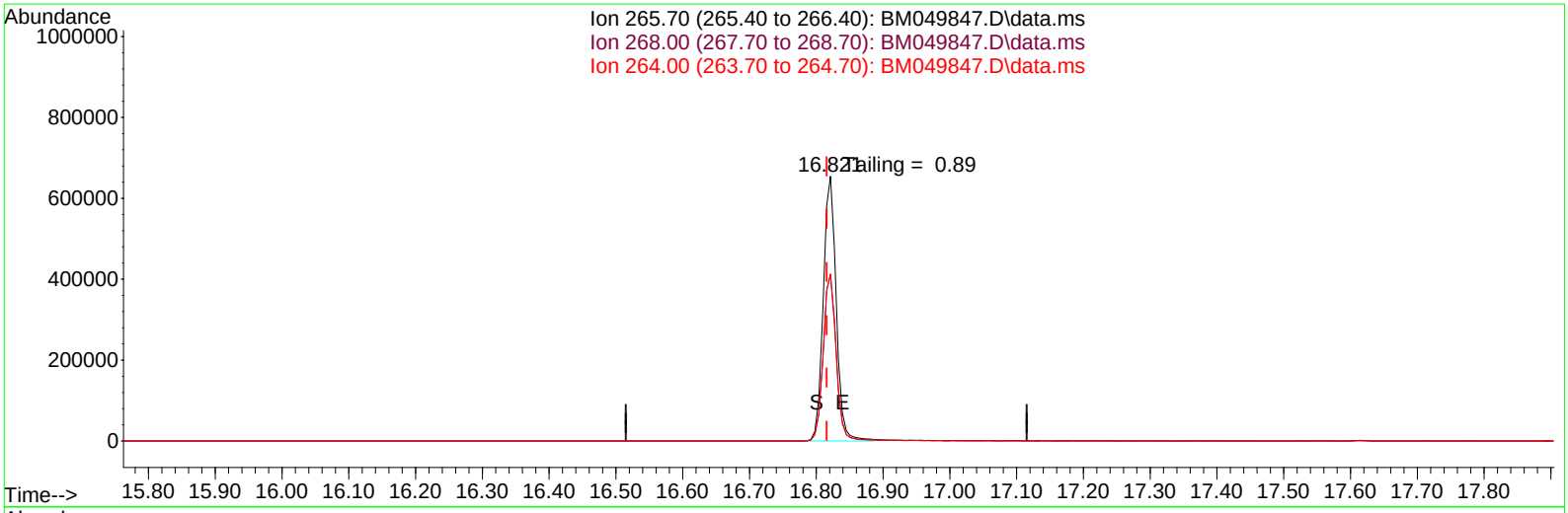
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	22.1	126723	PASS
68	69	0.00	2	1.2	1886	PASS
69	198	0.00	100	26.5	151989	PASS
70	69	0.00	2	0.3	382	PASS
127	198	10	80	34.9	200277	PASS
197	198	0.00	2	0.4	2141	PASS
198	198	100	100	100.0	573312	PASS
199	198	5	9	7.0	40037	PASS
275	198	10	60	26.5	151747	PASS
365	198	1	100	3.7	21032	PASS
441	198	0.01	100	12.4	71269	PASS
442	442	50	100	100.0	465813	PASS
443	442	15	24	18.8	87675	PASS

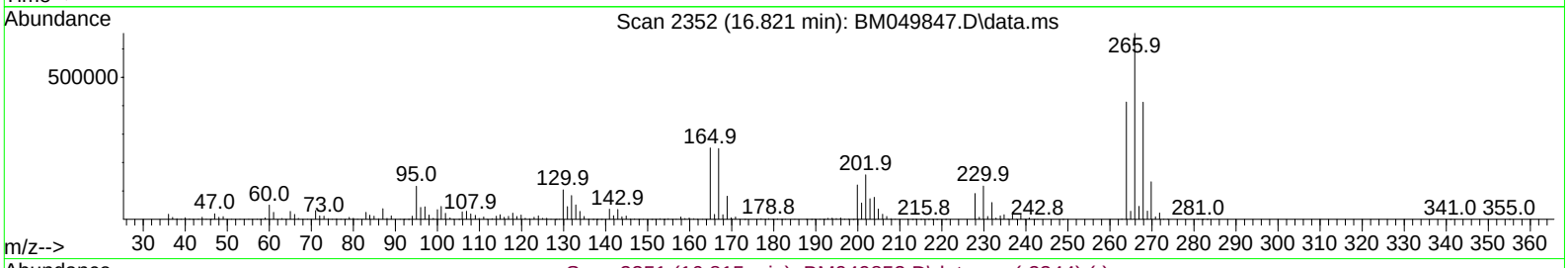
Sample Results: **BM049847.D**

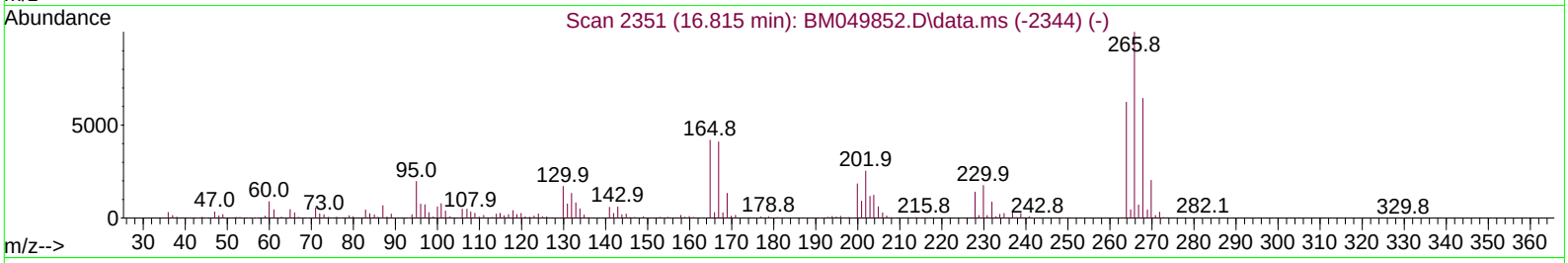
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049847.D
Acq On : 08 Apr 2025 12:55
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 09 04:09:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049847.D\data.ms

(70) Pentachlorophenol (C)

16.821min (+ 0.006) 230006.58 ng m

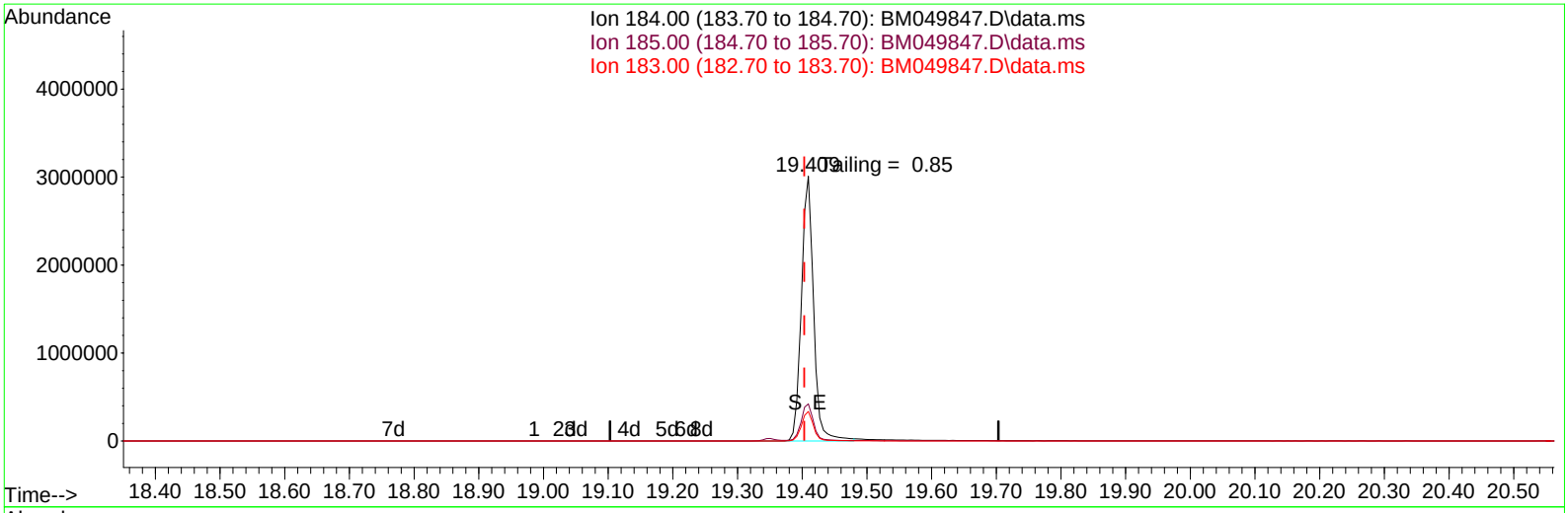
response 888392

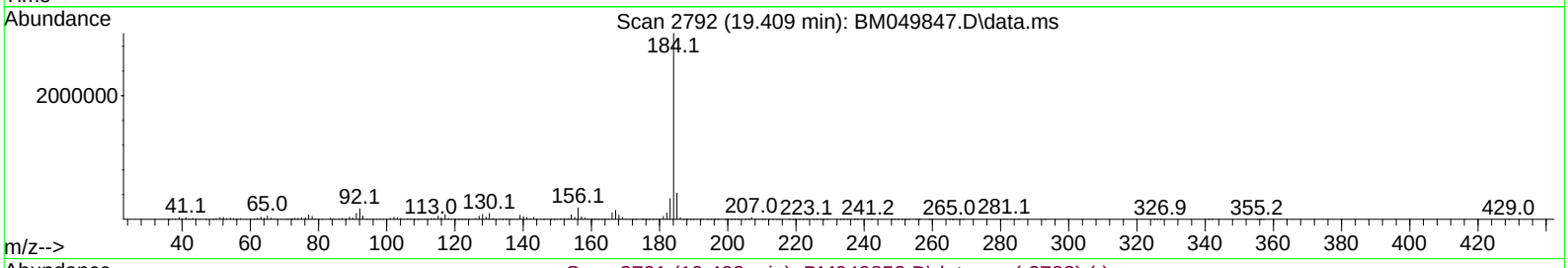
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.30	62.99
264.00	62.30	63.04
0.00	0.00	0.00

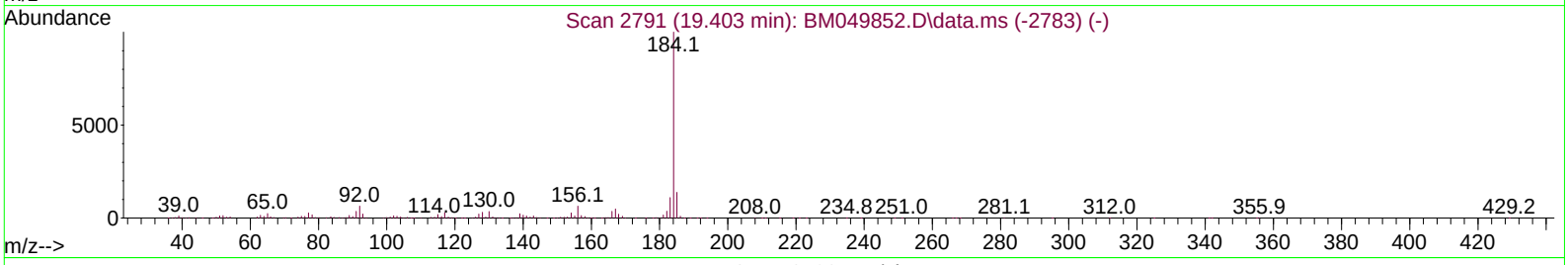
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040825\
Data File : BM049847.D
Acq On : 08 Apr 2025 12:55
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 09 04:09:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049847.D\data.ms

(77) Benzidine

19.409min (+ 0.006) 842986.98 ng m

response 4014847

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.30	14.02
183.00	11.00	11.14
0.00	0.00	0.00

DDT Breakdown

Date	Instrument Name	DFTPP Data File
4/8/2025	BNA_M	BM049847.D
Compound Name	**Response**	**Retention Time**
DDT	1953764	20.645
DDD	24016	20.262
DDE	1854	19.704
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
25870	1979634	1.31

Instrument :
BNA_M
ClientSampleId :
DFTPP

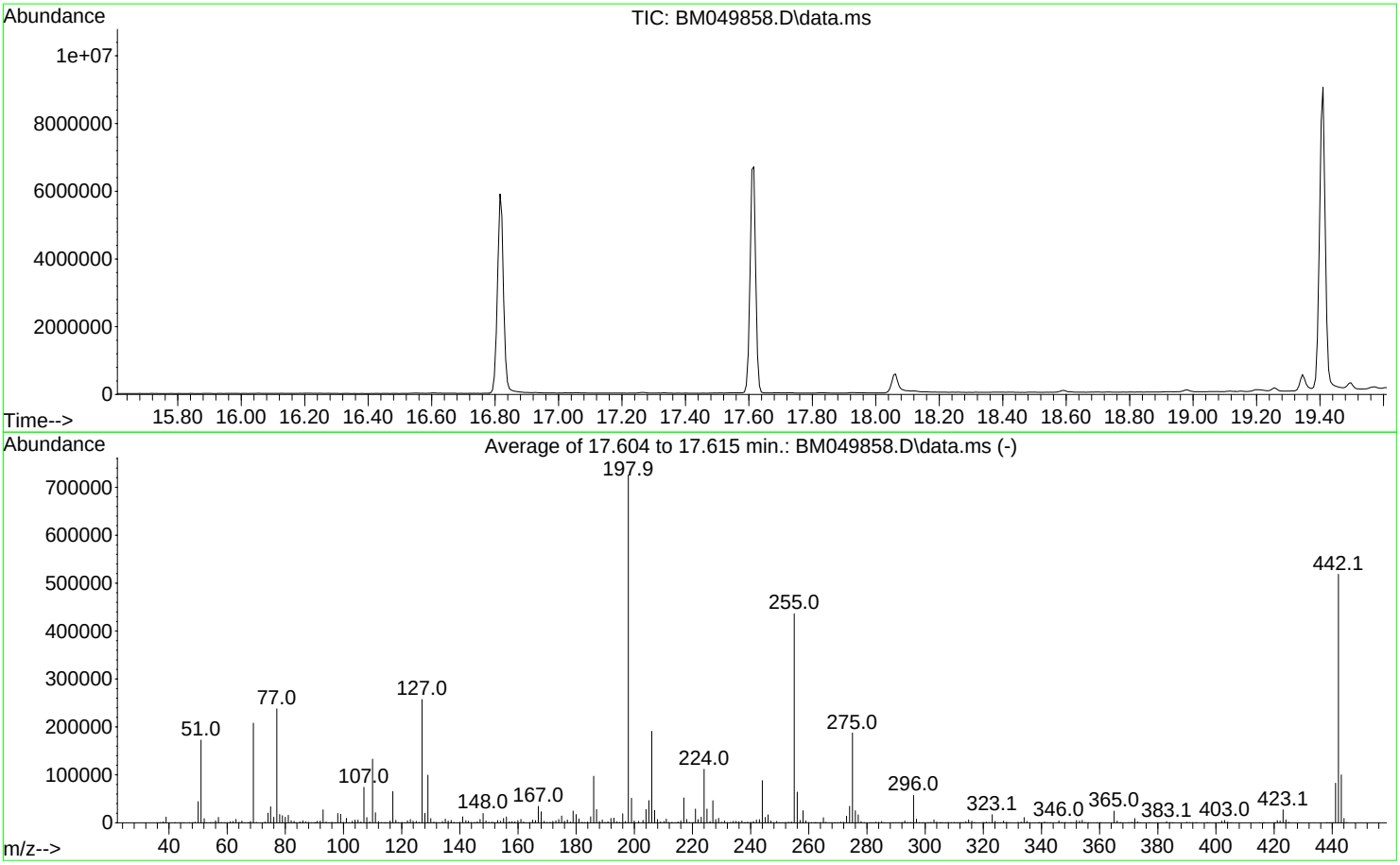
Sample Results: **BM049858.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049858.D
Acq On : 09 Apr 2025 08:30
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Apr 09 04:00:55 2025



AutoFind: Scans 2485, 2486, 2487; Background Corrected with Scan 2478

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	23.8	172767	PASS
68	69	0.00	2	1.4	2844	PASS
69	198	0.00	100	28.7	208079	PASS
70	69	0.00	2	0.5	979	PASS
127	198	10	80	35.4	257109	PASS
197	198	0.00	2	0.4	2927	PASS
198	198	100	100	100.0	725525	PASS
199	198	5	9	7.1	51557	PASS
275	198	10	60	25.8	187432	PASS
365	198	1	100	3.4	24319	PASS
441	198	0.01	100	11.4	82643	PASS
442	442	50	100	100.0	518613	PASS
443	442	15	24	19.3	100059	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
4/9/2025	BNA_M	BM049858.D
Compound Name	**Response**	**Retention Time**
DDT	2465394	20.645
DDD	31585	20.262
DDE	2023	19.698
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
33608	2499002	1.34

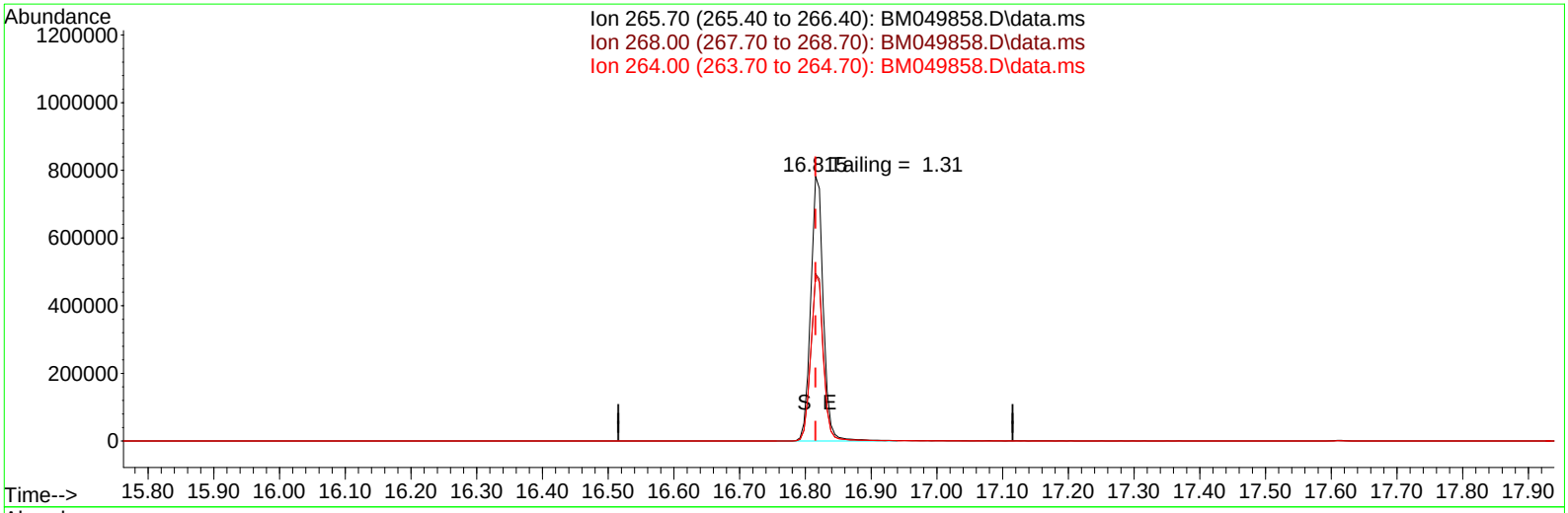
Instrument :
BNA_M
ClientSampleId :
DFTPP

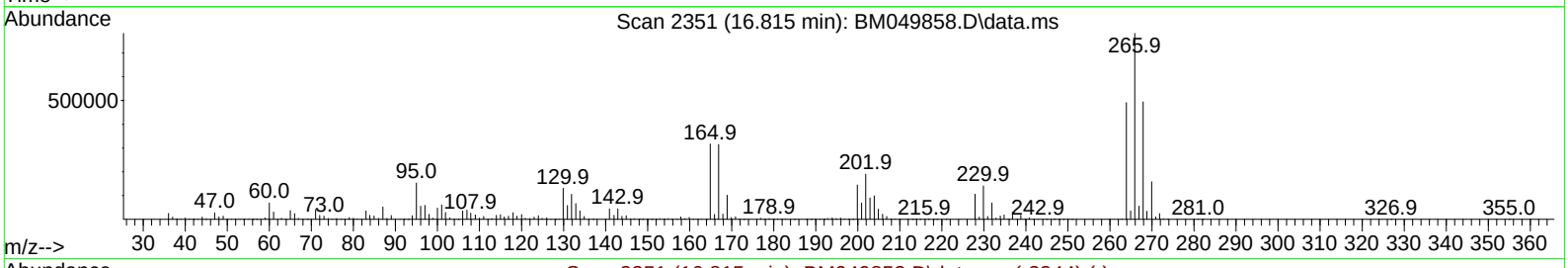
Sample Results: **BM049858.D**

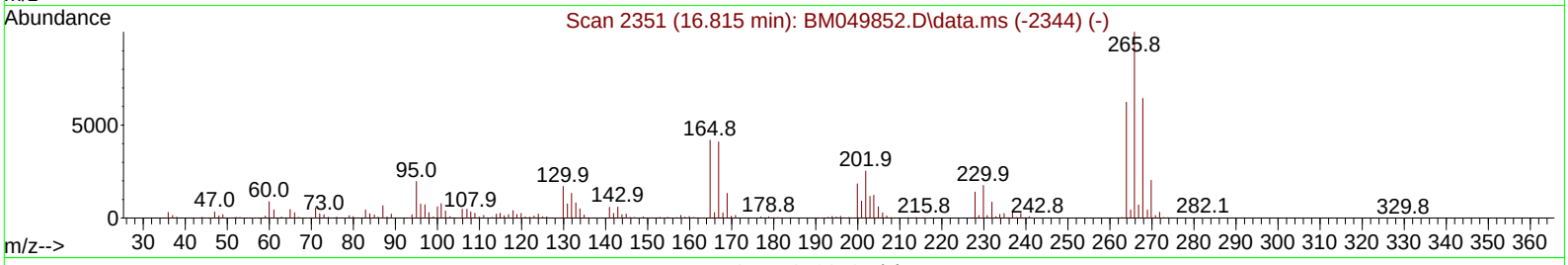
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049858.D
Acq On : 09 Apr 2025 08:30
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 09 11:47:50 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049858.D\data.ms

(70) Pentachlorophenol (C)

16.815min (-0.000) 710298.89 ng

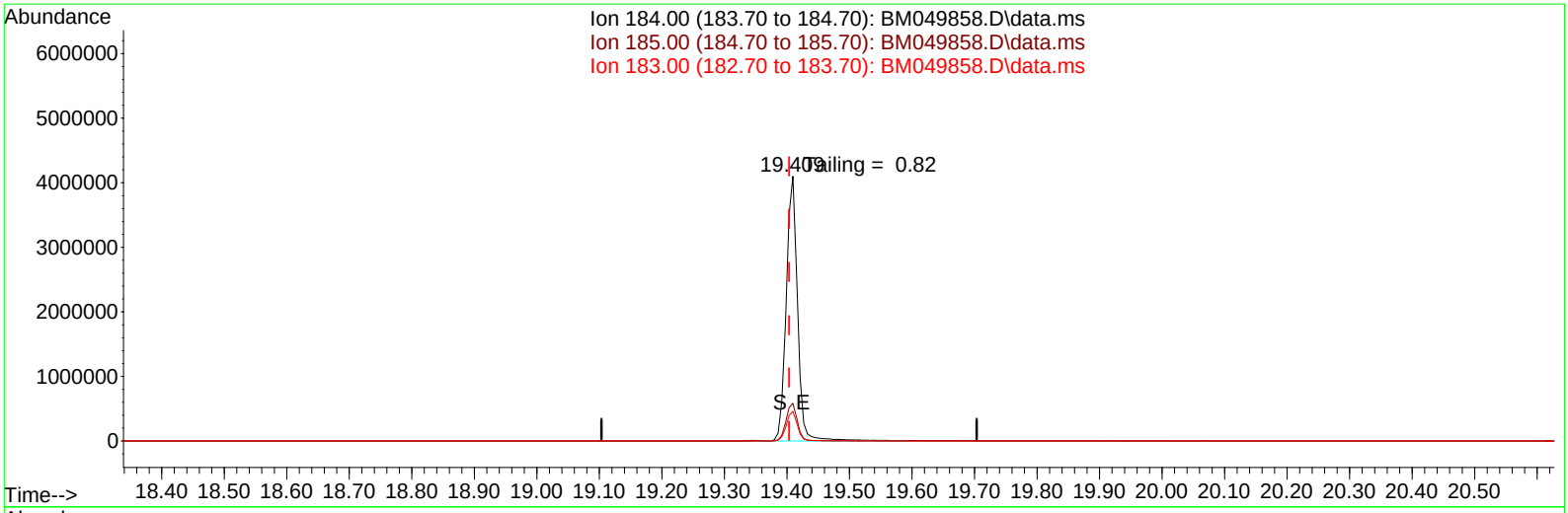
response 1044481

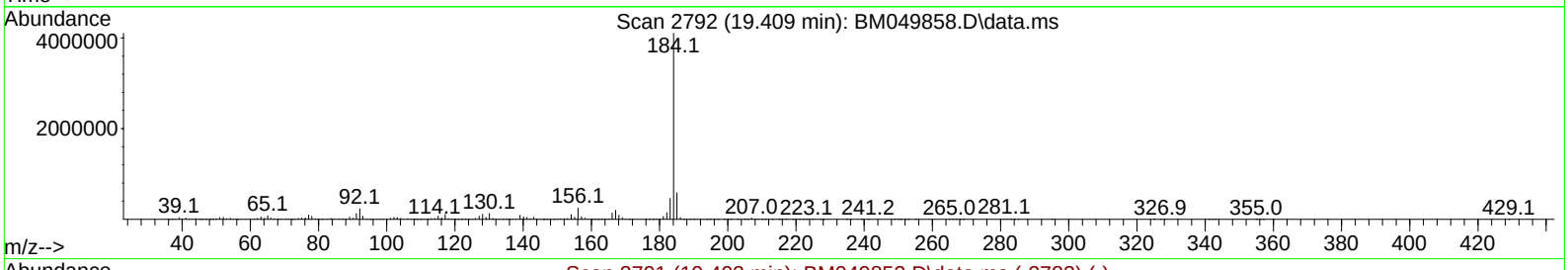
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.30	63.17
264.00	62.30	62.77
0.00	0.00	0.00

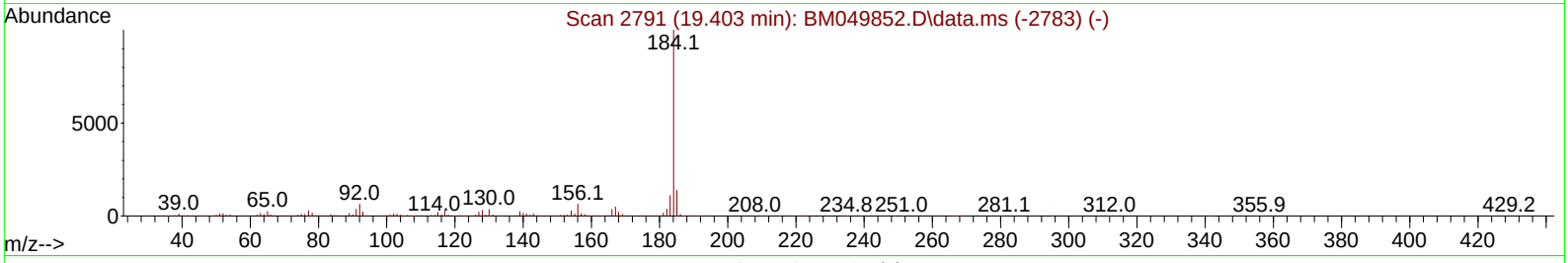
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049858.D
Acq On : 09 Apr 2025 08:30
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 09 11:47:50 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049858.D\data.ms

(77) Benzidine

19.409min (+ 0.006) 7036.51 ng

response 5211317

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.30	14.26
183.00	11.00	11.25
0.00	0.00	0.00

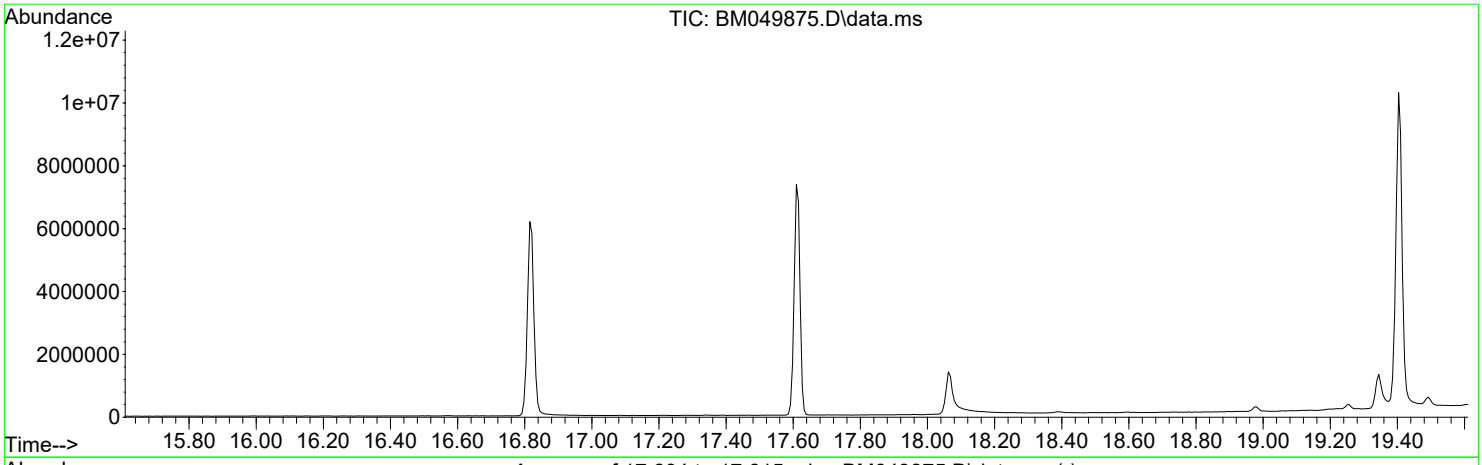
Sample Results: **BM049875.D**

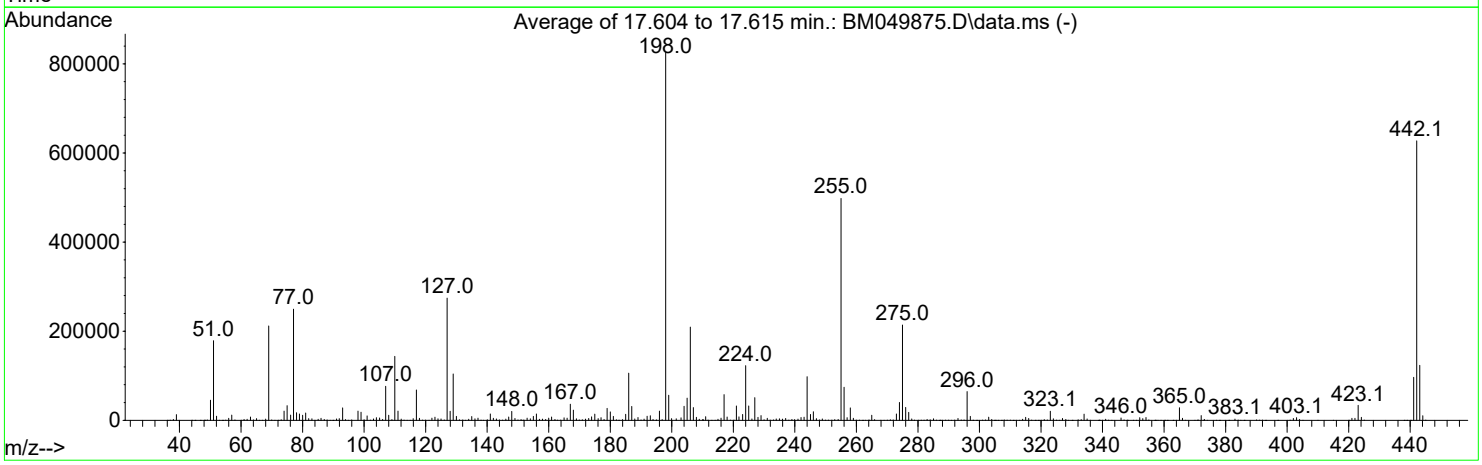
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049875.D
Acq On : 10 Apr 2025 08:53
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Apr 09 04:00:55 2025





AutoFind: Scans 2485, 2486, 2487; Background Corrected with Scan 2478

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	21.6	178667	PASS
68	69	0.00	2	1.4	2914	PASS
69	198	0.00	100	25.7	212021	PASS
70	69	0.00	2	0.5	1019	PASS
127	198	10	80	33.2	274475	PASS
197	198	0.00	2	0.2	1888	PASS
198	198	100	100	100.0	825515	PASS
199	198	5	9	6.8	56387	PASS
275	198	10	60	25.9	214123	PASS
365	198	1	100	3.4	28392	PASS
441	198	0.01	100	11.7	96741	PASS
442	442	50	100	100.0	627136	PASS
443	442	15	24	19.7	123464	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
4/10/2025	BNA_M	BM049875.D
Compound Name	**Response**	**Retention Time**
DDT	2746524	20.644
DDD	35768	20.256
DDE	2756	19.698
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
38524	2785048	1.38

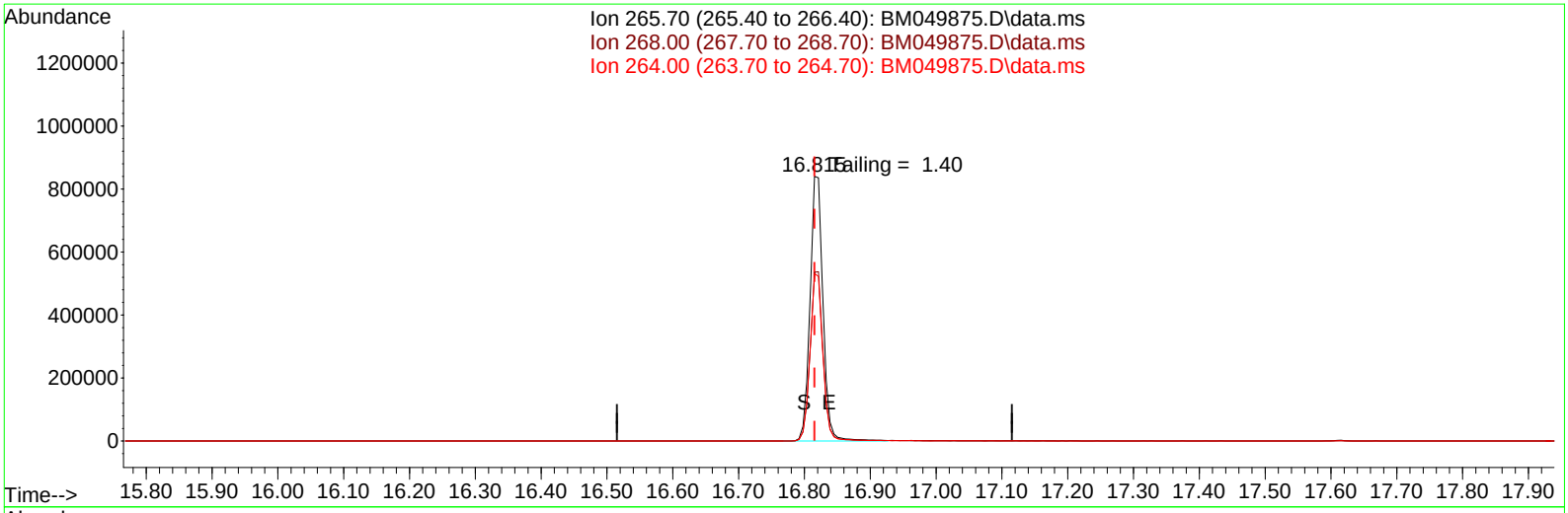
Instrument :
BNA_M
ClientSampleId :
DFTPP

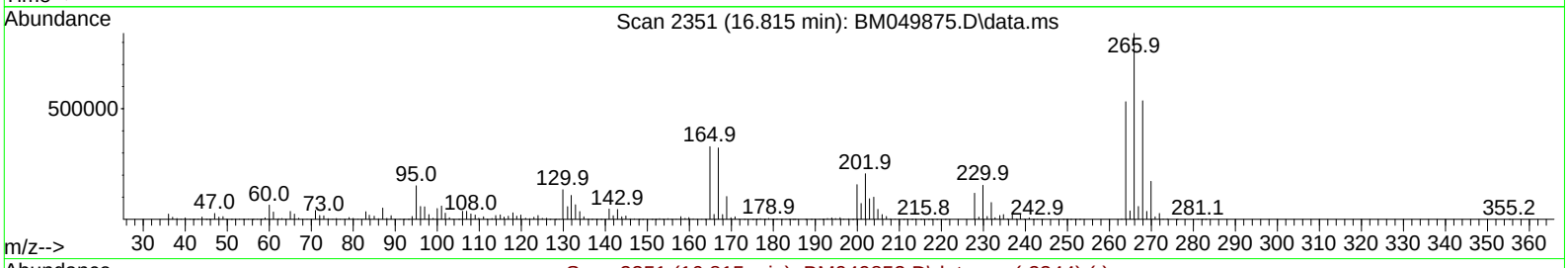
Sample Results: **BM049875.D**

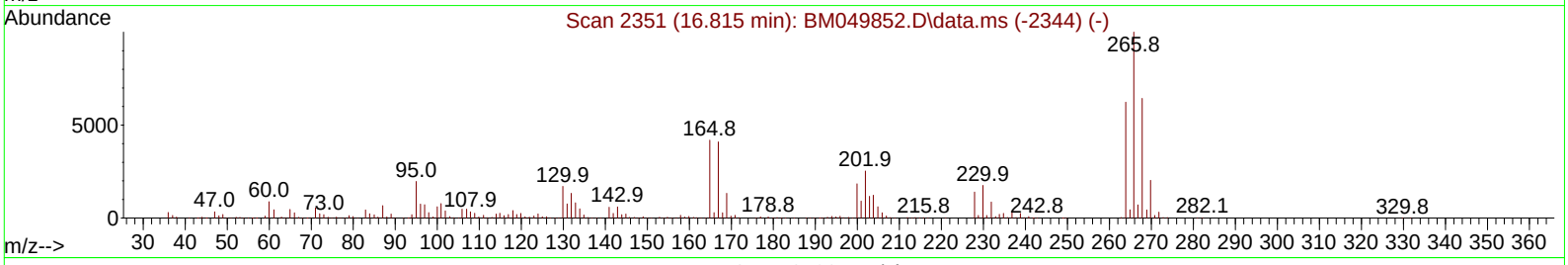
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049875.D
Acq On : 10 Apr 2025 08:53
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 10 12:01:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049875.D\data.ms

(70) Pentachlorophenol (C)

16.815min (-0.000) 211954.15 ng

response 1151118

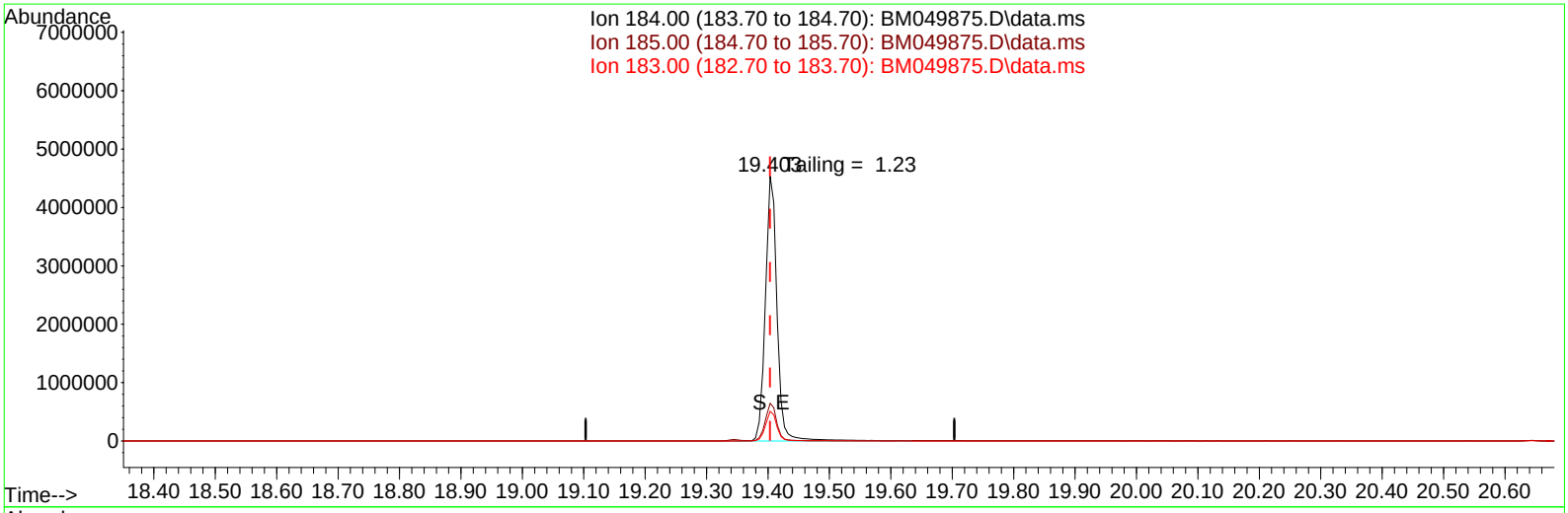
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.30	63.75
264.00	62.30	63.28
0.00	0.00	0.00

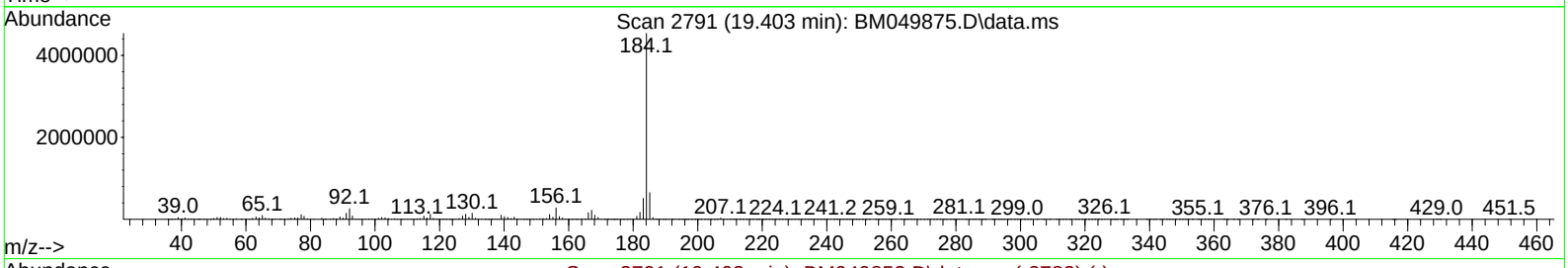
Sample Results: **BM049875.D**

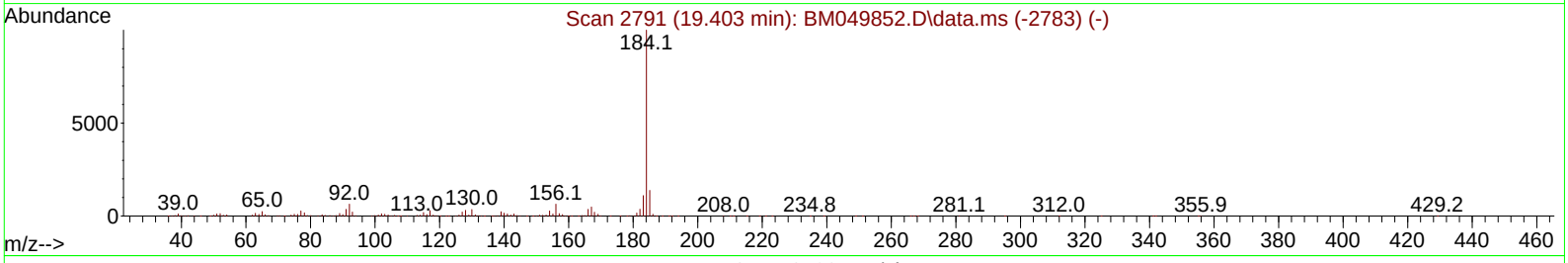
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049875.D
Acq On : 10 Apr 2025 08:53
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 10 12:01:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049875.D\data.ms

(77) Benzidine

19.403min (-0.000) 194071.13 ng

response 5998885

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.30	14.29
183.00	11.00	11.22
0.00	0.00	0.00

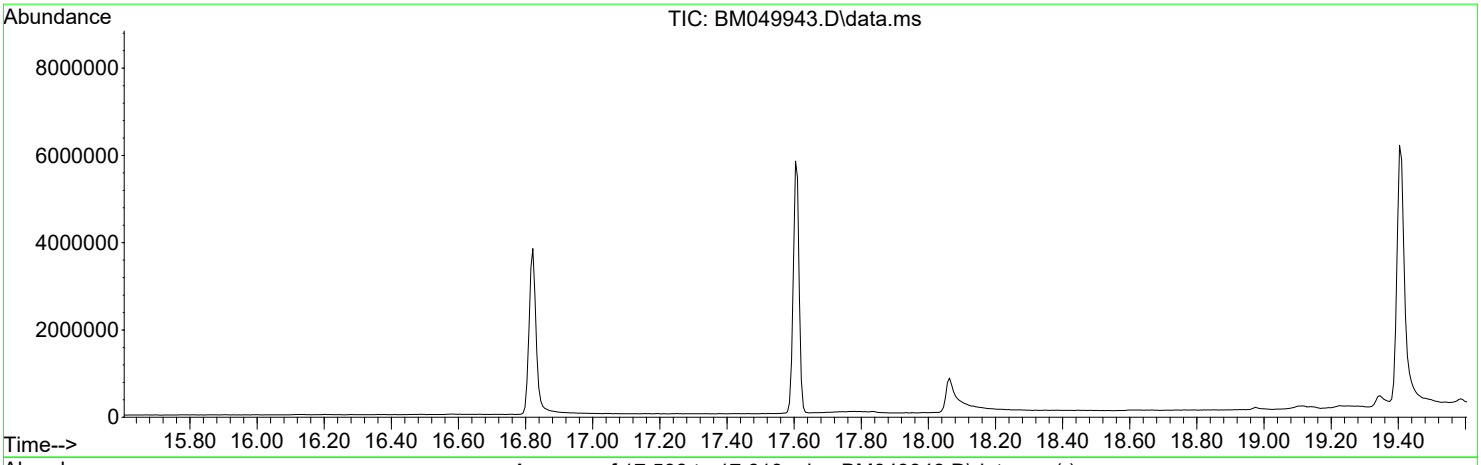
Sample Results: **BM049943.D**

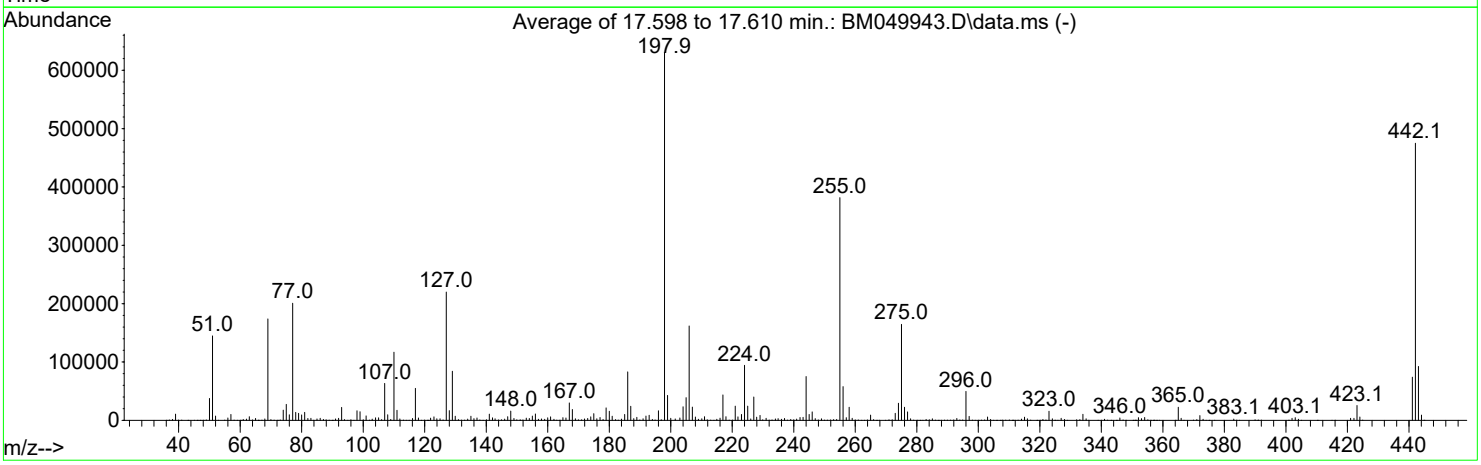
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049943.D
Acq On : 16 Apr 2025 08:49
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Apr 09 04:00:55 2025





AutoFind: Scans 2484, 2485, 2486; Background Corrected with Scan 2476

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	23.0	144954	PASS
68	69	0.00	2	1.5	2535	PASS
69	198	0.00	100	27.6	173898	PASS
70	69	0.00	2	0.7	1264	PASS
127	198	10	80	34.9	219925	PASS
197	198	0.00	2	0.1	865	PASS
198	198	100	100	100.0	630485	PASS
199	198	5	9	6.8	42927	PASS
275	198	10	60	26.1	164576	PASS
365	198	1	100	3.6	22401	PASS
441	198	0.01	100	11.7	73973	PASS
442	442	50	100	100.0	475008	PASS
443	442	15	24	19.4	92325	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
4/16/2025	BNA_M	BM049943.D
Compound Name	**Response**	**Retention Time**
DDT	1961082	20.645
DDD	51139	20.204
DDE	2728	19.698
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
53867	2014949	2.67

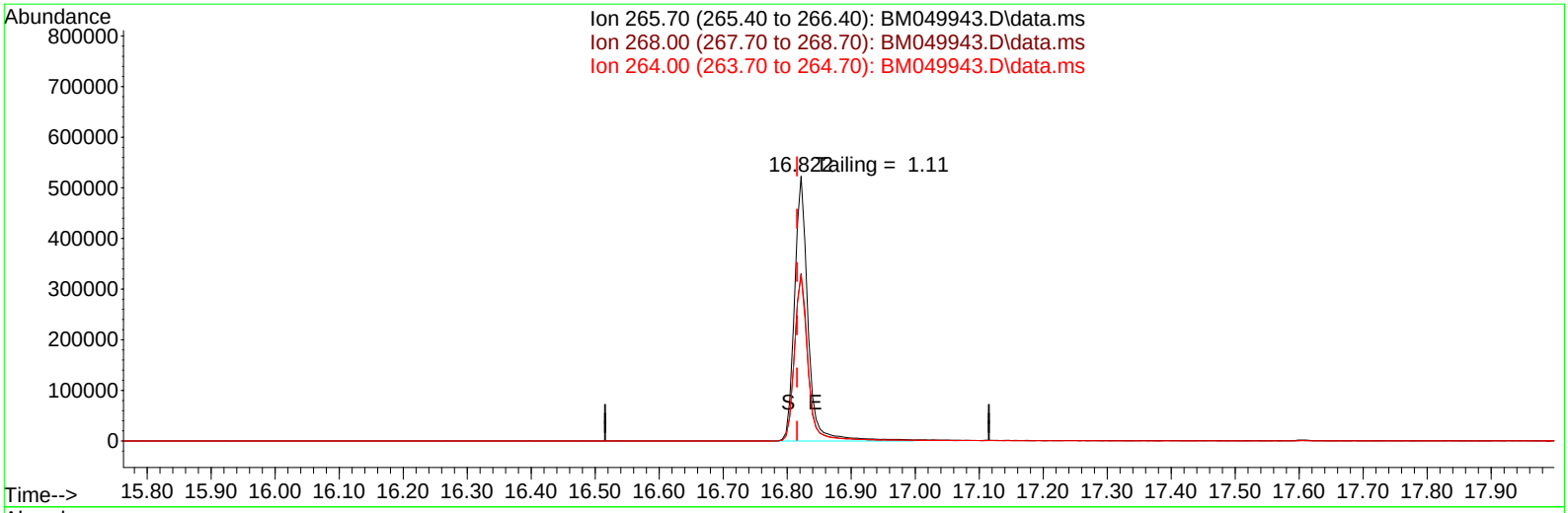
Instrument :
BNA_M
ClientSampleId :
DFTPP

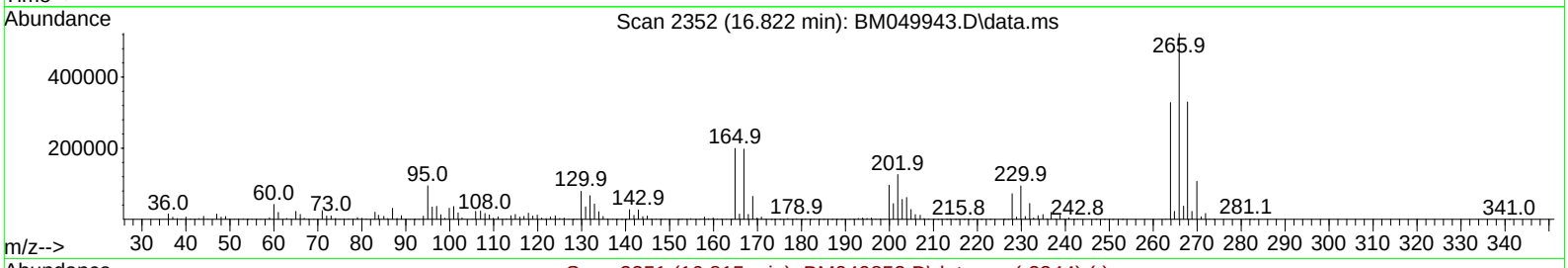
Sample Results: **BM049943.D**

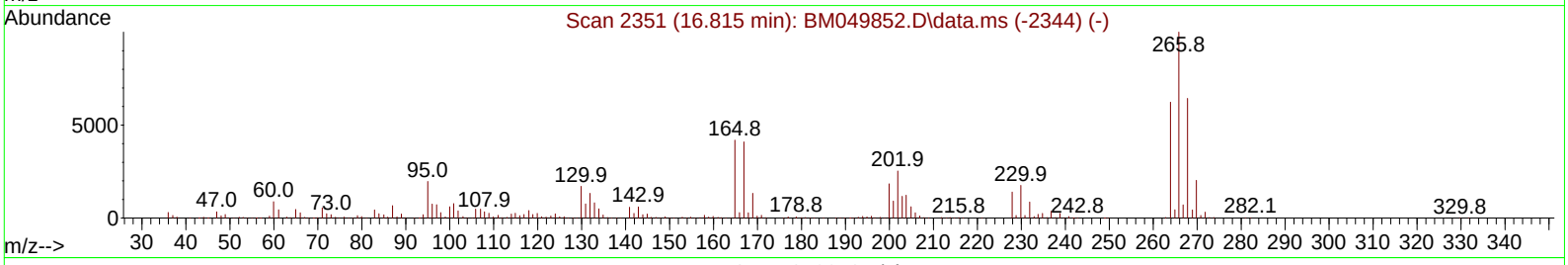
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049943.D
Acq On : 16 Apr 2025 08:49
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 16 11:06:52 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049943.D\data.ms

(70) Pentachlorophenol (C)

16.822min (+ 0.006) 1377107.60 ng

response 769504

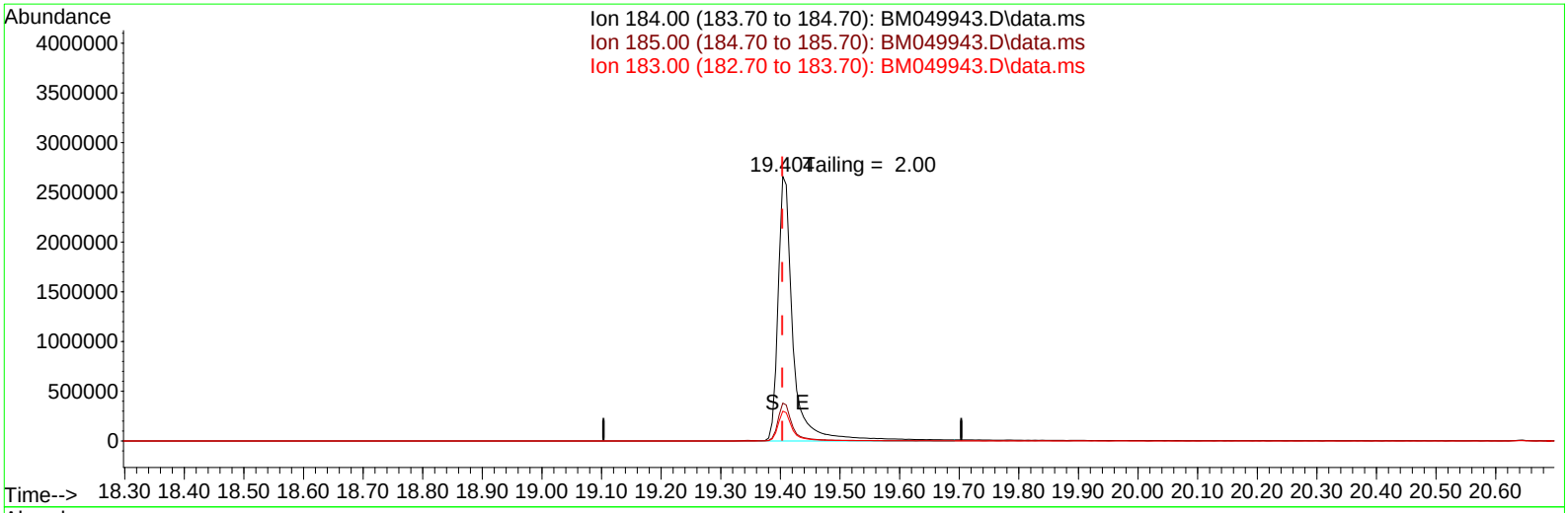
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.30	63.19
264.00	62.30	62.82
0.00	0.00	0.00

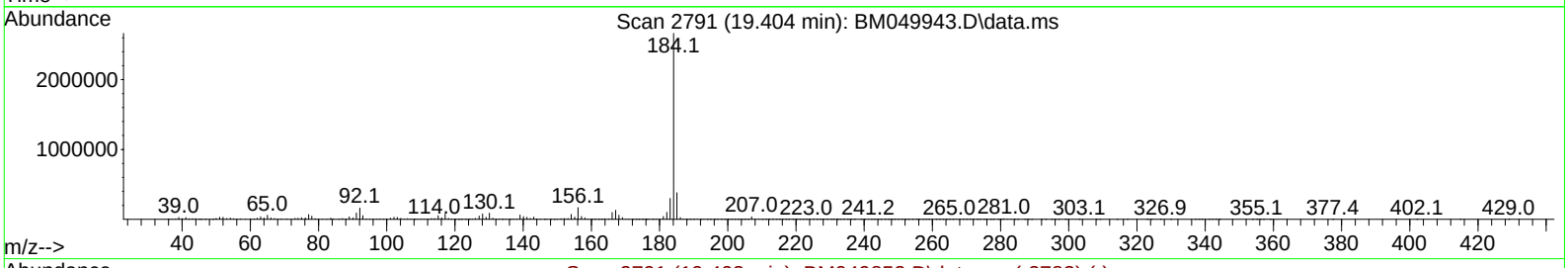
Sample Results: **BM049943.D**

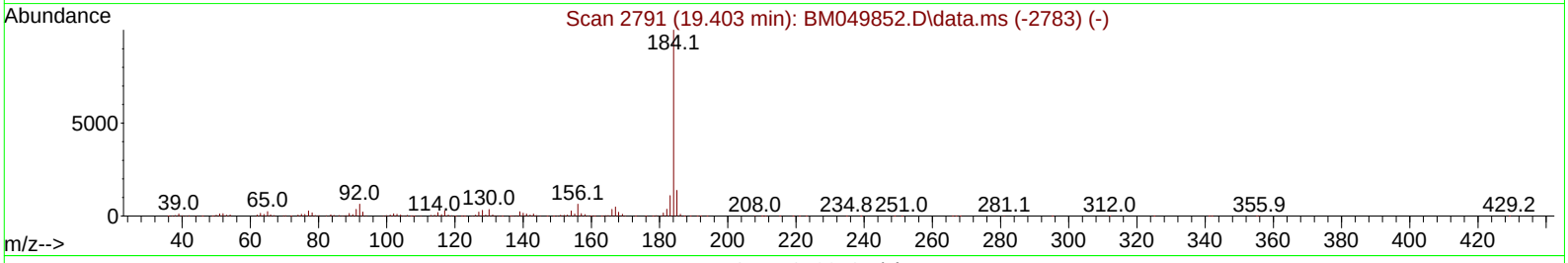
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049943.D
Acq On : 16 Apr 2025 08:49
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Apr 16 11:06:52 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration







TIC: BM049943.D\data.ms

(77) Benzidine

19.404min (+ 0.000) 473739.12 ng

response 4713616

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.30	14.31
183.00	11.00	11.26
0.00	0.00	0.00

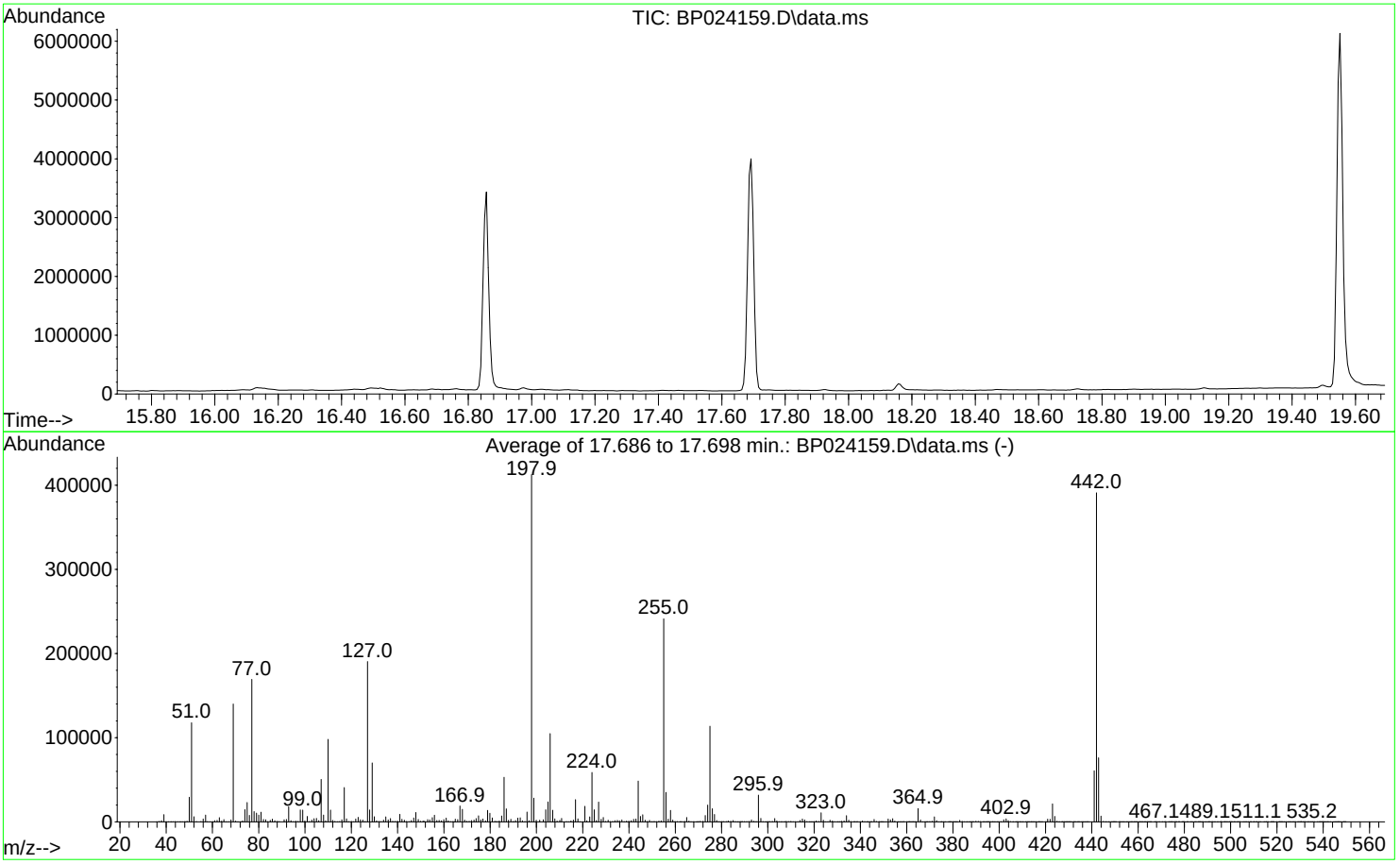
Sample Results: **BP024159.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024159.D
Acq On : 12 Mar 2025 15:36
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Mar 13 05:55:58 2025



AutoFind: Scans 2482, 2483, 2484; Background Corrected with Scan 2472

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	28.5	117822	PASS
68	69	0.00	2	1.6	2280	PASS
69	198	0.00	100	33.9	139938	PASS
70	69	0.00	2	0.6	822	PASS
127	198	10	80	46.1	190399	PASS
197	198	0.00	2	0.4	1468	PASS
198	198	100	100	100.0	412716	PASS
199	198	5	9	6.8	28114	PASS
275	198	10	60	27.5	113624	PASS
365	198	1	100	3.8	15804	PASS
441	198	0.01	100	14.7	60679	PASS
442	442	100	100	100.0	391061	PASS
443	442	15	24	19.5	76081	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
3/12/2025	BNA_P	BP024159.D
Compound Name	**Response**	**Retention Time**
DDT	1535436	20.851
DDD	16722	20.439
DDE	443	19.827
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
17165	1552601	1.11

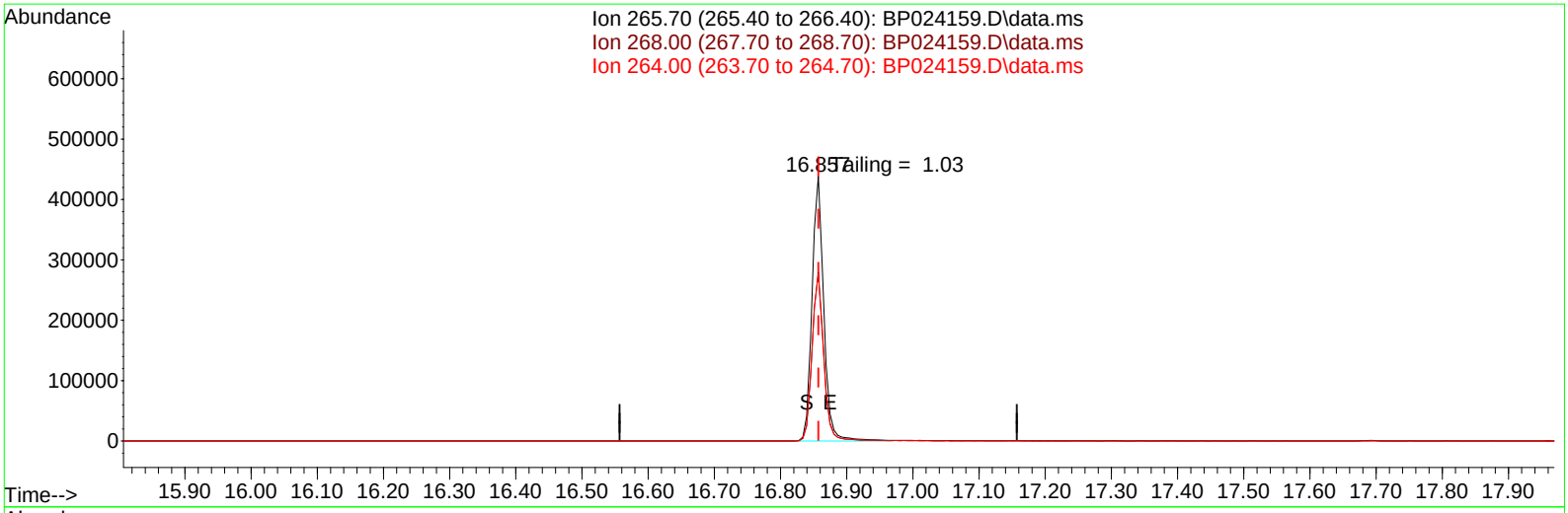
Instrument :
BNA_P
ClientSampleId :
DFTPP

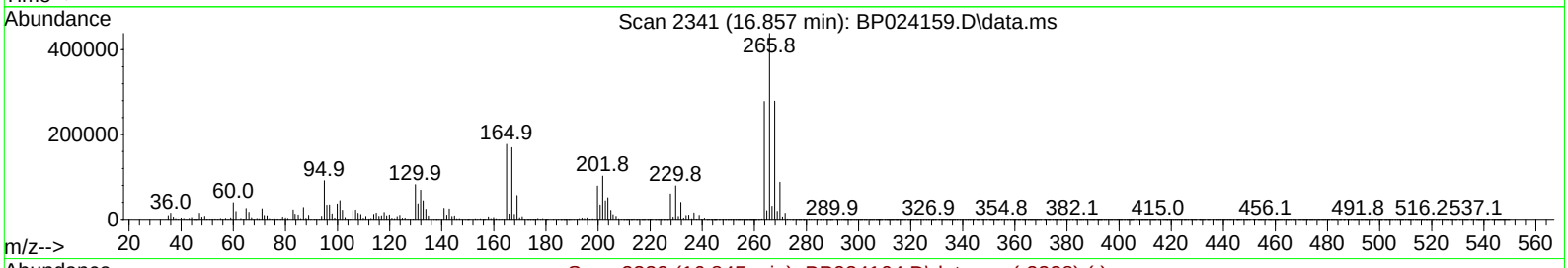
Sample Results: **BP024159.D**

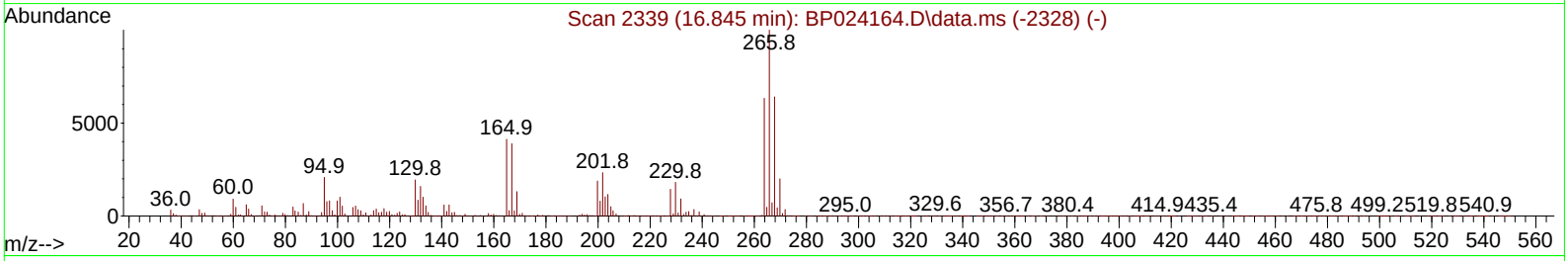
Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024159.D
Acq On : 12 Mar 2025 15:36
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Quant Time: Mar 13 05:56:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration







TIC: BP024159.D\data.ms

(70) Pentachlorophenol (C)

16.857min (0.000) 4607317.61 ng

response 542052

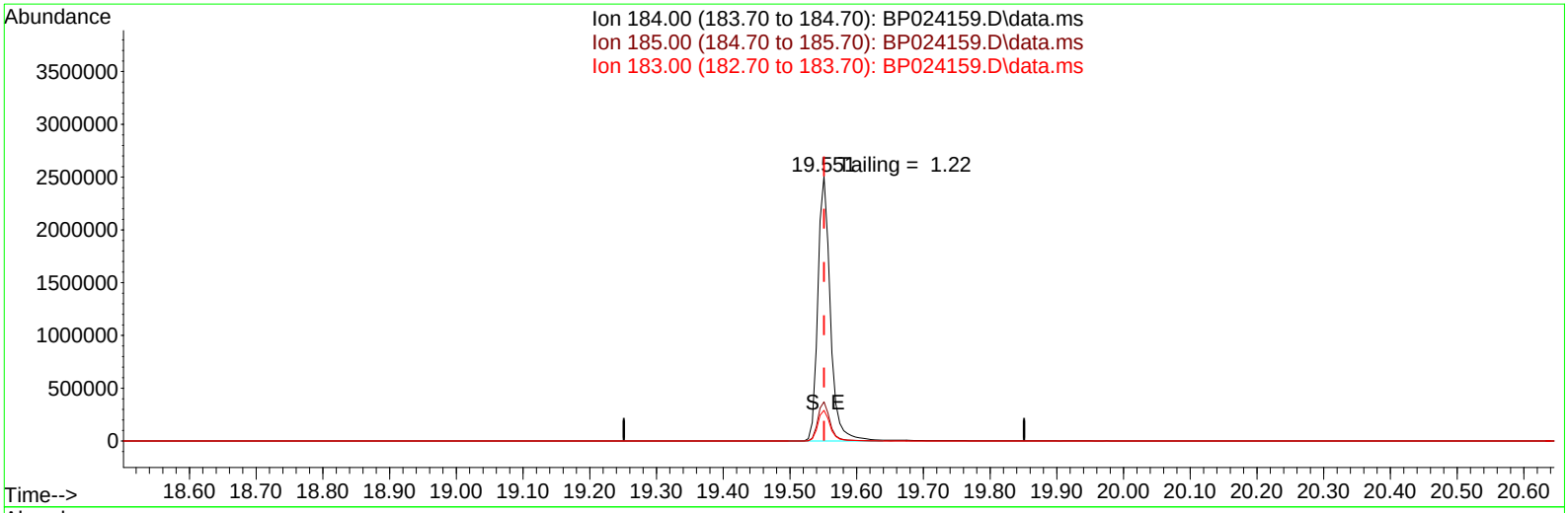
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.10	63.56
264.00	63.30	63.37
0.00	0.00	0.00

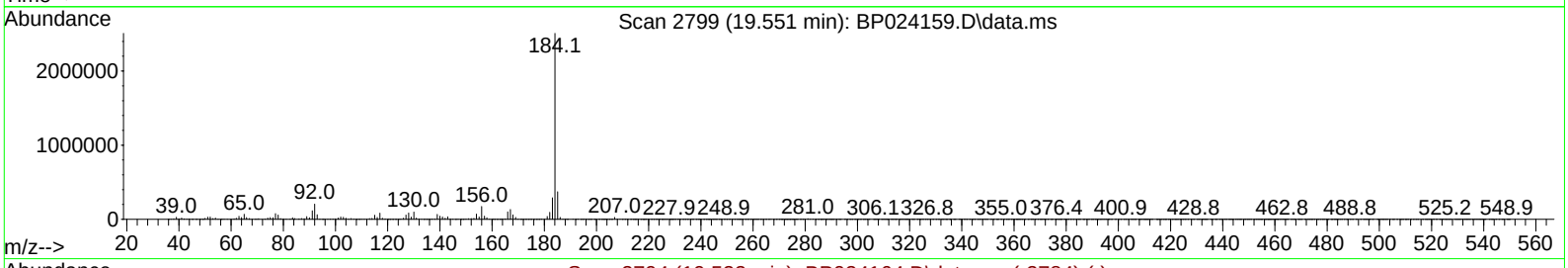
Sample Results: **BP024159.D**

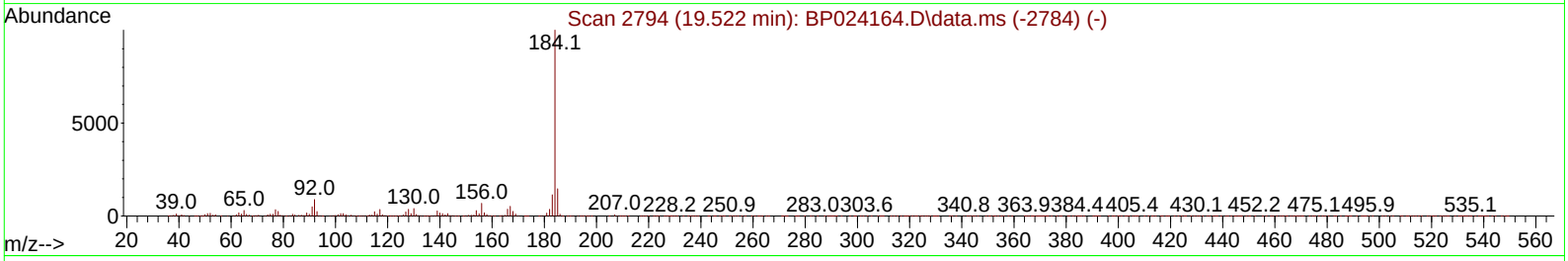
Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP031225\
Data File : BP024159.D
Acq On : 12 Mar 2025 15:36
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Quant Time: Mar 13 05:56:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration







TIC: BP024159.D\data.ms

(77) Benzidine

19.551min (0.000) 3117449.49 ng

response 3272103

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.70	14.81
183.00	11.40	11.59
0.00	0.00	0.00

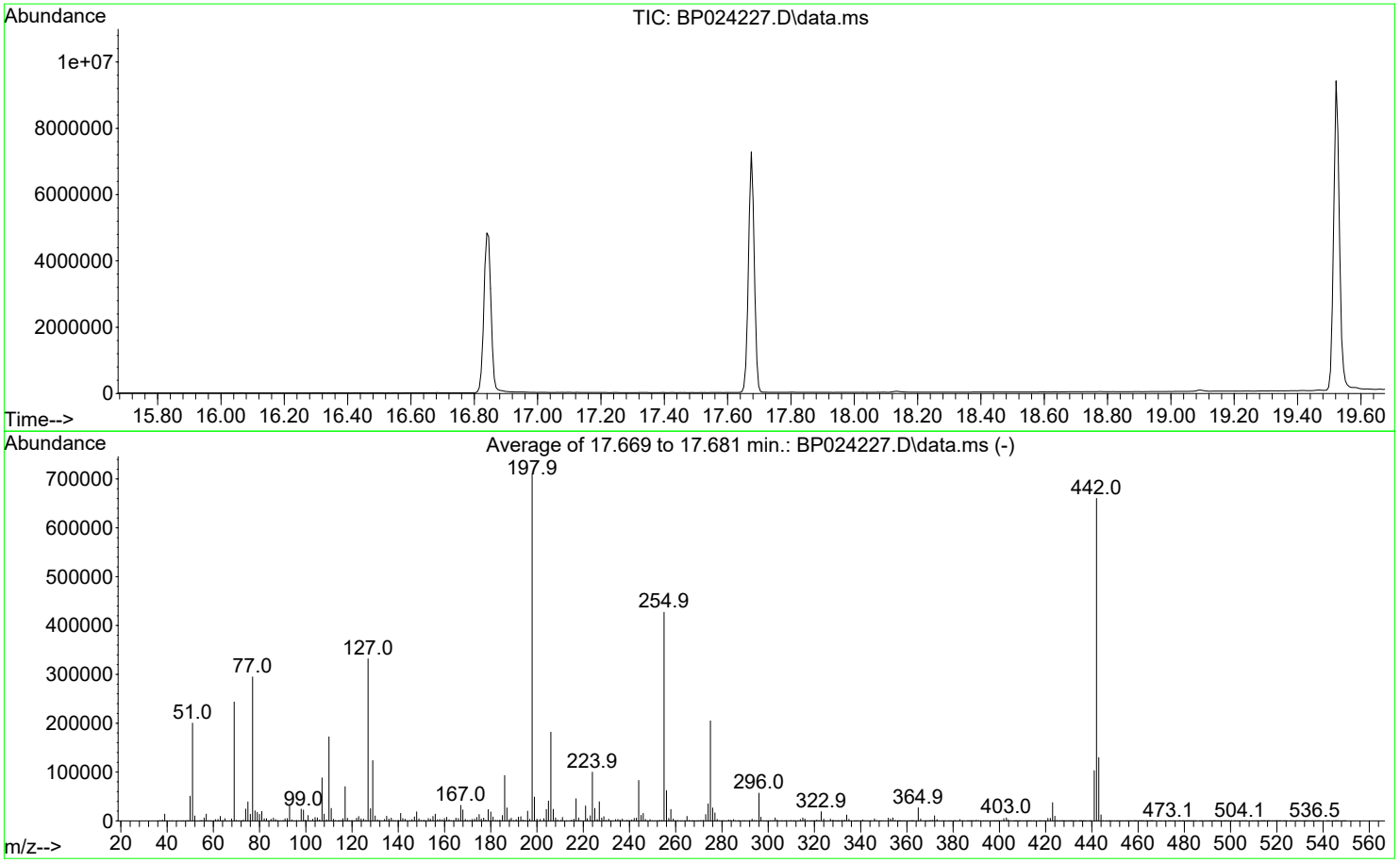
Sample Results: **BP024227.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024227.D
Acq On : 09 Apr 2025 08:42
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Mar 13 05:55:58 2025



AutoFind: Scans 2479, 2480, 2481; Background Corrected with Scan 2470

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	28.2	200115	PASS
68	69	0.00	2	1.6	3921	PASS
69	198	0.00	100	34.3	243587	PASS
70	69	0.00	2	0.5	1251	PASS
127	198	10	80	46.7	331923	PASS
197	198	0.00	2	0.5	3371	PASS
198	198	100	100	100.0	710336	PASS
199	198	5	9	6.9	48868	PASS
275	198	10	60	28.9	204948	PASS
365	198	1	100	3.8	26873	PASS
441	198	0.01	100	14.5	102902	PASS
442	442	100	100	100.0	660181	PASS
443	442	15	24	19.7	129757	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
4/9/2025	BNA_P	BP024227.D
Compound Name	**Response**	**Retention Time**
DDT	2570370	20.816
DDD	50806	20.363
DDE	1633	19.827
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
52439	2622809	2.00

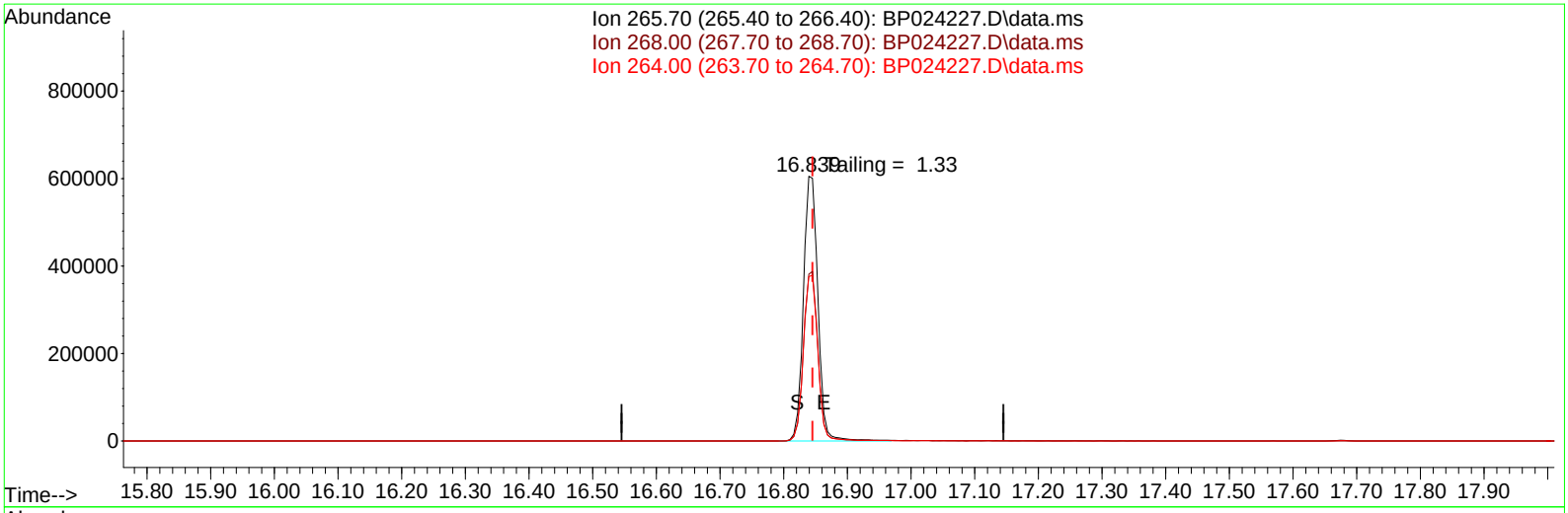
Instrument :
BNA_P
ClientSampleId :
DFTPP

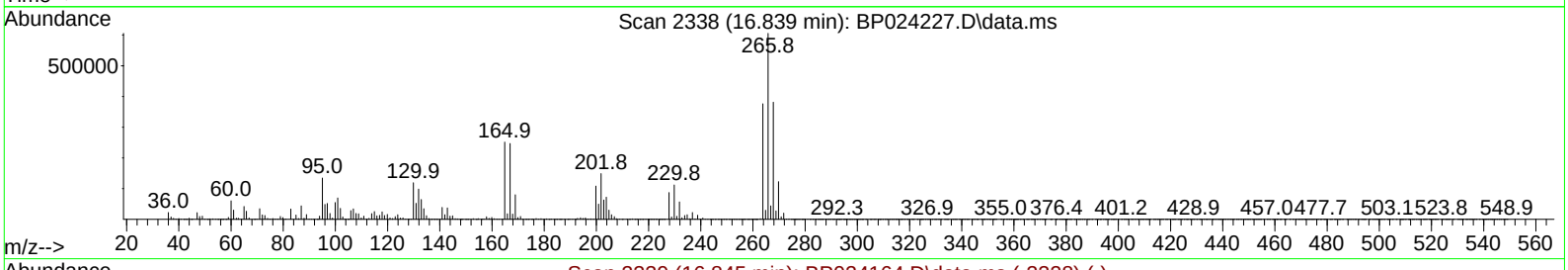
Sample Results: **BP024227.D**

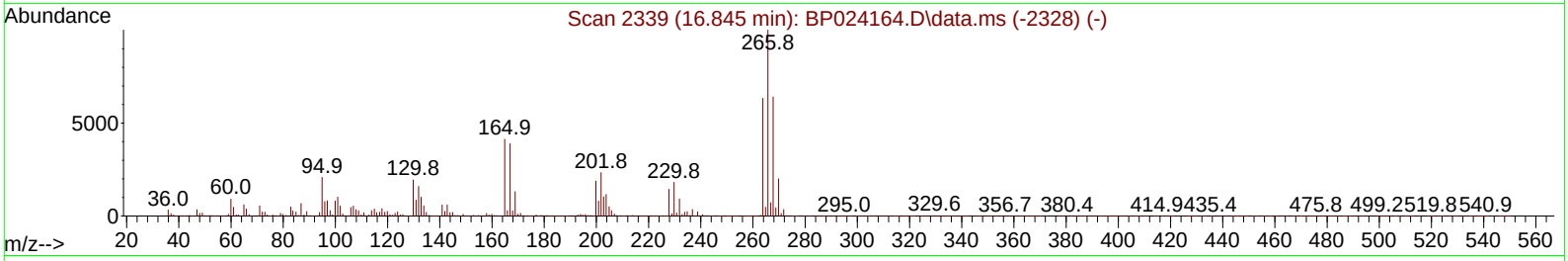
Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024227.D
Acq On : 09 Apr 2025 08:42
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Quant Time: Apr 09 12:31:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration







TIC: BP024227.D\data.ms

(70) Pentachlorophenol (C)

16.839min (-0.006) 65391.48 ng

response 964413

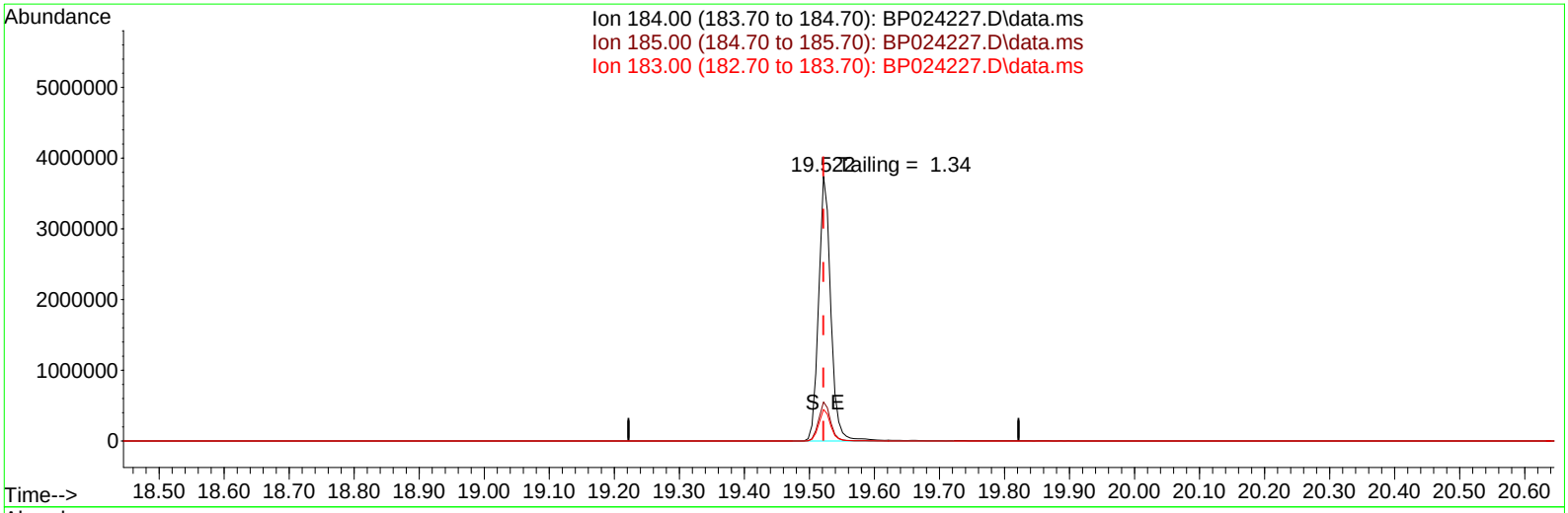
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.10	63.01
264.00	63.30	62.15
0.00	0.00	0.00

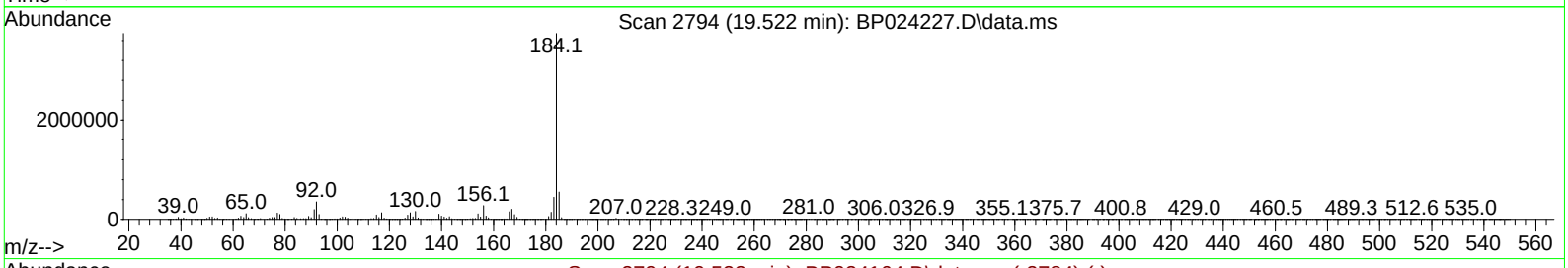
Sample Results: **BP024227.D**

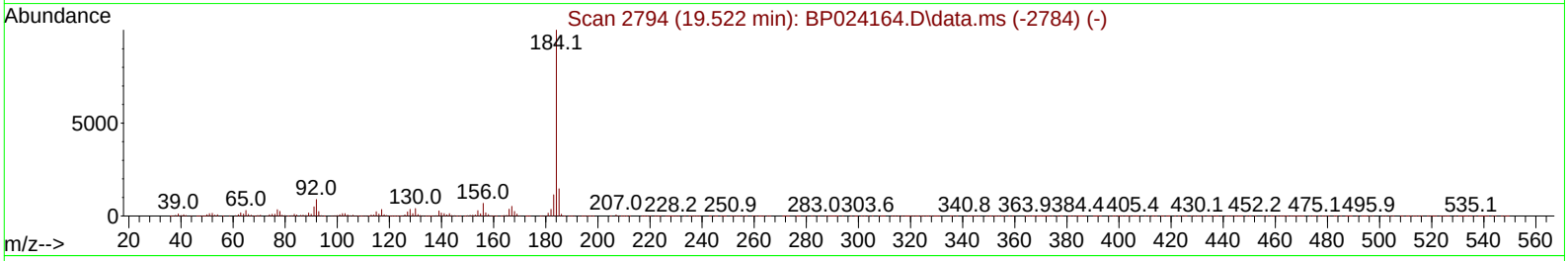
Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP040925\
Data File : BP024227.D
Acq On : 09 Apr 2025 08:42
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Quant Time: Apr 09 12:31:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 13 05:55:58 2025
Response via : Initial Calibration







TIC: BP024227.D\data.ms

(77) Benzidine

19.522min (-0.000) 108823.90 ng m

response 4912759

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.70	14.74
183.00	11.40	11.93
0.00	0.00	0.00

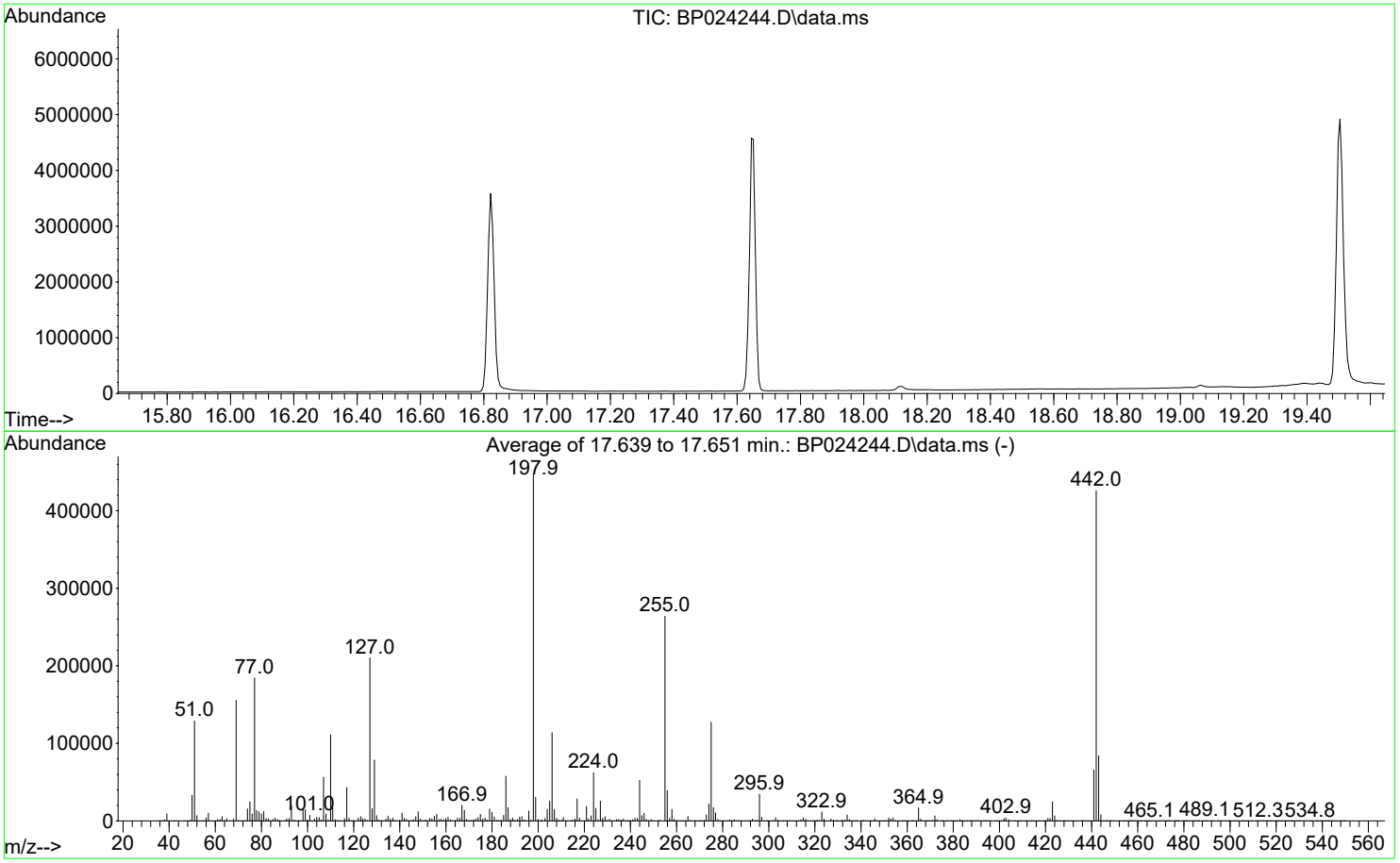
Sample Results: **BP024244.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024244.D
Acq On : 10 Apr 2025 09:05
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Apr 10 11:43:37 2025



AutoFind: Scans 2474, 2475, 2476; Background Corrected with Scan 2465

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	28.8	129060	PASS
68	69	0.00	2	1.7	2569	PASS
69	198	0.00	100	34.8	155535	PASS
70	69	0.00	2	0.5	814	PASS
127	198	10	80	47.0	210293	PASS
197	198	0.00	2	0.3	1397	PASS
198	198	100	100	100.0	447453	PASS
199	198	5	9	6.8	30328	PASS
275	198	10	60	28.5	127342	PASS
365	198	1	100	3.7	16767	PASS
441	198	0.01	100	14.6	65533	PASS
442	442	100	100	100.0	425856	PASS
443	442	15	24	19.7	84104	PASS

Instrument :
BNA_P
ClientSampleId :
DFTPP

DDT Breakdown

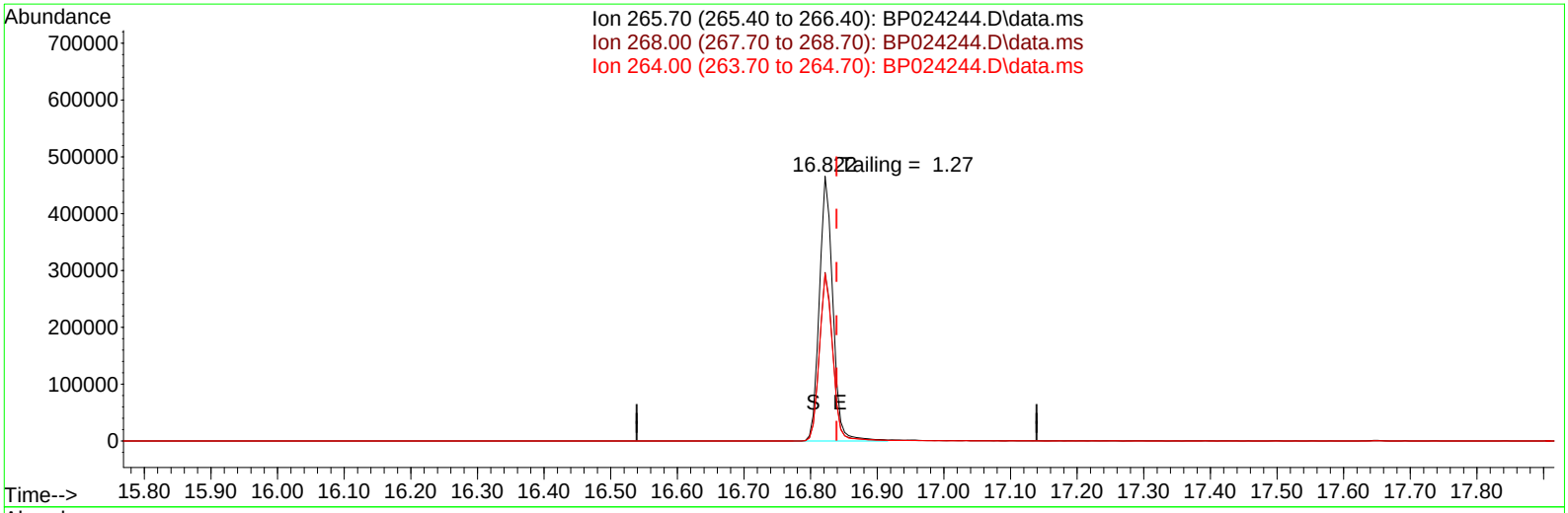
Date	Instrument Name	DFTPP Data File
4/10/2025	BNA_P	BP024244.D
Compound Name	**Response**	**Retention Time**
DDT	1572605	20.798
DDD	41488	20.333
DDE	2088	19.81
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
43576	1616181	2.70

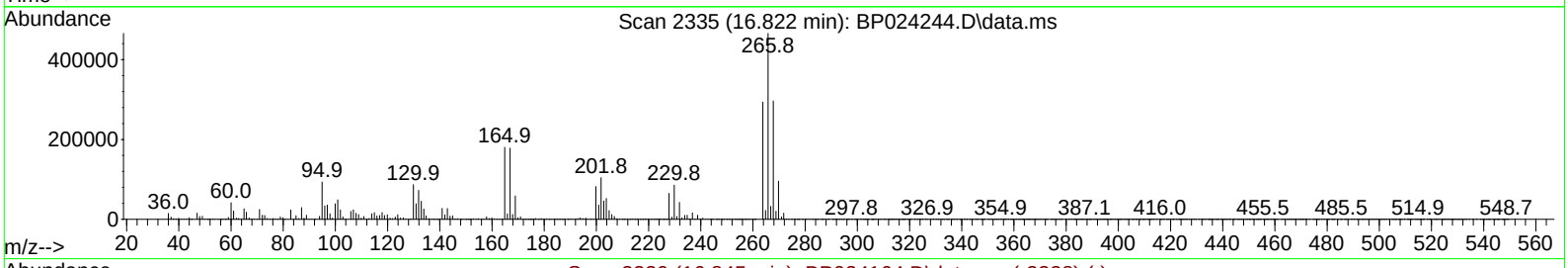
Sample Results: **BP024244.D**

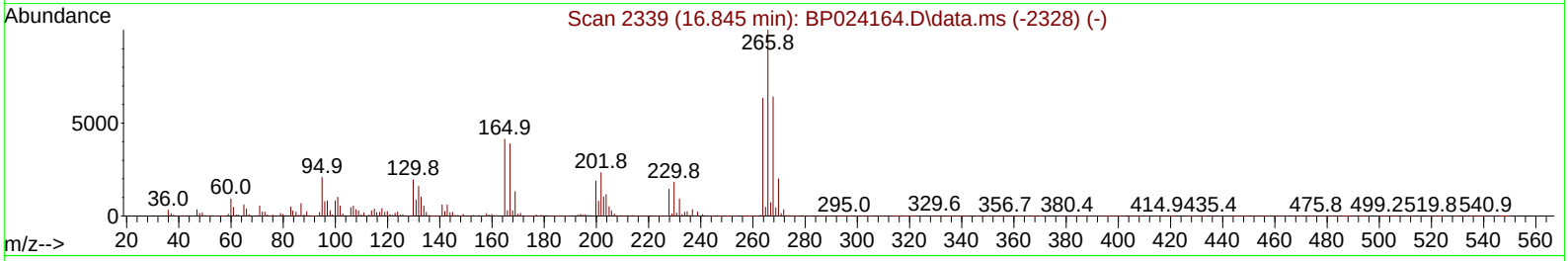
Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024244.D
Acq On : 10 Apr 2025 09:05
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Quant Time: Apr 10 14:43:14 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration







TIC: BP024244.D\data.ms

(70) Pentachlorophenol (C)

16.822min (-0.018) 2689216.60 ng

response 655373

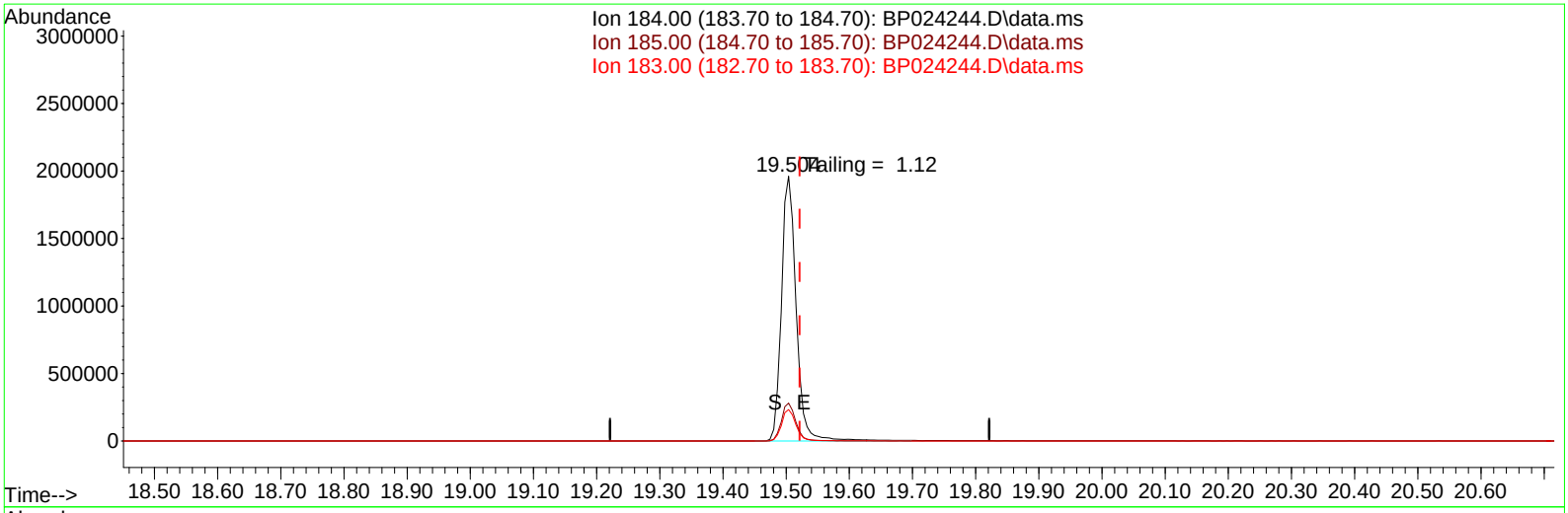
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	64.10	63.70
264.00	63.30	63.06
0.00	0.00	0.00

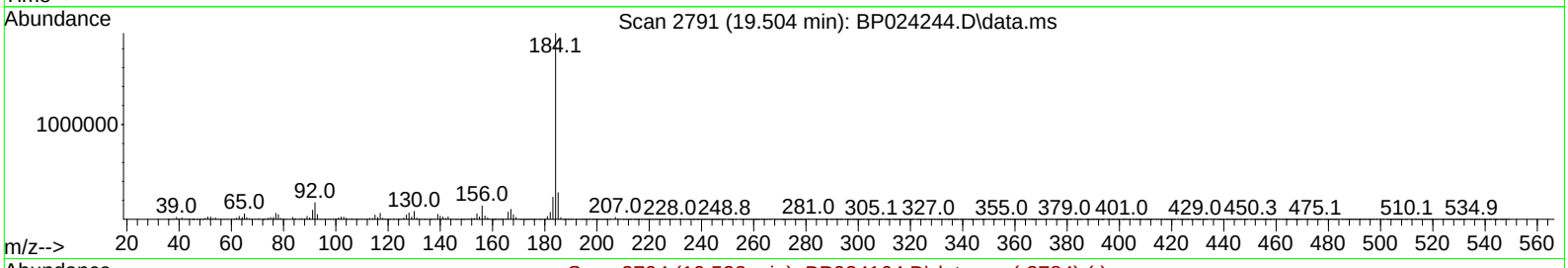
Sample Results: **BP024244.D**

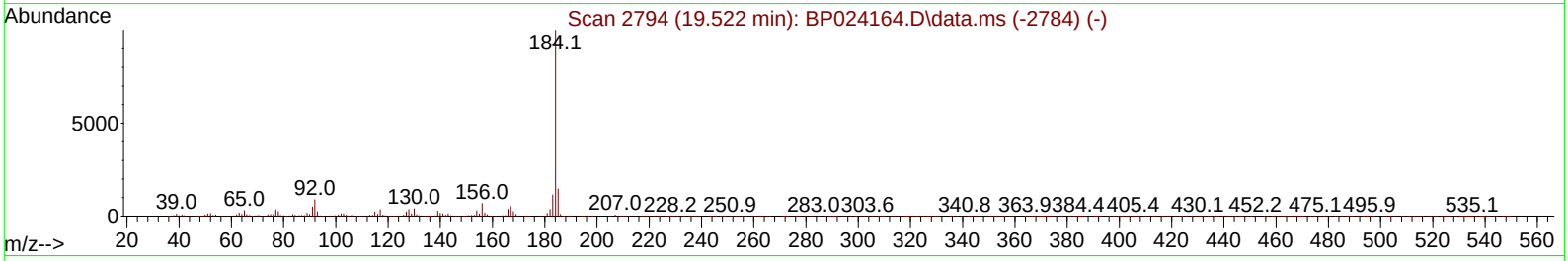
Data Path : Z:\svoasrv\HPCHEM1\BNA_P\Data\BP041025\
Data File : BP024244.D
Acq On : 10 Apr 2025 09:05
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
DFTPP

Quant Time: Apr 10 14:43:14 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_P\Methods\8270E-BP031225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Apr 10 11:43:37 2025
Response via : Initial Calibration







TIC: BP024244.D\data.ms

(77) Benzidine

19.504min (-0.018) 3933451.82 ng

response 3182452

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.70	14.33
183.00	11.40	11.89
0.00	0.00	0.00

Raw Data: **BM049877.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167509BL	SDG No.:	Q1746
Lab Sample ID:	PB167509BL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
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
BM049877.D	1	04/08/25 08:59	04/10/25 10:11	PB167509

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	58.1	U	58.1	170	ug/Kg
105-67-9	2,4-Dimethylphenol	64.7	U	64.7	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	52.0	U	52.0	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: **BM049877.D**

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167509BL	SDG No.:	Q1746
Lab Sample ID:	PB167509BL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
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
BM049877.D	1	04/08/25 08:59	04/10/25 10:11	PB167509

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	50.0	U	50.0	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	64.1	U	64.1	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	51.2	U	51.2	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	71.3	U	71.3	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	59.1	U	59.1	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

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167509BL	SDG No.:	Q1746
Lab Sample ID:	PB167509BL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
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
BM049877.D	1	04/08/25 08:59	04/10/25 10:11	PB167509

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	138		30 (18) - 130 (112)	92%	SPK: 150
13127-88-3	Phenol-d6	134		30 (15) - 130 (107)	89%	SPK: 150
4165-60-0	Nitrobenzene-d5	95.5		30 (18) - 130 (107)	95%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.3		30 (20) - 130 (109)	96%	SPK: 100
118-79-6	2,4,6-Tribromophenol	146		30 (10) - 130 (116)	97%	SPK: 150
1718-51-0	Terphenyl-d14	112		30 (10) - 130 (105)	112%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	305000	7.775			
1146-65-2	Naphthalene-d8	1030000	10.569			
15067-26-2	Acenaphthene-d10	650000	14.421			
1517-22-2	Phenanthrene-d10	1230000	17.162			
1719-03-5	Chrysene-d12	1170000	21.397			
1520-96-3	Perylene-d12	1310000	24.397			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	350	A		4.89	ug/Kg
000057-10-3	n-Hexadecanoic acid	110	J		18.1	ug/Kg
000057-11-4	Octadecanoic acid	81.3	J		19.3	ug/Kg

Raw Data: **BM049877.D**

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Report of Analysis

Client:	Portal Partners Tri-Venture			Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025			Date Received:	
Client Sample ID:	PB167509BL			SDG No.:	Q1746
Lab Sample ID:	PB167509BL			Matrix:	SOIL
Analytical Method:	SW8270			% Solid:	100
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
BM049877.D	1	04/08/25 08:59	04/10/25 10:11	PB167509

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_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Quant Time: Apr 10 11:29:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

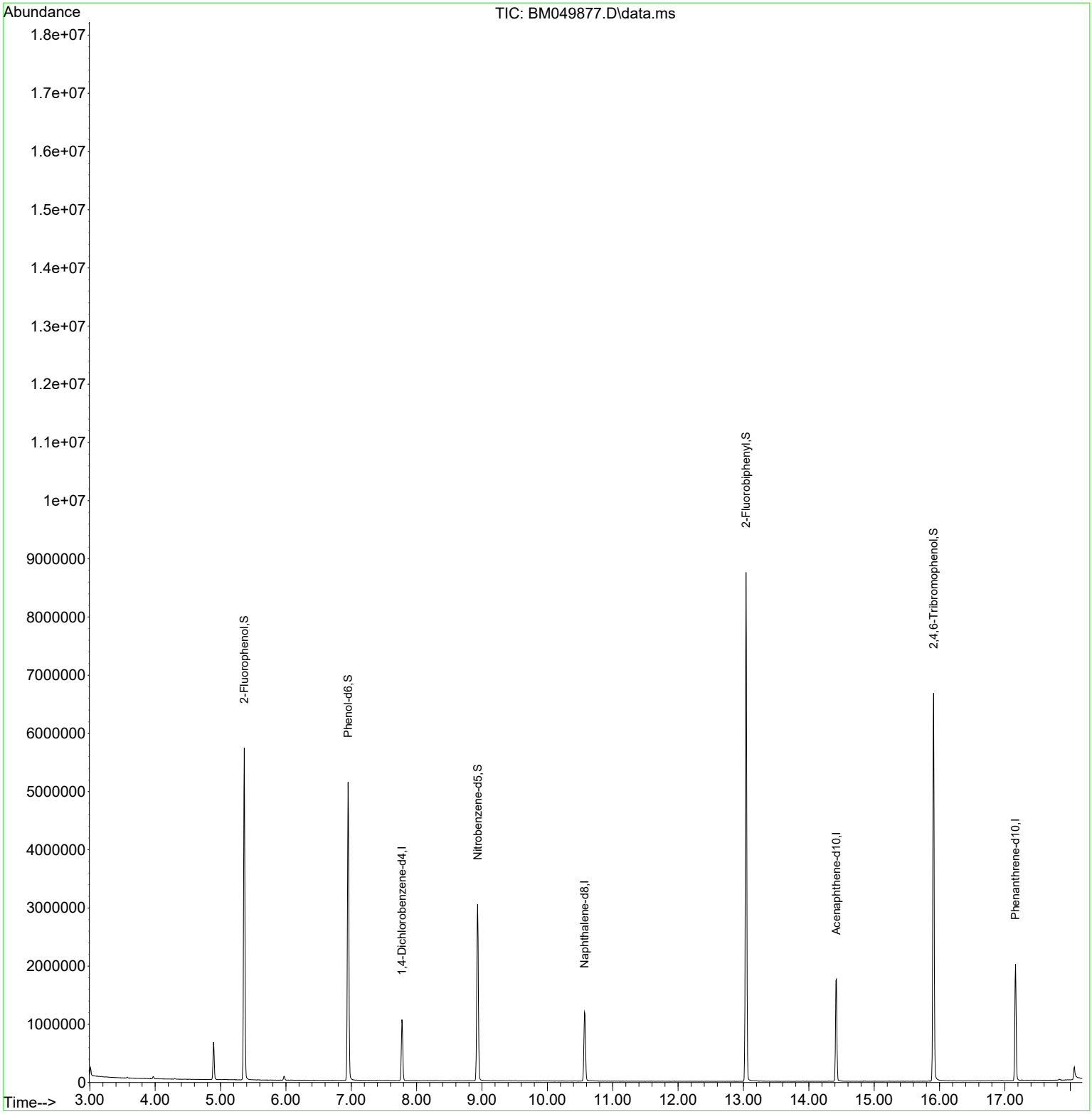
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	304918	20.000	ng	0.00
21) Naphthalene-d8	10.569	136	1031962	20.000	ng	0.00
39) Acenaphthene-d10	14.421	164	649646	20.000	ng	0.00
64) Phenanthrene-d10	17.162	188	1225291	20.000	ng	0.00
76) Chrysene-d12	21.397	240	1173504	20.000	ng	0.00
86) Perylene-d12	24.397	264	1306478	20.000	ng	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.363	112	2483463	138.303	ng	0.00
7) Phenol-d6	6.951	99	2987822	133.735	ng	0.00
23) Nitrobenzene-d5	8.933	82	1768989	95.456	ng	0.00
42) 2,4,6-Tribromophenol	15.909	330	1378609	145.895	ng	0.00
45) 2-Fluorobiphenyl	13.039	172	4613403	96.296	ng	0.00
79) Terphenyl-d14	19.786	244	7034521	112.339	ng	0.00
Target Compounds						Qvalue

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

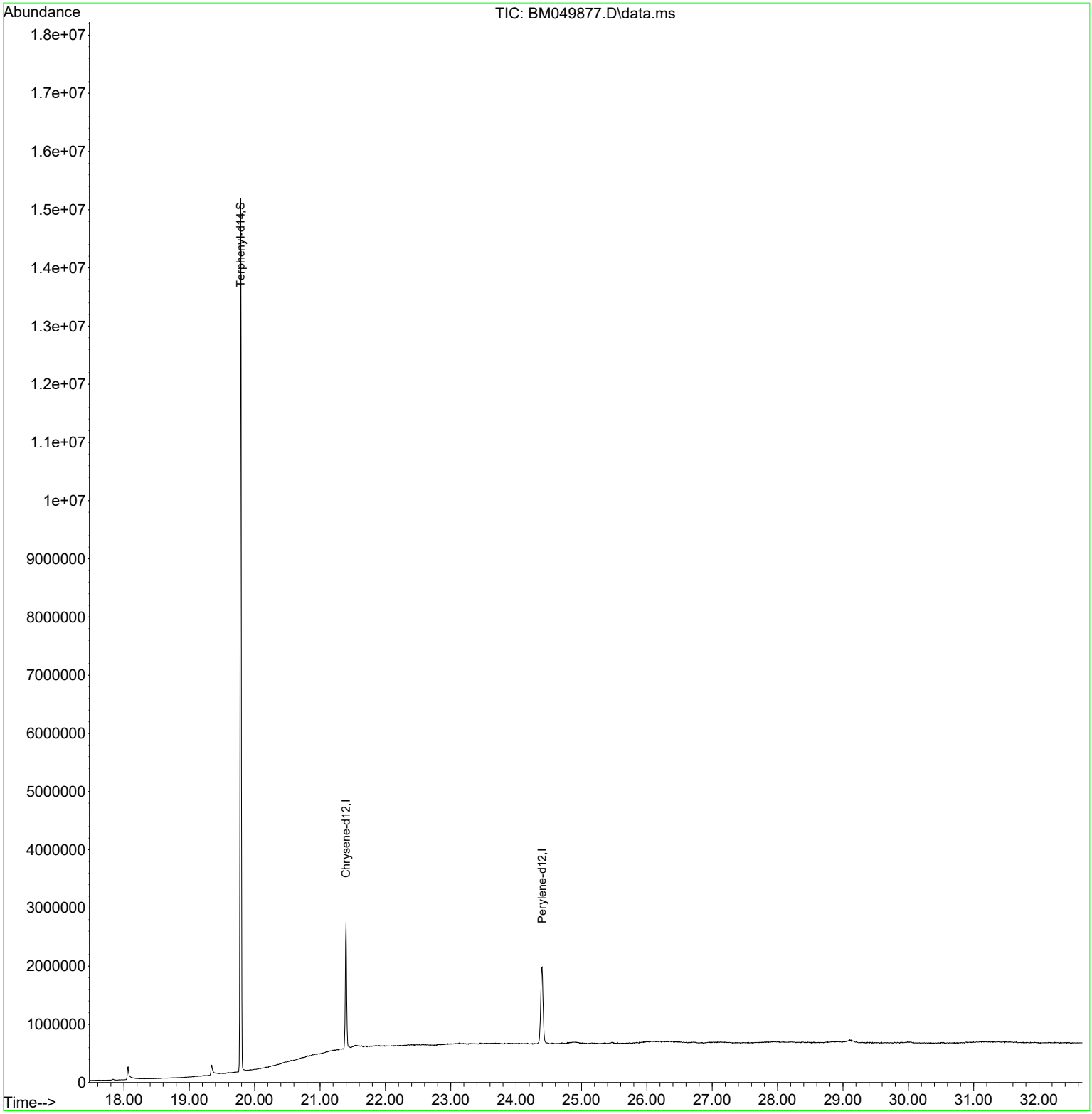
Quant Time: Apr 10 11:29:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

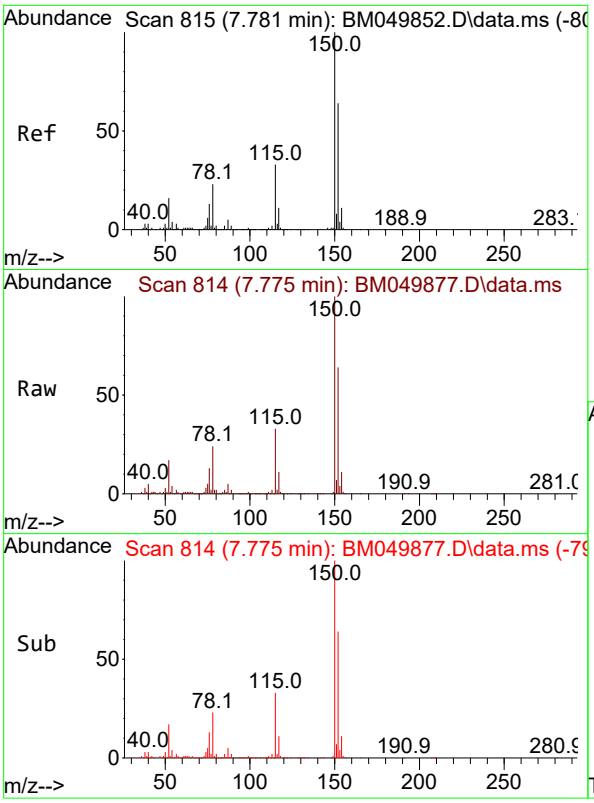


Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Quant Time: Apr 10 11:29:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



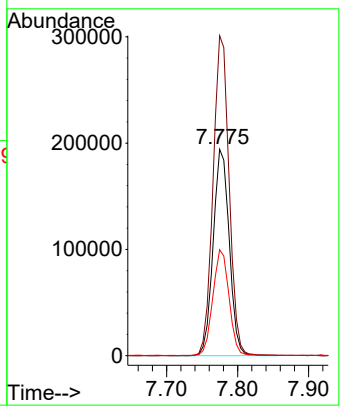


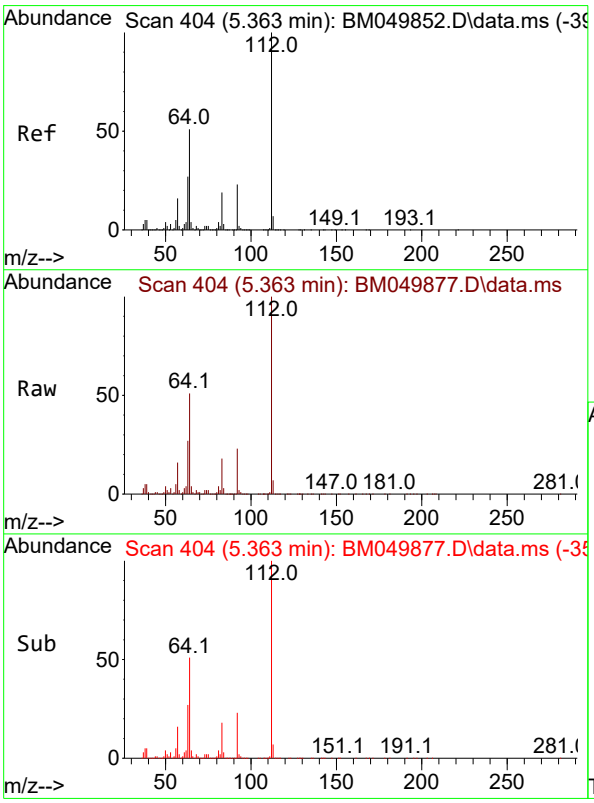
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.775 min Scan# 8
Delta R.T. -0.006 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Tgt Ion:152 Resp: 304918

Ion	Ratio	Lower	Upper
152	100		
150	155.1	124.3	186.5
115	51.3	41.1	61.7

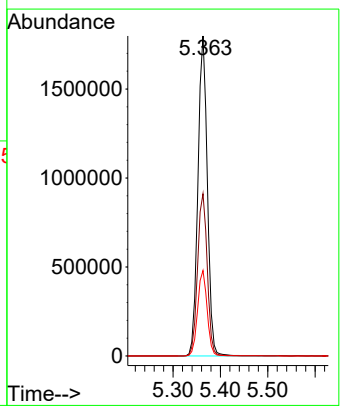


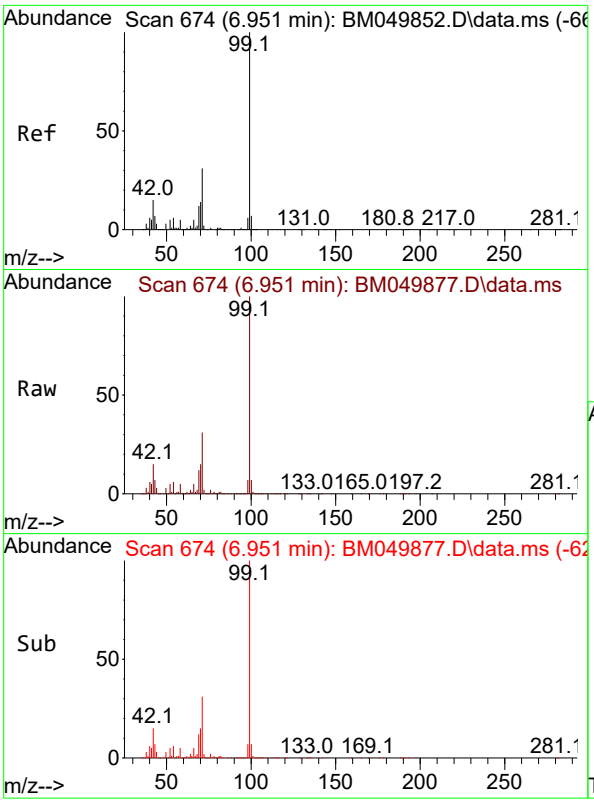


#5
2-Fluorophenol
Concen: 138.303 ng
RT: 5.363 min Scan# 404
Delta R.T. -0.000 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Tgt Ion:112 Resp: 2483463

Ion	Ratio	Lower	Upper
112	100		
64	50.7	41.0	61.6
63	26.7	21.5	32.3



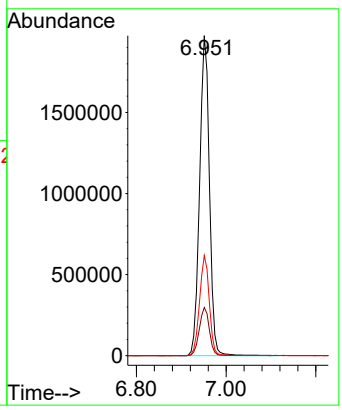


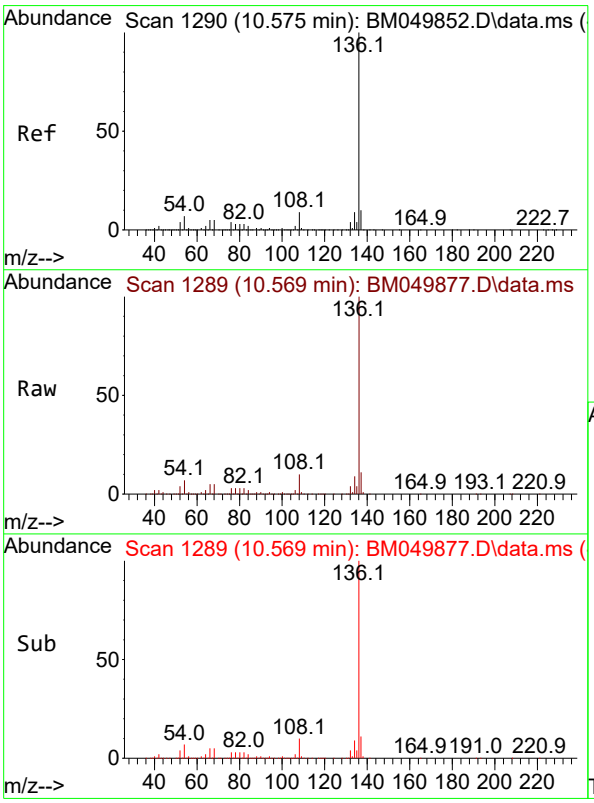
#7
Phenol-d6
Concen: 133.735 ng
RT: 6.951 min Scan# 6
Delta R.T. -0.000 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Tgt Ion: 99 Resp: 2987822

Ion	Ratio	Lower	Upper
99	100		
42	15.0	12.1	18.1
71	31.3	24.9	37.3

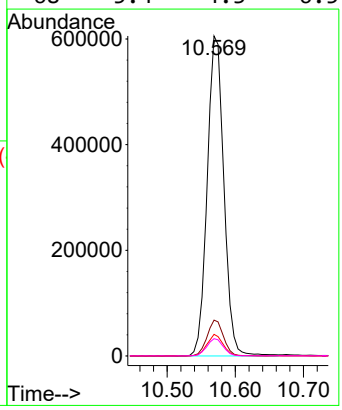


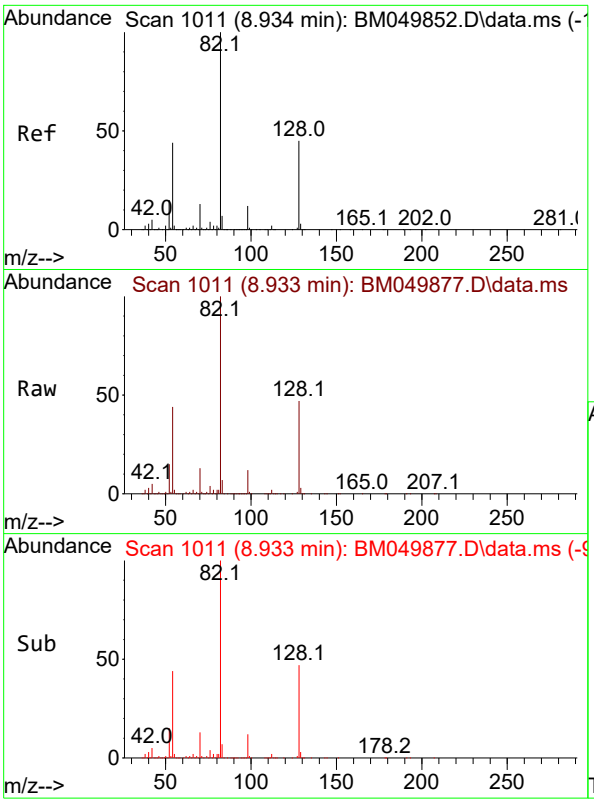


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.569 min Scan# 1289
Delta R.T. -0.006 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Tgt Ion:136 Resp: 1031962

Ion	Ratio	Lower	Upper
136	100		
137	11.2	8.4	12.6
54	6.8	5.3	7.9
68	5.4	4.3	6.5



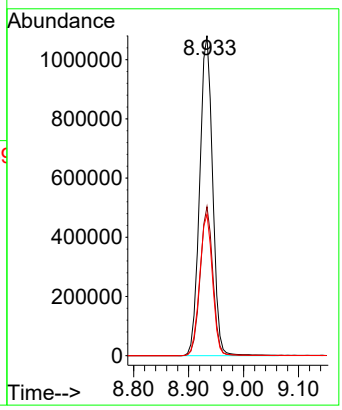


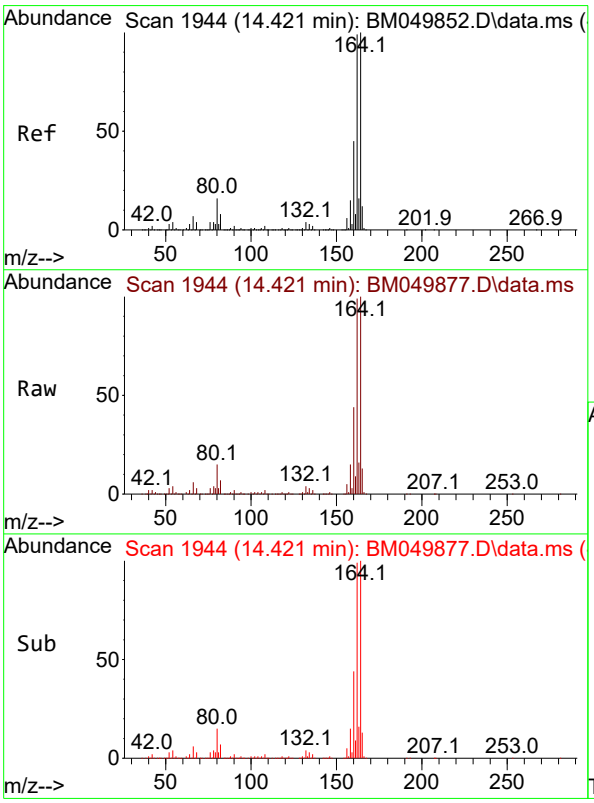
#23
Nitrobenzene-d5
Concen: 95.456 ng
RT: 8.933 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Tgt Ion: 82 Resp: 1768989

Ion	Ratio	Lower	Upper
82	100		
128	46.6	36.2	54.2
54	44.1	35.0	52.6

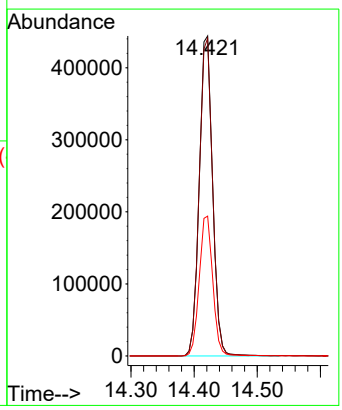


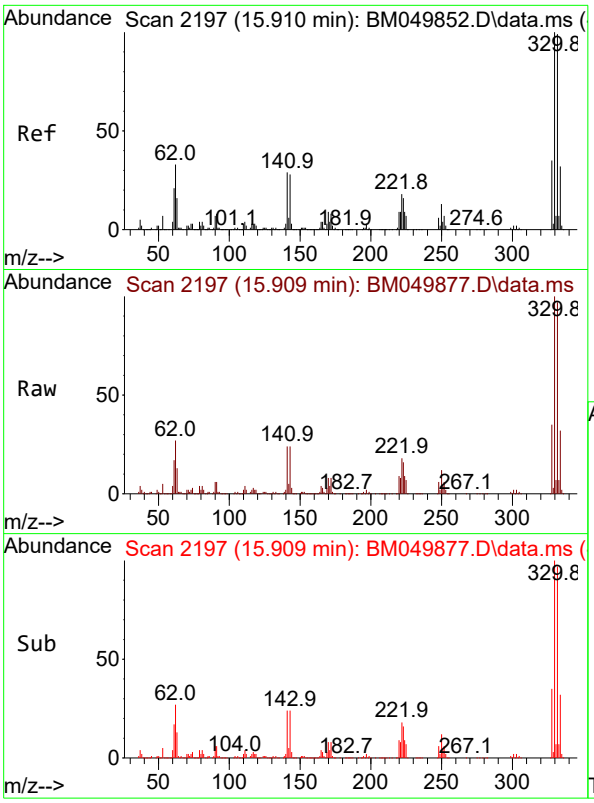


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.421 min Scan# 1944
Delta R.T. -0.000 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Tgt Ion:164 Resp: 649646

Ion	Ratio	Lower	Upper
164	100		
162	99.3	79.4	119.0
160	43.7	36.2	54.2



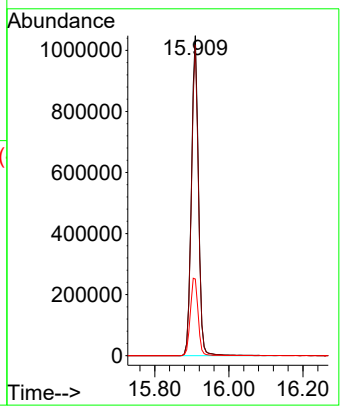


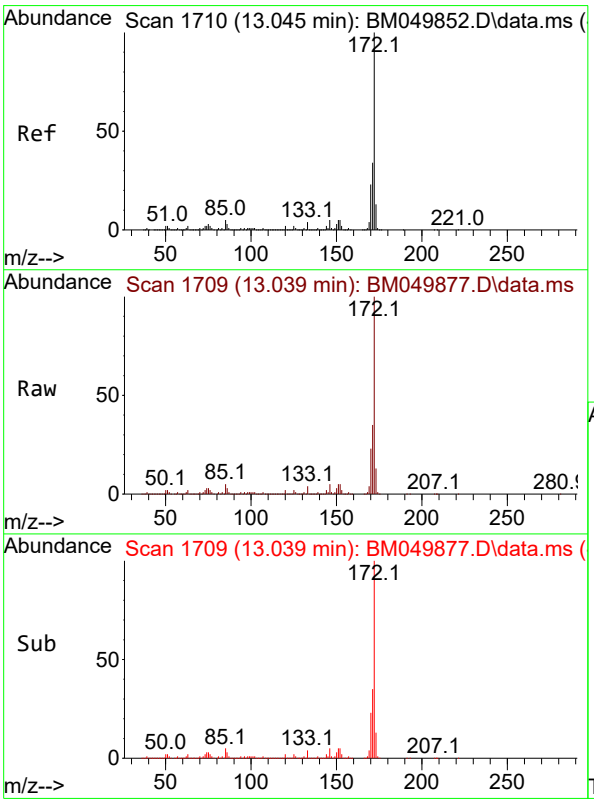
#42
2,4,6-Tribromophenol
Concen: 145.895 ng
RT: 15.909 min Scan# 2
Delta R.T. -0.000 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Tgt Ion:330 Resp: 1378609

Ion	Ratio	Lower	Upper
330	100		
332	96.3	78.0	117.0
141	26.6	23.5	35.3

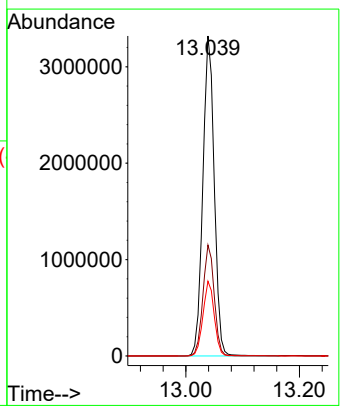


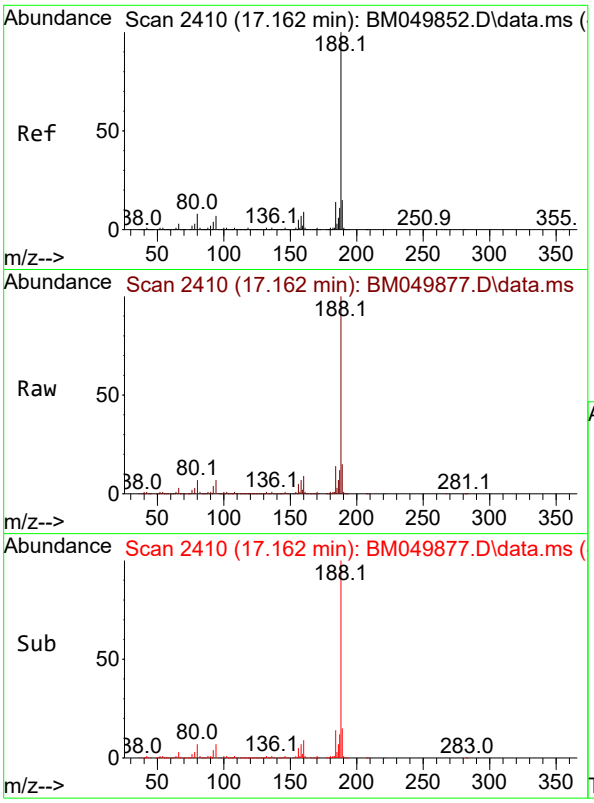


#45
2-Fluorobiphenyl
Concen: 96.296 ng
RT: 13.039 min Scan# 1709
Delta R.T. -0.006 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Tgt Ion:172 Resp: 4613403

Ion	Ratio	Lower	Upper
172	100		
171	34.6	27.4	41.2
170	23.3	18.6	28.0



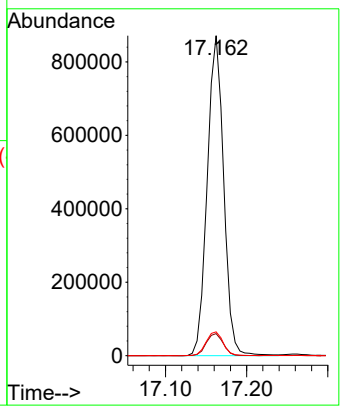


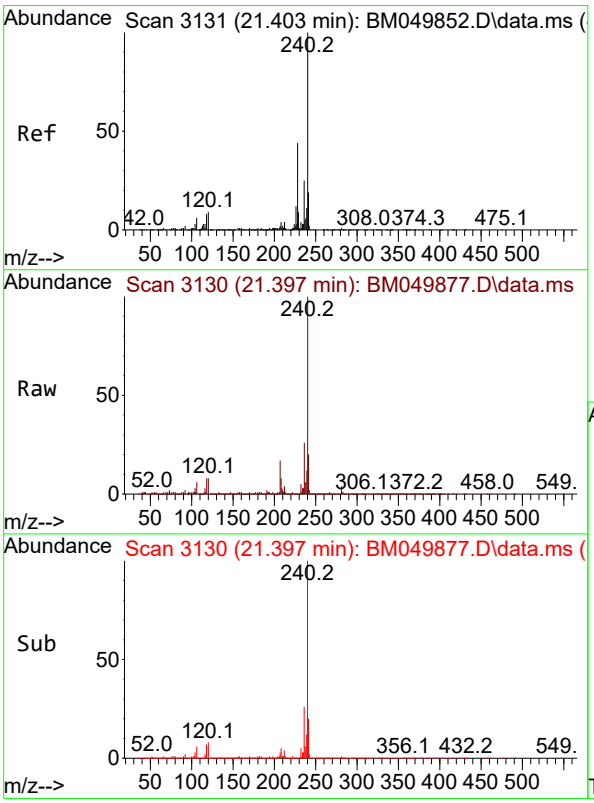
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.162 min Scan# 24
Delta R.T. -0.000 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Tgt Ion:188 Resp: 1225291

Ion	Ratio	Lower	Upper
188	100		
94	6.9	5.8	8.6
80	7.5	6.4	9.6

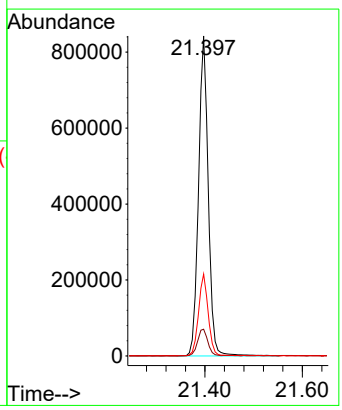


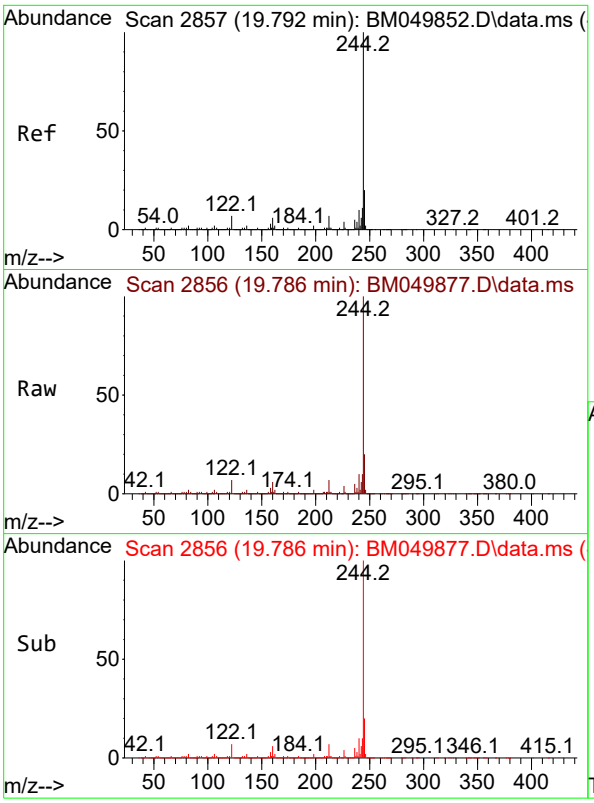


#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.397 min Scan# 3130
Delta R.T. -0.006 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Tgt Ion:240 Resp: 1173504

Ion	Ratio	Lower	Upper
240	100		
120	8.4	6.9	10.3
236	25.6	20.4	30.6



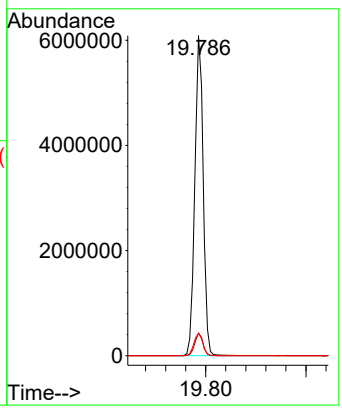


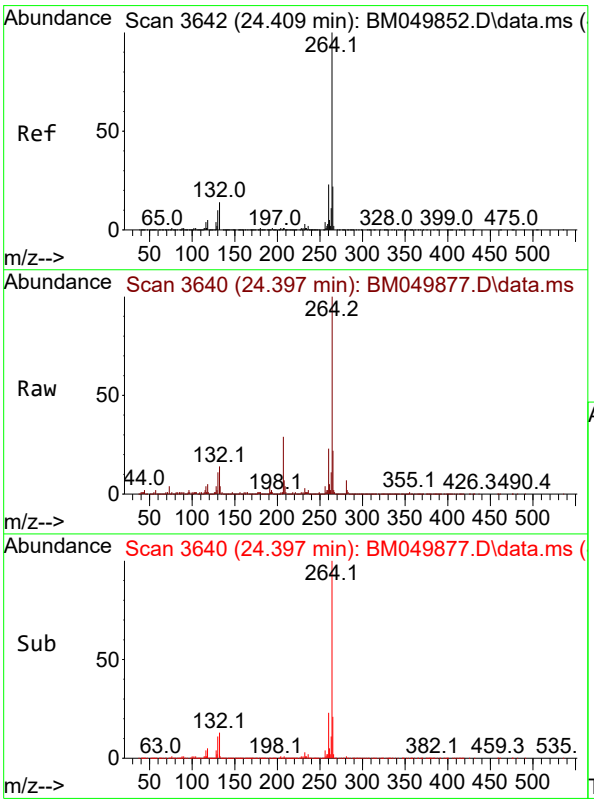
#79
Terphenyl-d14
Concen: 112.339 ng
RT: 19.786 min Scan# 2
Delta R.T. -0.006 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Tgt Ion:244 Resp: 7034521

Ion	Ratio	Lower	Upper
244	100		
212	7.1	5.5	8.3
122	7.0	5.4	8.0

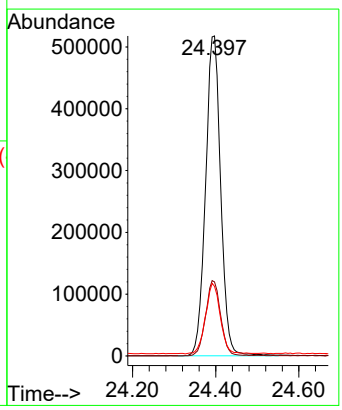




#86
Perylene-d12
Concen: 20.000 ng
RT: 24.397 min Scan# 3640
Delta R.T. -0.012 min
Lab File: BM049877.D
Acq: 10 Apr 2025 10:11

Tgt Ion:264 Resp: 1306478

Ion	Ratio	Lower	Upper
264	100		
260	23.2	18.6	28.0
265	21.8	17.8	26.8



Sample Results: **BM049877.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

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_M\Methods\8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BM049877.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.893	319	324	334	rVB	646700	865751	4.95%	1.128%
2	5.363	397	404	418	rBV	5708587	7953113	45.44%	10.360%
3	6.951	667	674	686	rBV	5127694	7849371	44.85%	10.225%
4	7.775	807	814	826	rVB	1049123	1640539	9.37%	2.137%
5	8.933	1003	1011	1022	rBV	3032859	4957314	28.33%	6.457%
6	10.569	1281	1289	1302	rBV	1182597	2019525	11.54%	2.631%
7	13.039	1700	1709	1724	rBV	8747013	12190336	69.66%	15.879%
8	14.421	1936	1944	1959	rBV	1754162	2616740	14.95%	3.409%
9	15.909	2190	2197	2216	rBV	6670855	9261965	52.92%	12.065%
10	17.162	2404	2410	2422	rBV	1998943	2845156	16.26%	3.706%
11	18.062	2558	2563	2578	rBV	216597	490971	2.81%	0.640%
12	19.339	2776	2780	2789	rBV2	174301	362861	2.07%	0.473%
13	19.786	2851	2856	2869	rBV	14999522	17500587	100.00%	22.796%
14	21.397	3125	3130	3142	rVB	2153994	2970766	16.98%	3.870%
15	24.397	3632	3640	3650	rVB	1302019	3244234	18.54%	4.226%

Sum of corrected areas: 76769229

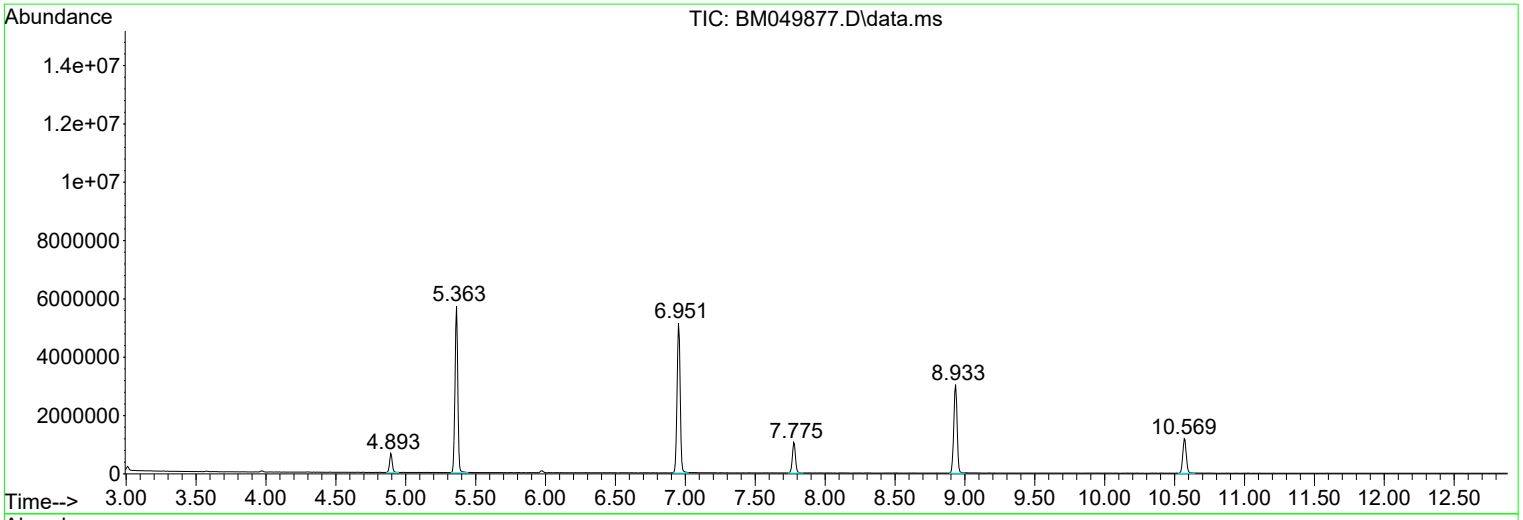
Sample Results: **BM049877.D**

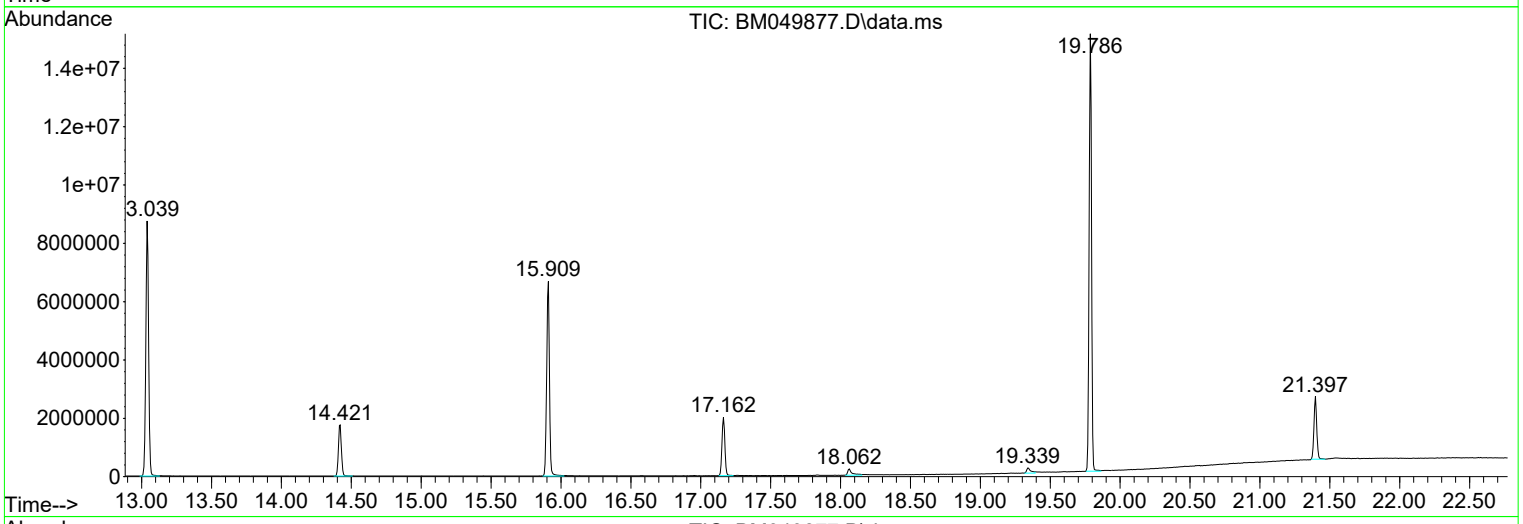
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

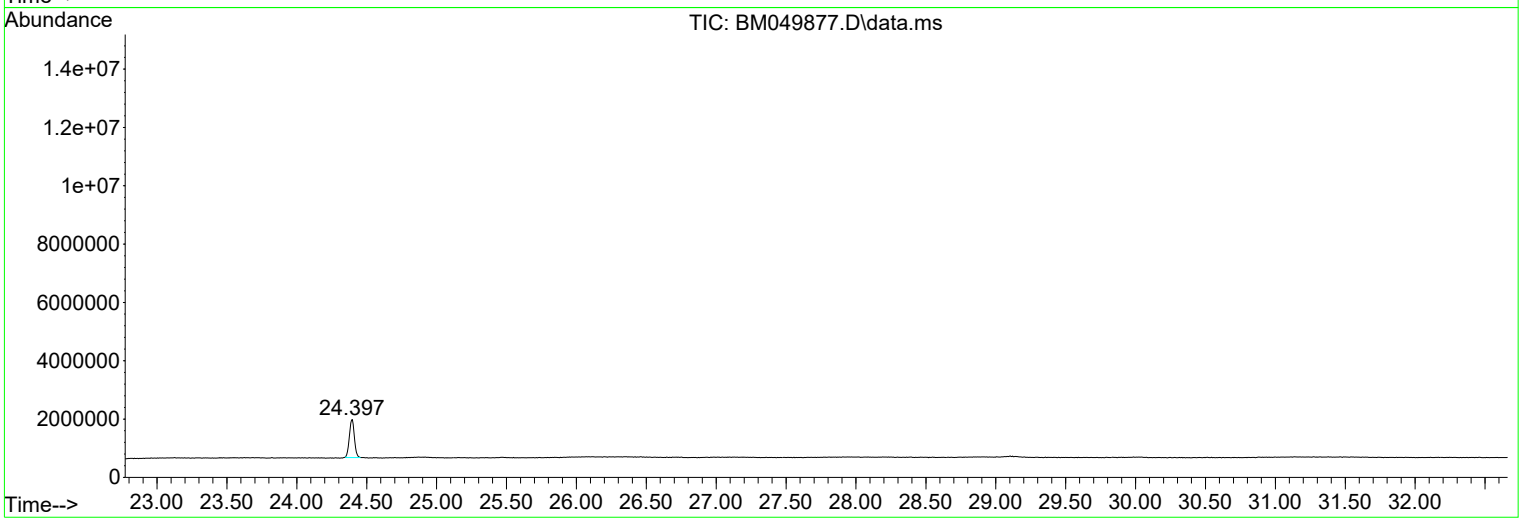
Instrument :
BNA_M
ClientSampleId :
PB167509BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.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_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

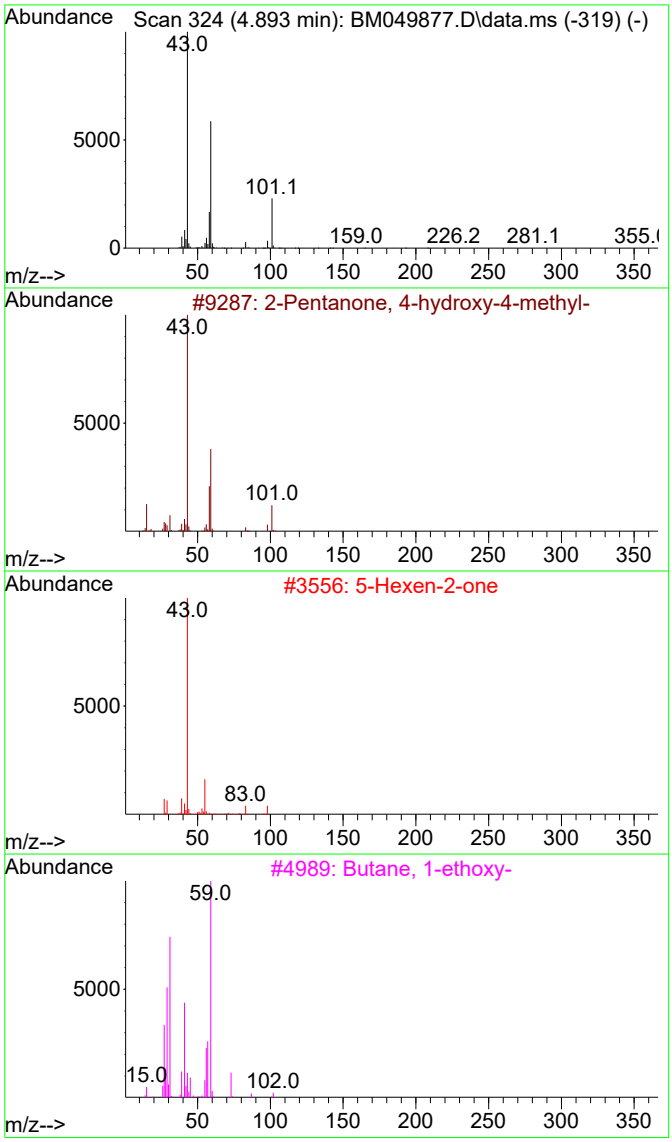
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

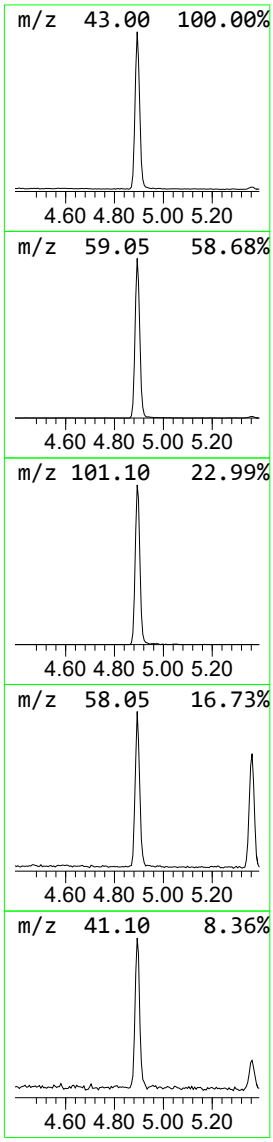
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.893	10.55 ng	865751	1,4-Dichlorobenzene-d4	7.775

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	5-Hexen-2-one	98	C6H10O	000109-49-9	9
3	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	9
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	Acetone	58	C3H6O	000067-64-1	9





Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

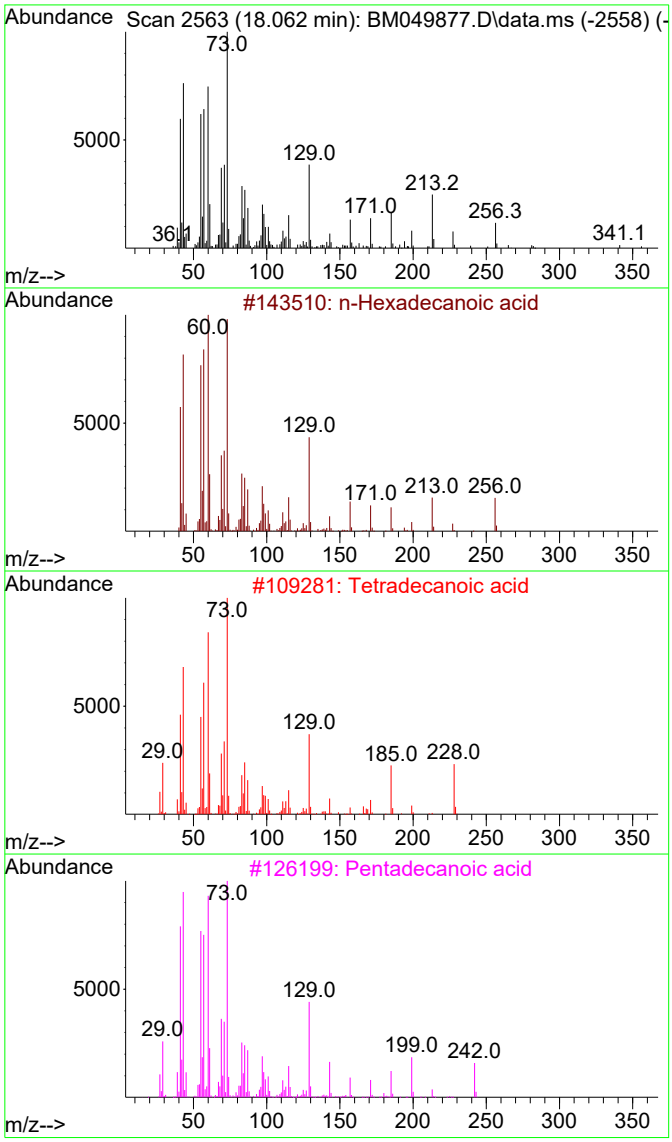
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

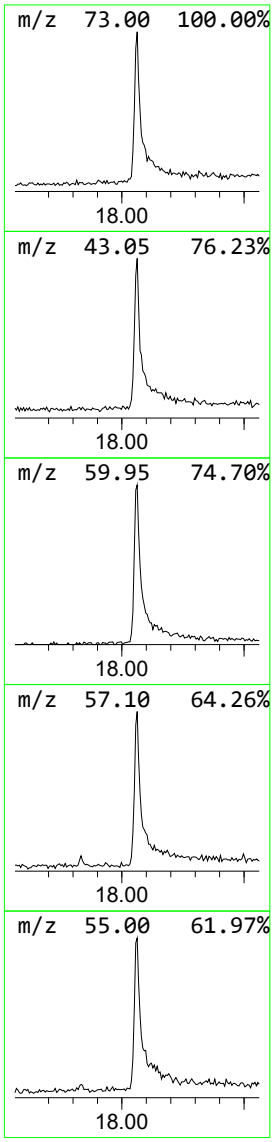
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.062	3.45 ng	490971	Phenanthrene-d10	17.162

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	94
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	87
4	Octadecanoic acid	284	C18H36O2	000057-11-4	87
5	Tridecanoic acid	214	C13H26O2	000638-53-9	87





Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

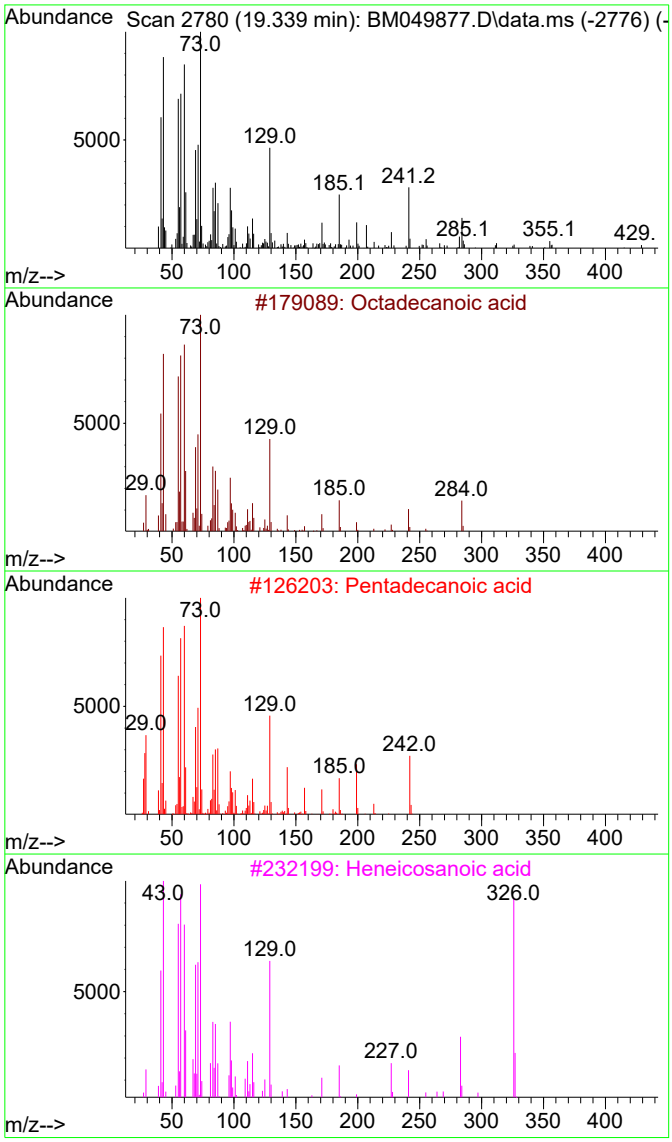
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

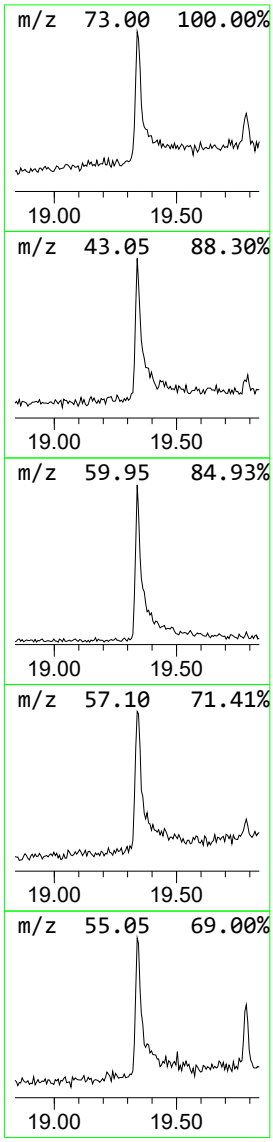
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Peak Number 3 Octadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.339	2.44 ng	362861	Chrysene-d12	21.397

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	93
3	Heneicosanoic acid	326	C21H42O2	002363-71-5	90
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	83
5	Octadecanoic acid, 2-(2-hydroxye...	372	C22H44O4	000106-11-6	80





Sample Results: **BM049877.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041025\
Data File : BM049877.D
Acq On : 10 Apr 2025 10:11
Operator : RC/JU
Sample : PB167509BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167509BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.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-...	4.893	10.6	ng	865751	1	7.775	1640540	20.0
n-Hexadecanoic ...	18.062	3.5	ng	490971	4	17.162	2845160	20.0
Octadecanoic acid	19.339	2.4	ng	362861	5	21.397	2970770	20.0

Raw Data: **BM049860.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BL	SDG No.:	Q1746
Lab Sample ID:	PB167521BL	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049860.D	1	04/08/25 11:55	04/09/25 09:48	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	3.90	U	3.90	10.0	ug/L
108-95-2	Phenol	0.91	U	0.91	5.00	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.81	U	0.81	5.00	ug/L
95-57-8	2-Chlorophenol	0.58	U	0.58	5.00	ug/L
95-48-7	2-Methylphenol	1.10	U	1.10	5.00	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.30	U	1.30	5.00	ug/L
98-86-2	Acetophenone	0.74	U	0.74	5.00	ug/L
65794-96-9	3+4-Methylphenols	1.10	U	1.10	10.0	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.40	U	1.40	2.50	ug/L
67-72-1	Hexachloroethane	0.65	U	0.65	5.00	ug/L
98-95-3	Nitrobenzene	0.76	U	0.76	5.00	ug/L
78-59-1	Isophorone	0.75	U	0.75	5.00	ug/L
88-75-5	2-Nitrophenol	1.80	U	1.80	5.00	ug/L
105-67-9	2,4-Dimethylphenol	1.90	U	1.90	5.00	ug/L
111-91-1	bis(2-Chloroethoxy)methane	0.68	U	0.68	5.00	ug/L
120-83-2	2,4-Dichlorophenol	0.52	U	0.52	5.00	ug/L
91-20-3	Naphthalene	0.50	U	0.50	5.00	ug/L
106-47-8	4-Chloroaniline	0.84	U	0.84	5.00	ug/L
87-68-3	Hexachlorobutadiene	0.54	U	0.54	5.00	ug/L
105-60-2	Caprolactam	1.10	U	1.10	10.0	ug/L
59-50-7	4-Chloro-3-methylphenol	0.59	U	0.59	5.00	ug/L
91-57-6	2-Methylnaphthalene	0.56	U	0.56	5.00	ug/L
77-47-4	Hexachlorocyclopentadiene	3.60	U	3.60	10.0	ug/L
88-06-2	2,4,6-Trichlorophenol	0.51	U	0.51	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	0.62	U	0.62	5.00	ug/L
92-52-4	1,1-Biphenyl	0.53	U	0.53	5.00	ug/L
91-58-7	2-Chloronaphthalene	0.61	U	0.61	5.00	ug/L
88-74-4	2-Nitroaniline	1.30	U	1.30	5.00	ug/L
131-11-3	Dimethylphthalate	0.61	U	0.61	5.00	ug/L

Raw Data: **BM049860.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BL	SDG No.:	Q1746
Lab Sample ID:	PB167521BL	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049860.D	1	04/08/25 11:55	04/09/25 09:48	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	0.75	U	0.75	5.00	ug/L
606-20-2	2,6-Dinitrotoluene	0.92	U	0.92	5.00	ug/L
99-09-2	3-Nitroaniline	1.10	U	1.10	5.00	ug/L
83-32-9	Acenaphthene	0.55	U	0.55	5.00	ug/L
51-28-5	2,4-Dinitrophenol	6.00	U	6.00	10.0	ug/L
100-02-7	4-Nitrophenol	2.40	U	2.40	10.0	ug/L
132-64-9	Dibenzofuran	0.61	U	0.61	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	1.20	U	1.20	5.00	ug/L
84-66-2	Diethylphthalate	0.69	U	0.69	5.00	ug/L
7005-72-3	4-Chlorophenyl-phenylether	0.68	U	0.68	5.00	ug/L
86-73-7	Fluorene	0.63	U	0.63	5.00	ug/L
100-01-6	4-Nitroaniline	1.50	U	1.50	5.00	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	2.90	U	2.90	10.0	ug/L
86-30-6	n-Nitrosodiphenylamine	0.58	U	0.58	5.00	ug/L
101-55-3	4-Bromophenyl-phenylether	0.40	U	0.40	5.00	ug/L
118-74-1	Hexachlorobenzene	0.52	U	0.52	5.00	ug/L
1912-24-9	Atrazine	1.00	U	1.00	5.00	ug/L
87-86-5	Pentachlorophenol	1.60	U	1.60	10.0	ug/L
85-01-8	Phenanthrene	0.50	U	0.50	5.00	ug/L
120-12-7	Anthracene	0.61	U	0.61	5.00	ug/L
86-74-8	Carbazole	0.72	U	0.72	5.00	ug/L
84-74-2	Di-n-butylphthalate	1.20	U	1.20	5.00	ug/L
206-44-0	Fluoranthene	0.82	U	0.82	5.00	ug/L
129-00-0	Pyrene	0.50	U	0.50	5.00	ug/L
85-68-7	Butylbenzylphthalate	1.90	U	1.90	5.00	ug/L
91-94-1	3,3-Dichlorobenzidine	0.93	U	0.93	10.0	ug/L
56-55-3	Benzo(a)anthracene	0.45	U	0.45	5.00	ug/L
218-01-9	Chrysene	0.44	U	0.44	5.00	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.60	U	1.60	5.00	ug/L
117-84-0	Di-n-octyl phthalate	2.30	U	2.30	10.0	ug/L
205-99-2	Benzo(b)fluoranthene	0.49	U	0.49	5.00	ug/L

Raw Data: **BM049860.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BL	SDG No.:	Q1746
Lab Sample ID:	PB167521BL	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049860.D	1	04/08/25 11:55	04/09/25 09:48	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	0.48	U	0.48	5.00	ug/L
50-32-8	Benzo(a)pyrene	0.55	U	0.55	5.00	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.59	U	0.59	5.00	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.67	U	0.67	5.00	ug/L
191-24-2	Benzo(g,h,i)perylene	0.69	U	0.69	5.00	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	0.52	U	0.52	5.00	ug/L
123-91-1	1,4-Dioxane	1.00	U	1.00	5.00	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.72	U	0.72	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	128		15 (10) - 110 (139)	86%	SPK: 150
13127-88-3	Phenol-d6	125		15 (10) - 110 (134)	83%	SPK: 150
4165-60-0	Nitrobenzene-d5	88.3		30 (49) - 130 (133)	88%	SPK: 100
321-60-8	2-Fluorobiphenyl	89.2		30 (52) - 130 (132)	89%	SPK: 100
118-79-6	2,4,6-Tribromophenol	136		15 (44) - 110 (137)	91%	SPK: 150
1718-51-0	Terphenyl-d14	108		30 (48) - 130 (125)	108%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	332000	7.775			
1146-65-2	Naphthalene-d8	1130000	10.569			
15067-26-2	Acenaphthene-d10	702000	14.416			
1517-22-2	Phenanthrene-d10	1350000	17.162			
1719-03-5	Chrysene-d12	1270000	21.397			
1520-96-3	Perylene-d12	1380000	24.391			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	9.20	A		4.89	ug/L

Raw Data: **BM049860.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BL	SDG No.:	Q1746
Lab Sample ID:	PB167521BL	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049860.D	1	04/08/25 11:55	04/09/25 09:48	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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: **BM049860.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049860.D
Acq On : 09 Apr 2025 09:48
Operator : RC/JU
Sample : PB167521BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Quant Time: Apr 09 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

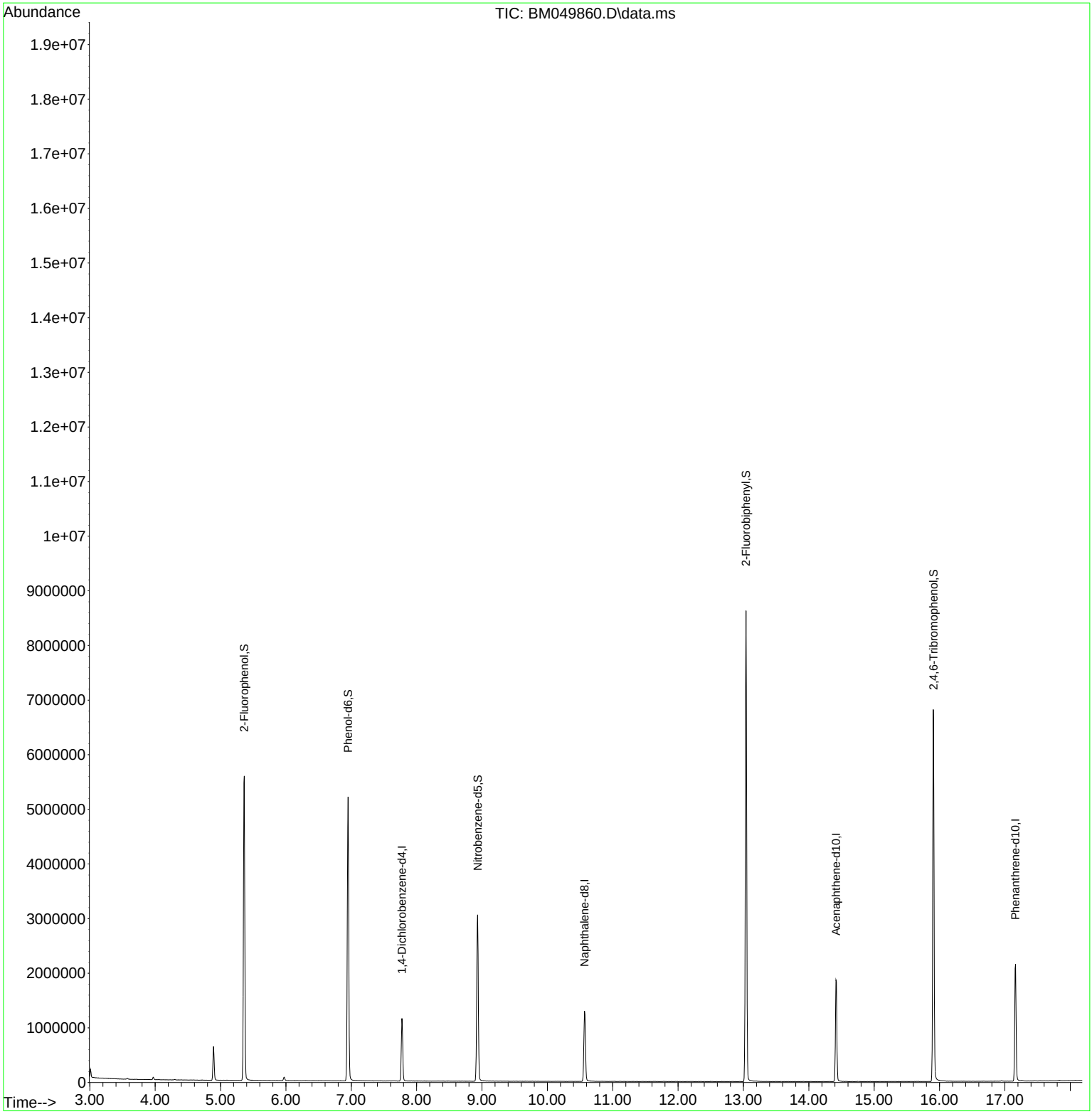
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	332281	20.000	ng	0.00
21) Naphthalene-d8	10.569	136	1132683	20.000	ng	0.00
39) Acenaphthene-d10	14.416	164	701970	20.000	ng	0.00
64) Phenanthrene-d10	17.162	188	1345526	20.000	ng	0.00
76) Chrysene-d12	21.397	240	1270012	20.000	ng	0.00
86) Perylene-d12	24.391	264	1381061	20.000	ng	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.363	112	2512705	128.408	ng	0.00
7) Phenol-d6	6.951	99	3032771	124.568	ng	0.00
23) Nitrobenzene-d5	8.934	82	1795986	88.295	ng	0.00
42) 2,4,6-Tribromophenol	15.910	330	1393023	136.432	ng	0.00
45) 2-Fluorobiphenyl	13.039	172	4615951	89.167	ng	0.00
79) Terphenyl-d14	19.786	244	7348045	108.429	ng	0.00
Target Compounds						Qvalue

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049860.D
Acq On : 09 Apr 2025 09:48
Operator : RC/JU
Sample : PB167521BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BL

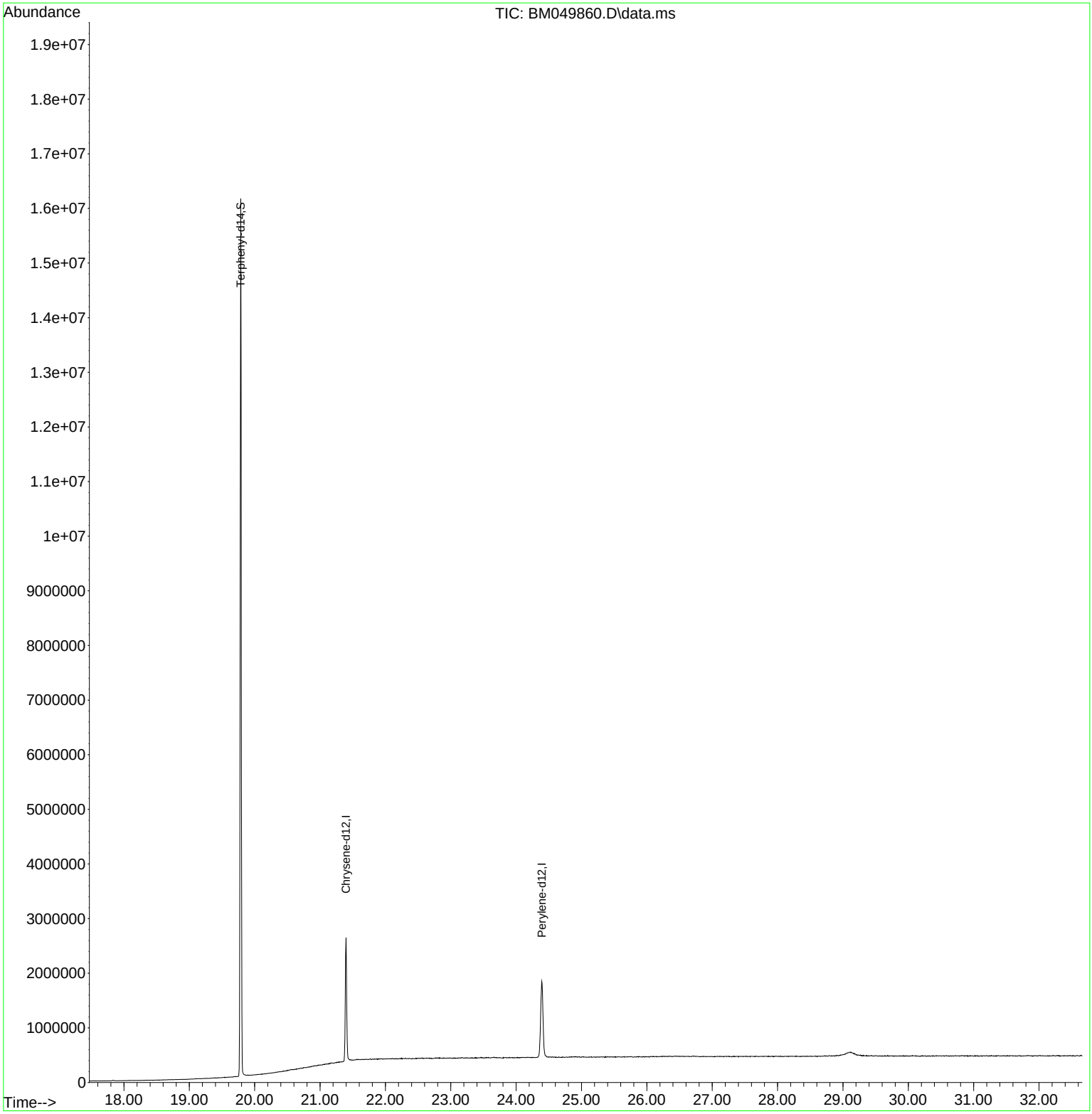
Quant Time: Apr 09 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

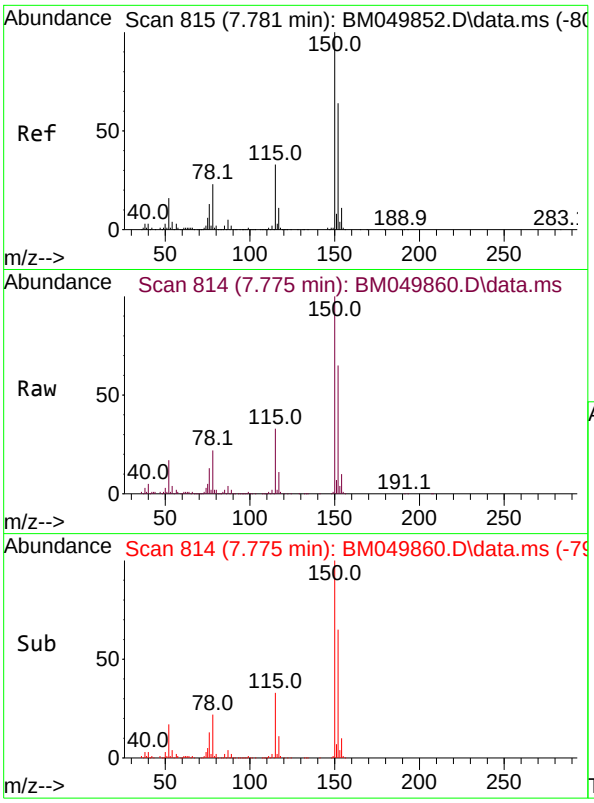


Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049860.D
Acq On : 09 Apr 2025 09:48
Operator : RC/JU
Sample : PB167521BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Quant Time: Apr 09 11:50:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



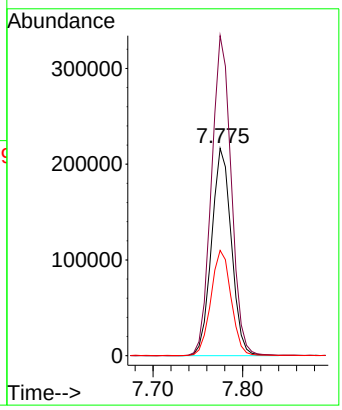


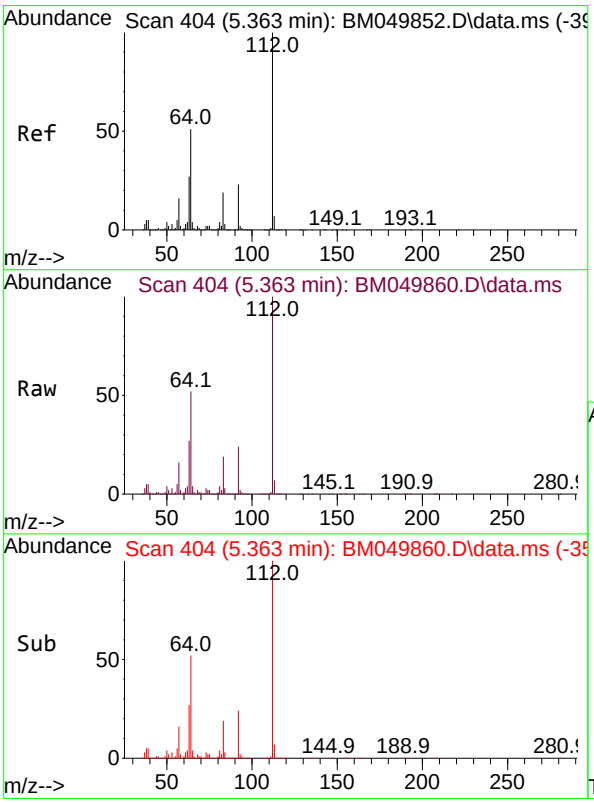
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.775 min Scan# 8
Delta R.T. -0.006 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Tgt Ion:152 Resp: 332281

Ion	Ratio	Lower	Upper
152	100		
150	154.3	124.3	186.5
115	50.8	41.1	61.7

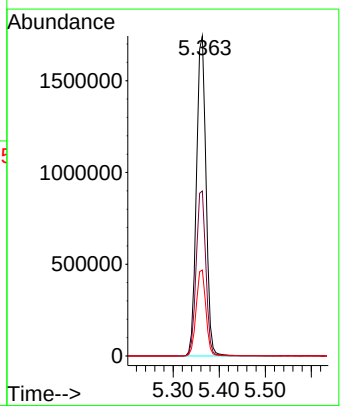


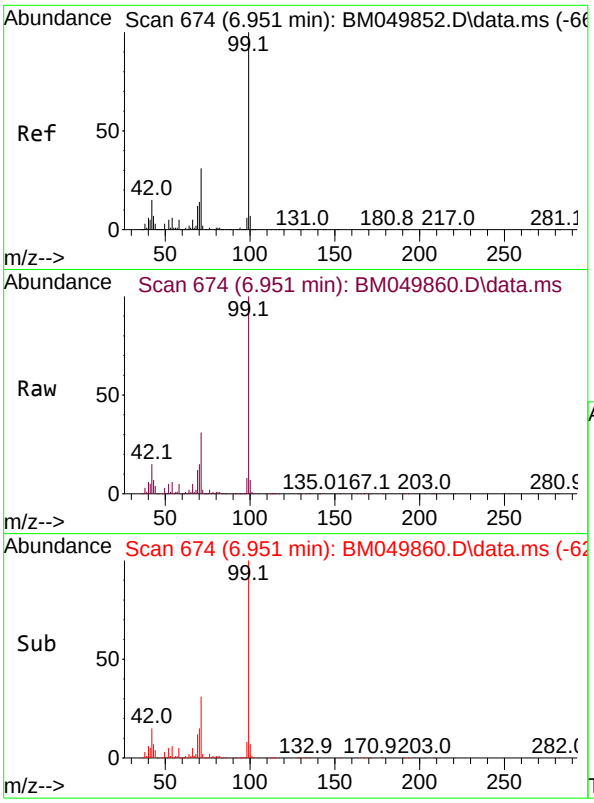


#5
2-Fluorophenol
Concen: 128.408 ng
RT: 5.363 min Scan# 404
Delta R.T. -0.000 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Tgt Ion:112 Resp: 2512705

Ion	Ratio	Lower	Upper
112	100		
64	51.5	41.0	61.6
63	26.9	21.5	32.3



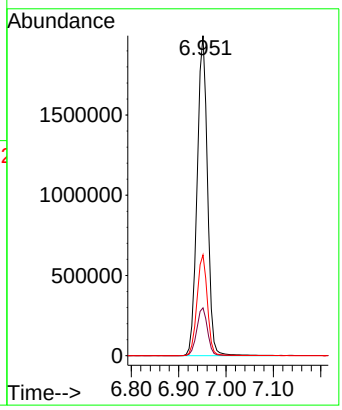


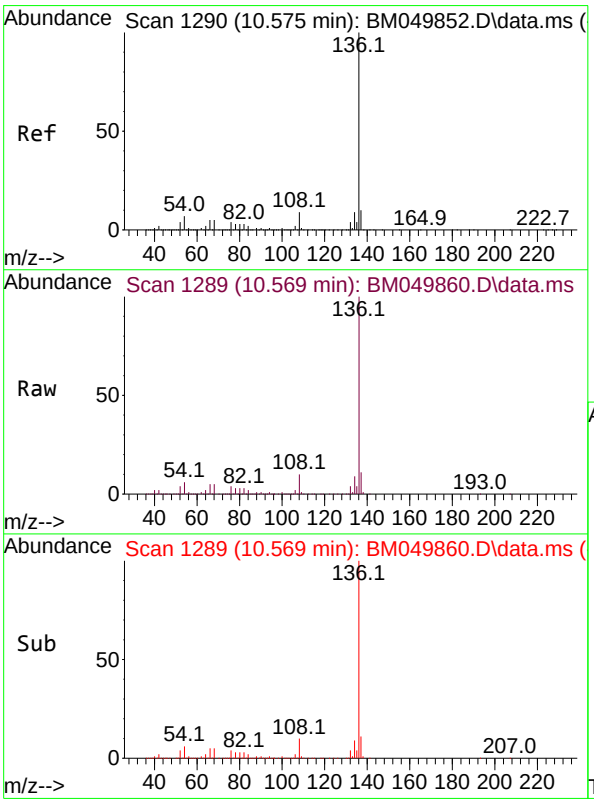
#7
Phenol-d6
Concen: 124.568 ng
RT: 6.951 min Scan# 6
Delta R.T. -0.000 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Tgt Ion: 99 Resp: 3032771

Ion	Ratio	Lower	Upper
99	100		
42	15.0	12.1	18.1
71	31.5	24.9	37.3

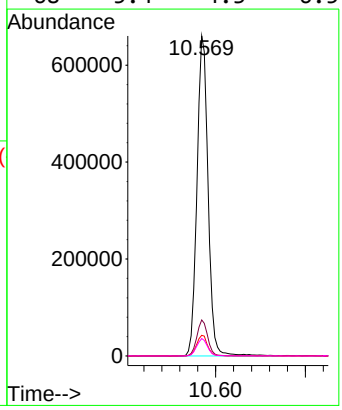


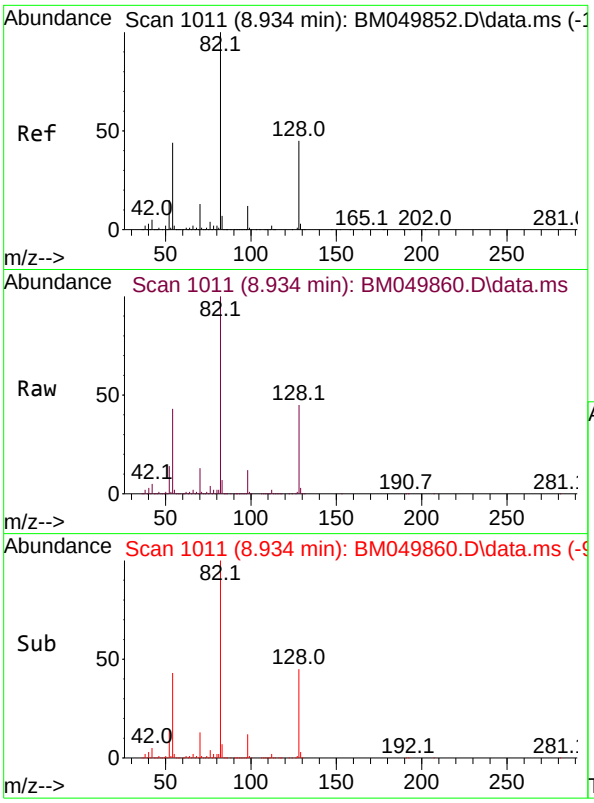


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.569 min Scan# 1289
Delta R.T. -0.006 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Tgt Ion:136 Resp: 1132683

Ion	Ratio	Lower	Upper
136	100		
137	11.2	8.4	12.6
54	6.4	5.3	7.9
68	5.4	4.3	6.5



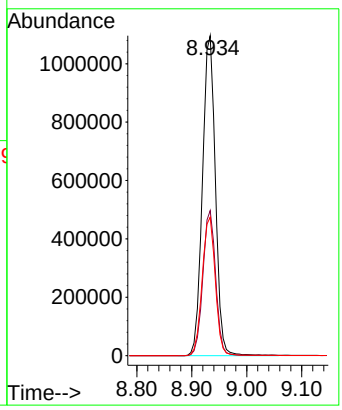


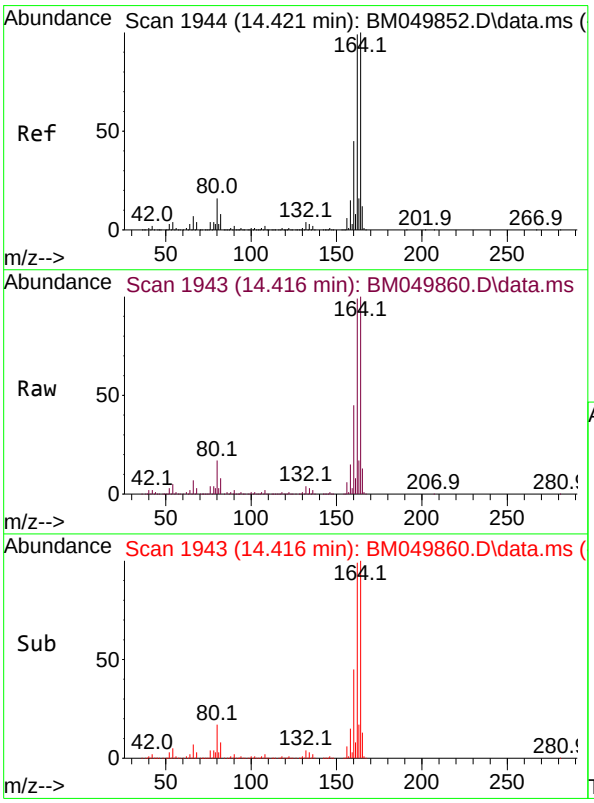
#23
Nitrobenzene-d5
Concen: 88.295 ng
RT: 8.934 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Tgt Ion: 82 Resp: 1795986

Ion	Ratio	Lower	Upper
82	100		
128	45.4	36.2	54.2
54	43.3	35.0	52.6

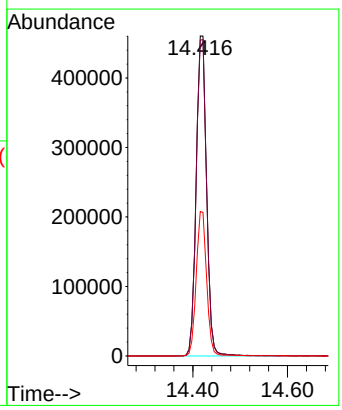


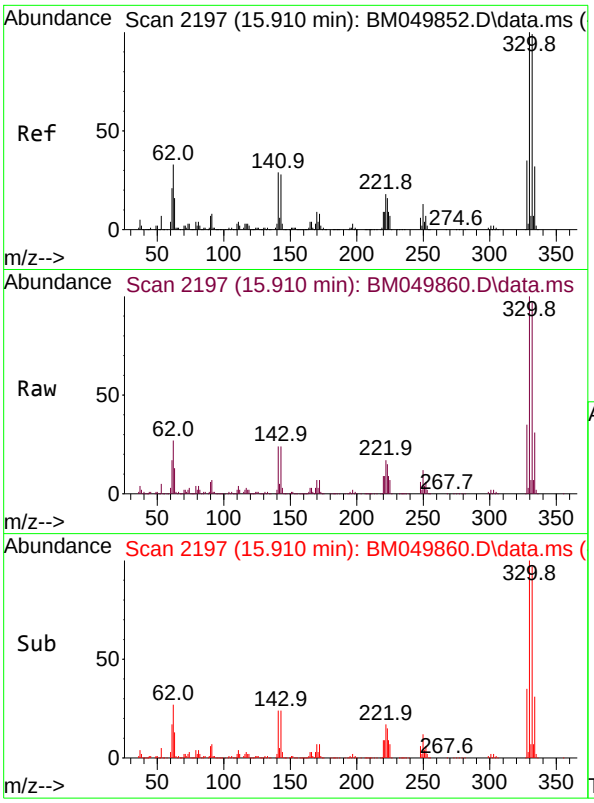


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.416 min Scan# 1943
Delta R.T. -0.006 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Tgt Ion:164 Resp: 701970

Ion	Ratio	Lower	Upper
164	100		
162	98.7	79.4	119.0
160	45.1	36.2	54.2



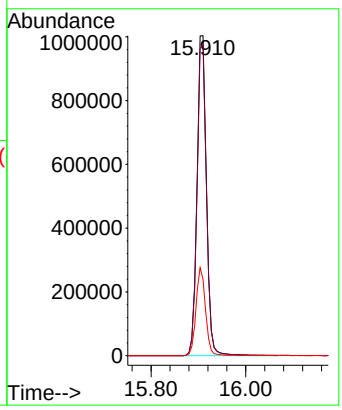


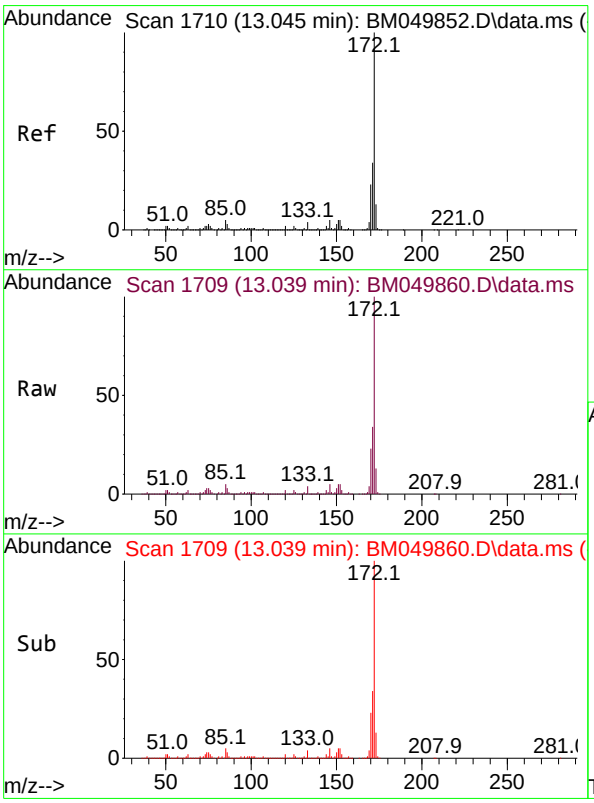
#42
2,4,6-Tribromophenol
Concen: 136.432 ng
RT: 15.910 min Scan# 21
Delta R.T. 0.000 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Tgt Ion:330 Resp: 1393023

Ion	Ratio	Lower	Upper
330	100		
332	96.7	78.0	117.0
141	27.8	23.5	35.3

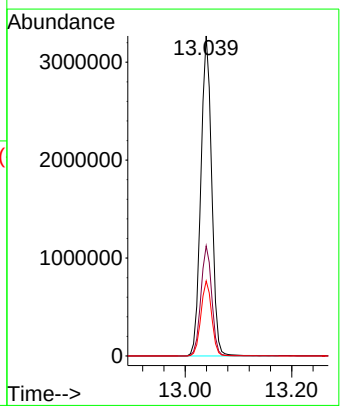


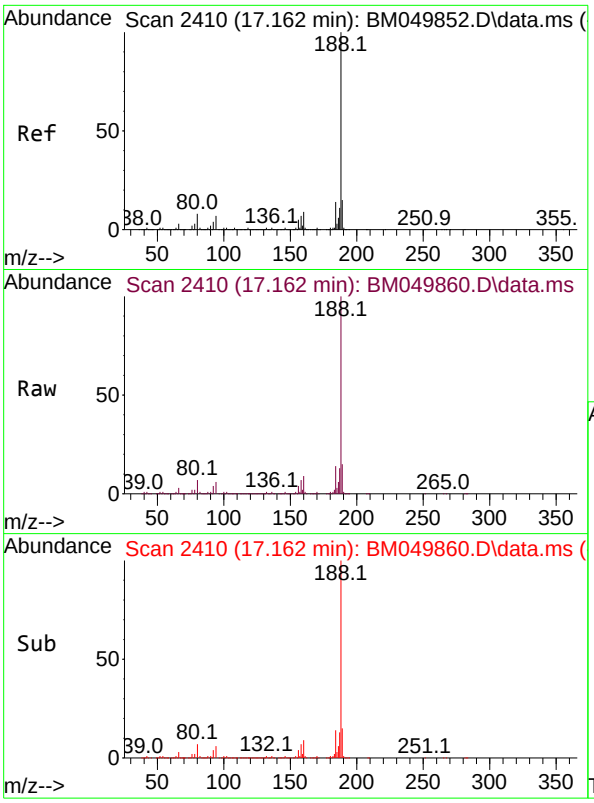


#45
2-Fluorobiphenyl
Concen: 89.167 ng
RT: 13.039 min Scan# 1709
Delta R.T. -0.006 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Tgt Ion:172 Resp: 4615951

Ion	Ratio	Lower	Upper
172	100		
171	34.4	27.4	41.2
170	23.4	18.6	28.0



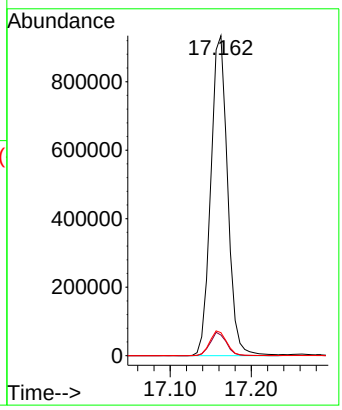


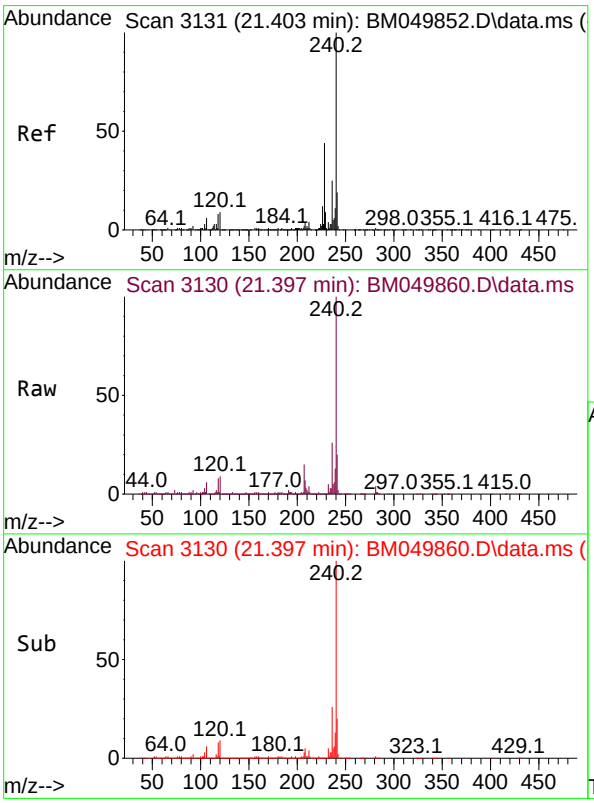
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.162 min Scan# 24
Delta R.T. -0.000 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Tgt Ion:188 Resp: 1345526

Ion	Ratio	Lower	Upper
188	100		
94	6.4	5.8	8.6
80	7.2	6.4	9.6

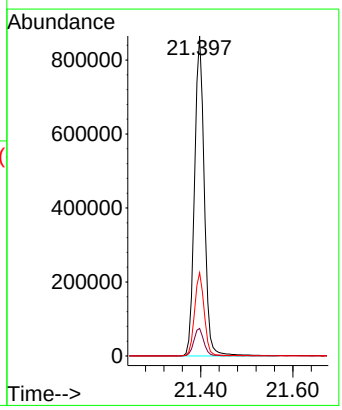


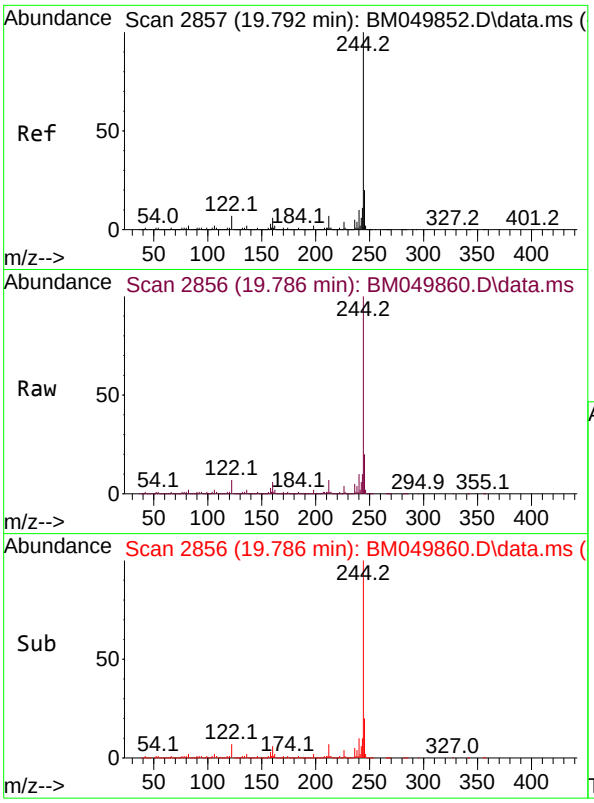


#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.397 min Scan# 3130
Delta R.T. -0.006 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Tgt Ion:240 Resp: 1270012

Ion	Ratio	Lower	Upper
240	100		
120	8.6	6.9	10.3
236	26.0	20.4	30.6



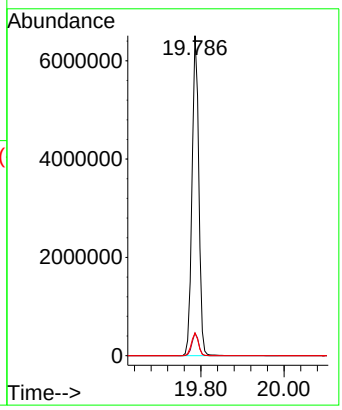


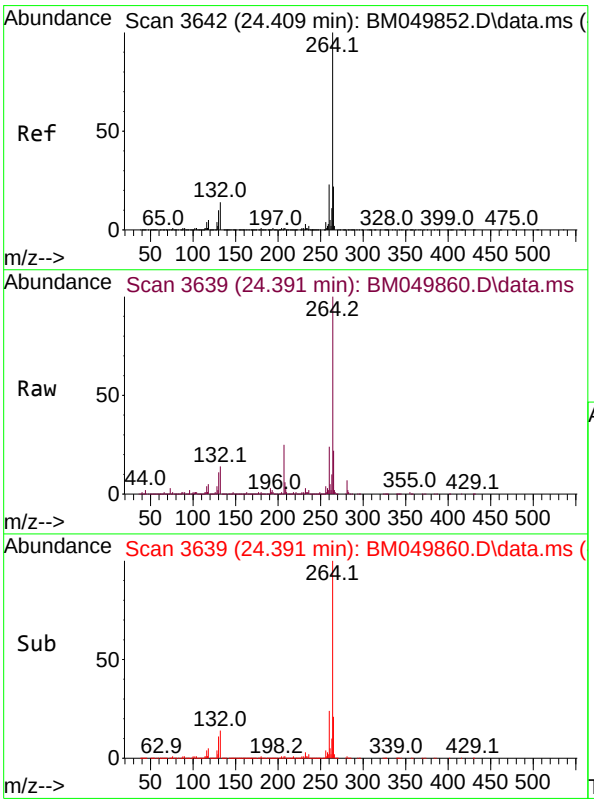
#79
Terphenyl-d14
Concen: 108.429 ng
RT: 19.786 min Scan# 2
Delta R.T. -0.006 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Tgt Ion:244 Resp: 7348045

Ion	Ratio	Lower	Upper
244	100		
212	7.1	5.5	8.3
122	7.1	5.4	8.0

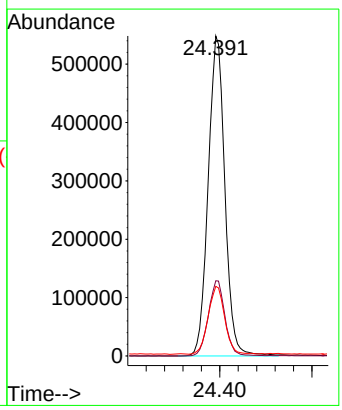




#86
Perylene-d12
Concen: 20.000 ng
RT: 24.391 min Scan# 3639
Delta R.T. -0.018 min
Lab File: BM049860.D
Acq: 09 Apr 2025 09:48

Tgt Ion:264 Resp: 1381061

Ion	Ratio	Lower	Upper
264	100		
260	23.5	18.6	28.0
265	21.8	17.8	26.8



Sample Results: **BM049860.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049860.D
Acq On : 09 Apr 2025 09:48
Operator : RC/JU
Sample : PB167521BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BL

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_M\Methods\8270-BM040825.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC: BM049860.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.893	319	324	331	rBV	621713	828312	4.51%	1.050%
2	5.363	397	404	421	rBV	5572018	8103768	44.14%	10.273%
3	6.951	666	674	689	rBV	5200303	8017188	43.67%	10.163%
4	7.775	807	814	825	rBV	1146886	1795930	9.78%	2.277%
5	8.934	1003	1011	1023	rBV	3048207	5032869	27.41%	6.380%
6	10.569	1280	1289	1300	rBV	1289614	2203550	12.00%	2.793%
7	13.039	1701	1709	1727	rBV	8620554	12256483	66.76%	15.537%
8	14.416	1937	1943	1960	rBV	1859190	2833843	15.44%	3.592%
9	15.904	2188	2196	2210	rBV	6810742	9476102	51.62%	12.013%
10	17.162	2403	2410	2424	rBV2	2138722	3149174	17.15%	3.992%
11	19.786	2850	2856	2871	rBV	16064322	18358983	100.00%	23.273%
12	21.397	3124	3130	3139	rBV	2259669	3328561	18.13%	4.220%
13	24.391	3632	3639	3655	rVB	1387290	3499272	19.06%	4.436%

Sum of corrected areas: 78884035

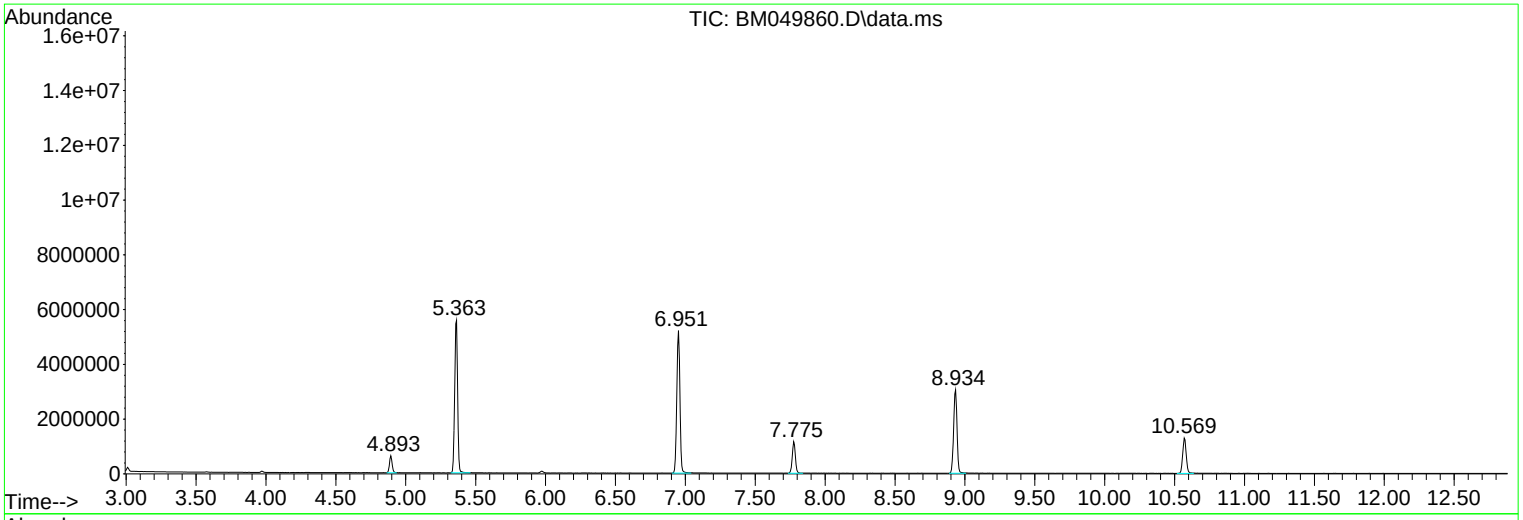
Sample Results: **BM049860.D**

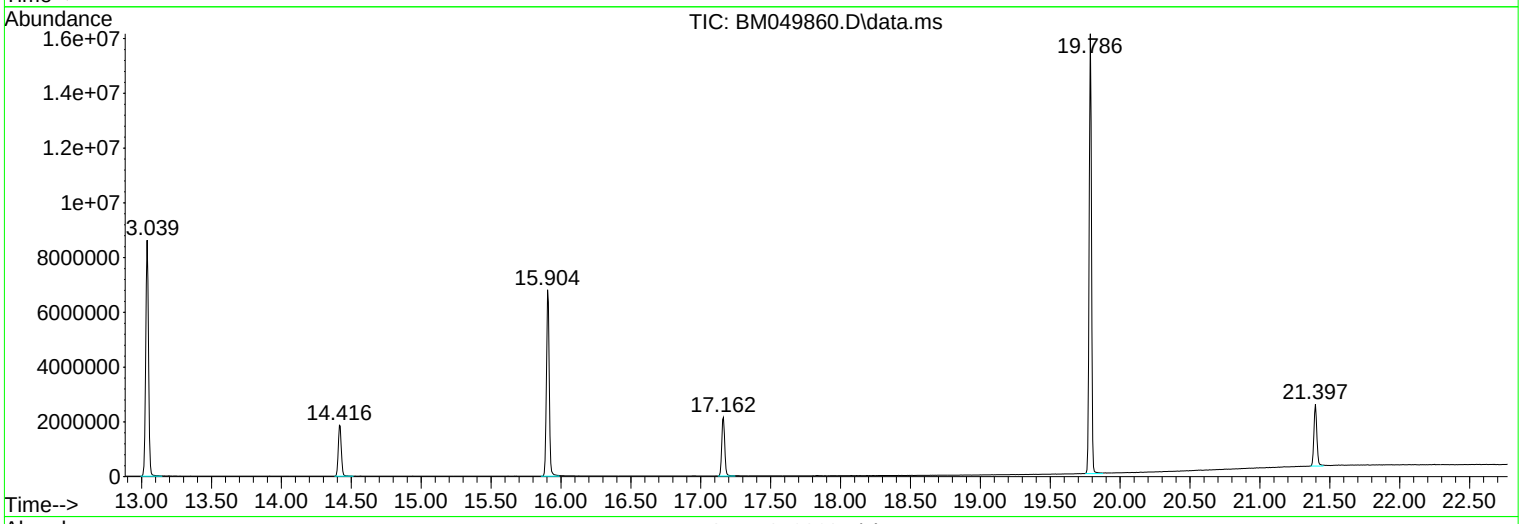
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049860.D
Acq On : 09 Apr 2025 09:48
Operator : RC/JU
Sample : PB167521BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

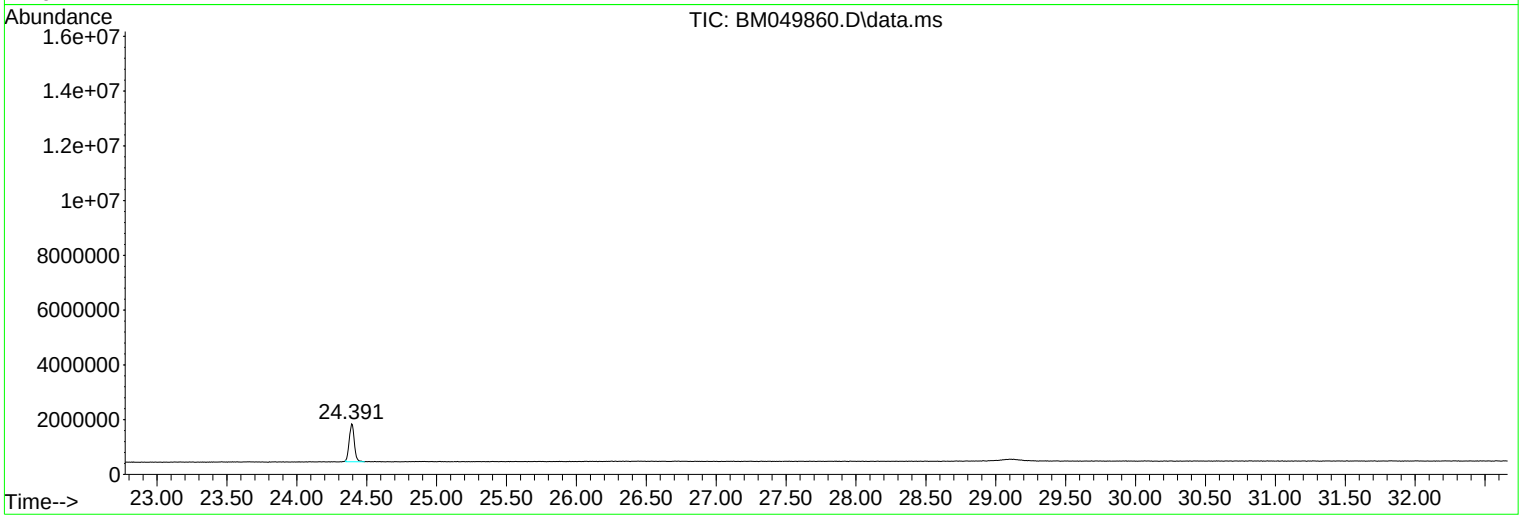
Instrument :
BNA_M
ClientSampleId :
PB167521BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.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_M\Data\BM040925\
Data File : BM049860.D
Acq On : 09 Apr 2025 09:48
Operator : RC/JU
Sample : PB167521BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BL

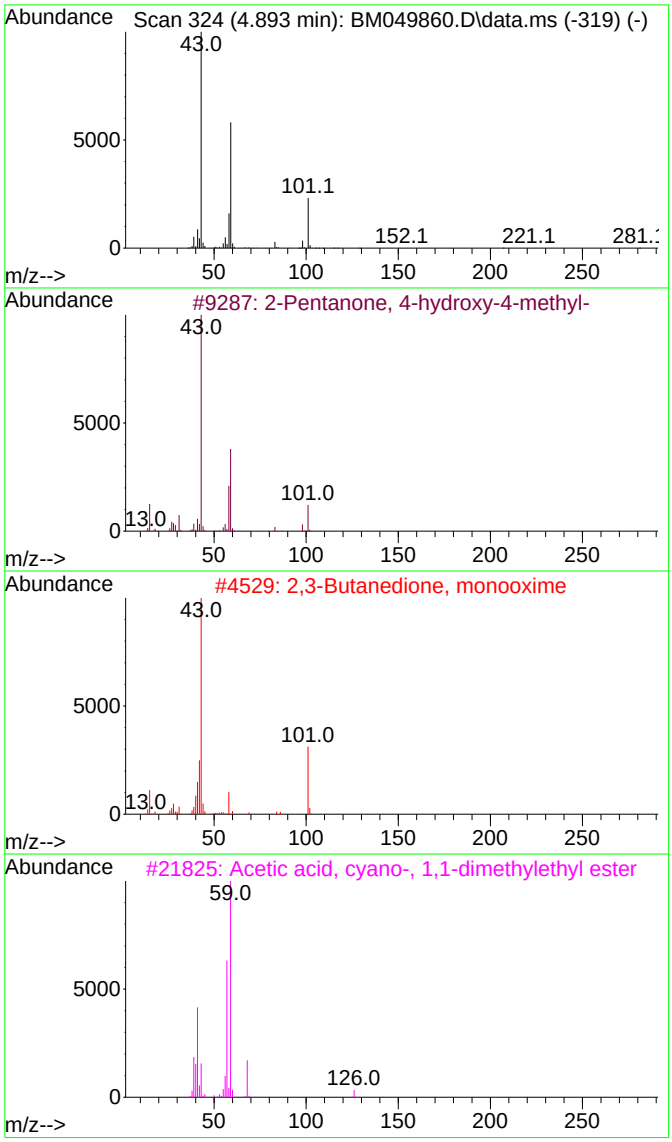
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

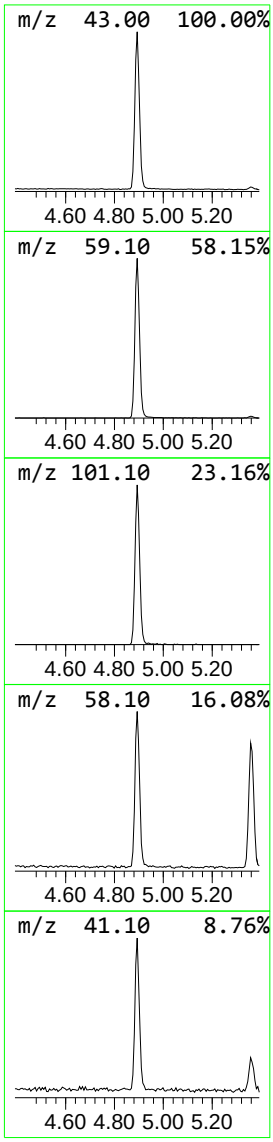
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.893	9.22 ng	828312	1,4-Dichlorobenzene-d4	7.775

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	17
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
4	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	10
5	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9





Sample Results: **BM049860.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049860.D
Acq On : 09 Apr 2025 09:48
Operator : RC/JU
Sample : PB167521BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BL

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.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-...	4.893	9.2	ng	828312	1	7.775	1795930	20.0

Raw Data: **BM049947.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167509BS	SDG No.:	Q1746
Lab Sample ID:	PB167509BS	Matrix:	SOIL
Analytical Method:	SW8270	% 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
BM049947.D	1	04/08/25 08:59	04/16/25 11:26	PB167509

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	1500		22.1	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1500		24.3	170	ug/Kg
95-57-8	2-Chlorophenol	1500		24.4	170	ug/Kg
95-48-7	2-Methylphenol	1600		29.9	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1600		37.5	170	ug/Kg
98-86-2	Acetophenone	1500		29.5	170	ug/Kg
65794-96-9	3+4-Methylphenols	1600		41.1	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1500		47.4	79.9	ug/Kg
67-72-1	Hexachloroethane	1500		17.6	170	ug/Kg
98-95-3	Nitrobenzene	1500		18.3	170	ug/Kg
78-59-1	Isophorone	1600		32.8	170	ug/Kg
88-75-5	2-Nitrophenol	1500		58.2	170	ug/Kg
105-67-9	2,4-Dimethylphenol	2200		64.8	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1500		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	820		35.4	170	ug/Kg
87-68-3	Hexachlorobutadiene	1500		25.3	170	ug/Kg
105-60-2	Caprolactam	1500		52.1	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1500		28.7	170	ug/Kg
91-57-6	2-Methylnaphthalene	1300		25.6	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	5400	E	120	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1600		19.8	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1600		29.1	170	ug/Kg
92-52-4	1,1-Biphenyl	1500		21.8	170	ug/Kg
91-58-7	2-Chloronaphthalene	1500		22.5	170	ug/Kg
88-74-4	2-Nitroaniline	1600		48.1	170	ug/Kg
131-11-3	Dimethylphthalate	1500		27.1	170	ug/Kg

Raw Data: **BM049947.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167509BS	SDG No.:	Q1746
Lab Sample ID:	PB167509BS	Matrix:	SOIL
Analytical Method:	SW8270	% 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
BM049947.D	1	04/08/25 08:59	04/16/25 11:26	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1600		28.9	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	1600		33.6	170	ug/Kg
99-09-2	3-Nitroaniline	1100		46.0	170	ug/Kg
83-32-9	Acenaphthene	1500		21.3	170	ug/Kg
51-28-5	2,4-Dinitrophenol	2900	E	230	330	ug/Kg
100-02-7	4-Nitrophenol	3200	E	110	330	ug/Kg
132-64-9	Dibenzofuran	1500		22.7	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	1700		50.1	170	ug/Kg
84-66-2	Diethylphthalate	1500		28.3	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1600		26.7	170	ug/Kg
86-73-7	Fluorene	1500		25.3	170	ug/Kg
100-01-6	4-Nitroaniline	1600		64.2	170	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1600		100	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1600		32.9	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1600		27.8	170	ug/Kg
118-74-1	Hexachlorobenzene	1600		25.3	170	ug/Kg
1912-24-9	Atrazine	2200		34.0	170	ug/Kg
87-86-5	Pentachlorophenol	3100	E	51.3	330	ug/Kg
85-01-8	Phenanthrene	1600		20.9	170	ug/Kg
120-12-7	Anthracene	1700		33.3	170	ug/Kg
86-74-8	Carbazole	1600		31.2	170	ug/Kg
84-74-2	Di-n-butylphthalate	1500		47.9	170	ug/Kg
206-44-0	Fluoranthene	1600		30.0	170	ug/Kg
129-00-0	Pyrene	1600		36.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	1600		71.4	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1200		36.7	330	ug/Kg
56-55-3	Benzo(a)anthracene	1600		23.0	170	ug/Kg
218-01-9	Chrysene	1600		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	1500		86.7	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	1600		19.0	170	ug/Kg

Raw Data: **BM049947.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167509BS	SDG No.:	Q1746
Lab Sample ID:	PB167509BS	Matrix:	SOIL
Analytical Method:	SW8270	% 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
BM049947.D	1	04/08/25 08:59	04/16/25 11:26	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1600		22.4	170	ug/Kg
50-32-8	Benzo(a)pyrene	1700		29.5	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1600		29.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1600		27.4	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1500		25.7	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1500		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	127		30 (18) - 130 (112)	85%	SPK: 150
13127-88-3	Phenol-d6	126		30 (15) - 130 (107)	84%	SPK: 150
4165-60-0	Nitrobenzene-d5	87.2		30 (18) - 130 (107)	87%	SPK: 100
321-60-8	2-Fluorobiphenyl	89.2		30 (20) - 130 (109)	89%	SPK: 100
118-79-6	2,4,6-Tribromophenol	145		30 (10) - 130 (116)	97%	SPK: 150
1718-51-0	Terphenyl-d14	101		30 (10) - 130 (105)	101%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	336000	7.769			
1146-65-2	Naphthalene-d8	1150000	10.563			
15067-26-2	Acenaphthene-d10	723000	14.416			
1517-22-2	Phenanthrene-d10	1410000	17.157			
1719-03-5	Chrysene-d12	1400000	21.404			
1520-96-3	Perylene-d12	1470000	24.403			

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_M\Data\BM041625\
Data File : BM049947.D
Acq On : 16 Apr 2025 11:26
Operator : RC/JU
Sample : PB167509BS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 16 12:10:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
PB167509BS

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 04/17/2025
Supervised By :Jagrut Upadhyay 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.769	152	335569	20.000	ng		-0.01
21) Naphthalene-d8	10.563	136	1154159	20.000	ng		-0.01
39) Acenaphthene-d10	14.416	164	723173	20.000	ng		0.00
64) Phenanthrene-d10	17.157	188	1408528	20.000	ng		0.00
76) Chrysene-d12	21.404	240	1396785	20.000	ng		0.00
86) Perylene-d12	24.403	264	1468801	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.358	112	2517914	127.414	ng		0.00
7) Phenol-d6	6.952	99	3087375	125.568	ng		0.00
23) Nitrobenzene-d5	8.928	82	1807121	87.189	ng		0.00
42) 2,4,6-Tribromophenol	15.910	330	1524489	144.930	ng		0.00
45) 2-Fluorobiphenyl	13.034	172	4755133	89.163	ng		-0.01
79) Terphenyl-d14	19.786	244	7545930	101.243	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.252	88	285236	35.047	ng		99
3) Pyridine	3.652	79	801586	37.487	ng		99
4) n-Nitrosodimethylamine	3.564	42	348421	42.817	ng		100
6) Aniline	7.099	93	802210	38.077	ng		100
8) 2-Chlorophenol	7.340	128	926757	45.761	ng		99
9) Benzaldehyde	6.910	77	410086	32.502	ng		99
10) Phenol	6.981	94	1092338	45.526	ng		98
11) bis(2-Chloroethyl)ether	7.193	93	862929	45.862	ng		100
12) 1,3-Dichlorobenzene	7.657	146	1062242	44.365	ng		98
13) 1,4-Dichlorobenzene	7.805	146	1072356	44.511	ng		99
14) 1,2-Dichlorobenzene	8.122	146	1029815	45.382	ng		99
15) Benzyl Alcohol	8.016	79	709628	45.834	ng		98
16) 2,2'-oxybis(1-Chloropr...	8.293	45	1007433	48.038	ng		98
17) 2-Methylphenol	8.222	107	711381	48.112	ng		99
18) Hexachloroethane	8.846	117	374982	44.738	ng		99
19) n-Nitroso-di-n-propyla...	8.581	70	626211	45.985	ng		99
20) 3+4-Methylphenols	8.552	107	954078	47.329	ng		99
22) Acetophenone	8.593	105	1241485	44.260	ng	#	99
24) Nitrobenzene	8.969	77	897029	44.947	ng		99
25) Isophorone	9.499	82	1683372	48.483	ng		99
26) 2-Nitrophenol	9.681	139	487144	46.053	ng		99
27) 2,4-Dimethylphenol	9.751	122	789352	65.846	ng		98
28) bis(2-Chloroethoxy)met...	9.975	93	1054935	45.383	ng		99
29) 2,4-Dichlorophenol	10.228	162	904031	45.368	ng		98
30) 1,2,4-Trichlorobenzene	10.428	180	1025903	44.503	ng		99
31) Naphthalene	10.616	128	2556936	43.115	ng		99
32) Benzoic acid	9.899	122	510676m	36.793	ng		
33) 4-Chloroaniline	10.728	127	517747	24.724	ng		98
34) Hexachlorobutadiene	10.904	225	658407	46.174	ng		98
35) Caprolactam	11.516	113	251400	43.988	ng		99
36) 4-Chloro-3-methylphenol	11.869	107	793616	45.467	ng		99
37) 2-Methylnaphthalene	12.228	142	1684399	40.312	ng		100
38) 1-Methylnaphthalene	12.451	142	1758489	43.198	ng		100
40) 1,2,4,5-Tetrachloroben...	12.604	216	1167474	46.145	ng		99
41) Hexachlorocyclopentadiene	12.581	237	1433013	161.644	ng		98
43) 2,4,6-Trichlorophenol	12.851	196	772469	47.982	ng		98

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049947.D
Acq On : 16 Apr 2025 11:26
Operator : RC/JU
Sample : PB167509BS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 16 12:10:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
PB167509BS

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 04/17/2025
Supervised By :Jagrut Upadhyay 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.928	196	833745	47.656	ng	99
46) 1,1'-Biphenyl	13.245	154	2422318	45.059	ng	100
47) 2-Chloronaphthalene	13.287	162	1925861	45.579	ng	98
48) 2-Nitroaniline	13.492	65	474869	48.580	ng	99
49) Acenaphthylene	14.139	152	3047254	49.510	ng	99
50) Dimethylphthalate	13.875	163	2358862	46.235	ng	100
51) 2,6-Dinitrotoluene	13.992	165	515213	48.200	ng	97
52) Acenaphthene	14.481	154	1764030	45.059	ng	99
53) 3-Nitroaniline	14.322	138	351369	34.011	ng	97
54) 2,4-Dinitrophenol	14.539	184	668125	85.742	ng	97
55) Dibenzofuran	14.816	168	2892823	44.201	ng	98
56) 4-Nitrophenol	14.651	139	879693	95.553	ng	99
57) 2,4-Dinitrotoluene	14.786	165	725380	50.868	ng	95
58) Fluorene	15.463	166	2409614	46.319	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.045	232	711309	46.388	ng	97
60) Diethylphthalate	15.239	149	2190399	44.769	ng	99
61) 4-Chlorophenyl-phenyle...	15.457	204	1302004	46.682	ng	99
62) 4-Nitroaniline	15.486	138	502922	47.073	ng	99
63) Azobenzene	15.751	77	1866693	44.564	ng	97
65) 4,6-Dinitro-2-methylph...	15.551	198	437036	49.238	ng	98
66) n-Nitrosodiphenylamine	15.675	169	2034520	48.266	ng	99
67) 4-Bromophenyl-phenylether	16.351	248	790083	48.319	ng	97
68) Hexachlorobenzene	16.475	284	919430	49.022	ng	99
69) Atrazine	16.627	200	731486	66.929	ng	98
70) Pentachlorophenol	16.816	266	1280079	92.705	ng	100
71) Phenanthrene	17.204	178	3723574	48.220	ng	100
72) Anthracene	17.292	178	3775775	49.616	ng	100
73) Carbazole	17.563	167	3426685	47.807	ng	99
74) Di-n-butylphthalate	18.127	149	3828697	46.376	ng	99
75) Fluoranthene	19.221	202	4496471	47.358	ng	99
77) Benzidine	19.404	184	1898133	102.434	ng	100
78) Pyrene	19.580	202	4650588	48.311	ng	100
80) Butylbenzylphthalate	20.480	149	1697848	46.939	ng	99
81) Benzo(a)anthracene	21.386	228	4535328	48.856	ng	100
82) 3,3'-Dichlorobenzidine	21.304	252	1250970	35.685	ng	99
83) Chrysene	21.445	228	4184241	47.411	ng	99
84) Bis(2-ethylhexyl)phtha...	21.304	149	2394124	45.429	ng	98
85) Di-n-octyl phthalate	22.439	149	4115837	44.642	ng	100
87) Indeno(1,2,3-cd)pyrene	27.809	276	5360089	48.957	ng	99
88) Benzo(b)fluoranthene	23.462	252	4436790	47.297	ng	99
89) Benzo(k)fluoranthene	23.521	252	4265178	46.919	ng	100
90) Benzo(a)pyrene	24.268	252	4193597	50.874	ng	99
91) Dibenzo(a,h)anthracene	27.856	278	4387155	48.647	ng	99
92) Benzo(g,h,i)perylene	28.862	276	4256093	46.184	ng	99

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

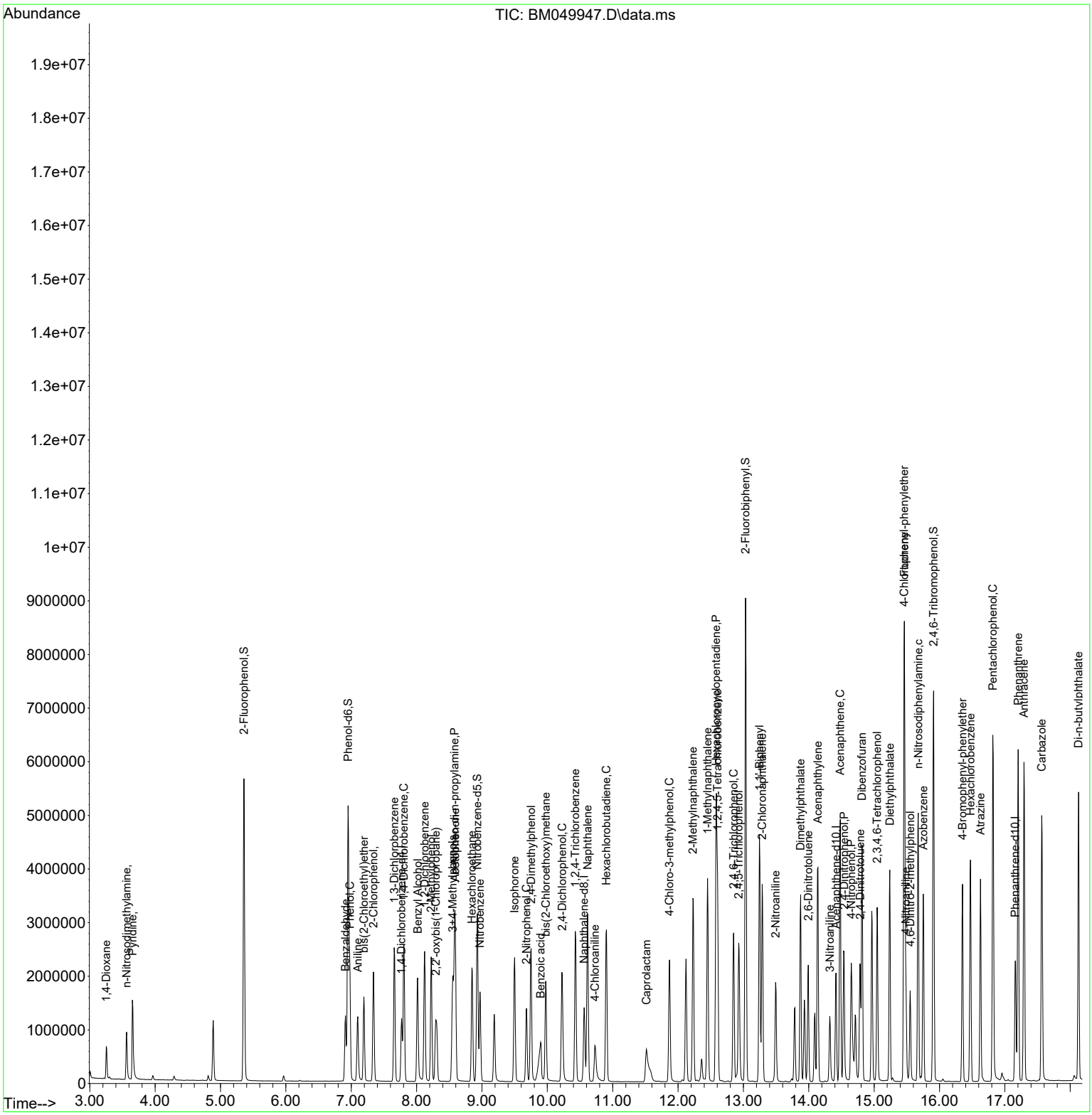
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049947.D
Acq On : 16 Apr 2025 11:26
Operator : RC/JU
Sample : PB167509BS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 16 12:10:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
PB167509BS

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 04/17/2025
Supervised By :Jagrut Upadhyay 04/17/2025



Sample Results: **BM049947.D**

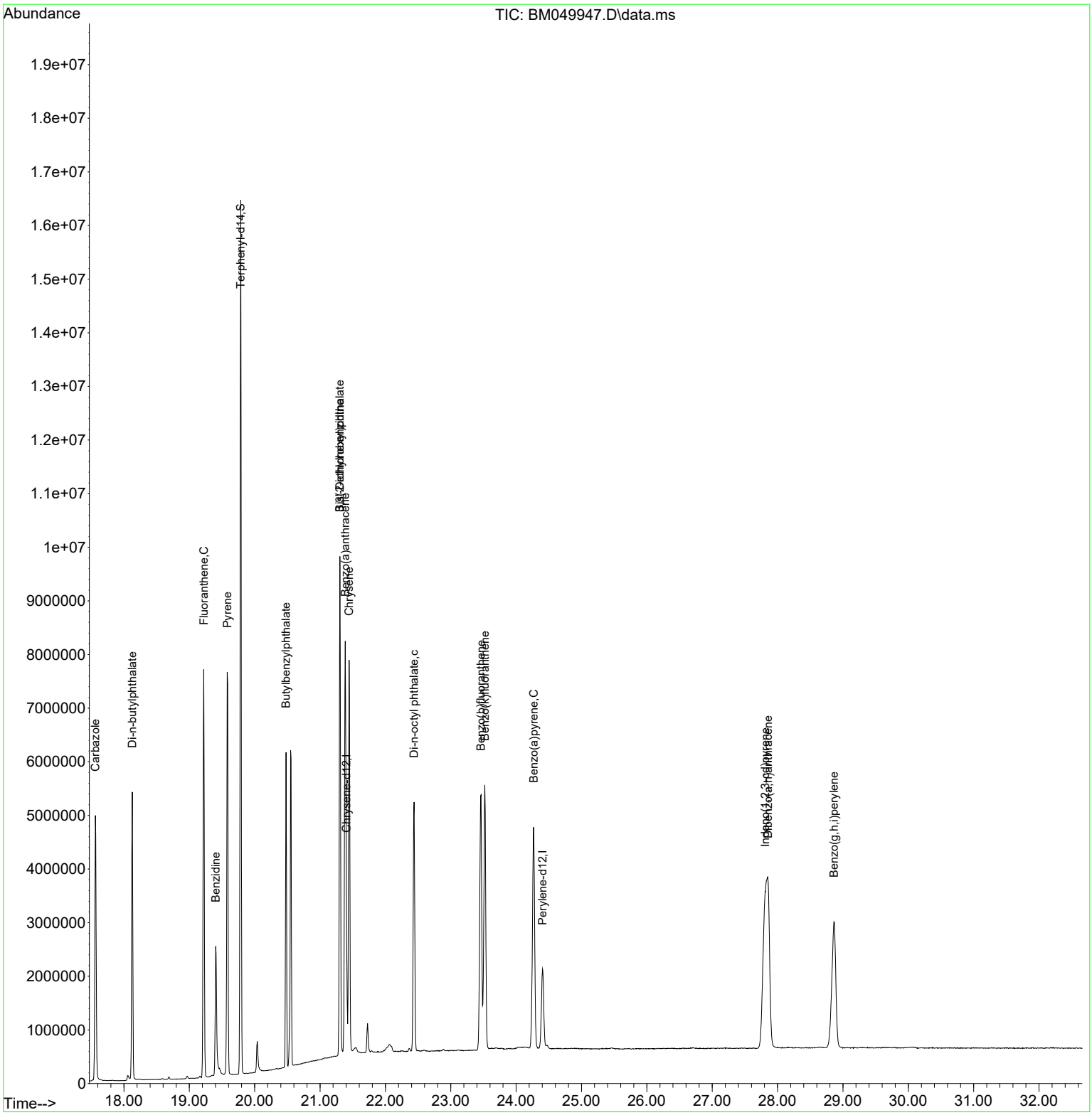
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM041625\
Data File : BM049947.D
Acq On : 16 Apr 2025 11:26
Operator : RC/JU
Sample : PB167509BS
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Quant Time: Apr 16 12:10:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
PB167509BS

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 04/17/2025
Supervised By :Jagrut Upadhyay 04/17/2025



Raw Data: **BM049861.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BS	SDG No.:	Q1746
Lab Sample ID:	PB167521BS	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049861.D	1	04/08/25 11:55	04/09/25 10:27	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	35.7		3.90	10.0	ug/L
108-95-2	Phenol	42.1		0.91	5.00	ug/L
111-44-4	bis(2-Chloroethyl)ether	41.4		0.81	5.00	ug/L
95-57-8	2-Chlorophenol	41.6		0.58	5.00	ug/L
95-48-7	2-Methylphenol	44.0		1.10	5.00	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	43.2		1.30	5.00	ug/L
98-86-2	Acetophenone	41.0		0.74	5.00	ug/L
65794-96-9	3+4-Methylphenols	43.6		1.10	10.0	ug/L
621-64-7	n-Nitroso-di-n-propylamine	42.8		1.40	2.50	ug/L
67-72-1	Hexachloroethane	41.0		0.65	5.00	ug/L
98-95-3	Nitrobenzene	40.6		0.76	5.00	ug/L
78-59-1	Isophorone	43.6		0.75	5.00	ug/L
88-75-5	2-Nitrophenol	40.0		1.80	5.00	ug/L
105-67-9	2,4-Dimethylphenol	60.6		1.90	5.00	ug/L
111-91-1	bis(2-Chloroethoxy)methane	41.6		0.68	5.00	ug/L
120-83-2	2,4-Dichlorophenol	41.7		0.52	5.00	ug/L
91-20-3	Naphthalene	39.4		0.50	5.00	ug/L
106-47-8	4-Chloroaniline	21.2		0.84	5.00	ug/L
87-68-3	Hexachlorobutadiene	41.2		0.54	5.00	ug/L
105-60-2	Caprolactam	39.5		1.10	10.0	ug/L
59-50-7	4-Chloro-3-methylphenol	41.8		0.59	5.00	ug/L
91-57-6	2-Methylnaphthalene	36.8		0.56	5.00	ug/L
77-47-4	Hexachlorocyclopentadiene	180	E	3.60	10.0	ug/L
88-06-2	2,4,6-Trichlorophenol	43.1		0.51	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	43.2		0.62	5.00	ug/L
92-52-4	1,1-Biphenyl	41.6		0.53	5.00	ug/L
91-58-7	2-Chloronaphthalene	42.2		0.61	5.00	ug/L
88-74-4	2-Nitroaniline	43.8		1.30	5.00	ug/L
131-11-3	Dimethylphthalate	42.1		0.61	5.00	ug/L

Raw Data: **BM049861.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BS	SDG No.:	Q1746
Lab Sample ID:	PB167521BS	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049861.D	1	04/08/25 11:55	04/09/25 10:27	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	45.7		0.75	5.00	ug/L
606-20-2	2,6-Dinitrotoluene	43.4		0.92	5.00	ug/L
99-09-2	3-Nitroaniline	22.2		1.10	5.00	ug/L
83-32-9	Acenaphthene	41.7		0.55	5.00	ug/L
51-28-5	2,4-Dinitrophenol	80.2	E	6.00	10.0	ug/L
100-02-7	4-Nitrophenol	92.4	E	2.40	10.0	ug/L
132-64-9	Dibenzofuran	40.7		0.61	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	45.8		1.20	5.00	ug/L
84-66-2	Diethylphthalate	41.2		0.69	5.00	ug/L
7005-72-3	4-Chlorophenyl-phenylether	43.1		0.68	5.00	ug/L
86-73-7	Fluorene	42.7		0.63	5.00	ug/L
100-01-6	4-Nitroaniline	41.6		1.50	5.00	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	43.6		2.90	10.0	ug/L
86-30-6	n-Nitrosodiphenylamine	44.3		0.58	5.00	ug/L
101-55-3	4-Bromophenyl-phenylether	43.4		0.40	5.00	ug/L
118-74-1	Hexachlorobenzene	43.8		0.52	5.00	ug/L
1912-24-9	Atrazine	62.2		1.00	5.00	ug/L
87-86-5	Pentachlorophenol	87.0	E	1.60	10.0	ug/L
85-01-8	Phenanthrene	43.8		0.50	5.00	ug/L
120-12-7	Anthracene	45.4		0.61	5.00	ug/L
86-74-8	Carbazole	43.7		0.72	5.00	ug/L
84-74-2	Di-n-butylphthalate	41.8		1.20	5.00	ug/L
206-44-0	Fluoranthene	42.1		0.82	5.00	ug/L
129-00-0	Pyrene	43.8		0.50	5.00	ug/L
85-68-7	Butylbenzylphthalate	42.3		1.90	5.00	ug/L
91-94-1	3,3-Dichlorobenzidine	23.5		0.93	10.0	ug/L
56-55-3	Benzo(a)anthracene	44.0		0.45	5.00	ug/L
218-01-9	Chrysene	43.1		0.44	5.00	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	41.7		1.60	5.00	ug/L
117-84-0	Di-n-octyl phthalate	40.0		2.30	10.0	ug/L
205-99-2	Benzo(b)fluoranthene	41.9		0.49	5.00	ug/L

Raw Data: **BM049861.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BS	SDG No.:	Q1746
Lab Sample ID:	PB167521BS	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049861.D	1	04/08/25 11:55	04/09/25 10:27	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	44.5		0.48	5.00	ug/L
50-32-8	Benzo(a)pyrene	46.4		0.55	5.00	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	44.5		0.59	5.00	ug/L
53-70-3	Dibenzo(a,h)anthracene	44.0		0.67	5.00	ug/L
191-24-2	Benzo(g,h,i)perylene	42.3		0.69	5.00	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	42.4		0.52	5.00	ug/L
123-91-1	1,4-Dioxane	32.1		1.00	5.00	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	42.1		0.72	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	119		15 (10) - 110 (139)	79%	SPK: 150
13127-88-3	Phenol-d6	118		15 (10) - 110 (134)	78%	SPK: 150
4165-60-0	Nitrobenzene-d5	79.5		30 (49) - 130 (133)	79%	SPK: 100
321-60-8	2-Fluorobiphenyl	82.6		30 (52) - 130 (132)	83%	SPK: 100
118-79-6	2,4,6-Tribromophenol	130		15 (44) - 110 (137)	87%	SPK: 150
1718-51-0	Terphenyl-d14	94.4		30 (48) - 130 (125)	94%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	337000	7.775			
1146-65-2	Naphthalene-d8	1170000	10.569			
15067-26-2	Acenaphthene-d10	730000	14.421			
1517-22-2	Phenanthrene-d10	1420000	17.162			
1719-03-5	Chrysene-d12	1400000	21.397			
1520-96-3	Perylene-d12	1420000	24.391			

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_M\Data\BM040925\
Data File : BM049861.D
Acq On : 09 Apr 2025 10:27
Operator : RC/JU
Sample : PB167521BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BS

Quant Time: Apr 10 01:10:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.775	152	336910	20.000	ng		0.00
21) Naphthalene-d8	10.569	136	1172193	20.000	ng		0.00
39) Acenaphthene-d10	14.421	164	730256	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1422911	20.000	ng		0.00
76) Chrysene-d12	21.397	240	1400193	20.000	ng		0.00
86) Perylene-d12	24.391	264	1421398	20.000	ng		-0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	2359326	118.913	ng		0.00
7) Phenol-d6	6.951	99	2904820	117.673	ng		0.00
23) Nitrobenzene-d5	8.933	82	1673050	79.479	ng		0.00
42) 2,4,6-Tribromophenol	15.909	330	1380194	129.939	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	4447030	82.577	ng		0.00
79) Terphenyl-d14	19.786	244	7050422	94.364	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.257	88	262686	32.148	ng		99
3) Pyridine	3.657	79	736378	34.301	ng		99
4) n-Nitrosodimethylamine	3.563	42	321708	39.377	ng		98
6) Aniline	7.104	93	786603	37.187	ng		100
8) 2-Chlorophenol	7.345	128	846424	41.628	ng		99
9) Benzaldehyde	6.916	77	452619	35.730	ng		98
10) Phenol	6.981	94	1015187	42.142	ng		98
11) bis(2-Chloroethyl)ether	7.198	93	781591	41.374	ng		99
12) 1,3-Dichlorobenzene	7.669	146	976490	40.621	ng		99
13) 1,4-Dichlorobenzene	7.810	146	989229	40.897	ng		99
14) 1,2-Dichlorobenzene	8.128	146	941895	41.342	ng		100
15) Benzyl Alcohol	8.016	79	656468	42.231	ng		100
16) 2,2'-oxybis(1-Chloropr...	8.304	45	909970	43.218	ng		99
17) 2-Methylphenol	8.222	107	653053	43.991	ng		98
18) Hexachloroethane	8.857	117	345101	41.009	ng		98
19) n-Nitroso-di-n-propyla...	8.586	70	585502	42.824	ng		98
20) 3+4-Methylphenols	8.551	107	881759	43.568	ng		99
22) Acetophenone	8.598	105	1168530	41.018	ng	#	99
24) Nitrobenzene	8.975	77	821968	40.552	ng		98
25) Isophorone	9.504	82	1536740	43.579	ng		99
26) 2-Nitrophenol	9.686	139	430155	40.040	ng		99
27) 2,4-Dimethylphenol	9.751	122	738065	60.621	ng		99
28) bis(2-Chloroethoxy)met...	9.980	93	981482	41.574	ng		99
29) 2,4-Dichlorophenol	10.222	162	842978	41.653	ng		99
30) 1,2,4-Trichlorobenzene	10.433	180	943265	40.289	ng		99
31) Naphthalene	10.622	128	2371128	39.367	ng		99
32) Benzoic acid	9.886	122	519818	36.856	ng		97
33) 4-Chloroaniline	10.727	127	451143	21.212	ng		98
34) Hexachlorobutadiene	10.910	225	596021	41.155	ng		99
35) Caprolactam	11.510	113	229193	39.485	ng		96
36) 4-Chloro-3-methylphenol	11.863	107	741890	41.849	ng		99
37) 2-Methylnaphthalene	12.233	142	1561901	36.805	ng		100
38) 1-Methylnaphthalene	12.457	142	1638645	39.635	ng		99
40) 1,2,4,5-Tetrachloroben...	12.610	216	1082730	42.381	ng		98
41) Hexachlorocyclopentadiene	12.592	237	1584026	176.945	ng		99
43) 2,4,6-Trichlorophenol	12.851	196	701162	43.130	ng		98

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049861.D
Acq On : 09 Apr 2025 10:27
Operator : RC/JU
Sample : PB167521BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BS

Quant Time: Apr 10 01:10:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

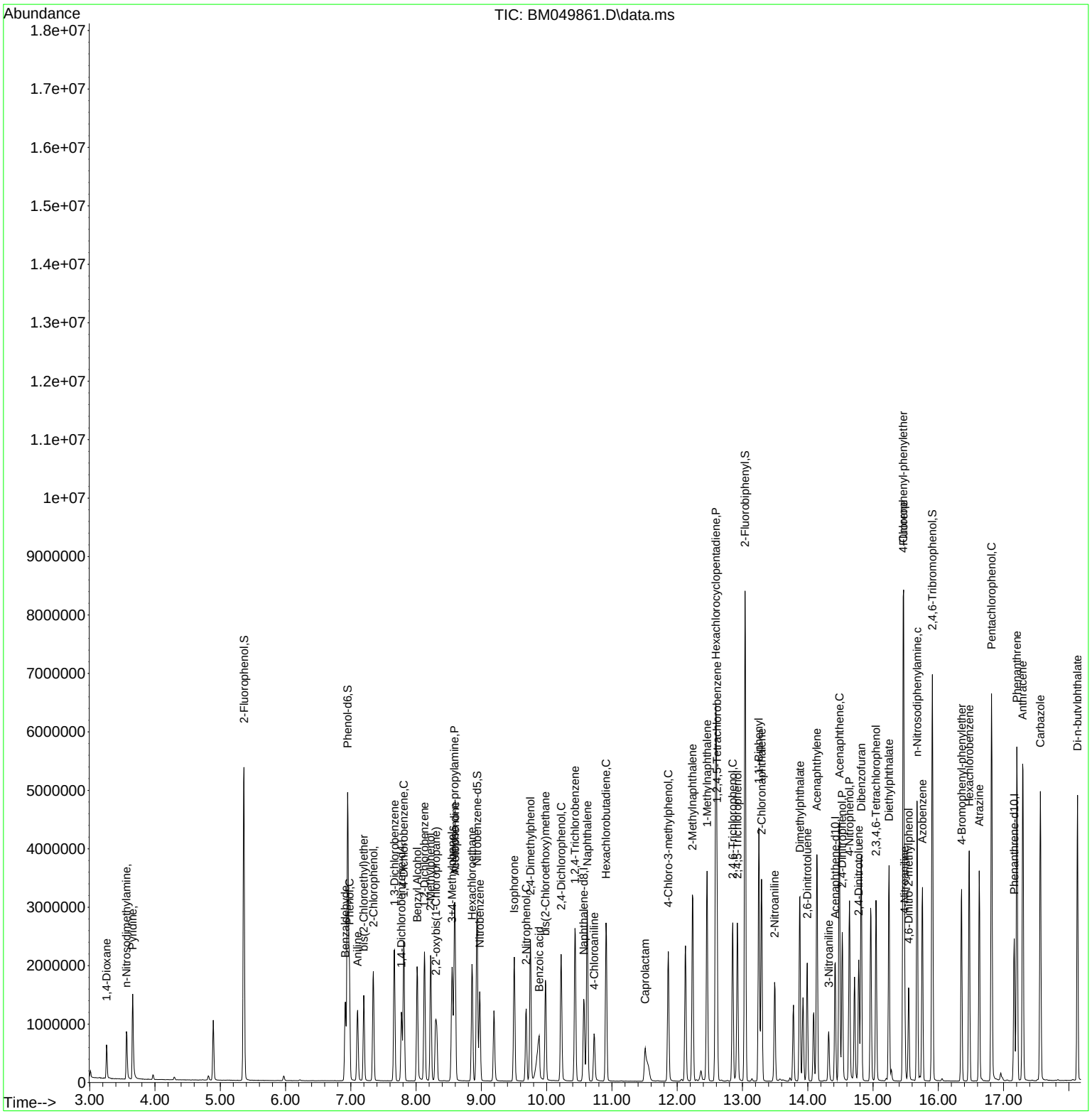
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.921	196	762647	43.169	ng	100
46) 1,1'-Biphenyl	13.251	154	2258251	41.600	ng	99
47) 2-Chloronaphthalene	13.292	162	1799659	42.179	ng	99
48) 2-Nitroaniline	13.492	65	431984	43.764	ng	96
49) Acenaphthylene	14.139	152	2838072	45.664	ng	100
50) Dimethylphthalate	13.880	163	2167102	42.064	ng	100
51) 2,6-Dinitrotoluene	13.992	165	468618	43.415	ng	96
52) Acenaphthene	14.486	154	1650214	41.742	ng	99
53) 3-Nitroaniline	14.321	138	231391	22.180	ng	98
54) 2,4-Dinitrophenol	14.527	184	627402	80.241	ng	97
55) Dibenzofuran	14.821	168	2688052	40.674	ng	99
56) 4-Nitrophenol	14.639	139	859247	92.427	ng	100
57) 2,4-Dinitrotoluene	14.780	165	659596	45.806	ng	98
58) Fluorene	15.468	166	2242323	42.685	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.045	232	651304	42.062	ng	99
60) Diethylphthalate	15.245	149	2033089	41.151	ng	99
61) 4-Chlorophenyl-phenyle...	15.462	204	1214951	43.138	ng	100
62) 4-Nitroaniline	15.486	138	448934	41.612	ng	97
63) Azobenzene	15.757	77	1748674	41.341	ng	98
65) 4,6-Dinitro-2-methylph...	15.545	198	390616	43.564	ng	99
66) n-Nitrosodiphenylamine	15.674	169	1888370	44.346	ng	100
67) 4-Bromophenyl-phenylether	16.356	248	716854	43.398	ng	97
68) Hexachlorobenzene	16.474	284	829113	43.760	ng	98
69) Atrazine	16.627	200	686882	62.213	ng	99
70) Pentachlorophenol	16.815	266	1213366	86.985	ng	99
71) Phenanthrene	17.203	178	3414386	43.769	ng	100
72) Anthracene	17.292	178	3489185	45.387	ng	99
73) Carbazole	17.562	167	3162399	43.674	ng	99
74) Di-n-butylphthalate	18.133	149	3486809	41.808	ng	99
75) Fluoranthene	19.221	202	4035546	42.074	ng	99
77) Benzidine	19.403	184	1680751	90.482	ng	100
78) Pyrene	19.580	202	4223716	43.770	ng	100
80) Butylbenzylphthalate	20.486	149	1532691	42.270	ng	97
81) Benzo(a)anthracene	21.380	228	4096069	44.017	ng	100
82) 3,3'-Dichlorobenzidine	21.303	252	825078	23.478	ng	100
83) Chrysene	21.444	228	3809504	43.060	ng	100
84) Bis(2-ethylhexyl)phtha...	21.309	149	2204910	41.737	ng	99
85) Di-n-octyl phthalate	22.438	149	3700122	40.036	ng	100
87) Indeno(1,2,3-cd)pyrene	27.779	276	4713585	44.488	ng	99
88) Benzo(b)fluoranthene	23.450	252	3803665	41.900	ng	100
89) Benzo(k)fluoranthene	23.515	252	3915062	44.504	ng	100
90) Benzo(a)pyrene	24.256	252	3700670	46.391	ng	99
91) Dibenzo(a,h)anthracene	27.832	278	3840955	44.011	ng	99
92) Benzo(g,h,i)perylene	28.832	276	3776735	42.349	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049861.D
Acq On : 09 Apr 2025 10:27
Operator : RC/JU
Sample : PB167521BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BS

Quant Time: Apr 10 01:10:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

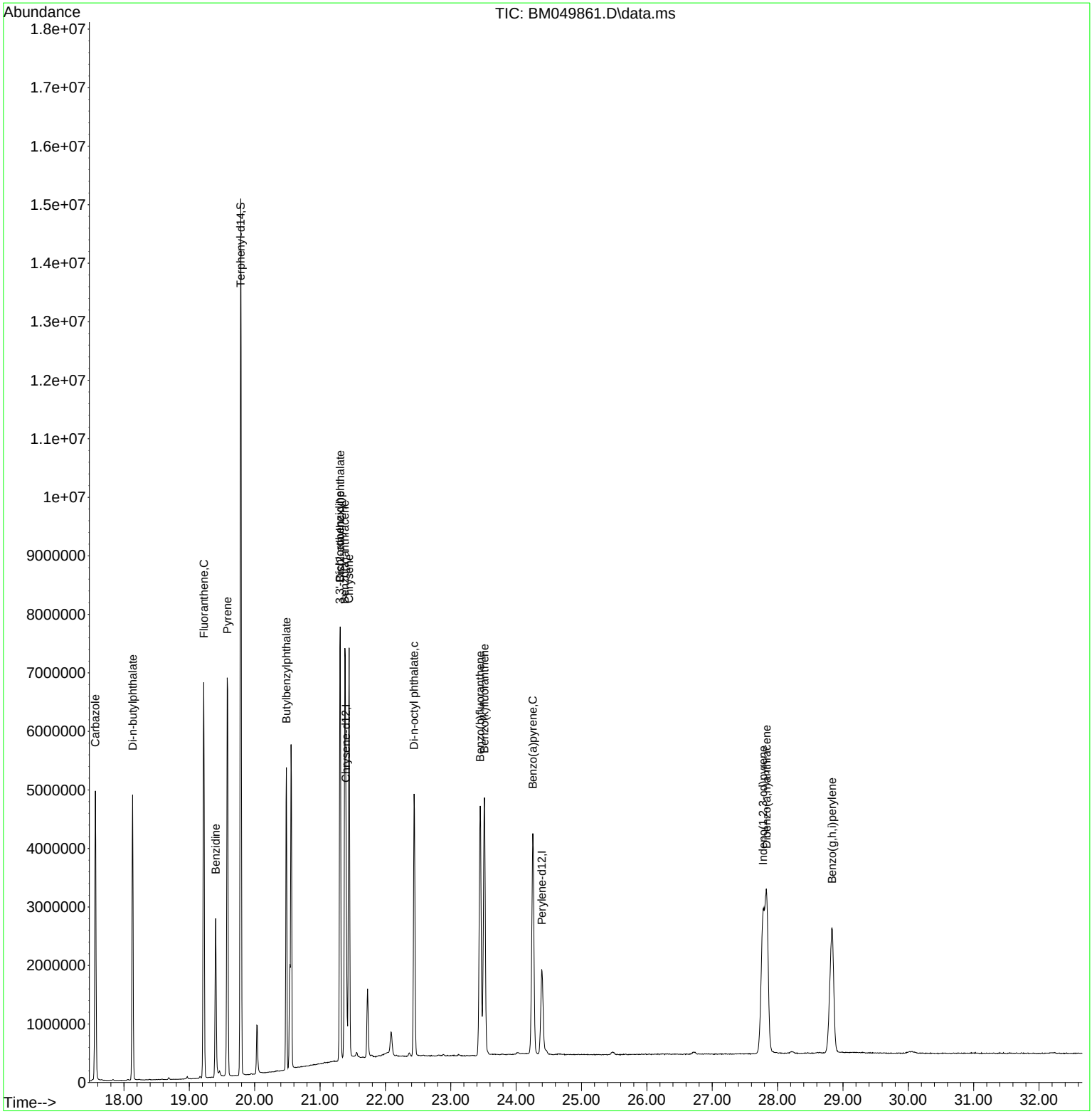


Sample Results: **BM049861.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049861.D
Acq On : 09 Apr 2025 10:27
Operator : RC/JU
Sample : PB167521BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BS

Quant Time: Apr 10 01:10:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Raw Data: **BM049862.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BSD	SDG No.:	Q1746
Lab Sample ID:	PB167521BSD	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049862.D	1	04/08/25 11:55	04/09/25 11:06	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	37.4		3.90	10.0	ug/L
108-95-2	Phenol	44.7		0.91	5.00	ug/L
111-44-4	bis(2-Chloroethyl)ether	43.9		0.81	5.00	ug/L
95-57-8	2-Chlorophenol	44.4		0.58	5.00	ug/L
95-48-7	2-Methylphenol	46.6		1.10	5.00	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	45.5		1.30	5.00	ug/L
98-86-2	Acetophenone	43.3		0.74	5.00	ug/L
65794-96-9	3+4-Methylphenols	45.7		1.10	10.0	ug/L
621-64-7	n-Nitroso-di-n-propylamine	44.1		1.40	2.50	ug/L
67-72-1	Hexachloroethane	43.4		0.65	5.00	ug/L
98-95-3	Nitrobenzene	43.6		0.76	5.00	ug/L
78-59-1	Isophorone	46.7		0.75	5.00	ug/L
88-75-5	2-Nitrophenol	43.4		1.80	5.00	ug/L
105-67-9	2,4-Dimethylphenol	63.9		1.90	5.00	ug/L
111-91-1	bis(2-Chloroethoxy)methane	44.3		0.68	5.00	ug/L
120-83-2	2,4-Dichlorophenol	44.3		0.52	5.00	ug/L
91-20-3	Naphthalene	42.1		0.50	5.00	ug/L
106-47-8	4-Chloroaniline	25.5		0.84	5.00	ug/L
87-68-3	Hexachlorobutadiene	44.3		0.54	5.00	ug/L
105-60-2	Caprolactam	42.2		1.10	10.0	ug/L
59-50-7	4-Chloro-3-methylphenol	43.7		0.59	5.00	ug/L
91-57-6	2-Methylnaphthalene	39.1		0.56	5.00	ug/L
77-47-4	Hexachlorocyclopentadiene	190	E	3.60	10.0	ug/L
88-06-2	2,4,6-Trichlorophenol	44.4		0.51	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	45.0		0.62	5.00	ug/L
92-52-4	1,1-Biphenyl	43.1		0.53	5.00	ug/L
91-58-7	2-Chloronaphthalene	43.6		0.61	5.00	ug/L
88-74-4	2-Nitroaniline	45.9		1.30	5.00	ug/L
131-11-3	Dimethylphthalate	43.8		0.61	5.00	ug/L

Raw Data: **BM049862.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BSD	SDG No.:	Q1746
Lab Sample ID:	PB167521BSD	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049862.D	1	04/08/25 11:55	04/09/25 11:06	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	47.0		0.75	5.00	ug/L
606-20-2	2,6-Dinitrotoluene	45.4		0.92	5.00	ug/L
99-09-2	3-Nitroaniline	26.5		1.10	5.00	ug/L
83-32-9	Acenaphthene	42.9		0.55	5.00	ug/L
51-28-5	2,4-Dinitrophenol	84.7	E	6.00	10.0	ug/L
100-02-7	4-Nitrophenol	99.6	E	2.40	10.0	ug/L
132-64-9	Dibenzofuran	41.8		0.61	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	48.1		1.20	5.00	ug/L
84-66-2	Diethylphthalate	42.9		0.69	5.00	ug/L
7005-72-3	4-Chlorophenyl-phenylether	44.7		0.68	5.00	ug/L
86-73-7	Fluorene	44.5		0.63	5.00	ug/L
100-01-6	4-Nitroaniline	44.6		1.50	5.00	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	45.4		2.90	10.0	ug/L
86-30-6	n-Nitrosodiphenylamine	45.8		0.58	5.00	ug/L
101-55-3	4-Bromophenyl-phenylether	44.9		0.40	5.00	ug/L
118-74-1	Hexachlorobenzene	45.6		0.52	5.00	ug/L
1912-24-9	Atrazine	66.0		1.00	5.00	ug/L
87-86-5	Pentachlorophenol	92.0	E	1.60	10.0	ug/L
85-01-8	Phenanthrene	45.9		0.50	5.00	ug/L
120-12-7	Anthracene	47.6		0.61	5.00	ug/L
86-74-8	Carbazole	46.1		0.72	5.00	ug/L
84-74-2	Di-n-butylphthalate	44.1		1.20	5.00	ug/L
206-44-0	Fluoranthene	45.0		0.82	5.00	ug/L
129-00-0	Pyrene	45.9		0.50	5.00	ug/L
85-68-7	Butylbenzylphthalate	44.3		1.90	5.00	ug/L
91-94-1	3,3-Dichlorobenzidine	25.9		0.93	10.0	ug/L
56-55-3	Benzo(a)anthracene	46.5		0.45	5.00	ug/L
218-01-9	Chrysene	45.1		0.44	5.00	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	44.1		1.60	5.00	ug/L
117-84-0	Di-n-octyl phthalate	42.3		2.30	10.0	ug/L
205-99-2	Benzo(b)fluoranthene	45.0		0.49	5.00	ug/L

Raw Data: **BM049862.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167521BSD	SDG No.:	Q1746
Lab Sample ID:	PB167521BSD	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM049862.D	1	04/08/25 11:55	04/09/25 11:06	PB167521

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	47.2		0.48	5.00	ug/L
50-32-8	Benzo(a)pyrene	49.1		0.55	5.00	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	46.9		0.59	5.00	ug/L
53-70-3	Dibenzo(a,h)anthracene	46.2		0.67	5.00	ug/L
191-24-2	Benzo(g,h,i)perylene	44.3		0.69	5.00	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	44.4		0.52	5.00	ug/L
123-91-1	1,4-Dioxane	35.7		1.00	5.00	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	43.7		0.72	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	125		15 (10) - 110 (139)	83%	SPK: 150
13127-88-3	Phenol-d6	122		15 (10) - 110 (134)	82%	SPK: 150
4165-60-0	Nitrobenzene-d5	84.5		30 (49) - 130 (133)	84%	SPK: 100
321-60-8	2-Fluorobiphenyl	84.4		30 (52) - 130 (132)	84%	SPK: 100
118-79-6	2,4,6-Tribromophenol	136		15 (44) - 110 (137)	91%	SPK: 150
1718-51-0	Terphenyl-d14	98.6		30 (48) - 130 (125)	99%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	335000	7.775			
1146-65-2	Naphthalene-d8	1150000	10.569			
15067-26-2	Acenaphthene-d10	736000	14.415			
1517-22-2	Phenanthrene-d10	1450000	17.162			
1719-03-5	Chrysene-d12	1440000	21.397			
1520-96-3	Perylene-d12	1420000	24.391			

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_M\Data\BM040925\
Data File : BM049862.D
Acq On : 09 Apr 2025 11:06
Operator : RC/JU
Sample : PB167521BSD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BSD

Quant Time: Apr 10 01:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.775	152	335066	20.000	ng		0.00
21) Naphthalene-d8	10.569	136	1150025	20.000	ng		0.00
39) Acenaphthene-d10	14.415	164	735598	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1446565	20.000	ng		0.00
76) Chrysene-d12	21.397	240	1438522	20.000	ng		0.00
86) Perylene-d12	24.391	264	1424302	20.000	ng		-0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	2462350	124.789	ng		0.00
7) Phenol-d6	6.951	99	3004228	122.370	ng		0.00
23) Nitrobenzene-d5	8.933	82	1745095	84.499	ng		0.00
42) 2,4,6-Tribromophenol	15.909	330	1453370	135.835	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	4580069	84.430	ng		0.00
79) Terphenyl-d14	19.786	244	7567987	98.593	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.257	88	289952	35.680	ng		99
3) Pyridine	3.657	79	810865	37.978	ng		98
4) n-Nitrosodimethylamine	3.563	42	341143	41.985	ng		96
6) Aniline	7.104	93	910625	43.288	ng		99
8) 2-Chlorophenol	7.345	128	896976	44.357	ng		99
9) Benzaldehyde	6.916	77	471360	37.414	ng		97
10) Phenol	6.981	94	1070288	44.674	ng		98
11) bis(2-Chloroethyl)ether	7.198	93	824742	43.899	ng		98
12) 1,3-Dichlorobenzene	7.669	146	1045388	43.726	ng		99
13) 1,4-Dichlorobenzene	7.810	146	1050000	43.648	ng		99
14) 1,2-Dichlorobenzene	8.128	146	1011408	44.638	ng		100
15) Benzyl Alcohol	8.016	79	696410	45.047	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.304	45	951860	45.456	ng		99
17) 2-Methylphenol	8.222	107	687637	46.576	ng		98
18) Hexachloroethane	8.857	117	363531	43.436	ng		97
19) n-Nitroso-di-n-propyla...	8.586	70	599988	44.125	ng		100
20) 3+4-Methylphenols	8.551	107	919992	45.707	ng		98
22) Acetophenone	8.598	105	1211222	43.337	ng	#	98
24) Nitrobenzene	8.975	77	866706	43.583	ng		99
25) Isophorone	9.504	82	1614808	46.675	ng		98
26) 2-Nitrophenol	9.686	139	457262	43.383	ng		99
27) 2,4-Dimethylphenol	9.751	122	763120	63.887	ng		98
28) bis(2-Chloroethoxy)met...	9.980	93	1026510	44.319	ng		99
29) 2,4-Dichlorophenol	10.222	162	879670	44.304	ng		99
30) 1,2,4-Trichlorobenzene	10.433	180	1007214	43.849	ng		100
31) Naphthalene	10.622	128	2487681	42.098	ng		99
32) Benzoic acid	9.886	122	500509	36.330	ng		99
33) 4-Chloroaniline	10.727	127	532920	25.540	ng		97
34) Hexachlorobutadiene	10.910	225	629806	44.327	ng		98
35) Caprolactam	11.510	113	240290	42.195	ng		93
36) 4-Chloro-3-methylphenol	11.863	107	759543	43.671	ng		99
37) 2-Methylnaphthalene	12.233	142	1628063	39.104	ng		99
38) 1-Methylnaphthalene	12.457	142	1708396	42.118	ng		99
40) 1,2,4,5-Tetrachloroben...	12.610	216	1141788	44.368	ng		99
41) Hexachlorocyclopentadiene	12.592	237	1686714	187.047	ng		99
43) 2,4,6-Trichlorophenol	12.851	196	727525	44.427	ng		99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049862.D
Acq On : 09 Apr 2025 11:06
Operator : RC/JU
Sample : PB167521BSD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BSD

Quant Time: Apr 10 01:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

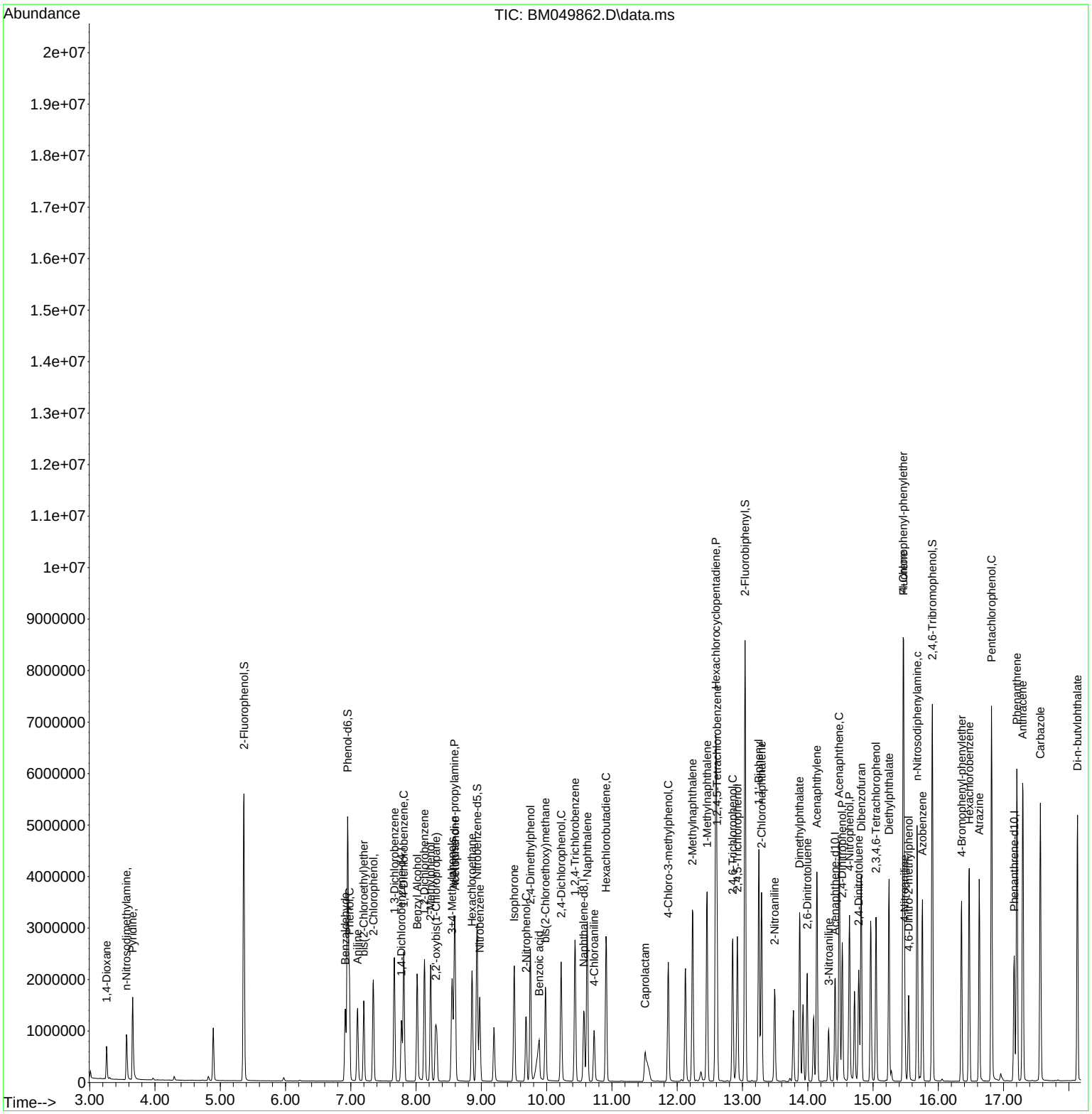
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.921	196	801550	45.042	ng	98
46) 1,1'-Biphenyl	13.251	154	2358457	43.130	ng	100
47) 2-Chloronaphthalene	13.292	162	1874993	43.626	ng	99
48) 2-Nitroaniline	13.492	65	456388	45.900	ng	98
49) Acenaphthylene	14.139	152	2942784	47.005	ng	100
50) Dimethylphthalate	13.874	163	2272895	43.798	ng	99
51) 2,6-Dinitrotoluene	13.992	165	493805	45.417	ng	99
52) Acenaphthene	14.480	154	1709875	42.938	ng	99
53) 3-Nitroaniline	14.321	138	278294	26.483	ng	98
54) 2,4-Dinitrophenol	14.527	184	670209	84.656	ng	97
55) Dibenzofuran	14.821	168	2780257	41.763	ng	98
56) 4-Nitrophenol	14.639	139	932568	99.585	ng	100
57) 2,4-Dinitrotoluene	14.780	165	697060	48.056	ng	98
58) Fluorene	15.468	166	2353879	44.483	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.045	232	682132	43.733	ng	99
60) Diethylphthalate	15.245	149	2135751	42.915	ng	99
61) 4-Chlorophenyl-phenyle...	15.462	204	1268642	44.717	ng	99
62) 4-Nitroaniline	15.486	138	485055	44.634	ng	99
63) Azobenzene	15.757	77	1821372	42.747	ng	98
65) 4,6-Dinitro-2-methylph...	15.545	198	414097	45.427	ng	98
66) n-Nitrosodiphenylamine	15.674	169	1981248	45.767	ng	100
67) 4-Bromophenyl-phenylether	16.356	248	754789	44.947	ng	96
68) Hexachlorobenzene	16.474	284	878488	45.607	ng	99
69) Atrazine	16.627	200	740849	66.004	ng	99
70) Pentachlorophenol	16.815	266	1304253	91.972	ng	100
71) Phenanthrene	17.203	178	3640568	45.905	ng	100
72) Anthracene	17.292	178	3723016	47.636	ng	100
73) Carbazole	17.562	167	3395893	46.132	ng	100
74) Di-n-butylphthalate	18.133	149	3742613	44.141	ng	100
75) Fluoranthene	19.221	202	4385651	44.976	ng	99
77) Benzidine	19.403	184	2008454	105.243	ng	100
78) Pyrene	19.580	202	4546344	45.858	ng	99
80) Butylbenzylphthalate	20.480	149	1651961	44.345	ng	99
81) Benzo(a)anthracene	21.380	228	4441714	46.460	ng	99
82) 3,3'-Dichlorobenzidine	21.303	252	934995	25.897	ng	100
83) Chrysene	21.444	228	4103005	45.142	ng	99
84) Bis(2-ethylhexyl)phtha...	21.309	149	2393538	44.100	ng	99
85) Di-n-octyl phthalate	22.438	149	4015047	42.286	ng	100
87) Indeno(1,2,3-cd)pyrene	27.773	276	4976589	46.874	ng	99
88) Benzo(b)fluoranthene	23.450	252	4090414	44.967	ng	99
89) Benzo(k)fluoranthene	23.515	252	4161896	47.213	ng	99
90) Benzo(a)pyrene	24.256	252	3924916	49.102	ng	99
91) Dibenzo(a,h)anthracene	27.832	278	4042770	46.229	ng	99
92) Benzo(g,h,i)perylene	28.832	276	3959871	44.312	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049862.D
Acq On : 09 Apr 2025 11:06
Operator : RC/JU
Sample : PB167521BSD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BSD

Quant Time: Apr 10 01:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

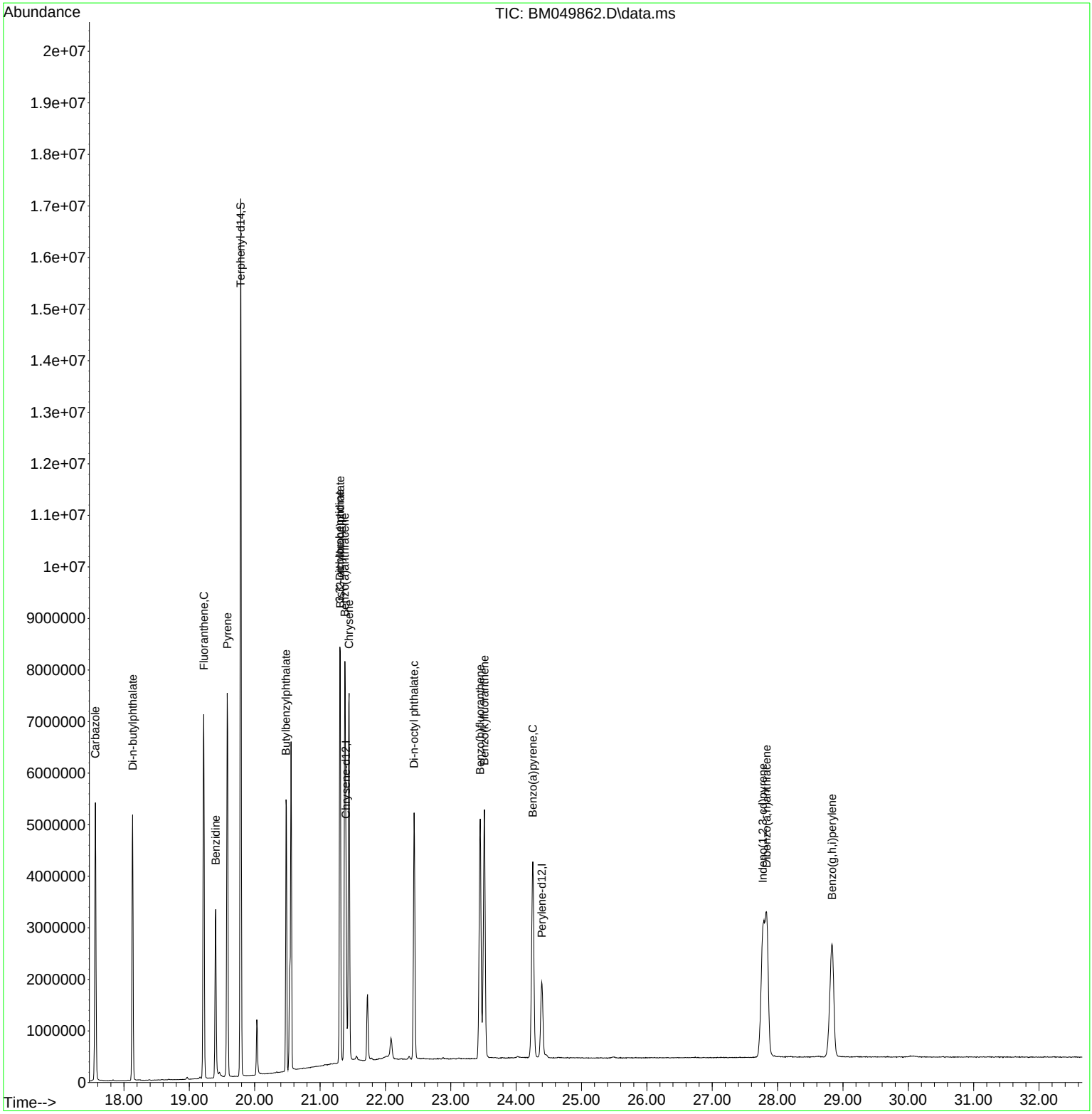


Sample Results: **BM049862.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049862.D
Acq On : 09 Apr 2025 11:06
Operator : RC/JU
Sample : PB167521BSD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
PB167521BSD

Quant Time: Apr 10 01:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Raw Data: **BM049865.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-SB01MS	SDG No.:	Q1746
Lab Sample ID:	Q1744-01MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	90
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
BM049865.D	1	04/08/25 08:59	04/09/25 13:08	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1600		170	370	ug/Kg
108-95-2	Phenol	1900		24.5	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1700		27.0	190	ug/Kg
95-57-8	2-Chlorophenol	1800		27.1	190	ug/Kg
95-48-7	2-Methylphenol	1900		33.2	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1800		41.6	190	ug/Kg
98-86-2	Acetophenone	1700		32.7	190	ug/Kg
65794-96-9	3+4-Methylphenols	1900		45.6	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1800		52.6	88.8	ug/Kg
67-72-1	Hexachloroethane	1700		19.5	190	ug/Kg
98-95-3	Nitrobenzene	1700		20.3	190	ug/Kg
78-59-1	Isophorone	1900		36.4	190	ug/Kg
88-75-5	2-Nitrophenol	1700		64.6	190	ug/Kg
105-67-9	2,4-Dimethylphenol	2600		71.9	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1700		34.2	190	ug/Kg
120-83-2	2,4-Dichlorophenol	1800		31.4	190	ug/Kg
91-20-3	Naphthalene	1700		25.2	190	ug/Kg
106-47-8	4-Chloroaniline	410		39.3	190	ug/Kg
87-68-3	Hexachlorobutadiene	1700		28.1	190	ug/Kg
105-60-2	Caprolactam	1700		57.8	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1800		31.8	190	ug/Kg
91-57-6	2-Methylnaphthalene	1600		28.4	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	6500	E	130	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1800		22.0	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1800		32.3	190	ug/Kg
92-52-4	1,1-Biphenyl	1700		24.2	190	ug/Kg
91-58-7	2-Chloronaphthalene	1700		25.0	190	ug/Kg
88-74-4	2-Nitroaniline	1800		53.4	190	ug/Kg
131-11-3	Dimethylphthalate	1700		30.1	190	ug/Kg

Raw Data: **BM049865.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-SB01MS	SDG No.:	Q1746
Lab Sample ID:	Q1744-01MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	90
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
BM049865.D	1	04/08/25 08:59	04/09/25 13:08	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1900		32.1	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	1800		37.3	190	ug/Kg
99-09-2	3-Nitroaniline	500		51.0	190	ug/Kg
83-32-9	Acenaphthene	1700		23.6	190	ug/Kg
51-28-5	2,4-Dinitrophenol	3100	E	250	370	ug/Kg
100-02-7	4-Nitrophenol	3900	E	120	370	ug/Kg
132-64-9	Dibenzofuran	1700		25.2	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	1900		55.6	190	ug/Kg
84-66-2	Diethylphthalate	1700		31.4	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1800		29.6	190	ug/Kg
86-73-7	Fluorene	1800		28.1	190	ug/Kg
100-01-6	4-Nitroaniline	1600		71.2	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1700		110	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1800		36.5	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1700		30.8	190	ug/Kg
118-74-1	Hexachlorobenzene	1800		28.1	190	ug/Kg
1912-24-9	Atrazine	2500		37.7	190	ug/Kg
87-86-5	Pentachlorophenol	3600	E	56.9	370	ug/Kg
85-01-8	Phenanthrene	1800		23.2	190	ug/Kg
120-12-7	Anthracene	1800		37.0	190	ug/Kg
86-74-8	Carbazole	1800		34.6	190	ug/Kg
84-74-2	Di-n-butylphthalate	1700		53.2	190	ug/Kg
206-44-0	Fluoranthene	1800		33.3	190	ug/Kg
129-00-0	Pyrene	1700		39.9	190	ug/Kg
85-68-7	Butylbenzylphthalate	1600		79.2	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	550		40.7	370	ug/Kg
56-55-3	Benzo(a)anthracene	1800		25.5	190	ug/Kg
218-01-9	Chrysene	1900		22.1	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1700		65.7	190	ug/Kg
117-84-0	Di-n-octyl phthalate	1600		96.3	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	1900		21.1	190	ug/Kg

Raw Data: **BM049865.D**

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-SB01MS	SDG No.:	Q1746
Lab Sample ID:	Q1744-01MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	90
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
BM049865.D	1	04/08/25 08:59	04/09/25 13:08	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1900		24.9	190	ug/Kg
50-32-8	Benzo(a)pyrene	1900		32.7	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1800		32.3	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1800		30.4	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1700		28.5	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1700		28.4	190	ug/Kg
123-91-1	1,4-Dioxane	1600		50.2	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1700		30.4	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	123		30 (18) - 130 (112)	82%	SPK: 150
13127-88-3	Phenol-d6	125		30 (15) - 130 (107)	83%	SPK: 150
4165-60-0	Nitrobenzene-d5	82.9		30 (18) - 130 (107)	83%	SPK: 100
321-60-8	2-Fluorobiphenyl	81.7		30 (20) - 130 (109)	82%	SPK: 100
118-79-6	2,4,6-Tribromophenol	135		30 (10) - 130 (116)	90%	SPK: 150
1718-51-0	Terphenyl-d14	89.4		30 (10) - 130 (105)	89%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	298000	7.775			
1146-65-2	Naphthalene-d8	1050000	10.569			
15067-26-2	Acenaphthene-d10	691000	14.421			
1517-22-2	Phenanthrene-d10	1390000	17.162			
1719-03-5	Chrysene-d12	1460000	21.398			
1520-96-3	Perylene-d12	1510000	24.391			

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_M\Data\BM040925\
Data File : BM049865.D
Acq On : 09 Apr 2025 13:08
Operator : RC/JU
Sample : Q1744-01MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MS

Quant Time: Apr 10 01:41:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.775	152	298114	20.000	ng		0.00
21) Naphthalene-d8	10.569	136	1050152	20.000	ng		0.00
39) Acenaphthene-d10	14.421	164	691142	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1385053	20.000	ng		0.00
76) Chrysene-d12	21.398	240	1462184	20.000	ng		0.00
86) Perylene-d12	24.391	264	1514539	20.000	ng		-0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	2155451	122.776	ng		0.00
7) Phenol-d6	6.951	99	2724158	124.716	ng		0.00
23) Nitrobenzene-d5	8.934	82	1562799	82.869	ng		0.00
42) 2,4,6-Tribromophenol	15.910	330	1354417	134.729	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	4162286	81.663	ng		0.00
79) Terphenyl-d14	19.786	244	6978001	89.436	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.257	88	309728	42.838	ng		99
3) Pyridine	3.657	79	835012	43.957	ng		99
4) n-Nitrosodimethylamine	3.563	42	327410	45.290	ng		97
6) Aniline	7.104	93	421157	22.502	ng		99
8) 2-Chlorophenol	7.345	128	863377	47.988	ng		99
9) Benzaldehyde	6.916	77	478135	42.656	ng		98
10) Phenol	6.975	94	1072705	50.325	ng		99
11) bis(2-Chloroethyl)ether	7.198	93	779707	46.646	ng		98
12) 1,3-Dichlorobenzene	7.663	146	989476	46.518	ng		98
13) 1,4-Dichlorobenzene	7.810	146	994756	46.478	ng		100
14) 1,2-Dichlorobenzene	8.128	146	951142	47.181	ng		99
15) Benzyl Alcohol	8.016	79	687559	49.988	ng		98
16) 2,2'-oxybis(1-Chloropr...	8.304	45	912146	48.959	ng		99
17) 2-Methylphenol	8.222	107	671680	51.134	ng		98
18) Hexachloroethane	8.857	117	347778	46.705	ng		99
19) n-Nitroso-di-n-propyla...	8.581	70	585438	48.392	ng		99
20) 3+4-Methylphenols	8.551	107	921924	51.480	ng		99
22) Acetophenone	8.598	105	1181375	46.289	ng	#	99
24) Nitrobenzene	8.975	77	842536	46.397	ng		98
25) Isophorone	9.504	82	1587310	50.244	ng		99
26) 2-Nitrophenol	9.686	139	447885	46.535	ng		99
27) 2,4-Dimethylphenol	9.751	122	756789	69.382	ng		99
28) bis(2-Chloroethoxy)met...	9.981	93	998019	47.187	ng		99
29) 2,4-Dichlorophenol	10.222	162	867930	47.870	ng		98
30) 1,2,4-Trichlorobenzene	10.434	180	953445	45.456	ng		99
31) Naphthalene	10.622	128	2418053	44.811	ng		99
32) Benzoic acid	9.886	122	566179	42.966	ng		98
33) 4-Chloroaniline	10.728	127	212114	11.132	ng		99
34) Hexachlorobutadiene	10.910	225	592511	45.668	ng		99
35) Caprolactam	11.510	113	244776	47.070	ng		95
36) 4-Chloro-3-methylphenol	11.863	107	780324	49.133	ng		99
37) 2-Methylnaphthalene	12.233	142	1605733	42.235	ng		100
38) 1-Methylnaphthalene	12.457	142	1688879	45.597	ng		100
40) 1,2,4,5-Tetrachloroben...	12.610	216	1105688	45.728	ng		99
41) Hexachlorocyclopentadiene	12.592	237	1498293	176.840	ng		100
43) 2,4,6-Trichlorophenol	12.851	196	737476	47.931	ng		99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049865.D
Acq On : 09 Apr 2025 13:08
Operator : RC/JU
Sample : Q1744-01MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MS

Quant Time: Apr 10 01:41:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

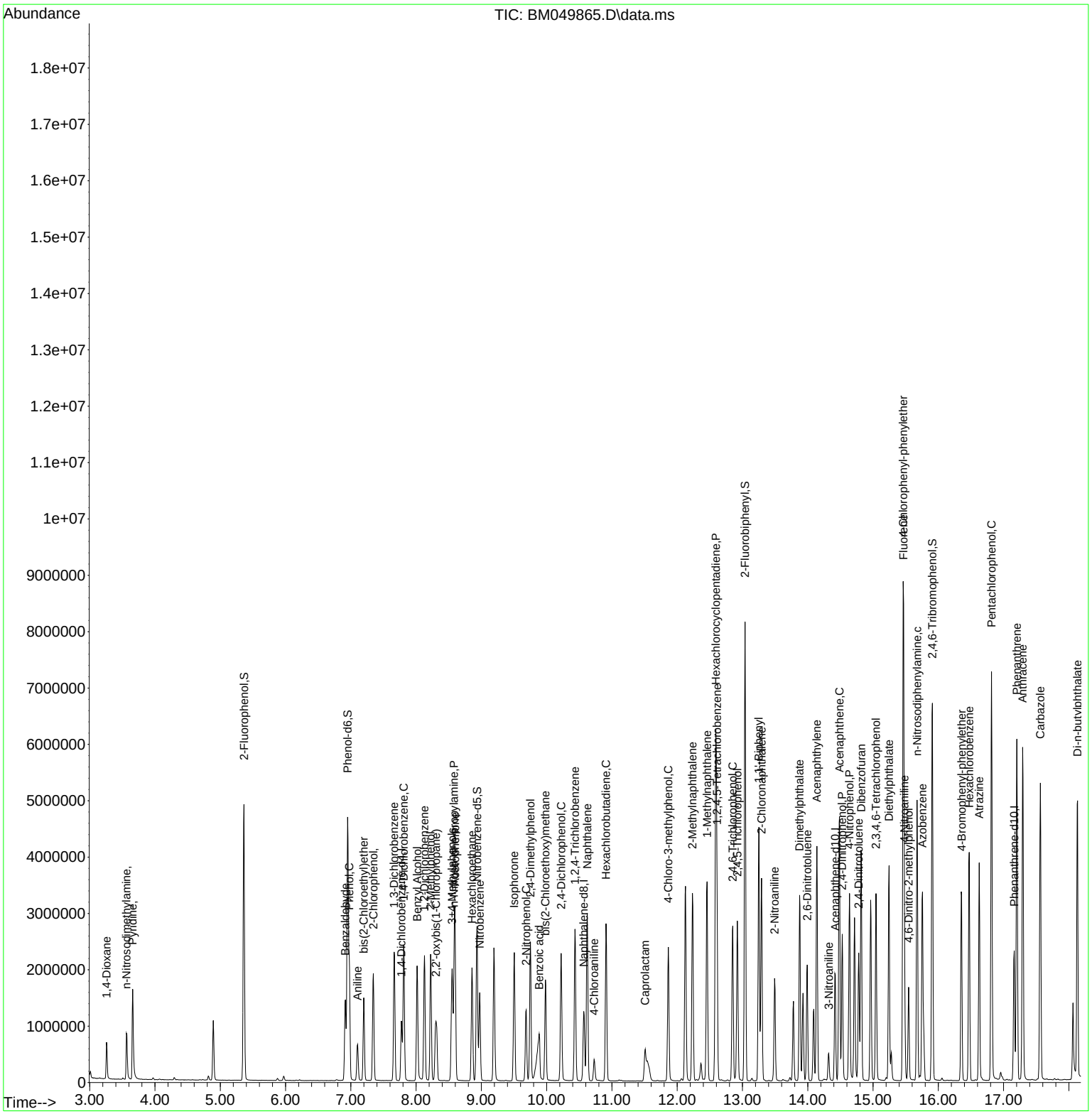
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.922	196	799432	47.812	ng	99
46) 1,1'-Biphenyl	13.251	154	2353870	45.815	ng	100
47) 2-Chloronaphthalene	13.292	162	1863914	46.157	ng	99
48) 2-Nitroaniline	13.492	65	458167	49.043	ng	98
49) Acenaphthylene	14.139	152	2960303	50.326	ng	99
50) Dimethylphthalate	13.874	163	2262384	46.399	ng	99
51) 2,6-Dinitrotoluene	13.992	165	490899	48.053	ng	98
52) Acenaphthene	14.486	154	1735053	46.372	ng	99
53) 3-Nitroaniline	14.321	138	132704	13.440	ng	100
54) 2,4-Dinitrophenol	14.527	184	621378	83.632	ng	98
55) Dibenzofuran	14.821	168	2807021	44.878	ng	98
56) 4-Nitrophenol	14.639	139	930802	105.790	ng	100
57) 2,4-Dinitrotoluene	14.780	165	697374	51.170	ng	97
58) Fluorene	15.468	166	2361809	47.504	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.045	232	689387	47.041	ng	99
60) Diethylphthalate	15.245	149	2130155	45.556	ng	99
61) 4-Chlorophenyl-phenyle...	15.463	204	1275390	47.847	ng	99
62) 4-Nitroaniline	15.480	138	451987	44.266	ng	99
63) Azobenzene	15.757	77	2042909	51.031	ng	98
65) 4,6-Dinitro-2-methylph...	15.545	198	401583	46.011	ng	99
66) n-Nitrosodiphenylamine	15.674	169	1992233	48.064	ng	100
67) 4-Bromophenyl-phenylether	16.357	248	755272	46.973	ng	96
68) Hexachlorobenzene	16.474	284	874487	47.416	ng	98
69) Atrazine	16.627	200	726702	67.619	ng	97
70) Pentachlorophenol	16.815	266	1316399	96.951	ng	99
71) Phenanthrene	17.204	178	3664770	48.263	ng	100
72) Anthracene	17.292	178	3737841	49.950	ng	100
73) Carbazole	17.562	167	3424599	48.588	ng	100
74) Di-n-butylphthalate	18.133	149	3797075	46.773	ng	99
75) Fluoranthene	19.221	202	4521849	48.432	ng	98
77) Benzidine	19.404	184	1817127	93.676	ng	100
78) Pyrene	19.580	202	4732548	46.963	ng	99
80) Butylbenzylphthalate	20.480	149	1682886	44.444	ng	99
81) Benzo(a)anthracene	21.380	228	4823789	49.640	ng	99
82) 3,3'-Dichlorobenzidine	21.303	252	545235	14.857	ng	100
83) Chrysene	21.445	228	4624441	50.056	ng	99
84) Bis(2-ethylhexyl)phtha...	21.309	149	2462859	44.643	ng	99
85) Di-n-octyl phthalate	22.439	149	4144598	42.944	ng	100
87) Indeno(1,2,3-cd)pyrene	27.779	276	5555016	49.205	ng	99
88) Benzo(b)fluoranthene	23.450	252	4850380	50.145	ng	99
89) Benzo(k)fluoranthene	23.515	252	4897679	52.250	ng	100
90) Benzo(a)pyrene	24.256	252	4441609	52.256	ng	99
91) Dibenzo(a,h)anthracene	27.832	278	4529739	48.712	ng	100
92) Benzo(g,h,i)perylene	28.832	276	4410499	46.414	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049865.D
Acq On : 09 Apr 2025 13:08
Operator : RC/JU
Sample : Q1744-01MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MS

Quant Time: Apr 10 01:41:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

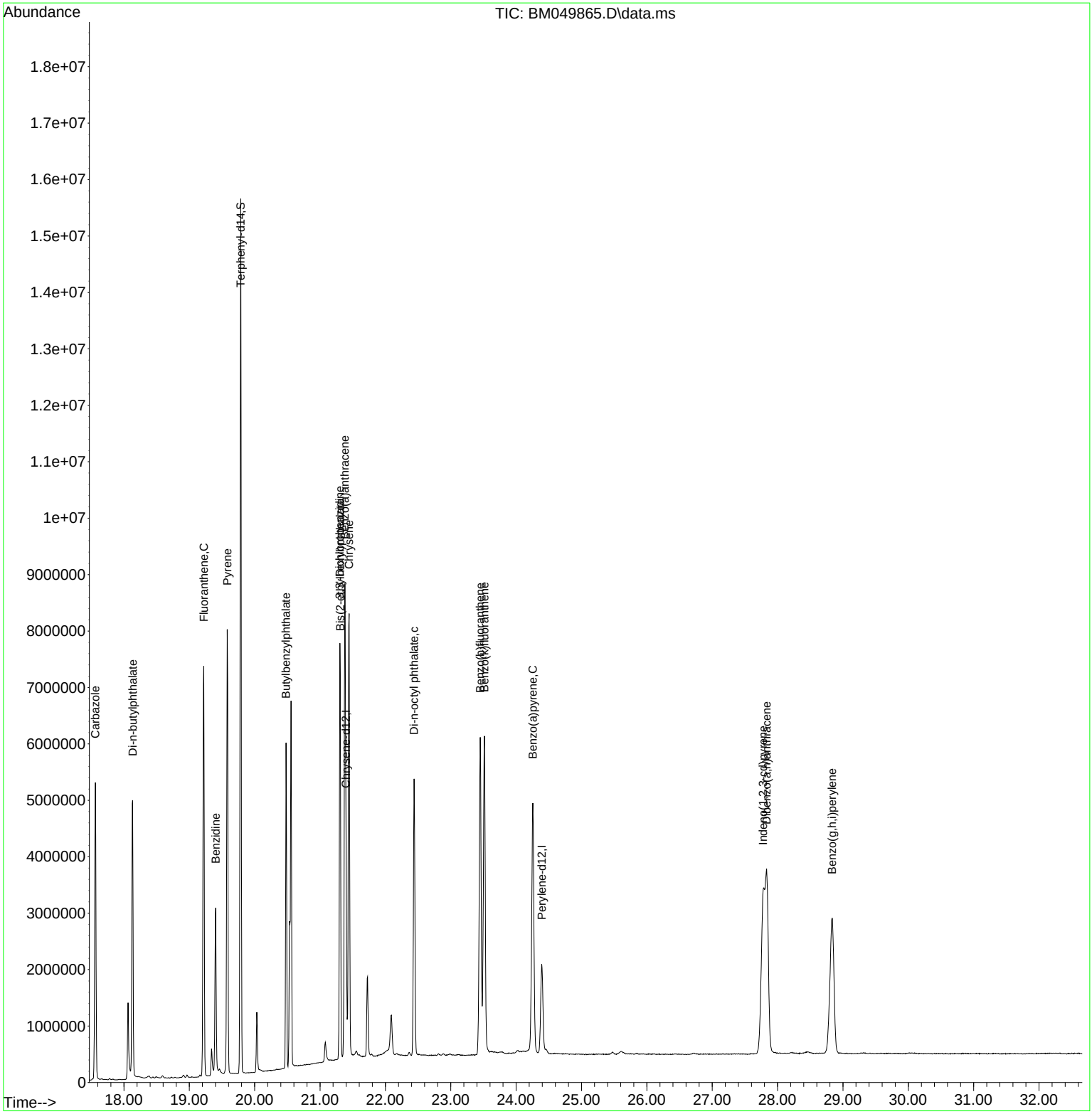


Sample Results: **BM049865.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049865.D
Acq On : 09 Apr 2025 13:08
Operator : RC/JU
Sample : Q1744-01MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MS

Quant Time: Apr 10 01:41:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-SB01MSD	SDG No.:	Q1746
Lab Sample ID:	Q1744-01MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	90
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
BM049866.D	1	04/08/25 08:59	04/09/25 13:47	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1600		170	370	ug/Kg
108-95-2	Phenol	1900		24.5	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1800		27.0	190	ug/Kg
95-57-8	2-Chlorophenol	1900		27.1	190	ug/Kg
95-48-7	2-Methylphenol	2000		33.2	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1900		41.6	190	ug/Kg
98-86-2	Acetophenone	1800		32.7	190	ug/Kg
65794-96-9	3+4-Methylphenols	2000		45.6	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1900		52.6	88.7	ug/Kg
67-72-1	Hexachloroethane	1800		19.5	190	ug/Kg
98-95-3	Nitrobenzene	1800		20.3	190	ug/Kg
78-59-1	Isophorone	1900		36.4	190	ug/Kg
88-75-5	2-Nitrophenol	1800		64.6	190	ug/Kg
105-67-9	2,4-Dimethylphenol	2700		71.9	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1800		34.2	190	ug/Kg
120-83-2	2,4-Dichlorophenol	1900		31.4	190	ug/Kg
91-20-3	Naphthalene	1700		25.2	190	ug/Kg
106-47-8	4-Chloroaniline	450		39.3	190	ug/Kg
87-68-3	Hexachlorobutadiene	1800		28.1	190	ug/Kg
105-60-2	Caprolactam	1800		57.8	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1900		31.8	190	ug/Kg
91-57-6	2-Methylnaphthalene	1600		28.4	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	6800	E	130	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1800		22.0	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1900		32.3	190	ug/Kg
92-52-4	1,1-Biphenyl	1800		24.2	190	ug/Kg
91-58-7	2-Chloronaphthalene	1800		25.0	190	ug/Kg
88-74-4	2-Nitroaniline	1900		53.4	190	ug/Kg
131-11-3	Dimethylphthalate	1800		30.1	190	ug/Kg

Raw Data: **BM049866.D**

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-SB01MSD	SDG No.:	Q1746
Lab Sample ID:	Q1744-01MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	90
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
BM049866.D	1	04/08/25 08:59	04/09/25 13:47	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1900		32.1	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	1900		37.3	190	ug/Kg
99-09-2	3-Nitroaniline	510		51.0	190	ug/Kg
83-32-9	Acenaphthene	1800		23.6	190	ug/Kg
51-28-5	2,4-Dinitrophenol	3200	E	250	370	ug/Kg
100-02-7	4-Nitrophenol	4100	E	120	370	ug/Kg
132-64-9	Dibenzofuran	1700		25.2	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	2000		55.6	190	ug/Kg
84-66-2	Diethylphthalate	1800		31.4	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1900		29.6	190	ug/Kg
86-73-7	Fluorene	1800		28.1	190	ug/Kg
100-01-6	4-Nitroaniline	1700		71.2	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1800		110	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1800		36.5	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1800		30.8	190	ug/Kg
118-74-1	Hexachlorobenzene	1800		28.1	190	ug/Kg
1912-24-9	Atrazine	2600		37.7	190	ug/Kg
87-86-5	Pentachlorophenol	3700	E	56.9	370	ug/Kg
85-01-8	Phenanthrene	1800		23.2	190	ug/Kg
120-12-7	Anthracene	1900		36.9	190	ug/Kg
86-74-8	Carbazole	1900		34.6	190	ug/Kg
84-74-2	Di-n-butylphthalate	1800		53.1	190	ug/Kg
206-44-0	Fluoranthene	1900		33.3	190	ug/Kg
129-00-0	Pyrene	1800		39.9	190	ug/Kg
85-68-7	Butylbenzylphthalate	1700		79.2	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	580		40.7	370	ug/Kg
56-55-3	Benzo(a)anthracene	1900		25.5	190	ug/Kg
218-01-9	Chrysene	1900		22.1	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1700		65.7	190	ug/Kg
117-84-0	Di-n-octyl phthalate	1700		96.3	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	1900		21.1	190	ug/Kg

Raw Data: **BM049866.D**

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-158-SB01MSD	SDG No.:	Q1746
Lab Sample ID:	Q1744-01MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	90
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
BM049866.D	1	04/08/25 08:59	04/09/25 13:47	PB167509

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	2000		24.8	190	ug/Kg
50-32-8	Benzo(a)pyrene	2000		32.7	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1900		32.3	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1900		30.4	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1800		28.5	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1800		28.4	190	ug/Kg
123-91-1	1,4-Dioxane	1600		50.1	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1800		30.4	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	127		30 (18) - 130 (112)	85%	SPK: 150
13127-88-3	Phenol-d6	130		30 (15) - 130 (107)	87%	SPK: 150
4165-60-0	Nitrobenzene-d5	86.2		30 (18) - 130 (107)	86%	SPK: 100
321-60-8	2-Fluorobiphenyl	85.2		30 (20) - 130 (109)	85%	SPK: 100
118-79-6	2,4,6-Tribromophenol	141		30 (10) - 130 (116)	94%	SPK: 150
1718-51-0	Terphenyl-d14	93.3		30 (10) - 130 (105)	93%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	285000	7.775			
1146-65-2	Naphthalene-d8	1010000	10.569			
15067-26-2	Acenaphthene-d10	664000	14.421			
1517-22-2	Phenanthrene-d10	1340000	17.162			
1719-03-5	Chrysene-d12	1400000	21.397			
1520-96-3	Perylene-d12	1460000	24.391			

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_M\Data\BM040925\
Data File : BM049866.D
Acq On : 09 Apr 2025 13:47
Operator : RC/JU
Sample : Q1744-01MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MSD

Quant Time: Apr 10 01:42:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.775	152	285351	20.000	ng		0.00
21) Naphthalene-d8	10.569	136	1005761	20.000	ng		0.00
39) Acenaphthene-d10	14.421	164	663787	20.000	ng		0.00
64) Phenanthrene-d10	17.162	188	1342339	20.000	ng		0.00
76) Chrysene-d12	21.397	240	1401873	20.000	ng		0.00
86) Perylene-d12	24.391	264	1461448	20.000	ng		-0.02
System Monitoring Compounds							
5) 2-Fluorophenol	5.363	112	2136954	127.167	ng		0.00
7) Phenol-d6	6.951	99	2724008	130.287	ng		0.00
23) Nitrobenzene-d5	8.933	82	1557737	86.246	ng		0.00
42) 2,4,6-Tribromophenol	15.909	330	1357374	140.587	ng		0.00
45) 2-Fluorobiphenyl	13.039	172	4170498	85.197	ng		0.00
79) Terphenyl-d14	19.786	244	6980310	93.314	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.257	88	306237	44.250	ng		99
3) Pyridine	3.657	79	824020	45.318	ng		100
4) n-Nitrosodimethylamine	3.563	42	324177	46.848	ng		97
6) Aniline	7.104	93	420957	23.497	ng		99
8) 2-Chlorophenol	7.345	128	864396	50.194	ng		98
9) Benzaldehyde	6.916	77	477912	44.543	ng		98
10) Phenol	6.975	94	1066445	52.269	ng		99
11) bis(2-Chloroethyl)ether	7.198	93	776399	48.525	ng		100
12) 1,3-Dichlorobenzene	7.663	146	980458	48.155	ng		99
13) 1,4-Dichlorobenzene	7.810	146	992255	48.434	ng		98
14) 1,2-Dichlorobenzene	8.128	146	950955	49.282	ng		99
15) Benzyl Alcohol	8.016	79	693613	52.683	ng		99
16) 2,2'-oxybis(1-Chloropr...	8.298	45	901093	50.529	ng		99
17) 2-Methylphenol	8.222	107	672939	53.521	ng		99
18) Hexachloroethane	8.857	117	341526	47.917	ng		98
19) n-Nitroso-di-n-propyla...	8.581	70	582254	50.282	ng		99
20) 3+4-Methylphenols	8.551	107	917509	53.525	ng		99
22) Acetophenone	8.598	105	1167291	47.755	ng	#	99
24) Nitrobenzene	8.975	77	835602	48.046	ng		98
25) Isophorone	9.504	82	1576133	52.092	ng		99
26) 2-Nitrophenol	9.686	139	445919	48.376	ng		99
27) 2,4-Dimethylphenol	9.751	122	761170	72.864	ng		98
28) bis(2-Chloroethoxy)met...	9.980	93	996102	49.175	ng		99
29) 2,4-Dichlorophenol	10.222	162	874134	50.340	ng		99
30) 1,2,4-Trichlorobenzene	10.433	180	956323	47.606	ng		100
31) Naphthalene	10.622	128	2397631	46.394	ng		99
32) Benzoic acid	9.886	122	566036	44.477	ng		98
33) 4-Chloroaniline	10.727	127	220350	12.075	ng		99
34) Hexachlorobutadiene	10.910	225	588579	47.367	ng		98
35) Caprolactam	11.510	113	247722	49.739	ng		99
36) 4-Chloro-3-methylphenol	11.863	107	776696	51.063	ng		99
37) 2-Methylnaphthalene	12.233	142	1595016	43.805	ng		99
38) 1-Methylnaphthalene	12.457	142	1678627	47.320	ng		100
40) 1,2,4,5-Tetrachloroben...	12.610	216	1117353	48.115	ng		98
41) Hexachlorocyclopentadiene	12.592	237	1486422	182.669	ng		99
43) 2,4,6-Trichlorophenol	12.851	196	734045	49.674	ng		97

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049866.D
Acq On : 09 Apr 2025 13:47
Operator : RC/JU
Sample : Q1744-01MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MSD

Quant Time: Apr 10 01:42:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
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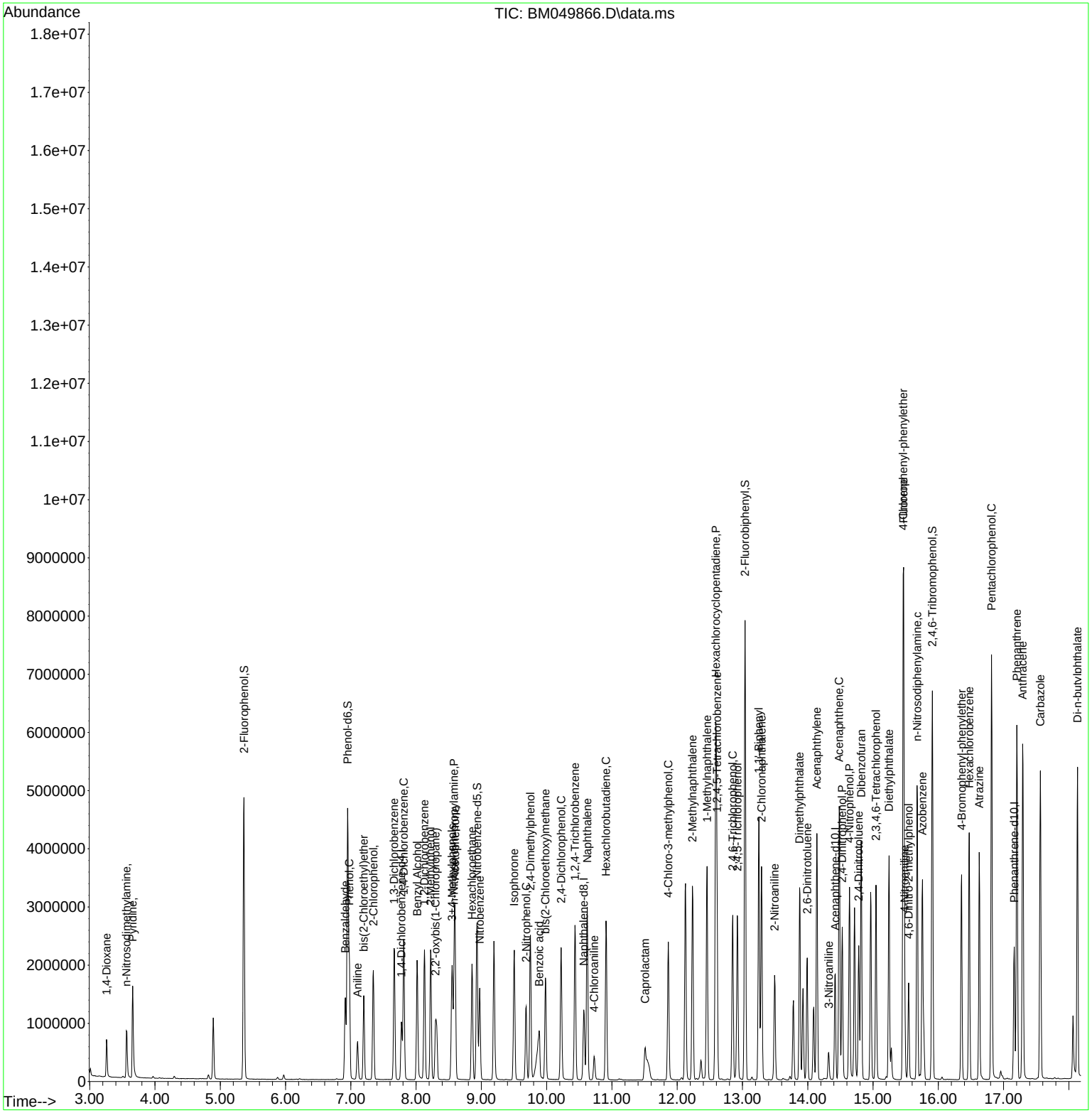
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.921	196	804889	50.122	ng	99
46) 1,1'-Biphenyl	13.251	154	2349677	47.618	ng	100
47) 2-Chloronaphthalene	13.292	162	1871890	48.265	ng	99
48) 2-Nitroaniline	13.492	65	456335	50.860	ng	98
49) Acenaphthylene	14.139	152	2972105	52.609	ng	100
50) Dimethylphthalate	13.874	163	2283140	48.754	ng	99
51) 2,6-Dinitrotoluene	13.992	165	492479	50.195	ng	99
52) Acenaphthene	14.480	154	1724643	47.994	ng	99
53) 3-Nitroaniline	14.321	138	130642	13.777	ng	98
54) 2,4-Dinitrophenol	14.527	184	629408	87.809	ng	98
55) Dibenzofuran	14.821	168	2836442	47.217	ng	98
56) 4-Nitrophenol	14.639	139	934371	110.572	ng	99
57) 2,4-Dinitrotoluene	14.780	165	698694	53.380	ng	98
58) Fluorene	15.468	166	2375933	49.757	ng	99
59) 2,3,4,6-Tetrachlorophenol	15.045	232	692400	49.194	ng	99
60) Diethylphthalate	15.245	149	2148314	47.838	ng	99
61) 4-Chlorophenyl-phenyle...	15.462	204	1280962	50.036	ng	99
62) 4-Nitroaniline	15.486	138	455783	46.478	ng	99
63) Azobenzene	15.757	77	2029859	52.794	ng	97
65) 4,6-Dinitro-2-methylph...	15.545	198	406755	48.087	ng	99
66) n-Nitrosodiphenylamine	15.674	169	1993763	49.632	ng	99
67) 4-Bromophenyl-phenylether	16.356	248	758871	48.699	ng	96
68) Hexachlorobenzene	16.474	284	874754	48.940	ng	98
69) Atrazine	16.627	200	737371	70.795	ng	99
70) Pentachlorophenol	16.815	266	1321712	100.440	ng	99
71) Phenanthrene	17.203	178	3676782	49.961	ng	100
72) Anthracene	17.292	178	3760847	51.857	ng	100
73) Carbazole	17.562	167	3446827	50.460	ng	100
74) Di-n-butylphthalate	18.133	149	3801949	48.323	ng	100
75) Fluoranthene	19.221	202	4538028	50.152	ng	99
77) Benzidine	19.403	184	1757189	94.484	ng	99
78) Pyrene	19.580	202	4707504	48.725	ng	99
80) Butylbenzylphthalate	20.480	149	1704963	46.964	ng	100
81) Benzo(a)anthracene	21.380	228	4791802	51.432	ng	100
82) 3,3'-Dichlorobenzidine	21.303	252	548354	15.585	ng	99
83) Chrysene	21.444	228	4591192	51.834	ng	99
84) Bis(2-ethylhexyl)phtha...	21.309	149	2464666	46.598	ng	99
85) Di-n-octyl phthalate	22.438	149	4181805	45.193	ng	100
87) Indeno(1,2,3-cd)pyrene	27.779	276	5591757	51.330	ng	99
88) Benzo(b)fluoranthene	23.450	252	4901336	52.512	ng	99
89) Benzo(k)fluoranthene	23.515	252	4863511	53.770	ng	100
90) Benzo(a)pyrene	24.256	252	4421640	53.910	ng	99
91) Dibenzo(a,h)anthracene	27.832	278	4528137	50.463	ng	100
92) Benzo(g,h,i)perylene	28.838	276	4423237	48.240	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049866.D
Acq On : 09 Apr 2025 13:47
Operator : RC/JU
Sample : Q1744-01MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MSD

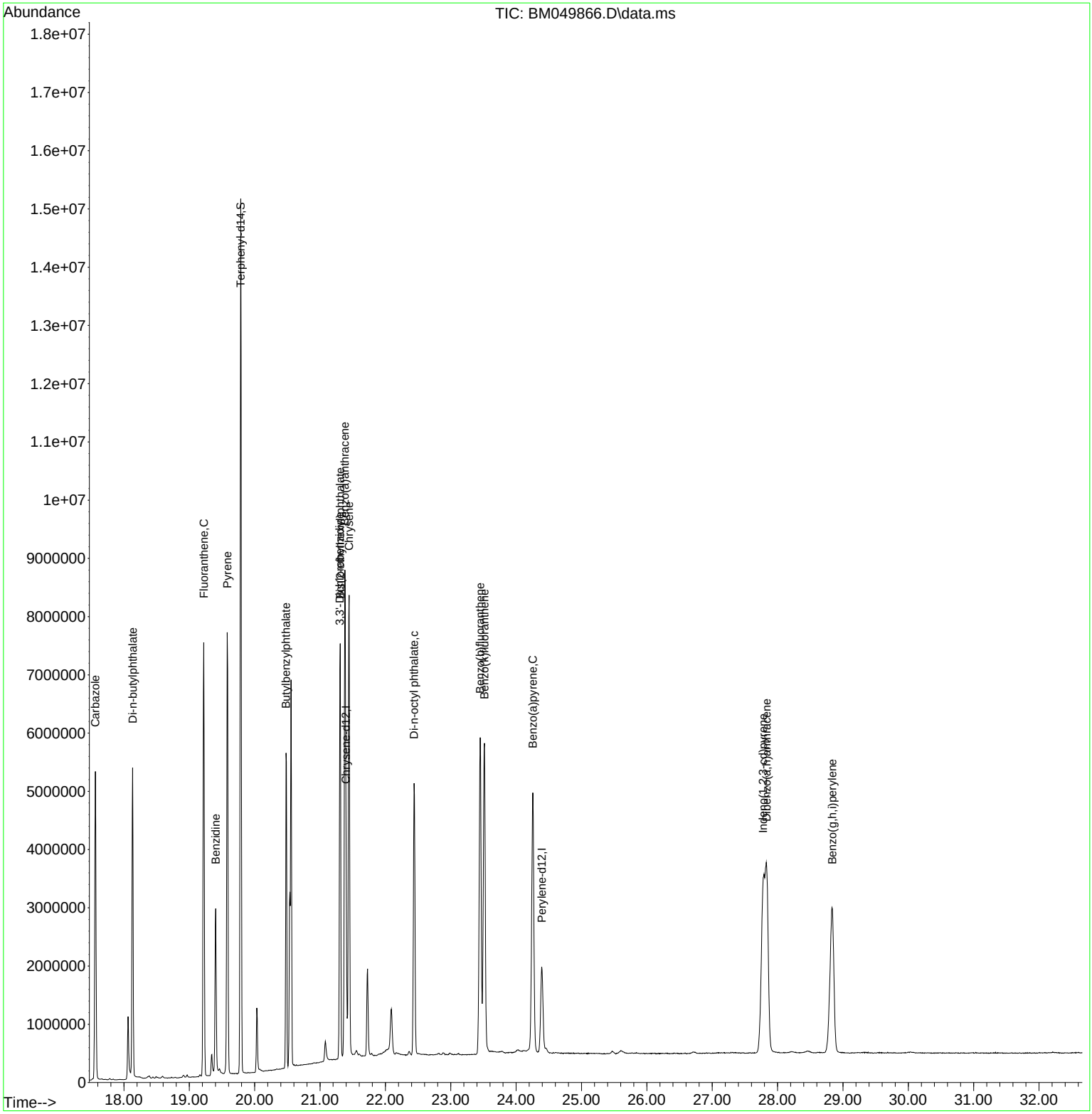
Quant Time: Apr 10 01:42:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM040925\
Data File : BM049866.D
Acq On : 09 Apr 2025 13:47
Operator : RC/JU
Sample : Q1744-01MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
B-158-SB01MSD

Quant Time: Apr 10 01:42:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM040825.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Apr 09 04:00:55 2025
Response via : Initial Calibration



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Manual Integration Report

Sequence:	BM040825	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC005	BM049849.D	Benzaldehyde	anahy	4/9/2025 10:32:06 AM	Jagrut	4/9/2025 4:46:22 PM	Peak Integrated by Software
SSTDICC010	BM049850.D	Benzoic acid	anahy	4/9/2025 10:32:44 AM	Jagrut	4/9/2025 4:46:25 PM	Peak Integrated by Software
SSTDICC060	BM049854.D	Pyridine	anahy	4/9/2025 10:33:20 AM	Jagrut	4/9/2025 4:46:27 PM	Peak Integrated by Software
SSTDICC080	BM049855.D	Pyridine	anahy	4/9/2025 10:34:03 AM	Jagrut	4/9/2025 4:46:30 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	bm040925	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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Manual Integration Report

Sequence:	bm041025	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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Manual Integration Report

Sequence:	bm041625	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDCCC040	BM049944.D	Benzoic acid	Rahul	4/17/2025 10:25:47 AM	Jagrut	4/17/2025 12:27:50 PM	Peak Integrated by Software
PB167509BS	BM049947.D	Benzoic acid	Rahul	4/17/2025 10:25:55 AM	Jagrut	4/17/2025 12:27:57 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	BP031225	Instrument	BNA_p

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC005	BP024161.D	Benzaldehyde	anahy	3/13/2025 11:10:33 AM	Jagrut	3/13/2025 11:45:04 AM	Peak Integrated by Software
SSTDICC050	BP024165.D	Pyridine	anahy	3/13/2025 11:11:20 AM	Jagrut	3/13/2025 11:45:07 AM	Peak Integrated by Software
SSTDICC060	BP024166.D	Indeno(1,2,3-cd)pyrene	anahy	3/13/2025 11:38:58 AM	Jagrut	3/13/2025 11:45:09 AM	Peak Integrated by Software
SSTDICC060	BP024166.D	Pyridine	anahy	3/13/2025 11:38:58 AM	Jagrut	3/13/2025 11:45:09 AM	Peak Integrated by Software
SSTDICC080	BP024167.D	Pyridine	anahy	3/13/2025 11:39:57 AM	Jagrut	3/13/2025 11:45:11 AM	Peak Integrated by Software
SSTDICV040	BP024168.D	Benzo(g,h,i)perylene	anahy	3/13/2025 11:40:49 AM	Jagrut	3/13/2025 11:45:14 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	BP040925	Instrument	BNA_p

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDCCC040	BP024228.D	Benzoic acid	anahy	4/10/2025 10:35:25 AM	Jagrut	4/10/2025 3:32:58 PM	Peak Integrated by Software
SSTDCCC040	BP024228.D	Indeno(1,2,3-cd)pyrene	anahy	4/10/2025 10:35:25 AM	Jagrut	4/10/2025 3:32:58 PM	Peak Integrated by Software
SSTDCCC040	BP024243.D	Benzo(g,h,i)perylene	anahy	4/10/2025 10:37:39 AM	Jagrut	4/10/2025 3:33:04 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	bp041025	Instrument	BNA_p

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1746-06	BP024253.D	Benzoic acid	anahy	4/11/2025 9:37:54 AM	Jagrut	4/11/2025 10:44:22 AM	Peak Integrated by Software

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM040825

Review By	anahy	Review On	4/9/2025 10:38:14 AM				
Supervise By	Jagrut	Supervise On	4/9/2025 4:50:06 PM				
SubDirectory	BM040825	HP Acquire Method	BNA_M		HP Processing Method	bm040825	

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12657,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BM049847.D	08 Apr 2025 12:55	RC/JU	Ok
2	SSTDICC2.5	BM049848.D	08 Apr 2025 13:35	RC/JU	Ok
3	SSTDICC005	BM049849.D	08 Apr 2025 14:14	RC/JU	Ok,M
4	SSTDICC010	BM049850.D	08 Apr 2025 14:53	RC/JU	Ok,M
5	SSTDICC020	BM049851.D	08 Apr 2025 15:32	RC/JU	Ok
6	SSTDICCC040	BM049852.D	08 Apr 2025 16:12	RC/JU	Ok
7	SSTDICC050	BM049853.D	08 Apr 2025 17:30	RC/JU	Ok
8	SSTDICC060	BM049854.D	08 Apr 2025 19:28	RC/JU	Ok,M
9	SSTDICC080	BM049855.D	08 Apr 2025 20:07	RC/JU	Ok,M
10	SSTDICV040	BM049856.D	08 Apr 2025 20:47	RC/JU	Ok
11	PB167474BL	BM049857.D	08 Apr 2025 21:26	RC/JU	Not Ok

M : Manual Integration

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM040925

Review By	anahy	Review On	4/10/2025 10:38:09 AM		
Supervise By	Jagrut	Supervise On	4/10/2025 3:33:56 PM		
SubDirectory	BM040925	HP Acquire Method	BNA_M	HP Processing Method	bm040825

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BM049858.D	09 Apr 2025 08:30	RC/JU	Ok
2	SSTDCCC040	BM049859.D	09 Apr 2025 09:09	RC/JU	Ok
3	PB167521BL	BM049860.D	09 Apr 2025 09:48	RC/JU	Ok
4	PB167521BS	BM049861.D	09 Apr 2025 10:27	RC/JU	Ok
5	PB167521BSD	BM049862.D	09 Apr 2025 11:06	RC/JU	Ok
6	Q1740-01	BM049863.D	09 Apr 2025 11:50	RC/JU	Ok
7	Q1744-01	BM049864.D	09 Apr 2025 12:29	RC/JU	Ok
8	Q1744-01MS	BM049865.D	09 Apr 2025 13:08	RC/JU	Ok
9	Q1744-01MSD	BM049866.D	09 Apr 2025 13:47	RC/JU	Ok
10	Q1742-01	BM049867.D	09 Apr 2025 14:26	RC/JU	Ok,M
11	Q1746-03	BM049868.D	09 Apr 2025 15:05	RC/JU	Ok
12	Q1744-03	BM049869.D	09 Apr 2025 15:45	RC/JU	Ok
13	Q1712-01DL	BM049870.D	09 Apr 2025 16:24	RC/JU	Dilution
14	Q1712-01DL2	BM049871.D	09 Apr 2025 17:03	RC/JU	Ok,M
15	Q1743-01	BM049872.D	09 Apr 2025 17:42	RC/JU	Ok,M
16	Q1745-09	BM049873.D	09 Apr 2025 18:21	RC/JU	Ok,M
17	Q1739-01	BM049874.D	09 Apr 2025 19:01	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM041025

Review By	anahy	Review On	4/11/2025 10:19:37 AM		
Supervise By	Jagrut	Supervise On	4/11/2025 10:44:07 AM		
SubDirectory	BM041025	HP Acquire Method	BNA_M	HP Processing Method	bm040825

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BM049875.D	10 Apr 2025 08:53	RC/JU	Ok
2	SSTDCCC040	BM049876.D	10 Apr 2025 09:32	RC/JU	Ok
3	PB167509BL	BM049877.D	10 Apr 2025 10:11	RC/JU	Ok
4	Q1753-01	BM049878.D	10 Apr 2025 10:54	RC/JU	Ok
5	Q1753-05	BM049879.D	10 Apr 2025 11:34	RC/JU	Ok
6	Q1753-05MS	BM049880.D	10 Apr 2025 12:13	RC/JU	Ok,M
7	Q1753-05MSD	BM049881.D	10 Apr 2025 12:52	RC/JU	Ok,M
8	Q1752-05	BM049882.D	10 Apr 2025 13:31	RC/JU	Ok
9	Q1752-07	BM049883.D	10 Apr 2025 14:10	RC/JU	Ok
10	Q1752-01	BM049884.D	10 Apr 2025 14:49	RC/JU	Ok
11	Q1752-03	BM049885.D	10 Apr 2025 15:28	RC/JU	Ok
12	Q1754-03	BM049886.D	10 Apr 2025 16:07	RC/JU	Ok,M
13	Q1739-02	BM049887.D	10 Apr 2025 16:46	RC/JU	Ok,M
14	Q1754-01	BM049888.D	10 Apr 2025 17:25	RC/JU	Ok,M
15	Q1749-01	BM049889.D	10 Apr 2025 18:04	RC/JU	Ok
16	Q1748-05	BM049890.D	10 Apr 2025 18:44	RC/JU	Ok
17	Q1748-01	BM049891.D	10 Apr 2025 19:23	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM041625

Review By	Rahul	Review On	4/17/2025 10:26:53 AM		
Supervise By	Jagrut	Supervise On	4/17/2025 12:28:46 PM		
SubDirectory	BM041625	HP Acquire Method	BNA_M	HP Processing Method	bm040825

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12659,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BM049943.D	16 Apr 2025 08:49	RC/JU	Ok
2	SSTDCCC040	BM049944.D	16 Apr 2025 09:28	RC/JU	Ok,M
3	PB167561BL	BM049945.D	16 Apr 2025 10:07	RC/JU	Ok
4	PB167561BS	BM049946.D	16 Apr 2025 10:47	RC/JU	Ok,M
5	PB167509BS	BM049947.D	16 Apr 2025 11:26	RC/JU	Ok,M
6	PB167587TB	BM049948.D	16 Apr 2025 12:05	RC/JU	Ok
7	PB167598BL	BM049949.D	16 Apr 2025 12:44	RC/JU	Ok
8	PB167598BS	BM049950.D	16 Apr 2025 13:24	RC/JU	Ok,M
9	Q1791-13	BM049951.D	16 Apr 2025 14:07	RC/JU	ReRun
10	Q1791-14	BM049952.D	16 Apr 2025 14:46	RC/JU	Ok
11	Q1810-02	BM049953.D	16 Apr 2025 15:26	RC/JU	Ok
12	Q1806-01DL	BM049954.D	16 Apr 2025 16:05	RC/JU	Ok,M
13	Q1788-01DL	BM049955.D	16 Apr 2025 16:44	RC/JU	Ok,M
14	Q1808-01MS	BM049956.D	16 Apr 2025 17:24	RC/JU	Ok,M
15	Q1808-01MSD	BM049957.D	16 Apr 2025 18:03	RC/JU	Ok,M
16	Q1808-03	BM049958.D	16 Apr 2025 18:42	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_P

Daily Analysis Runlog For Sequence/QCBatch ID # BP031225

Review By	anahy	Review On	3/13/2025 11:41:15 AM				
Supervise By	Jagrut	Supervise On	3/17/2025 4:44:19 PM				
SubDirectory	BP031225	HP Acquire Method	BNA_P		HP Processing Method	bp031225	

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12653,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BP024159.D	12 Mar 2025 15:36	RC/JU	Ok
2	SSTDICC2.5	BP024160.D	12 Mar 2025 16:17	RC/JU	Ok
3	SSTDICC005	BP024161.D	12 Mar 2025 16:57	RC/JU	Ok,M
4	SSTDICC010	BP024162.D	12 Mar 2025 17:38	RC/JU	Ok
5	SSTDICC020	BP024163.D	12 Mar 2025 18:19	RC/JU	Ok
6	SSTDICCC040	BP024164.D	12 Mar 2025 19:00	RC/JU	Ok
7	SSTDICC050	BP024165.D	12 Mar 2025 19:41	RC/JU	Ok,M
8	SSTDICC060	BP024166.D	12 Mar 2025 20:21	RC/JU	Ok,M
9	SSTDICC080	BP024167.D	12 Mar 2025 21:02	RC/JU	Ok,M
10	SSTDICV040	BP024168.D	12 Mar 2025 21:43	RC/JU	Ok,M
11	PB167078BL	BP024169.D	12 Mar 2025 22:24	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_P

Daily Analysis Runlog For Sequence/QCBatch ID # BP040925

Review By	anahy	Review On	4/10/2025 10:38:27 AM		
Supervise By	Jagrut	Supervise On	4/10/2025 3:33:16 PM		
SubDirectory	BP040925	HP Acquire Method	BNA_P	HP Processing Method	bp031225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BP024227.D	09 Apr 2025 08:42	RC/JU	Ok
2	SSTDCCC040	BP024228.D	09 Apr 2025 10:08	RC/JU	Ok,M
3	PB167467TB	BP024229.D	09 Apr 2025 10:49	RC/JU	Ok
4	PB167474BS	BP024230.D	09 Apr 2025 11:29	RC/JU	Not Ok
5	Q1730-01MS	BP024231.D	09 Apr 2025 12:15	RC/JU	Ok
6	Q1730-01MSD	BP024232.D	09 Apr 2025 12:56	RC/JU	Ok
7	Q1737-02	BP024233.D	09 Apr 2025 13:37	RC/JU	Ok
8	Q1712-04	BP024234.D	09 Apr 2025 14:18	RC/JU	Ok
9	Q1712-04MS	BP024235.D	09 Apr 2025 14:59	RC/JU	Ok
10	Q1712-04MSD	BP024236.D	09 Apr 2025 15:39	RC/JU	Ok
11	Q1712-08	BP024237.D	09 Apr 2025 16:20	RC/JU	Ok
12	Q1732-04	BP024238.D	09 Apr 2025 17:01	RC/JU	Ok
13	Q1746-07	BP024239.D	09 Apr 2025 17:41	RC/JU	Ok
14	Q1746-01	BP024240.D	09 Apr 2025 18:22	RC/JU	Ok
15	Q1747-01	BP024241.D	09 Apr 2025 19:03	RC/JU	Ok
16	Q1745-01	BP024242.D	09 Apr 2025 19:43	RC/JU	Ok,M
17	SSTDCCC040	BP024243.D	09 Apr 2025 20:24	RC/JU	Ok,M

M : Manual Integration

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Instrument ID: BNA_P

Daily Analysis Runlog For Sequence/QCBatch ID # BP041025

Review By	anahy	Review On	4/11/2025 10:19:20 AM		
Supervise By	Jagrut	Supervise On	4/11/2025 10:44:46 AM		
SubDirectory	BP041025	HP Acquire Method	BNA_P	HP Processing Method	bp031225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BP024244.D	10 Apr 2025 09:05	RC/JU	Ok
2	SSTDCCC040	BP024245.D	10 Apr 2025 09:46	RC/JU	Ok
3	PB167518BL	BP024246.D	10 Apr 2025 10:27	RC/JU	Ok
4	PB167537TB	BP024247.D	10 Apr 2025 11:08	RC/JU	Ok
5	Q1745-04	BP024248.D	10 Apr 2025 11:54	RC/JU	Ok
6	Q1745-12	BP024249.D	10 Apr 2025 12:35	RC/JU	Ok
7	Q1740-04	BP024250.D	10 Apr 2025 13:15	RC/JU	Ok
8	Q1743-04	BP024251.D	10 Apr 2025 13:56	RC/JU	Ok
9	Q1746-05	BP024252.D	10 Apr 2025 14:36	RC/JU	Ok
10	Q1746-06	BP024253.D	10 Apr 2025 15:17	RC/JU	Ok,M
11	Q1748-04	BP024254.D	10 Apr 2025 17:08	RC/JU	Ok
12	Q1748-08	BP024255.D	10 Apr 2025 17:49	RC/JU	Ok
13	Q1754-02	BP024256.D	10 Apr 2025 18:30	RC/JU	Ok
14	Q1754-04	BP024257.D	10 Apr 2025 19:10	RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM040825

Review By	anahy	Review On	4/9/2025 10:38:14 AM		
Supervise By	Jagrut	Supervise On	4/9/2025 4:50:06 PM		
SubDirectory	BM040825	HP Acquire Method	BNA_M	HP Processing Method	bm040825

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12657,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BM049847.D	08 Apr 2025 12:55		RC/JU	Ok
2	SSTDICC2.5	SSTDICC2.5	BM049848.D	08 Apr 2025 13:35		RC/JU	Ok
3	SSTDICC005	SSTDICC005	BM049849.D	08 Apr 2025 14:14	Compound #32,54,65 removed from 5ppm	RC/JU	Ok,M
4	SSTDICC010	SSTDICC010	BM049850.D	08 Apr 2025 14:53	Compound #32,54 kept on LR	RC/JU	Ok,M
5	SSTDICC020	SSTDICC020	BM049851.D	08 Apr 2025 15:32	This calibration is fail for Com#77	RC/JU	Ok
6	SSTDICCC040	SSTDICCC040	BM049852.D	08 Apr 2025 16:12	This calibration is good for 8270E DOD except Com#77 and good for 625.1 method	RC/JU	Ok
7	SSTDICC050	SSTDICC050	BM049853.D	08 Apr 2025 17:30		RC/JU	Ok
8	SSTDICC060	SSTDICC060	BM049854.D	08 Apr 2025 19:28	Compound #69 Removed from 60PPM	RC/JU	Ok,M
9	SSTDICC080	SSTDICC080	BM049855.D	08 Apr 2025 20:07	Compound #69 Removed from 80PPM	RC/JU	Ok,M
10	SSTDICV040	ICVBM040825	BM049856.D	08 Apr 2025 20:47		RC/JU	Ok
11	PB167474BL	PB167474BL	BM049857.D	08 Apr 2025 21:26	Use for Q1730 only	RC/JU	Not Ok

M : Manual Integration

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM040925

Review By	anahy	Review On	4/10/2025 10:38:09 AM		
Supervise By	Jagrut	Supervise On	4/10/2025 3:33:56 PM		
SubDirectory	BM040925	HP Acquire Method	BNA_M	HP Processing Method	bm040825

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BM049858.D	09 Apr 2025 08:30		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BM049859.D	09 Apr 2025 09:09		RC/JU	Ok
3	PB167521BL	PB167521BL	BM049860.D	09 Apr 2025 09:48		RC/JU	Ok
4	PB167521BS	PB167521BS	BM049861.D	09 Apr 2025 10:27		RC/JU	Ok
5	PB167521BSD	PB167521BSD	BM049862.D	09 Apr 2025 11:06		RC/JU	Ok
6	Q1740-01	TP-20	BM049863.D	09 Apr 2025 11:50		RC/JU	Ok
7	Q1744-01	B-158-SB01	BM049864.D	09 Apr 2025 12:29		RC/JU	Ok
8	Q1744-01MS	B-158-SB01MS	BM049865.D	09 Apr 2025 13:08		RC/JU	Ok
9	Q1744-01MSD	B-158-SB01MSD	BM049866.D	09 Apr 2025 13:47		RC/JU	Ok
10	Q1742-01	TR-06-040725	BM049867.D	09 Apr 2025 14:26		RC/JU	Ok,M
11	Q1746-03	B-149-SB02	BM049868.D	09 Apr 2025 15:05		RC/JU	Ok
12	Q1744-03	B-158-SB02	BM049869.D	09 Apr 2025 15:45		RC/JU	Ok
13	Q1712-01DL	Z-05ADL	BM049870.D	09 Apr 2025 16:24	Need 5X further Dilution	RC/JU	Dilution
14	Q1712-01DL2	Z-05ADL2	BM049871.D	09 Apr 2025 17:03		RC/JU	Ok,M
15	Q1743-01	TP-16	BM049872.D	09 Apr 2025 17:42		RC/JU	Ok,M
16	Q1745-09	IB-6.5-WC	BM049873.D	09 Apr 2025 18:21		RC/JU	Ok,M
17	Q1739-01	WC-LIQUID-20250404	BM049874.D	09 Apr 2025 19:01	Surrogate Fail	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM041025

Review By	anahy	Review On	4/11/2025 10:19:37 AM		
Supervise By	Jagrut	Supervise On	4/11/2025 10:44:07 AM		
SubDirectory	BM041025	HP Acquire Method	BNA_M	HP Processing Method	bm040825

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BM049875.D	10 Apr 2025 08:53		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BM049876.D	10 Apr 2025 09:32		RC/JU	Ok
3	PB167509BL	PB167509BL	BM049877.D	10 Apr 2025 10:11		RC/JU	Ok
4	Q1753-01	WC-1	BM049878.D	10 Apr 2025 10:54		RC/JU	Ok
5	Q1753-05	WC-2	BM049879.D	10 Apr 2025 11:34		RC/JU	Ok
6	Q1753-05MS	WC-2MS	BM049880.D	10 Apr 2025 12:13		RC/JU	Ok,M
7	Q1753-05MSD	WC-2MSD	BM049881.D	10 Apr 2025 12:52		RC/JU	Ok,M
8	Q1752-05	TP-4	BM049882.D	10 Apr 2025 13:31		RC/JU	Ok
9	Q1752-07	TP-3	BM049883.D	10 Apr 2025 14:10		RC/JU	Ok
10	Q1752-01	TP-1	BM049884.D	10 Apr 2025 14:49		RC/JU	Ok
11	Q1752-03	TP-2	BM049885.D	10 Apr 2025 15:28		RC/JU	Ok
12	Q1754-03	TP-1-CONCRETE	BM049886.D	10 Apr 2025 16:07		RC/JU	Ok,M
13	Q1739-02	WC-LIQUID-20250404	BM049887.D	10 Apr 2025 16:46		RC/JU	Ok,M
14	Q1754-01	TP-1	BM049888.D	10 Apr 2025 17:25		RC/JU	Ok,M
15	Q1749-01	TP-14	BM049889.D	10 Apr 2025 18:04		RC/JU	Ok
16	Q1748-05	IB-2A-WC	BM049890.D	10 Apr 2025 18:44		RC/JU	Ok
17	Q1748-01	IB-1.5-WC	BM049891.D	10 Apr 2025 19:23		RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM041625

Review By	Rahul	Review On	4/17/2025 10:26:53 AM		
Supervise By	Jagrut	Supervise On	4/17/2025 12:28:46 PM		
SubDirectory	BM041625	HP Acquire Method	BNA_M	HP Processing Method	bm040825

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12659,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BM049943.D	16 Apr 2025 08:49		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BM049944.D	16 Apr 2025 09:28		RC/JU	Ok,M
3	PB167561BL	PB167561BL	BM049945.D	16 Apr 2025 10:07		RC/JU	Ok
4	PB167561BS	PB167561BS	BM049946.D	16 Apr 2025 10:47		RC/JU	Ok,M
5	PB167509BS	PB167509BS	BM049947.D	16 Apr 2025 11:26		RC/JU	Ok,M
6	PB167587TB	PB167587TB	BM049948.D	16 Apr 2025 12:05		RC/JU	Ok
7	PB167598BL	PB167598BL	BM049949.D	16 Apr 2025 12:44		RC/JU	Ok
8	PB167598BS	PB167598BS	BM049950.D	16 Apr 2025 13:24		RC/JU	Ok,M
9	Q1791-13	279312	BM049951.D	16 Apr 2025 14:07	Internal Standards and surrogates Failed	RC/JU	ReRun
10	Q1791-14	VB16164	BM049952.D	16 Apr 2025 14:46		RC/JU	Ok
11	Q1810-02	MOO-25-0118	BM049953.D	16 Apr 2025 15:26		RC/JU	Ok
12	Q1806-01DL	OR-03-041425DL	BM049954.D	16 Apr 2025 16:05		RC/JU	Ok,M
13	Q1788-01DL	WC-1DL	BM049955.D	16 Apr 2025 16:44		RC/JU	Ok,M
14	Q1808-01MS	OILY-SOIL-PILEMS	BM049956.D	16 Apr 2025 17:24		RC/JU	Ok,M
15	Q1808-01MSD	OILY-SOIL-PILEMSD	BM049957.D	16 Apr 2025 18:03		RC/JU	Ok,M
16	Q1808-03	LAW-25-0060	BM049958.D	16 Apr 2025 18:42		RC/JU	Ok

M : Manual Integration

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Instrument ID: BNA_P

Daily Analysis Runlog For Sequence/QCBatch ID # BP031225

Review By	anahy	Review On	3/13/2025 11:41:15 AM		
Supervise By	Jagrut	Supervise On	3/17/2025 4:44:19 PM		
SubDirectory	BP031225	HP Acquire Method	BNA_P	HP Processing Method	bp031225

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12653,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BP024159.D	12 Mar 2025 15:36		RC/JU	Ok
2	SSTDICC2.5	SSTDICC2.5	BP024160.D	12 Mar 2025 16:17		RC/JU	Ok
3	SSTDICC005	SSTDICC005	BP024161.D	12 Mar 2025 16:57	Compound #32,54,65 removed from 5ppm	RC/JU	Ok,M
4	SSTDICC010	SSTDICC010	BP024162.D	12 Mar 2025 17:38		RC/JU	Ok
5	SSTDICC020	SSTDICC020	BP024163.D	12 Mar 2025 18:19		RC/JU	Ok
6	SSTDICCC040	SSTDICCC040	BP024164.D	12 Mar 2025 19:00	This calibration is good for 8270E and 8270E DOD methods	RC/JU	Ok
7	SSTDICC050	SSTDICC050	BP024165.D	12 Mar 2025 19:41		RC/JU	Ok,M
8	SSTDICC060	SSTDICC060	BP024166.D	12 Mar 2025 20:21	Compound #69 Removed from 60PPM	RC/JU	Ok,M
9	SSTDICC080	SSTDICC080	BP024167.D	12 Mar 2025 21:02	Compound #32,54,69 Removed from 80PPM	RC/JU	Ok,M
10	SSTDICV040	ICVBP031225	BP024168.D	12 Mar 2025 21:43		RC/JU	Ok,M
11	PB167078BL	PB167078BL	BP024169.D	12 Mar 2025 22:24		RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_P

Daily Analysis Runlog For Sequence/QCBatch ID # BP040925

Review By	anahy	Review On	4/10/2025 10:38:27 AM		
Supervise By	Jagrut	Supervise On	4/10/2025 3:33:16 PM		
SubDirectory	BP040925	HP Acquire Method	BNA_P	HP Processing Method	bp031225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BP024227.D	09 Apr 2025 08:42		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BP024228.D	09 Apr 2025 10:08		RC/JU	Ok,M
3	PB167467TB	PB167467TB	BP024229.D	09 Apr 2025 10:49		RC/JU	Ok
4	PB167474BS	PB167474BS	BP024230.D	09 Apr 2025 11:29	not used.	RC/JU	Not Ok
5	Q1730-01MS	OU4-VSL-15-040325MS	BP024231.D	09 Apr 2025 12:15		RC/JU	Ok
6	Q1730-01MSD	OU4-VSL-15-040325MS	BP024232.D	09 Apr 2025 12:56		RC/JU	Ok
7	Q1737-02	RT3069	BP024233.D	09 Apr 2025 13:37		RC/JU	Ok
8	Q1712-04	Z-05A	BP024234.D	09 Apr 2025 14:18		RC/JU	Ok
9	Q1712-04MS	Z-05AMS	BP024235.D	09 Apr 2025 14:59		RC/JU	Ok
10	Q1712-04MSD	Z-05AMSD	BP024236.D	09 Apr 2025 15:39		RC/JU	Ok
11	Q1712-08	TT-7	BP024237.D	09 Apr 2025 16:20		RC/JU	Ok
12	Q1732-04	TT-8	BP024238.D	09 Apr 2025 17:01		RC/JU	Ok
13	Q1746-07	EB-2025-4-7	BP024239.D	09 Apr 2025 17:41		RC/JU	Ok
14	Q1746-01	B-149-SB01	BP024240.D	09 Apr 2025 18:22		RC/JU	Ok
15	Q1747-01	ARS20-0008	BP024241.D	09 Apr 2025 19:03		RC/JU	Ok
16	Q1745-01	IB-6A-WC	BP024242.D	09 Apr 2025 19:43		RC/JU	Ok,M
17	SSTDCCC040	SSTDCCC040EC	BP024243.D	09 Apr 2025 20:24		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_P

Daily Analysis Runlog For Sequence/QCBatch ID # BP041025

Review By	anahy	Review On	4/11/2025 10:19:20 AM		
Supervise By	Jagrut	Supervise On	4/11/2025 10:44:46 AM		
SubDirectory	BP041025	HP Acquire Method	BNA_P	HP Processing Method	bp031225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729
CCC	SP6725
Internal Standard/PEM	S12658,10ul/1000ul sample
ICV/I.BLK	SP6686
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BP024244.D	10 Apr 2025 09:05		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BP024245.D	10 Apr 2025 09:46		RC/JU	Ok
3	PB167518BL	PB167518BL	BP024246.D	10 Apr 2025 10:27		RC/JU	Ok
4	PB167537TB	PB167537TB	BP024247.D	10 Apr 2025 11:08		RC/JU	Ok
5	Q1745-04	IB-6A-WC	BP024248.D	10 Apr 2025 11:54		RC/JU	Ok
6	Q1745-12	IB-6.5-WC	BP024249.D	10 Apr 2025 12:35		RC/JU	Ok
7	Q1740-04	TP-20	BP024250.D	10 Apr 2025 13:15		RC/JU	Ok
8	Q1743-04	TP-16	BP024251.D	10 Apr 2025 13:56		RC/JU	Ok
9	Q1746-05	B-158-GW01	BP024252.D	10 Apr 2025 14:36		RC/JU	Ok
10	Q1746-06	B-149-GW01	BP024253.D	10 Apr 2025 15:17		RC/JU	Ok,M
11	Q1748-04	IB-1.5-WC	BP024254.D	10 Apr 2025 17:08		RC/JU	Ok
12	Q1748-08	IB-2A-WC	BP024255.D	10 Apr 2025 17:49		RC/JU	Ok
13	Q1754-02	TP-1	BP024256.D	10 Apr 2025 18:30		RC/JU	Ok
14	Q1754-04	TP-1-CONCRETE	BP024257.D	10 Apr 2025 19:10		RC/JU	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/8/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:05
In Date: 04/07/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:19
Out Date: 04/08/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB135324

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
Q1740-01	TP-20	1	1.14	9.97	11.11	9.88	87.7	
Q1740-02	TP-20-E2	2	1.15	10.14	11.29	10.06	87.9	
Q1740-03	TP-20-VOC	3	1.18	11.96	13.14	11.9	89.6	
Q1742-01	TR-06-040725	17	1.14	10.11	11.25	10.00	87.6	
Q1742-02	TR-06-040725-E2	18	1.18	10.20	11.38	10.24	88.8	
Q1743-01	TP-16	4	1.14	10.15	11.29	10.74	94.6	
Q1743-02	TP-16-EPH	5	1.16	9.91	11.07	9.27	81.8	
Q1743-03	TP-16-VOC	6	1.14	10.34	11.48	10.84	93.8	
Q1744-01	B-158-SB01	7	1.12	9.66	10.78	9.81	90.0	
Q1744-03	B-158-SB02	8	1.18	10.73	11.91	7.19	56.0	
Q1745-01	IB-6A-WC	9	1.17	10.10	11.27	9.76	85.0	
Q1745-02	IB-6A-EPH	10	1.18	9.96	11.14	9.56	84.1	
Q1745-03	IB-6A-VOC	11	1.18	10.06	11.24	9.98	87.5	
Q1745-09	IB-6.5-WC	12	1.15	10.49	11.64	8.65	71.5	
Q1745-10	IB-6.5-EPH	13	1.18	10.26	11.44	8.46	71.0	
Q1745-11	IB-6.5-VOC	14	1.15	9.98	11.13	7.93	67.9	
Q1746-01	B-149-SB01	15	1.14	10.17	11.31	10.22	89.3	
Q1746-03	B-149-SB02	16	1.14	10.23	11.37	9.81	84.8	
Q1747-01	ARS20-0008	19	1.15	10.33	11.48	11.08	96.1	
Q1747-02	ARS20-0008-E2	20	1.19	10.08	11.27	10.8	95.3	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

VB135324

WorkList Name : %1-040725 **WorkList ID :** 188763 **Department :** Wet-Chemistry **Date :** 04-07-2025 08:21:09

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1740-01	TP-20	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	04/04/2025	Chemtech -SO
Q1740-02	TP-20-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	04/04/2025	Chemtech -SO
Q1740-03	TP-20-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	04/04/2025	Chemtech -SO
Q1742-01	TR-06-040725	Solid	Percent Solids	Cool 4 deg C	PSEG05		04/04/2025	Chemtech -SO
Q1742-02	TR-06-040725-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05		04/04/2025	Chemtech -SO
Q1743-01	TP-16	Solid	Percent Solids	Cool 4 deg C	PSEG03	L33	04/07/2025	Chemtech -SO
Q1743-02	TP-16-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L33	04/07/2025	Chemtech -SO
Q1743-03	TP-16-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L33	04/07/2025	Chemtech -SO
Q1744-01	B-158-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	04/05/2025	Chemtech -SO
Q1744-03	B-158-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	04/05/2025	Chemtech -SO
Q1745-01	IB-6A-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/07/2025	Chemtech -SO
Q1745-02	IB-6A-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/07/2025	Chemtech -SO
Q1745-03	IB-6A-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/07/2025	Chemtech -SO
Q1745-09	IB-6.5-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/07/2025	Chemtech -SO
Q1745-10	IB-6.5-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/07/2025	Chemtech -SO
Q1745-11	IB-6.5-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/07/2025	Chemtech -SO
Q1746-01	B-149-SB01	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/07/2025	Chemtech -SO
Q1746-03	B-149-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	04/05/2025	Chemtech -SO
Q1747-01	ARS20-0008	Solid	Percent Solids	Cool 4 deg C	PORT06	L41	04/06/2025	Chemtech -SO
Q1747-02	ARS20-0008-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	04/07/2025	Chemtech -SO
					PSEG03	I41	04/07/2025	Chemtech -SO

Date/Time 04/07/25 1525
Raw Sample Received by:
Raw Sample Relinquished by:

Date/Time 04/07/25 17:15
Raw Sample Received by:
Raw Sample Relinquished by:

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB167509

SOP ID: M3541-ASE Extraction-14

Clean Up SOP #: N/A

Matrix : Solid

Weigh By: EH

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date : 04/08/2025

Extraction Start Time : 08:59

Extraction End Date : 04/08/2025

Extraction End Time : 12:00

Concentration By: EH

Supervisor By : rajesh

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	SP6752
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	EP2591
Baked Na2SO4	N/A	EP2597
Sand	N/A	EP2865
Methylene Chloride	N/A	E3904
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 # 2210673.

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/08/25	RJ (Ext. Lab)	RC/SVOC
12:05	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB167509

Analytical Method: M3541-ASE Extraction-14 **Concentration Date:** 04/08/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167509BL	SBLK509	SVOC-TCL BNA -20	30.03	N/A	ritesh	Evelyn	1			U3-1
PB167509BS	SLCS509	SVOC-TCL BNA -20	30.02	N/A	ritesh	Evelyn	1			2
Q1740-01	TP-20	SVOC-TCL BNA -20	50.05	N/A	ritesh	Evelyn	1	E		3
Q1742-01	TR-06-040725	SVOC-TCL BNA -20	50.04	N/A	ritesh	Evelyn	1	E		4
Q1743-01	TP-16	SVOC-TCL BNA -20	50.02	N/A	ritesh	Evelyn	1	D		5
Q1744-01	B-158-SB01	SVOC-TCL BNA -20	30.02	N/A	ritesh	Evelyn	1	E		6
Q1744-01MS	B-158-SB01MS	SVOC-TCL BNA -20	30.04	N/A	ritesh	Evelyn	1	E		U6-1
Q1744-01MSD	B-158-SB01MSD	SVOC-TCL BNA -20	30.05	N/A	ritesh	Evelyn	1	E		2
Q1744-03	B-158-SB02	SVOC-TCL BNA -20	30.06	N/A	ritesh	Evelyn	1	E		3
Q1745-01	IB-6A-WC	SVOC-TCL BNA -20	50.02	N/A	ritesh	Evelyn	1	D		4
Q1745-09	IB-6.5-WC	SVOC-TCL BNA -20	50.08	N/A	ritesh	Evelyn	1	D		5
Q1746-01	B-149-SB01	SVOC-TCL BNA -20	30.03	N/A	ritesh	Evelyn	1	E		6
Q1746-03	B-149-SB02	SVOC-TCL BNA -20	30.07	N/A	ritesh	Evelyn	1	F		U2-1
Q1747-01	ARS20-0008	SVOC-TCL BNA -20	50.03	N/A	ritesh	Evelyn	1	E		2

* **Extracts relinquished on the same date as received.**

4/8/25

167509 8:29

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1742 **WorkList ID :** 188790 **Department :** Extraction **Date :** 04-08-2025 08:11:38

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1740-01	TP-20	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG03	L21	04/04/2025	8270E
Q1742-01	TR-06-040725	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG05		04/04/2025	8270E
Q1743-01	TP-16	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG03	L33	04/07/2025	8270E
Q1744-01	B-158-SB01	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	L41	04/05/2025	8270E
Q1744-03	B-158-SB02	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	L41	04/05/2025	8270E
Q1745-01	IB-6A-WC	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG03	L41	04/07/2025	8270E
Q1745-09	IB-6.5-WC	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG03	L41	04/07/2025	8270E
Q1746-01	B-149-SB01	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	L41	04/05/2025	8270E
Q1746-03	B-149-SB02	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	L41	04/06/2025	8270E
Q1747-01	ARS20-0008	Solid	SVOC-TCL BNA -20	Cool 4 deg C	PSEG03	I41	04/07/2025	8270E

Date/Time 04/08/25 8:55
Raw Sample Received by: RJ (Eat 2043)
Raw Sample Relinquished by: CP

Date/Time 04/08/25 9:15
Raw Sample Received by: CP
Raw Sample Relinquished by: RJ (Eat 2043)

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB167521

SOP ID: M3510C,3580A-Extraction SVOC-20

Clean Up SOP #: N/A

Matrix : Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3880

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 4,6,7

Extraction Start Date : 04/08/2025

Extraction Start Time : 11:55

Extraction End Date : 04/08/2025

Extraction End Time : 16:45

Concentration By: EH

Supervisor By : rajesh

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	SP6752
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
Methylene Chloride	N/A	E3926
Baked Na2SO4	N/A	EP2599
10N NaoH	N/A	EP2569
H2SO4 1:1	N/A	EP2865
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

KD Bath ID: Water bath -01

KD Bath Temperature: 60 °C

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/08/25	RP (Ext. Lab)	AC/SVOC
16:50	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB167521

Analytical Method: M3510C,3580A-Extraction SVOC-20

Concentration Date: 04/08/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167521BL	SBLK521	SVOC-TCL BNA -20	1000	6	ritesh	rajesh	1			SEP-08
PB167521BS	SLCS521	SVOC-TCL BNA -20	1000	6	ritesh	rajesh	1			9
PB167521BSD	SLCSD521	SVOC-TCL BNA -20	1000	6	ritesh	rajesh	1			10
Q1739-01	WC-LIQUID-20250404	SVOC-TCL BNA -20	970	6	ritesh	rajesh	10	I	Oily	11
Q1746-05	B-158-GW01	SVOC-TCL BNA -20	980	6	ritesh	rajesh	1	G		12
Q1746-06	B-149-GW01	SVOC-TCL BNA -20	970	6	ritesh	rajesh	1	G		13
Q1746-07	EB-2025-4-7	SVOC-TCL BNA -20	970	6	ritesh	rajesh	1	G		14

* **Extracts relinguished on the same date as received.**

4/9/25

16/5/21
12:00

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1741 **WorkList ID :** 188807 **Department :** Extraction **Date :** 04-08-2025 10:05:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1739-01	WC-LIQUID-20250404	Water	SVOC-TCL BNA -20	Cool 4 deg C	PARS02	L31	04/04/2025	8270E
Q1739-01	WC-LIQUID-20250404	Water	TPH GC	Cool 4 deg C	PARS02	L31	04/04/2025	8015D
Q1741-01	RMW-02B-66-040425	Water	SVOC-SIMGroup1	Cool 4 deg C	JACO05	L33	04/04/2025	8270-Modified
Q1741-02	RMW-02B-74-040425	Water	SVOC-SIMGroup1	Cool 4 deg C	JACO05	L33	04/04/2025	8270-Modified
Q1741-03	FB01-040425	Water	SVOC-SIMGroup1	Cool 4 deg C	JACO05	L33	04/04/2025	8270-Modified
Q1746-05	B-158-GW01	Water	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	L41	04/05/2025	8270E
Q1746-06	B-149-GW01	Water	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	L41	04/06/2025	8270E
Q1746-07	EB-2025-4-7	Water	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	L41	04/07/2025	8270E

Date/Time 04/08/25 11:55
Raw Sample Received by: RJ (Sat Lab)
Raw Sample Relinquished by: CP

Date/Time 04/08/25 12:20
Raw Sample Received by: CP
Raw Sample Relinquished by: RJ (Sat Lab)

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Prep Standard - Chemical Standard Summary

Order ID : Q1746

Test : SVOC-TCL BNA -20

Prepbatch ID : PB167509,PB167521,

Sequence ID/Qc Batch ID: bm040925,bm041025,BM041625,BP040925,BP041025,

Standard ID :
EP2569,EP2591,EP2597,EP2599,EP2865,SP6685,SP6686,SP6721,SP6722,SP6723,SP6724,SP6725,SP6726,SP6727,SP6728,SP6729,SP6752,SP6754,SP6757,

Chemical ID :
10ul/1000ul sample,E3551,E3828,E3874,E3876,E3878,E3902,E3904,E3926,M6121,S10104,S10397,S10584,S11074,S11087,S11143,S11161,S11487,S11495,S11650,S11785,S11786,S11787,S11788,S12114,S12142,S12189,S12190,S12191,S12192,S12193,S12194,S12195,S12208,S12209,S12210,S12211,S12212,S12213,S12214,S12215,S12216,S12270,S12276,S12327,S12469,S12478,S12479,S12480,S12481,S12482,S12483,S12484,S12485,S12486,S12517,S12525,S12526,S12527,S12528,S12529,S12530,S12531,S12532,S12533,S12577,S12649,S12658,S12659,S12791,S12966,S12967,S12968,S12969,S12970,S12971,S12972,S12973,S12974,W3112,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3319	6N HCL	EP2569	12/02/2024	05/13/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 12/02/2024

FROM 219.00000ml of M6121 + 781.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2591	02/26/2025	08/14/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 02/26/2025

FROM 8000.00000ml of E3876 + 8000.00000ml of E3878 = Final Quantity: 16000.000 ml

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2597	03/28/2025	07/01/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	Evelyn Huang 03/28/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2599	04/07/2025	07/01/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 04/07/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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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)	SP6685	11/15/2024	04/10/2025	Jagrut Upadhyay	None	None	Yogesh Patel 12/27/2024

FROM 0.04000ml of S12189 + 0.08000ml of S12208 + 0.10000ml of S11074 + 0.20000ml of S12142 + 0.20000ml of S12469 + 0.20000ml of S12517 + 1.18000ml of E3828 = 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	SP6686	11/15/2024	04/10/2025	Jagrut Upadhyay	None	None	Yogesh Patel 12/27/2024

FROM 0.01000ml of S12327 + 0.60000ml of E3828 + 0.40000ml of SP6685 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3764	8270/625 Stock solution 100 ng	SP6721	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.26700ml of S10104 + 0.40000ml of S11495 + 0.50000ml of S12114 + 1.00000ml of S11087 + 1.00000ml of S11161 + 1.00000ml of S12270 + 1.00000ml of S12276 + 1.00000ml of S12791 + 3.83300ml of E3874 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
413	80 ng BNA ICC, 80 PPM	SP6722	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.20000ml of E3874 + 0.80000ml of SP6721 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
412	60 ng BNA ICC, 60 PPM	SP6723	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.40000ml of E3874 + 0.60000ml of SP6721 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
411	50 ng BNA ICC, 50 PPM	SP6724	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.50000ml of E3874 + 0.50000ml of SP6721 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
410	40 ng BNA ICC, 40 PPM	SP6725	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.60000ml of E3874 + 0.40000ml of SP6721 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3678	20 ng BNA ICC, 20 PPM	SP6726	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.80000ml of E3874 + 0.20000ml of SP6721 = Final Quantity: 1.010 ml

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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	SP6727	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.90000ml of E3874 + 0.10000ml of SP6721 = 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	SP6728	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.95000ml of E3874 + 0.05000ml of SP6721 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
175	2.5 ng BNA ICC, 2.5 PPM	SP6729	01/30/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.01000ml of S12649 + 0.50000ml of E3874 + 0.50000ml of SP6728 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
171	8270/625 Spike Solution, 50/100 PPM	SP6752	03/10/2025	05/31/2025	Rahul Chavli	None	None	Jagrut Upadhyay 04/03/2025

FROM 0.10000ml of S12478 + 0.30000ml of S12525 + 0.40000ml of S10397 + 0.40000ml of S10584 + 0.40000ml of S11143 + 0.40000ml of S11487 + 0.40000ml of S11650 + 0.40000ml of S12533 + 0.40000ml of S12974 + 0.60000ml of S12486 + 0.80000ml of S12966 + 1.10000ml of S11788 + 1.20000ml of S11785 + 1.20000ml of S12483 + 1.20000ml of S12526 + 1.20000ml of S12967 + 1.20000ml of S12968 + 1.20000ml of S12970 + 1.20000ml of S12972 + 1.30000ml of S11786 + 1.30000ml of S12481 + 1.30000ml of S12482 + 1.30000ml of S12484 + 1.30000ml of S12528 + 1.30000ml of S12529 + 1.30000ml of S12531 + 1.30000ml of S12969 + 1.30000ml of S12973 + 1.40000ml of S11787 + 1.40000ml of S12479 + 1.40000ml of S12480 + 1.40000ml of S12485 + 1.40000ml of S12527 + 1.40000ml of S12530 + 1.40000ml of S12532 + 1.40000ml of S12971 + 163.00000ml of E3876 = Final Quantity: 200.000 ml

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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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

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	07/30/2025	01/30/2025 / Rajesh	01/20/2025 / Rajesh	E3874

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	08/25/2025	02/25/2025 /	02/12/2025 / Rajesh	E3876

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	08/14/2025	02/14/2025 / Rajesh	12/27/2024 / Rajesh	E3878

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

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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-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-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

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	01/29/2025 / anahy	05/18/2022 / Christian	S10397

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0187043	05/15/2025	11/15/2024 / Jagrut	02/06/2023 / Christian	S11074

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)	406703	07/30/2025	01/30/2025 / anahy	02/07/2023 / Christian	S11087

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

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	01/30/2025 / anahy	03/06/2023 / Christian	S11161

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	08/31/2026	01/29/2025 / anahy	08/10/2023 / yogesh	S11487

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	05/12/2025	11/12/2024 / Jagrut	08/11/2023 / Yogesh	S11495

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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	07/29/2025	01/29/2025 / anahy	11/21/2023 / Rahul	S11785

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	09/10/2025	03/10/2025 / anahy	11/21/2023 / Rahul	S11786

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	S11787

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 #
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	454157	05/12/2025	11/12/2024 / Jagrut	03/08/2024 / Rahul	S12114

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0203726	04/30/2025	11/14/2024 / anahy	03/15/2024 / Rahul	S12142

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	04/10/2025	10/10/2024 / anahy	03/15/2024 / Rahul	S12189

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

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

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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	05/15/2025	11/15/2024 / Jagrut	03/15/2024 / Rahul	S12208

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

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

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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

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	07/30/2025	01/30/2025 / anahy	05/24/2024 / Rahul	S12270

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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	05/12/2025	11/12/2024 / Jagrut	05/24/2024 / Rahul	S12276

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	A0206540	05/12/2025	11/12/2024 / anahy	05/30/2024 / Rahul	S12327

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	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12469

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	07/29/2025	01/29/2025 / anahy	07/23/2024 / RAHUL	S12478

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	S12479

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	S12480

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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	S12481

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	S12482

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	S12483

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	S12484

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	S12485

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

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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	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12517

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	07/29/2025	01/29/2025 / anahy	07/23/2024 / RAHUL	S12525

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12526

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12527

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12528

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12529

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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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12530

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12531

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12532

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12533

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	07/21/2025	01/21/2025 / anahy	09/20/2024 / anahy	S12649

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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	10/14/2025	04/14/2025 / Rahul	09/20/2024 / anahy	S12659

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	06/21/2025	01/30/2025 / anahy	05/24/2024 / Rahul	S12791

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	07/29/2025	01/29/2025 / anahy	12/11/2024 / anahy	S12966

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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	S12967

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	S12968

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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	09/10/2025	03/10/2025 / anahy	12/11/2024 / anahy	S12969

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	S12970

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	S12971

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	S12972

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	S12973

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

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	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

CPI INTERNATIONAL

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(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	406703	≤ -10 °C	Methylene Chloride	3/30/2025	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	99.5	74.3.26P	989 ± 7.53

Received on
02/07/23
by
CG

S11084
to
S11088

*Not a certified value

Certified By: _____
Jacob Mulloy
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 gravimetricllly.

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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.

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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.

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received 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.

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Certificate #3222.01

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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.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on 02/06/23 by CG

S11071 to S11075

Catalog No. : 31853 **Lot No.:** A0187043

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	2,019.0 µg/mL	+/- 11.8486	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBN5929)		+/- 43.2570	µg/mL	Unstressed
	Purity 99%		+/- 44.5129	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

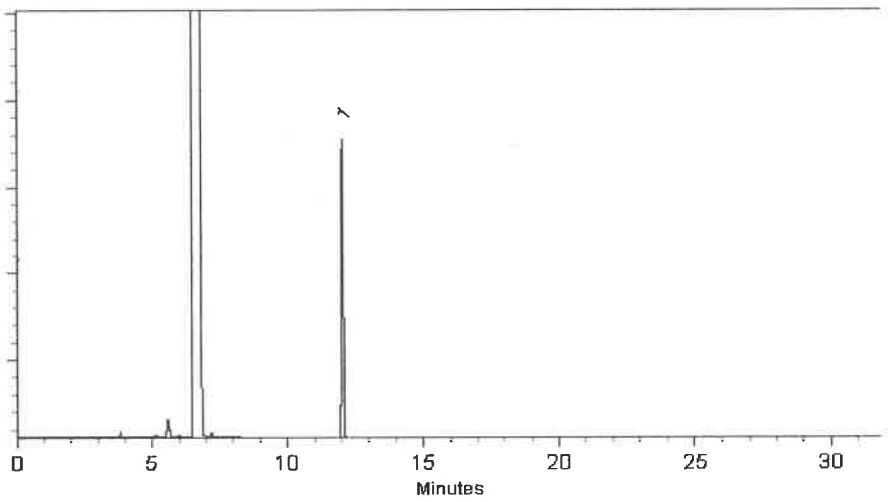
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I

Date Mixed: 07-Jul-2022 **Balance:** 1128360905

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 12-Jul-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

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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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 24J0862003
Manufactured Date: 2024-09-12
Expiration Date:2025-12-12
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Titrable Acid (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 3828

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

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

E 3874

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date:2026-01-07
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 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	<= 0.3	0.0
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 3878

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

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

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6/21

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.190
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

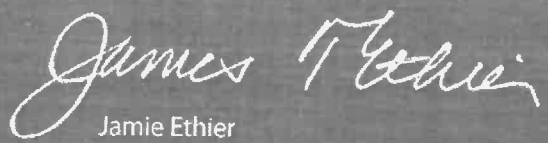
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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
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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.)

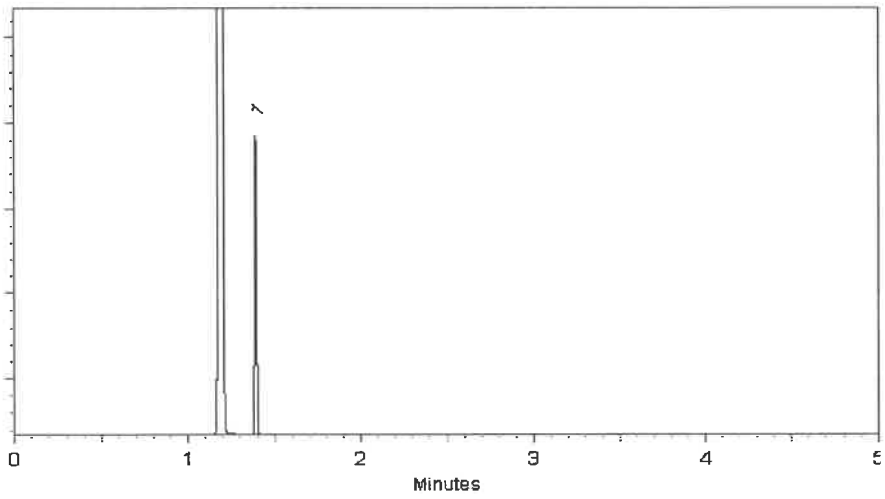
Inj. Temp:
250°C

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.

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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.)

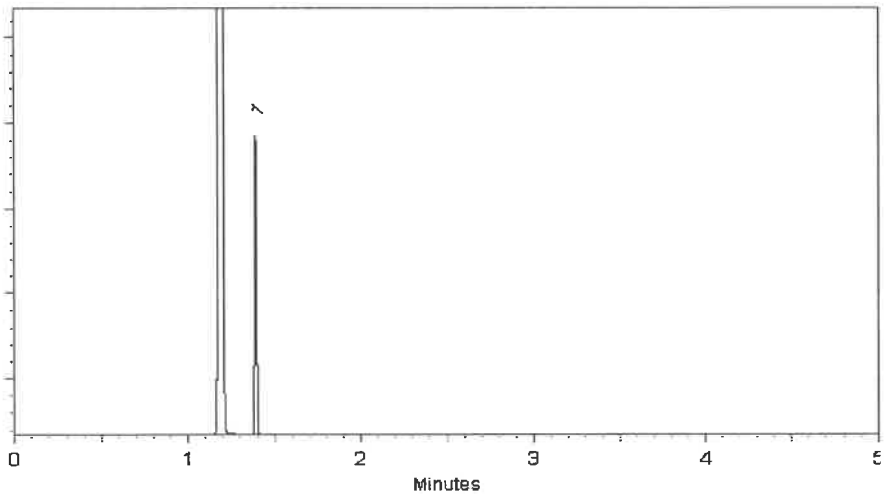
Inj. Temp:
250°C

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.

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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.)

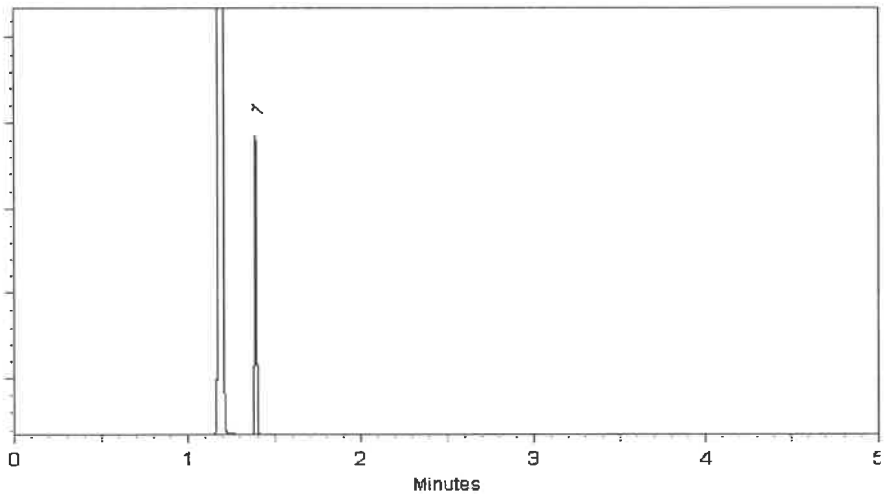
Inj. Temp:
250°C

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.
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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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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.)

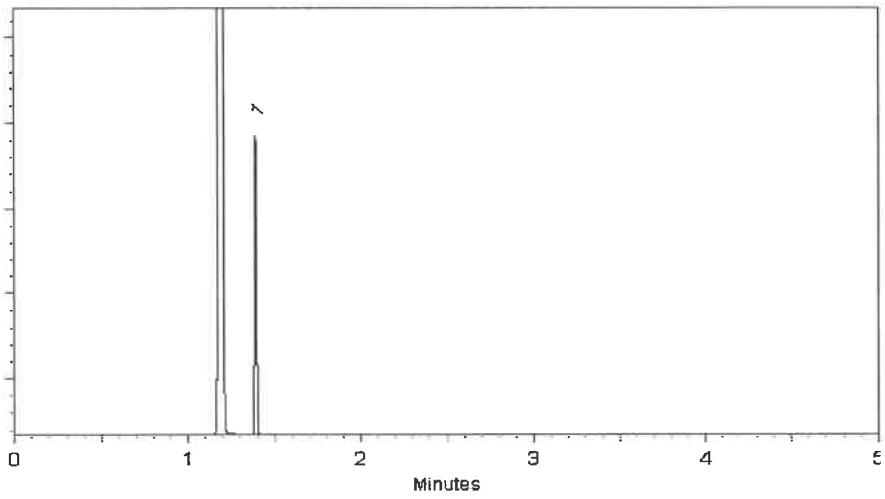
Inj. Temp:
250°C

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.
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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.

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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.:** A0203726

Description : 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

S12117 ↓ S12146 RC/ 03/18/24

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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%	1,001.6 µg/mL	+/- 36.4412
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.9 µg/mL	+/- 36.5968
3	Phenol	108-95-2	MKCK1120	99%	1,003.3 µg/mL	+/- 36.5038
4	Aniline	62-53-3	X22F726	99%	1,005.8 µg/mL	+/- 36.5928
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,008.1 µg/mL	+/- 36.6776
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,001.8 µg/mL	+/- 36.4492
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,002.3 µg/mL	+/- 36.4654
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,003.7 µg/mL	+/- 36.5159
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,008.7 µg/mL	+/- 36.6979
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,000.3 µg/mL	+/- 36.3926
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,003.5 µg/mL	+/- 36.5099
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,007.3 µg/mL	+/- 36.6493
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	504.3 µg/mL	+/- 18.3500
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.6 µg/mL	+/- 18.3237
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,008.3 µg/mL	+/- 36.6857
16	Hexachloroethane	67-72-1	QTORH	99%	1,007.5 µg/mL	+/- 36.6554
17	Nitrobenzene	98-95-3	10224044	99%	1,008.6 µg/mL	+/- 36.6938

18	Isophorone	78-59-1	MKCC9506	99%	1,005.9	µg/mL	+/- 36.5988
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/- 36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/- 36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/- 36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/- 36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/- 36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/- 36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/- 36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/- 36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/- 36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/- 36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/- 36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/- 36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/- 36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/- 36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/- 36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/- 36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/- 36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/- 36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/- 36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/- 36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/- 36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/- 36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/- 36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/- 36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/- 36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/- 36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/- 36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/- 36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/- 36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/- 36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/- 36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/- 36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/- 36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/- 36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/- 36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	BCCK0887	99%	1,005.8	µg/mL	+/- 36.5928
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,003.0	µg/mL	+/- 36.4917
57	Hexachlorobenzene	118-74-1	14821700	99%	1,007.5	µg/mL	+/- 36.6554
58	Pentachlorophenol	87-86-5	RP230530RSR	99%	1,008.8	µg/mL	+/- 36.7019
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,008.4	µg/mL	+/- 36.6877
60	Anthracene	120-12-7	MKCR0570	99%	1,009.0	µg/mL	+/- 36.7100
61	Carbazole	86-74-8	14351100	99%	1,000.9	µg/mL	+/- 36.4149
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,007.6	µg/mL	+/- 36.6595
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,009.6	µg/mL	+/- 36.7302
64	Pyrene	129-00-0	BCCG8479	98%	1,007.2	µg/mL	+/- 36.6453
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,002.1	µg/mL	+/- 36.4573
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.2	µg/mL	+/- 36.5705
67	Benz(a)anthracene	56-55-3	I220012022BAA	99%	1,002.2	µg/mL	+/- 36.4614
68	Chrysene	218-01-9	RP230601	99%	1,008.3	µg/mL	+/- 36.6837
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,001.8	µg/mL	+/- 36.4472
70	Di-n-octyl phthalate	117-84-0	14382700	99%	1,006.0	µg/mL	+/- 36.6008
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,002.8	µg/mL	+/- 36.4836
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,003.0	µg/mL	+/- 36.4917
73	Benzo(a)pyrene	50-32-8	P54915-0703	99%	1,002.3	µg/mL	+/- 36.4674
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,009.4	µg/mL	+/- 36.7243
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,007.6	µg/mL	+/- 36.6595
76	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	1,002.9	µg/mL	+/- 36.4876

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

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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.)

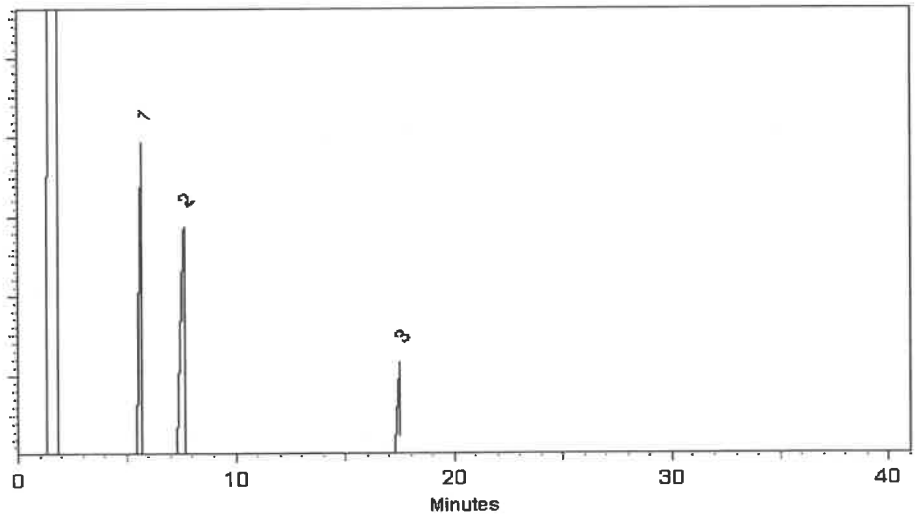
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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

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Certificate #3222.02

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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.)

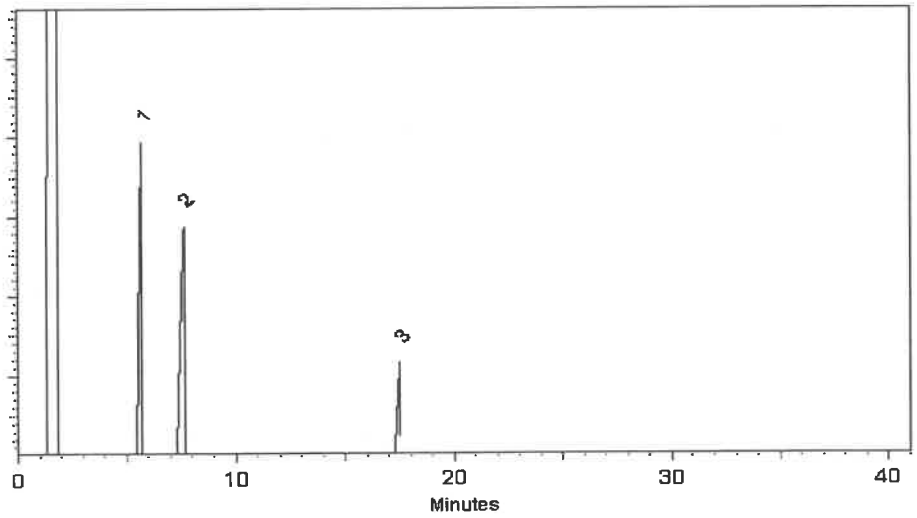
Inj. Temp:
250°C

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

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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.)

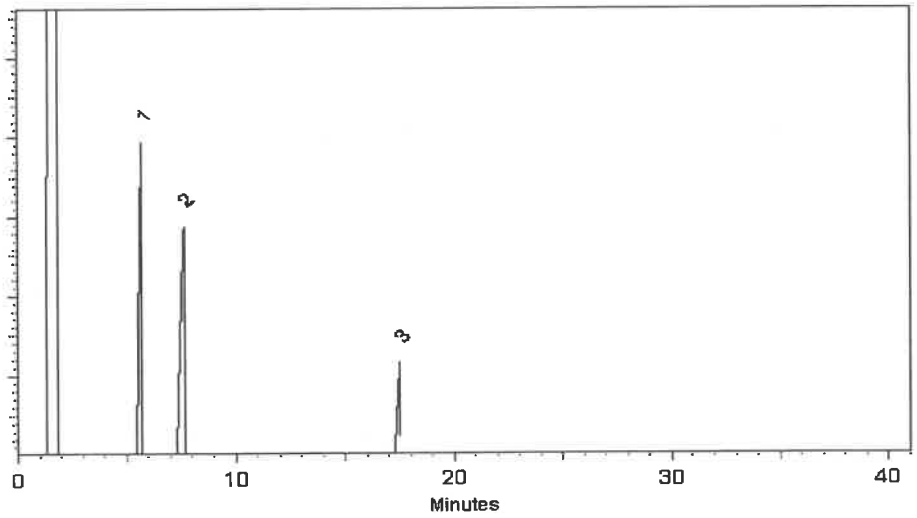
Inj. Temp:
250°C

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

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.)

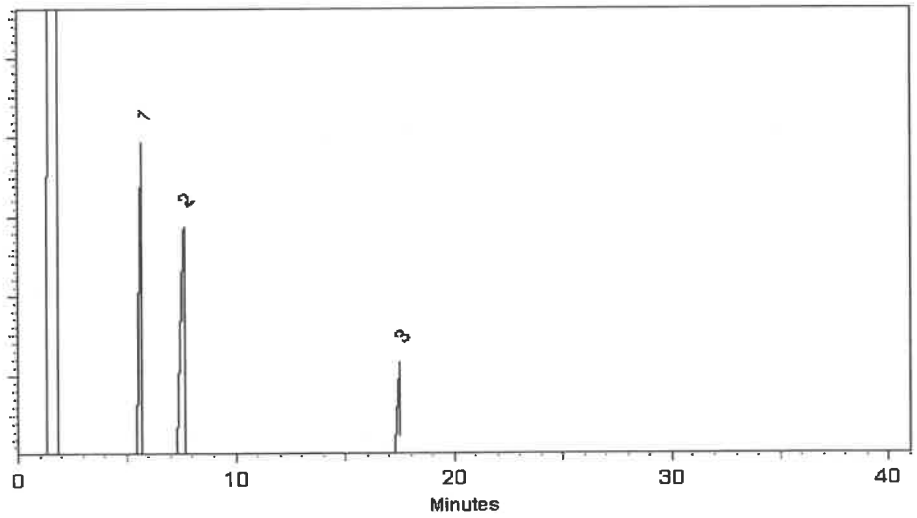
Inj. Temp:
250°C

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

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.)

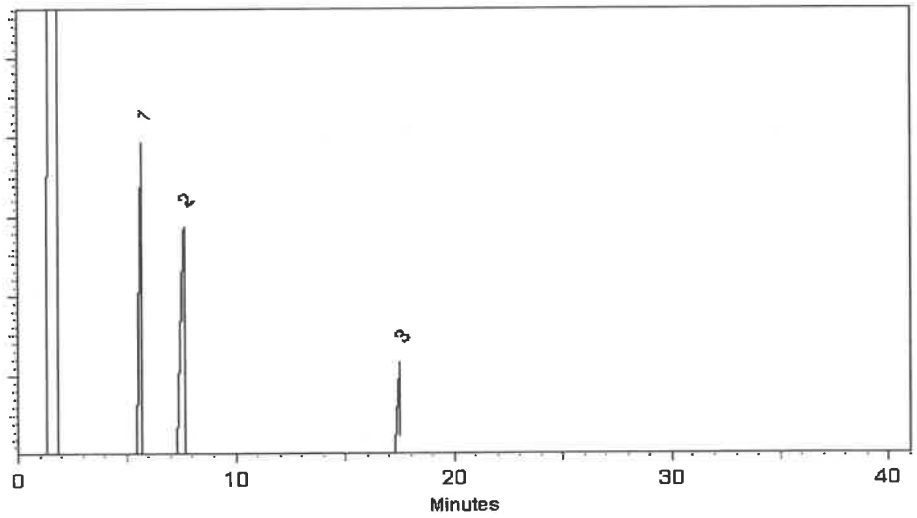
Inj. Temp:
250°C

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

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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.)

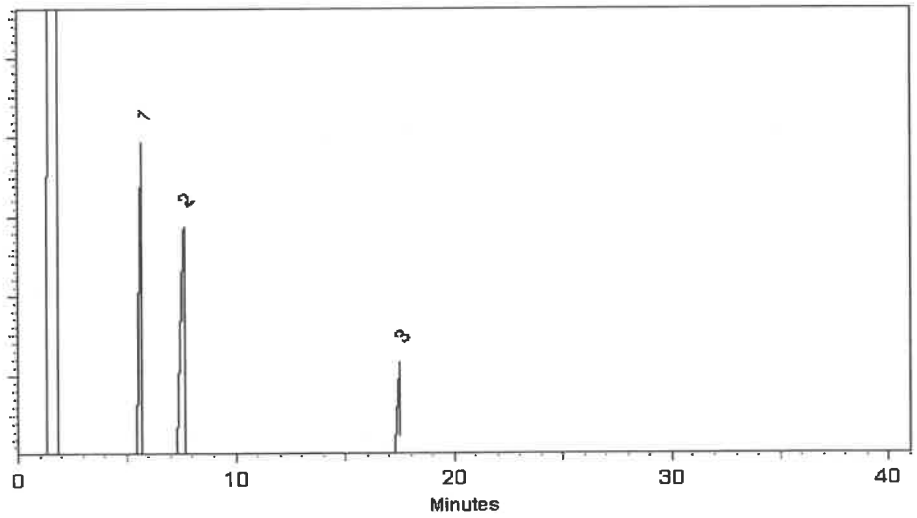
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.)

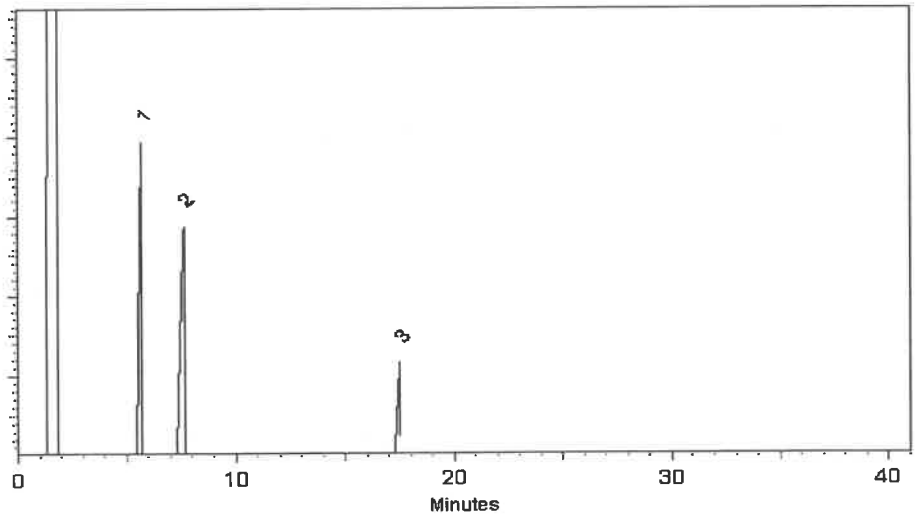
Inj. Temp:
250°C

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

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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.)

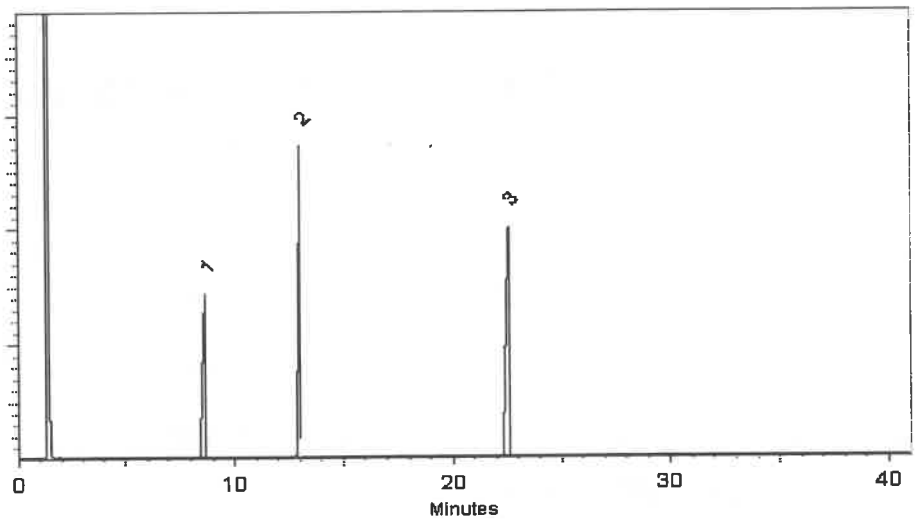
Inj. Temp:
250°C

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

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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.)

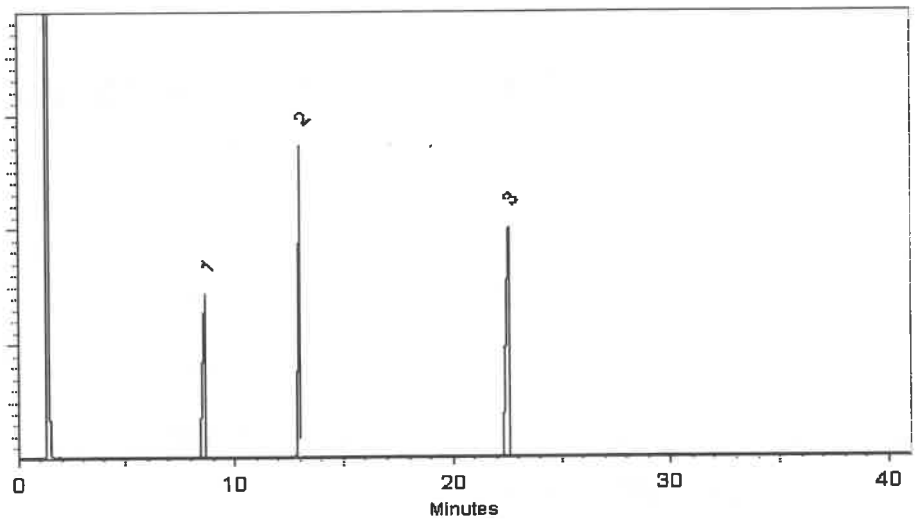
Inj. Temp:
250°C

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

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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.)

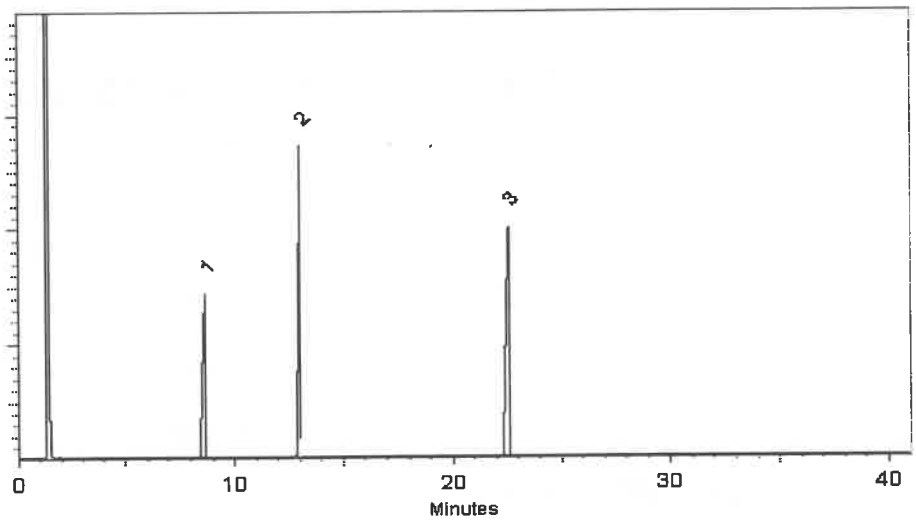
Inj. Temp:
250°C

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

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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.)

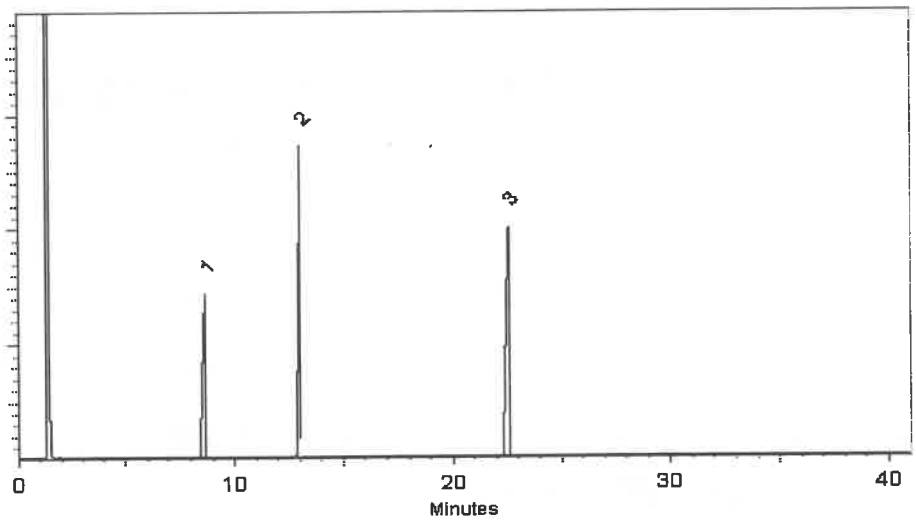
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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
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S12207 ↓ S12221 RC/ 03/18/24

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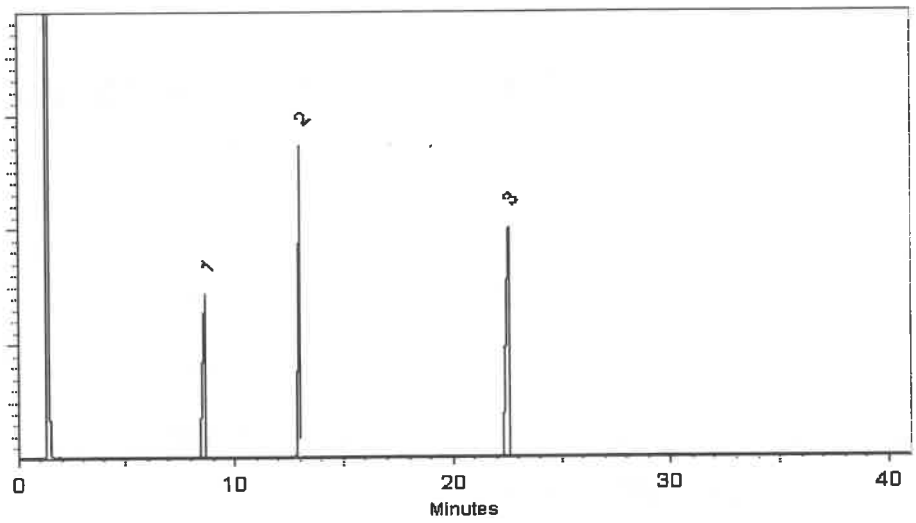
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Inj. Vol
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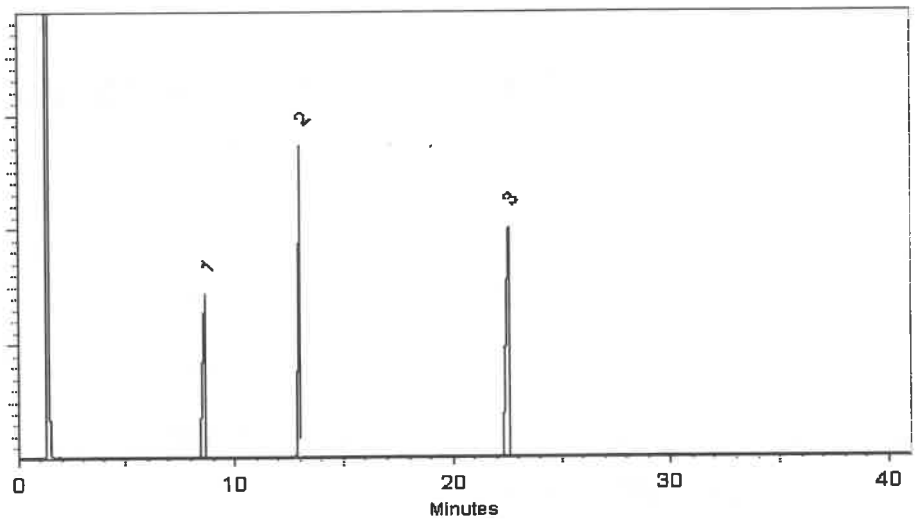
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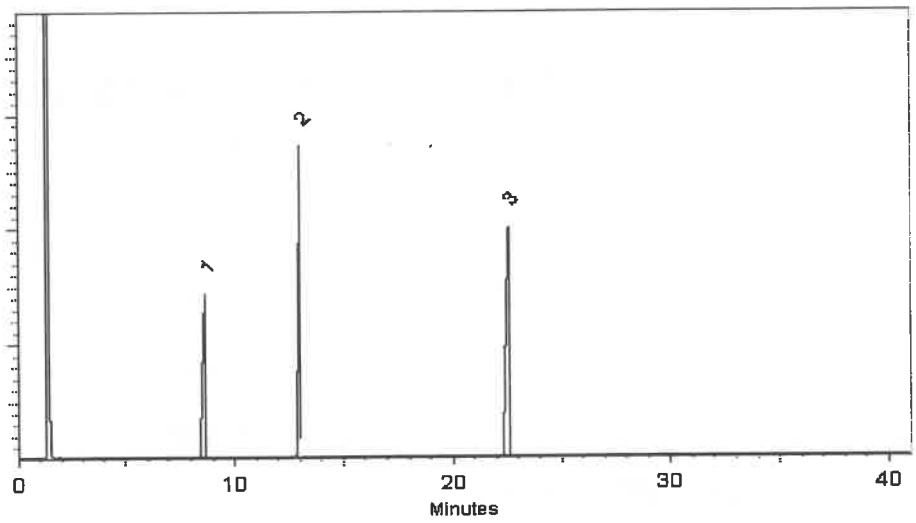
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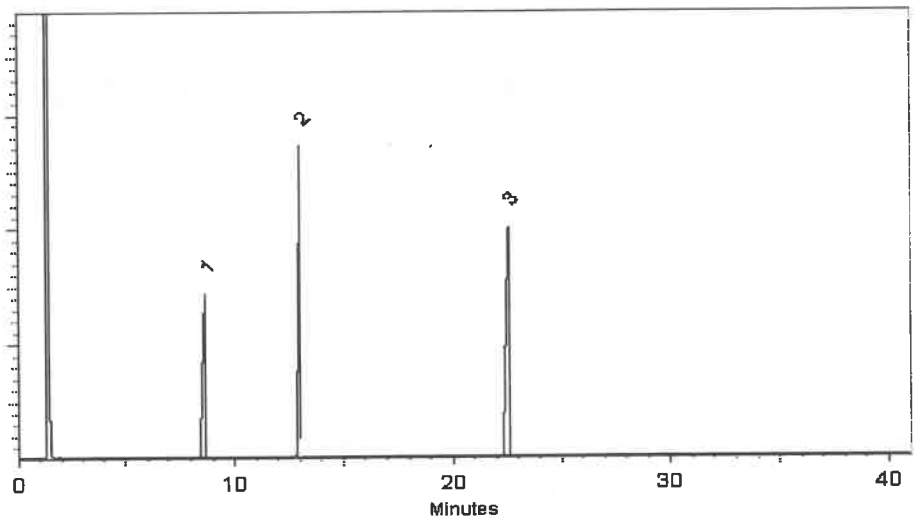
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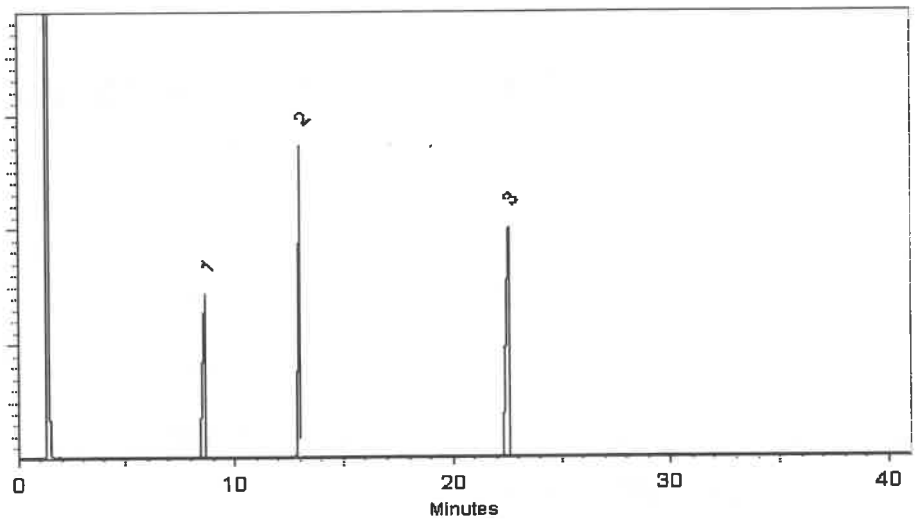
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Jennifer Pollino - Operations Tech III - ARM QC

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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

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Certified By: Kerry E Kane

Kerry Kane
Chemist

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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

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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.

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chromatographic plus

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S12312 ↓ S12331 } RC/ 05/30/24

Catalog No. : 31206 **Lot No.:** A0206540

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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%	2,007.1 µg/mL	+/- 90.4025
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,005.9 µg/mL	+/- 90.3454
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,007.9 µg/mL	+/- 90.4385
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,006.7 µg/mL	+/- 90.3845
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,015.5 µg/mL	+/- 90.7778
6	Perylene-d12	1520-96-3	PR-33205	99%	2,014.7 µg/mL	+/- 90.7448

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

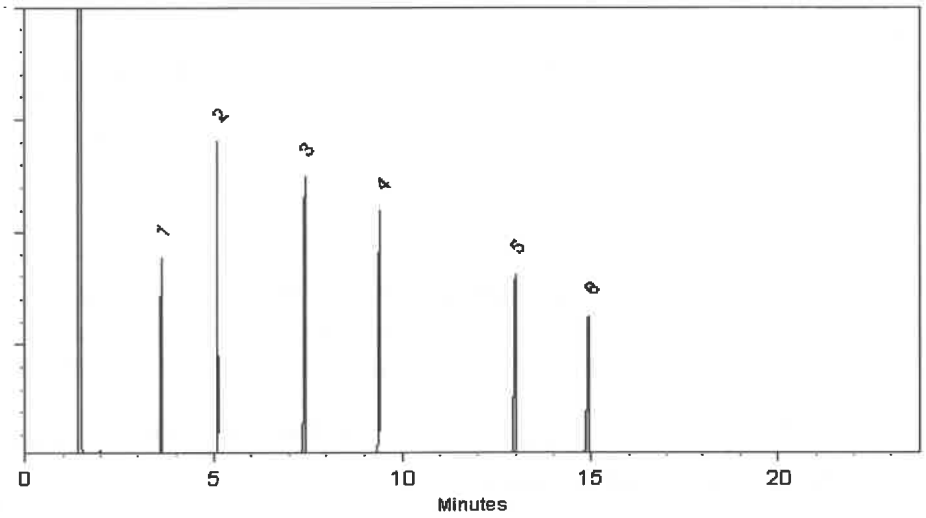
Inj. Temp:
250°C

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.

Malina Homan - Operations Technician I

Date Mixed: 12-Jan-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jan-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Certificate of Analysis

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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.
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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

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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

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Manufacturing Notes:

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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:

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Manufacturing Notes:

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Handling Notes:

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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.
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- Purity values are rounded to the nearest whole number.

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  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:

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Handling Notes:

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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
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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

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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)
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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

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Expiration Date : July 31, 2026 **Storage:** 10°C or colder

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CAS # 75-09-2
Purity 99%

S12449 ↓ S12508 } RC 7/24/24

Rebecca Gingerich - Operations Tech II

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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

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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

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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

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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

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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

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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
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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

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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

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- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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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.
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- 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%.

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- 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
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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

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.

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Certificate of Analysis

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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.)

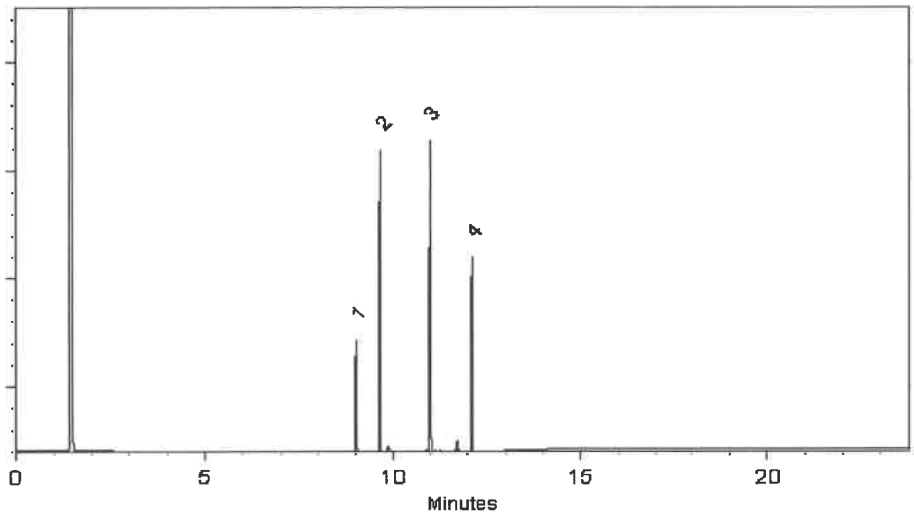
Inj. Temp:
250°C

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

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chromatographic plus

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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

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.

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Certificate #3222.01

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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.

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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.

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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

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Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
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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.

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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.

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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.

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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.

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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.



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. Q17446
COC Number 2046610

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Gannett Fleming
ADDRESS: 1010 Adams Ave
CITY: Audobon STATE: PA ZIP: 19405
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak Replacement of SB
PROJECT NO.: 950000818 LOCATION: Kearny, NJ
PROJECT MANAGER: Joe Krupansky
e-mail: QAQC@BEMSYS.com
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Alliance PO#:
ADDRESS: 284 Sheffield St
CITY Mountainside STATE: NJ ZIP: 07093
ATTENTION: Samaila Beasly PHONE: 9087883148

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 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 BEM EDD

ANALYSIS

1. PCBs
2. TAL Metals
3. TCL-VOC+10
4. Cr(VI) Cr(III)
5. TCL-SVOCs-BNA-20
6. EPH
7. RCRA
8. TCLP
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.	B-158-GW01	GW		X	4/5/25	2300	8	X	X	X	X	X	X				
2.	B-149-SB01	S		X	4/5/25	2025	9	X	X	X	X	X	X	X	X		
3.	B-149-SB02	S		X	4/6/25	110	7										
4.	B-149-GW01	GW		X	4/6/25	345	8	X	X	X	X	X	X				
5.	~~EB~~																
6.	~~TB~~				~~NA~~	~~NA~~				~~X~~							
7.	EB_2025.4.7	WQ			4/7/25	830	9	X	X	X	X	X	X				
8.	TB-2025.4.7	-			-	-				X							
9.																	
10.																	

PRESERVATIVES: ← 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. Natali Bucca	4-7-25 1040	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.1 °C
Comments: B-149-SB02 has limited volume IP-6m #1 "Adjust factor +1"

Page _____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1746 PORT06 **Order Date :** 4/7/2025 12:00:00 PM **Project Mgr :**
Client Name : Portal Partners Tri-Venture **Project Name :** Amtrak Sawtooth Bridges 2 **Report Type :** NJ Reduced
Client Contact : Joseph Krupansky **Receive DateTime :** 4/7/2025 10:40:00 AM **EDD Type :** EXCEL NJCLEANUP
Invoice Name : Portal Partners Tri-Venture **Purchase Order :** **Hard Copy Date :**
Invoice Contact : Joseph Krupansky **Date Signoff :**

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1746-01	B-149-SB01	Solid	04/05/2025	20:25					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1746-03	B-149-SB02	Solid	04/06/2025	01:10					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q1746-05	B-158-GW01	Water	04/05/2025	23:00					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
Q1746-06	B-149-GW01	Water	~~04/05/2025~~ 04/06/2025 yg 04/06/25	03:45					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
Q1746-07	EB-2025-4-7	Water	04/07/2025	08:30					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
Q1746-08	TB-2025-4-7	Water	04/07/2025	00:00					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID :	Q1746 PORT06	**Order Date :**	4/7/2025 12:00:00 PM	**Project Mgr :**	
Client Name :	Portal Partners Tri-Venture	**Project Name :**	Amtrak Sawtooth Bridges 2	**Report Type :**	NJ Reduced
Client Contact :	Joseph Krupansky	**Receive DateTime :**	4/7/2025 10:40:00 AM	**EDD Type :**	EXCEL NJCLEANUP
Invoice Name :	Portal Partners Tri-Venture	**Purchase Order :**		**Hard Copy Date :**	
Invoice Contact :	Joseph Krupansky			**Date Signoff :**	

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

Relinguished By : _____

Date / Time : 4-7-25 1255

Received By : _____

Date / Time : 4.7.25 12:55

Storage Area : **VOA Refridgerator Room**