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Fax : 908 789 8922

Cover Page

Order ID : Q2008

Project ID : Former Schlumberger Site Princeton NJ 2025

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
Q2008-01	IDW-AQ-DRUM-633-05092025
Q2008-03	IDW-AQ-DRUM-633-05092025

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: 5/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger Site Princeton NJ 2025
Project # N/A
Order ID # Q2008
Test Name: SVOC-TCL BNA -20

A. Number of Samples and Date of Receipt:
1 Water sample was received on 05/09/2025.
1 Water sample was received on 05/09/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Flash Point, Gasoline Range Organics, Mercury, Metals ICP-TAL, METALS-TAL, pH, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe 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 IDW-AQ-DRUM-633-05092025 [2-Fluorophenol - 13%- Phenol-d6 - 9%]. 2-Fluorophenol did not meet the NJDKQP criteria but met the in-house criteria. AS per method one Acid surrogate is allowed to fail, Therefore no corrective action required.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The MS {Q1993-02MS} with File ID: BF142341.D recoveries met the requirements for all compounds except for 2-Methylphenol[64%], 3-Nitroaniline[50%], 4-Chloroaniline[29%], Benzo(g,h,i)perylene[64%], Caprolactam[19%] and Diethylphthalate[60%] . These compounds did not meet the NJDKQP criteria but met the in-house criteria, due to matrix interference.
The MSD {Q1993-03MSD} with File ID: BF142342.D recoveries met the acceptable requirements except for 2-Methylphenol[68%], 3-Nitroaniline[52%], 4-Chloroaniline[30%], Benzo(g,h,i)perylene[66%] and Diethylphthalate[68%]. These compounds did not meet the NJDKQP criteria but met the in-house criteria, due to matrix interference.
The RPD met criteria .

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The Blank Spike for {PB167951BS} with File ID: BF142338.D met requirements for all samples except for 4-Chloroaniline[25%] . This compound 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-BF050525.M) for 2-Nitrophenol, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Butylbenzlphthalate, Bis(2-ethylhexyl)phthalate, Di-n-octyl phthalate, these compound are passing on Linear Regression .

The Continuous Calibration File ID BF142336.D met the requirements except for 2,3,4,6-Tetrachlorophenol,2,4,5-Trichlorophenol,2,4,6-Trichlorophenol,2,4-Dichlorophenol,2,4-Dinitrotoluene,2,6-Dinitrotoluene,2-Nitroaniline,3,3-Dichlorobenzidine,3-Nitroaniline,4-Nitroaniline,4-Nitrophenol,Atrazine,Caprolactam,Di-n-butylphthalate, Hexachlorocyclopentadiene, Nitrobenzene, Pentachlorophenol, Phenol,2,4,6-Tribromophenol and Nitrobenzene-d5 . But associated samples have not positive hit for these compounds therefore no corrective action was taken.
The Tuning criteria met requirements.

E. Additional Comments:
The Form 6 is not included in the data package because the Initial Calibration was performed using 8 points.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

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 #: **Q2008**

	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:** **05/17/2025**

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LAB CHRONICLE

OrderID:	Q2008	**OrderDate:**	5/9/2025 3:21:23 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger Site Princeton NJ 2025
Contact:	Mary I. Murphy	**Location:**	L41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2008-01	**IDW-AQ-DRUM-633-05092025**	**Water**			**05/09/25**			**05/09/25**
			SVOC-TCL BNA -20	8270E		05/12/25	05/13/25	

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Hit Summary Sheet
SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Sample ID	Client ID	Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**IDW-AQ-DRUM-633-05092025**							
Q2008-01	IDW-AQ-DRUM-633-05 WATER	Butylbenzylphthalate		4.100	J	2.1	5.3	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	Bis(2-ethylhexyl)phthalate		5.500		1.7	5.3	ug/L
		Total Svoc :				**9.60**		
Q2008-01	IDW-AQ-DRUM-633-05 WATER	.beta.-Acetylacrylic acid	*	9.800	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	1H-Pyrazole-3,4-diamine, 1,5-dim	*	19.100	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	2,5-Hexanedione	*	190.000	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	2-Propanone, 1,1,3-trichloro-	*	57.400	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	2-Propanone, 1,1-dichloro-	*	67.800	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	2-Propanone, 1,3-dichloro-	*	1,100.000	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	2-Propanone, 1-chloro-	*	520.000	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	Acetic acid, chloro-, ethyl ester	*	43.400	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	Furazan, 3,4-bis(chloroacetylamin	*	8.800	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	n-Hexadecanoic acid	*	7.800	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	Octadecanoic acid	*	20.100	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	unknown10.292	*	11.100	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	unknown3.675	*	16.800	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	unknown6.340	*	16.200	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	unknown6.798	*	14.300	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	unknown7.722	*	120.000	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	unknown8.322	*	23.100	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	unknown9.163	*	13.200	J	0	0	ug/L
Q2008-01	IDW-AQ-DRUM-633-05 WATER	Butane, 2-methoxy-2-methyl-	*	87.800	J	0	0	ug/L
		Total Tics :				**2,346.70**		
		Total Concentration:				**2,356.30**		

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB167951BL	PB167951BL	2-Fluorophenol	150	123	82		15 (10)	110 (139)
		Phenol-d6	150	119	79		15 (10)	110 (134)
		Nitrobenzene-d5	100	82.0	82		30 (49)	130 (133)
		2-Fluorobiphenyl	100	70.8	71		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	137	92		15 (44)	110 (137)
		Terphenyl-d14	100	64.9	65		30 (48)	130 (125)
PB167951BS	PB167951BS	2-Fluorophenol	150	121	80		15 (10)	110 (139)
		Phenol-d6	150	122	81		15 (10)	110 (134)
		Nitrobenzene-d5	100	82.7	83		30 (49)	130 (133)
		2-Fluorobiphenyl	100	72.3	72		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	144	96		15 (44)	110 (137)
		Terphenyl-d14	100	77.8	78		30 (48)	130 (125)
Q1993-02MS	MW-3-20250508MS	2-Fluorophenol	150	63.4	42		15 (10)	110 (139)
		Phenol-d6	150	41.2	27		15 (10)	110 (134)
		Nitrobenzene-d5	100	86.2	86		30 (49)	130 (133)
		2-Fluorobiphenyl	100	74.5	74		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	139	93		15 (44)	110 (137)
		Terphenyl-d14	100	69.6	70		30 (48)	130 (125)
Q1993-03MSD	MW-3-20250508MSD	2-Fluorophenol	150	67.3	45		15 (10)	110 (139)
		Phenol-d6	150	44.1	29		15 (10)	110 (134)
		Nitrobenzene-d5	100	91.3	91		30 (49)	130 (133)
		2-Fluorobiphenyl	100	77.7	78		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	149	99		15 (44)	110 (137)
		Terphenyl-d14	100	72.6	73		30 (48)	130 (125)
Q2008-01	IDW-AQ-DRUM-633-05092025	2-Fluorophenol	150	19.6	13	*	15 (10)	110 (139)
		Phenol-d6	150	13.2	9	*	15 (10)	110 (134)
		Nitrobenzene-d5	100	89.6	90		30 (49)	130 (133)
		2-Fluorobiphenyl	100	65.8	66		30 (52)	130 (132)
		2,4,6-Tribromophenol	150	83.9	56		15 (44)	110 (137)
		Terphenyl-d14	100	71.0	71		30 (48)	130 (125)

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1993-02MS		**Client Sample ID: MW-3-20250508MS**						**DataFile: BF142341.D**			
Benzaldehyde	50	0	36.1	ug/L	72				20 (10)	160 (137)	
Phenol	50	0	15.7	ug/L	31				20 (10)	160 (130)	
bis(2-Chloroethyl)ether	50	0	35.0	ug/L	70				70 (29)	130 (141)	
2-Chlorophenol	50	0	37.4	ug/L	75				70 (23)	130 (127)	
2-Methylphenol	50	0	31.8	ug/L	64	*			70 (60)	130 (131)	
2,2-oxybis(1-Chloropropane)	50	0	39.4	ug/L	79				70 (36)	130 (141)	
Acetophenone	50	0	43.2	ug/L	86				70 (31)	130 (164)	
3+4-Methylphenols	50	0	28.6	ug/L	57				20 (54)	160 (136)	
N-Nitroso-di-n-propylamine	50	0	42.9	ug/L	86				70 (36)	130 (147)	
Hexachloroethane	50	0	34.3	ug/L	69				20 (19)	160 (146)	
Nitrobenzene	50	0	46.3	ug/L	93				70 (62)	130 (112)	
Isophorone	50	0	44.7	ug/L	89				70 (39)	130 (146)	
2-Nitrophenol	50	0	49.6	ug/L	99				70 (30)	130 (148)	
2,4-Dimethylphenol	50	0	42.1	ug/L	84				70 (17)	130 (143)	
bis(2-Chloroethoxy)methane	50	0	43.8	ug/L	88				70 (39)	130 (143)	
2,4-Dichlorophenol	50	0	44.5	ug/L	89				70 (22)	130 (146)	
Naphthalene	50	0	40.6	ug/L	81				70 (17)	130 (157)	
4-Chloroaniline	50	0	14.7	ug/L	29	*			70 (10)	130 (95)	
Hexachlorobutadiene	50	0	38.4	ug/L	77				70 (52)	130 (125)	
Caprolactam	50	0	9.30	ug/L	19	*			20 (10)	160 (130)	
4-Chloro-3-methylphenol	50	0	40.8	ug/L	82				70 (17)	130 (148)	
2-Methylnaphthalene	50	0	42.6	ug/L	85				70 (38)	130 (146)	
Hexachlorocyclopentadiene	100	0	77.1	ug/L	77				20 (20)	160 (153)	
2,4,6-Trichlorophenol	50	0	48.7	ug/L	97				70 (78)	130 (112)	
2,4,5-Trichlorophenol	50	0	46.2	ug/L	92				70 (71)	130 (111)	
1,1-Biphenyl	50	0	43.3	ug/L	87				70 (38)	130 (154)	
2-Chloronaphthalene	50	0	42.8	ug/L	86				70 (41)	130 (145)	
2-Nitroaniline	50	0	52.4	ug/L	105				70 (39)	130 (151)	
Dimethylphthalate	50	0	46.5	ug/L	93				70 (42)	130 (147)	
Acenaphthylene	50	0	43.0	ug/L	86				70 (40)	130 (141)	
2,6-Dinitrotoluene	50	0	53.9	ug/L	108				70 (43)	130 (148)	
3-Nitroaniline	50	0	25.2	ug/L	50	*			70 (10)	130 (111)	
Acenaphthene	50	0	47.5	ug/L	95				70 (37)	130 (146)	
2,4-Dinitrophenol	100	0	98.5	ug/L	99				20 (14)	160 (167)	
4-Nitrophenol	100	0	37.0	ug/L	37				20 (10)	160 (130)	
Dibenzofuran	50	0	42.9	ug/L	86				70 (41)	130 (145)	
2,4-Dinitrotoluene	50	0	56.1	ug/L	112				70 (74)	130 (137)	
Diethylphthalate	50	41.1	70.9	ug/L	60	*			70 (41)	130 (148)	
4-Chlorophenyl-phenylether	50	0	43.6	ug/L	87				70 (38)	130 (149)	
Fluorene	50	0	42.6	ug/L	85				70 (39)	130 (144)	
4-Nitroaniline	50	0	51.9	ug/L	104				70 (27)	130 (138)	
4,6-Dinitro-2-methylphenol	50	0	53.7	ug/L	107				70 (32)	130 (175)	
N-Nitrosodiphenylamine	50	0	47.6	ug/L	95				70 (40)	130 (150)	
4-Bromophenyl-phenylether	50	0	48.4	ug/L	97				70 (42)	130 (151)	
Hexachlorobenzene	50	0	47.7	ug/L	95				70 (72)	130 (115)	
Atrazine	50	0	48.2	ug/L	96				70 (20)	130 (162)	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Pentachlorophenol	100	0	100	ug/L	100				20 (52)	160 (162)	
Phenanthrene	50	0	44.0	ug/L	88				70 (40)	130 (147)	
Anthracene	50	0	43.9	ug/L	88				70 (41)	130 (146)	
Carbazole	50	0	41.1	ug/L	82				70 (37)	130 (154)	
Di-n-butylphthalate	50	0	52.0	ug/L	104				70 (40)	130 (151)	
Fluoranthene	50	0	39.5	ug/L	79				70 (42)	130 (146)	
Pyrene	50	0	40.2	ug/L	80				70 (41)	130 (149)	
Butylbenzylphthalate	50	0	54.8	ug/L	110				70 (39)	130 (155)	
3,3-Dichlorobenzidine	50	0	40.5	ug/L	81				70 (10)	130 (114)	
Benzo(a)anthracene	50	0	46.2	ug/L	92				70 (41)	130 (147)	
Chrysene	50	0	45.3	ug/L	91				70 (44)	130 (144)	
bis(2-Ethylhexyl)phthalate	50	8.70	59.5	ug/L	102				70 (33)	130 (160)	
Di-n-octyl phthalate	50	0	52.5	ug/L	105				70 (36)	130 (158)	
Benzo(b)fluoranthene	50	0	46.9	ug/L	94				70 (40)	130 (150)	
Benzo(k)fluoranthene	50	0	46.3	ug/L	93				70 (40)	130 (147)	
Benzo(a)pyrene	50	0	47.6	ug/L	95				70 (42)	130 (147)	
Indeno(1,2,3-cd)pyrene	50	0	35.7	ug/L	71				70 (30)	130 (166)	
Dibenz(a,h)anthracene	50	0	36.2	ug/L	72				70 (23)	130 (172)	
Benzo(g,h,i)perylene	50	0	31.9	ug/L	64	*			70 (27)	130 (167)	
1,2,4,5-Tetrachlorobenzene	50	0	42.5	ug/L	85				70 (89)	130 (102)	
1,4-Dioxane	50	0	17.9	ug/L	36				20 (38)	160 (130)	
2,3,4,6-Tetrachlorophenol	50	0	49.1	ug/L	98				70 (91)	130 (111)	

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Fax : 908 789 8922

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1993-03MSD		**Client Sample ID: MW-3-20250508MSD**						**DataFile: BF142342.D**			
Benzaldehyde	50	0	38.2	ug/L	76		5		20 (10)	160 (137)	20 (20)
Phenol	50	0	16.6	ug/L	33		6		20 (10)	160 (130)	20 (20)
bis(2-Chloroethyl)ether	50	0	37.1	ug/L	74		6		70 (29)	130 (141)	20 (20)
2-Chlorophenol	50	0	39.6	ug/L	79		5		70 (23)	130 (127)	20 (20)
2-Methylphenol	50	0	34.2	ug/L	68	*	6		70 (60)	130 (131)	20 (20)
2,2-oxybis(1-Chloropropane)	50	0	41.4	ug/L	83		5		70 (36)	130 (141)	20 (20)
Acetophenone	50	0	45.4	ug/L	91		6		70 (31)	130 (164)	20 (20)
3+4-Methylphenols	50	0	30.3	ug/L	61		7		20 (54)	160 (136)	20 (20)
N-Nitroso-di-n-propylamine	50	0	45.2	ug/L	90		5		70 (36)	130 (147)	20 (20)
Hexachloroethane	50	0	35.6	ug/L	71		3		20 (19)	160 (146)	20 (20)
Nitrobenzene	50	0	49.8	ug/L	100		7		70 (62)	130 (112)	20 (20)
Isophorone	50	0	47.0	ug/L	94		5		70 (39)	130 (146)	20 (20)
2-Nitrophenol	50	0	52.7	ug/L	105		6		70 (30)	130 (148)	20 (20)
2,4-Dimethylphenol	50	0	44.5	ug/L	89		6		70 (17)	130 (143)	20 (20)
bis(2-Chloroethoxy)methane	50	0	46.1	ug/L	92		4		70 (39)	130 (143)	20 (20)
2,4-Dichlorophenol	50	0	46.8	ug/L	94		5		70 (22)	130 (146)	20 (20)
Naphthalene	50	0	42.7	ug/L	85		5		70 (17)	130 (157)	20 (20)
4-Chloroaniline	50	0	15.0	ug/L	30	*	3		70 (10)	130 (95)	20 (20)
Hexachlorobutadiene	50	0	40.1	ug/L	80		4		70 (52)	130 (125)	20 (20)
Caprolactam	50	0	10.5	ug/L	21		10		20 (10)	160 (130)	20 (20)
4-Chloro-3-methylphenol	50	0	43.4	ug/L	87		6		70 (17)	130 (148)	20 (20)
2-Methylnaphthalene	50	0	44.2	ug/L	88		3		70 (38)	130 (146)	20 (20)
Hexachlorocyclopentadiene	100	0	80.5	ug/L	81		5		20 (20)	160 (153)	20 (20)
2,4,6-Trichlorophenol	50	0	51.7	ug/L	103		6		70 (78)	130 (112)	20 (20)
2,4,5-Trichlorophenol	50	0	50.0	ug/L	100		8		70 (71)	130 (111)	20 (20)
1,1-Biphenyl	50	0	45.6	ug/L	91		4		70 (38)	130 (154)	20 (20)
2-Chloronaphthalene	50	0	45.5	ug/L	91		6		70 (41)	130 (145)	20 (20)
2-Nitroaniline	50	0	56.9	ug/L	114		8		70 (39)	130 (151)	20 (20)
Dimethylphthalate	50	0	49.3	ug/L	99		6		70 (42)	130 (147)	20 (20)
Acenaphthylene	50	0	45.5	ug/L	91		6		70 (40)	130 (141)	20 (20)
2,6-Dinitrotoluene	50	0	57.7	ug/L	115		6		70 (43)	130 (148)	20 (20)
3-Nitroaniline	50	0	25.9	ug/L	52	*	4		70 (10)	130 (111)	20 (20)
Acenaphthene	50	0	50.7	ug/L	101		6		70 (37)	130 (146)	20 (20)
2,4-Dinitrophenol	100	0	110	ug/L	110		11		20 (14)	160 (167)	20 (20)
4-Nitrophenol	100	0	40.3	ug/L	40		8		20 (10)	160 (130)	20 (20)
Dibenzofuran	50	0	45.3	ug/L	91		6		70 (41)	130 (145)	20 (20)
2,4-Dinitrotoluene	50	0	60.6	ug/L	121		8		70 (74)	130 (137)	20 (20)
Diethylphthalate	50	41.1	75.2	ug/L	68	*	13		70 (41)	130 (148)	20 (20)
4-Chlorophenyl-phenylether	50	0	46.2	ug/L	92		6		70 (38)	130 (149)	20 (20)
Fluorene	50	0	45.2	ug/L	90		6		70 (39)	130 (144)	20 (20)
4-Nitroaniline	50	0	56.9	ug/L	114		9		70 (27)	130 (138)	20 (20)
4,6-Dinitro-2-methylphenol	50	0	58.3	ug/L	117		9		70 (32)	130 (175)	20 (20)
N-Nitrosodiphenylamine	50	0	49.8	ug/L	100		5		70 (40)	130 (150)	20 (20)
4-Bromophenyl-phenylether	50	0	51.1	ug/L	102		5		70 (42)	130 (151)	20 (20)
Hexachlorobenzene	50	0	50.1	ug/L	100		5		70 (72)	130 (115)	20 (20)
Atrazine	50	0	51.5	ug/L	103		7		70 (20)	130 (162)	20 (20)

( ) = LABORATORY INHOUSE LIMIT

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Pentachlorophenol	100	0	110	ug/L	110		10		20 (52)	160 (162)	20 (20)
Phenanthrene	50	0	46.5	ug/L	93		6		70 (40)	130 (147)	20 (20)
Anthracene	50	0	45.9	ug/L	92		4		70 (41)	130 (146)	20 (20)
Carbazole	50	0	43.7	ug/L	87		6		70 (37)	130 (154)	20 (20)
Di-n-butylphthalate	50	0	54.5	ug/L	109		5		70 (40)	130 (151)	20 (20)
Fluoranthene	50	0	41.9	ug/L	84		6		70 (42)	130 (146)	20 (20)
Pyrene	50	0	42.7	ug/L	85		6		70 (41)	130 (149)	20 (20)
Butylbenzylphthalate	50	0	60.3	ug/L	121		10		70 (39)	130 (155)	20 (20)
3,3-Dichlorobenzidine	50	0	42.7	ug/L	85		5		70 (10)	130 (114)	20 (20)
Benzo(a)anthracene	50	0	48.4	ug/L	97		5		70 (41)	130 (147)	20 (20)
Chrysene	50	0	48.0	ug/L	96		5		70 (44)	130 (144)	20 (20)
bis(2-Ethylhexyl)phthalate	50	8.70	62.6	ug/L	108		6		70 (33)	130 (160)	20 (20)
Di-n-octyl phthalate	50	0	54.6	ug/L	109		4		70 (36)	130 (158)	20 (20)
Benzo(b)fluoranthene	50	0	48.4	ug/L	97		3		70 (40)	130 (150)	20 (20)
Benzo(k)fluoranthene	50	0	50.7	ug/L	101		8		70 (40)	130 (147)	20 (20)
Benzo(a)pyrene	50	0	50.8	ug/L	102		7		70 (42)	130 (147)	20 (20)
Indeno(1,2,3-cd)pyrene	50	0	37.1	ug/L	74		4		70 (30)	130 (166)	20 (20)
Dibenz(a,h)anthracene	50	0	37.4	ug/L	75		4		70 (23)	130 (172)	20 (20)
Benzo(g,h,i)perylene	50	0	33.0	ug/L	66	*	3		70 (27)	130 (167)	20 (20)
1,2,4,5-Tetrachlorobenzene	50	0	44.5	ug/L	89		5		70 (89)	130 (102)	20 (20)
1,4-Dioxane	50	0	19.4	ug/L	39		8		20 (38)	160 (130)	20 (20)
2,3,4,6-Tetrachlorophenol	50	0	51.3	ug/L	103		5		70 (91)	130 (111)	20 (20)

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270E **DataFile:** BF142338.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167951BS	Benzaldehyde	50	22.9	ug/L	46				20 (10)	160 (162)	
	Phenol	50	46.1	ug/L	92				20 (66)	160 (118)	
	bis(2-Chloroethyl)ether	50	37.5	ug/L	75				70 (62)	130 (103)	
	2-Chlorophenol	50	45.0	ug/L	90				70 (70)	130 (117)	
	2-Methylphenol	50	44.7	ug/L	89				70 (69)	130 (109)	
	2,2-oxybis(1-Chloropropane)	50	41.1	ug/L	82				70 (65)	130 (100)	
	Acetophenone	50	41.6	ug/L	83				70 (60)	130 (104)	
	3+4-Methylphenols	50	43.5	ug/L	87				20 (67)	160 (106)	
	N-Nitroso-di-n-propylamine	50	42.2	ug/L	84				70 (57)	130 (107)	
	Hexachloroethane	50	42.8	ug/L	86				20 (76)	160 (118)	
	Nitrobenzene	50	46.1	ug/L	92				70 (58)	130 (106)	
	Isophorone	50	43.8	ug/L	88				70 (61)	130 (102)	
	2-Nitrophenol	50	47.0	ug/L	94				70 (70)	130 (115)	
	2,4-Dimethylphenol	50	45.2	ug/L	90				70 (42)	130 (142)	
	bis(2-Chloroethoxy)methane	50	42.8	ug/L	86				70 (58)	130 (109)	
	2,4-Dichlorophenol	50	46.4	ug/L	93				70 (66)	130 (115)	
	Naphthalene	50	42.1	ug/L	84				70 (64)	130 (107)	
	4-Chloroaniline	50	12.7	ug/L	25		*		70 (10)	130 (85)	
	Hexachlorobutadiene	50	43.3	ug/L	87				70 (69)	130 (101)	
	Caprolactam	50	51.4	ug/L	103				20 (58)	160 (128)	
	4-Chloro-3-methylphenol	50	46.6	ug/L	93				70 (65)	130 (114)	
	2-Methylnaphthalene	50	42.8	ug/L	86				70 (64)	130 (107)	
	Hexachlorocyclopentadiene	100	89.0	ug/L	89				20 (36)	160 (160)	
	2,4,6-Trichlorophenol	50	49.5	ug/L	99				70 (61)	130 (110)	
	2,4,5-Trichlorophenol	50	46.5	ug/L	93				70 (70)	130 (106)	
	1,1-Biphenyl	50	41.4	ug/L	83				70 (72)	130 (98)	
	2-Chloronaphthalene	50	42.7	ug/L	85				70 (59)	130 (106)	
	2-Nitroaniline	50	50.3	ug/L	101				70 (73)	130 (114)	
	Dimethylphthalate	50	44.7	ug/L	89				70 (64)	130 (103)	
	Acenaphthylene	50	42.5	ug/L	85				70 (79)	130 (103)	
	2,6-Dinitrotoluene	50	52.6	ug/L	105				70 (64)	130 (110)	
	3-Nitroaniline	50	36.4	ug/L	73				70 (28)	130 (100)	
	Acenaphthene	50	46.5	ug/L	93				70 (59)	130 (113)	
	2,4-Dinitrophenol	100	100	ug/L	100				20 (36)	160 (166)	
	4-Nitrophenol	100	110	ug/L	110				20 (45)	160 (147)	
	Dibenzofuran	50	42.4	ug/L	85				70 (65)	130 (106)	
	2,4-Dinitrotoluene	50	55.9	ug/L	112				70 (60)	130 (115)	
	Diethylphthalate	50	45.3	ug/L	91				70 (63)	130 (105)	
	4-Chlorophenyl-phenylether	50	43.1	ug/L	86				70 (61)	130 (104)	
	Fluorene	50	42.0	ug/L	84				70 (64)	130 (107)	
	4-Nitroaniline	50	61.2	ug/L	122				70 (55)	130 (125)	
	4,6-Dinitro-2-methylphenol	50	50.3	ug/L	101				70 (62)	130 (132)	
	N-Nitrosodiphenylamine	50	43.5	ug/L	87				70 (61)	130 (109)	
	4-Bromophenyl-phenylether	50	44.9	ug/L	90				70 (73)	130 (103)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2008

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270E **DataFile:** BF142338.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167951BS	Hexachlorobenzene	50	45.6	ug/L	91				70 (73)	130 (106)	
	Atrazine	50	50.3	ug/L	101				70 (76)	130 (120)	
	Pentachlorophenol	100	110	ug/L	110				20 (47)	160 (114)	
	Phenanthrene	50	43.0	ug/L	86				70 (62)	130 (109)	
	Anthracene	50	43.1	ug/L	86				70 (65)	130 (110)	
	Carbazole	50	44.1	ug/L	88				70 (62)	130 (106)	
	Di-n-butylphthalate	50	48.4	ug/L	97				70 (64)	130 (106)	
	Fluoranthene	50	43.7	ug/L	87				70 (64)	130 (110)	
	Pyrene	50	45.2	ug/L	90				70 (71)	130 (103)	
	Butylbenzylphthalate	50	49.4	ug/L	99				70 (61)	130 (105)	
	3,3-Dichlorobenzidine	50	40.4	ug/L	81				70 (43)	130 (108)	
	Benzo(a)anthracene	50	45.7	ug/L	91				70 (62)	130 (107)	
	Chrysene	50	45.0	ug/L	90				70 (61)	130 (108)	
	bis(2-Ethylhexyl)phthalate	50	45.0	ug/L	90				70 (59)	130 (110)	
	Di-n-octyl phthalate	50	43.5	ug/L	87				70 (52)	130 (139)	
	Benzo(b)fluoranthene	50	45.9	ug/L	92				70 (77)	130 (113)	
	Benzo(k)fluoranthene	50	48.3	ug/L	97				70 (77)	130 (105)	
	Benzo(a)pyrene	50	48.1	ug/L	96				70 (72)	130 (131)	
	Indeno(1,2,3-cd)pyrene	50	46.3	ug/L	93				70 (72)	130 (105)	
	Dibenz(a,h)anthracene	50	46.0	ug/L	92				70 (78)	130 (115)	
	Benzo(g,h,i)perylene	50	46.0	ug/L	92				70 (75)	130 (118)	
	1,2,4,5-Tetrachlorobenzene	50	40.9	ug/L	82				70 (72)	130 (101)	
	1,4-Dioxane	50	32.6	ug/L	65				20 (38)	160 (125)	
	2,3,4,6-Tetrachlorophenol	50	50.1	ug/L	100				70 (63)	130 (116)	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167951BL

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG NO.: Q2008

Lab File ID: BF142337.D Lab Sample ID: PB167951BL

Instrument ID: BNA_F Date Extracted: 05/12/2025

Matrix: (soil/water) Water Date Analyzed: 05/13/2025

Level: (low/med) LOW Time Analyzed: 11:17

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167951BS	PB167951BS	BF142338.D	05/13/2025
MW-3-20250508MS	Q1993-02MS	BF142341.D	05/13/2025
MW-3-20250508MSD	Q1993-03MSD	BF142342.D	05/13/2025
IDW-AQ-DRUM-633-05092025	Q2008-01	BF142344.D	05/13/2025

COMMENTS:

Alliance TECHNICAL GROUP
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM SAS No.: Q2008 SDG NO.: Q2008

Lab File ID: BF142294.D DFTPP Injection Date: 05/05/2025

Instrument ID: BNA_F DFTPP Injection Time: 13:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	32
68	Less than 2.0% of mass 69	0.5 (1.8) 1
69	Mass 69 relative abundance	25.8
70	Less than 2.0% of mass 69	0.1 (0.5) 1
127	10.0 - 80.0% of mass 198	34.9
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	5.2
275	10.0 - 60.0% of mass 198	22.8
365	Greater than 1% of mass 198	3
441	Present, but less than mass 443	15.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.6 (19.6) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF142295.D	05/05/2025	13:54
SSTDICC005	SSTDICC005	BF142296.D	05/05/2025	14:23
SSTDICC010	SSTDICC010	BF142297.D	05/05/2025	14:52
SSTDICC020	SSTDICC020	BF142298.D	05/05/2025	15:21
SSTDICCC040	SSTDICCC040	BF142299.D	05/05/2025	15:50
SSTDICC050	SSTDICC050	BF142300.D	05/05/2025	16:18
SSTDICC060	SSTDICC060	BF142301.D	05/05/2025	16:47
SSTDICC080	SSTDICC080	BF142302.D	05/05/2025	17:15

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM SAS No.: Q2008 SDG NO.: Q2008

Lab File ID: BF142335.D DFTPP Injection Date: 05/13/2025

Instrument ID: BNA_F DFTPP Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	25.4
68	Less than 2.0% of mass 69	0.4 (1.9) 1
69	Mass 69 relative abundance	21.1
70	Less than 2.0% of mass 69	0.1 (0.6) 1
127	10.0 - 80.0% of mass 198	28.5
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	4.4
275	10.0 - 60.0% of mass 198	20.7
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	15.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.4 (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	BF142336.D	05/13/2025	10:49
PB167951BL	PB167951BL	BF142337.D	05/13/2025	11:17
PB167951BS	PB167951BS	BF142338.D	05/13/2025	11:46
MW-3-20250508MS	Q1993-02MS	BF142341.D	05/13/2025	13:16
MW-3-20250508MSD	Q1993-03MSD	BF142342.D	05/13/2025	13:45
IDW-AQ-DRUM-633-05092025	Q2008-01	BF142344.D	05/13/2025	15:17

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG NO.: Q2008

EPA Sample No.: SSTDICCC040 Date Analyzed: 05/05/2025

Lab File ID: BF142299.D Time Analyzed: 15:50

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	215157	6.904	842526	8.19	453823	9.95
	UPPER LIMIT	430314	7.404	1685050	8.687	907646	10.445
	LOWER LIMIT	107579	6.404	421263	7.687	226912	9.445
	EPA SAMPLE NO.						
01	MW-3-20250508MS	222671	6.90	844135	8.19	448767	9.95
02	MW-3-20250508MSD	221066	6.90	841600	8.19	447768	9.95
03	PB167951BL	233617	6.90	911574	8.19	504645	9.94
04	PB167951BS	241382	6.90	943250	8.19	511130	9.95
05	IDW-AQ-DRUM-633-05092025	241479	6.91	926949	8.19	504780	9.94

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG NO.: Q2008

EPA Sample No.: SSTDICCC040 Date Analyzed: 05/05/2025

Lab File ID: BF142299.D Time Analyzed: 15:50

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	760936	11.433	448285	14.069	426732	15.563
	UPPER LIMIT	1521870	11.933	896570	14.569	853464	16.063
	LOWER LIMIT	380468	10.933	224143	13.569	213366	15.063
	EPA SAMPLE NO.						
01	MW-3-20250508MS	711096	11.43	400063	14.07	458773	15.56
02	MW-3-20250508MSD	724658	11.43	407587	14.07	453389	15.56
03	PB167951BL	917241	11.43	662807	14.07	462932	15.56
04	PB167951BS	874805	11.43	500567	14.07	474027	15.56
05	IDW-AQ-DRUM-633-05092025	920791	11.43	602587	14.06	431268	15.55

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

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

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

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG NO.: Q2008

EPA Sample No.: SSTDCCC040 Date Analyzed: 05/13/2025

Lab File ID: BF142336.D Time Analyzed: 10:49

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	199243	6.904	783419	8.19	422251	9.95
	UPPER LIMIT	398486	7.404	1566840	8.687	844502	10.445
	LOWER LIMIT	99621.5	6.404	391710	7.687	211126	9.445
	EPA SAMPLE NO.						
01	PB167951BL	233617	6.90	911574	8.19	504645	9.94
02	PB167951BS	241382	6.90	943250	8.19	511130	9.95
03	MW-3-20250508MS	222671	6.90	844135	8.19	448767	9.95
04	MW-3-20250508MSD	221066	6.90	841600	8.19	447768	9.95
05	IDW-AQ-DRUM-633-05092025	241479	6.91	926949	8.19	504780	9.94

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG NO.: Q2008

EPA Sample No.: SSTDCCC040 Date Analyzed: 05/13/2025

Lab File ID: BF142336.D Time Analyzed: 10:49

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	732764	11.433	429049	14.074	422358	15.563
	UPPER LIMIT	1465530	11.933	858098	14.574	844716	16.063
	LOWER LIMIT	366382	10.933	214525	13.574	211179	15.063
	EPA SAMPLE NO.						
01	PB167951BL	917241	11.43	662807	14.07	462932	15.56
02	PB167951BS	874805	11.43	500567	14.07	474027	15.56
03	MW-3-20250508MS	711096	11.43	400063	14.07	458773	15.56
04	MW-3-20250508MSD	724658	11.43	407587	14.07	453389	15.56
05	IDW-AQ-DRUM-633-05092025	920791	11.43	602587	14.06	431268	15.55

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: **BF142344.D**

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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/09/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	IDW-AQ-DRUM-633-05092025	SDG No.:	Q2008
Lab Sample ID:	Q2008-01	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	940 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
BF142344.D	1	05/12/25 08:40	05/13/25 15:17	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.20	U	4.20	10.6	ug/L
108-95-2	Phenol	0.97	U	0.97	5.30	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.86	U	0.86	5.30	ug/L
95-57-8	2-Chlorophenol	0.62	U	0.62	5.30	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.30	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.40	U	1.40	5.30	ug/L
98-86-2	Acetophenone	0.79	U	0.79	5.30	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.6	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.50	U	1.50	2.70	ug/L
67-72-1	Hexachloroethane	0.69	U	0.69	5.30	ug/L
98-95-3	Nitrobenzene	0.81	U	0.81	5.30	ug/L
78-59-1	Isophorone	0.80	U	0.80	5.30	ug/L
88-75-5	2-Nitrophenol	1.90	U	1.90	5.30	ug/L
105-67-9	2,4-Dimethylphenol	2.00	U	2.00	5.30	ug/L
111-91-1	bis(2-Chloroethoxy)methane	0.72	U	0.72	5.30	ug/L
120-83-2	2,4-Dichlorophenol	0.55	U	0.55	5.30	ug/L
91-20-3	Naphthalene	0.53	U	0.53	5.30	ug/L
106-47-8	4-Chloroaniline	0.89	UQ	0.89	5.30	ug/L
87-68-3	Hexachlorobutadiene	0.57	U	0.57	5.30	ug/L
105-60-2	Caprolactam	1.20	U	1.20	10.6	ug/L
59-50-7	4-Chloro-3-methylphenol	0.63	U	0.63	5.30	ug/L
91-57-6	2-Methylnaphthalene	0.60	U	0.60	5.30	ug/L
77-47-4	Hexachlorocyclopentadiene	3.90	U	3.90	10.6	ug/L
88-06-2	2,4,6-Trichlorophenol	0.54	U	0.54	5.30	ug/L
95-95-4	2,4,5-Trichlorophenol	0.66	U	0.66	5.30	ug/L
92-52-4	1,1-Biphenyl	0.56	U	0.56	5.30	ug/L
91-58-7	2-Chloronaphthalene	0.65	U	0.65	5.30	ug/L
88-74-4	2-Nitroaniline	1.30	U	1.30	5.30	ug/L
131-11-3	Dimethylphthalate	0.65	U	0.65	5.30	ug/L

Raw Data: **BF142344.D**

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/09/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	IDW-AQ-DRUM-633-05092025	SDG No.:	Q2008
Lab Sample ID:	Q2008-01	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	940 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
BF142344.D	1	05/12/25 08:40	05/13/25 15:17	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	0.80	U	0.80	5.30	ug/L
606-20-2	2,6-Dinitrotoluene	0.98	U	0.98	5.30	ug/L
99-09-2	3-Nitroaniline	1.10	U	1.10	5.30	ug/L
83-32-9	Acenaphthene	0.59	U	0.59	5.30	ug/L
51-28-5	2,4-Dinitrophenol	6.40	U	6.40	10.6	ug/L
100-02-7	4-Nitrophenol	2.50	U	2.50	10.6	ug/L
132-64-9	Dibenzofuran	0.65	U	0.65	5.30	ug/L
121-14-2	2,4-Dinitrotoluene	1.30	U	1.30	5.30	ug/L
84-66-2	Diethylphthalate	0.73	U	0.73	5.30	ug/L
7005-72-3	4-Chlorophenyl-phenylether	0.72	U	0.72	5.30	ug/L
86-73-7	Fluorene	0.67	U	0.67	5.30	ug/L
100-01-6	4-Nitroaniline	1.60	U	1.60	5.30	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	3.10	U	3.10	10.6	ug/L
86-30-6	n-Nitrosodiphenylamine	0.62	U	0.62	5.30	ug/L
101-55-3	4-Bromophenyl-phenylether	0.43	U	0.43	5.30	ug/L
118-74-1	Hexachlorobenzene	0.55	U	0.55	5.30	ug/L
1912-24-9	Atrazine	1.10	U	1.10	5.30	ug/L
87-86-5	Pentachlorophenol	1.70	U	1.70	10.6	ug/L
85-01-8	Phenanthrene	0.53	U	0.53	5.30	ug/L
120-12-7	Anthracene	0.65	U	0.65	5.30	ug/L
86-74-8	Carbazole	0.77	U	0.77	5.30	ug/L
84-74-2	Di-n-butylphthalate	1.30	U	1.30	5.30	ug/L
206-44-0	Fluoranthene	0.87	U	0.87	5.30	ug/L
129-00-0	Pyrene	0.53	U	0.53	5.30	ug/L
85-68-7	Butylbenzylphthalate	4.10	J	2.10	5.30	ug/L
91-94-1	3,3-Dichlorobenzidine	0.99	U	0.99	10.6	ug/L
56-55-3	Benzo(a)anthracene	0.48	U	0.48	5.30	ug/L
218-01-9	Chrysene	0.47	U	0.47	5.30	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	5.50		1.70	5.30	ug/L
117-84-0	Di-n-octyl phthalate	2.50	U	2.50	10.6	ug/L
205-99-2	Benzo(b)fluoranthene	0.52	U	0.52	5.30	ug/L

Raw Data: **BF142344.D**

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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/09/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	IDW-AQ-DRUM-633-05092025	SDG No.:	Q2008
Lab Sample ID:	Q2008-01	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	940 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
BF142344.D	1	05/12/25 08:40	05/13/25 15:17	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	0.51	U	0.51	5.30	ug/L
50-32-8	Benzo(a)pyrene	0.59	U	0.59	5.30	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.63	U	0.63	5.30	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.71	U	0.71	5.30	ug/L
191-24-2	Benzo(g,h,i)perylene	0.73	U	0.73	5.30	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	0.55	U	0.55	5.30	ug/L
123-91-1	1,4-Dioxane	1.10	U	1.10	5.30	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.77	U	0.77	5.30	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	19.6	*	15 (10) - 110 (139)	13%	SPK: 150
13127-88-3	Phenol-d6	13.2	*	15 (10) - 110 (134)	9%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.6		30 (49) - 130 (133)	90%	SPK: 100
321-60-8	2-Fluorobiphenyl	65.8		30 (52) - 130 (132)	66%	SPK: 100
118-79-6	2,4,6-Tribromophenol	83.9		15 (44) - 110 (137)	56%	SPK: 150
1718-51-0	Terphenyl-d14	71.0		30 (48) - 130 (125)	71%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	241000	6.91			
1146-65-2	Naphthalene-d8	927000	8.187			
15067-26-2	Acenaphthene-d10	505000	9.939			
1517-22-2	Phenanthrene-d10	921000	11.427			
1719-03-5	Chrysene-d12	603000	14.063			
1520-96-3	Perylene-d12	431000	15.551			
TENTATIVE IDENTIFIED COMPOUNDS						
000994-05-8	Butane, 2-methoxy-2-methyl-	87.8	J		2.23	ug/L
000078-95-5	2-Propanone, 1-chloro-	520	J		2.44	ug/L
000513-88-2	2-Propanone, 1,1-dichloro-	67.8	J		3.39	ug/L
	unknown3.675	16.8	J		3.67	ug/L
000534-07-6	2-Propanone, 1,3-dichloro-	1100	J		5.80	ug/L
076368-87-1	1H-Pyrazole-3,4-diamine, 1,5-dimet	19.1	J		6.08	ug/L
000110-13-4	2,5-Hexanedione	190	J		6.13	ug/L

Raw Data: **BF142344.D**

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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/09/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	IDW-AQ-DRUM-633-05092025	SDG No.:	Q2008
Lab Sample ID:	Q2008-01	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	940 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
BF142344.D	1	05/12/25 08:40	05/13/25 15:17	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
	unknown6.340	16.2	J		6.34	ug/L
000921-03-9	2-Propanone, 1,1,3-trichloro-	57.4	J		6.47	ug/L
	unknown6.798	14.3	J		6.80	ug/L
	unknown7.722	120	J		7.72	ug/L
004743-82-2	.beta.-Acetylacrylic acid	9.80	J		8.24	ug/L
	unknown8.322	23.1	J		8.32	ug/L
000105-39-5	Acetic acid, chloro-, ethyl ester	43.4	J		9.03	ug/L
	unknown9.163	13.2	J		9.16	ug/L
124460-62-4	Furazan, 3,4-bis(chloroacetylamino	8.80	J		9.47	ug/L
	unknown10.292	11.1	J		10.3	ug/L
000057-10-3	n-Hexadecanoic acid	7.80	J		12.0	ug/L
000057-11-4	Octadecanoic acid	20.1	J		12.7	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_F\Data\BF051325\
Data File : BF142344.D
Acq On : 13 May 2025 15:17
Operator : RC/JU
Sample : Q2008-01
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Quant Time: May 13 16:02:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

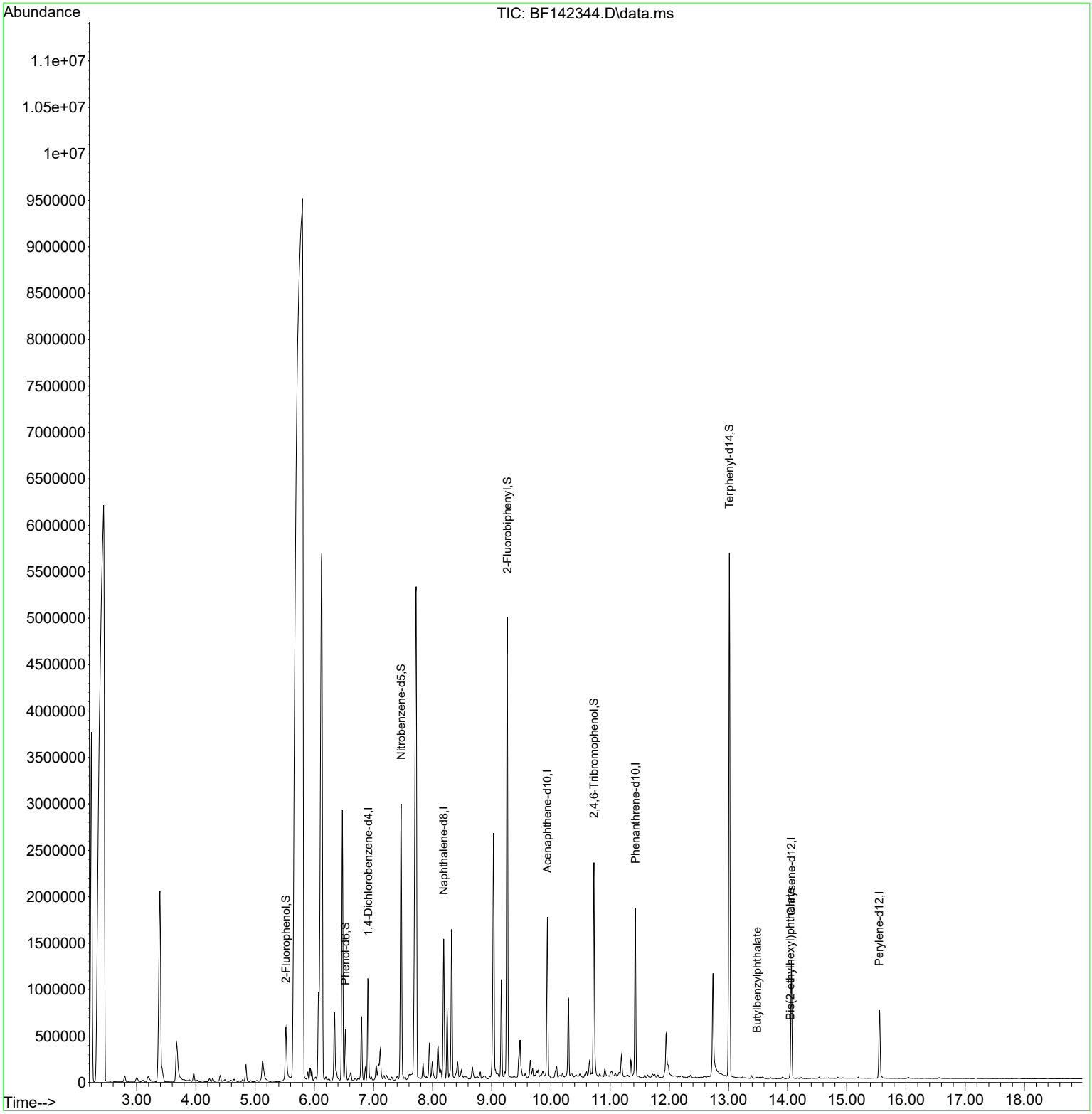
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.910	152	241479	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	926949	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	504780	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	920791	20.000	ng	0.00
76) Chrysene-d12	14.063	240	602587	20.000	ng	0.00
86) Perylene-d12	15.551	264	431268	20.000	ng	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.522	112	276953	19.579	ng	0.01
7) Phenol-d6	6.528	99	229848	13.211	ng	0.00
23) Nitrobenzene-d5	7.469	82	1361104	89.552	ng	0.00
42) 2,4,6-Tribromophenol	10.728	330	408763	83.874	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	2329379	65.799	ng	0.00
79) Terphenyl-d14	13.016	244	2891916	71.033	ng	0.00
Target Compounds						Qvalue
80) Butylbenzylphthalate	13.486	149	3417	3.861	ng	98
84) Bis(2-ethylhexyl)phtha...	14.045	149	21514	5.199	ng	99

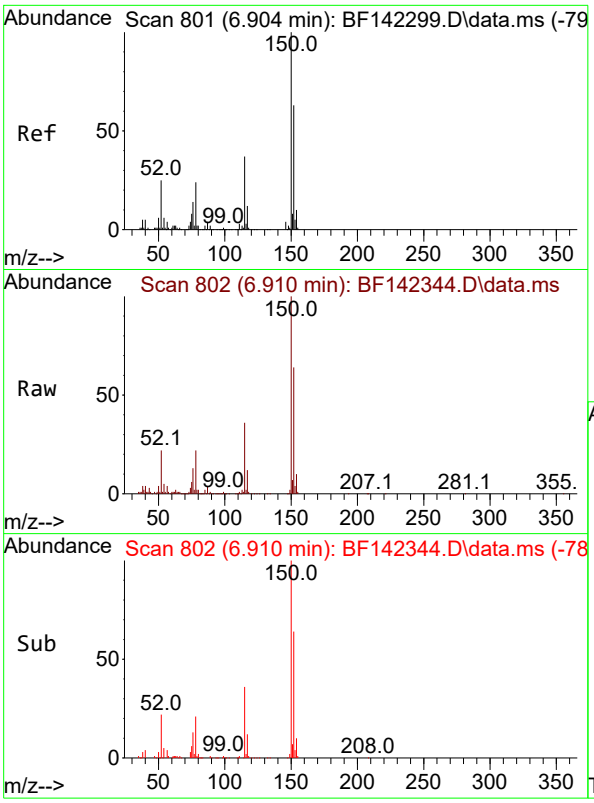
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142344.D
Acq On : 13 May 2025 15:17
Operator : RC/JU
Sample : Q2008-01
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Quant Time: May 13 16:02:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration



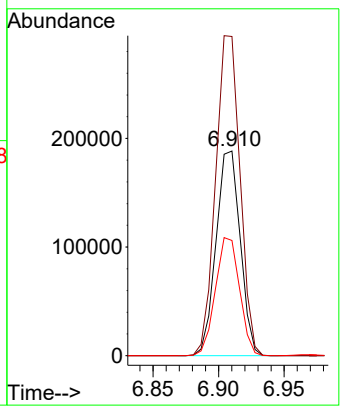


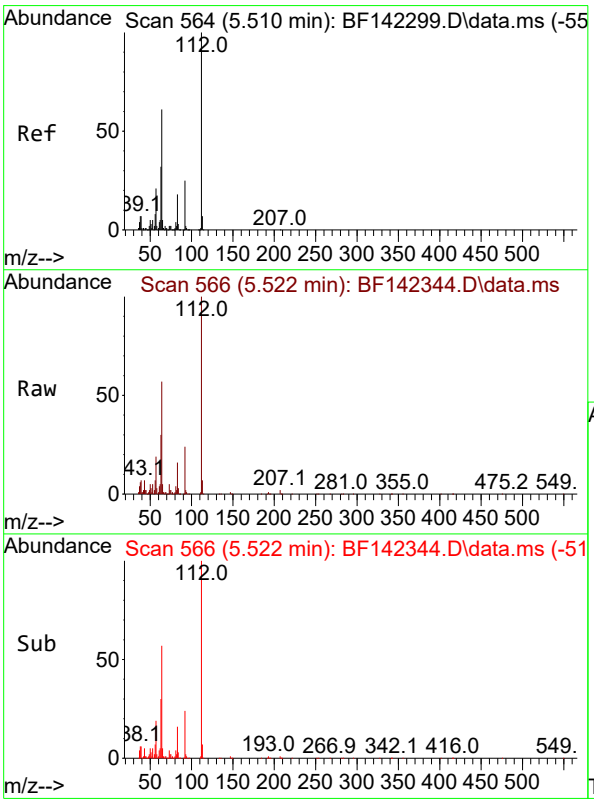
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.910 min Scan# 8
Delta R.T. 0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Tgt Ion:152 Resp: 241479

Ion	Ratio	Lower	Upper
152	100		
150	155.9	126.6	190.0
115	56.3	47.3	70.9

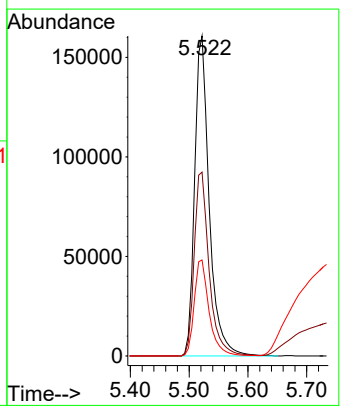


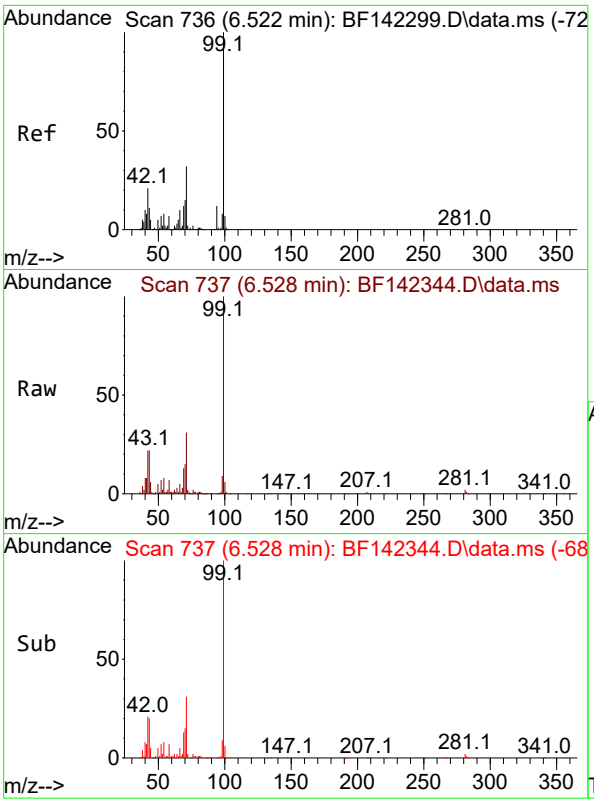


#5
2-Fluorophenol
Concen: 19.579 ng
RT: 5.522 min Scan# 566
Delta R.T. 0.012 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Tgt Ion:112 Resp: 276953

Ion	Ratio	Lower	Upper
112	100		
64	57.5	48.9	73.3
63	30.0	25.6	38.4



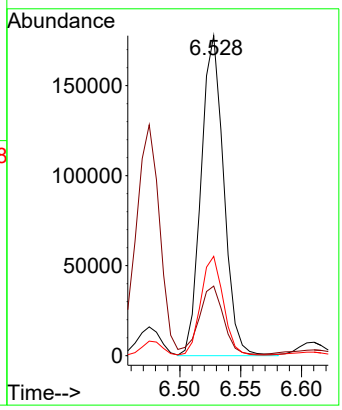


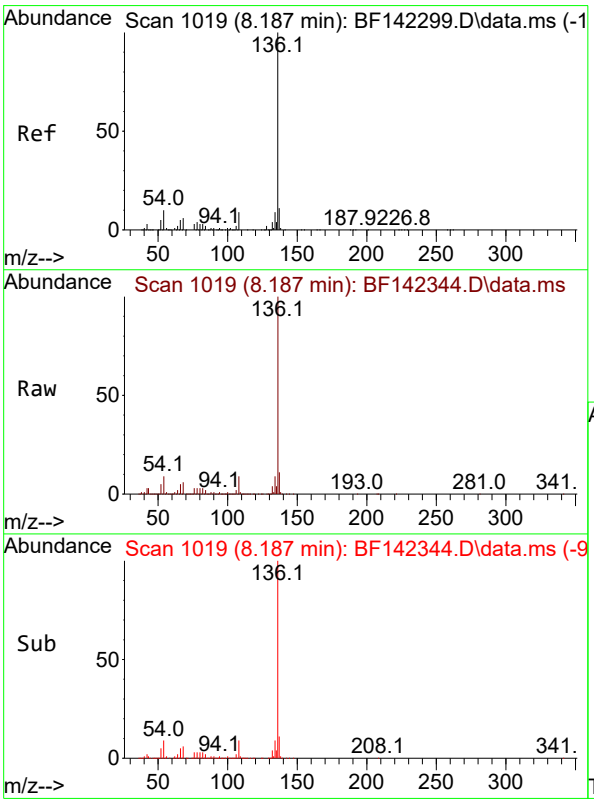
#7
Phenol-d6
Concen: 13.211 ng
RT: 6.528 min Scan# 7
Delta R.T. 0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Tgt Ion: 99 Resp: 229848

Ion	Ratio	Lower	Upper
99	100		
42	21.8	17.0	25.4
71	31.0	25.8	38.8

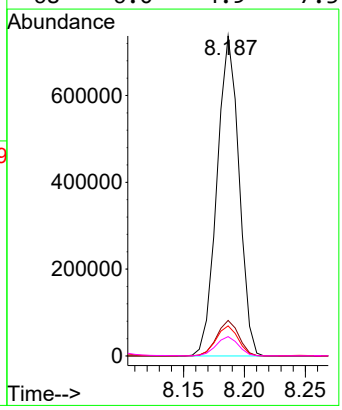


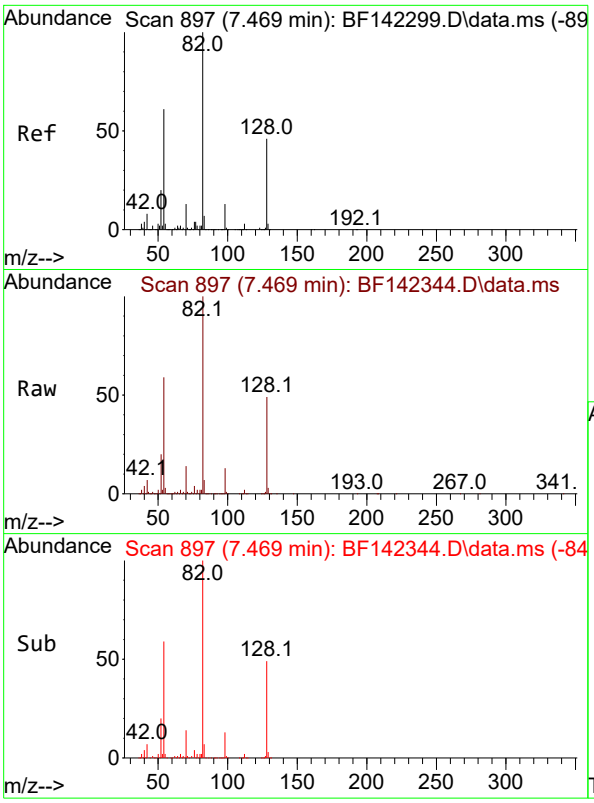


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.187 min Scan# 1019
Delta R.T. -0.000 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Tgt Ion:136 Resp: 926949

Ion	Ratio	Lower	Upper
136	100		
137	11.1	8.9	13.3
54	9.4	7.7	11.5
68	6.0	4.9	7.3



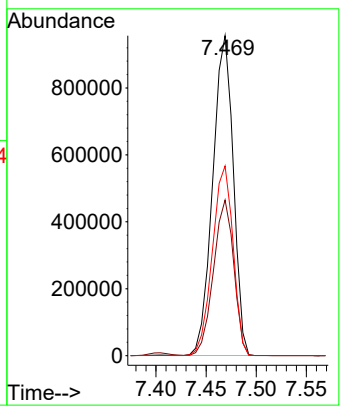


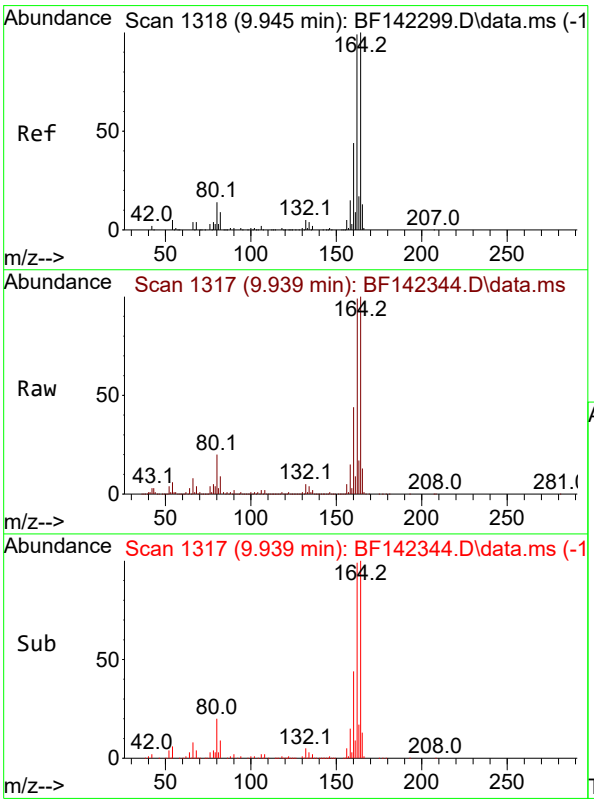
#23
Nitrobenzene-d5
Concen: 89.552 ng
RT: 7.469 min Scan# 8
Delta R.T. -0.000 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Tgt Ion: 82 Resp: 1361104

Ion	Ratio	Lower	Upper
82	100		
128	48.7	37.0	55.6
54	59.3	48.6	73.0

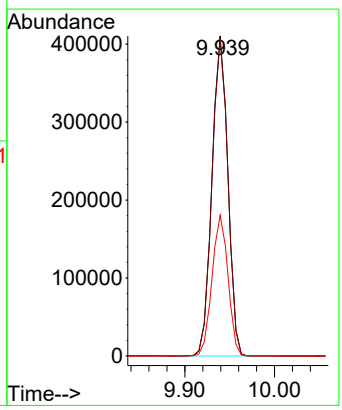


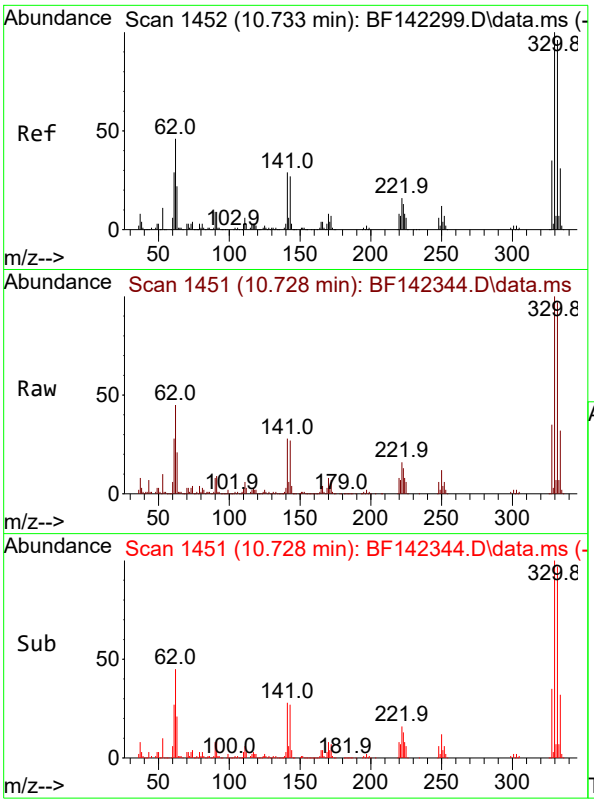


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Tgt Ion:164 Resp: 504780

Ion	Ratio	Lower	Upper
164	100		
162	99.0	79.2	118.8
160	44.0	35.3	52.9



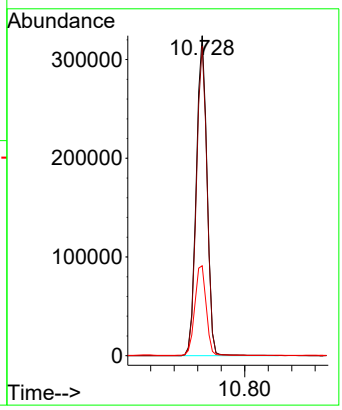


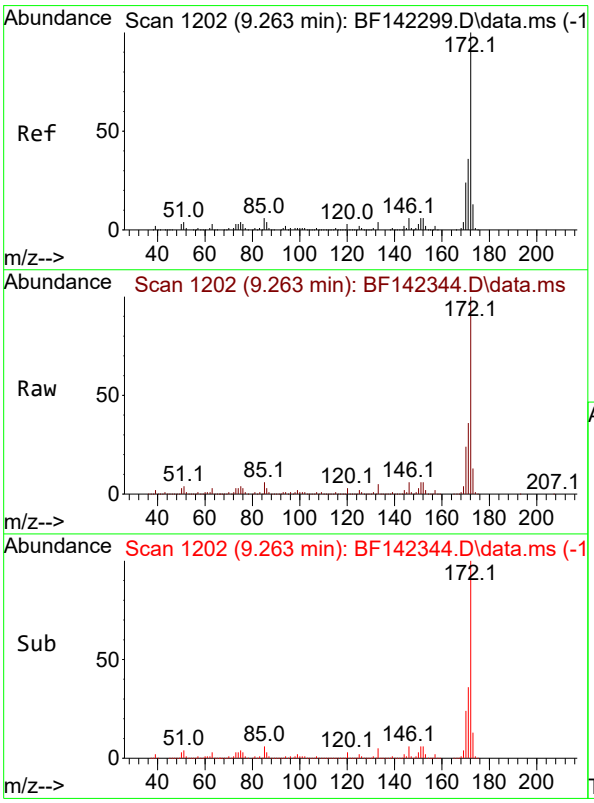
#42
2,4,6-Tribromophenol
Concen: 83.874 ng
RT: 10.728 min Scan# 14
Delta R.T. -0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Tgt Ion:330 Resp: 408763

Ion	Ratio	Lower	Upper
330	100		
332	96.2	76.8	115.2
141	29.9	24.9	37.3

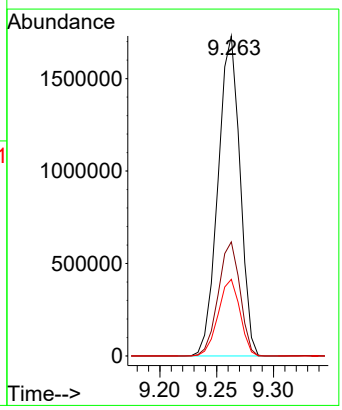


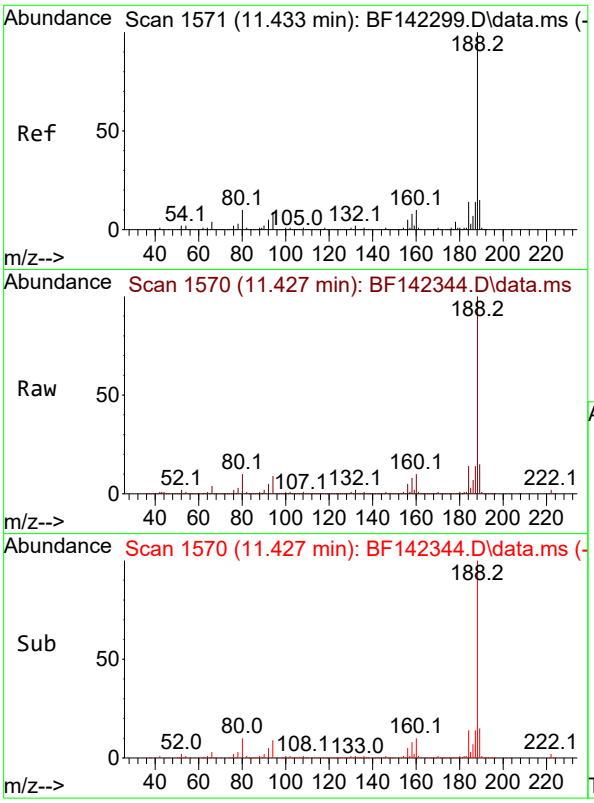


#45
2-Fluorobiphenyl
Concen: 65.799 ng
RT: 9.263 min Scan# 1202
Delta R.T. -0.000 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Tgt Ion:172 Resp: 2329379

Ion	Ratio	Lower	Upper
172	100		
171	35.7	28.6	42.8
170	24.0	19.0	28.4



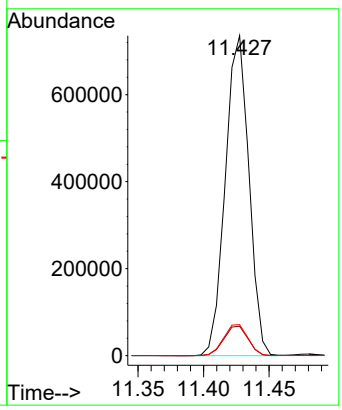


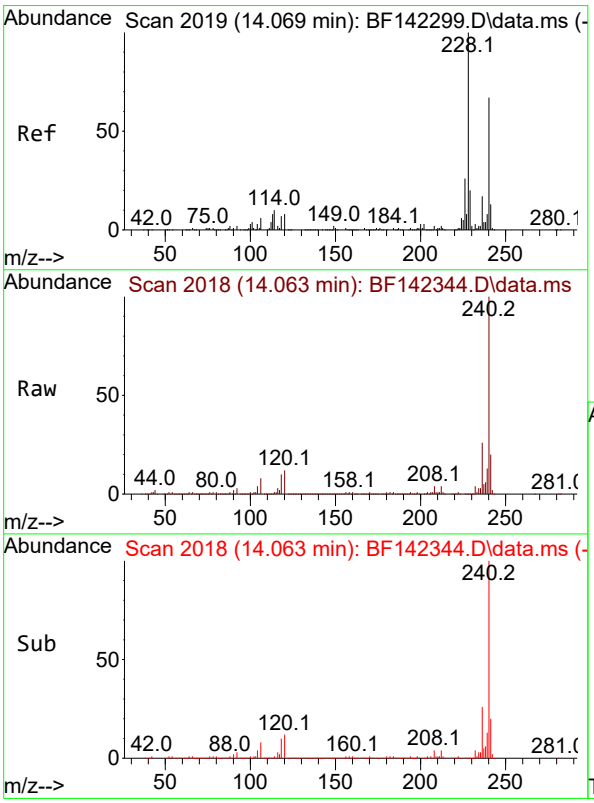
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Tgt Ion:188 Resp: 920791

Ion	Ratio	Lower	Upper
188	100		
94	9.2	7.5	11.3
80	9.7	7.9	11.9

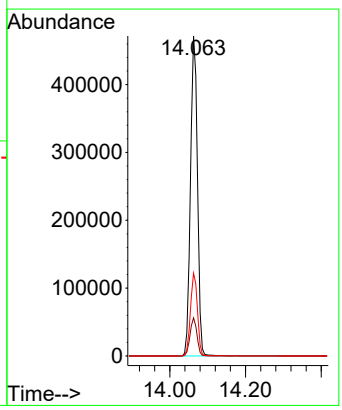


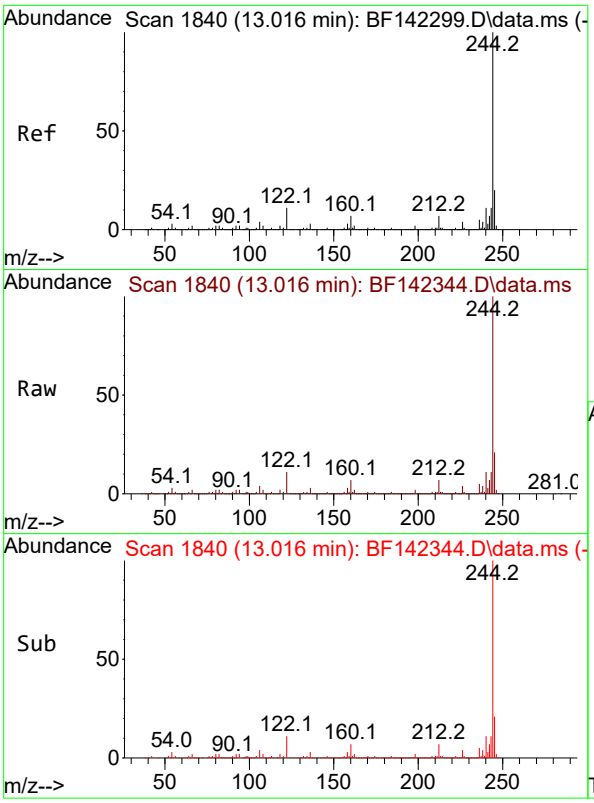


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.063 min Scan# 2018
Delta R.T. -0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Tgt Ion:240 Resp: 602587

Ion	Ratio	Lower	Upper
240	100		
120	11.9	9.7	14.5
236	25.9	20.0	30.0



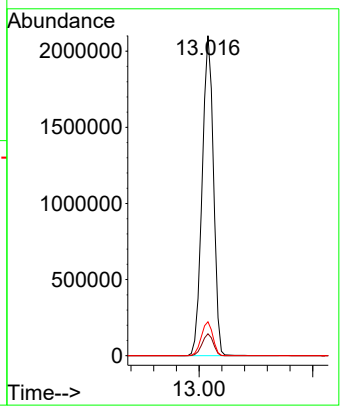


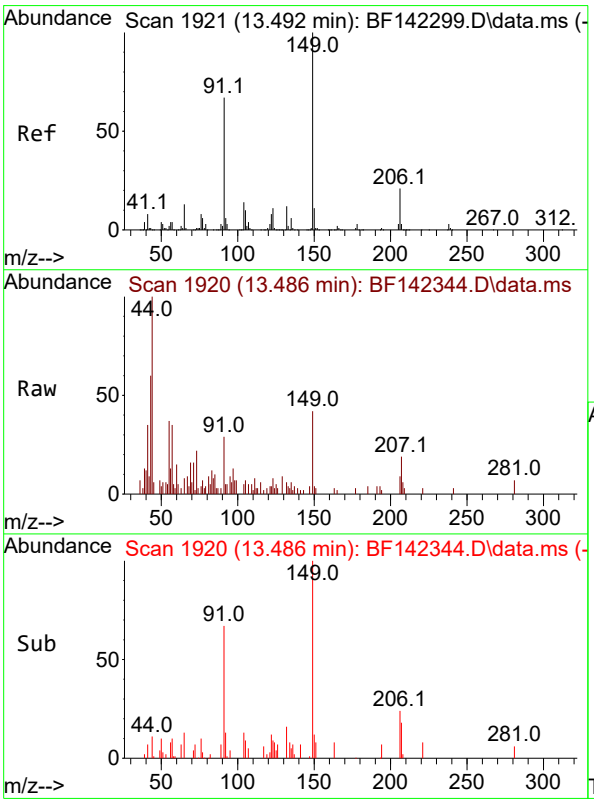
#79
Terphenyl-d14
Concen: 71.033 ng
RT: 13.016 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Tgt Ion:244 Resp: 2891916

Ion	Ratio	Lower	Upper
244	100		
212	6.9	5.4	8.2
122	10.6	9.0	13.4

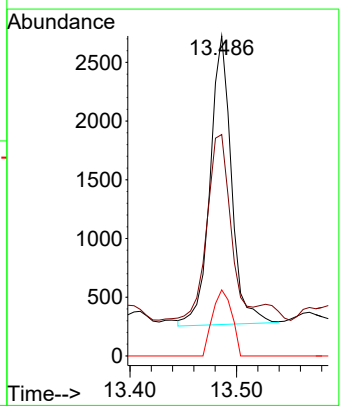


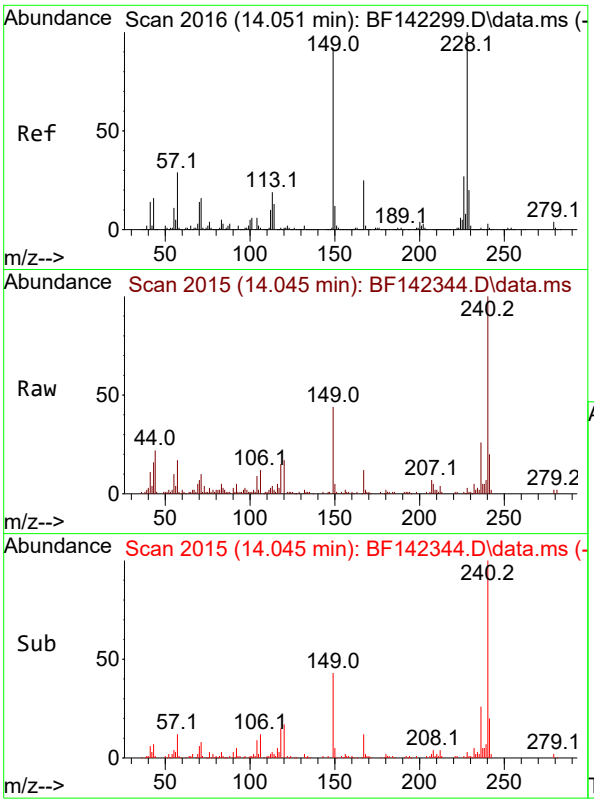


#80
Butylbenzylphthalate
Concen: 3.861 ng
RT: 13.486 min Scan# 1920
Delta R.T. -0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Tgt Ion:149 Resp: 3417

Ion	Ratio	Lower	Upper
149	100		
91	69.2	53.8	80.6
206	20.7	16.6	24.8



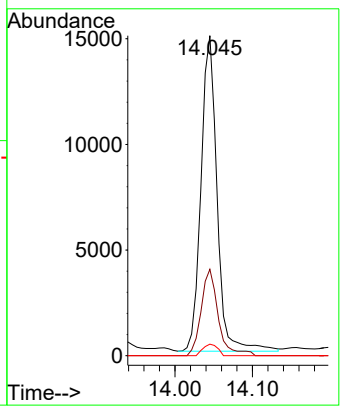


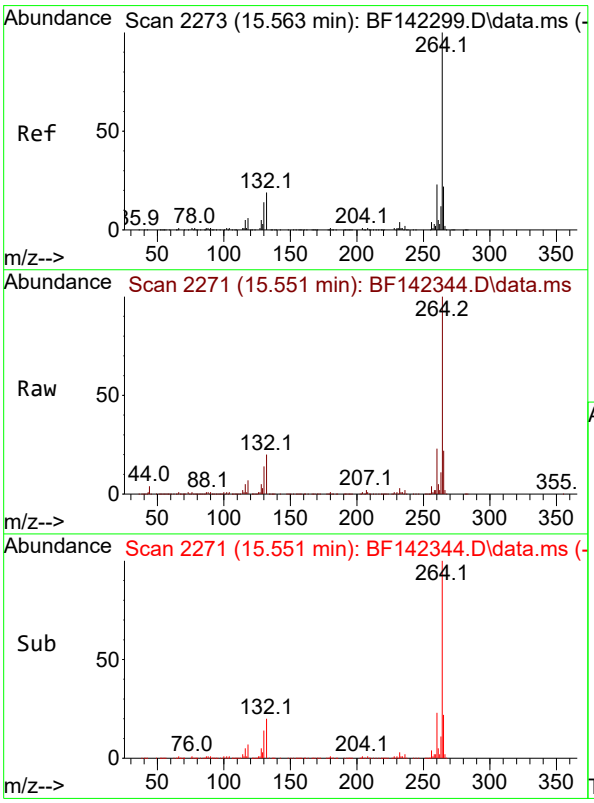
#84
Bis(2-ethylhexyl)phthalate
Concen: 5.199 ng
RT: 14.045 min Scan# 2
Delta R.T. -0.006 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Instrument :
BNA_F
ClientSampleId :
IDW-AQ-DRUM-633-05092025

Tgt Ion:149 Resp: 21514

Ion	Ratio	Lower	Upper
149	100		
167	27.0	22.0	33.0
279	3.6	3.0	4.6

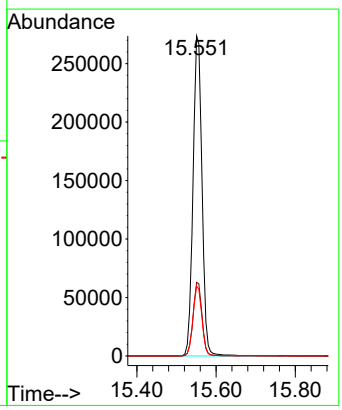




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.551 min Scan# 2271
Delta R.T. -0.012 min
Lab File: BF142344.D
Acq: 13 May 2025 15:17

Tgt Ion:264 Resp: 431268

Ion	Ratio	Lower	Upper
264	100		
260	23.0	18.6	27.8
265	21.8	17.5	26.3



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: JACO05

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

Instrument ID: BNA_F Calibration Date(s): 05/05/2025 05/05/2025

Calibration Time(s): 13:54 17:15

LAB FILE ID: RRF2.5 = BF142295.D RRF005 = BF142296.D RRF010 = BF142297.D
RRF020 = BF142298.D RRF040 = BF142299.D RRF050 = BF142300.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2-Fluorophenol		1.212	1.177	1.211	1.126	1.224	1.172	4.4
Benzaldehyde		1.049	0.959	0.903	0.734	0.752	0.843	17.7
Phenol-d6		1.510	1.458	1.489	1.375	1.500	1.441	4.6
Phenol		1.599	1.528	1.584	1.472	1.580	1.531	4.1
bis(2-Chloroethyl)ether		1.789	1.543	1.510	1.353	1.516	1.506	9.5
2-Chlorophenol		1.202	1.223	1.263	1.221	1.346	1.252	4.0
2-Methylphenol		1.033	1.008	1.022	0.972	1.070	1.014	3.3
2,2-oxybis(1-Chloropropane)		2.379	2.310	2.325	2.135	2.341	2.249	5.5
Acetophenone		0.505	0.474	0.464	0.416	0.446	0.445	9.0
3+4-Methylphenols		1.354	1.281	1.322	1.218	1.333	1.265	6.5
n-Nitroso-di-n-propylamine	0.840	0.943	0.915	0.918	0.860	0.933	0.891	4.7
Nitrobenzene-d5		0.289	0.304	0.336	0.327	0.360	0.328	7.5
Hexachloroethane		0.473	0.464	0.488	0.463	0.511	0.478	3.8
Nitrobenzene		0.281	0.293	0.316	0.306	0.337	0.309	6.0
Isophorone		0.639	0.623	0.630	0.586	0.648	0.621	3.5
2-Nitrophenol		0.089	0.097	0.121	0.132	0.154	0.129	21.5
2,4-Dimethylphenol		0.311	0.314	0.321	0.298	0.329	0.312	3.5
bis(2-Chloroethoxy)methane		0.430	0.414	0.418	0.374	0.408	0.399	6.1
2,4-Dichlorophenol		0.245	0.251	0.278	0.263	0.288	0.265	5.7
Naphthalene		1.102	1.031	1.028	0.906	0.978	0.969	9.5
4-Chloroaniline		0.373	0.373	0.398	0.383	0.435	0.395	5.8
Hexachlorobutadiene		0.188	0.182	0.181	0.168	0.185	0.177	5.3
Caprolactam		0.063	0.068	0.078	0.079	0.088	0.077	11.4
4-Chloro-3-methylphenol		0.281	0.270	0.283	0.265	0.290	0.276	3.7
2-Methylnaphthalene		0.672	0.636	0.635	0.569	0.615	0.602	8.6
Hexachlorocyclopentadiene		0.286	0.303	0.349	0.343	0.388	0.345	11.2
2,4,6-Trichlorophenol		0.306	0.320	0.360	0.351	0.393	0.352	8.5
2-Fluorobiphenyl		1.737	1.605	1.532	1.272	1.337	1.403	16.3
2,4,5-Trichlorophenol		0.339	0.353	0.390	0.363	0.413	0.375	7.0
1,1-Biphenyl		1.727	1.641	1.637	1.411	1.567	1.533	9.8
2-Chloronaphthalene		1.256	1.198	1.193	1.058	1.155	1.140	7.4
2-Nitroaniline		0.205	0.240	0.292	0.298	0.344	0.292	17.9
Dimethylphthalate		1.338	1.295	1.344	1.210	1.342	1.284	5.0
Acenaphthylene		2.083	2.025	2.009	1.783	1.958	1.908	7.9

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: JACO05

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

Instrument ID: BNA_F Calibration Date(s): 05/05/2025 05/05/2025

Calibration Time(s): 13:54 17:15

LAB FILE ID: RRF2.5 = BF142295.D RRF005 = BF142296.D RRF010 = BF142297.D
RRF020 = BF142298.D RRF040 = BF142299.D RRF050 = BF142300.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2,6-Dinitrotoluene		0.172	0.206	0.242	0.245	0.280	0.240	16.2
3-Nitroaniline		0.206	0.238	0.288	0.286	0.329	0.282	15.8
Acenaphthene		1.260	1.191	1.200	1.066	1.180	1.147	7.3
2,4-Dinitrophenol			0.062	0.083	0.097	0.120	0.102	25.4
4-Nitrophenol		0.159	0.178	0.210	0.214	0.253	0.212	15.8
Dibenzofuran		1.932	1.790	1.801	1.555	1.711	1.693	9.7
2,4-Dinitrotoluene		0.222	0.250	0.303	0.318	0.368	0.308	17.6
Diethylphthalate		1.344	1.325	1.355	1.207	1.344	1.283	6.3
4-Chlorophenyl-phenylether		0.699	0.666	0.658	0.577	0.638	0.623	9.3
Fluorene		1.521	1.407	1.374	1.195	1.283	1.292	11.8
4-Nitroaniline		0.207	0.230	0.248	0.225	0.240	0.223	8.2
4,6-Dinitro-2-methylphenol			0.052	0.068	0.081	0.094	0.082	23.5
n-Nitrosodiphenylamine		0.704	0.683	0.693	0.629	0.686	0.666	5.3
2,4,6-Tribromophenol		0.161	0.176	0.198	0.191	0.218	0.193	10.2
4-Bromophenyl-phenylether		0.230	0.227	0.232	0.216	0.238	0.227	3.4
Hexachlorobenzene		0.264	0.246	0.253	0.237	0.258	0.249	3.8
Atrazine		0.157	0.165	0.176	0.174	0.196	0.175	7.2
Pentachlorophenol		0.094	0.109	0.130	0.139	0.153	0.131	16.7
Phenanthrene		1.193	1.102	1.105	0.988	1.058	1.048	9.1
Anthracene		1.210	1.136	1.134	1.018	1.093	1.077	8.8
Carbazole		1.065	1.016	1.024	0.926	0.986	0.966	8.2
Di-n-butylphthalate		0.957	1.022	1.082	1.013	1.093	1.016	5.9
Fluoranthene		1.198	1.154	1.128	0.985	1.051	1.048	11.5
Pyrene		1.822	1.748	1.902	1.705	1.912	1.780	7.0
Terphenyl-d14		1.493	1.424	1.460	1.255	1.390	1.351	9.6
Butylbenzylphthalate		0.282	0.330	0.439	0.469	0.545	0.449	23.7
3,3-Dichlorobenzidine		0.250	0.279	0.316	0.296	0.327	0.301	9.4
Benzo(a)anthracene		1.370	1.299	1.317	1.238	1.354	1.295	4.8
Chrysene		1.294	1.227	1.247	1.104	1.238	1.206	5.6
Bis(2-ethylhexyl)phthalate		0.328	0.417	0.557	0.601	0.699	0.573	26.4
Di-n-octyl phthalate			0.586	0.856	1.029	1.242	1.057	27.8
Benzo(b)fluoranthene		1.312	1.216	1.227	1.163	1.263	1.211	5.1
Benzo(k)fluoranthene		1.158	1.142	1.164	1.040	1.172	1.109	6.9
Benzo(a)pyrene		1.034	1.042	1.102	1.066	1.183	1.085	4.9
Indeno(1,2,3-cd)pyrene		1.152	1.281	1.421	1.384	1.596	1.391	10.4

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: JACO05

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

Instrument ID: BNA_F Calibration Date(s): 05/05/2025 05/05/2025

Calibration Time(s): 13:54 17:15

LAB FILE ID: RRF2.5 = BF142295.D RRF005 = BF142296.D RRF010 = BF142297.D
RRF020 = BF142298.D RRF040 = BF142299.D RRF050 = BF142300.D

COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
Dibenzo(a,h)anthracene		0.987	1.066	1.194	1.137	1.308	1.149	9.2
Benzo(g,h,i)perylene		0.971	1.056	1.175	1.120	1.295	1.141	9.4
1,2,4,5-Tetrachlorobenzene		0.600	0.586	0.586	0.515	0.574	0.559	6.5
1,4-Dioxane		0.553	0.527	0.535	0.503	0.543	0.528	3.4
2,3,4,6-Tetrachlorophenol		0.266	0.288	0.320	0.305	0.344	0.309	8.4

All other compounds must meet a minimum RRF of 0.010.

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF050525.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon May 05 18:41:44 2025
Response Via : Initial Calibration

Calibration Files
2.5 =BF142295.D 5 =BF142296.D 10 =BF142297.D 20 =BF142298.D 40 =BF142299.D 50 =BF142300.D 60 =BF142301.D 80 =BF1423
02.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------							
2)		1,4-Dioxane		0.553	0.527	0.535	0.503	0.543	0.521	0.511	0.528	3.36
3)		Pyridine		1.159	1.233	1.210	1.176	1.311	1.312	1.270	1.239	4.99
4)		n-Nitrosodimet...		0.718	0.707	0.729	0.696	0.759	0.726	0.705	0.720	2.88
5)	S	2-Fluorophenol		1.212	1.177	1.211	1.126	1.224	1.165	1.086	1.172	4.35
6)		Aniline		0.955	1.370	1.568	1.467	1.543	1.519	1.472	1.413	15.03
7)	S	Phenol-d6		1.510	1.458	1.489	1.375	1.500	1.419	1.336	1.441	4.64
8)		2-Chlorophenol		1.202	1.223	1.263	1.221	1.346	1.283	1.225	1.252	4.00
9)		Benzaldehyde		1.049	0.959	0.903	0.734	0.752	0.663		0.843	17.74
10)	C	Phenol		1.599	1.528	1.584	1.472	1.580	1.524	1.405	1.527	4.55
11)		bis(2-Chloroet...		1.789	1.543	1.510	1.353	1.516	1.441	1.392	1.506	9.49
12)		1,3-Dichlorobe...		1.555	1.505	1.466	1.347	1.477	1.379	1.298	1.432	6.48
13)	C	1,4-Dichlorobe...		1.562	1.499	1.486	1.364	1.476	1.386	1.294	1.438	6.46
14)		1,2-Dichlorobe...		1.480	1.432	1.415	1.317	1.424	1.340	1.254	1.380	5.71
15)		Benzyl Alcohol		0.816	0.843	0.933	0.928	1.030	1.008	0.972	0.933	8.56
16)		2,2'-oxybis(1-...		2.379	2.310	2.325	2.135	2.341	2.211	2.044	2.249	5.48
17)		2-Methylphenol		1.033	1.008	1.022	0.972	1.070	1.013	0.978	1.014	3.30
18)		Hexachloroethane		0.473	0.464	0.488	0.463	0.511	0.487	0.463	0.478	3.78
19)	P	n-Nitroso-di-n...	0.840	0.943	0.915	0.918	0.860	0.933	0.885	0.837	0.891	4.69
20)		3+4-Methylphenols		1.354	1.281	1.322	1.218	1.333	1.226	1.121	1.265	6.48
21)	I	Naphthalene-d8	----------	ISTD	----------							
22)		Acetophenone		0.505	0.474	0.464	0.416	0.446	0.419	0.389	0.445	8.95
23)	S	Nitrobenzene-d5		0.289	0.304	0.336	0.327	0.360	0.348	0.332	0.328	7.48
24)		Nitrobenzene		0.281	0.293	0.316	0.306	0.337	0.325	0.305	0.309	6.05
25)		Isophorone		0.639	0.623	0.630	0.586	0.648	0.622	0.598	0.621	3.53
26)	C	2-Nitrophenol		0.089	0.097	0.121	0.132	0.154	0.155	0.155	0.129	21.55
27)		2,4-Dimethylph...		0.311	0.314	0.321	0.298	0.329	0.314	0.299	0.312	3.55
28)		bis(2-Chloroet...		0.430	0.414	0.418	0.374	0.408	0.386	0.366	0.399	6.09
29)	C	2,4-Dichloroph...		0.245	0.251	0.278	0.263	0.288	0.274	0.260	0.265	5.71
30)		1,2,4-Trichlor...		0.329	0.309	0.309	0.281	0.304	0.289	0.271	0.299	6.60
31)		Naphthalene		1.102	1.031	1.028	0.906	0.978	0.906	0.835	0.969	9.52
32)		Benzoic acid			0.084	0.117	0.140	0.178	0.186	0.194	0.150	29.22
33)		4-Chloroaniline		0.373	0.373	0.398	0.383	0.435	0.415	0.392	0.396	5.80
34)	C	Hexachlorobuta...		0.188	0.182	0.181	0.168	0.185	0.173	0.162	0.177	5.32
35)		Caprolactam		0.063	0.068	0.078	0.079	0.088	0.083	0.082	0.077	11.39
36)	C	4-Chloro-3-met...		0.281	0.270	0.283	0.265	0.290	0.279	0.262	0.276	3.68
37)		2-Methylnaphth...		0.672	0.636	0.635	0.569	0.615	0.568	0.521	0.602	8.60
38)		1-Methylnaphth...		0.710	0.675	0.665	0.594	0.630	0.587	0.535	0.628	9.59

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF050525.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.600	0.586	0.586	0.515	0.574	0.538	0.512	0.559	6.51
41)	P	Hexachlorocycl...	0.286	0.303	0.349	0.343	0.388	0.379	0.369	0.345	11.16
42)	S	2,4,6-Tribromo...	0.161	0.176	0.198	0.191	0.218	0.210	0.197	0.193	10.16
43)	C	2,4,6-Trichlor...	0.306	0.320	0.360	0.351	0.393	0.371	0.365	0.352	8.53
44)		2,4,5-Trichlor...	0.339	0.353	0.390	0.363	0.413	0.397	0.369	0.375	7.00
45)	S	2-Fluorobiphenyl	1.737	1.605	1.532	1.272	1.337	1.246	1.090	1.403	16.29
46)		1,1'-Biphenyl	1.727	1.641	1.637	1.411	1.567	1.442	1.310	1.533	9.75
47)		2-Chloronaphth...	1.256	1.198	1.193	1.058	1.155	1.106	1.018	1.140	7.40
48)		2-Nitroaniline	0.205	0.240	0.292	0.298	0.344	0.337	0.330	0.292	17.90
49)		Acenaphthylene	2.083	2.025	2.009	1.783	1.958	1.830	1.665	1.908	7.94
50)		Dimethylphthalate	1.338	1.295	1.344	1.210	1.342	1.275	1.186	1.284	5.04
51)		2,6-Dinitrotol...	0.172	0.206	0.242	0.245	0.280	0.273	0.263	0.240	16.19
52)	C	Acenaphthene	1.260	1.191	1.200	1.066	1.180	1.111	1.021	1.147	7.32
53)		3-Nitroaniline	0.206	0.238	0.288	0.286	0.329	0.319	0.307	0.282	15.80
54)	P	2,4-Dinitrophenol		0.062	0.083	0.097	0.120	0.124	0.127	0.102	25.44
55)		Dibenzofuran	1.932	1.790	1.801	1.555	1.711	1.609	1.453	1.693	9.72
56)	P	4-Nitrophenol	0.159	0.178	0.210	0.214	0.253	0.240	0.231	0.212	15.82
57)		2,4-Dinitrotol...	0.222	0.250	0.303	0.318	0.368	0.355	0.341	0.308	17.63
58)		Fluorene	1.521	1.407	1.374	1.195	1.283	1.183	1.080	1.292	11.77
59)		2,3,4,6-Tetrac...	0.266	0.288	0.320	0.305	0.344	0.329	0.314	0.309	8.38
60)		Diethylphthalate	1.344	1.325	1.355	1.207	1.344	1.252	1.151	1.283	6.27
61)		4-Chlorophenyl...	0.699	0.666	0.658	0.577	0.638	0.590	0.535	0.623	9.26
62)		4-Nitroaniline	0.207	0.230	0.248	0.225	0.240	0.219	0.195	0.223	8.23
63)		Azobenzene	1.338	1.271	1.285	1.132	1.270	1.185	1.098	1.226	7.23
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...		0.052	0.068	0.081	0.094	0.098	0.101	0.082	23.49
66)	c	n-Nitrosodiphe...	0.704	0.683	0.693	0.629	0.686	0.654	0.610	0.666	5.28
67)		4-Bromophenyl-...	0.230	0.227	0.232	0.216	0.238	0.227	0.217	0.227	3.44
68)		Hexachlorobenzene	0.264	0.246	0.253	0.237	0.258	0.248	0.240	0.249	3.84
69)		Atrazine	0.157	0.165	0.176	0.174	0.196	0.185	0.175	0.175	7.17
70)	C	Pentachlorophenol	0.094	0.109	0.130	0.139	0.153	0.150	0.144	0.131	16.65
71)		Phenanthrene	1.193	1.102	1.105	0.988	1.058	0.987	0.906	1.048	9.14
72)		Anthracene	1.210	1.136	1.134	1.018	1.093	1.023	0.927	1.077	8.77
73)		Carbazole	1.065	1.016	1.024	0.926	0.986	0.911	0.837	0.966	8.17
74)		Di-n-butylphth...	0.957	1.022	1.082	1.013	1.093	1.019	0.928	1.016	5.91
75)	C	Fluoranthene	1.198	1.154	1.128	0.985	1.051	0.956	0.863	1.048	11.46
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine		0.272	0.384	0.358	0.426	0.403	0.337	0.363	15.09
78)		Pyrene	1.822	1.748	1.902	1.705	1.912	1.817	1.555	1.780	6.99
79)	S	Terphenyl-d14	1.493	1.424	1.460	1.255	1.390	1.314	1.123	1.351	9.61
80)		Butylbenzylpht...	0.282	0.330	0.439	0.469	0.545	0.549	0.527	0.449	23.70
81)		Benzo(a)anthra...	1.370	1.299	1.317	1.238	1.354	1.296	1.192	1.295	4.84
82)		3,3'-Dichlorob...	0.250	0.279	0.316	0.296	0.327	0.323	0.317	0.301	9.40
83)		Chrysene	1.294	1.227	1.247	1.104	1.238	1.203	1.128	1.206	5.59
84)		Bis(2-ethylhex...	0.328	0.417	0.557	0.601	0.699	0.716	0.697	0.573	26.35
85)	c	Di-n-octyl pht...		0.586	0.856	1.029	1.242	1.315	1.317	1.057	27.77

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF050525.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.152	1.281	1.421	1.384	1.596	1.504	1.402	1.391	10.38
88)		Benzo(b)fluora...	1.312	1.216	1.227	1.163	1.263	1.142	1.156	1.211	5.14
89)		Benzo(k)fluora...	1.158	1.142	1.164	1.040	1.172	1.114	0.969	1.109	6.88
90)	C	Benzo(a)pyrene	1.034	1.042	1.102	1.066	1.183	1.119	1.054	1.085	4.88
91)		Dibenzo(a,h)an...	0.987	1.066	1.194	1.137	1.308	1.224	1.129	1.149	9.17
92)		Benzo(g,h,i)pe...	0.971	1.056	1.175	1.120	1.295	1.225	1.143	1.141	9.37

(#) = Out of Range

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF050525.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon May 05 18:41:44 2025
Response Via : Initial Calibration

Calibration Files
2.5 =BF142295.D 5 =BF142296.D 10 =BF142297.D 20 =BF142298.D 40 =BF142299.D 50 =BF142300.D 60 =BF142301.D 80 =BF1423
02.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------							
2)		1,4-Dioxane		0.553	0.527	0.535	0.503	0.543	0.521	0.511	0.528	3.36
3)		Pyridine		1.159	1.233	1.210	1.176	1.311	1.312	1.270	1.239	4.99
4)		n-Nitrosodimet...		0.718	0.707	0.729	0.696	0.759	0.726	0.705	0.720	2.88
5)	S	2-Fluorophenol		1.212	1.177	1.211	1.126	1.224	1.165	1.086	1.172	4.35
6)		Aniline		0.955	1.370	1.568	1.467	1.543	1.519	1.472	1.413	15.03
7)	S	Phenol-d6		1.510	1.458	1.489	1.375	1.500	1.419	1.336	1.441	4.64
8)		2-Chlorophenol		1.202	1.223	1.263	1.221	1.346	1.283	1.225	1.252	4.00
9)		Benzaldehyde		1.049	0.959	0.903	0.734	0.752	0.663		0.843	17.74
10)	C	Phenol		1.599	1.528	1.584	1.472	1.580	1.524	1.405	1.527	4.55
11)		bis(2-Chloroet...		1.789	1.543	1.510	1.353	1.516	1.441	1.392	1.506	9.49
12)		1,3-Dichlorobe...		1.555	1.505	1.466	1.347	1.477	1.379	1.298	1.432	6.48
13)	C	1,4-Dichlorobe...		1.562	1.499	1.486	1.364	1.476	1.386	1.294	1.438	6.46
14)		1,2-Dichlorobe...		1.480	1.432	1.415	1.317	1.424	1.340	1.254	1.380	5.71
15)		Benzyl Alcohol		0.816	0.843	0.933	0.928	1.030	1.008	0.972	0.933	8.56
16)		2,2'-oxybis(1-...		2.379	2.310	2.325	2.135	2.341	2.211	2.044	2.249	5.48
17)		2-Methylphenol		1.033	1.008	1.022	0.972	1.070	1.013	0.978	1.014	3.30
18)		Hexachloroethane		0.473	0.464	0.488	0.463	0.511	0.487	0.463	0.478	3.78
19)	P	n-Nitroso-di-n...	0.840	0.943	0.915	0.918	0.860	0.933	0.885	0.837	0.891	4.69
20)		3+4-Methylphenols		1.354	1.281	1.322	1.218	1.333	1.226	1.121	1.265	6.48
21)	I	Naphthalene-d8	----------	ISTD	----------							
22)		Acetophenone		0.505	0.474	0.464	0.416	0.446	0.419	0.389	0.445	8.95
23)	S	Nitrobenzene-d5		0.289	0.304	0.336	0.327	0.360	0.348	0.332	0.328	7.48
24)		Nitrobenzene		0.281	0.293	0.316	0.306	0.337	0.325	0.305	0.309	6.05
25)		Isophorone		0.639	0.623	0.630	0.586	0.648	0.622	0.598	0.621	3.53
26)	C	2-Nitrophenol		0.089	0.097	0.121	0.132	0.154	0.155	0.155	0.129	21.55
27)		2,4-Dimethylph...		0.311	0.314	0.321	0.298	0.329	0.314	0.299	0.312	3.55
28)		bis(2-Chloroet...		0.430	0.414	0.418	0.374	0.408	0.386	0.366	0.399	6.09
29)	C	2,4-Dichloroph...		0.245	0.251	0.278	0.263	0.288	0.274	0.260	0.265	5.71
30)		1,2,4-Trichlor...		0.329	0.309	0.309	0.281	0.304	0.289	0.271	0.299	6.60
31)		Naphthalene		1.102	1.031	1.028	0.906	0.978	0.906	0.835	0.969	9.52
32)		Benzoic acid			0.084	0.117	0.140	0.178	0.186	0.194	0.150	29.22
33)		4-Chloroaniline		0.373	0.373	0.398	0.383	0.435	0.415	0.392	0.396	5.80
34)	C	Hexachlorobuta...		0.188	0.182	0.181	0.168	0.185	0.173	0.162	0.177	5.32
35)		Caprolactam		0.063	0.068	0.078	0.079	0.088	0.083	0.082	0.077	11.39
36)	C	4-Chloro-3-met...		0.281	0.270	0.283	0.265	0.290	0.279	0.262	0.276	3.68
37)		2-Methylnaphth...		0.672	0.636	0.635	0.569	0.615	0.568	0.521	0.602	8.60
38)		1-Methylnaphth...		0.710	0.675	0.665	0.594	0.630	0.587	0.535	0.628	9.59

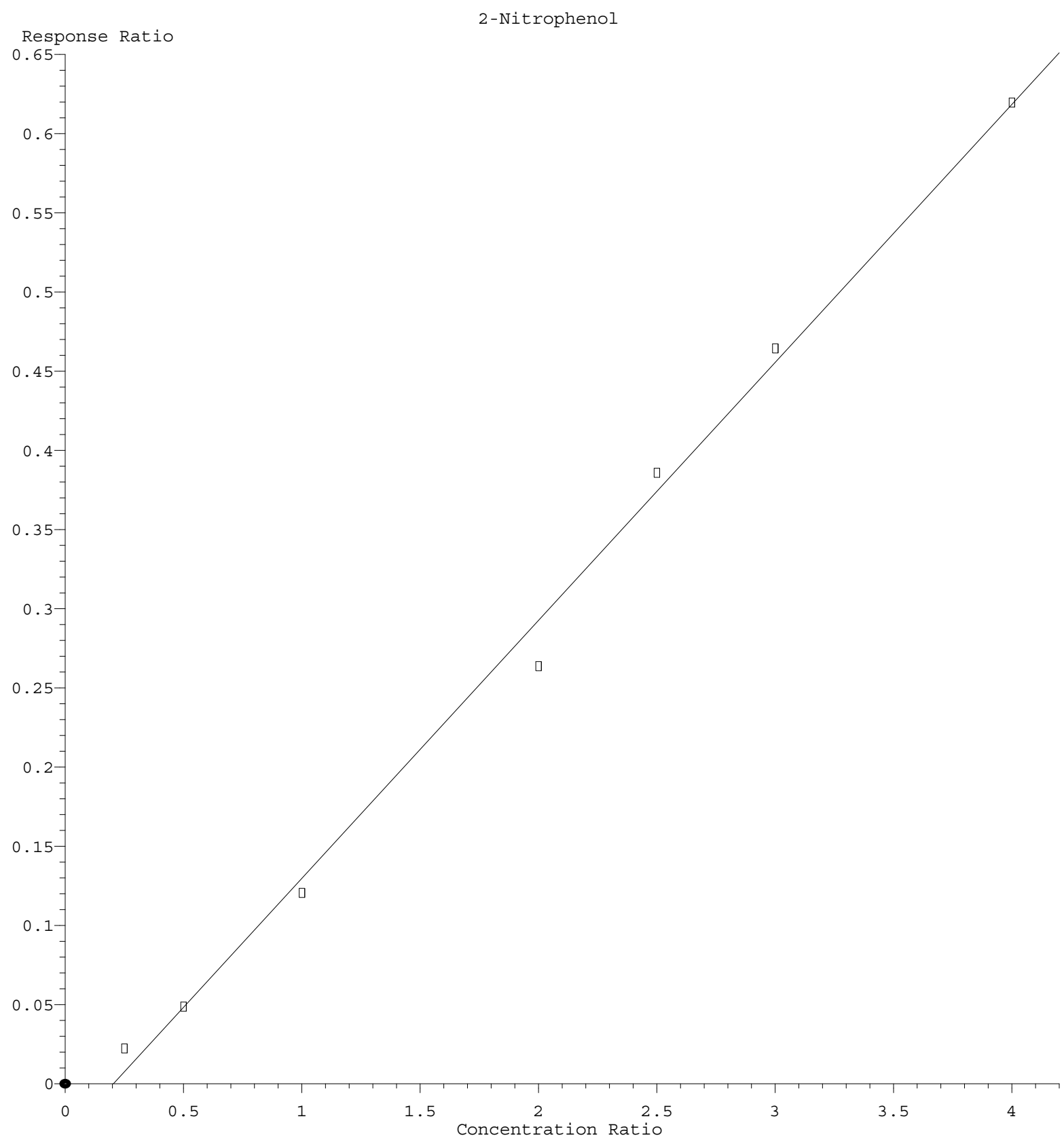
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF050525.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.600	0.586	0.586	0.515	0.574	0.538	0.512	0.559	6.51
41)	P	Hexachlorocycl...	0.286	0.303	0.349	0.343	0.388	0.379	0.369	0.345	11.16
42)	S	2,4,6-Tribromo...	0.161	0.176	0.198	0.191	0.218	0.210	0.197	0.193	10.16
43)	C	2,4,6-Trichlor...	0.306	0.320	0.360	0.351	0.393	0.371	0.365	0.352	8.53
44)		2,4,5-Trichlor...	0.339	0.353	0.390	0.363	0.413	0.397	0.369	0.375	7.00
45)	S	2-Fluorobiphenyl	1.737	1.605	1.532	1.272	1.337	1.246	1.090	1.403	16.29
46)		1,1'-Biphenyl	1.727	1.641	1.637	1.411	1.567	1.442	1.310	1.533	9.75
47)		2-Chloronaphth...	1.256	1.198	1.193	1.058	1.155	1.106	1.018	1.140	7.40
48)		2-Nitroaniline	0.205	0.240	0.292	0.298	0.344	0.337	0.330	0.292	17.90
49)		Acenaphthylene	2.083	2.025	2.009	1.783	1.958	1.830	1.665	1.908	7.94
50)		Dimethylphthalate	1.338	1.295	1.344	1.210	1.342	1.275	1.186	1.284	5.04
51)		2,6-Dinitrotol...	0.172	0.206	0.242	0.245	0.280	0.273	0.263	0.240	16.19
52)	C	Acenaphthene	1.260	1.191	1.200	1.066	1.180	1.111	1.021	1.147	7.32
53)		3-Nitroaniline	0.206	0.238	0.288	0.286	0.329	0.319	0.307	0.282	15.80
54)	P	2,4-Dinitrophenol		0.062	0.083	0.097	0.120	0.124	0.127	0.102	25.44
55)		Dibenzofuran	1.932	1.790	1.801	1.555	1.711	1.609	1.453	1.693	9.72
56)	P	4-Nitrophenol	0.159	0.178	0.210	0.214	0.253	0.240	0.231	0.212	15.82
57)		2,4-Dinitrotol...	0.222	0.250	0.303	0.318	0.368	0.355	0.341	0.308	17.63
58)		Fluorene	1.521	1.407	1.374	1.195	1.283	1.183	1.080	1.292	11.77
59)		2,3,4,6-Tetrac...	0.266	0.288	0.320	0.305	0.344	0.329	0.314	0.309	8.38
60)		Diethylphthalate	1.344	1.325	1.355	1.207	1.344	1.252	1.151	1.283	6.27
61)		4-Chlorophenyl...	0.699	0.666	0.658	0.577	0.638	0.590	0.535	0.623	9.26
62)		4-Nitroaniline	0.207	0.230	0.248	0.225	0.240	0.219	0.195	0.223	8.23
63)		Azobenzene	1.338	1.271	1.285	1.132	1.270	1.185	1.098	1.226	7.23
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...		0.052	0.068	0.081	0.094	0.098	0.101	0.082	23.49
66)	c	n-Nitrosodiphe...	0.704	0.683	0.693	0.629	0.686	0.654	0.610	0.666	5.28
67)		4-Bromophenyl-...	0.230	0.227	0.232	0.216	0.238	0.227	0.217	0.227	3.44
68)		Hexachlorobenzene	0.264	0.246	0.253	0.237	0.258	0.248	0.240	0.249	3.84
69)		Atrazine	0.157	0.165	0.176	0.174	0.196	0.185	0.175	0.175	7.17
70)	C	Pentachlorophenol	0.094	0.109	0.130	0.139	0.153	0.150	0.144	0.131	16.65
71)		Phenanthrene	1.193	1.102	1.105	0.988	1.058	0.987	0.906	1.048	9.14
72)		Anthracene	1.210	1.136	1.134	1.018	1.093	1.023	0.927	1.077	8.77
73)		Carbazole	1.065	1.016	1.024	0.926	0.986	0.911	0.837	0.966	8.17
74)		Di-n-butylphth...	0.957	1.022	1.082	1.013	1.093	1.019	0.928	1.016	5.91
75)	C	Fluoranthene	1.198	1.154	1.128	0.985	1.051	0.956	0.863	1.048	11.46
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine		0.272	0.384	0.358	0.426	0.403	0.337	0.363	15.09
78)		Pyrene	1.822	1.748	1.902	1.705	1.912	1.817	1.555	1.780	6.99
79)	S	Terphenyl-d14	1.493	1.424	1.460	1.255	1.390	1.314	1.123	1.351	9.61
80)		Butylbenzylpht...	0.282	0.330	0.439	0.469	0.545	0.549	0.527	0.449	23.70
81)		Benzo(a)anthra...	1.370	1.299	1.317	1.238	1.354	1.296	1.192	1.295	4.84
82)		3,3'-Dichlorob...	0.250	0.279	0.316	0.296	0.327	0.323	0.317	0.301	9.40
83)		Chrysene	1.294	1.227	1.247	1.104	1.238	1.203	1.128	1.206	5.59
84)		Bis(2-ethylhex...	0.328	0.417	0.557	0.601	0.699	0.716	0.697	0.573	26.35
85)	c	Di-n-octyl pht...		0.586	0.856	1.029	1.242	1.315	1.317	1.057	27.77

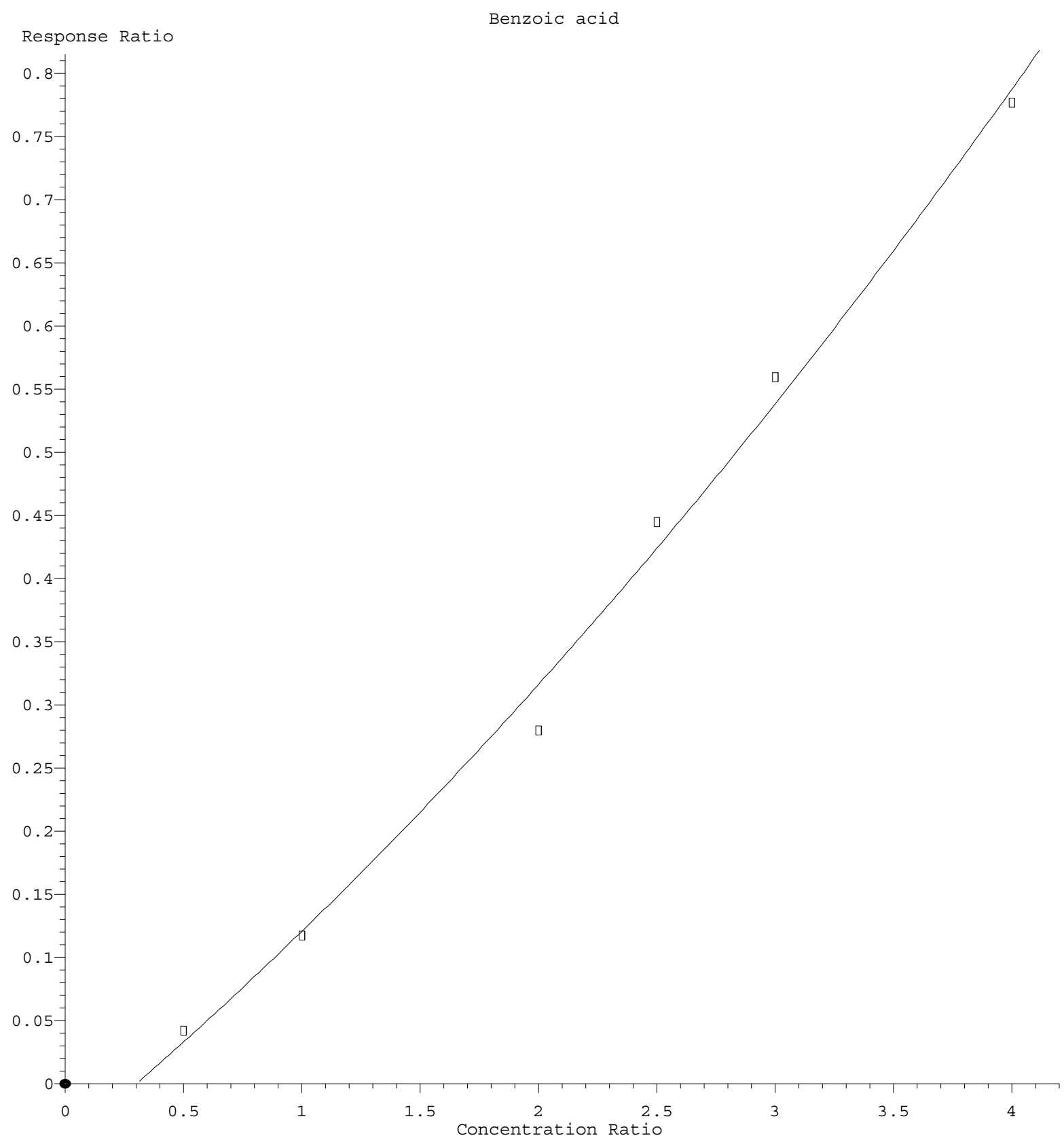
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF050525.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.152	1.281	1.421	1.384	1.596	1.504	1.402	1.391	10.38
88)		Benzo(b)fluora...	1.312	1.216	1.227	1.163	1.263	1.142	1.156	1.211	5.14
89)		Benzo(k)fluora...	1.158	1.142	1.164	1.040	1.172	1.114	0.969	1.109	6.88
90)	C	Benzo(a)pyrene	1.034	1.042	1.102	1.066	1.183	1.119	1.054	1.085	4.88
91)		Dibenzo(a,h)an...	0.987	1.066	1.194	1.137	1.308	1.224	1.129	1.149	9.17
92)		Benzo(g,h,i)pe...	0.971	1.056	1.175	1.120	1.295	1.225	1.143	1.141	9.37

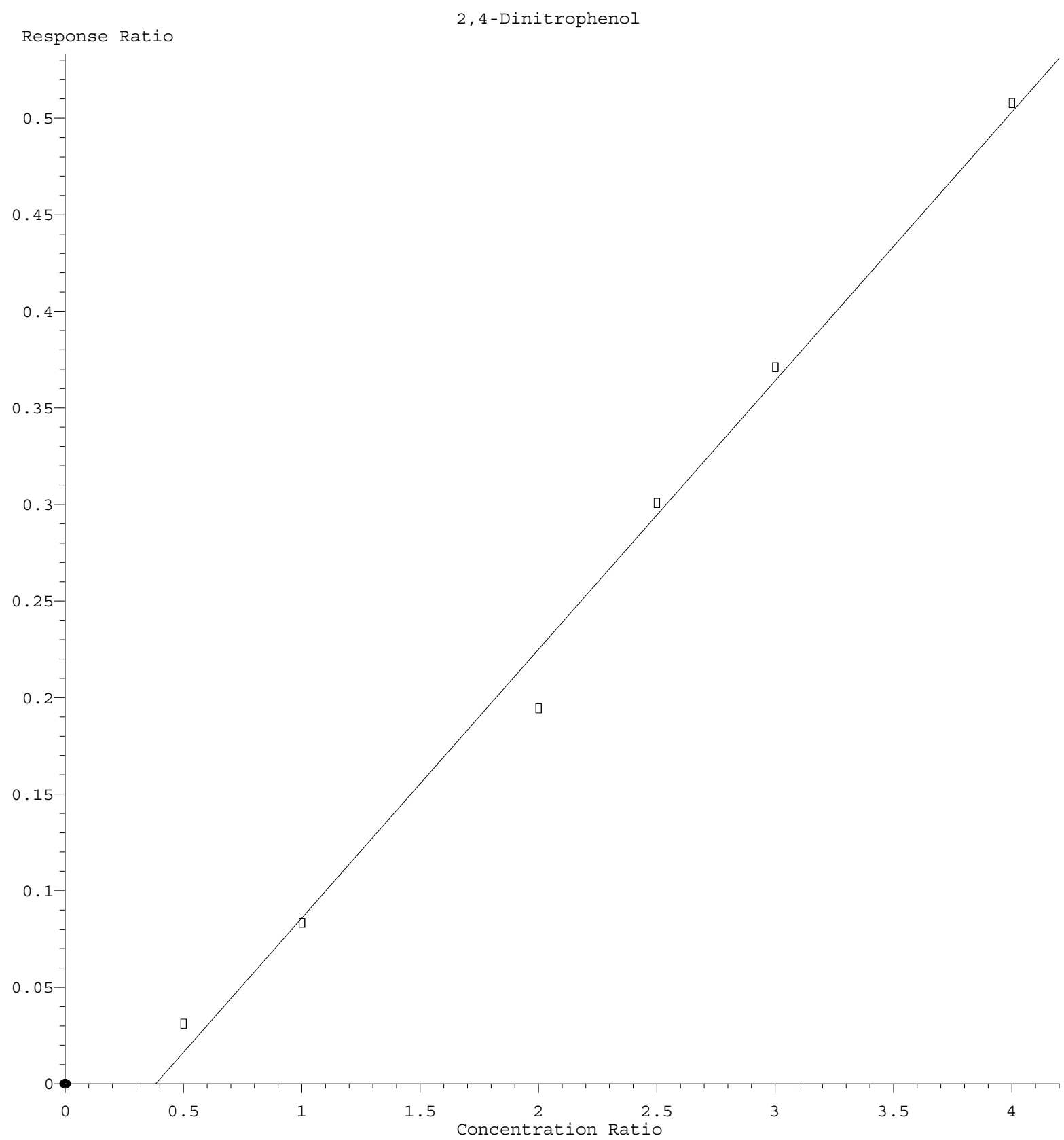
(#) = Out of Range



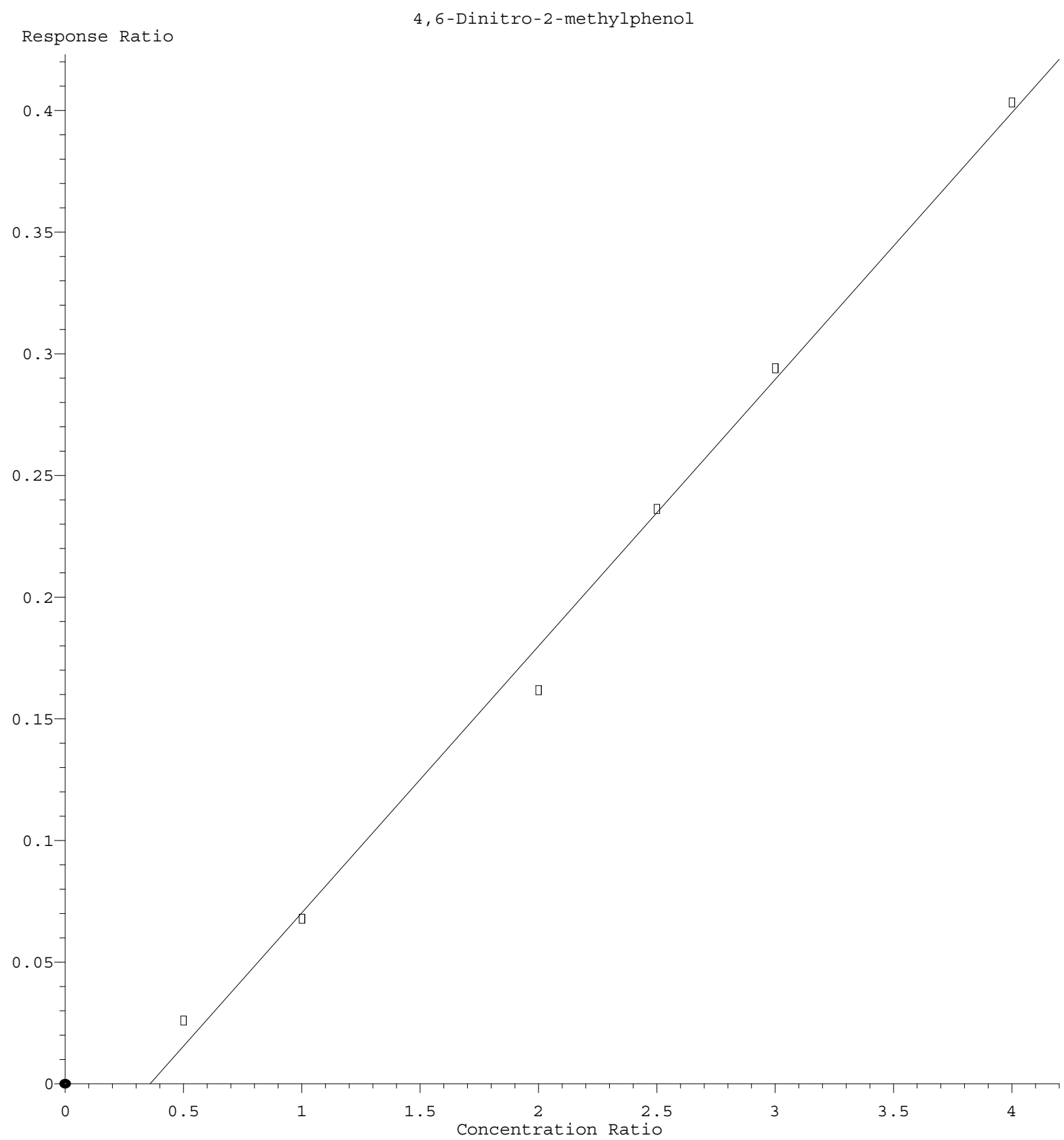
Response = 1.629e-001 * Amt - 3.329e-002
Coef of Det (r^2) = 0.995567 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF050525.M
Calibration Table Last Updated: Mon May 05 18:41:44 2025



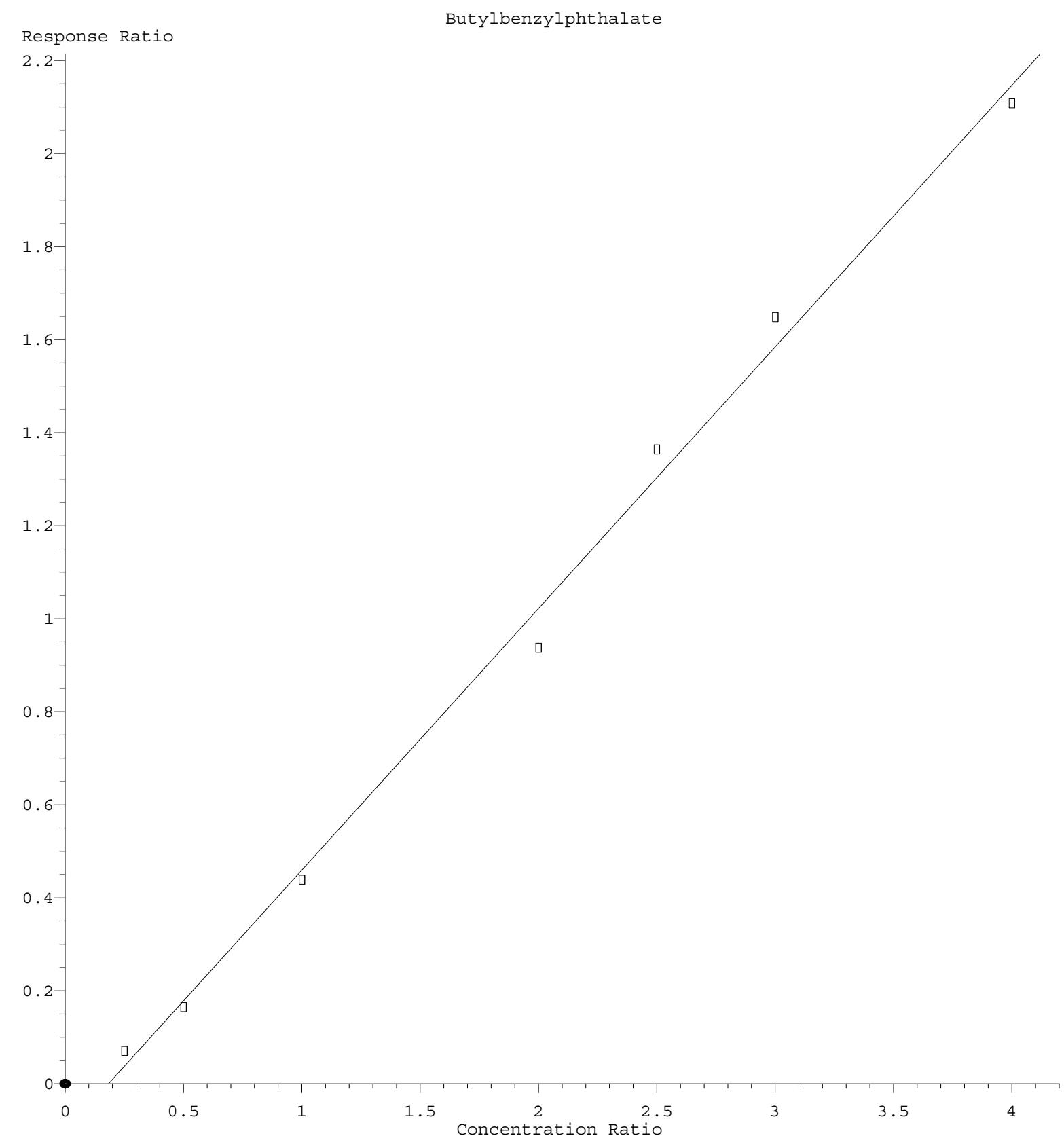
R = 1.340e-002 A*A + 1.552e-001 A - 4.790e-002
Coef of Det (r^2) = 0.993773 Curve Fit: Quadratic
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF050525.M
Calibration Table Last Updated: Mon May 05 18:41:44 2025



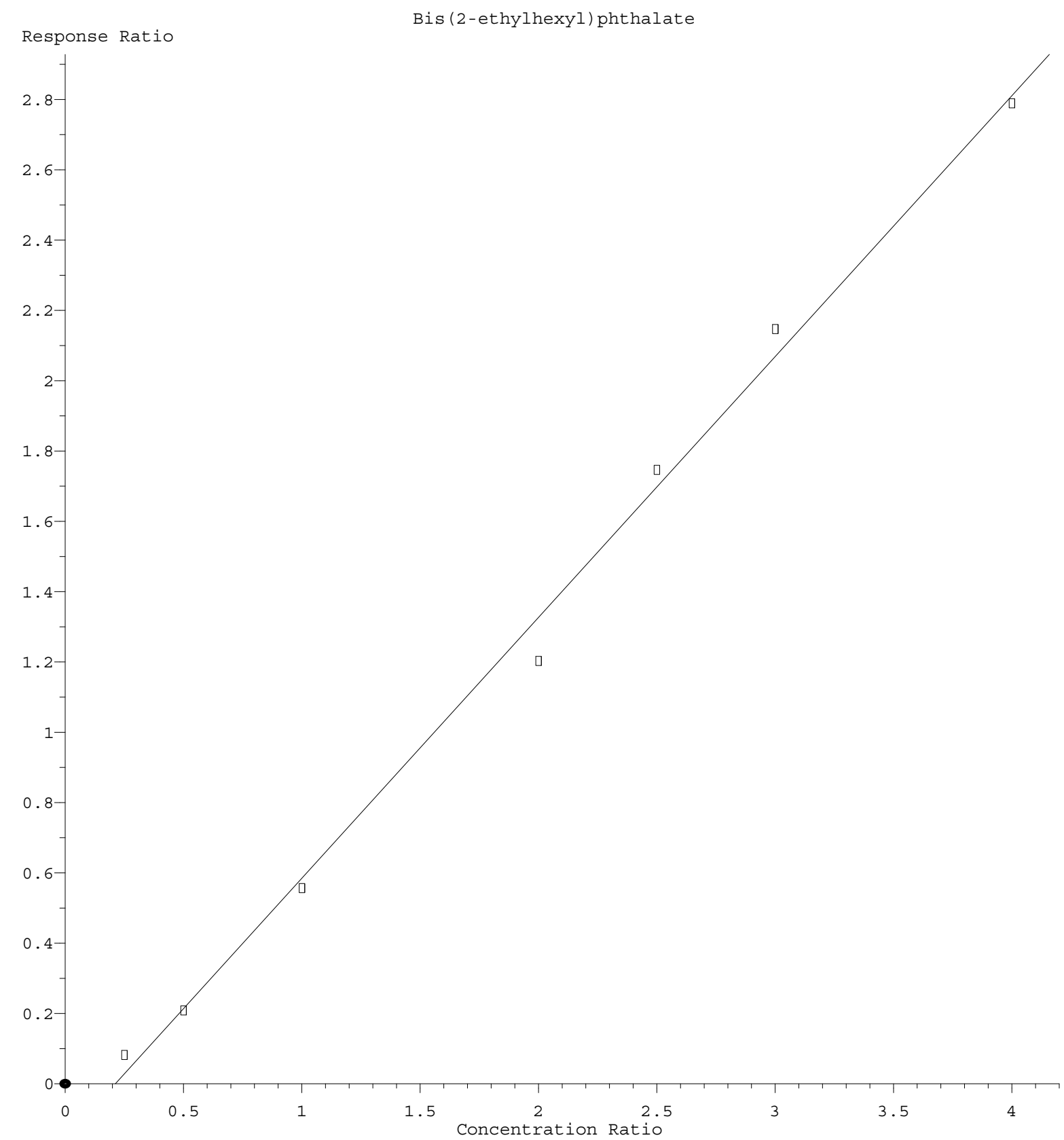
Response = 1.391e-001 * Amt - 5.328e-002
Coef of Det (r^2) = 0.992198 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF050525.M
Calibration Table Last Updated: Mon May 05 18:41:44 2025



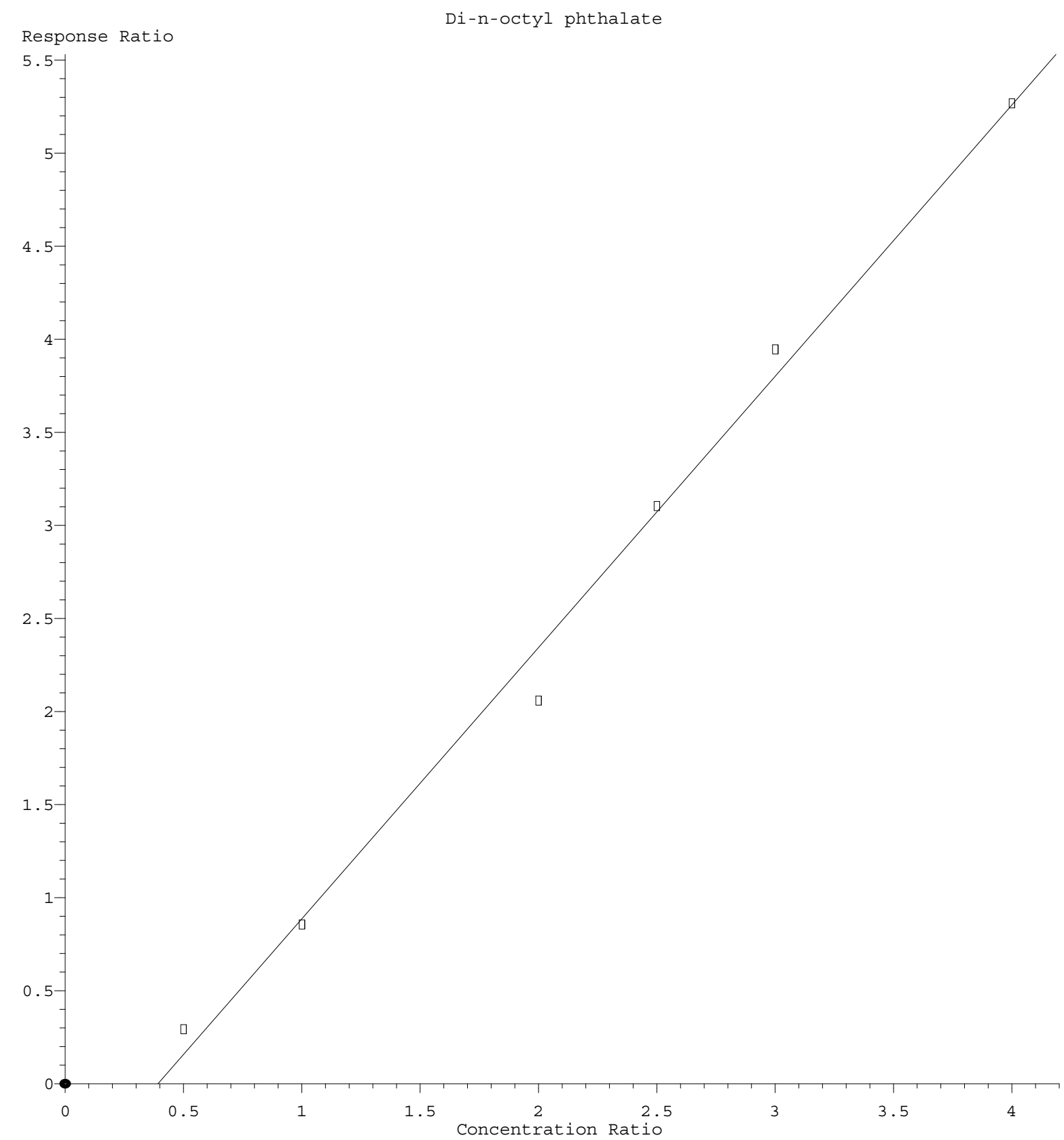
Response = 1.096e-001 * Amt - 3.939e-002
Coef of Det (r^2) = 0.995176 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF050525.M
Calibration Table Last Updated: Mon May 05 18:41:44 2025



Response = 5.624e-001 * Amt - 1.029e-001
Coef of Det (r^2) = 0.995038 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF050525.M
Calibration Table Last Updated: Mon May 05 18:41:44 2025



Response = 7.421e-001 * Amt - 1.572e-001
Coef of Det (r^2) = 0.995584 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF050525.M
Calibration Table Last Updated: Mon May 05 18:41:44 2025



Response = 1.458e+000 * Amt - 5.715e-001
Coef of Det (r^2) = 0.993132 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF050525.M
Calibration Table Last Updated: Mon May 05 18:41:44 2025

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142295.D
Acq On : 05 May 2025 13:54
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Quant Time: May 05 17:55:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	220458	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	851705	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	461090	20.000	ng	0.00
64) Phenanthrene-d10	11.428	188	826586	20.000	ng	0.00
76) Chrysene-d12	14.069	240	600134	20.000	ng	0.00
86) Perylene-d12	15.557	264	417952	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.000	ng	
7) Phenol-d6	0.000	99	0d	0.000	ng	
23) Nitrobenzene-d5	0.000	82	0d	0.000	ng	
42) 2,4,6-Tribromophenol	0.000	330	0d	0.000	ng	
45) 2-Fluorobiphenyl	0.000	172	0d	0.000	ng	
79) Terphenyl-d14	0.000	244	0d	0.000	ng	
Target Compounds						Qvalue
19) n-Nitroso-di-n-propyla...	7.304	70	23149	2.356	ng	93

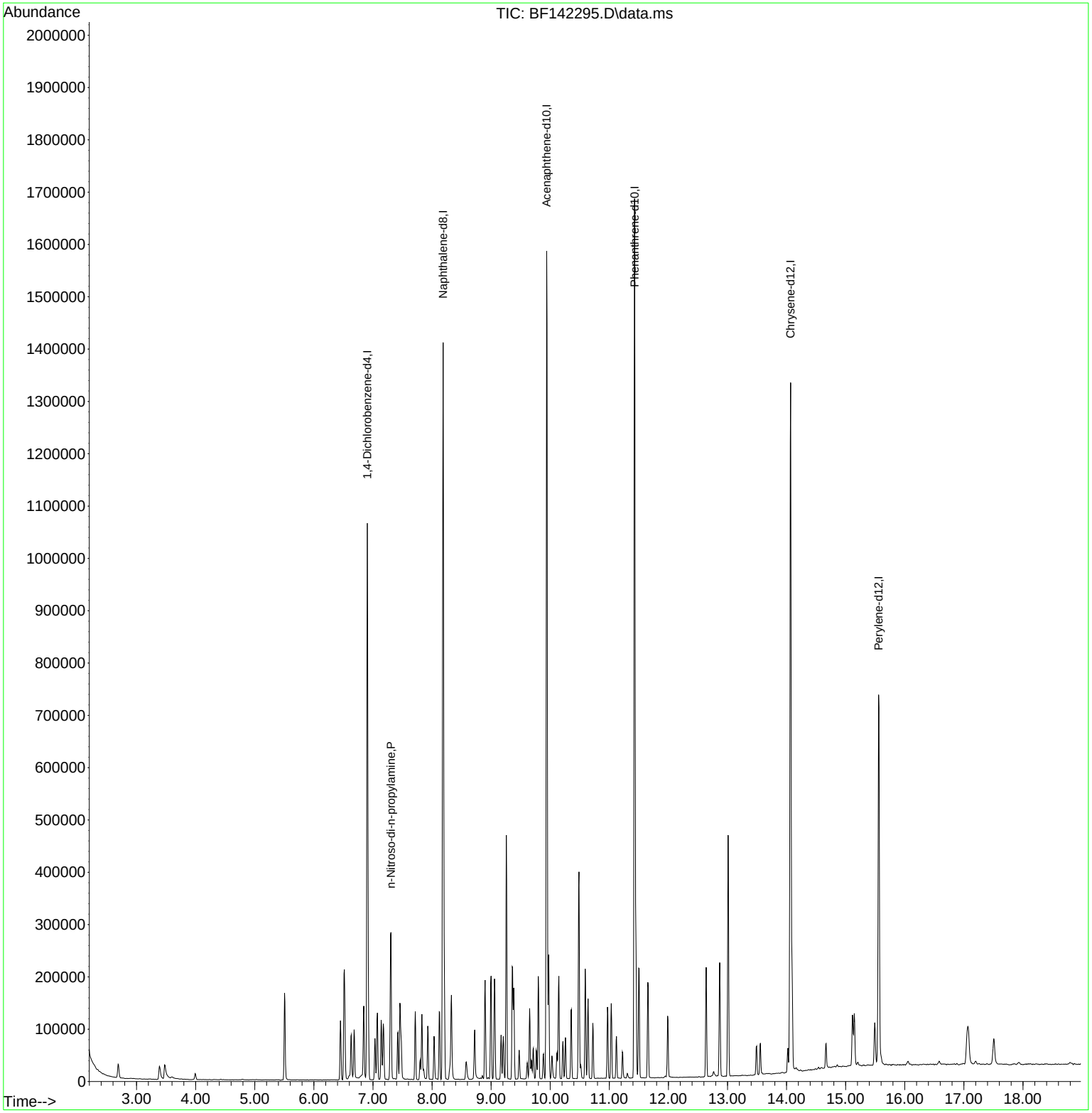
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142295.D
Acq On : 05 May 2025 13:54
Operator : RC/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Quant Time: May 05 17:55:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142296.D
Acq On : 05 May 2025 14:23
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Quant Time: May 05 17:56:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.904	152	207173	20.000	ng		0.00
21) Naphthalene-d8	8.187	136	800106	20.000	ng		0.00
39) Acenaphthene-d10	9.939	164	439288	20.000	ng		0.00
64) Phenanthrene-d10	11.427	188	788007	20.000	ng		0.00
76) Chrysene-d12	14.068	240	553678	20.000	ng		0.00
86) Perylene-d12	15.557	264	376971	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.504	112	125572	10.347	ng		0.00
7) Phenol-d6	6.510	99	156415	10.479	ng		-0.01
23) Nitrobenzene-d5	7.457	82	115545	8.807	ng		-0.01
42) 2,4,6-Tribromophenol	10.727	330	35296	8.322	ng		0.00
45) 2-Fluorobiphenyl	9.257	172	381508	12.383	ng		0.00
79) Terphenyl-d14	13.010	244	413313	11.049	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.687	88	28652	5.243	ng		100
3) Pyridine	3.463	79	60003m	4.669	ng		
4) n-Nitrosodimethylamine	3.387	42	37175	4.985	ng	#	98
6) Aniline	6.563	93	49440	3.377	ng		97
8) 2-Chlorophenol	6.681	128	62258	4.801	ng		98
9) Benzaldehyde	6.451	77	54313	6.217	ng		97
10) Phenol	6.522	94	82817	5.234	ng		97
11) bis(2-Chloroethyl)ether	6.634	93	92675m	5.940	ng		
12) 1,3-Dichlorobenzene	6.845	146	80536	5.428	ng		99
13) 1,4-Dichlorobenzene	6.922	146	80900	5.431	ng		98
14) 1,2-Dichlorobenzene	7.075	146	76655	5.361	ng		99
15) Benzyl Alcohol	7.034	79	42272	4.374	ng		99
16) 2,2'-oxybis(1-Chloropr...	7.175	45	123229	5.289	ng		100
17) 2-Methylphenol	7.140	107	53481	5.094	ng		98
18) Hexachloroethane	7.422	117	24476	4.938	ng		98
19) n-Nitroso-di-n-propyla...	7.304	70	48843	5.290	ng		97
20) 3+4-Methylphenols	7.292	107	70122	5.351	ng		89
22) Acetophenone	7.304	105	101001	5.677	ng		98
24) Nitrobenzene	7.481	77	56276	4.551	ng		98
25) Isophorone	7.716	82	127812	5.145	ng		98
26) 2-Nitrophenol	7.798	139	17854	6.828	ng		97
27) 2,4-Dimethylphenol	7.828	122	62210	4.981	ng		99
28) bis(2-Chloroethoxy)met...	7.928	93	86020	5.385	ng		98
29) 2,4-Dichlorophenol	8.034	162	49005	4.615	ng		99
30) 1,2,4-Trichlorobenzene	8.128	180	65738	5.501	ng		98
31) Naphthalene	8.210	128	220404	5.684	ng		98
33) 4-Chloroaniline	8.275	127	74603m	4.723	ng		
34) Hexachlorobutadiene	8.328	225	37522	5.302	ng		99
35) Caprolactam	8.581	113	12615	4.085	ng		96
36) 4-Chloro-3-methylphenol	8.722	107	56110	5.083	ng		99
37) 2-Methylnaphthalene	8.898	142	134367	5.576	ng		99
38) 1-Methylnaphthalene	8.998	142	141952	5.652	ng		99
40) 1,2,4,5-Tetrachloroben...	9.063	216	65890	5.370	ng		99
41) Hexachlorocyclopentadiene	9.051	237	31389	4.140	ng		99
43) 2,4,6-Trichlorophenol	9.169	196	33630	4.346	ng		98
44) 2,4,5-Trichlorophenol	9.204	196	37237	4.522	ng		98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142296.D
Acq On : 05 May 2025 14:23
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Quant Time: May 05 17:56:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

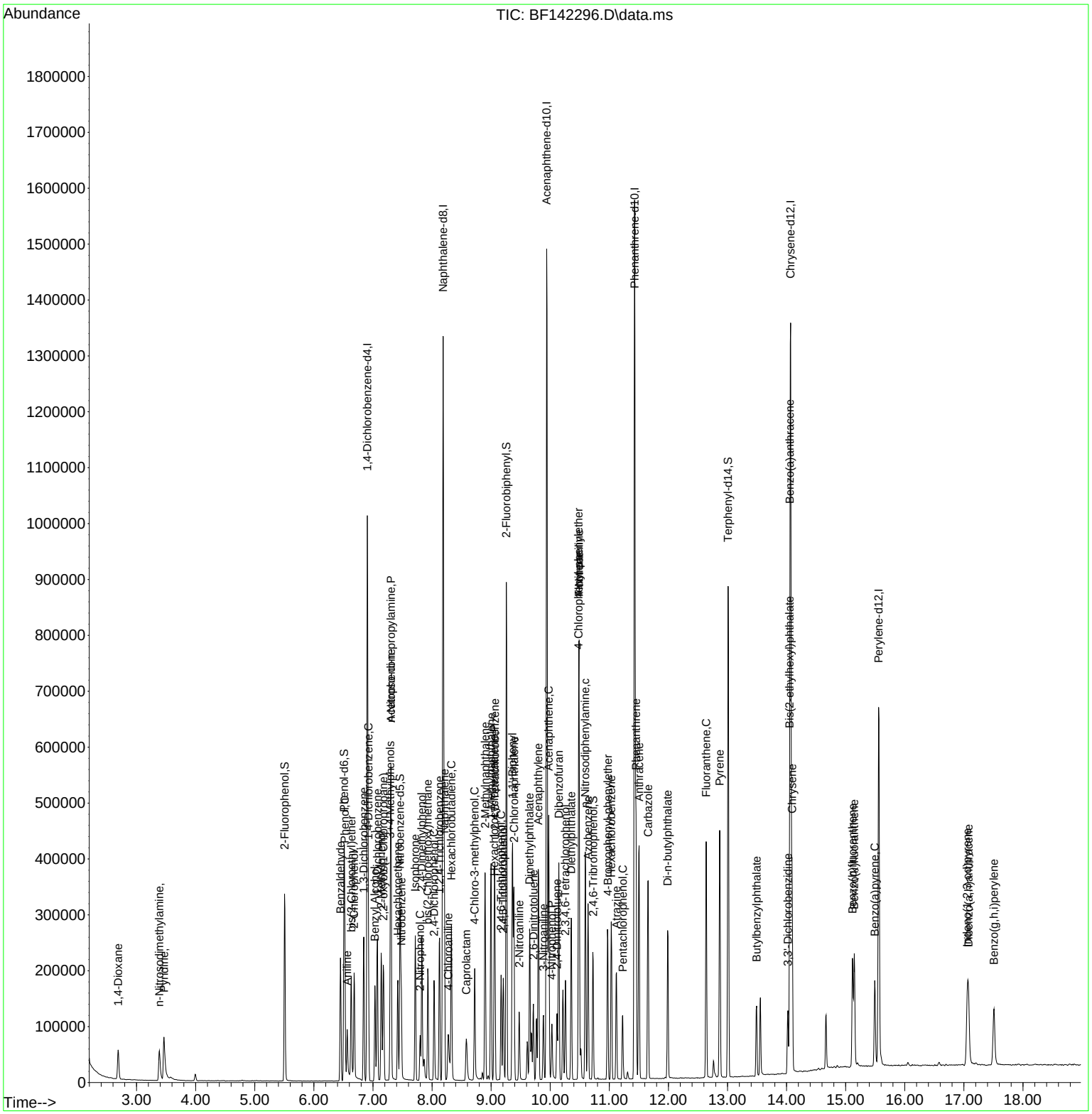
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) 1,1'-Biphenyl	9.363	154	189666	5.631	ng		98
47) 2-Chloronaphthalene	9.386	162	137929	5.506	ng		98
48) 2-Nitroaniline	9.475	65	22539	3.510	ng		95
49) Acenaphthylene	9.798	152	228773	5.460	ng		99
50) Dimethylphthalate	9.651	163	146916	5.208	ng		99
51) 2,6-Dinitrotoluene	9.716	165	18933	3.586	ng		95
52) Acenaphthene	9.975	154	138379	5.492	ng		96
53) 3-Nitroaniline	9.886	138	22656	3.659	ng	#	98
55) Dibenzofuran	10.145	168	212190	5.706	ng		99
56) 4-Nitrophenol	10.028	139	17445	3.743	ng		96
57) 2,4-Dinitrotoluene	10.116	165	24415	3.605	ng		96
58) Fluorene	10.486	166	167029	5.886	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.257	232	29233	4.301	ng		99
60) Diethylphthalate	10.357	149	147649	5.241	ng		98
61) 4-Chlorophenyl-phenyle...	10.480	204	76782	5.608	ng		98
62) 4-Nitroaniline	10.486	138	22736	4.632	ng		93
63) Azobenzene	10.639	77	146968	5.460	ng		99
66) n-Nitrosodiphenylamine	10.592	169	138600	5.286	ng		99
67) 4-Bromophenyl-phenylether	10.975	248	45301	5.072	ng		97
68) Hexachlorobenzene	11.033	284	51978	5.291	ng		100
69) Atrazine	11.122	200	30914	4.472	ng		99
70) Pentachlorophenol	11.227	266	18599	3.599	ng		98
71) Phenanthrene	11.451	178	235107	5.692	ng		98
72) Anthracene	11.504	178	238345	5.616	ng		98
73) Carbazole	11.657	167	209878	5.512	ng		98
74) Di-n-butylphthalate	11.986	149	188462	4.707	ng		99
75) Fluoranthene	12.639	202	236016	5.716	ng		99
78) Pyrene	12.869	202	252238	5.118	ng		98
80) Butylbenzylphthalate	13.492	149	39082	6.169	ng		98
81) Benzo(a)anthracene	14.057	228	189654	5.289	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	34544	4.143	ng		99
83) Chrysene	14.092	228	179085	5.365	ng		100
84) Bis(2-ethylhexyl)phtha...	14.051	149	45343	6.444	ng		98
87) Indeno(1,2,3-cd)pyrene	17.057	276	108522	4.138	ng		99
88) Benzo(b)fluoranthene	15.115	252	123666	5.416	ng		99
89) Benzo(k)fluoranthene	15.145	252	109149	5.224	ng		99
90) Benzo(a)pyrene	15.492	252	97418	4.761	ng		100
91) Dibenzo(a,h)anthracene	17.080	278	93055	4.295	ng		98
92) Benzo(g,h,i)perylene	17.509	276	91492	4.255	ng		98

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142296.D
Acq On : 05 May 2025 14:23
Operator : RC/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Quant Time: May 05 17:56:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142297.D
Acq On : 05 May 2025 14:52
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Quant Time: May 05 17:57:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.904	152	212907	20.000	ng		0.00
21) Naphthalene-d8	8.187	136	834027	20.000	ng		0.00
39) Acenaphthene-d10	9.939	164	451658	20.000	ng		0.00
64) Phenanthrene-d10	11.428	188	799418	20.000	ng		0.00
76) Chrysene-d12	14.069	240	531922	20.000	ng		0.00
86) Perylene-d12	15.563	264	390300	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.510	112	250509	20.086	ng		0.00
7) Phenol-d6	6.516	99	310470	20.240	ng		0.00
23) Nitrobenzene-d5	7.463	82	253451	18.533	ng		0.00
42) 2,4,6-Tribromophenol	10.728	330	79570	18.247	ng		0.00
45) 2-Fluorobiphenyl	9.257	172	725000	22.888	ng		0.00
79) Terphenyl-d14	13.010	244	757212	21.070	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.687	88	56091	9.987	ng		98
3) Pyridine	3.457	79	131287	9.941	ng		99
4) n-Nitrosodimethylamine	3.387	42	75254	9.819	ng	#	98
6) Aniline	6.563	93	145801	9.690	ng		99
8) 2-Chlorophenol	6.681	128	130151	9.765	ng		98
9) Benzaldehyde	6.451	77	102088	11.371	ng		100
10) Phenol	6.528	94	162652	10.003	ng		99
11) bis(2-Chloroethyl)ether	6.634	93	164226m	10.242	ng		
12) 1,3-Dichlorobenzene	6.845	146	160179	10.505	ng		99
13) 1,4-Dichlorobenzene	6.922	146	159624	10.427	ng		99
14) 1,2-Dichlorobenzene	7.075	146	152479	10.376	ng		99
15) Benzyl Alcohol	7.034	79	89790	9.040	ng		100
16) 2,2'-oxybis(1-Chloropr...	7.175	45	245918	10.270	ng		99
17) 2-Methylphenol	7.145	107	107331	9.947	ng		98
18) Hexachloroethane	7.422	117	49420	9.702	ng		99
19) n-Nitroso-di-n-propyla...	7.304	70	97394	10.264	ng		95
20) 3+4-Methylphenols	7.293	107	136376	10.127	ng	#	88
22) Acetophenone	7.304	105	197710	10.662	ng		96
24) Nitrobenzene	7.481	77	122267	9.485	ng		99
25) Isophorone	7.716	82	259962	10.039	ng		98
26) 2-Nitrophenol	7.798	139	40609	10.066	ng		99
27) 2,4-Dimethylphenol	7.828	122	131079	10.068	ng		98
28) bis(2-Chloroethoxy)met...	7.928	93	172734	10.373	ng		99
29) 2,4-Dichlorophenol	8.034	162	104807	9.468	ng		98
30) 1,2,4-Trichlorobenzene	8.128	180	129041	10.358	ng		98
31) Naphthalene	8.210	128	429996	10.638	ng		99
32) Benzoic acid	7.881	122	35000m	11.080	ng		
33) 4-Chloroaniline	8.257	127	155389m	9.438	ng		
34) Hexachlorobutadiene	8.328	225	75921	10.292	ng		99
35) Caprolactam	8.587	113	28438	8.834	ng		97
36) 4-Chloro-3-methylphenol	8.722	107	112762	9.800	ng		99
37) 2-Methylnaphthalene	8.898	142	265328	10.564	ng		100
38) 1-Methylnaphthalene	8.998	142	281289	10.745	ng		98
40) 1,2,4,5-Tetrachloroben...	9.063	216	132346	10.492	ng		99
41) Hexachlorocyclopentadiene	9.051	237	68324	8.764	ng		100
43) 2,4,6-Trichlorophenol	9.169	196	72234	9.078	ng		99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142297.D
Acq On : 05 May 2025 14:52
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Quant Time: May 05 17:57:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.204	196	79827	9.429	ng		97
46) 1,1'-Biphenyl	9.363	154	370629	10.702	ng		98
47) 2-Chloronaphthalene	9.386	162	270501	10.503	ng		98
48) 2-Nitroaniline	9.475	65	54180	8.208	ng		97
49) Acenaphthylene	9.804	152	457356	10.616	ng		99
50) Dimethylphthalate	9.657	163	292351	10.080	ng		99
51) 2,6-Dinitrotoluene	9.716	165	46421	8.551	ng		99
52) Acenaphthene	9.975	154	268993	10.384	ng		99
53) 3-Nitroaniline	9.886	138	53755	8.443	ng	#	99
54) 2,4-Dinitrophenol	9.986	184	14043	12.133	ng	#	1
55) Dibenzofuran	10.145	168	404214	10.573	ng		99
56) 4-Nitrophenol	10.028	139	40283	8.407	ng		98
57) 2,4-Dinitrotoluene	10.116	165	56545	8.120	ng		94
58) Fluorene	10.486	166	317792	10.892	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.257	232	65106	9.316	ng		99
60) Diethylphthalate	10.357	149	299154	10.329	ng		99
61) 4-Chlorophenyl-phenyle...	10.481	204	150371	10.683	ng		97
62) 4-Nitroaniline	10.492	138	51843	10.274	ng		96
63) Azobenzene	10.639	77	287064	10.372	ng		98
65) 4,6-Dinitro-2-methylph...	10.522	198	20774	11.925	ng		94
66) n-Nitrosodiphenylamine	10.598	169	273145	10.268	ng		100
67) 4-Bromophenyl-phenylether	10.975	248	90669	10.008	ng		96
68) Hexachlorobenzene	11.033	284	98422	9.876	ng		98
69) Atrazine	11.122	200	65913	9.400	ng		99
70) Pentachlorophenol	11.228	266	43524	8.302	ng		99
71) Phenanthrene	11.451	178	440505	10.512	ng		99
72) Anthracene	11.504	178	454013	10.545	ng		99
73) Carbazole	11.657	167	406007	10.511	ng		99
74) Di-n-butylphthalate	11.992	149	408614	10.060	ng		99
75) Fluoranthene	12.639	202	461212	11.011	ng		99
77) Benzidine	12.763	184	72321	7.482	ng		99
78) Pyrene	12.869	202	464898	9.819	ng		100
80) Butylbenzylphthalate	13.492	149	87770	9.527	ng		99
81) Benzo(a)anthracene	14.057	228	345605	10.033	ng		100
82) 3,3'-Dichlorobenzidine	14.021	252	74238	9.267	ng		99
83) Chrysene	14.092	228	326300	10.175	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	111032	9.863	ng		98
85) Di-n-octyl phthalate	14.669	149	155899	11.860	ng		99
87) Indeno(1,2,3-cd)pyrene	17.057	276	250070	9.211	ng		100
88) Benzo(b)fluoranthene	15.116	252	237339	10.040	ng		100
89) Benzo(k)fluoranthene	15.145	252	222898	10.304	ng		99
90) Benzo(a)pyrene	15.492	252	203272	9.596	ng		98
91) Dibenzo(a,h)anthracene	17.080	278	207967	9.272	ng		99
92) Benzo(g,h,i)perylene	17.509	276	206052	9.256	ng		99

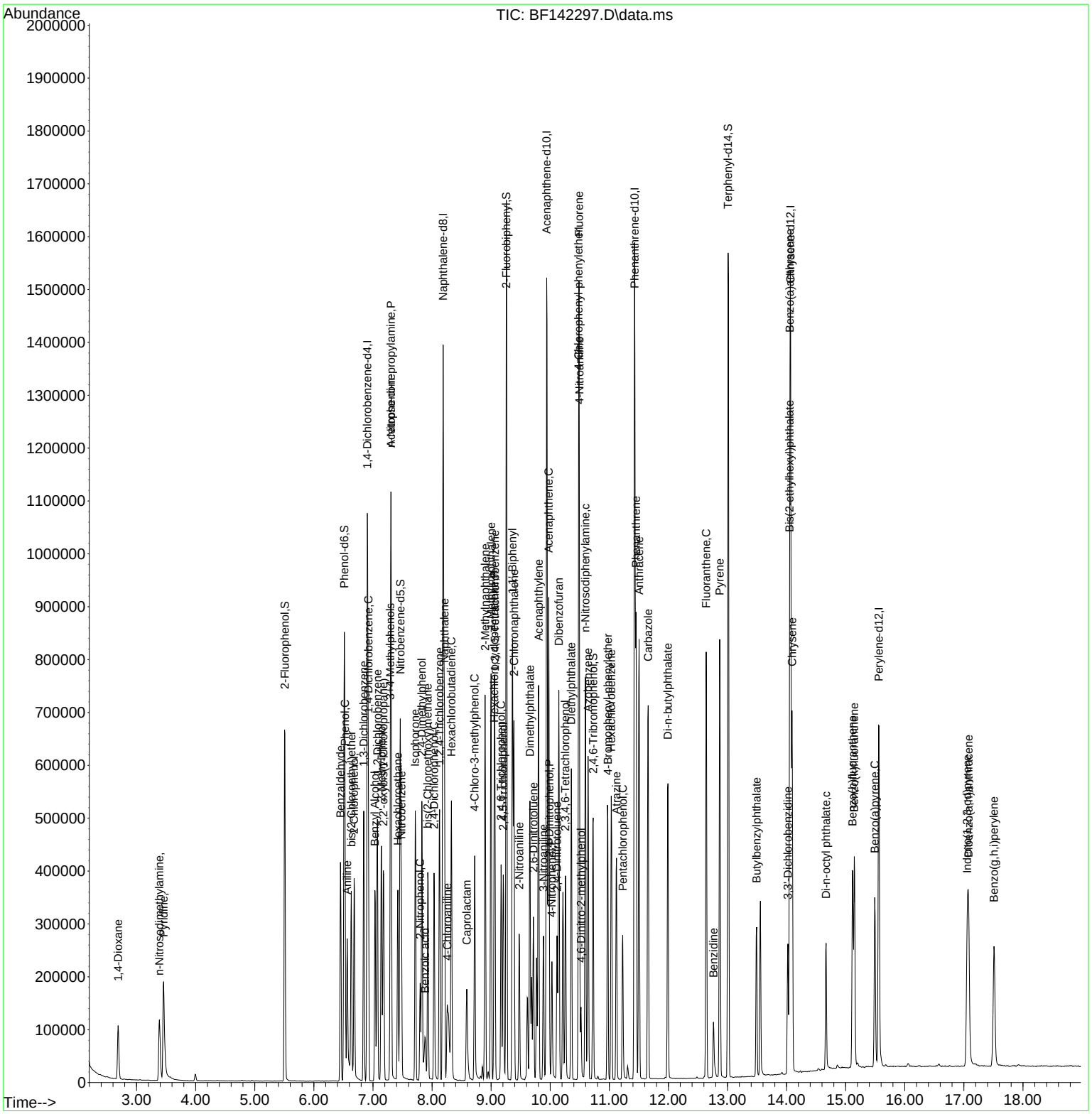
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142297.D
Acq On : 05 May 2025 14:52
Operator : RC/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Quant Time: May 05 17:57:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142298.D
Acq On : 05 May 2025 15:21
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Quant Time: May 05 17:58:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	216286	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	842039	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	449427	20.000	ng	0.00
64) Phenanthrene-d10	11.428	188	788283	20.000	ng	0.00
76) Chrysene-d12	14.069	240	473278	20.000	ng	0.00
86) Perylene-d12	15.563	264	392077	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	524001	41.358	ng	0.00
7) Phenol-d6	6.516	99	644227	41.341	ng	0.00
23) Nitrobenzene-d5	7.463	82	565303	40.944	ng	0.00
42) 2,4,6-Tribromophenol	10.728	330	178075	41.039	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	1377117	43.691	ng	0.00
79) Terphenyl-d14	13.016	244	1382069	43.222	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.687	88	115676	20.274	ng	99
3) Pyridine	3.452	79	261665	19.504	ng	99
4) n-Nitrosodimethylamine	3.393	42	157578	20.240	ng	96
6) Aniline	6.563	93	339232	22.194	ng	100
8) 2-Chlorophenol	6.687	128	273145	20.174	ng	99
9) Benzaldehyde	6.451	77	195344	21.418	ng	98
10) Phenol	6.534	94	342565	20.739	ng	99
11) bis(2-Chloroethyl)ether	6.634	93	326537	20.046	ng	99
12) 1,3-Dichlorobenzene	6.845	146	317103	20.472	ng	99
13) 1,4-Dichlorobenzene	6.922	146	321447	20.669	ng	99
14) 1,2-Dichlorobenzene	7.075	146	306024	20.500	ng	99
15) Benzyl Alcohol	7.040	79	201768	19.996	ng	99
16) 2,2'-oxybis(1-Chloropr...	7.181	45	502839	20.672	ng	100
17) 2-Methylphenol	7.145	107	221049	20.166	ng	98
18) Hexachloroethane	7.422	117	105630	20.413	ng	99
19) n-Nitroso-di-n-propyla...	7.310	70	198554	20.599	ng	99
20) 3+4-Methylphenols	7.298	107	285863	20.896	ng	96
22) Acetophenone	7.310	105	390755	20.871	ng	99
24) Nitrobenzene	7.481	77	266464	20.474	ng	99
25) Isophorone	7.722	82	530519	20.291	ng	100
26) 2-Nitrophenol	7.798	139	101497	18.889	ng	97
27) 2,4-Dimethylphenol	7.828	122	270038	20.543	ng	100
28) bis(2-Chloroethoxy)met...	7.934	93	351686	20.919	ng	99
29) 2,4-Dichlorophenol	8.040	162	233840	20.924	ng	99
30) 1,2,4-Trichlorobenzene	8.128	180	260029	20.674	ng	99
31) Naphthalene	8.210	128	865551	21.209	ng	99
32) Benzoic acid	7.910	122	98814m	19.691	ng	
33) 4-Chloroaniline	8.257	127	335192m	20.165	ng	
34) Hexachlorobutadiene	8.328	225	152292	20.449	ng	99
35) Caprolactam	8.604	113	65889	20.272	ng	99
36) 4-Chloro-3-methylphenol	8.722	107	238603	20.539	ng	99
37) 2-Methylnaphthalene	8.898	142	534930	21.095	ng	100
38) 1-Methylnaphthalene	8.998	142	559888	21.183	ng	99
40) 1,2,4,5-Tetrachloroben...	9.063	216	263169	20.966	ng	99
41) Hexachlorocyclopentadiene	9.051	237	156699	20.200	ng	99
43) 2,4,6-Trichlorophenol	9.169	196	161721	20.426	ng	99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142298.D
Acq On : 05 May 2025 15:21
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Quant Time: May 05 17:58:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

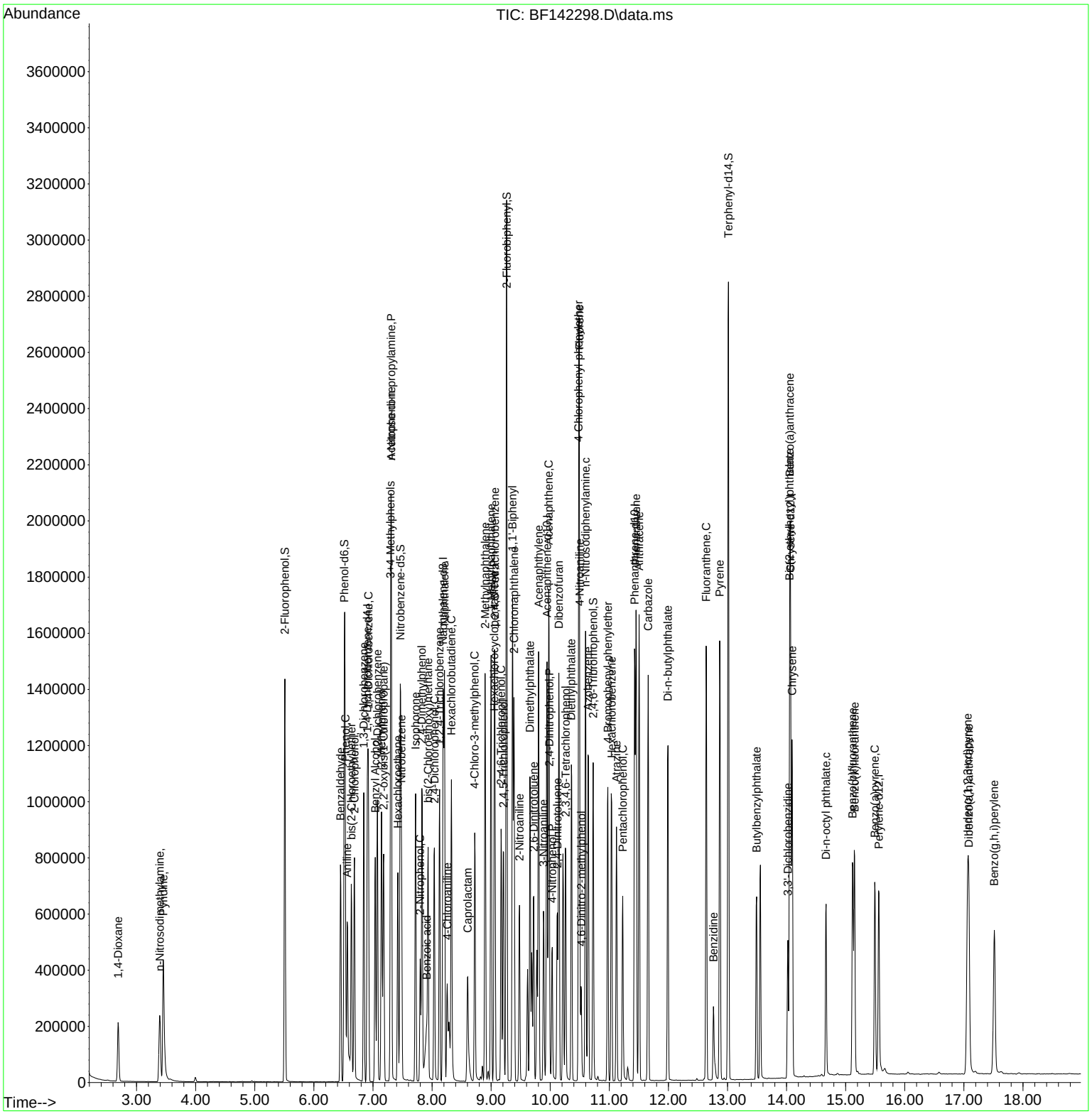
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	175468	20.829	ng		99
46) 1,1'-Biphenyl	9.363	154	735501	21.344	ng		98
47) 2-Chloronaphthalene	9.386	162	536203	20.924	ng		100
48) 2-Nitroaniline	9.481	65	131275	19.985	ng		99
49) Acenaphthylene	9.804	152	902949	21.063	ng		99
50) Dimethylphthalate	9.657	163	604026	20.930	ng		99
51) 2,6-Dinitrotoluene	9.722	165	108919	20.163	ng		98
52) Acenaphthene	9.975	154	539391	20.925	ng		99
53) 3-Nitroaniline	9.886	138	129439	20.431	ng		98
54) 2,4-Dinitrophenol	9.986	184	37439	19.641	ng	#	1
55) Dibenzofuran	10.145	168	809325	21.274	ng		100
56) 4-Nitrophenol	10.034	139	94419	19.802	ng		98
57) 2,4-Dinitrotoluene	10.122	165	136138	19.647	ng		98
58) Fluorene	10.492	166	617592	21.273	ng		100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	143706	20.664	ng		99
60) Diethylphthalate	10.357	149	609078	21.134	ng		99
61) 4-Chlorophenyl-phenyle...	10.481	204	295765	21.116	ng		97
62) 4-Nitroaniline	10.498	138	111613	22.228	ng		98
63) Azobenzene	10.639	77	577345	20.964	ng		98
65) 4,6-Dinitro-2-methylph...	10.528	198	53454	19.555	ng		98
66) n-Nitrosodiphenylamine	10.598	169	545886	20.811	ng		99
67) 4-Bromophenyl-phenylether	10.975	248	182781	20.459	ng		98
68) Hexachlorobenzene	11.039	284	199561	20.307	ng		97
69) Atrazine	11.122	200	138860	20.082	ng		99
70) Pentachlorophenol	11.228	266	102593	19.845	ng		97
71) Phenanthrene	11.451	178	871138	21.083	ng		99
72) Anthracene	11.504	178	893968	21.056	ng		99
73) Carbazole	11.657	167	807082	21.189	ng		99
74) Di-n-butylphthalate	11.992	149	852839	21.293	ng		99
75) Fluoranthene	12.639	202	888973	21.523	ng		99
77) Benzidine	12.763	184	181563	21.110	ng		99
78) Pyrene	12.869	202	900375	21.373	ng		99
80) Butylbenzylphthalate	13.492	149	207602	19.258	ng		99
81) Benzo(a)anthracene	14.057	228	623286	20.336	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	149520	20.978	ng		98
83) Chrysene	14.092	228	589961	20.676	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	263391	19.237	ng		98
85) Di-n-octyl phthalate	14.668	149	405073	19.581	ng		99
87) Indeno(1,2,3-cd)pyrene	17.062	276	556960	20.421	ng		99
88) Benzo(b)fluoranthene	15.116	252	481134	20.261	ng		100
89) Benzo(k)fluoranthene	15.151	252	456264	20.996	ng		100
90) Benzo(a)pyrene	15.492	252	432151	20.308	ng		100
91) Dibenzo(a,h)anthracene	17.086	278	468301	20.783	ng		99
92) Benzo(g,h,i)perylene	17.515	276	460655	20.598	ng		99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142298.D
Acq On : 05 May 2025 15:21
Operator : RC/JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Quant Time: May 05 17:58:22 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142299.D
Acq On : 05 May 2025 15:50
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Quant Time: May 05 17:59:10 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	215157	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	842526	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	453823	20.000	ng	0.00
64) Phenanthrene-d10	11.433	188	760936	20.000	ng	0.00
76) Chrysene-d12	14.069	240	448285	20.000	ng	0.00
86) Perylene-d12	15.563	264	426732	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	968719	76.859	ng	0.00
7) Phenol-d6	6.522	99	1182959	76.311	ng	0.00
23) Nitrobenzene-d5	7.469	82	1103045	79.845	ng	0.00
42) 2,4,6-Tribromophenol	10.733	330	347351	79.275	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	2308950	72.545	ng	0.00
79) Terphenyl-d14	13.016	244	2250335	74.299	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.687	88	216454	38.137	ng	100
3) Pyridine	3.452	79	505899	37.907	ng	100
4) n-Nitrosodimethylamine	3.405	42	299573	38.681	ng	100
6) Aniline	6.569	93	631218	41.514	ng	100
8) 2-Chlorophenol	6.687	128	525501	39.017	ng	100
9) Benzaldehyde	6.457	77	315981	34.827	ng	100
10) Phenol	6.540	94	633459m	38.550	ng	
11) bis(2-Chloroethyl)ether	6.640	93	582128m	35.924	ng	
12) 1,3-Dichlorobenzene	6.845	146	579737	37.624	ng	100
13) 1,4-Dichlorobenzene	6.922	146	586776	37.927	ng	100
14) 1,2-Dichlorobenzene	7.075	146	566937	38.177	ng	100
15) Benzyl Alcohol	7.040	79	399542	39.803	ng	100
16) 2,2'-oxybis(1-Chloropr...	7.181	45	918775	37.969	ng	100
17) 2-Methylphenol	7.151	107	418080	38.341	ng	100
18) Hexachloroethane	7.422	117	199182	38.694	ng	100
19) n-Nitroso-di-n-propyla...	7.316	70	370009	38.588	ng	100
20) 3+4-Methylphenols	7.304	107	524172	38.517	ng	100
22) Acetophenone	7.316	105	701214	37.432	ng	100
24) Nitrobenzene	7.487	77	516127	39.634	ng	100
25) Isophorone	7.728	82	988094	37.771	ng	100
26) 2-Nitrophenol	7.804	139	222173	36.469	ng	100
27) 2,4-Dimethylphenol	7.834	122	501635	38.139	ng	100
28) bis(2-Chloroethoxy)met...	7.934	93	629800	37.440	ng	100
29) 2,4-Dichlorophenol	8.040	162	442388	39.562	ng	100
30) 1,2,4-Trichlorobenzene	8.128	180	473497	37.625	ng	100
31) Naphthalene	8.210	128	1526020	37.372	ng	100
32) Benzoic acid	7.940	122	235641	36.564	ng	100
33) 4-Chloroaniline	8.257	127	645610m	38.817	ng	
34) Hexachlorobutadiene	8.328	225	282333	37.888	ng	100
35) Caprolactam	8.622	113	132846	40.850	ng	100
36) 4-Chloro-3-methylphenol	8.728	107	447226	38.475	ng	100
37) 2-Methylnaphthalene	8.904	142	958304	37.768	ng	100
38) 1-Methylnaphthalene	8.998	142	1000206	37.821	ng	100
40) 1,2,4,5-Tetrachloroben...	9.069	216	467314	36.869	ng	100
41) Hexachlorocyclopentadiene	9.057	237	311649	39.785	ng	100
43) 2,4,6-Trichlorophenol	9.175	196	318860	39.883	ng	100

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142299.D
Acq On : 05 May 2025 15:50
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Quant Time: May 05 17:59:10 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	329034	38.680	ng	100
46) 1,1'-Biphenyl	9.363	154	1280889	36.811	ng	100
47) 2-Chloronaphthalene	9.392	162	959880	37.093	ng	100
48) 2-Nitroaniline	9.481	65	270673	40.808	ng	100
49) Acenaphthylene	9.804	152	1618066	37.378	ng	100
50) Dimethylphthalate	9.663	163	1097900	37.675	ng	100
51) 2,6-Dinitrotoluene	9.722	165	222509	40.792	ng	100
52) Acenaphthene	9.981	154	967532	37.171	ng	100
53) 3-Nitroaniline	9.892	138	259735	40.600	ng	100
54) 2,4-Dinitrophenol	9.992	184	88227	35.617	ng	100
55) Dibenzofuran	10.151	168	1411519	36.745	ng	100
56) 4-Nitrophenol	10.039	139	194419	40.380	ng	100
57) 2,4-Dinitrotoluene	10.128	165	288836	41.281	ng	100
58) Fluorene	10.492	166	1084214	36.984	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	277041	39.451	ng	100
60) Diethylphthalate	10.363	149	1095399	37.640	ng	100
61) 4-Chlorophenyl-phenyle...	10.486	204	523719	37.028	ng	100
62) 4-Nitroaniline	10.504	138	203816	40.198	ng	100
63) Azobenzene	10.645	77	1027227	36.938	ng	100
65) 4,6-Dinitro-2-methylph...	10.533	198	123079	36.690	ng	100
66) n-Nitrosodiphenylamine	10.604	169	957534	37.816	ng	100
67) 4-Bromophenyl-phenylether	10.975	248	328625	38.106	ng	100
68) Hexachlorobenzene	11.039	284	360906	38.046	ng	100
69) Atrazine	11.128	200	265558	39.786	ng	100
70) Pentachlorophenol	11.228	266	211262	42.334	ng	100
71) Phenanthrene	11.457	178	1503192	37.687	ng	100
72) Anthracene	11.510	178	1549487	37.808	ng	100
73) Carbazole	11.657	167	1409408	38.332	ng	100
74) Di-n-butylphthalate	11.992	149	1540981	39.856	ng	100
75) Fluoranthene	12.645	202	1499802	37.616	ng	100
77) Benzidine	12.769	184	321040	39.408	ng	100
78) Pyrene	12.874	202	1528516	38.307	ng	100
80) Butylbenzylphthalate	13.492	149	420197	36.993	ng	100
81) Benzo(a)anthracene	14.063	228	1109518	38.218	ng	100
82) 3,3'-Dichlorobenzidine	14.021	252	265678	39.352	ng	100
83) Chrysene	14.098	228	989811	36.624	ng	100
84) Bis(2-ethylhexyl)phtha...	14.051	149	539105	36.650	ng	100
85) Di-n-octyl phthalate	14.669	149	922803	36.079	ng	100
87) Indeno(1,2,3-cd)pyrene	17.068	276	1181269	39.794	ng	100
88) Benzo(b)fluoranthene	15.121	252	992827	38.414	ng	100
89) Benzo(k)fluoranthene	15.157	252	888026	37.546	ng	100
90) Benzo(a)pyrene	15.498	252	909479	39.269	ng	100
91) Dibenzo(a,h)anthracene	17.092	278	970622	39.578	ng	100
92) Benzo(g,h,i)perylene	17.527	276	956211	39.285	ng	100

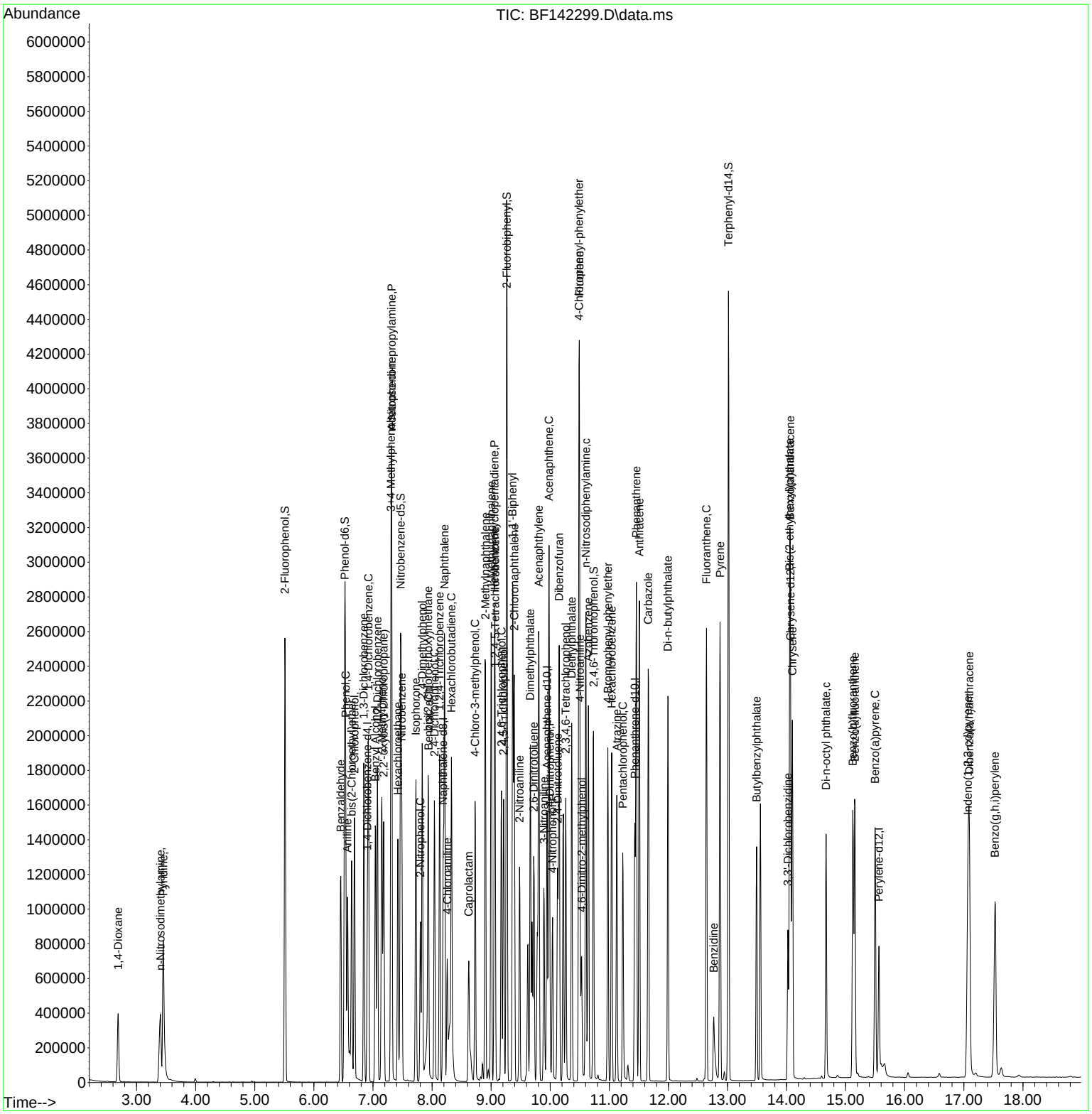
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142299.D
Acq On : 05 May 2025 15:50
Operator : RC/JU
Sample : SSTDICCC040
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Quant Time: May 05 17:59:10 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142300.D
Acq On : 05 May 2025 16:18
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Quant Time: May 05 18:00:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	184142	20.000	ng	0.00
21) Naphthalene-d8	8.192	136	725434	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	381581	20.000	ng	0.00
64) Phenanthrene-d10	11.433	188	653321	20.000	ng	0.00
76) Chrysene-d12	14.074	240	361528	20.000	ng	0.00
86) Perylene-d12	15.563	264	352732	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	1127279	104.504	ng	0.00
7) Phenol-d6	6.528	99	1380723	104.071	ng	0.00
23) Nitrobenzene-d5	7.469	82	1306356	109.825	ng	0.00
42) 2,4,6-Tribromophenol	10.733	330	416395	113.025	ng	0.00
45) 2-Fluorobiphenyl	9.269	172	2550133	95.292	ng	0.00
79) Terphenyl-d14	13.016	244	2512161	102.849	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.675	88	250125	51.492	ng	100
3) Pyridine	3.446	79	603723	52.856	ng	99
4) n-Nitrosodimethylamine	3.399	42	349382	52.710	ng	99
6) Aniline	6.569	93	710390	54.590	ng	100
8) 2-Chlorophenol	6.687	128	619795	53.769	ng	99
9) Benzaldehyde	6.457	77	346249	44.591	ng	100
10) Phenol	6.540	94	727274m	51.714	ng	
11) bis(2-Chloroethyl)ether	6.640	93	698119m	50.339	ng	
12) 1,3-Dichlorobenzene	6.846	146	679991	51.563	ng	100
13) 1,4-Dichlorobenzene	6.928	146	679359	51.307	ng	99
14) 1,2-Dichlorobenzene	7.075	146	655534	51.578	ng	99
15) Benzyl Alcohol	7.045	79	474305	55.210	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.181	45	1077461	52.026	ng	100
17) 2-Methylphenol	7.151	107	492676	52.792	ng	100
18) Hexachloroethane	7.422	117	235428	53.439	ng	99
19) n-Nitroso-di-n-propyla...	7.322	70	429402	52.324	ng	99
20) 3+4-Methylphenols	7.304	107	613574	52.680	ng	94
22) Acetophenone	7.316	105	809554	50.190	ng	98
24) Nitrobenzene	7.493	77	610521	54.450	ng	98
25) Isophorone	7.728	82	1175639	52.193	ng	99
26) 2-Nitrophenol	7.804	139	279873	51.463	ng	99
27) 2,4-Dimethylphenol	7.834	122	596218	52.647	ng	99
28) bis(2-Chloroethoxy)met...	7.940	93	739692	51.070	ng	99
29) 2,4-Dichlorophenol	8.045	162	521673	54.183	ng	99
30) 1,2,4-Trichlorobenzene	8.128	180	550979	50.849	ng	100
31) Naphthalene	8.210	128	1773884	50.454	ng	100
32) Benzoic acid	7.945	122	322603m	51.963	ng	
33) 4-Chloroaniline	8.257	127	789321m	55.118	ng	
34) Hexachlorobutadiene	8.328	225	335206	52.244	ng	99
35) Caprolactam	8.628	113	160421	57.291	ng	97
36) 4-Chloro-3-methylphenol	8.734	107	526289	52.584	ng	99
37) 2-Methylnaphthalene	8.904	142	1114987	51.036	ng	99
38) 1-Methylnaphthalene	9.004	142	1142120	50.158	ng	99
40) 1,2,4,5-Tetrachloroben...	9.069	216	547513	51.375	ng	100
41) Hexachlorocyclopentadiene	9.057	237	369761	56.140	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	375122	55.803	ng	99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142300.D
Acq On : 05 May 2025 16:18
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Quant Time: May 05 18:00:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

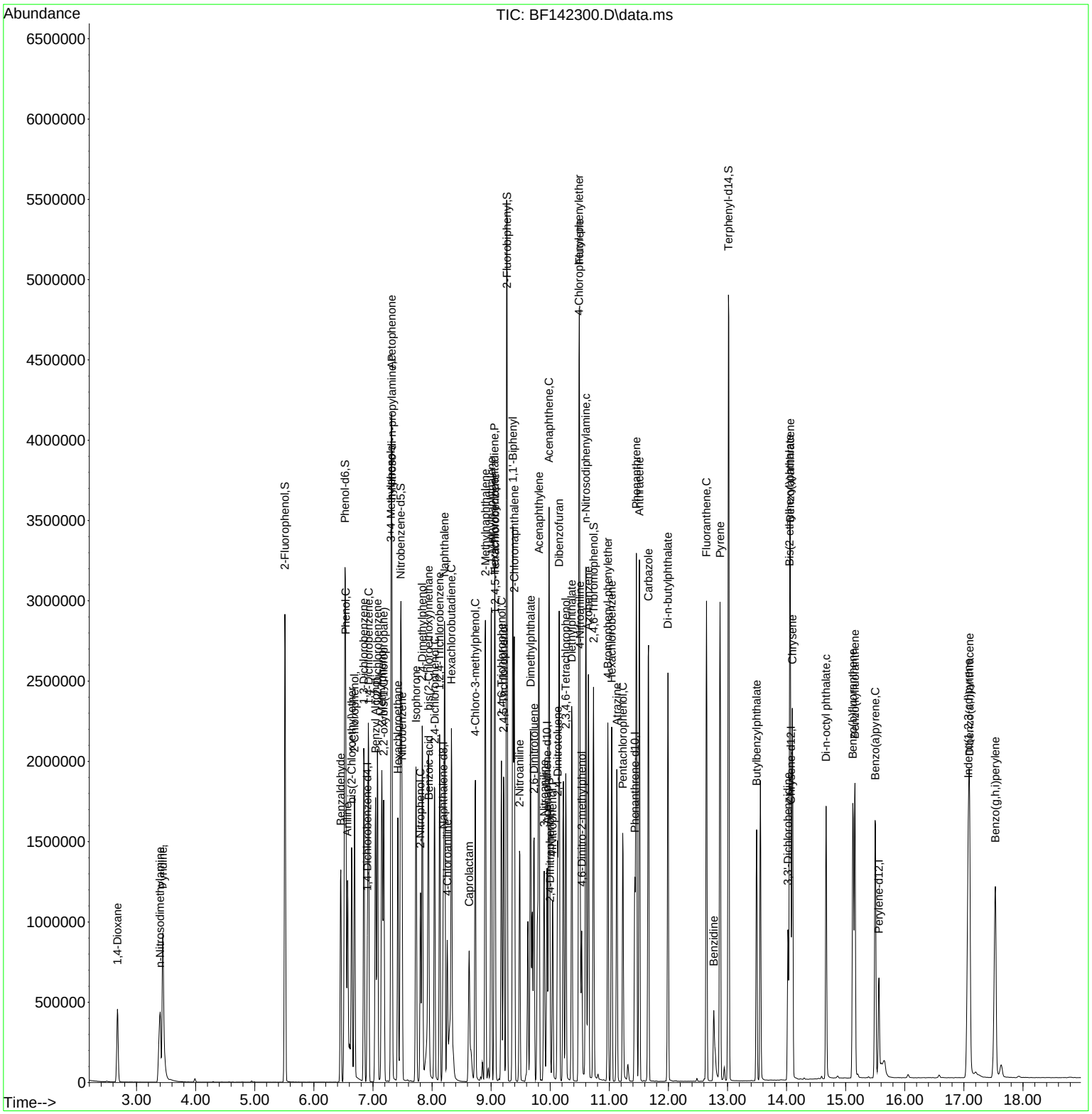
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	394344	55.134	ng		99
46) 1,1'-Biphenyl	9.369	154	1494596	51.084	ng		100
47) 2-Chloronaphthalene	9.392	162	1101937	50.645	ng		99
48) 2-Nitroaniline	9.481	65	327821	58.781	ng		98
49) Acenaphthylene	9.810	152	1868268	51.328	ng		99
50) Dimethylphthalate	9.669	163	1280292	52.252	ng		99
51) 2,6-Dinitrotoluene	9.728	165	267530	58.331	ng		95
52) Acenaphthene	9.981	154	1125706	51.436	ng		99
53) 3-Nitroaniline	9.898	138	313887	58.354	ng		98
54) 2,4-Dinitrophenol	9.998	184	114759	50.908	ng	#	15
55) Dibenzofuran	10.151	168	1632492	50.542	ng		99
56) 4-Nitrophenol	10.039	139	240972	59.524	ng		99
57) 2,4-Dinitrotoluene	10.128	165	350749	59.620	ng		100
58) Fluorene	10.492	166	1224371	49.671	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	327947	55.542	ng		99
60) Diethylphthalate	10.363	149	1282136	52.397	ng		99
61) 4-Chlorophenyl-phenyle...	10.486	204	608508	51.168	ng		100
62) 4-Nitroaniline	10.504	138	229299	53.785	ng		98
63) Azobenzene	10.645	77	1211976	51.833	ng		100
65) 4,6-Dinitro-2-methylph...	10.534	198	154307	50.269	ng		96
66) n-Nitrosodiphenylamine	10.604	169	1120570	51.544	ng		100
67) 4-Bromophenyl-phenylether	10.975	248	388493	52.469	ng		99
68) Hexachlorobenzene	11.039	284	420761	51.661	ng		99
69) Atrazine	11.128	200	319507	55.754	ng		99
70) Pentachlorophenol	11.228	266	249218	58.166	ng		98
71) Phenanthrene	11.457	178	1727795	50.453	ng		99
72) Anthracene	11.510	178	1784428	50.712	ng		100
73) Carbazole	11.663	167	1610611	51.019	ng		100
74) Di-n-butylphthalate	11.992	149	1785998	53.803	ng		100
75) Fluoranthene	12.645	202	1717060	50.159	ng		100
77) Benzidine	12.769	184	385286	58.643	ng		99
78) Pyrene	12.875	202	1728090	53.702	ng		99
80) Butylbenzylphthalate	13.492	149	493025	52.156	ng		100
81) Benzo(a)anthracene	14.063	228	1224138	52.285	ng		99
82) 3,3'-Dichlorobenzidine	14.022	252	295953	54.357	ng		99
83) Chrysene	14.098	228	1119046	51.342	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	631350	51.305	ng		99
85) Di-n-octyl phthalate	14.669	149	1122100	50.417	ng		100
87) Indeno(1,2,3-cd)pyrene	17.074	276	1407239	57.351	ng		100
88) Benzo(b)fluoranthene	15.121	252	1113446	52.119	ng		99
89) Benzo(k)fluoranthene	15.157	252	1033813	52.880	ng		100
90) Benzo(a)pyrene	15.504	252	1043008	54.482	ng		99
91) Dibenzo(a,h)anthracene	17.098	278	1153556	56.905	ng		99
92) Benzo(g,h,i)perylene	17.533	276	1141826	56.752	ng		99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142300.D
Acq On : 05 May 2025 16:18
Operator : RC/JU
Sample : SSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Quant Time: May 05 18:00:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142301.D
Acq On : 05 May 2025 16:47
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Quant Time: May 05 18:00:55 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.910	152	197459	20.000	ng		0.00
21) Naphthalene-d8	8.192	136	774183	20.000	ng		0.00
39) Acenaphthene-d10	9.945	164	403498	20.000	ng		0.00
64) Phenanthrene-d10	11.433	188	678705	20.000	ng		0.00
76) Chrysene-d12	14.074	240	358642	20.000	ng		0.00
86) Perylene-d12	15.563	264	387967	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.516	112	1380708	119.365	ng		0.00
7) Phenol-d6	6.528	99	1681641	118.204	ng		0.00
23) Nitrobenzene-d5	7.475	82	1614559	127.189	ng		0.00
42) 2,4,6-Tribromophenol	10.733	330	509292	130.732	ng		0.00
45) 2-Fluorobiphenyl	9.269	172	3015927	106.576	ng		0.00
79) Terphenyl-d14	13.022	244	2827945	116.709	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.681	88	308652	59.255	ng		100
3) Pyridine	3.446	79	777252	63.459	ng		99
4) n-Nitrosodimethylamine	3.405	42	429842	60.476	ng		99
6) Aniline	6.575	93	900100	64.503	ng		99
8) 2-Chlorophenol	6.687	128	760230	61.504	ng		99
9) Benzaldehyde	6.457	77	392710	47.164	ng		99
10) Phenol	6.545	94	902878m	59.871	ng		
11) bis(2-Chloroethyl)ether	6.645	93	853741m	57.408	ng		
12) 1,3-Dichlorobenzene	6.851	146	816681	57.752	ng		99
13) 1,4-Dichlorobenzene	6.928	146	820881	57.814	ng		99
14) 1,2-Dichlorobenzene	7.075	146	794010	58.260	ng		99
15) Benzyl Alcohol	7.045	79	597038	64.809	ng		99
16) 2,2'-oxybis(1-Chloropr...	7.181	45	1310008	58.989	ng		100
17) 2-Methylphenol	7.151	107	599927	59.949	ng		99
18) Hexachloroethane	7.422	117	288326	61.032	ng		99
19) n-Nitroso-di-n-propyla...	7.328	70	523983	59.543	ng		98
20) 3+4-Methylphenols	7.310	107	726451	58.165	ng		94
22) Acetophenone	7.316	105	972165	56.476	ng	#	93
24) Nitrobenzene	7.492	77	753847	62.999	ng		97
25) Isophorone	7.734	82	1444396	60.087	ng		100
26) 2-Nitrophenol	7.804	139	359513	61.112	ng		98
27) 2,4-Dimethylphenol	7.840	122	729069	60.325	ng		99
28) bis(2-Chloroethoxy)met...	7.939	93	896741	58.015	ng		100
29) 2,4-Dichlorophenol	8.045	162	636712	61.967	ng		99
30) 1,2,4-Trichlorobenzene	8.128	180	670104	57.949	ng		99
31) Naphthalene	8.216	128	2103149	56.052	ng		99
32) Benzoic acid	7.957	122	433085m	61.871	ng		
33) 4-Chloroaniline	8.257	127	963425m	63.039	ng		
34) Hexachlorobutadiene	8.328	225	401644	58.657	ng		100
35) Caprolactam	8.634	113	193098	64.619	ng		97
36) 4-Chloro-3-methylphenol	8.734	107	648747	60.738	ng		99
37) 2-Methylnaphthalene	8.904	142	1319794	56.607	ng		99
38) 1-Methylnaphthalene	9.004	142	1363474	56.109	ng		99
40) 1,2,4,5-Tetrachloroben...	9.069	216	650696	57.740	ng		99
41) Hexachlorocyclopentadiene	9.057	237	459147	65.925	ng		100
43) 2,4,6-Trichlorophenol	9.175	196	448837	63.143	ng		98

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142301.D
Acq On : 05 May 2025 16:47
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Quant Time: May 05 18:00:55 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration

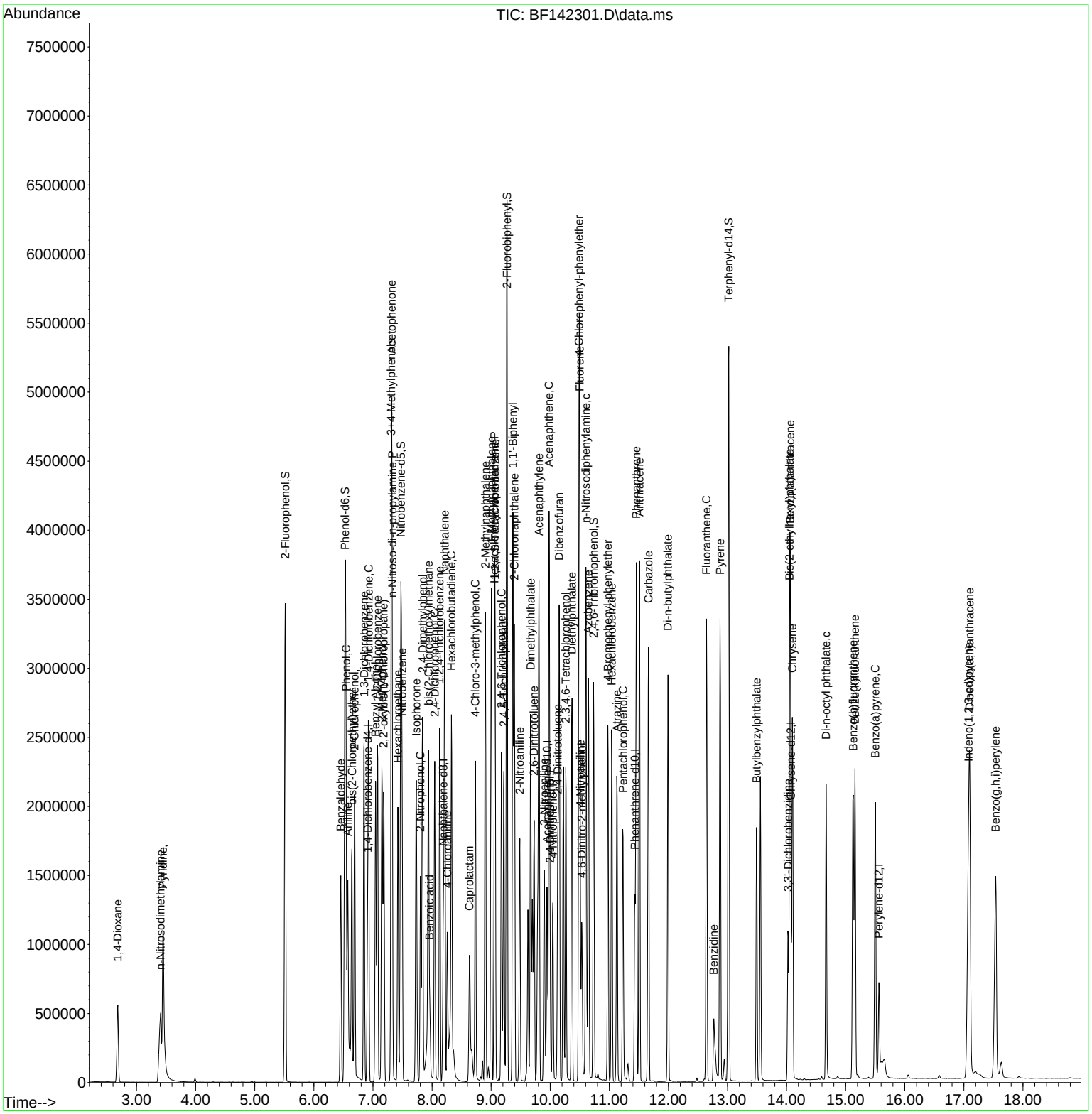
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	480305	63.505	ng		99
46) 1,1'-Biphenyl	9.369	154	1745424	56.417	ng		99
47) 2-Chloronaphthalene	9.392	162	1338338	58.169	ng		99
48) 2-Nitroaniline	9.486	65	407862	69.160	ng		95
49) Acenaphthylene	9.810	152	2215774	57.569	ng		99
50) Dimethylphthalate	9.669	163	1543896	59.587	ng		100
51) 2,6-Dinitrotoluene	9.728	165	330939	68.237	ng		96
52) Acenaphthene	9.981	154	1345347	58.133	ng		100
53) 3-Nitroaniline	9.898	138	385568	67.787	ng		98
54) 2,4-Dinitrophenol	9.998	184	149707	61.014	ng	#	25
55) Dibenzofuran	10.151	168	1947247	57.013	ng		98
56) 4-Nitrophenol	10.045	139	290245	67.801	ng		99
57) 2,4-Dinitrotoluene	10.128	165	430311	69.171	ng		98
58) Fluorene	10.498	166	1432119	54.944	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	398607	63.842	ng		98
60) Diethylphthalate	10.369	149	1515452	58.568	ng		99
61) 4-Chlorophenyl-phenyle...	10.486	204	714047	56.782	ng		99
62) 4-Nitroaniline	10.510	138	265178	58.823	ng		100
63) Azobenzene	10.645	77	1434293	58.009	ng		100
65) 4,6-Dinitro-2-methylph...	10.533	198	199546	60.816	ng		96
66) n-Nitrosodiphenylamine	10.604	169	1330840	58.927	ng		100
67) 4-Bromophenyl-phenylether	10.975	248	461892	60.048	ng		99
68) Hexachlorobenzene	11.039	284	504486	59.625	ng		100
69) Atrazine	11.128	200	376071	63.169	ng		100
70) Pentachlorophenol	11.233	266	304541	68.419	ng		98
71) Phenanthrene	11.457	178	2009150	56.475	ng		99
72) Anthracene	11.510	178	2082880	56.980	ng		100
73) Carbazole	11.663	167	1854181	56.538	ng		100
74) Di-n-butylphthalate	11.992	149	2073826	60.137	ng		100
75) Fluoranthene	12.645	202	1946773	54.742	ng		100
77) Benzidine	12.769	184	434063	66.599	ng		100
78) Pyrene	12.874	202	1954922	61.239	ng		100
80) Butylbenzylphthalate	13.492	149	591132	62.274	ng		99
81) Benzo(a)anthracene	14.063	228	1394561	60.043	ng		99
82) 3,3'-Dichlorobenzidine	14.027	252	347469	64.332	ng		99
83) Chrysene	14.098	228	1293807	59.838	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	769940	62.098	ng		99
85) Di-n-octyl phthalate	14.668	149	1414997	61.963	ng		99
87) Indeno(1,2,3-cd)pyrene	17.080	276	1749961	64.842	ng		100
88) Benzo(b)fluoranthene	15.127	252	1328806	56.551	ng		99
89) Benzo(k)fluoranthene	15.157	252	1296375	60.288	ng		99
90) Benzo(a)pyrene	15.504	252	1302088	61.838	ng		99
91) Dibenzo(a,h)anthracene	17.098	278	1424781	63.902	ng		99
92) Benzo(g,h,i)perylene	17.539	276	1426095	64.444	ng		99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142301.D
Acq On : 05 May 2025 16:47
Operator : RC/JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Quant Time: May 05 18:00:55 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 17:44:56 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142302.D
Acq On : 05 May 2025 17:15
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Quant Time: May 05 18:39:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:17:22 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.910	152	205452	20.000	ng		0.00
21) Naphthalene-d8	8.192	136	801101	20.000	ng		0.00
39) Acenaphthene-d10	9.945	164	414811	20.000	ng		0.00
64) Phenanthrene-d10	11.433	188	679241	20.000	ng		0.00
76) Chrysene-d12	14.074	240	373928	20.000	ng		0.00
86) Perylene-d12	15.562	264	426614	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.516	112	1784288	148.254	ng		0.00
7) Phenol-d6	6.534	99	2195377	148.311	ng		0.01
23) Nitrobenzene-d5	7.481	82	2128583	162.047	ng		0.01
42) 2,4,6-Tribromophenol	10.739	330	652850	163.012	ng		0.00
45) 2-Fluorobiphenyl	9.269	172	3617174	124.337	ng		0.00
79) Terphenyl-d14	13.021	244	3360156	133.004	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.687	88	419794	77.457	ng		100
3) Pyridine	3.457	79	1043726	82.025	ng		99
4) n-Nitrosodimethylamine	3.422	42	579736	78.391	ng		99
6) Aniline	6.575	93	1209360	83.294	ng		100
8) 2-Chlorophenol	6.692	128	1007022	78.300	ng		99
10) Phenol	6.551	94	1172548m	74.728	ng		
11) bis(2-Chloroethyl)ether	6.645	93	1143684m	73.913	ng		
12) 1,3-Dichlorobenzene	6.851	146	1066308	72.470	ng		99
13) 1,4-Dichlorobenzene	6.928	146	1063540	71.991	ng		99
14) 1,2-Dichlorobenzene	7.081	146	1030293	72.657	ng		99
15) Benzyl Alcohol	7.051	79	799114	83.370	ng		98
16) 2,2'-oxybis(1-Chloropr...	7.186	45	1679925	72.703	ng		99
17) 2-Methylphenol	7.157	107	803596	77.177	ng		98
18) Hexachloroethane	7.422	117	380705	77.452	ng		99
19) n-Nitroso-di-n-propyla...	7.334	70	688261	75.168	ng		97
20) 3+4-Methylphenols	7.316	107	921424	70.906	ng	#	89
22) Acetophenone	7.322	105	1245347	69.916	ng	#	94
24) Nitrobenzene	7.498	77	978534	79.029	ng		97
25) Isophorone	7.739	82	1916388	77.044	ng		100
26) 2-Nitrophenol	7.810	139	496348	80.172	ng		99
27) 2,4-Dimethylphenol	7.839	122	958602	76.651	ng		100
28) bis(2-Chloroethoxy)met...	7.939	93	1171369	73.236	ng		100
29) 2,4-Dichlorophenol	8.045	162	832329	78.283	ng		100
30) 1,2,4-Trichlorobenzene	8.133	180	868126	72.551	ng		99
31) Naphthalene	8.216	128	2675722	68.916	ng		99
32) Benzoic acid	7.975	122	622313m	79.184	ng		
33) 4-Chloroaniline	8.263	127	1251630m	79.003	ng		
34) Hexachlorobutadiene	8.333	225	520499	73.460	ng		99
35) Caprolactam	8.651	113	261433m	84.368	ng		
36) 4-Chloro-3-methylphenol	8.739	107	840535	76.050	ng		100
37) 2-Methylnaphthalene	8.904	142	1669985	69.220	ng		98
38) 1-Methylnaphthalene	9.004	142	1714046	68.165	ng		99
40) 1,2,4,5-Tetrachloroben...	9.069	216	849773	73.349	ng		99
41) Hexachlorocyclopentadiene	9.057	237	612608	85.560	ng		100
43) 2,4,6-Trichlorophenol	9.180	196	605787	82.898	ng		99
44) 2,4,5-Trichlorophenol	9.216	196	611514	78.648	ng		99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142302.D
Acq On : 05 May 2025 17:15
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Quant Time: May 05 18:39:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:17:22 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) 1,1'-Biphenyl	9.369	154	2173202	68.328	ng		99
47) 2-Chloronaphthalene	9.398	162	1688751	71.397	ng		99
48) 2-Nitroaniline	9.486	65	547789	90.354	ng		98
49) Acenaphthylene	9.810	152	2763028	69.830	ng		98
50) Dimethylphthalate	9.675	163	1968431	73.901	ng		100
51) 2,6-Dinitrotoluene	9.733	165	437098	87.669	ng		93
52) Acenaphthene	9.986	154	1694020	71.203	ng		99
53) 3-Nitroaniline	9.904	138	510152	87.244	ng		96
54) 2,4-Dinitrophenol	10.004	184	210652	80.686	ng	#	3
55) Dibenzofuran	10.157	168	2410169	68.642	ng		98
56) 4-Nitrophenol	10.051	139	383978	87.250	ng		97
57) 2,4-Dinitrotoluene	10.133	165	566575	88.591	ng		99
58) Fluorene	10.498	166	1792549	66.896	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.269	232	520638	81.113	ng		98
60) Diethylphthalate	10.369	149	1909012	71.766	ng		99
61) 4-Chlorophenyl-phenyle...	10.486	204	888242	68.707	ng		98
62) 4-Nitroaniline	10.516	138	323923	69.894	ng		99
63) Azobenzene	10.651	77	1821504	71.660	ng		99
65) 4,6-Dinitro-2-methylph...	10.539	198	273917	80.746	ng		96
66) n-Nitrosodiphenylamine	10.610	169	1658390	73.372	ng		100
67) 4-Bromophenyl-phenylether	10.980	248	590568	76.716	ng		98
68) Hexachlorobenzene	11.045	284	650802	76.857	ng		96
69) Atrazine	11.133	200	476112	79.910	ng		99
70) Pentachlorophenol	11.233	266	390517	87.666	ng		97
71) Phenanthrene	11.463	178	2460275	69.101	ng		98
72) Anthracene	11.516	178	2518162	68.834	ng		99
73) Carbazole	11.663	167	2274167	69.290	ng		99
74) Di-n-butylphthalate	11.992	149	2521480	73.060	ng		99
75) Fluoranthene	12.645	202	2345160	65.892	ng		99
77) Benzidine	12.774	184	504643	74.263	ng		99
78) Pyrene	12.874	202	2325631	69.874	ng		99
80) Butylbenzylphthalate	13.492	149	788213	78.621	ng		99
81) Benzo(a)anthracene	14.063	228	1782801	73.621	ng		99
82) 3,3'-Dichlorobenzidine	14.027	252	474263	84.217	ng		99
83) Chrysene	14.104	228	1687889	74.873	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	1042846	79.404	ng		100
85) Di-n-octyl phthalate	14.668	149	1969676	80.100	ng		99
87) Indeno(1,2,3-cd)pyrene	17.086	276	2392344	80.614	ng		100
88) Benzo(b)fluoranthene	15.127	252	1972745	76.350	ng		99
89) Benzo(k)fluoranthene	15.162	252	1653244	69.919	ng		100
90) Benzo(a)pyrene	15.504	252	1797975	77.653	ng		100
91) Dibenzo(a,h)anthracene	17.109	278	1926135	78.562	ng		99
92) Benzo(g,h,i)perylene	17.551	276	1951121	80.182	ng		99

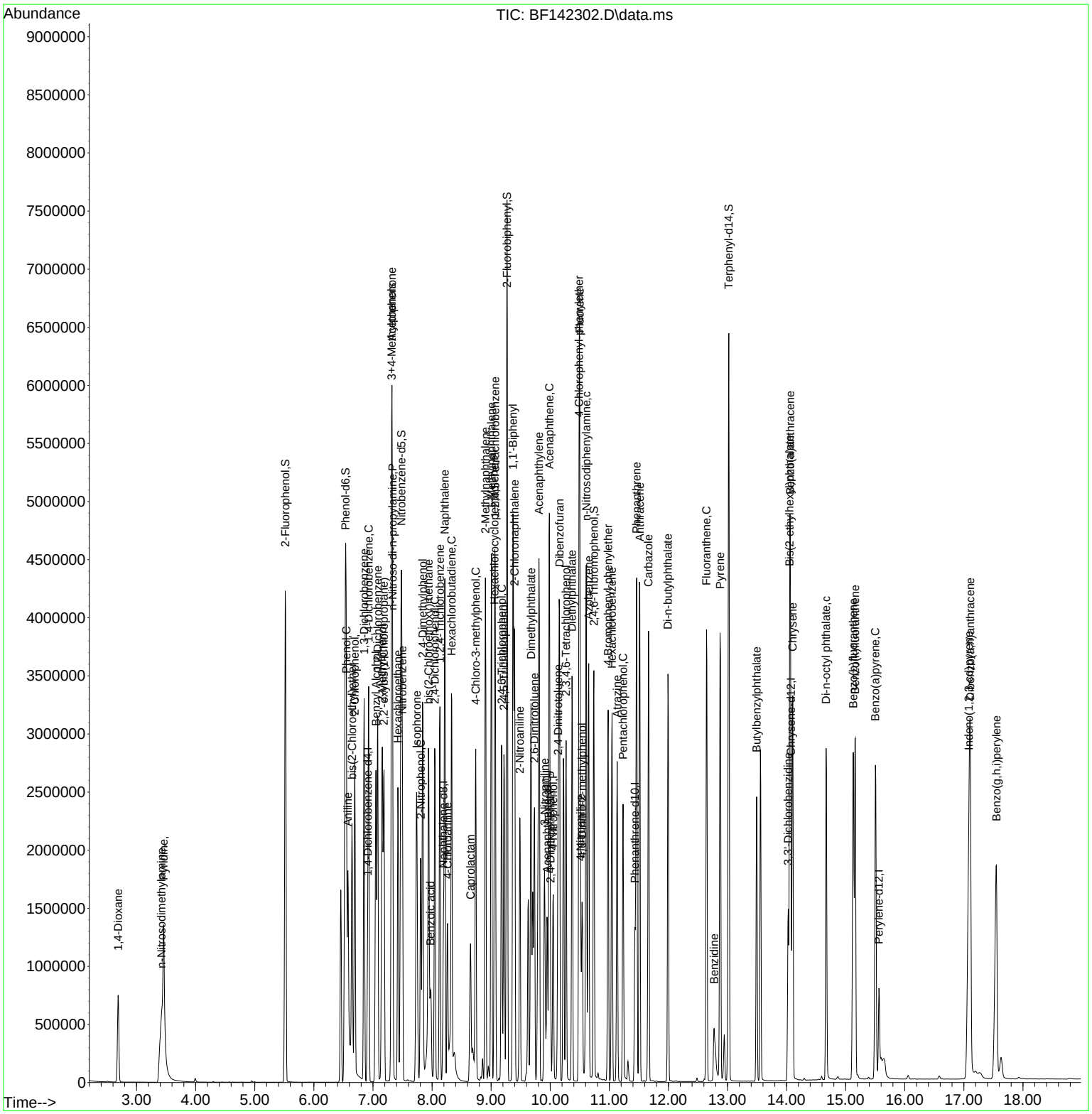
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142302.D
Acq On : 05 May 2025 17:15
Operator : RC/JU
Sample : SSTDICC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Quant Time: May 05 18:39:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:17:22 2025
Response via : Initial Calibration



ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	230180	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	893807	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	478877	20.000	ng	0.00
64) Phenanthrene-d10	11.433	188	810843	20.000	ng	0.00
76) Chrysene-d12	14.074	240	446151	20.000	ng	0.00
86) Perylene-d12	15.563	264	447218	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.516	112	1038606	77.026	ng	0.00
7) Phenol-d6	6.522	99	1267516	76.429	ng	0.00
23) Nitrobenzene-d5	7.469	82	1224734	83.567	ng	0.00
42) 2,4,6-Tribromophenol	10.733	330	384712	83.209	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	2396964	71.371	ng	0.00
79) Terphenyl-d14	13.016	244	2301923	76.366	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.687	88	231020	38.046	ng	99
3) Pyridine	3.452	79	584384	40.992	ng	99
4) n-Nitrosodimethylamine	3.405	42	317717	38.346	ng	100
6) Aniline	6.569	93	686015	42.173	ng	99
8) 2-Chlorophenol	6.687	128	572045	39.701	ng	100
9) Benzaldehyde	6.457	77	330476	34.048	ng	100
10) Phenol	6.540	94	676388m	38.399	ng	
11) bis(2-Chloroethyl)ether	6.640	93	624602m	36.030	ng	
12) 1,3-Dichlorobenzene	6.845	146	616110	37.375	ng	99
13) 1,4-Dichlorobenzene	6.922	146	623676	37.681	ng	99
14) 1,2-Dichlorobenzene	7.075	146	600086	37.772	ng	99
15) Benzyl Alcohol	7.045	79	436337	40.632	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.181	45	983896	38.006	ng	100
17) 2-Methylphenol	7.151	107	454505	38.961	ng	100
18) Hexachloroethane	7.422	117	218260	39.633	ng	100
19) n-Nitroso-di-n-propyla...	7.322	70	394300	38.437	ng	98
20) 3+4-Methylphenols	7.304	107	569096	39.089	ng	97
22) Acetophenone	7.316	105	745621	37.519	ng	99
24) Nitrobenzene	7.487	77	572370	41.431	ng	99
25) Isophorone	7.728	82	1066427	38.426	ng	99
26) 2-Nitrophenol	7.804	139	276219	42.037	ng	99
27) 2,4-Dimethylphenol	7.834	122	542819	38.903	ng	98
28) bis(2-Chloroethoxy)met...	7.934	93	681438	38.186	ng	99
29) 2,4-Dichlorophenol	8.039	162	482996	40.715	ng	99
30) 1,2,4-Trichlorobenzene	8.128	180	500471	37.487	ng	99
31) Naphthalene	8.210	128	1645769	37.992	ng	100
32) Benzoic acid	7.939	122	311574m	43.072	ng	
33) 4-Chloroaniline	8.257	127	706603m	39.993	ng	
34) Hexachlorobutadiene	8.328	225	304456	38.512	ng	100
35) Caprolactam	8.622	113	143456	41.494	ng	96
36) 4-Chloro-3-methylphenol	8.728	107	489740	39.715	ng	99
37) 2-Methylnaphthalene	8.898	142	1013246	37.643	ng	98
38) 1-Methylnaphthalene	8.998	142	1052686	37.522	ng	100
40) 1,2,4,5-Tetrachloroben...	9.069	216	502278	37.555	ng	99
41) Hexachlorocyclopentadiene	9.057	237	347327	42.020	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	347673	41.212	ng	99

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	358022	39.886	ng	99
46) 1,1'-Biphenyl	9.363	154	1368945	37.283	ng	100
47) 2-Chloronaphthalene	9.392	162	1019130	37.323	ng	100
48) 2-Nitroaniline	9.481	65	312727	44.681	ng	99
49) Acenaphthylene	9.804	152	1728165	37.833	ng	100
50) Dimethylphthalate	9.663	163	1173252	38.154	ng	100
51) 2,6-Dinitrotoluene	9.722	165	257792	44.788	ng	96
52) Acenaphthene	9.981	154	1029833	37.495	ng	99
53) 3-Nitroaniline	9.898	138	291556	43.190	ng	95
54) 2,4-Dinitrophenol	9.992	184	114850	42.149	ng	85
55) Dibenzofuran	10.151	168	1506186	37.158	ng	99
56) 4-Nitrophenol	10.039	139	225481	44.381	ng	98
57) 2,4-Dinitrotoluene	10.128	165	334070	45.248	ng	97
58) Fluorene	10.492	166	1135685	36.712	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	308477	41.630	ng	99
60) Diethylphthalate	10.363	149	1168902	38.064	ng	100
61) 4-Chlorophenyl-phenyle...	10.486	204	549616	36.826	ng	99
62) 4-Nitroaniline	10.504	138	210408	39.327	ng	99
63) Azobenzene	10.645	77	1112390	37.908	ng	100
65) 4,6-Dinitro-2-methylph...	10.533	198	152861	41.574	ng	99
66) n-Nitrosodiphenylamine	10.604	169	1027891	38.096	ng	99
67) 4-Bromophenyl-phenylether	10.975	248	352033	38.308	ng	99
68) Hexachlorobenzene	11.039	284	386876	38.273	ng	98
69) Atrazine	11.128	200	291834	41.032	ng	99
70) Pentachlorophenol	11.228	266	233208	43.855	ng	98
71) Phenanthrene	11.457	178	1591319	37.441	ng	100
72) Anthracene	11.510	178	1633756	37.410	ng	100
73) Carbazole	11.657	167	1466436	37.428	ng	100
74) Di-n-butylphthalate	11.992	149	1635344	39.694	ng	100
75) Fluoranthene	12.645	202	1560552	36.731	ng	100
77) Benzidine	12.769	184	349742	43.136	ng	100
78) Pyrene	12.874	202	1553540	39.120	ng	100
80) Butylbenzylphthalate	13.492	149	451916	39.681	ng	99
81) Benzo(a)anthracene	14.063	228	1121831	38.827	ng	99
82) 3,3'-Dichlorobenzidine	14.021	252	278603	41.464	ng	100
83) Chrysene	14.098	228	987170	36.701	ng	99
84) Bis(2-ethylhexyl)phtha...	14.051	149	576295	39.051	ng	99
85) Di-n-octyl phthalate	14.668	149	1053573	40.234	ng	99
87) Indeno(1,2,3-cd)pyrene	17.074	276	1258449	40.452	ng	100
88) Benzo(b)fluoranthene	15.121	252	1055207	38.957	ng	99
89) Benzo(k)fluoranthene	15.151	252	885574	35.727	ng	99
90) Benzo(a)pyrene	15.498	252	943474	38.871	ng	100
91) Dibenzo(a,h)anthracene	17.092	278	1030211	40.084	ng	100
92) Benzo(g,h,i)perylene	17.533	276	1024727	40.171	ng	98

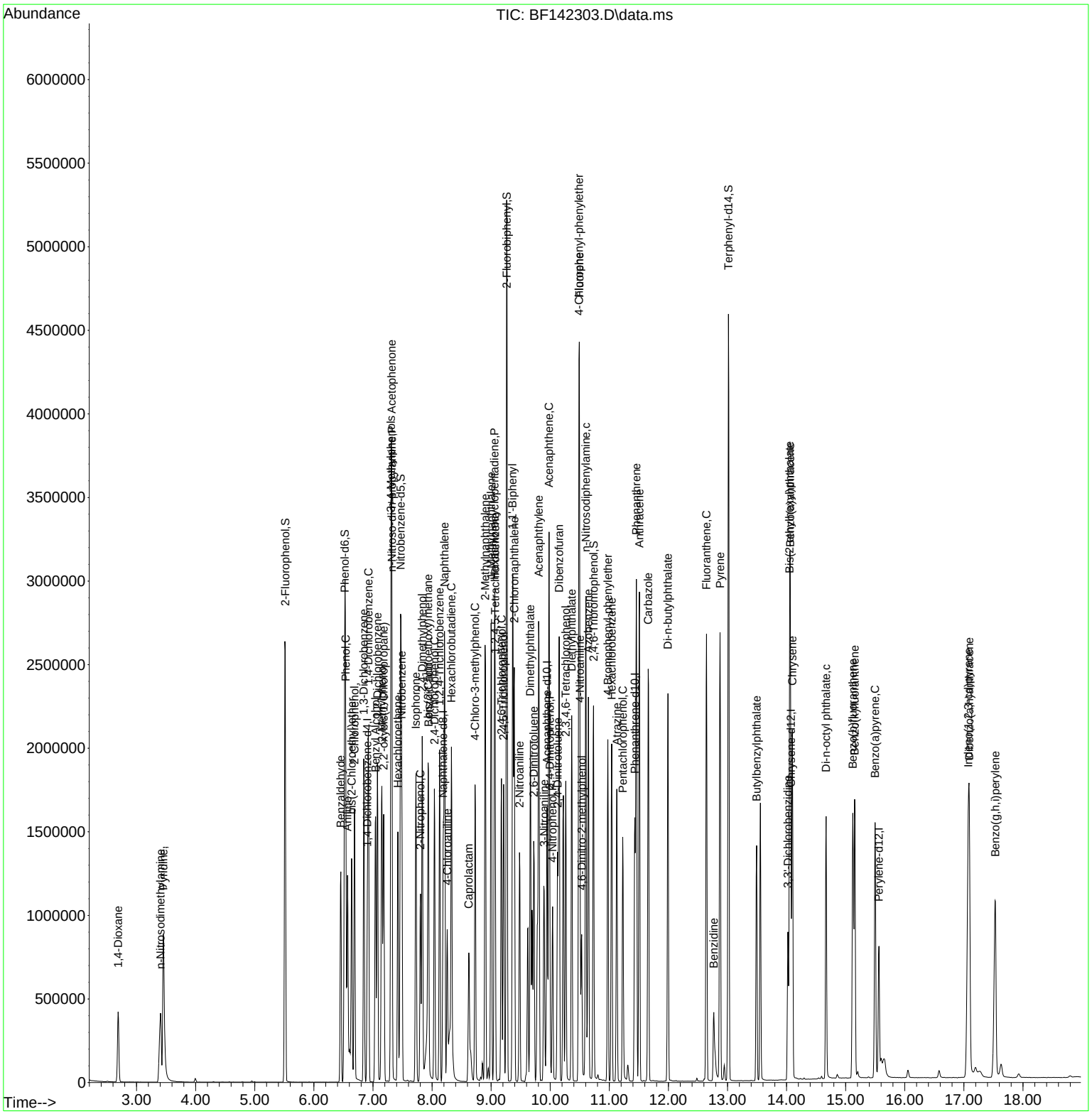
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	107	0.00
2		1,4-Dioxane	0.528	0.502	4.9	107	0.00
3		Pyridine	1.239	1.269	-2.4	116	0.00
4		n-Nitrosodimethylamine	0.720	0.690	4.2	106	0.00
5	S	2-Fluorophenol	1.172	1.128	3.8	107	0.00
6		Aniline	1.413	1.490	-5.4	109	0.00
7	S	Phenol-d6	1.441	1.377	4.4	107	0.00
8		2-Chlorophenol	1.252	1.243	0.7	109	0.00
9		Benzaldehyde	0.843	0.718	14.8	105	0.00
10	C	Phenol	1.527	1.469	3.8	107	0.00
11		bis(2-Chloroethyl)ether	1.506	1.357	9.9	107	0.00
12		1,3-Dichlorobenzene	1.432	1.338	6.6	106	0.00
13	C	1,4-Dichlorobenzene	1.438	1.355	5.8	106	0.00
14		1,2-Dichlorobenzene	1.380	1.304	5.5	106	0.00
15		Benzyl Alcohol	0.933	0.948	-1.6	109	0.00
16		2,2'-oxybis(1-Chloropropane	2.249	2.137	5.0	107	0.00
17		2-Methylphenol	1.014	0.987	2.7	109	0.00
18		Hexachloroethane	0.478	0.474	0.8	110	0.00
19	P	n-Nitroso-di-n-propylamine	0.891	0.857	3.8	107	0.00
20		3+4-Methylphenols	1.265	1.236	2.3	109	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00
22		Acetophenone	0.445	0.417	6.3	106	0.00
23	S	Nitrobenzene-d5	0.328	0.343	-4.6	111	0.00
24		Nitrobenzene	0.309	0.320	-3.6	111	0.00
25		Isophorone	0.621	0.597	3.9	108	0.00
26	C	2-Nitrophenol	0.129	0.155	-20.2#	124	0.00
27		2,4-Dimethylphenol	0.312	0.304	2.6	108	0.00
28		bis(2-Chloroethoxy)methane	0.399	0.381	4.5	108	0.00
29	C	2,4-Dichlorophenol	0.265	0.270	-1.9	109	0.00
30		1,2,4-Trichlorobenzene	0.299	0.280	6.4	106	0.00
31		Naphthalene	0.969	0.921	5.0	108	0.00
32		Benzoic acid	0.150	0.174	-16.0	132	0.00
33		4-Chloroaniline	0.396	0.395	0.3	109	0.00
34	C	Hexachlorobutadiene	0.177	0.170	4.0	108	0.00
35		Caprolactam	0.077	0.080	-3.9	108	0.00
36	C	4-Chloro-3-methylphenol	0.276	0.274	0.7	110	0.00
37		2-Methylnaphthalene	0.602	0.567	5.8	106	0.00
38		1-Methylnaphthalene	0.628	0.589	6.2	105	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	106	0.00
40		1,2,4,5-Tetrachlorobenzene	0.559	0.524	6.3	107	0.00
41	P	Hexachlorocyclopentadiene	0.345	0.363	-5.2	111	0.00
42	S	2,4,6-Tribromophenol	0.193	0.201	-4.1	111	0.00
43	C	2,4,6-Trichlorophenol	0.352	0.363	-3.1	109	0.00
44		2,4,5-Trichlorophenol	0.375	0.374	0.3	109	0.00
45	S	2-Fluorobiphenyl	1.403	1.251	10.8	104	0.00
46		1,1'-Biphenyl	1.533	1.429	6.8	107	0.00
47		2-Chloronaphthalene	1.140	1.064	6.7	106	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	0.292	0.327	-12.0	116	0.00
49		Acenaphthylene	1.908	1.804	5.5	107	0.00
50		Dimethylphthalate	1.284	1.225	4.6	107	0.00
51		2,6-Dinitrotoluene	0.240	0.269	-12.1	116	0.00
52	C	Acenaphthene	1.147	1.075	6.3	106	0.00
53		3-Nitroaniline	0.282	0.304	-7.8	112	0.00
54	P	2,4-Dinitrophenol	0.102	0.120	-17.6	130	0.00
55		Dibenzofuran	1.693	1.573	7.1	107	0.00
56	P	4-Nitrophenol	0.212	0.235	-10.8	116	0.00
57		2,4-Dinitrotoluene	0.308	0.349	-13.3	116	0.00
58		Fluorene	1.292	1.186	8.2	105	0.00
59		2,3,4,6-Tetrachlorophenol	0.309	0.322	-4.2	111	0.00
60		Diethylphthalate	1.283	1.220	4.9	107	0.00
61		4-Chlorophenyl-phenylether	0.623	0.574	7.9	105	0.00
62		4-Nitroaniline	0.223	0.220	1.3	103	0.00
63		Azobenzene	1.226	1.161	5.3	108	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00
65		4,6-Dinitro-2-methylphenol	0.082	0.094	-14.6	124	0.00
66	c	n-Nitrosodiphenylamine	0.666	0.634	4.8	107	0.00
67		4-Bromophenyl-phenylether	0.227	0.217	4.4	107	0.00
68		Hexachlorobenzene	0.249	0.239	4.0	107	0.00
69		Atrazine	0.175	0.180	-2.9	110	0.00
70	C	Pentachlorophenol	0.131	0.144	-9.9	110	0.00
71		Phenanthrene	1.048	0.981	6.4	106	0.00
72		Anthracene	1.077	1.007	6.5	105	0.00
73		Carbazole	0.966	0.904	6.4	104	0.00
74		Di-n-butylphthalate	1.016	1.008	0.8	106	0.00
75	C	Fluoranthene	1.048	0.962	8.2	104	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
77		Benzidine	0.363	0.392	-8.0	109	0.00
78		Pyrene	1.780	1.741	2.2	102	0.00
79	S	Terphenyl-d14	1.351	1.290	4.5	102	0.00
80		Butylbenzylphthalate	0.449	0.506	-12.7	108	0.00
81		Benzo(a)anthracene	1.295	1.257	2.9	101	0.00
82		3,3'-Dichlorobenzidine	0.301	0.312	-3.7	105	0.00
83		Chrysene	1.206	1.106	8.3	100	0.00
84		Bis(2-ethylhexyl)phthalate	0.573	0.646	-12.7	107	0.00
85	c	Di-n-octyl phthalate	1.057	1.181	-11.7	114	0.00
86	I	Perylene-d12	1.000	1.000	0.0	105	0.00
87		Indeno(1,2,3-cd)pyrene	1.391	1.407	-1.2	107	0.00
88		Benzo(b)fluoranthene	1.211	1.180	2.6	106	0.00
89		Benzo(k)fluoranthene	1.109	0.990	10.7	100	0.00
90	C	Benzo(a)pyrene	1.085	1.055	2.8	104	0.00
91		Dibenzo(a,h)anthracene	1.149	1.152	-0.3	106	0.00
92		Benzo(g,h,i)perylene	1.141	1.146	-0.4	107	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
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ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	107	0.00
2		1,4-Dioxane	40.000	38.046	4.9	107	0.00
3		Pyridine	40.000	40.992	-2.5	116	0.00
4		n-Nitrosodimethylamine	40.000	38.346	4.1	106	0.00
5	S	2-Fluorophenol	80.000	77.026	3.7	107	0.00
6		Aniline	40.000	42.173	-5.4	109	0.00
7	S	Phenol-d6	80.000	76.429	4.5	107	0.00
8		2-Chlorophenol	40.000	39.701	0.7	109	0.00
9		Benzaldehyde	40.000	34.048	14.9	105	0.00
10	C	Phenol	40.000	38.399	4.0	107	0.00
11		bis(2-Chloroethyl)ether	40.000	36.030	9.9	107	0.00
12		1,3-Dichlorobenzene	40.000	37.375	6.6	106	0.00
13	C	1,4-Dichlorobenzene	40.000	37.681	5.8	106	0.00
14		1,2-Dichlorobenzene	40.000	37.772	5.6	106	0.00
15		Benzyl Alcohol	40.000	40.632	-1.6	109	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	38.006	5.0	107	0.00
17		2-Methylphenol	40.000	38.961	2.6	109	0.00
18		Hexachloroethane	40.000	39.633	0.9	110	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	38.437	3.9	107	0.00
20		3+4-Methylphenols	40.000	39.089	2.3	109	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	106	0.00
22		Acetophenone	40.000	37.519	6.2	106	0.00
23	S	Nitrobenzene-d5	80.000	83.567	-4.5	111	0.00
24		Nitrobenzene	40.000	41.431	-3.6	111	0.00
25		Isophorone	40.000	38.426	3.9	108	0.00
26	C	2-Nitrophenol	40.000	42.037	-5.1	124	0.00
27		2,4-Dimethylphenol	40.000	38.903	2.7	108	0.00
28		bis(2-Chloroethoxy)methane	40.000	38.186	4.5	108	0.00
29	C	2,4-Dichlorophenol	40.000	40.715	-1.8	109	0.00
30		1,2,4-Trichlorobenzene	40.000	37.487	6.3	106	0.00
31		Naphthalene	40.000	37.992	5.0	108	0.00
32		Benzoic acid	40.000	43.072	-7.7	132	0.00
33		4-Chloroaniline	40.000	39.993	0.0	109	0.00
34	C	Hexachlorobutadiene	40.000	38.512	3.7	108	0.00
35		Caprolactam	40.000	41.494	-3.7	108	0.00
36	C	4-Chloro-3-methylphenol	40.000	39.715	0.7	110	0.00
37		2-Methylnaphthalene	40.000	37.643	5.9	106	0.00
38		1-Methylnaphthalene	40.000	37.522	6.2	105	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	106	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	37.555	6.1	107	0.00
41	P	Hexachlorocyclopentadiene	40.000	42.020	-5.1	111	0.00
42	S	2,4,6-Tribromophenol	80.000	83.209	-4.0	111	0.00
43	C	2,4,6-Trichlorophenol	40.000	41.212	-3.0	109	0.00
44		2,4,5-Trichlorophenol	40.000	39.886	0.3	109	0.00
45	S	2-Fluorobiphenyl	80.000	71.371	10.8	104	0.00
46		1,1'-Biphenyl	40.000	37.283	6.8	107	0.00
47		2-Chloronaphthalene	40.000	37.323	6.7	106	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	44.681	-11.7	116	0.00
49		Acenaphthylene	40.000	37.833	5.4	107	0.00
50		Dimethylphthalate	40.000	38.154	4.6	107	0.00
51		2,6-Dinitrotoluene	40.000	44.788	-12.0	116	0.00
52	C	Acenaphthene	40.000	37.495	6.3	106	0.00
53		3-Nitroaniline	40.000	43.190	-8.0	112	0.00
54	P	2,4-Dinitrophenol	40.000	42.149	-5.4	130	0.00
55		Dibenzofuran	40.000	37.158	7.1	107	0.00
56	P	4-Nitrophenol	40.000	44.381	-11.0	116	0.00
57		2,4-Dinitrotoluene	40.000	45.248	-13.1	116	0.00
58		Fluorene	40.000	36.712	8.2	105	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	41.630	-4.1	111	0.00
60		Diethylphthalate	40.000	38.064	4.8	107	0.00
61		4-Chlorophenyl-phenylether	40.000	36.826	7.9	105	0.00
62		4-Nitroaniline	40.000	39.327	1.7	103	0.00
63		Azobenzene	40.000	37.908	5.2	108	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	107	0.00
65		4,6-Dinitro-2-methylphenol	40.000	41.574	-3.9	124	0.00
66	c	n-Nitrosodiphenylamine	40.000	38.096	4.8	107	0.00
67		4-Bromophenyl-phenylether	40.000	38.308	4.2	107	0.00
68		Hexachlorobenzene	40.000	38.273	4.3	107	0.00
69		Atrazine	40.000	41.032	-2.6	110	0.00
70	C	Pentachlorophenol	40.000	43.855	-9.6	110	0.00
71		Phenanthrene	40.000	37.441	6.4	106	0.00
72		Anthracene	40.000	37.410	6.5	105	0.00
73		Carbazole	40.000	37.428	6.4	104	0.00
74		Di-n-butylphthalate	40.000	39.694	0.8	106	0.00
75	C	Fluoranthene	40.000	36.731	8.2	104	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	100	0.00
77		Benzidine	40.000	43.136	-7.8	109	0.00
78		Pyrene	40.000	39.120	2.2	102	0.00
79	S	Terphenyl-d14	80.000	76.366	4.5	102	0.00
80		Butylbenzylphthalate	40.000	39.681	0.8	108	0.00
81		Benzo(a)anthracene	40.000	38.827	2.9	101	0.00
82		3,3'-Dichlorobenzidine	40.000	41.464	-3.7	105	0.00
83		Chrysene	40.000	36.701	8.2	100	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	39.051	2.4	107	0.00
85	c	Di-n-octyl phthalate	40.000	40.234	-0.6	114	0.00
86	I	Perylene-d12	20.000	20.000	0.0	105	0.00
87		Indeno(1,2,3-cd)pyrene	40.000	40.452	-1.1	107	0.00
88		Benzo(b)fluoranthene	40.000	38.957	2.6	106	0.00
89		Benzo(k)fluoranthene	40.000	35.727	10.7	100	0.00
90	C	Benzo(a)pyrene	40.000	38.871	2.8	104	0.00
91		Dibenzo(a,h)anthracene	40.000	40.084	-0.2	106	0.00
92		Benzo(g,h,i)perylene	40.000	40.171	-0.4	107	0.00

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142303.D
Acq On : 05 May 2025 18:13
Operator : RC/JU
Sample : SSTDICV040
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF050525

Quant Time: May 05 18:41:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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: **BF142336.D**

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

Instrument ID: BNA_F Calibration Date/Time: 05/13/2025 10:49

Lab File ID: BF142336.D Init. Calib. Date(s): 05/05/2025 05/05/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:54 17:15

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.172	1.367		16.6	
Benzaldehyde	0.843	0.753		-10.7	
Phenol-d6	1.441	1.664		15.5	
Phenol	1.531	1.898		24.0	20.0
bis(2-Chloroethyl)ether	1.506	1.507		0.1	
2-Chlorophenol	1.252	1.494		19.3	
2-Methylphenol	1.014	1.200		18.3	
2,2-oxybis(1-Chloropropane)	2.249	2.554		13.6	
Acetophenone	0.445	0.499		12.1	
3+4-Methylphenols	1.265	1.480		17.0	
n-Nitroso-di-n-propylamine	0.891	1.031	0.050	15.7	
Nitrobenzene-d5	0.328	0.407		24.1	
Hexachloroethane	0.478	0.564		18.0	
Nitrobenzene	0.309	0.384		24.3	
Isophorone	0.621	0.722		16.3	
2-Nitrophenol	0.129	0.174		34.9	20.0
2,4-Dimethylphenol	0.312	0.365		17.0	
bis(2-Chloroethoxy)methane	0.399	0.454		13.8	
2,4-Dichlorophenol	0.265	0.324		22.3	20.0
Naphthalene	0.969	1.107		14.2	
4-Chloroaniline	0.395	0.472		19.5	
Hexachlorobutadiene	0.177	0.205		15.8	20.0
Caprolactam	0.077	0.101		31.2	
4-Chloro-3-methylphenol	0.276	0.328		18.8	20.0
2-Methylnaphthalene	0.602	0.684		13.6	
Hexachlorocyclopentadiene	0.345	0.427	0.050	23.8	
2,4,6-Trichlorophenol	0.352	0.428		21.6	20.0
2-Fluorobiphenyl	1.403	1.493		6.4	
2,4,5-Trichlorophenol	0.375	0.463		23.5	
1,1-Biphenyl	1.533	1.716		11.9	
2-Chloronaphthalene	1.140	1.289		13.1	
2-Nitroaniline	0.292	0.387		32.5	
Dimethylphthalate	1.284	1.507		17.4	
Acenaphthylene	1.908	2.144		12.4	
2,6-Dinitrotoluene	0.240	0.324		35.0	
3-Nitroaniline	0.282	0.375		33.0	
Acenaphthene	1.147	1.291		12.6	20.0
2,4-Dinitrophenol	0.102	0.137	0.050	34.3	
4-Nitrophenol	0.212	0.286	0.050	34.9	

Raw Data: **BF142336.D**

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

Instrument ID: BNA_F Calibration Date/Time: 05/13/2025 10:49

Lab File ID: BF142336.D Init. Calib. Date(s): 05/05/2025 05/05/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:54 17:15

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.693	1.907		12.6	
2,4-Dinitrotoluene	0.308	0.427		38.6	
Diethylphthalate	1.283	1.519		18.4	
4-Chlorophenyl-phenylether	0.623	0.707		13.5	
Fluorene	1.292	1.434		11.0	
4-Nitroaniline	0.223	0.278		24.7	
4,6-Dinitro-2-methylphenol	0.082	0.108		31.7	
n-Nitrosodiphenylamine	0.666	0.748		12.3	20.0
2,4,6-Tribromophenol	0.193	0.249		29.0	
4-Bromophenyl-phenylether	0.227	0.262		15.4	
Hexachlorobenzene	0.249	0.290		16.5	
Atrazine	0.175	0.220		25.7	
Pentachlorophenol	0.131	0.173		32.1	20.0
Phenanthrene	1.048	1.171		11.7	
Anthracene	1.077	1.205		11.9	
Carbazole	0.966	1.086		12.4	
Di-n-butylphthalate	1.016	1.242		22.2	
Fluoranthene	1.048	1.170		11.6	20.0
Pyrene	1.780	1.976		11.0	
Terphenyl-d14	1.351	1.483		9.8	
Butylbenzylphthalate	0.449	0.615		37.0	
3,3-Dichlorobenzidine	0.301	0.406		34.9	
Benzo(a)anthracene	1.295	1.500		15.8	
Chrysene	1.206	1.354		12.3	
Bis(2-ethylhexyl)phthalate	0.573	0.764		33.3	
Di-n-octyl phthalate	1.057	1.342		27.0	20.0
Benzo(b)fluoranthene	1.211	1.431		18.2	
Benzo(k)fluoranthene	1.109	1.254		13.1	
Benzo(a)pyrene	1.085	1.300		19.8	20.0
Indeno(1,2,3-cd)pyrene	1.391	1.662		19.5	
Dibenzo(a,h)anthracene	1.149	1.354		17.8	
Benzo(g,h,i)perylene	1.141	1.342		17.6	
1,2,4,5-Tetrachlorobenzene	0.559	0.639		14.3	
1,4-Dioxane	0.528	0.613		16.1	20.0
2,3,4,6-Tetrachlorophenol	0.309	0.387		25.2	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	199243	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	783419	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	422251	20.000	ng	0.00
64) Phenanthrene-d10	11.433	188	732764	20.000	ng	0.00
76) Chrysene-d12	14.074	240	429049	20.000	ng	0.00
86) Perylene-d12	15.563	264	422358	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.510	112	1089406	93.338	ng	0.00
7) Phenol-d6	6.528	99	1325765	92.355	ng	0.00
23) Nitrobenzene-d5	7.469	82	1274851	99.244	ng	0.00
42) 2,4,6-Tribromophenol	10.733	330	421374	103.360	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	2521890	85.160	ng	0.00
79) Terphenyl-d14	13.016	244	2544484	87.778	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.675	88	244141	46.450	ng	99
3) Pyridine	3.440	79	619125	50.172	ng	98
4) n-Nitrosodimethylamine	3.393	42	331847	46.270	ng	98
6) Aniline	6.569	93	861426	61.179	ng	100
8) 2-Chlorophenol	6.687	128	595294	47.729	ng	99
9) Benzaldehyde	6.457	77	299990	35.706	ng	99
10) Phenol	6.540	94	756188	49.695	ng	98
11) bis(2-Chloroethyl)ether	6.640	93	600392	40.011	ng	98
12) 1,3-Dichlorobenzene	6.845	146	648776	45.467	ng	99
13) 1,4-Dichlorobenzene	6.922	146	653098	45.586	ng	99
14) 1,2-Dichlorobenzene	7.075	146	633135	46.040	ng	100
15) Benzyl Alcohol	7.045	79	474722	51.070	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.181	45	1017623	45.413	ng	100
17) 2-Methylphenol	7.151	107	478348	47.372	ng	100
18) Hexachloroethane	7.422	117	224841	47.168	ng	99
19) n-Nitroso-di-n-propyla...	7.322	70	410811	46.265	ng	97
20) 3+4-Methylphenols	7.304	107	589778	46.799	ng	97
22) Acetophenone	7.316	105	781512	44.866	ng	99
24) Nitrobenzene	7.492	77	601351	49.663	ng	96
25) Isophorone	7.728	82	1131035	46.497	ng	99
26) 2-Nitrophenol	7.804	139	272331	46.775	ng	99
27) 2,4-Dimethylphenol	7.834	122	572246	46.791	ng	99
28) bis(2-Chloroethoxy)met...	7.934	93	711812	45.508	ng	100
29) 2,4-Dichlorophenol	8.040	162	507181	48.778	ng	99
30) 1,2,4-Trichlorobenzene	8.128	180	540912	46.225	ng	99
31) Naphthalene	8.210	128	1734051	45.670	ng	100
32) Benzoic acid	7.945	122	315432m	48.069	ng	
33) 4-Chloroaniline	8.257	127	740296	47.782	ng	99
34) Hexachlorobutadiene	8.328	225	321190	46.354	ng	99
35) Caprolactam	8.622	113	158124	52.181	ng	97
36) 4-Chloro-3-methylphenol	8.734	107	513736	47.531	ng	100
37) 2-Methylnaphthalene	8.898	142	1072003	45.437	ng	98
38) 1-Methylnaphthalene	8.998	142	1116031	45.385	ng	100
40) 1,2,4,5-Tetrachloroben...	9.069	216	539798	45.772	ng	99
41) Hexachlorocyclopentadiene	9.057	237	360385	49.446	ng	100
43) 2,4,6-Trichlorophenol	9.175	196	361231	48.561	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

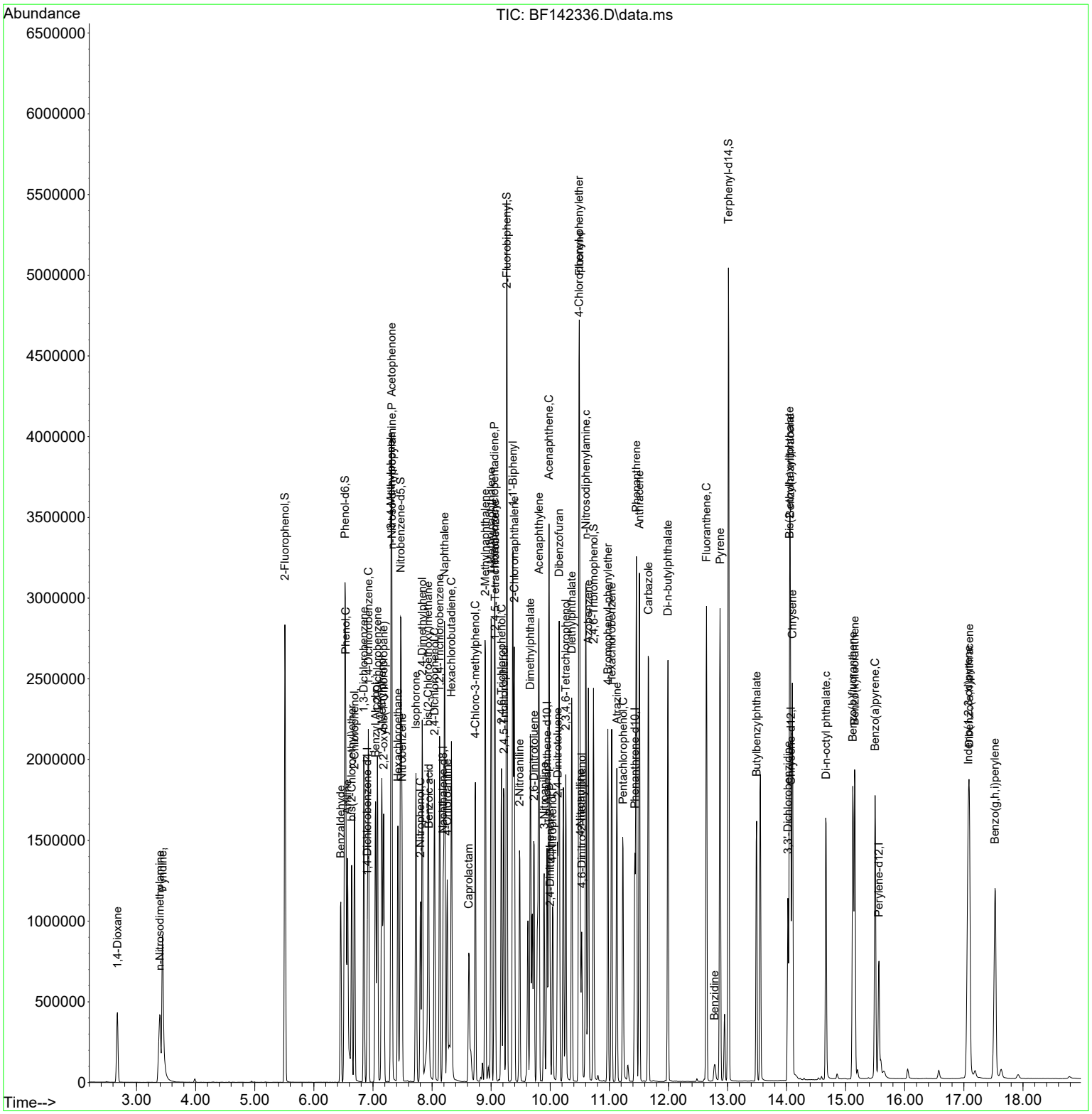
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	390633	49.355	ng		98
46) 1,1'-Biphenyl	9.369	154	1449158	44.761	ng		99
47) 2-Chloronaphthalene	9.392	162	1088716	45.218	ng		99
48) 2-Nitroaniline	9.481	65	326709	52.939	ng		98
49) Acenaphthylene	9.810	152	1810909	44.961	ng		99
50) Dimethylphthalate	9.663	163	1272686	46.938	ng		100
51) 2,6-Dinitrotoluene	9.728	165	273559	53.901	ng		91
52) Acenaphthene	9.981	154	1090605	45.032	ng		99
53) 3-Nitroaniline	9.898	138	316945	53.247	ng		96
54) 2,4-Dinitrophenol	9.998	184	115320	46.934	ng	#	13
55) Dibenzofuran	10.151	168	1610610	45.062	ng		99
56) 4-Nitrophenol	10.039	139	241256	53.854	ng		99
57) 2,4-Dinitrotoluene	10.128	165	360605	55.391	ng		98
58) Fluorene	10.492	166	1210666	44.385	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	326712	50.003	ng		99
60) Diethylphthalate	10.363	149	1282684	47.371	ng		100
61) 4-Chlorophenyl-phenyle...	10.486	204	597338	45.391	ng		99
62) 4-Nitroaniline	10.510	138	234587	49.726	ng		99
63) Azobenzene	10.645	77	1177154	45.494	ng		99
65) 4,6-Dinitro-2-methylph...	10.533	198	157743	46.453	ng		99
66) n-Nitrosodiphenylamine	10.604	169	1095830	44.941	ng		100
67) 4-Bromophenyl-phenylether	10.975	248	383867	46.223	ng		98
68) Hexachlorobenzene	11.039	284	425189	46.545	ng		98
69) Atrazine	11.128	200	323129	50.272	ng		99
70) Pentachlorophenol	11.233	266	253484	52.747	ng		97
71) Phenanthrene	11.457	178	1716372	44.686	ng		100
72) Anthracene	11.510	178	1765937	44.746	ng		100
73) Carbazole	11.663	167	1590890	44.931	ng		99
74) Di-n-butylphthalate	11.992	149	1820284	48.890	ng		100
75) Fluoranthene	12.645	202	1715140	44.671	ng		100
77) Benzidine	12.780	184	86272	11.065	ng		98
78) Pyrene	12.874	202	1695335	44.393	ng		100
80) Butylbenzylphthalate	13.492	149	527431	47.376	ng		98
81) Benzo(a)anthracene	14.063	228	1286820	46.312	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	348051	53.865	ng		99
83) Chrysene	14.098	228	1161556	44.906	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	655350	45.405	ng		99
85) Di-n-octyl phthalate	14.668	149	1151683	44.663	ng		99
87) Indeno(1,2,3-cd)pyrene	17.074	276	1403936	47.784	ng		100
88) Benzo(b)fluoranthene	15.121	252	1209004	47.263	ng		100
89) Benzo(k)fluoranthene	15.151	252	1059661	45.267	ng		99
90) Benzo(a)pyrene	15.498	252	1098240	47.910	ng		100
91) Dibenzo(a,h)anthracene	17.092	278	1144103	47.135	ng		99
92) Benzo(g,h,i)perylene	17.527	276	1133909	47.068	ng		100

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration



Sample Results: **BF142336.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	93	0.00
2		1,4-Dioxane	0.528	0.613	-16.1	113	-0.01
3		Pyridine	1.239	1.554	-25.4#	122	-0.01
4		n-Nitrosodimethylamine	0.720	0.833	-15.7	111	-0.01
5	S	2-Fluorophenol	1.172	1.367	-16.6	112	0.00
6		Aniline	1.413	2.162	-53.0#	136	0.00
7	S	Phenol-d6	1.441	1.664	-15.5	112	0.00
8		2-Chlorophenol	1.252	1.494	-19.3	113	0.00
9		Benzaldehyde	0.843	0.753	10.7	95	0.00
10	C	Phenol	1.527	1.898	-24.3#	119	0.00
11		bis(2-Chloroethyl)ether	1.506	1.507	-0.1	103	0.00
12		1,3-Dichlorobenzene	1.432	1.628	-13.7	112	0.00
13	C	1,4-Dichlorobenzene	1.438	1.639	-14.0	111	0.00
14		1,2-Dichlorobenzene	1.380	1.589	-15.1	112	0.00
15		Benzyl Alcohol	0.933	1.191	-27.7#	119	0.00
16		2,2'-oxybis(1-Chloropropane	2.249	2.554	-13.6	111	0.00
17		2-Methylphenol	1.014	1.200	-18.3	114	0.00
18		Hexachloroethane	0.478	0.564	-18.0	113	0.00
19	P	n-Nitroso-di-n-propylamine	0.891	1.031	-15.7	111	0.00
20		3+4-Methylphenols	1.265	1.480	-17.0	113	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	93	0.00
22		Acetophenone	0.445	0.499	-12.1	111	0.00
23	S	Nitrobenzene-d5	0.328	0.407	-24.1	116	0.00
24		Nitrobenzene	0.309	0.384	-24.3	117	0.00
25		Isophorone	0.621	0.722	-16.3	114	0.00
26	C	2-Nitrophenol	0.129	0.174	-34.9#	123	0.00
27		2,4-Dimethylphenol	0.312	0.365	-17.0	114	0.00
28		bis(2-Chloroethoxy)methane	0.399	0.454	-13.8	113	0.00
29	C	2,4-Dichlorophenol	0.265	0.324	-22.3#	115	0.00
30		1,2,4-Trichlorobenzene	0.299	0.345	-15.4	114	0.00
31		Naphthalene	0.969	1.107	-14.2	114	0.00
32		Benzoic acid	0.150	0.201	-34.0#	134	0.00
33		4-Chloroaniline	0.396	0.472	-19.2	115	0.00
34	C	Hexachlorobutadiene	0.177	0.205	-15.8	114	0.00
35		Caprolactam	0.077	0.101	-31.2#	119	0.00
36	C	4-Chloro-3-methylphenol	0.276	0.328	-18.8	115	0.00
37		2-Methylnaphthalene	0.602	0.684	-13.6	112	0.00
38		1-Methylnaphthalene	0.628	0.712	-13.4	112	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	93	0.00
40		1,2,4,5-Tetrachlorobenzene	0.559	0.639	-14.3	116	0.00
41	P	Hexachlorocyclopentadiene	0.345	0.427	-23.8	116	0.00
42	S	2,4,6-Tribromophenol	0.193	0.249	-29.0#	121	0.00
43	C	2,4,6-Trichlorophenol	0.352	0.428	-21.6#	113	0.00
44		2,4,5-Trichlorophenol	0.375	0.463	-23.5	119	0.00
45	S	2-Fluorobiphenyl	1.403	1.493	-6.4	109	0.00
46		1,1'-Biphenyl	1.533	1.716	-11.9	113	0.00
47		2-Chloronaphthalene	1.140	1.289	-13.1	113	0.00

Sample Results: **BF142336.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	0.292	0.387	-32.5#	121	0.00
49		Acenaphthylene	1.908	2.144	-12.4	112	0.00
50		Dimethylphthalate	1.284	1.507	-17.4	116	0.00
51		2,6-Dinitrotoluene	0.240	0.324	-35.0#	123	0.00
52	C	Acenaphthene	1.147	1.291	-12.6	113	0.00
53		3-Nitroaniline	0.282	0.375	-33.0#	122	0.00
54	P	2,4-Dinitrophenol	0.102	0.137	-34.3#	131	0.00
55		Dibenzofuran	1.693	1.907	-12.6	114	0.00
56	P	4-Nitrophenol	0.212	0.286	-34.9#	124	0.00
57		2,4-Dinitrotoluene	0.308	0.427	-38.6#	125	0.00
58		Fluorene	1.292	1.434	-11.0	112	0.00
59		2,3,4,6-Tetrachlorophenol	0.309	0.387	-25.2#	118	0.00
60		Diethylphthalate	1.283	1.519	-18.4	117	0.00
61		4-Chlorophenyl-phenylether	0.623	0.707	-13.5	114	0.00
62		4-Nitroaniline	0.223	0.278	-24.7	115	0.00
63		Azobenzene	1.226	1.394	-13.7	115	0.00
64	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00
65		4,6-Dinitro-2-methylphenol	0.082	0.108	-31.7#	128	0.00
66	c	n-Nitrosodiphenylamine	0.666	0.748	-12.3	114	0.00
67		4-Bromophenyl-phenylether	0.227	0.262	-15.4	117	0.00
68		Hexachlorobenzene	0.249	0.290	-16.5	118	0.00
69		Atrazine	0.175	0.220	-25.7#	122	0.00
70	C	Pentachlorophenol	0.131	0.173	-32.1#	120	0.00
71		Phenanthrene	1.048	1.171	-11.7	114	0.00
72		Anthracene	1.077	1.205	-11.9	114	0.00
73		Carbazole	0.966	1.086	-12.4	113	0.00
74		Di-n-butylphthalate	1.016	1.242	-22.2	118	0.00
75	C	Fluoranthene	1.048	1.170	-11.6	114	0.00
76	I	Chrysene-d12	1.000	1.000	0.0	96	0.00
77		Benzidine	0.363	0.101	72.2#	27#	0.01
78		Pyrene	1.780	1.976	-11.0	111	0.00
79	S	Terphenyl-d14	1.351	1.483	-9.8	113	0.00
80		Butylbenzylphthalate	0.449	0.615	-37.0#	126	0.00
81		Benzo(a)anthracene	1.295	1.500	-15.8	116	0.00
82		3,3'-Dichlorobenzidine	0.301	0.406	-34.9#	131	0.00
83		Chrysene	1.206	1.354	-12.3	117	0.00
84		Bis(2-ethylhexyl)phthalate	0.573	0.764	-33.3#	122	0.00
85	c	Di-n-octyl phthalate	1.057	1.342	-27.0#	125	0.00
86	I	Perylene-d12	1.000	1.000	0.0	99	0.00
87		Indeno(1,2,3-cd)pyrene	1.391	1.662	-19.5	119	0.00
88		Benzo(b)fluoranthene	1.211	1.431	-18.2	122	0.00
89		Benzo(k)fluoranthene	1.109	1.254	-13.1	119	0.00
90	C	Benzo(a)pyrene	1.085	1.300	-19.8	121	0.00
91		Dibenzo(a,h)anthracene	1.149	1.354	-17.8	118	0.00
92		Benzo(g,h,i)perylene	1.141	1.342	-17.6	119	0.00

Sample Results: **BF142336.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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 = 6

Sample Results: **BF142336.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	93	0.00
2		1,4-Dioxane	40.000	46.450	-16.1	113	-0.01
3		Pyridine	40.000	50.172	-25.4#	122	-0.01
4		n-Nitrosodimethylamine	40.000	46.270	-15.7	111	-0.01
5	S	2-Fluorophenol	80.000	93.338	-16.7	112	0.00
6		Aniline	40.000	61.179	-52.9#	136	0.00
7	S	Phenol-d6	80.000	92.355	-15.4	112	0.00
8		2-Chlorophenol	40.000	47.729	-19.3	113	0.00
9		Benzaldehyde	40.000	35.706	10.7	95	0.00
10	C	Phenol	40.000	49.695	-24.2#	119	0.00
11		bis(2-Chloroethyl)ether	40.000	40.011	-0.0	103	0.00
12		1,3-Dichlorobenzene	40.000	45.467	-13.7	112	0.00
13	C	1,4-Dichlorobenzene	40.000	45.586	-14.0	111	0.00
14		1,2-Dichlorobenzene	40.000	46.040	-15.1	112	0.00
15		Benzyl Alcohol	40.000	51.070	-27.7#	119	0.00
16		2,2'-oxybis(1-Chloropropane	40.000	45.413	-13.5	111	0.00
17		2-Methylphenol	40.000	47.372	-18.4	114	0.00
18		Hexachloroethane	40.000	47.168	-17.9	113	0.00
19	P	n-Nitroso-di-n-propylamine	40.000	46.265	-15.7	111	0.00
20		3+4-Methylphenols	40.000	46.799	-17.0	113	0.00
21	I	Naphthalene-d8	20.000	20.000	0.0	93	0.00
22		Acetophenone	40.000	44.866	-12.2	111	0.00
23	S	Nitrobenzene-d5	80.000	99.244	-24.1	116	0.00
24		Nitrobenzene	40.000	49.663	-24.2	117	0.00
25		Isophorone	40.000	46.497	-16.2	114	0.00
26	C	2-Nitrophenol	40.000	46.775	-16.9	123	0.00
27		2,4-Dimethylphenol	40.000	46.791	-17.0	114	0.00
28		bis(2-Chloroethoxy)methane	40.000	45.508	-13.8	113	0.00
29	C	2,4-Dichlorophenol	40.000	48.778	-21.9#	115	0.00
30		1,2,4-Trichlorobenzene	40.000	46.225	-15.6	114	0.00
31		Naphthalene	40.000	45.670	-14.2	114	0.00
32		Benzoic acid	40.000	48.069	-20.2	134	0.00
33		4-Chloroaniline	40.000	47.782	-19.5	115	0.00
34	C	Hexachlorobutadiene	40.000	46.354	-15.9	114	0.00
35		Caprolactam	40.000	52.181	-30.5#	119	0.00
36	C	4-Chloro-3-methylphenol	40.000	47.531	-18.8	115	0.00
37		2-Methylnaphthalene	40.000	45.437	-13.6	112	0.00
38		1-Methylnaphthalene	40.000	45.385	-13.5	112	0.00
39	I	Acenaphthene-d10	20.000	20.000	0.0	93	0.00
40		1,2,4,5-Tetrachlorobenzene	40.000	45.772	-14.4	116	0.00
41	P	Hexachlorocyclopentadiene	40.000	49.446	-23.6	116	0.00
42	S	2,4,6-Tribromophenol	80.000	103.360	-29.2#	121	0.00
43	C	2,4,6-Trichlorophenol	40.000	48.561	-21.4#	113	0.00
44		2,4,5-Trichlorophenol	40.000	49.355	-23.4	119	0.00
45	S	2-Fluorobiphenyl	80.000	85.160	-6.4	109	0.00
46		1,1'-Biphenyl	40.000	44.761	-11.9	113	0.00
47		2-Chloronaphthalene	40.000	45.218	-13.0	113	0.00

Sample Results: **BF142336.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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	52.939	-32.3#	121	0.00
49		Acenaphthylene	40.000	44.961	-12.4	112	0.00
50		Dimethylphthalate	40.000	46.938	-17.3	116	0.00
51		2,6-Dinitrotoluene	40.000	53.901	-34.8#	123	0.00
52	C	Acenaphthene	40.000	45.032	-12.6	113	0.00
53		3-Nitroaniline	40.000	53.247	-33.1#	122	0.00
54	P	2,4-Dinitrophenol	40.000	46.934	-17.3	131	0.00
55		Dibenzofuran	40.000	45.062	-12.7	114	0.00
56	P	4-Nitrophenol	40.000	53.854	-34.6#	124	0.00
57		2,4-Dinitrotoluene	40.000	55.391	-38.5#	125	0.00
58		Fluorene	40.000	44.385	-11.0	112	0.00
59		2,3,4,6-Tetrachlorophenol	40.000	50.003	-25.0#	118	0.00
60		Diethylphthalate	40.000	47.371	-18.4	117	0.00
61		4-Chlorophenyl-phenylether	40.000	45.391	-13.5	114	0.00
62		4-Nitroaniline	40.000	49.726	-24.3	115	0.00
63		Azobenzene	40.000	45.494	-13.7	115	0.00
64	I	Phenanthrene-d10	20.000	20.000	0.0	96	0.00
65		4,6-Dinitro-2-methylphenol	40.000	46.453	-16.1	128	0.00
66	c	n-Nitrosodiphenylamine	40.000	44.941	-12.4	114	0.00
67		4-Bromophenyl-phenylether	40.000	46.223	-15.6	117	0.00
68		Hexachlorobenzene	40.000	46.545	-16.4	118	0.00
69		Atrazine	40.000	50.272	-25.7#	122	0.00
70	C	Pentachlorophenol	40.000	52.747	-31.9#	120	0.00
71		Phenanthrene	40.000	44.686	-11.7	114	0.00
72		Anthracene	40.000	44.746	-11.9	114	0.00
73		Carbazole	40.000	44.931	-12.3	113	0.00
74		Di-n-butylphthalate	40.000	48.890	-22.2	118	0.00
75	C	Fluoranthene	40.000	44.671	-11.7	114	0.00
76	I	Chrysene-d12	20.000	20.000	0.0	96	0.00
77		Benzidine	40.000	11.065	72.3#	27	0.01
78		Pyrene	40.000	44.393	-11.0	111	0.00
79	S	Terphenyl-d14	80.000	87.778	-9.7	113	0.00
80		Butylbenzylphthalate	40.000	47.376	-18.4	126	0.00
81		Benzo(a)anthracene	40.000	46.312	-15.8	116	0.00
82		3,3'-Dichlorobenzidine	40.000	53.865	-34.7#	131	0.00
83		Chrysene	40.000	44.906	-12.3	117	0.00
84		Bis(2-ethylhexyl)phthalate	40.000	45.405	-13.5	122	0.00
85	c	Di-n-octyl phthalate	40.000	44.663	-11.7	125	0.00
86	I	Perylene-d12	20.000	20.000	0.0	99	0.00
87		Indeno(1,2,3-cd)pyrene	40.000	47.784	-19.5	119	0.00
88		Benzo(b)fluoranthene	40.000	47.263	-18.2	122	0.00
89		Benzo(k)fluoranthene	40.000	45.267	-13.2	119	0.00
90	C	Benzo(a)pyrene	40.000	47.910	-19.8	121	0.00
91		Dibenzo(a,h)anthracene	40.000	47.135	-17.8	118	0.00
92		Benzo(g,h,i)perylene	40.000	47.068	-17.7	119	0.00

Sample Results: **BF142336.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142336.D
Acq On : 13 May 2025 10:49
Operator : RC/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: May 13 13:03:07 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 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 = 4

QC SAMPLE DATA

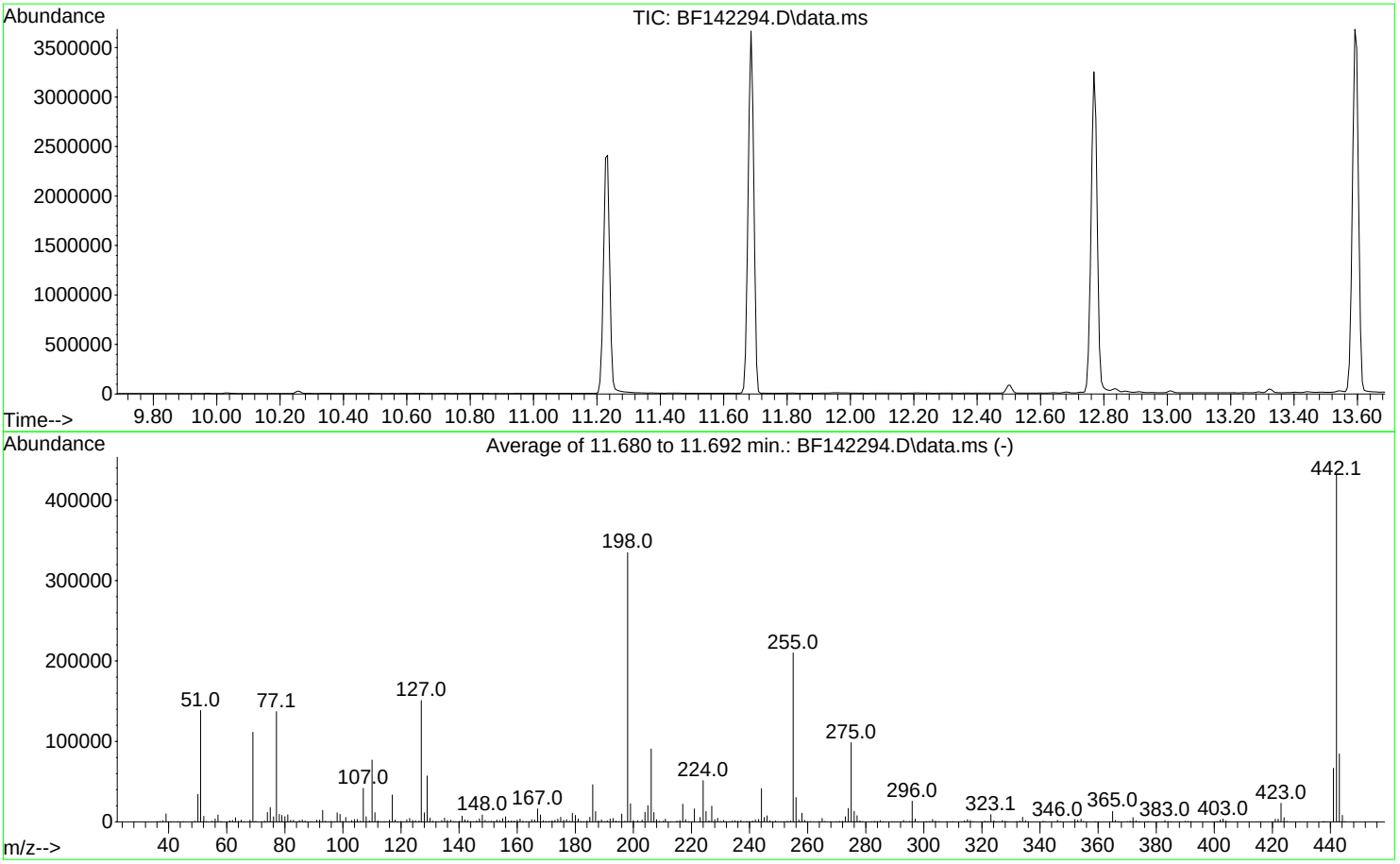
Sample Results: **BF142294.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142294.D
Acq On : 05 May 2025 13:24
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon May 05 18:41:44 2025



AutoFind: Scans 1613, 1614, 1615; Background Corrected with Scan 1606

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	41.3	138422	PASS
68	69	0.00	2	1.8	2002	PASS
69	198	0.00	100	33.3	111451	PASS
70	69	0.00	2	0.5	606	PASS
127	198	10	80	45.1	150915	PASS
197	198	0.00	2	0.2	791	PASS
198	198	100	100	100.0	334827	PASS
199	198	5	9	6.7	22493	PASS
275	198	10	60	29.4	98472	PASS
365	198	1	100	3.9	13004	PASS
441	198	0.01	100	19.9	66483	PASS
442	442	50	100	100.0	431915	PASS
443	442	15	24	19.6	84477	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
5/5/2025	BNA_F	BF142274.D
Compound Name	**Response**	**Retention Time**
DDT	875067	13.592
DDD	9793	13.321
DDE	601	12.957
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
10394	885461	1.17

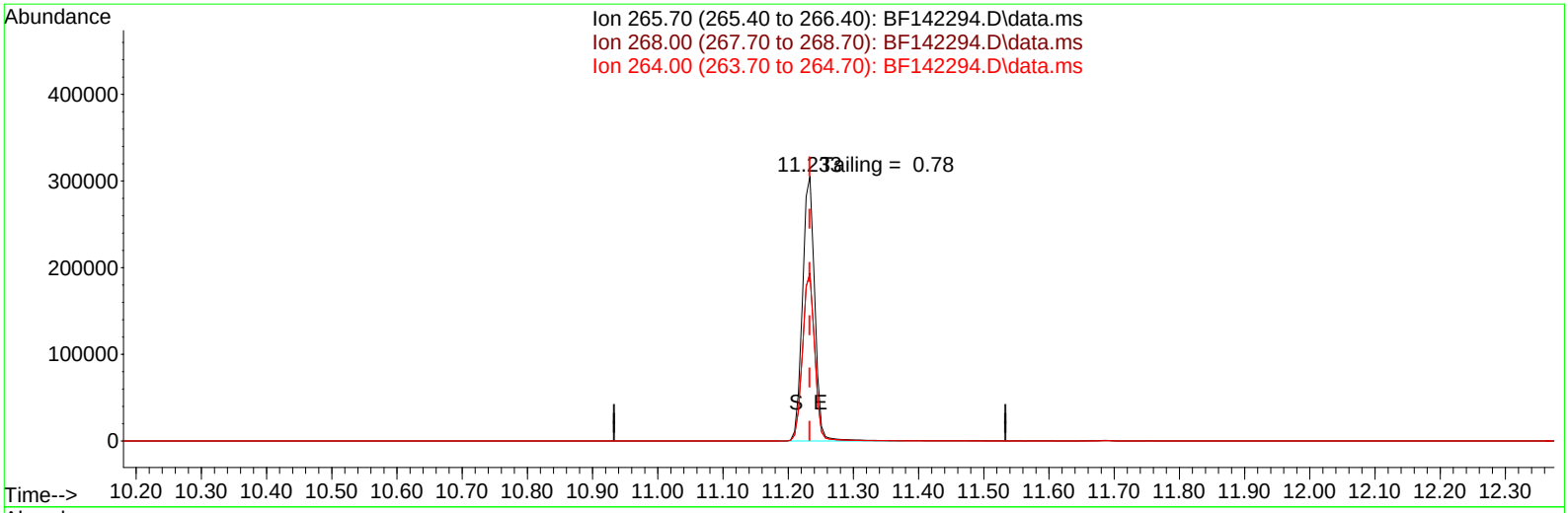
Instrument :
BNA_F
ClientSampleId :
DFTPP

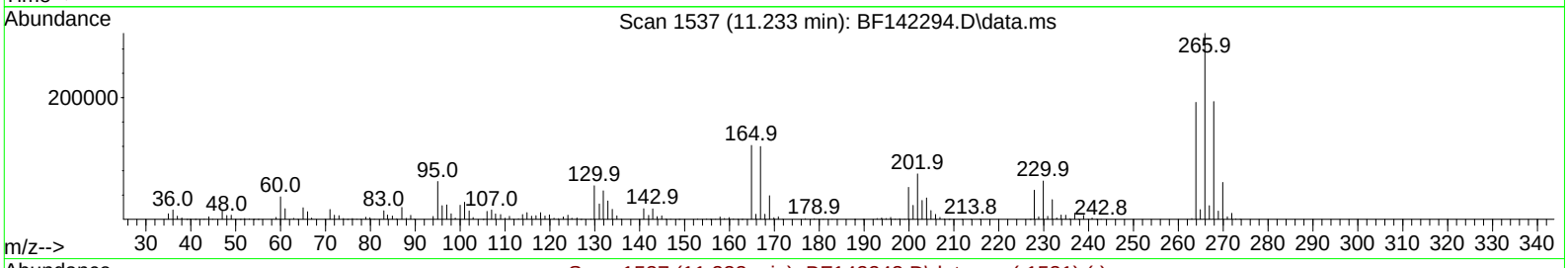
Sample Results: **BF142294.D**

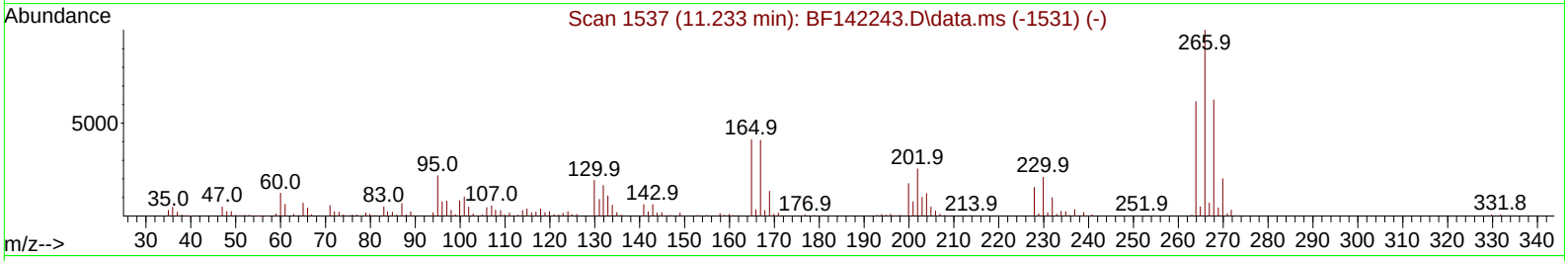
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142294.D
Acq On : 05 May 2025 13:24
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 05 15:26:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 15:26:28 2025
Response via : Initial Calibration







TIC: BF142294.D\data.ms

(70) Pentachlorophenol (C)

11.233min (+ 0.000) 69841.70 ng

response 401301

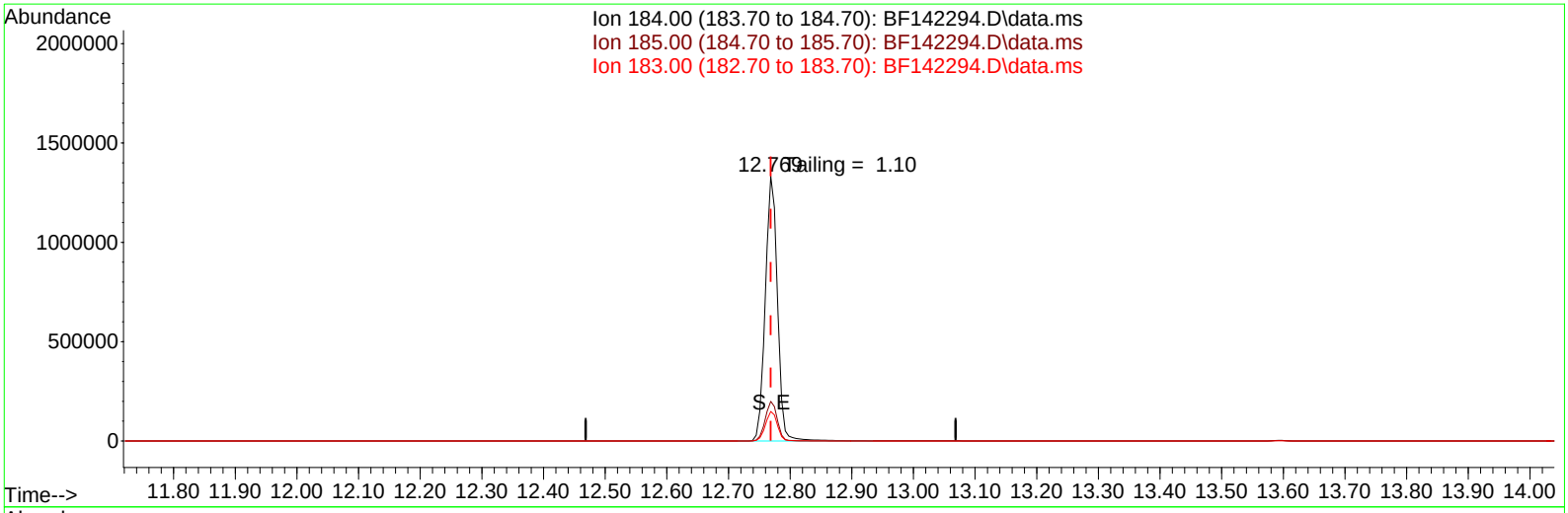
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.50	63.35
264.00	61.60	62.89
0.00	0.00	0.00

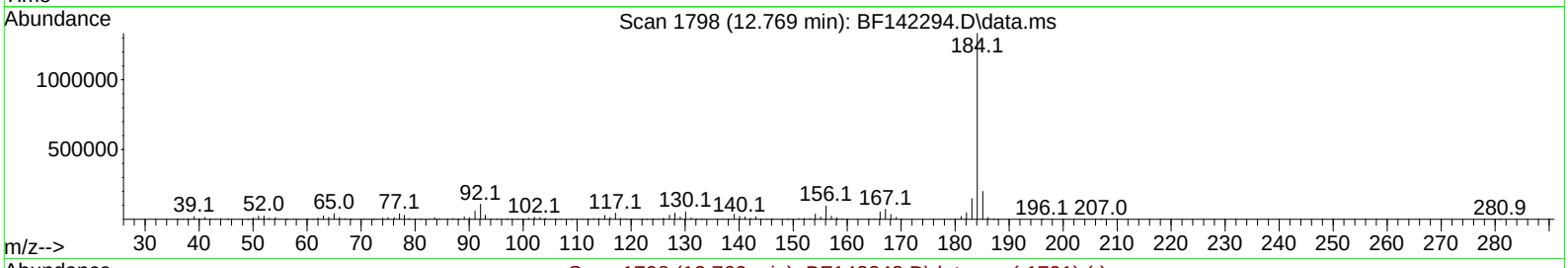
Sample Results: **BF142294.D**

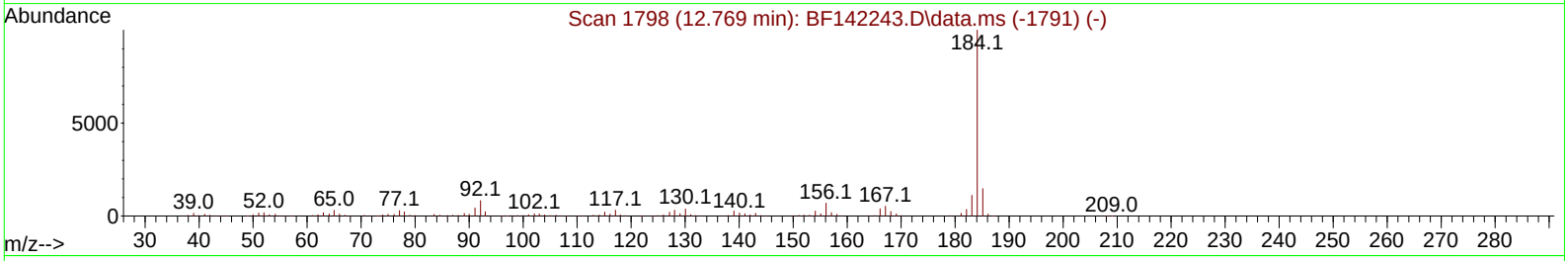
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF050525\
Data File : BF142294.D
Acq On : 05 May 2025 13:24
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 05 15:26:33 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 15:26:28 2025
Response via : Initial Calibration







TIC: BF142294.D\data.ms

(77) Benzidine

12.769min (-0.000) 69201.02 ng

response 1834842

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.70	15.01
183.00	11.10	11.15
0.00	0.00	0.00

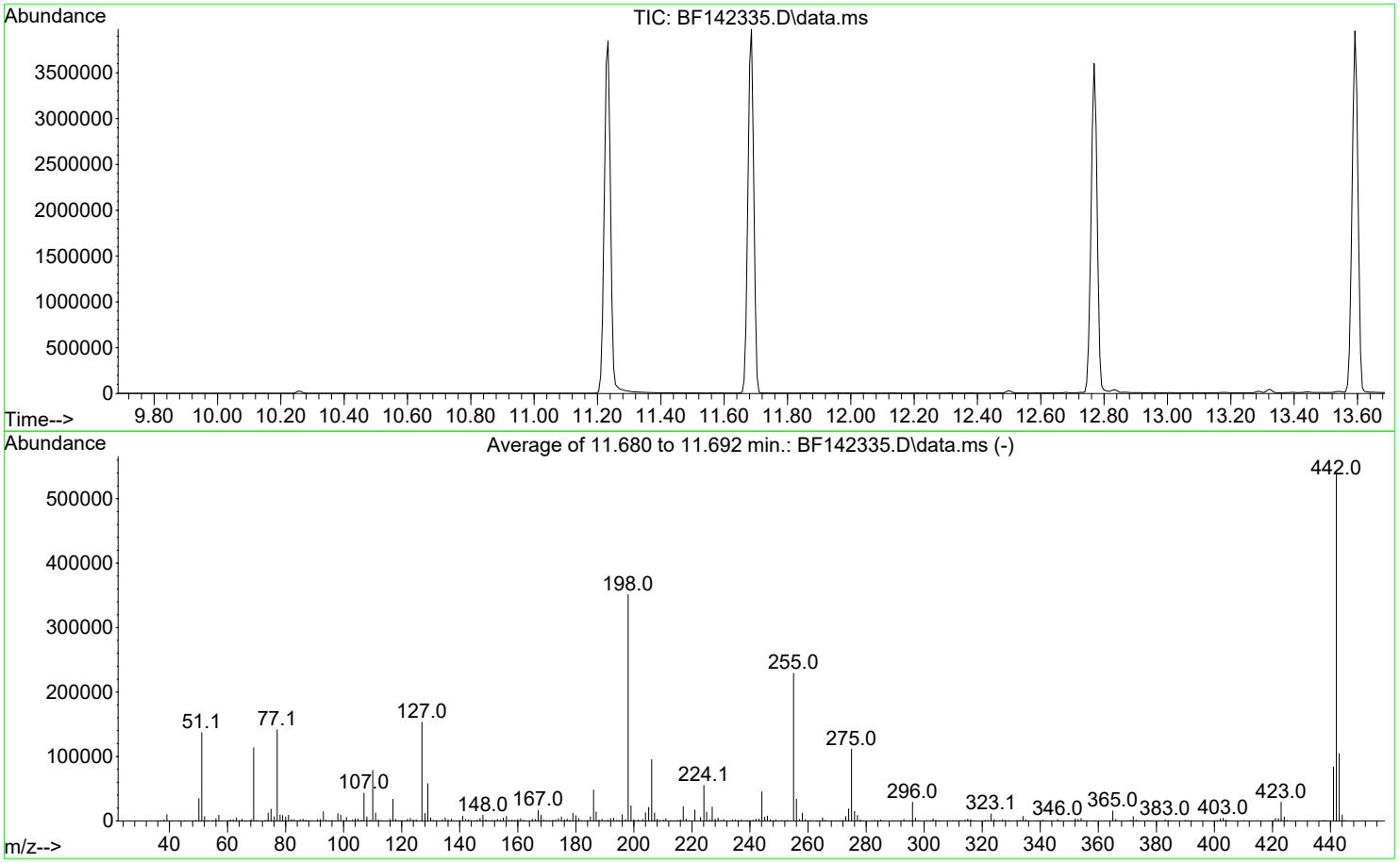
Sample Results: **BF142335.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142335.D
Acq On : 13 May 2025 10:20
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon May 05 18:41:44 2025



AutoFind: Scans 1613, 1614, 1615; Background Corrected with Scan 1606

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	39.0	137011	PASS
68	69	0.00	2	1.9	2133	PASS
69	198	0.00	100	32.4	113659	PASS
70	69	0.00	2	0.6	668	PASS
127	198	10	80	43.6	153267	PASS
197	198	0.00	2	0.6	2125	PASS
198	198	100	100	100.0	351232	PASS
199	198	5	9	6.7	23472	PASS
275	198	10	60	31.7	111221	PASS
365	198	1	100	4.4	15525	PASS
441	198	0.01	100	23.9	83896	PASS
442	442	50	100	100.0	538432	PASS
443	442	15	24	19.4	104517	PASS

DDT Breakdown

Date	Instrument Name	DFTPP Data File
5/13/2025	BNA_F	BF142335.D
Compound Name	**Response**	**Retention Time**
DDT	977951	13.592
DDD	13135	13.322
DDE	606	12.957
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
13741	991692	1.39

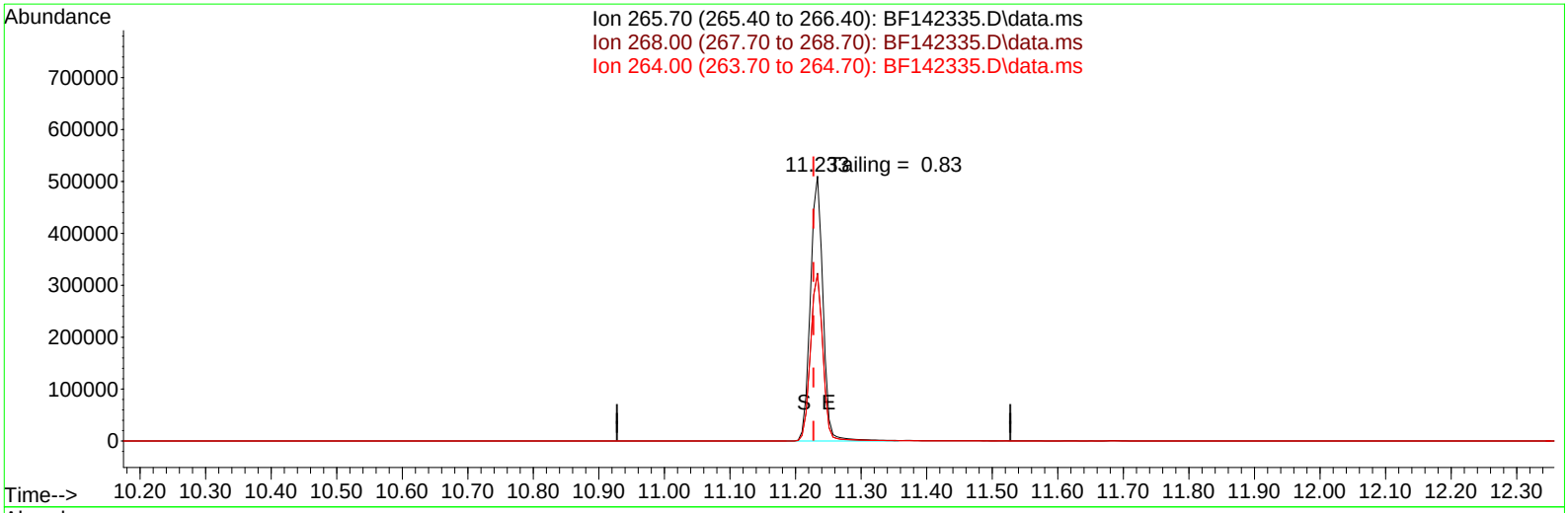
Instrument :
BNA_F
ClientSampleId :
DFTPP

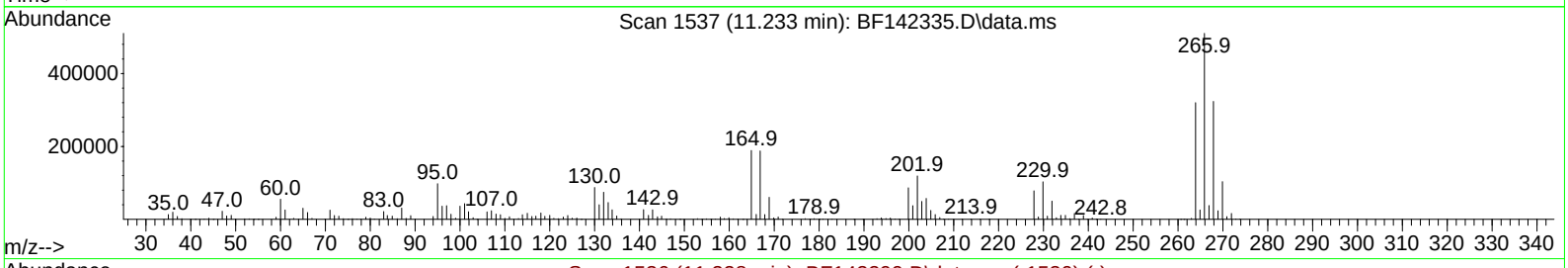
Sample Results: **BF142335.D**

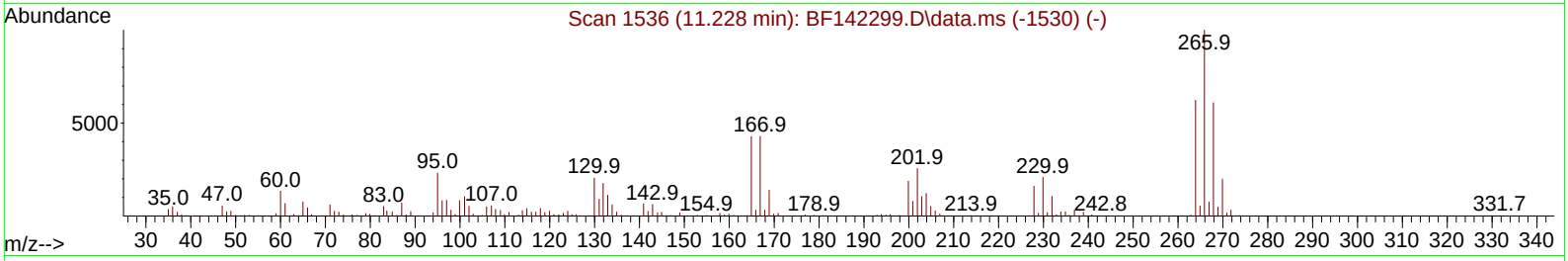
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142335.D
Acq On : 13 May 2025 10:20
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 13 11:35:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration







TIC: BF142335.D\data.ms

(70) Pentachlorophenol (C)

11.233min (+ 0.006) 828247.03 ng

response 684411

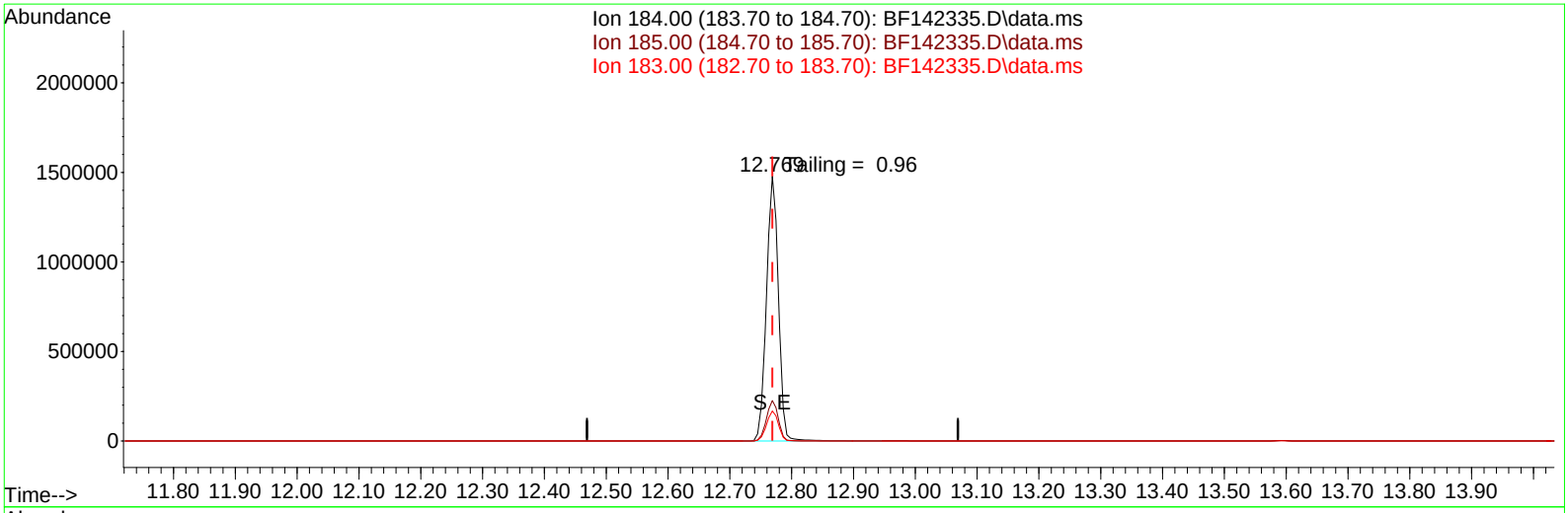
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	60.90	63.40
264.00	62.20	62.74
0.00	0.00	0.00

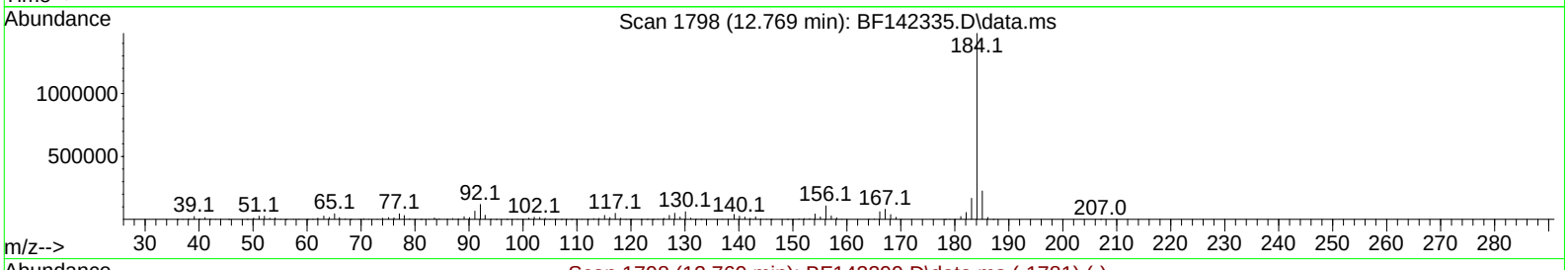
Sample Results: **BF142335.D**

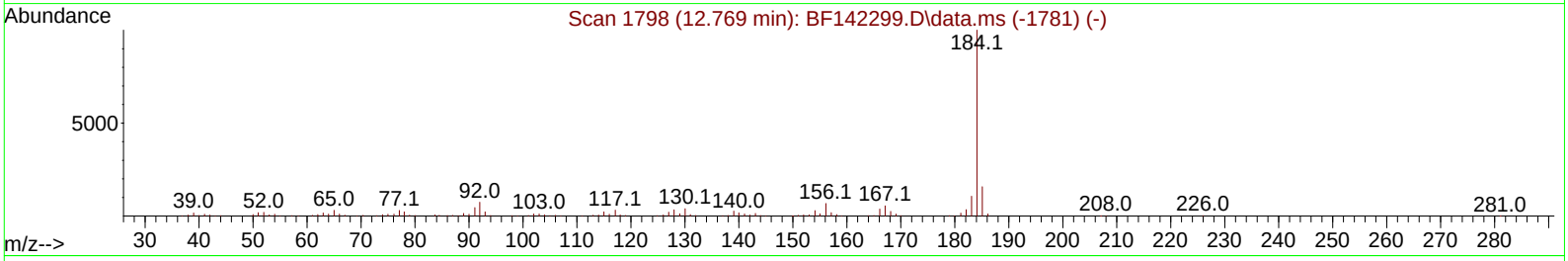
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142335.D
Acq On : 13 May 2025 10:20
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: May 13 11:35:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration







TIC: BF142335.D\data.ms

(77) Benzidine

12.769min (-0.000) 1007757.80 ng

response 1996205

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.70	15.25
183.00	10.70	11.33
0.00	0.00	0.00

Raw Data: **BF142337.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	
Client Sample ID:	PB167951BL	SDG No.:	Q2008
Lab Sample ID:	PB167951BL	Matrix:	Water
Analytical Method:	8270E	% 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
BF142337.D	1	05/12/25 08:40	05/13/25 11:17	PB167951

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: **BF142337.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	
Client Sample ID:	PB167951BL	SDG No.:	Q2008
Lab Sample ID:	PB167951BL	Matrix:	Water
Analytical Method:	8270E	% 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
BF142337.D	1	05/12/25 08:40	05/13/25 11:17	PB167951

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: **BF142337.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	
Client Sample ID:	PB167951BL	SDG No.:	Q2008
Lab Sample ID:	PB167951BL	Matrix:	Water
Analytical Method:	8270E	% 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
BF142337.D	1	05/12/25 08:40	05/13/25 11:17	PB167951

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	123		15 (10) - 110 (139)	82%	SPK: 150
13127-88-3	Phenol-d6	119		15 (10) - 110 (134)	79%	SPK: 150
4165-60-0	Nitrobenzene-d5	82.0		30 (49) - 130 (133)	82%	SPK: 100
321-60-8	2-Fluorobiphenyl	70.8		30 (52) - 130 (132)	71%	SPK: 100
118-79-6	2,4,6-Tribromophenol	137		15 (44) - 110 (137)	92%	SPK: 150
1718-51-0	Terphenyl-d14	64.9		30 (48) - 130 (125)	65%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	234000	6.904			
1146-65-2	Naphthalene-d8	912000	8.186			
15067-26-2	Acenaphthene-d10	505000	9.939			
1517-22-2	Phenanthrene-d10	917000	11.427			
1719-03-5	Chrysene-d12	663000	14.068			
1520-96-3	Perylene-d12	463000	15.557			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	9.20	A		5.14	ug/L

Raw Data: **BF142337.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	
Client Sample ID:	PB167951BL	SDG No.:	Q2008
Lab Sample ID:	PB167951BL	Matrix:	Water
Analytical Method:	8270E	% 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
BF142337.D	1	05/12/25 08:40	05/13/25 11:17	PB167951

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_F\Data\BF051325\
Data File : BF142337.D
Acq On : 13 May 2025 11:17
Operator : RC/JU
Sample : PB167951BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Quant Time: May 13 11:41:06 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

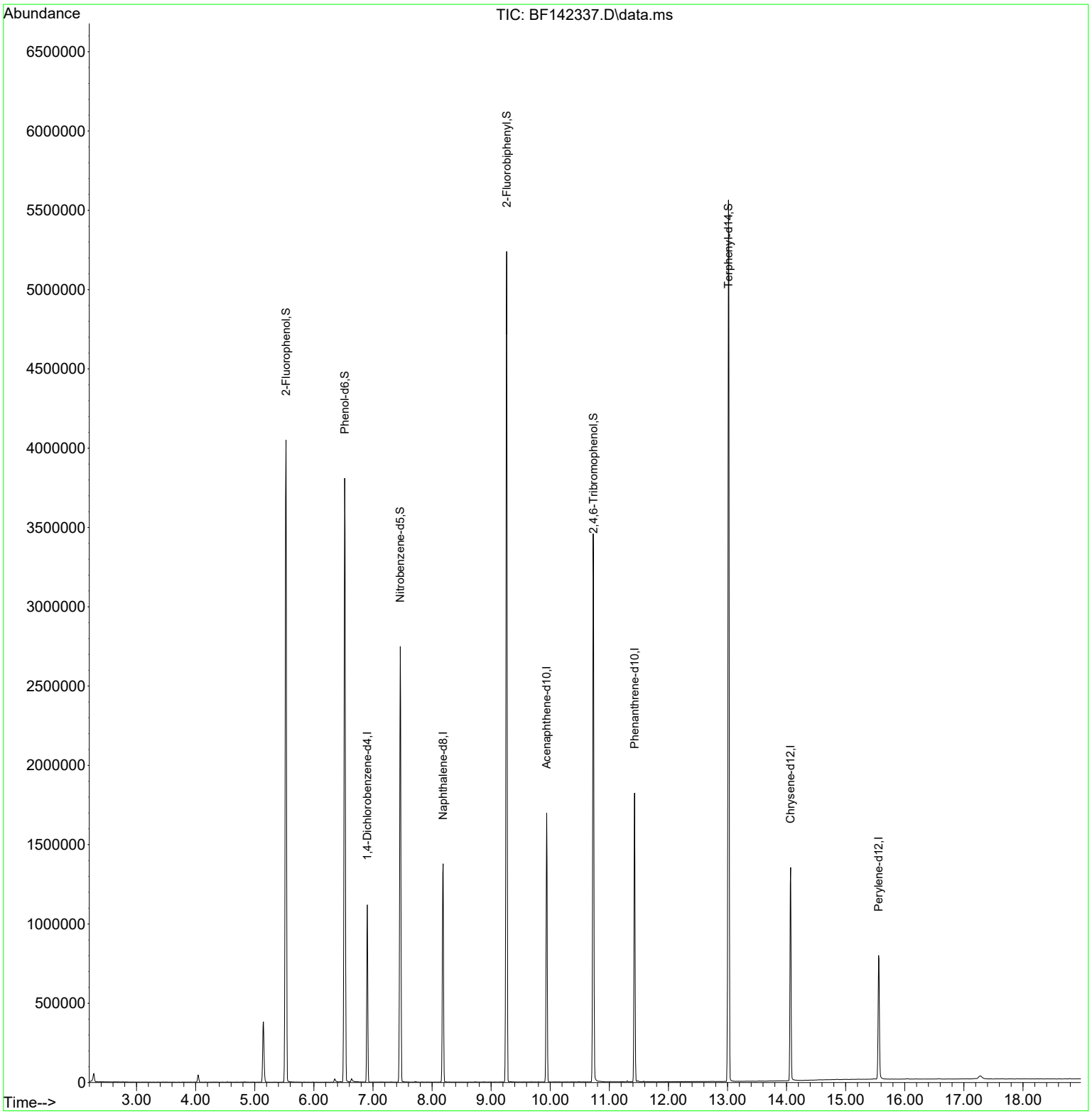
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	233617	20.000	ng	0.00
21) Naphthalene-d8	8.186	136	911574	20.000	ng	0.00
39) Acenaphthene-d10	9.939	164	504645	20.000	ng	0.00
64) Phenanthrene-d10	11.427	188	917241	20.000	ng	0.00
76) Chrysene-d12	14.068	240	662807	20.000	ng	0.00
86) Perylene-d12	15.557	264	462932	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.528	112	1677167	122.553	ng	0.02
7) Phenol-d6	6.522	99	1998713	118.747	ng	0.00
23) Nitrobenzene-d5	7.463	82	1226100	82.030	ng	0.00
42) 2,4,6-Tribromophenol	10.733	330	668977	137.303	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	2505995	70.807	ng	0.00
79) Terphenyl-d14	13.016	244	2907827	64.934	ng	0.00
Target Compounds						Qvalue

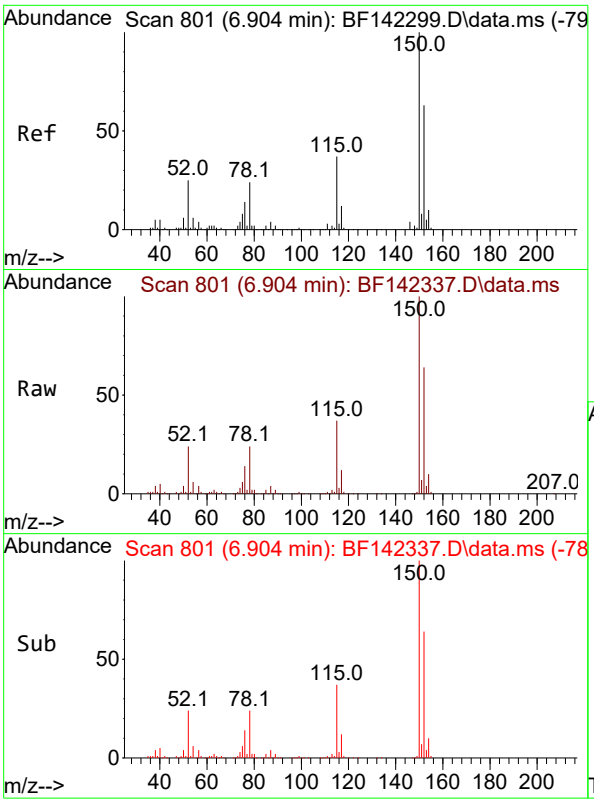
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142337.D
Acq On : 13 May 2025 11:17
Operator : RC/JU
Sample : PB167951BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Quant Time: May 13 11:41:06 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration



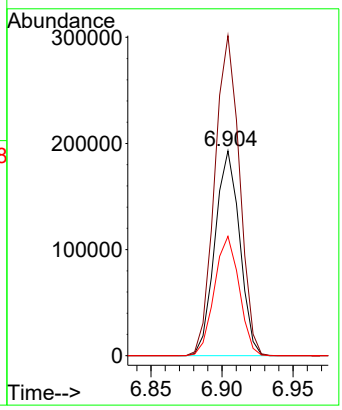


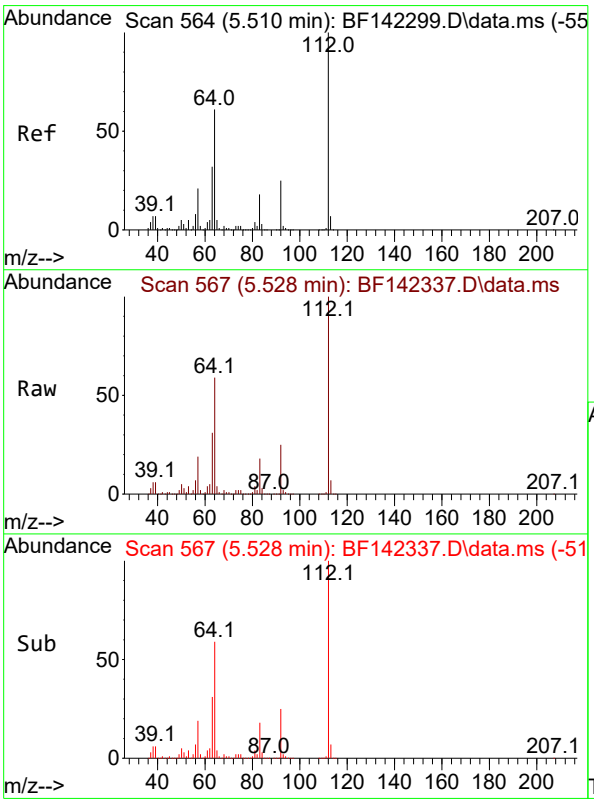
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.904 min Scan# 8
Delta R.T. 0.000 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Tgt Ion:152 Resp: 233617

Ion	Ratio	Lower	Upper
152	100		
150	156.3	126.6	190.0
115	58.3	47.3	70.9

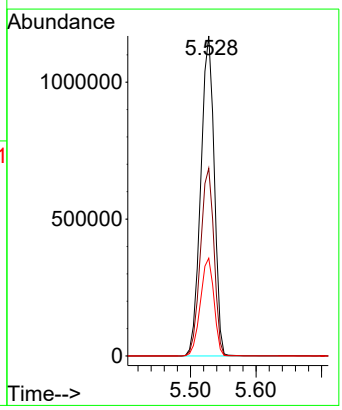


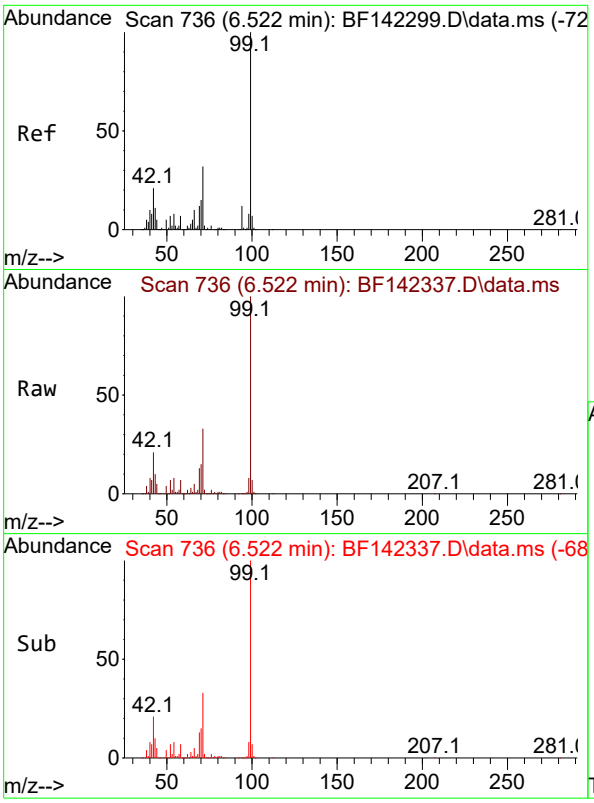


#5
2-Fluorophenol
Concen: 122.553 ng
RT: 5.528 min Scan# 567
Delta R.T. 0.018 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Tgt Ion:112 Resp: 1677167

Ion	Ratio	Lower	Upper
112	100		
64	58.7	48.9	73.3
63	30.6	25.6	38.4



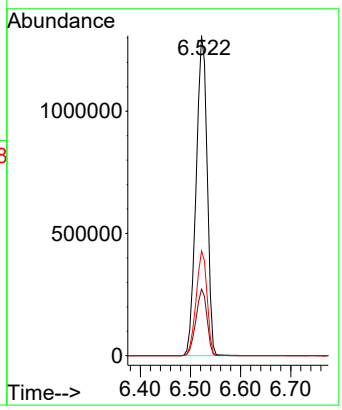


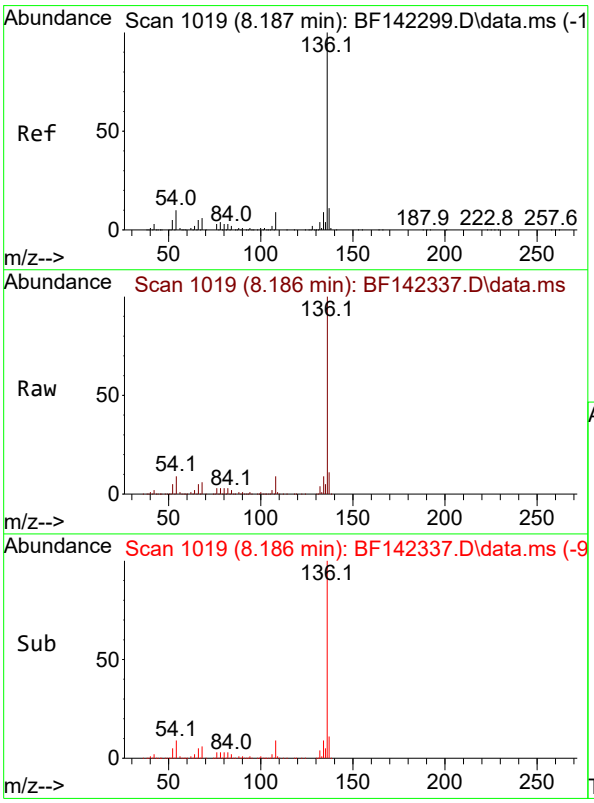
#7
Phenol-d6
Concen: 118.747 ng
RT: 6.522 min Scan# 7
Delta R.T. -0.000 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Tgt Ion: 99 Resp: 1998713

Ion	Ratio	Lower	Upper
99	100		
42	20.8	17.0	25.4
71	32.8	25.8	38.8

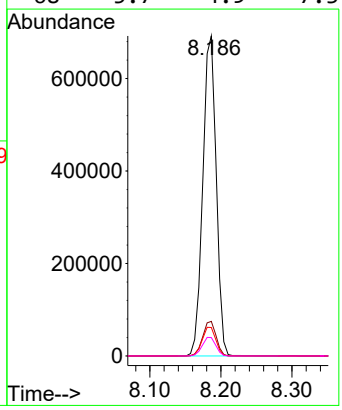


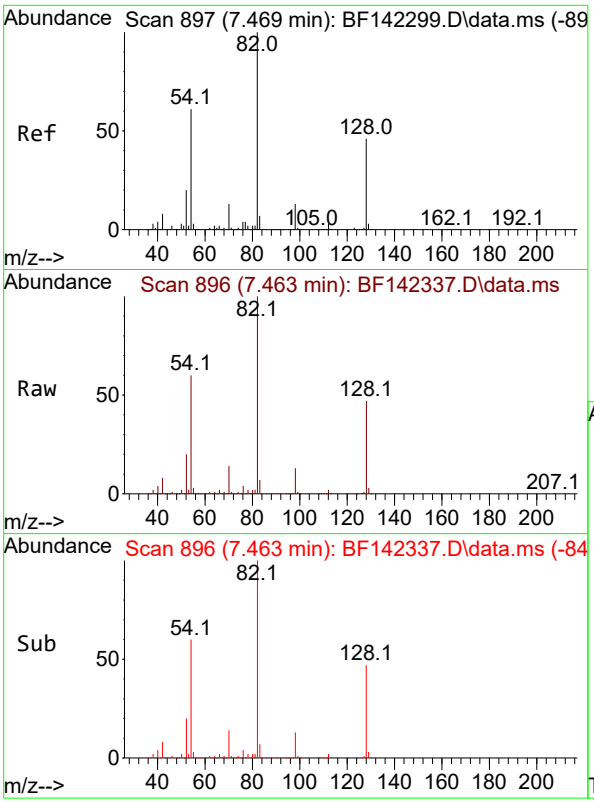


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.186 min Scan# 1019
Delta R.T. -0.000 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Tgt Ion:136 Resp: 911574

Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.9	13.3
54	8.9	7.7	11.5
68	5.7	4.9	7.3



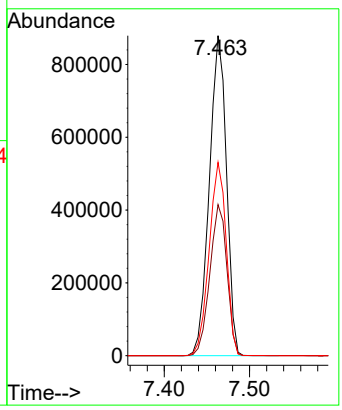


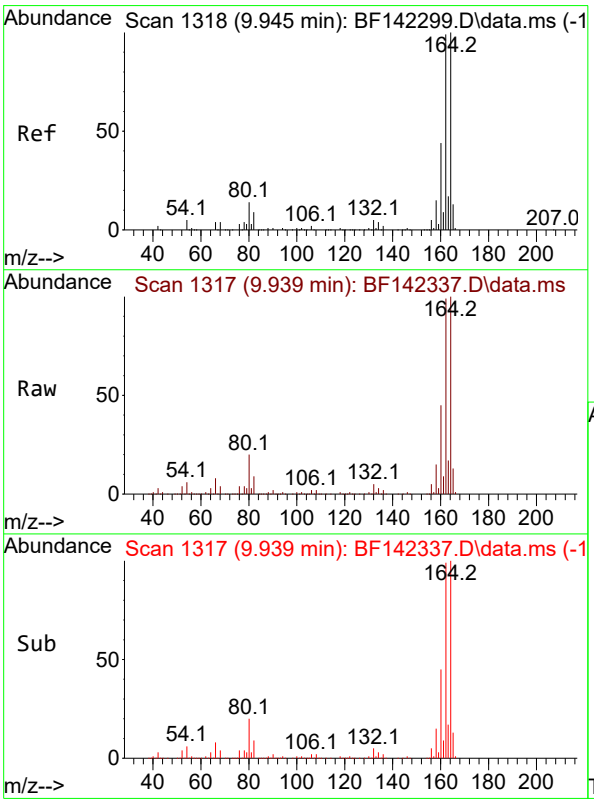
#23
Nitrobenzene-d5
Concen: 82.030 ng
RT: 7.463 min Scan# 8
Delta R.T. -0.006 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Tgt Ion: 82 Resp: 1226100

Ion	Ratio	Lower	Upper
82	100		
128	47.2	37.0	55.6
54	60.4	48.6	73.0

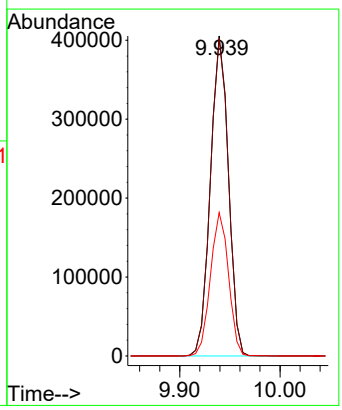


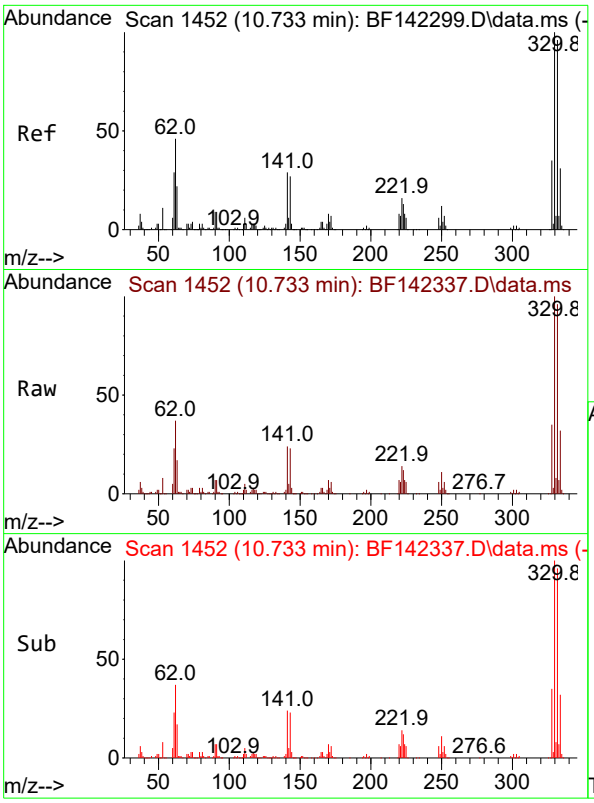


#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.939 min Scan# 1317
Delta R.T. -0.006 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Tgt Ion:164 Resp: 504645

Ion	Ratio	Lower	Upper
164	100		
162	99.2	79.2	118.8
160	44.8	35.3	52.9



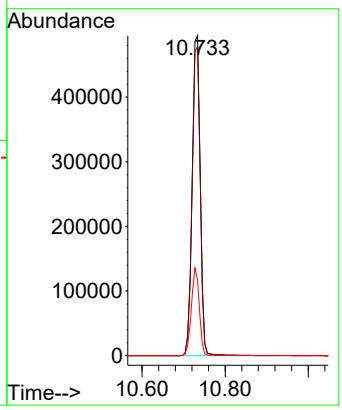


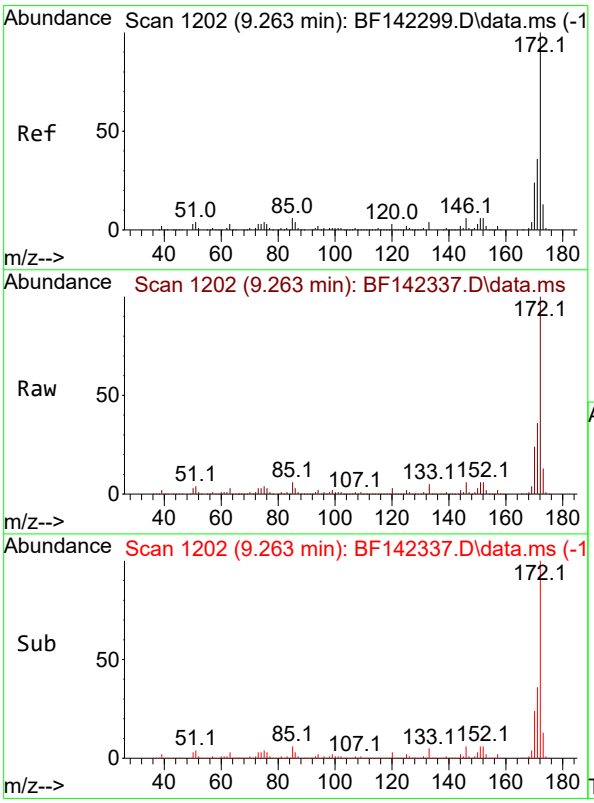
#42
2,4,6-Tribromophenol
Concen: 137.303 ng
RT: 10.733 min Scan# 14
Delta R.T. -0.000 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Tgt Ion:330 Resp: 668977

Ion	Ratio	Lower	Upper
330	100		
332	96.8	76.8	115.2
141	27.0	24.9	37.3

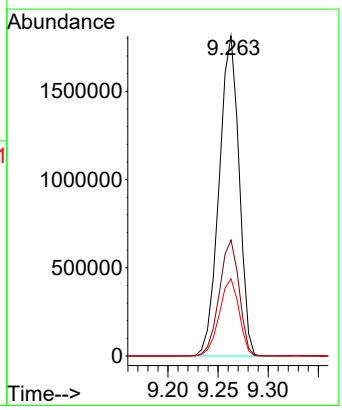


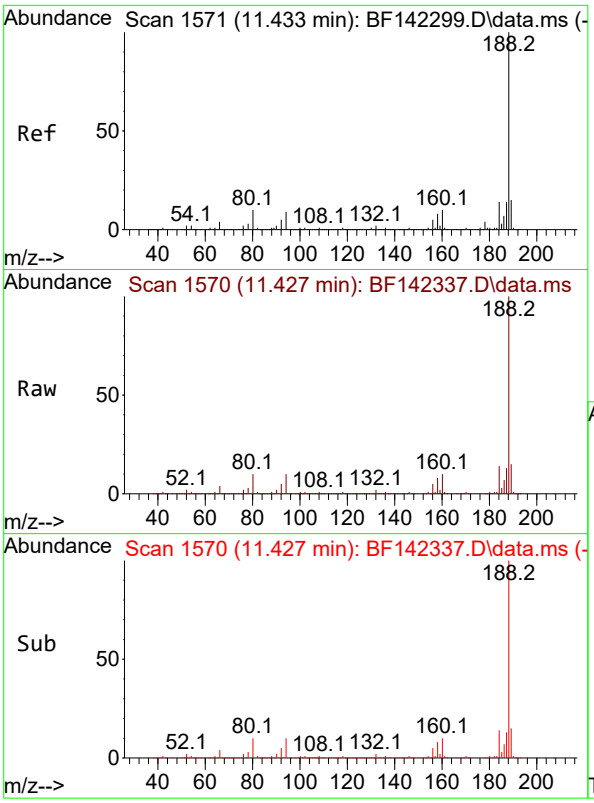


#45
2-Fluorobiphenyl
Concen: 70.807 ng
RT: 9.263 min Scan# 1202
Delta R.T. -0.000 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Tgt Ion:172 Resp: 2505995

Ion	Ratio	Lower	Upper
172	100		
171	36.3	28.6	42.8
170	24.1	19.0	28.4



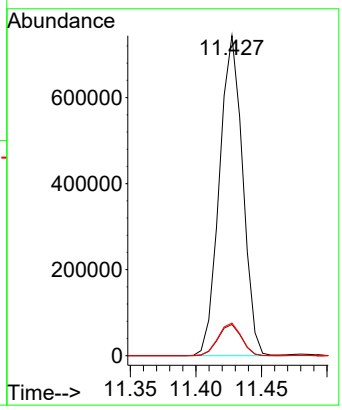


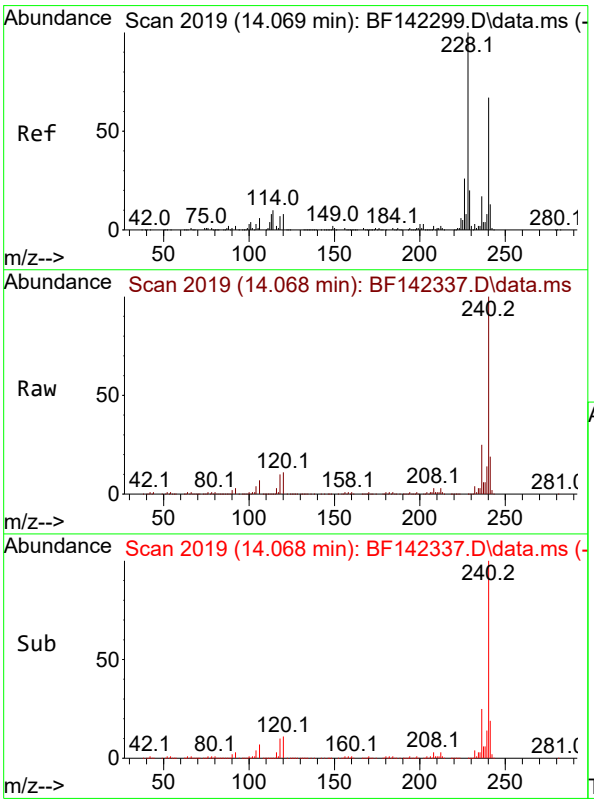
#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Tgt Ion:188 Resp: 917241

Ion	Ratio	Lower	Upper
188	100		
94	9.8	7.5	11.3
80	10.2	7.9	11.9

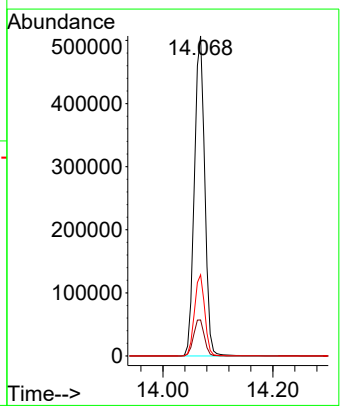


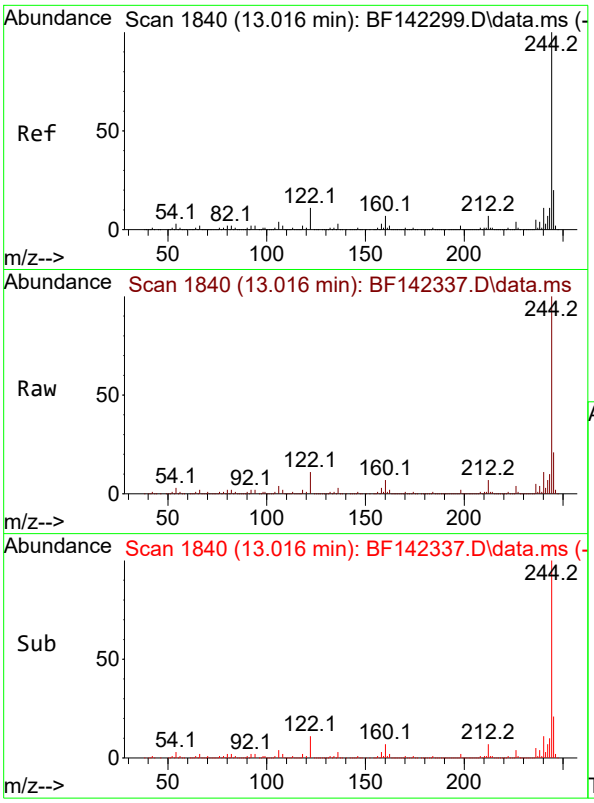


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.068 min Scan# 2019
Delta R.T. -0.000 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Tgt Ion:240 Resp: 662807

Ion	Ratio	Lower	Upper
240	100		
120	11.2	9.7	14.5
236	25.4	20.0	30.0



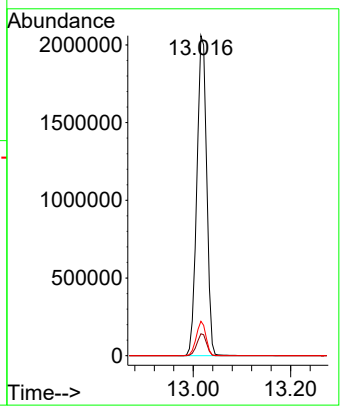


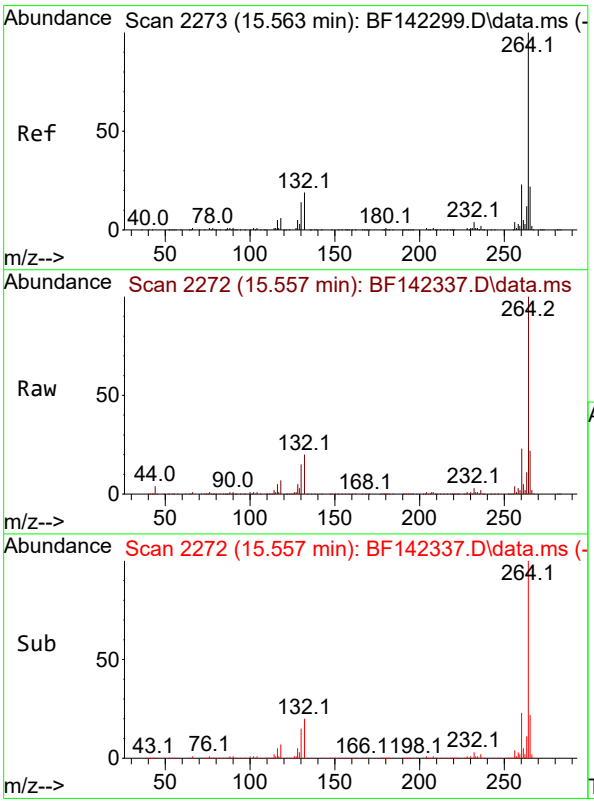
#79
Terphenyl-d14
Concen: 64.934 ng
RT: 13.016 min Scan# 1
Delta R.T. -0.000 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Instrument :
BNA_F
ClientSampleId :
PB167951BL

Tgt Ion:244 Resp: 2907827

Ion	Ratio	Lower	Upper
244	100		
212	6.9	5.4	8.2
122	10.8	9.0	13.4

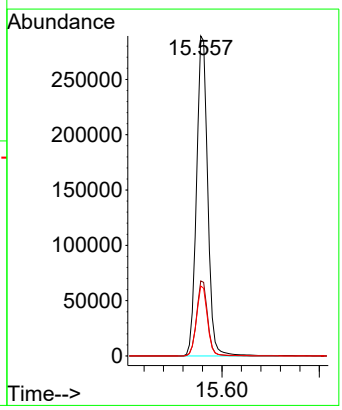




#86
Perylene-d12
Concen: 20.000 ng
RT: 15.557 min Scan# 2272
Delta R.T. -0.006 min
Lab File: BF142337.D
Acq: 13 May 2025 11:17

Tgt Ion:264 Resp: 462932

Ion	Ratio	Lower	Upper
264	100		
260	23.5	18.6	27.8
265	21.9	17.5	26.3



Raw Data: **BF142338.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	
Client Sample ID:	PB167951BS	SDG No.:	Q2008
Lab Sample ID:	PB167951BS	Matrix:	Water
Analytical Method:	8270E	% 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
BF142338.D	1	05/12/25 08:40	05/13/25 11:46	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	22.9		3.90	10.0	ug/L
108-95-2	Phenol	46.1		0.91	5.00	ug/L
111-44-4	bis(2-Chloroethyl)ether	37.5		0.81	5.00	ug/L
95-57-8	2-Chlorophenol	45.0		0.58	5.00	ug/L
95-48-7	2-Methylphenol	44.7		1.10	5.00	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	41.1		1.30	5.00	ug/L
98-86-2	Acetophenone	41.6		0.74	5.00	ug/L
65794-96-9	3+4-Methylphenols	43.5		1.10	10.0	ug/L
621-64-7	n-Nitroso-di-n-propylamine	42.2		1.40	2.50	ug/L
67-72-1	Hexachloroethane	42.8		0.65	5.00	ug/L
98-95-3	Nitrobenzene	46.1		0.76	5.00	ug/L
78-59-1	Isophorone	43.8		0.75	5.00	ug/L
88-75-5	2-Nitrophenol	47.0		1.80	5.00	ug/L
105-67-9	2,4-Dimethylphenol	45.2		1.90	5.00	ug/L
111-91-1	bis(2-Chloroethoxy)methane	42.8		0.68	5.00	ug/L
120-83-2	2,4-Dichlorophenol	46.4		0.52	5.00	ug/L
91-20-3	Naphthalene	42.1		0.50	5.00	ug/L
106-47-8	4-Chloroaniline	12.7		0.84	5.00	ug/L
87-68-3	Hexachlorobutadiene	43.3		0.54	5.00	ug/L
105-60-2	Caprolactam	51.4		1.10	10.0	ug/L
59-50-7	4-Chloro-3-methylphenol	46.6		0.59	5.00	ug/L
91-57-6	2-Methylnaphthalene	42.8		0.56	5.00	ug/L
77-47-4	Hexachlorocyclopentadiene	89.0	E	3.60	10.0	ug/L
88-06-2	2,4,6-Trichlorophenol	49.5		0.51	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	46.5		0.62	5.00	ug/L
92-52-4	1,1-Biphenyl	41.4		0.53	5.00	ug/L
91-58-7	2-Chloronaphthalene	42.7		0.61	5.00	ug/L
88-74-4	2-Nitroaniline	50.3		1.30	5.00	ug/L
131-11-3	Dimethylphthalate	44.7		0.61	5.00	ug/L

Raw Data: **BF142338.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	
Client Sample ID:	PB167951BS	SDG No.:	Q2008
Lab Sample ID:	PB167951BS	Matrix:	Water
Analytical Method:	8270E	% 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
BF142338.D	1	05/12/25 08:40	05/13/25 11:46	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	42.5		0.75	5.00	ug/L
606-20-2	2,6-Dinitrotoluene	52.6		0.92	5.00	ug/L
99-09-2	3-Nitroaniline	36.4		1.10	5.00	ug/L
83-32-9	Acenaphthene	46.5		0.55	5.00	ug/L
51-28-5	2,4-Dinitrophenol	100	E	6.00	10.0	ug/L
100-02-7	4-Nitrophenol	110	E	2.40	10.0	ug/L
132-64-9	Dibenzofuran	42.4		0.61	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	55.9		1.20	5.00	ug/L
84-66-2	Diethylphthalate	45.3		0.69	5.00	ug/L
7005-72-3	4-Chlorophenyl-phenylether	43.1		0.68	5.00	ug/L
86-73-7	Fluorene	42.0		0.63	5.00	ug/L
100-01-6	4-Nitroaniline	61.2		1.50	5.00	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	50.3		2.90	10.0	ug/L
86-30-6	n-Nitrosodiphenylamine	43.5		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	50.3		1.00	5.00	ug/L
87-86-5	Pentachlorophenol	110	E	1.60	10.0	ug/L
85-01-8	Phenanthrene	43.0		0.50	5.00	ug/L
120-12-7	Anthracene	43.1		0.61	5.00	ug/L
86-74-8	Carbazole	44.1		0.72	5.00	ug/L
84-74-2	Di-n-butylphthalate	48.4		1.20	5.00	ug/L
206-44-0	Fluoranthene	43.7		0.82	5.00	ug/L
129-00-0	Pyrene	45.2		0.50	5.00	ug/L
85-68-7	Butylbenzylphthalate	49.4		1.90	5.00	ug/L
91-94-1	3,3-Dichlorobenzidine	40.4		0.93	10.0	ug/L
56-55-3	Benzo(a)anthracene	45.7		0.45	5.00	ug/L
218-01-9	Chrysene	45.0		0.44	5.00	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	45.0		1.60	5.00	ug/L
117-84-0	Di-n-octyl phthalate	43.5		2.30	10.0	ug/L
205-99-2	Benzo(b)fluoranthene	45.9		0.49	5.00	ug/L

Raw Data: **BF142338.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	
Client Sample ID:	PB167951BS	SDG No.:	Q2008
Lab Sample ID:	PB167951BS	Matrix:	Water
Analytical Method:	8270E	% 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
BF142338.D	1	05/12/25 08:40	05/13/25 11:46	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	48.3		0.48	5.00	ug/L
50-32-8	Benzo(a)pyrene	48.1		0.55	5.00	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	46.3		0.59	5.00	ug/L
53-70-3	Dibenzo(a,h)anthracene	46.0		0.67	5.00	ug/L
191-24-2	Benzo(g,h,i)perylene	46.0		0.69	5.00	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	40.9		0.52	5.00	ug/L
123-91-1	1,4-Dioxane	32.6		1.00	5.00	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	50.1		0.72	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	121		15 (10) - 110 (139)	80%	SPK: 150
13127-88-3	Phenol-d6	122		15 (10) - 110 (134)	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	82.7		30 (49) - 130 (133)	83%	SPK: 100
321-60-8	2-Fluorobiphenyl	72.3		30 (52) - 130 (132)	72%	SPK: 100
118-79-6	2,4,6-Tribromophenol	144		15 (44) - 110 (137)	96%	SPK: 150
1718-51-0	Terphenyl-d14	77.8		30 (48) - 130 (125)	78%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	241000	6.904			
1146-65-2	Naphthalene-d8	943000	8.187			
15067-26-2	Acenaphthene-d10	511000	9.945			
1517-22-2	Phenanthrene-d10	875000	11.433			
1719-03-5	Chrysene-d12	501000	14.074			
1520-96-3	Perylene-d12	474000	15.563			

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

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142338.D
Acq On : 13 May 2025 11:46
Operator : RC/JU
Sample : PB167951BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB167951BS

Quant Time: May 13 12:12:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.904	152	241382	20.000	ng	0.00
21) Naphthalene-d8	8.187	136	943250	20.000	ng	0.00
39) Acenaphthene-d10	9.945	164	511130	20.000	ng	0.00
64) Phenanthrene-d10	11.433	188	874805	20.000	ng	0.00
76) Chrysene-d12	14.074	240	500567	20.000	ng	0.00
86) Perylene-d12	15.563	264	474027	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.528	112	1707404	120.749	ng	0.02
7) Phenol-d6	6.534	99	2124088	122.136	ng	0.01
23) Nitrobenzene-d5	7.469	82	1278916	82.690	ng	0.00
42) 2,4,6-Tribromophenol	10.739	330	711687	144.216	ng	0.00
45) 2-Fluorobiphenyl	9.263	172	2593122	72.339	ng	0.00
79) Terphenyl-d14	13.016	244	2632861	77.850	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.787	88	207722	32.622	ng	100
3) Pyridine	3.534	79	570207	38.141	ng	98
4) n-Nitrosodimethylamine	3.487	42	355540	40.920	ng	99
6) Aniline	6.569	93	845882	49.588	ng	99
8) 2-Chlorophenol	6.687	128	680417	45.030	ng	100
9) Benzaldehyde	6.451	77	233348	22.925	ng	97
10) Phenol	6.545	94	849474	46.080	ng	96
11) bis(2-Chloroethyl)ether	6.640	93	681136	37.467	ng	99
12) 1,3-Dichlorobenzene	6.845	146	704235	40.738	ng	99
13) 1,4-Dichlorobenzene	6.922	146	710663	40.944	ng	99
14) 1,2-Dichlorobenzene	7.075	146	690036	41.418	ng	99
15) Benzyl Alcohol	7.045	79	547065	48.579	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.181	45	1116178	41.115	ng	99
17) 2-Methylphenol	7.151	107	546222	44.651	ng	99
18) Hexachloroethane	7.422	117	247237	42.812	ng	99
19) n-Nitroso-di-n-propyla...	7.322	70	453917	42.195	ng	97
20) 3+4-Methylphenols	7.304	107	664649	43.533	ng	98
22) Acetophenone	7.316	105	871738	41.565	ng	99
24) Nitrobenzene	7.487	77	672452	46.124	ng	98
25) Isophorone	7.728	82	1282336	43.784	ng	100
26) 2-Nitrophenol	7.804	139	329627	47.001	ng	99
27) 2,4-Dimethylphenol	7.840	122	665591	45.201	ng	99
28) bis(2-Chloroethoxy)met...	7.934	93	806367	42.818	ng	100
29) 2,4-Dichlorophenol	8.045	162	580463	46.367	ng	98
30) 1,2,4-Trichlorobenzene	8.128	180	600381	42.613	ng	100
31) Naphthalene	8.210	128	1926661	42.145	ng	100
32) Benzoic acid	7.957	122	410434	51.001	ng	99
33) 4-Chloroaniline	8.263	127	237628	12.739	ng	99
34) Hexachlorobutadiene	8.328	225	361338	43.312	ng	100
35) Caprolactam	8.634	113	187405m	51.364	ng	
36) 4-Chloro-3-methylphenol	8.734	107	606490	46.604	ng	99
37) 2-Methylnaphthalene	8.898	142	1215435	42.787	ng	99
38) 1-Methylnaphthalene	8.998	142	1247683	42.141	ng	99
40) 1,2,4,5-Tetrachloroben...	9.069	216	583955	40.906	ng	99
41) Hexachlorocyclopentadiene	9.057	237	785517	89.036	ng	99
43) 2,4,6-Trichlorophenol	9.175	196	445473	49.473	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142338.D
Acq On : 13 May 2025 11:46
Operator : RC/JU
Sample : PB167951BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB167951BS

Quant Time: May 13 12:12:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

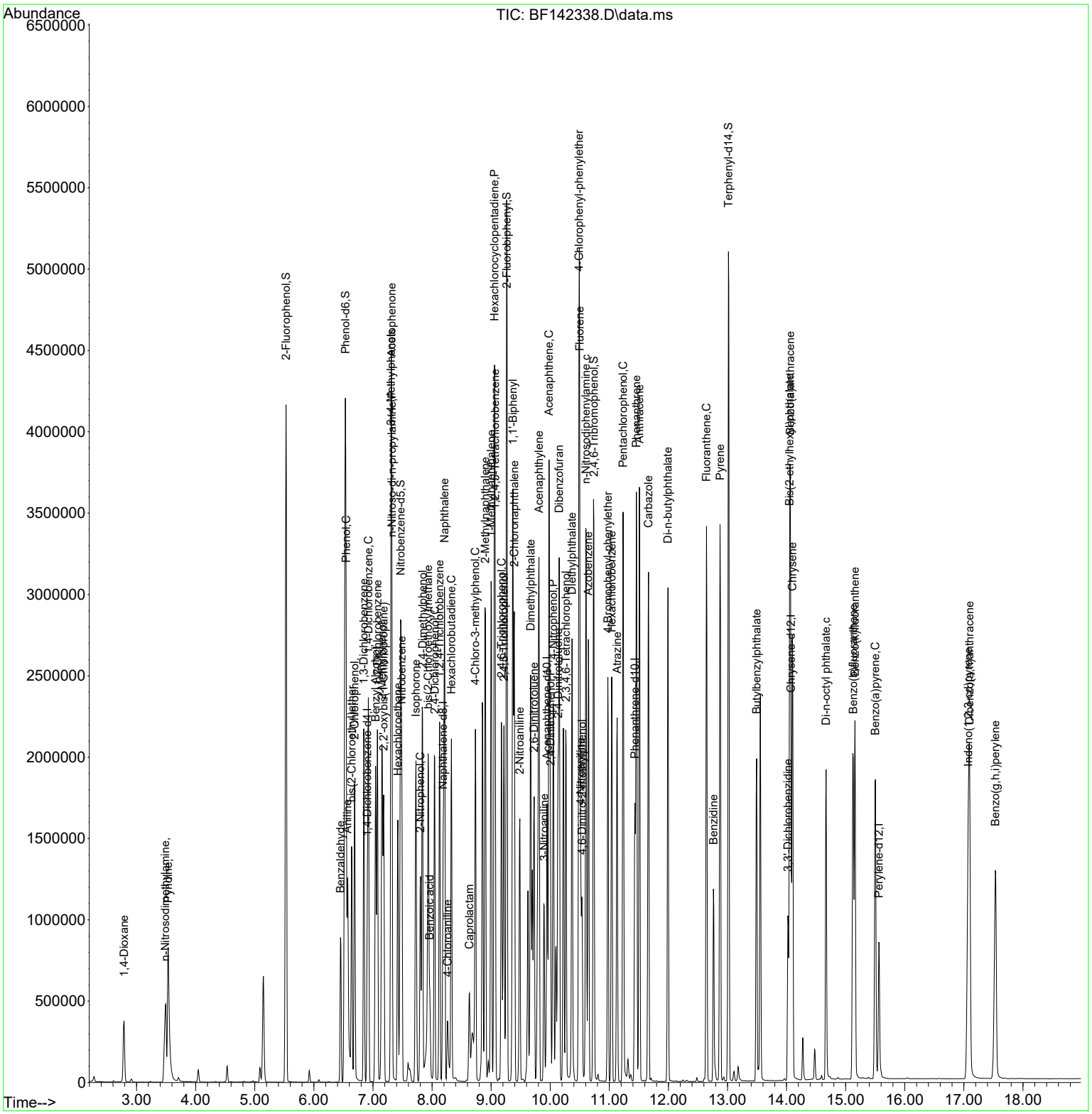
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.216	196	445249	46.473	ng		100
46) 1,1'-Biphenyl	9.369	154	1623648	41.430	ng		99
47) 2-Chloronaphthalene	9.392	162	1243156	42.654	ng		99
48) 2-Nitroaniline	9.486	65	375868	50.314	ng		91
49) Acenaphthylene	9.810	152	2071966	42.497	ng		100
50) Dimethylphthalate	9.669	163	1466822	44.691	ng		100
51) 2,6-Dinitrotoluene	9.728	165	323178	52.605	ng		92
52) Acenaphthene	9.981	154	1363722	46.518	ng		100
53) 3-Nitroaniline	9.898	138	262380	36.415	ng		94
54) 2,4-Dinitrophenol	10.004	184	334297	101.710	ng	#	1
55) Dibenzofuran	10.151	168	1836587	42.449	ng		98
56) 4-Nitrophenol	10.051	139	582316	107.384	ng		99
57) 2,4-Dinitrotoluene	10.133	165	440858	55.943	ng		97
58) Fluorene	10.498	166	1385694	41.968	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.269	232	396218	50.097	ng		97
60) Diethylphthalate	10.369	149	1485669	45.327	ng		100
61) 4-Chlorophenyl-phenyle...	10.486	204	686859	43.118	ng		99
62) 4-Nitroaniline	10.516	138	349500	61.202	ng		98
63) Azobenzene	10.645	77	1356723	43.317	ng		99
65) 4,6-Dinitro-2-methylph...	10.539	198	206766	50.299	ng		97
66) n-Nitrosodiphenylamine	10.604	169	1267302	43.535	ng		99
67) 4-Bromophenyl-phenylether	10.975	248	444751	44.859	ng		99
68) Hexachlorobenzene	11.039	284	496845	45.558	ng		99
69) Atrazine	11.133	200	386080	50.314	ng		99
70) Pentachlorophenol	11.233	266	613387	106.915	ng		99
71) Phenanthrene	11.457	178	1971676	42.998	ng		99
72) Anthracene	11.510	178	2029462	43.074	ng		100
73) Carbazole	11.663	167	1865721	44.137	ng		100
74) Di-n-butylphthalate	11.992	149	2149539	48.360	ng		99
75) Fluoranthene	12.645	202	2004417	43.728	ng		100
77) Benzidine	12.763	184	668971	73.540	ng		99
78) Pyrene	12.874	202	2015964	45.246	ng		100
80) Butylbenzylphthalate	13.492	149	643503	49.376	ng		99
81) Benzo(a)anthracene	14.063	228	1480499	45.670	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	304866	40.441	ng		99
83) Chrysene	14.098	228	1358442	45.014	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	757616	45.030	ng		100
85) Di-n-octyl phthalate	14.668	149	1299418	43.450	ng		98
87) Indeno(1,2,3-cd)pyrene	17.074	276	1527317	46.318	ng		99
88) Benzo(b)fluoranthene	15.127	252	1318721	45.933	ng		99
89) Benzo(k)fluoranthene	15.157	252	1269903	48.335	ng		100
90) Benzo(a)pyrene	15.504	252	1237919	48.117	ng		99
91) Dibenzo(a,h)anthracene	17.098	278	1253090	45.998	ng		99
92) Benzo(g,h,i)perylene	17.533	276	1243180	45.979	ng		99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142338.D
Acq On : 13 May 2025 11:46
Operator : RC/JU
Sample : PB167951BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB167951BS

Quant Time: May 13 12:12:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration



Raw Data: **BF142341.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/08/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	MW-3-20250508MS	SDG No.:	Q2008
Lab Sample ID:	Q1993-02MS	Matrix:	Water
Analytical Method:	8270E	% 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
BF142341.D	1	05/12/25 08:40	05/13/25 13:16	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	36.1		3.90	10.0	ug/L
108-95-2	Phenol	15.7		0.91	5.00	ug/L
111-44-4	bis(2-Chloroethyl)ether	35.0		0.81	5.00	ug/L
95-57-8	2-Chlorophenol	37.4		0.58	5.00	ug/L
95-48-7	2-Methylphenol	31.8		1.10	5.00	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	39.4		1.30	5.00	ug/L
98-86-2	Acetophenone	43.2		0.74	5.00	ug/L
65794-96-9	3+4-Methylphenols	28.6		1.10	10.0	ug/L
621-64-7	n-Nitroso-di-n-propylamine	42.9		1.40	2.50	ug/L
67-72-1	Hexachloroethane	34.3		0.65	5.00	ug/L
98-95-3	Nitrobenzene	46.3		0.76	5.00	ug/L
78-59-1	Isophorone	44.7		0.75	5.00	ug/L
88-75-5	2-Nitrophenol	49.6		1.80	5.00	ug/L
105-67-9	2,4-Dimethylphenol	42.1		1.90	5.00	ug/L
111-91-1	bis(2-Chloroethoxy)methane	43.8		0.68	5.00	ug/L
120-83-2	2,4-Dichlorophenol	44.5		0.52	5.00	ug/L
91-20-3	Naphthalene	40.6		0.50	5.00	ug/L
106-47-8	4-Chloroaniline	14.7		0.84	5.00	ug/L
87-68-3	Hexachlorobutadiene	38.4		0.54	5.00	ug/L
105-60-2	Caprolactam	9.30	J	1.10	10.0	ug/L
59-50-7	4-Chloro-3-methylphenol	40.8		0.59	5.00	ug/L
91-57-6	2-Methylnaphthalene	42.6		0.56	5.00	ug/L
77-47-4	Hexachlorocyclopentadiene	77.1		3.60	10.0	ug/L
88-06-2	2,4,6-Trichlorophenol	48.7		0.51	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	46.2		0.62	5.00	ug/L
92-52-4	1,1-Biphenyl	43.3		0.53	5.00	ug/L
91-58-7	2-Chloronaphthalene	42.8		0.61	5.00	ug/L
88-74-4	2-Nitroaniline	52.4		1.30	5.00	ug/L
131-11-3	Dimethylphthalate	46.5		0.61	5.00	ug/L

Raw Data: **BF142341.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/08/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	MW-3-20250508MS	SDG No.:	Q2008
Lab Sample ID:	Q1993-02MS	Matrix:	Water
Analytical Method:	8270E	% 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
BF142341.D	1	05/12/25 08:40	05/13/25 13:16	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	43.0		0.75	5.00	ug/L
606-20-2	2,6-Dinitrotoluene	53.9		0.92	5.00	ug/L
99-09-2	3-Nitroaniline	25.2		1.10	5.00	ug/L
83-32-9	Acenaphthene	47.5		0.55	5.00	ug/L
51-28-5	2,4-Dinitrophenol	98.5	E	6.00	10.0	ug/L
100-02-7	4-Nitrophenol	37.0		2.40	10.0	ug/L
132-64-9	Dibenzofuran	42.9		0.61	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	56.1		1.20	5.00	ug/L
84-66-2	Diethylphthalate	70.9		0.69	5.00	ug/L
7005-72-3	4-Chlorophenyl-phenylether	43.6		0.68	5.00	ug/L
86-73-7	Fluorene	42.6		0.63	5.00	ug/L
100-01-6	4-Nitroaniline	51.9		1.50	5.00	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	53.7		2.90	10.0	ug/L
86-30-6	n-Nitrosodiphenylamine	47.6		0.58	5.00	ug/L
101-55-3	4-Bromophenyl-phenylether	48.4		0.40	5.00	ug/L
118-74-1	Hexachlorobenzene	47.7		0.52	5.00	ug/L
1912-24-9	Atrazine	48.2		1.00	5.00	ug/L
87-86-5	Pentachlorophenol	100	E	1.60	10.0	ug/L
85-01-8	Phenanthrene	44.0		0.50	5.00	ug/L
120-12-7	Anthracene	43.9		0.61	5.00	ug/L
86-74-8	Carbazole	41.1		0.72	5.00	ug/L
84-74-2	Di-n-butylphthalate	52.0		1.20	5.00	ug/L
206-44-0	Fluoranthene	39.5		0.82	5.00	ug/L
129-00-0	Pyrene	40.2		0.50	5.00	ug/L
85-68-7	Butylbenzylphthalate	54.8		1.90	5.00	ug/L
91-94-1	3,3-Dichlorobenzidine	40.5		0.93	10.0	ug/L
56-55-3	Benzo(a)anthracene	46.2		0.45	5.00	ug/L
218-01-9	Chrysene	45.3		0.44	5.00	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	59.5		1.60	5.00	ug/L
117-84-0	Di-n-octyl phthalate	52.5		2.30	10.0	ug/L
205-99-2	Benzo(b)fluoranthene	46.9		0.49	5.00	ug/L

Raw Data: **BF142341.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/08/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	MW-3-20250508MS	SDG No.:	Q2008
Lab Sample ID:	Q1993-02MS	Matrix:	Water
Analytical Method:	8270E	% 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
BF142341.D	1	05/12/25 08:40	05/13/25 13:16	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	46.3		0.48	5.00	ug/L
50-32-8	Benzo(a)pyrene	47.6		0.55	5.00	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	35.7		0.59	5.00	ug/L
53-70-3	Dibenzo(a,h)anthracene	36.2		0.67	5.00	ug/L
191-24-2	Benzo(g,h,i)perylene	31.9		0.69	5.00	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	42.5		0.52	5.00	ug/L
123-91-1	1,4-Dioxane	17.9		1.00	5.00	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	49.1		0.72	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	63.4		15 (10) - 110 (139)	42%	SPK: 150
13127-88-3	Phenol-d6	41.2		15 (10) - 110 (134)	27%	SPK: 150
4165-60-0	Nitrobenzene-d5	86.2		30 (49) - 130 (133)	86%	SPK: 100
321-60-8	2-Fluorobiphenyl	74.5		30 (52) - 130 (132)	74%	SPK: 100
118-79-6	2,4,6-Tribromophenol	139		15 (44) - 110 (137)	93%	SPK: 150
1718-51-0	Terphenyl-d14	69.6		30 (48) - 130 (125)	70%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	223000	6.904			
1146-65-2	Naphthalene-d8	844000	8.187			
15067-26-2	Acenaphthene-d10	449000	9.945			
1517-22-2	Phenanthrene-d10	711000	11.433			
1719-03-5	Chrysene-d12	400000	14.074			
1520-96-3	Perylene-d12	459000	15.563			

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

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142341.D
Acq On : 13 May 2025 13:16
Operator : RC/JU
Sample : Q1993-02MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-3-20250508MS

Quant Time: May 13 13:55:06 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.904	152	222671	20.000	ng		0.00
21) Naphthalene-d8	8.187	136	844135	20.000	ng		0.00
39) Acenaphthene-d10	9.945	164	448767	20.000	ng		0.00
64) Phenanthrene-d10	11.433	188	711096	20.000	ng		0.00
76) Chrysene-d12	14.074	240	400063	20.000	ng		0.00
86) Perylene-d12	15.563	264	458773	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.516	112	827305	63.424	ng		0.00
7) Phenol-d6	6.522	99	661577	41.237	ng		0.00
23) Nitrobenzene-d5	7.469	82	1193717	86.244	ng		0.00
42) 2,4,6-Tribromophenol	10.733	330	602013	138.944	ng		0.00
45) 2-Fluorobiphenyl	9.263	172	2343262	74.453	ng		0.00
79) Terphenyl-d14	13.016	244	1881074	69.594	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.734	88	105179	17.906	ng		98
3) Pyridine	3.487	79	249292	18.076	ng		99
4) n-Nitrosodimethylamine	3.428	42	160095	19.974	ng		98
6) Aniline	6.569	93	573513	36.446	ng		99
8) 2-Chlorophenol	6.687	128	521491	37.413	ng		98
9) Benzaldehyde	6.451	77	339068	36.111	ng		99
10) Phenol	6.534	94	267411	15.725	ng		98
11) bis(2-Chloroethyl)ether	6.634	93	586176	34.953	ng		97
12) 1,3-Dichlorobenzene	6.845	146	531652	33.339	ng		99
13) 1,4-Dichlorobenzene	6.922	146	544713	34.020	ng		99
14) 1,2-Dichlorobenzene	7.075	146	535342	34.833	ng		99
15) Benzyl Alcohol	7.040	79	335251	32.271	ng		98
16) 2,2'-oxybis(1-Chloropr...	7.181	45	987524	39.433	ng		99
17) 2-Methylphenol	7.151	107	359385	31.846	ng		99
18) Hexachloroethane	7.422	117	182886	34.330	ng		98
19) n-Nitroso-di-n-propyla...	7.316	70	425960	42.924	ng		98
20) 3+4-Methylphenols	7.304	107	402217	28.558	ng	#	72
22) Acetophenone	7.310	105	811717	43.248	ng		98
24) Nitrobenzene	7.487	77	604693	46.347	ng		97
25) Isophorone	7.722	82	1171958	44.714	ng		99
26) 2-Nitrophenol	7.798	139	313153	49.643	ng		97
27) 2,4-Dimethylphenol	7.834	122	554257	42.060	ng		100
28) bis(2-Chloroethoxy)met...	7.934	93	737527	43.761	ng		98
29) 2,4-Dichlorophenol	8.039	162	498131	44.462	ng		99
30) 1,2,4-Trichlorobenzene	8.128	180	497743	39.476	ng		100
31) Naphthalene	8.210	128	1661033	40.600	ng		100
32) Benzoic acid	7.910	122	112899	21.421	ng		98
33) 4-Chloroaniline	8.257	127	245480	14.705	ng		100
34) Hexachlorobutadiene	8.328	225	286359	38.355	ng		100
35) Caprolactam	8.628	113	30378m	9.304	ng		
36) 4-Chloro-3-methylphenol	8.728	107	474733	40.763	ng		98
37) 2-Methylnaphthalene	8.898	142	1082318	42.575	ng		100
38) 1-Methylnaphthalene	8.998	142	1123435	42.400	ng		99
40) 1,2,4,5-Tetrachloroben...	9.069	216	533036	42.528	ng		99
41) Hexachlorocyclopentadiene	9.057	237	597101	77.084	ng		99
43) 2,4,6-Trichlorophenol	9.175	196	385055	48.705	ng		98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142341.D
Acq On : 13 May 2025 13:16
Operator : RC/JU
Sample : Q1993-02MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-3-20250508MS

Quant Time: May 13 13:55:06 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

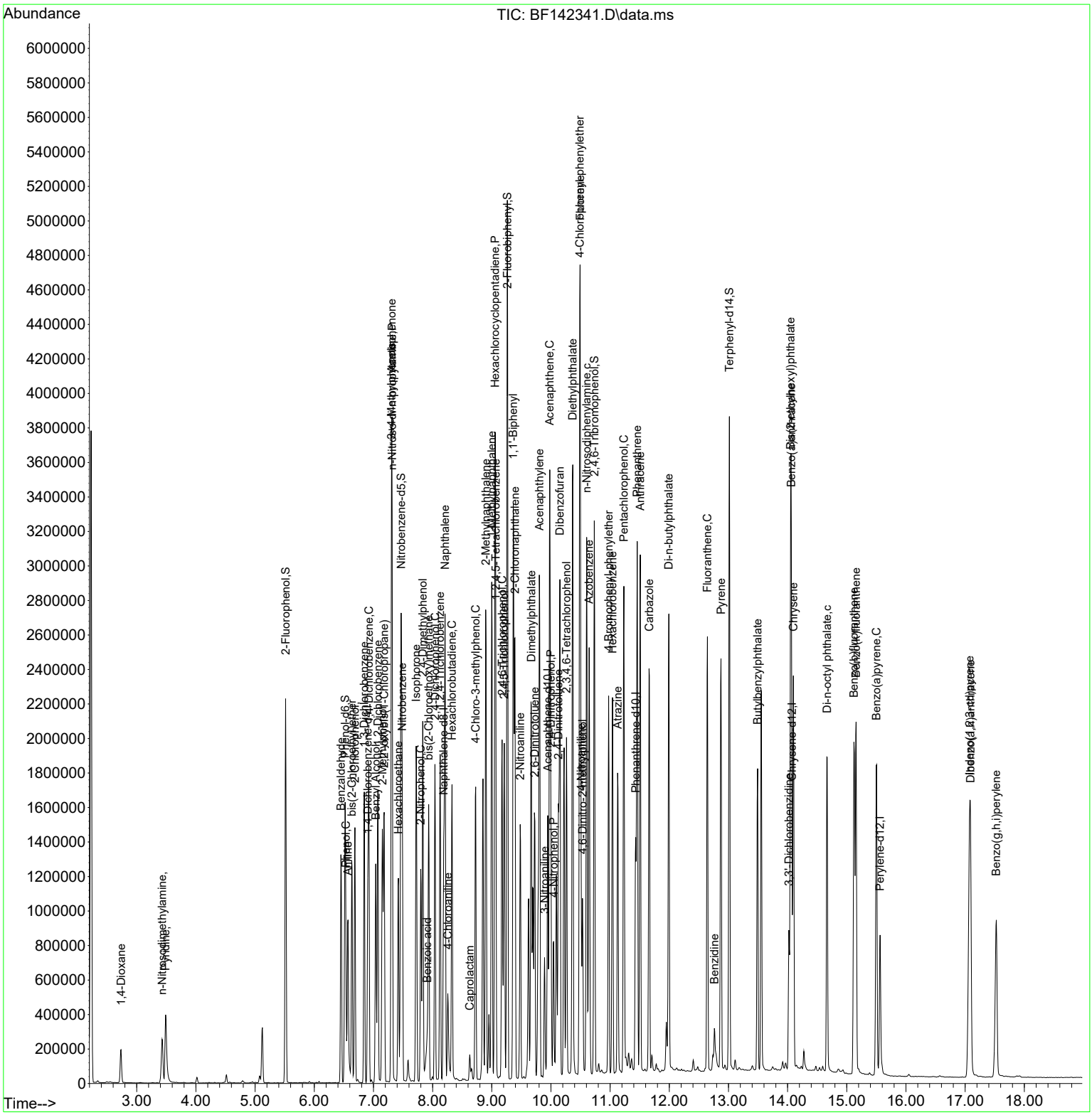
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	388948	46.238	ng		100
46) 1,1'-Biphenyl	9.363	154	1490605	43.320	ng		100
47) 2-Chloronaphthalene	9.392	162	1096312	42.843	ng		100
48) 2-Nitroaniline	9.481	65	343788	52.415	ng		97
49) Acenaphthylene	9.804	152	1842685	43.046	ng		100
50) Dimethylphthalate	9.669	163	1339615	46.488	ng		100
51) 2,6-Dinitrotoluene	9.728	165	290481	53.853	ng		91
52) Acenaphthene	9.981	154	1222632	47.501	ng		99
53) 3-Nitroaniline	9.892	138	159295	25.181	ng		94
54) 2,4-Dinitrophenol	9.998	184	283601	98.536	ng	#	1
55) Dibenzofuran	10.151	168	1631429	42.948	ng		99
56) 4-Nitrophenol	10.045	139	175940	36.953	ng		96
57) 2,4-Dinitrotoluene	10.128	165	387857	56.057	ng		96
58) Fluorene	10.492	166	1234531	42.585	ng		99
59) 2,3,4,6-Tetrachlorophenol	10.263	232	340901	49.092	ng		98
60) Diethylphthalate	10.369	149	2041429	70.938	ng		99
61) 4-Chlorophenyl-phenyle...	10.486	204	609755	43.597	ng		99
62) 4-Nitroaniline	10.510	138	260342	51.925	ng		100
63) Azobenzene	10.645	77	1237241	44.991	ng		98
65) 4,6-Dinitro-2-methylph...	10.533	198	181337	53.702	ng		99
66) n-Nitrosodiphenylamine	10.604	169	1127454	47.647	ng		100
67) 4-Bromophenyl-phenylether	10.975	248	389701	48.355	ng		99
68) Hexachlorobenzene	11.039	284	423127	47.731	ng		98
69) Atrazine	11.128	200	300676	48.205	ng		100
70) Pentachlorophenol	11.233	266	483498	103.676	ng		98
71) Phenanthrene	11.457	178	1641209	44.031	ng		100
72) Anthracene	11.510	178	1680500	43.879	ng		100
73) Carbazole	11.663	167	1413709	41.144	ng		100
74) Di-n-butylphthalate	11.992	149	1877806	51.972	ng		100
75) Fluoranthene	12.645	202	1472368	39.516	ng		99
77) Benzidine	12.763	184	144725	19.906	ng		98
78) Pyrene	12.874	202	1432084	40.216	ng		99
80) Butylbenzylphthalate	13.492	149	575720	54.836	ng		99
81) Benzo(a)anthracene	14.063	228	1197998	46.239	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	244119	40.518	ng		99
83) Chrysene	14.098	228	1091976	45.275	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	820672	59.526	ng		99
85) Di-n-octyl phthalate	14.668	149	1302921	52.516	ng		98
87) Indeno(1,2,3-cd)pyrene	17.074	276	1139843	35.716	ng		100
88) Benzo(b)fluoranthene	15.121	252	1304145	46.935	ng		100
89) Benzo(k)fluoranthene	15.157	252	1176087	46.252	ng		100
90) Benzo(a)pyrene	15.504	252	1185667	47.619	ng		99
91) Dibenzo(a,h)anthracene	17.092	278	954756	36.212	ng		99
92) Benzo(g,h,i)perylene	17.527	276	834969	31.908	ng		100

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142341.D
Acq On : 13 May 2025 13:16
Operator : RC/JU
Sample : Q1993-02MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-3-20250508MS

Quant Time: May 13 13:55:06 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration



Raw Data: **BF142342.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/08/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	MW-3-20250508MSD	SDG No.:	Q2008
Lab Sample ID:	Q1993-03MSD	Matrix:	Water
Analytical Method:	8270E	% 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
BF142342.D	1	05/12/25 08:40	05/13/25 13:45	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	38.2		3.90	10.0	ug/L
108-95-2	Phenol	16.6		0.91	5.00	ug/L
111-44-4	bis(2-Chloroethyl)ether	37.1		0.81	5.00	ug/L
95-57-8	2-Chlorophenol	39.6		0.58	5.00	ug/L
95-48-7	2-Methylphenol	34.2		1.10	5.00	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	41.4		1.30	5.00	ug/L
98-86-2	Acetophenone	45.4		0.74	5.00	ug/L
65794-96-9	3+4-Methylphenols	30.3		1.10	10.0	ug/L
621-64-7	n-Nitroso-di-n-propylamine	45.2		1.40	2.50	ug/L
67-72-1	Hexachloroethane	35.6		0.65	5.00	ug/L
98-95-3	Nitrobenzene	49.8		0.76	5.00	ug/L
78-59-1	Isophorone	47.0		0.75	5.00	ug/L
88-75-5	2-Nitrophenol	52.7		1.80	5.00	ug/L
105-67-9	2,4-Dimethylphenol	44.5		1.90	5.00	ug/L
111-91-1	bis(2-Chloroethoxy)methane	46.1		0.68	5.00	ug/L
120-83-2	2,4-Dichlorophenol	46.8		0.52	5.00	ug/L
91-20-3	Naphthalene	42.7		0.50	5.00	ug/L
106-47-8	4-Chloroaniline	15.0		0.84	5.00	ug/L
87-68-3	Hexachlorobutadiene	40.1		0.54	5.00	ug/L
105-60-2	Caprolactam	10.5		1.10	10.0	ug/L
59-50-7	4-Chloro-3-methylphenol	43.4		0.59	5.00	ug/L
91-57-6	2-Methylnaphthalene	44.2		0.56	5.00	ug/L
77-47-4	Hexachlorocyclopentadiene	80.5	E	3.60	10.0	ug/L
88-06-2	2,4,6-Trichlorophenol	51.7		0.51	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	50.0		0.62	5.00	ug/L
92-52-4	1,1-Biphenyl	45.6		0.53	5.00	ug/L
91-58-7	2-Chloronaphthalene	45.5		0.61	5.00	ug/L
88-74-4	2-Nitroaniline	56.9		1.30	5.00	ug/L
131-11-3	Dimethylphthalate	49.3		0.61	5.00	ug/L

Raw Data: **BF142342.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/08/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	MW-3-20250508MSD	SDG No.:	Q2008
Lab Sample ID:	Q1993-03MSD	Matrix:	Water
Analytical Method:	8270E	% 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
BF142342.D	1	05/12/25 08:40	05/13/25 13:45	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	45.5		0.75	5.00	ug/L
606-20-2	2,6-Dinitrotoluene	57.7		0.92	5.00	ug/L
99-09-2	3-Nitroaniline	25.9		1.10	5.00	ug/L
83-32-9	Acenaphthene	50.7		0.55	5.00	ug/L
51-28-5	2,4-Dinitrophenol	110	E	6.00	10.0	ug/L
100-02-7	4-Nitrophenol	40.3		2.40	10.0	ug/L
132-64-9	Dibenzofuran	45.3		0.61	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	60.6		1.20	5.00	ug/L
84-66-2	Diethylphthalate	75.2		0.69	5.00	ug/L
7005-72-3	4-Chlorophenyl-phenylether	46.2		0.68	5.00	ug/L
86-73-7	Fluorene	45.2		0.63	5.00	ug/L
100-01-6	4-Nitroaniline	56.9		1.50	5.00	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	58.3		2.90	10.0	ug/L
86-30-6	n-Nitrosodiphenylamine	49.8		0.58	5.00	ug/L
101-55-3	4-Bromophenyl-phenylether	51.1		0.40	5.00	ug/L
118-74-1	Hexachlorobenzene	50.1		0.52	5.00	ug/L
1912-24-9	Atrazine	51.5		1.00	5.00	ug/L
87-86-5	Pentachlorophenol	110	E	1.60	10.0	ug/L
85-01-8	Phenanthrene	46.5		0.50	5.00	ug/L
120-12-7	Anthracene	45.9		0.61	5.00	ug/L
86-74-8	Carbazole	43.7		0.72	5.00	ug/L
84-74-2	Di-n-butylphthalate	54.5		1.20	5.00	ug/L
206-44-0	Fluoranthene	41.9		0.82	5.00	ug/L
129-00-0	Pyrene	42.7		0.50	5.00	ug/L
85-68-7	Butylbenzylphthalate	60.3		1.90	5.00	ug/L
91-94-1	3,3-Dichlorobenzidine	42.7		0.93	10.0	ug/L
56-55-3	Benzo(a)anthracene	48.4		0.45	5.00	ug/L
218-01-9	Chrysene	48.0		0.44	5.00	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	62.6		1.60	5.00	ug/L
117-84-0	Di-n-octyl phthalate	54.6		2.30	10.0	ug/L
205-99-2	Benzo(b)fluoranthene	48.4		0.49	5.00	ug/L

Raw Data: **BF142342.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	05/08/25
Project:	Former Schlumberger Site Princeton NJ 2025	Date Received:	05/09/25
Client Sample ID:	MW-3-20250508MSD	SDG No.:	Q2008
Lab Sample ID:	Q1993-03MSD	Matrix:	Water
Analytical Method:	8270E	% 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
BF142342.D	1	05/12/25 08:40	05/13/25 13:45	PB167951

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	50.7		0.48	5.00	ug/L
50-32-8	Benzo(a)pyrene	50.8		0.55	5.00	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	37.1		0.59	5.00	ug/L
53-70-3	Dibenzo(a,h)anthracene	37.4		0.67	5.00	ug/L
191-24-2	Benzo(g,h,i)perylene	33.0		0.69	5.00	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	44.5		0.52	5.00	ug/L
123-91-1	1,4-Dioxane	19.4		1.00	5.00	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	51.3		0.72	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	67.3		15 (10) - 110 (139)	45%	SPK: 150
13127-88-3	Phenol-d6	44.1		15 (10) - 110 (134)	29%	SPK: 150
4165-60-0	Nitrobenzene-d5	91.3		30 (49) - 130 (133)	91%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.7		30 (52) - 130 (132)	78%	SPK: 100
118-79-6	2,4,6-Tribromophenol	149		15 (44) - 110 (137)	99%	SPK: 150
1718-51-0	Terphenyl-d14	72.6		30 (48) - 130 (125)	73%	SPK: 100

INTERNAL STANDARDS			
3855-82-1	1,4-Dichlorobenzene-d4	221000	6.904
1146-65-2	Naphthalene-d8	842000	8.186
15067-26-2	Acenaphthene-d10	448000	9.945
1517-22-2	Phenanthrene-d10	725000	11.433
1719-03-5	Chrysene-d12	408000	14.074
1520-96-3	Perylene-d12	453000	15.562

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

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142342.D
Acq On : 13 May 2025 13:45
Operator : RC/JU
Sample : Q1993-03MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-3-20250508MSD

Quant Time: May 13 14:18:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.904	152	221066	20.000	ng		0.00
21) Naphthalene-d8	8.186	136	841600	20.000	ng		0.00
39) Acenaphthene-d10	9.945	164	447768	20.000	ng		0.00
64) Phenanthrene-d10	11.433	188	724658	20.000	ng		0.00
76) Chrysene-d12	14.074	240	407587	20.000	ng		0.00
86) Perylene-d12	15.562	264	453389	20.000	ng		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	5.516	112	871505	67.298	ng		0.00
7) Phenol-d6	6.522	99	702084	44.080	ng		0.00
23) Nitrobenzene-d5	7.469	82	1259491	91.270	ng		0.00
42) 2,4,6-Tribromophenol	10.733	330	642952	148.724	ng		0.00
45) 2-Fluorobiphenyl	9.263	172	2438446	77.650	ng		0.00
79) Terphenyl-d14	13.016	244	1998010	72.555	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	2.740	88	113173	19.407	ng		99
3) Pyridine	3.493	79	269314	19.670	ng		98
4) n-Nitrosodimethylamine	3.440	42	168771	21.209	ng		97
6) Aniline	6.569	93	597881	38.270	ng		98
8) 2-Chlorophenol	6.687	128	547573	39.569	ng		98
9) Benzaldehyde	6.451	77	356085	38.198	ng		98
10) Phenol	6.534	94	280825	16.633	ng		98
11) bis(2-Chloroethyl)ether	6.639	93	617860	37.110	ng		99
12) 1,3-Dichlorobenzene	6.845	146	562663	35.540	ng		99
13) 1,4-Dichlorobenzene	6.922	146	575974	36.234	ng		99
14) 1,2-Dichlorobenzene	7.075	146	565364	37.054	ng		100
15) Benzyl Alcohol	7.039	79	356873	34.602	ng		98
16) 2,2'-oxybis(1-Chloropr...	7.181	45	1030130	41.433	ng		99
17) 2-Methylphenol	7.151	107	382890	34.175	ng		100
18) Hexachloroethane	7.422	117	188182	35.580	ng		97
19) n-Nitroso-di-n-propyla...	7.316	70	444906	45.158	ng		99
20) 3+4-Methylphenols	7.304	107	423760	30.306	ng	#	76
22) Acetophenone	7.310	105	850113	45.430	ng		98
24) Nitrobenzene	7.486	77	647369	49.767	ng		98
25) Isophorone	7.722	82	1227117	46.959	ng		99
26) 2-Nitrophenol	7.798	139	333366	52.729	ng		97
27) 2,4-Dimethylphenol	7.834	122	584294	44.473	ng		100
28) bis(2-Chloroethoxy)met...	7.934	93	775324	46.142	ng		99
29) 2,4-Dichlorophenol	8.039	162	522818	46.806	ng		100
30) 1,2,4-Trichlorobenzene	8.128	180	525741	41.823	ng		100
31) Naphthalene	8.210	128	1743065	42.734	ng		100
32) Benzoic acid	7.910	122	119374	22.299	ng		98
33) 4-Chloroaniline	8.257	127	248882	14.953	ng		100
34) Hexachlorobutadiene	8.328	225	298845	40.148	ng		99
35) Caprolactam	8.633	113	34235m	10.516	ng		
36) 4-Chloro-3-methylphenol	8.728	107	504096	43.415	ng		100
37) 2-Methylnaphthalene	8.898	142	1119426	44.167	ng		99
38) 1-Methylnaphthalene	8.998	142	1176636	44.541	ng		99
40) 1,2,4,5-Tetrachloroben...	9.069	216	556690	44.515	ng		99
41) Hexachlorocyclopentadiene	9.057	237	622413	80.531	ng		99
43) 2,4,6-Trichlorophenol	9.175	196	408130	51.739	ng		99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142342.D
Acq On : 13 May 2025 13:45
Operator : RC/JU
Sample : Q1993-03MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-3-20250508MSD

Quant Time: May 13 14:18:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration

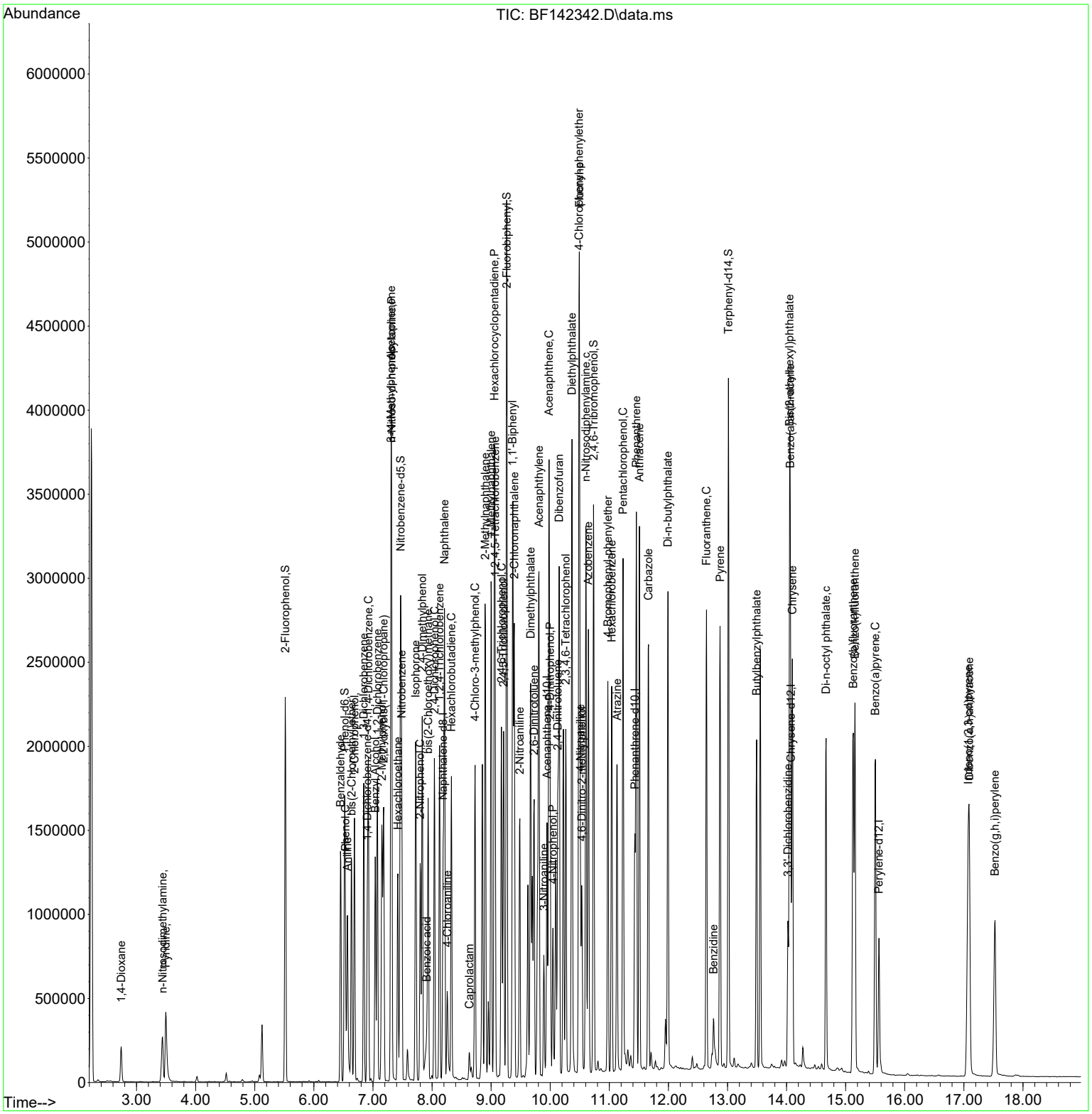
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) 2,4,5-Trichlorophenol	9.210	196	419470	49.978	ng		100
46) 1,1'-Biphenyl	9.363	154	1566630	45.631	ng		100
47) 2-Chloronaphthalene	9.392	162	1161143	45.478	ng		100
48) 2-Nitroaniline	9.486	65	372559	56.928	ng		94
49) Acenaphthylene	9.810	152	1944287	45.521	ng		100
50) Dimethylphthalate	9.669	163	1418621	49.339	ng		99
51) 2,6-Dinitrotoluene	9.728	165	310344	57.664	ng		92
52) Acenaphthene	9.980	154	1301843	50.691	ng		99
53) 3-Nitroaniline	9.892	138	163608	25.920	ng		97
54) 2,4-Dinitrophenol	9.998	184	322352	111.183	ng	#	1
55) Dibenzofuran	10.151	168	1717820	45.323	ng		99
56) 4-Nitrophenol	10.045	139	191606	40.334	ng		98
57) 2,4-Dinitrotoluene	10.127	165	418571	60.631	ng		98
58) Fluorene	10.492	166	1306634	45.173	ng		100
59) 2,3,4,6-Tetrachlorophenol	10.263	232	355309	51.281	ng		100
60) Diethylphthalate	10.369	149	2159612	75.212	ng		98
61) 4-Chlorophenyl-phenyle...	10.486	204	645158	46.231	ng		100
62) 4-Nitroaniline	10.510	138	284711	56.912	ng		99
63) Azobenzene	10.645	77	1311682	47.805	ng		99
65) 4,6-Dinitro-2-methylph...	10.533	198	203210	58.337	ng		99
66) n-Nitrosodiphenylamine	10.604	169	1201766	49.837	ng		100
67) 4-Bromophenyl-phenylether	10.975	248	419820	51.118	ng		98
68) Hexachlorobenzene	11.039	284	452855	50.128	ng		99
69) Atrazine	11.133	200	327274	51.487	ng		99
70) Pentachlorophenol	11.233	266	520921	109.611	ng		97
71) Phenanthrene	11.457	178	1767047	46.520	ng		100
72) Anthracene	11.510	178	1790740	45.882	ng		100
73) Carbazole	11.663	167	1530832	43.718	ng		100
74) Di-n-butylphthalate	11.992	149	2006185	54.486	ng		100
75) Fluoranthene	12.645	202	1590916	41.899	ng		100
77) Benzidine	12.763	184	178374	24.082	ng		99
78) Pyrene	12.874	202	1548848	42.692	ng		100
80) Butylbenzylphthalate	13.492	149	648929	60.278	ng		99
81) Benzo(a)anthracene	14.063	228	1278426	48.433	ng		99
82) 3,3'-Dichlorobenzidine	14.021	252	261890	42.665	ng		99
83) Chrysene	14.098	228	1180559	48.044	ng		99
84) Bis(2-ethylhexyl)phtha...	14.051	149	882737	62.609	ng		99
85) Di-n-octyl phthalate	14.668	149	1388300	54.565	ng		98
87) Indeno(1,2,3-cd)pyrene	17.074	276	1170137	37.101	ng		100
88) Benzo(b)fluoranthene	15.127	252	1329901	48.431	ng		99
89) Benzo(k)fluoranthene	15.157	252	1274067	50.701	ng		100
90) Benzo(a)pyrene	15.504	252	1248896	50.754	ng		99
91) Dibenzo(a,h)anthracene	17.092	278	973904	37.377	ng		100
92) Benzo(g,h,i)perylene	17.527	276	853513	33.004	ng		99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF051325\
Data File : BF142342.D
Acq On : 13 May 2025 13:45
Operator : RC/JU
Sample : Q1993-03MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-3-20250508MSD

Quant Time: May 13 14:18:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF050525.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon May 05 18:41:44 2025
Response via : Initial Calibration



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

Manual Integration Report

Sequence:	bf050525	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC005	BF142296.D	4-Chloroaniline	Rahul	5/6/2025 9:54:09 AM	Jagrut	5/6/2025 10:53:06 AM	Peak Integrated by Software
SSTDICC005	BF142296.D	bis(2-Chloroethyl)ether	Rahul	5/6/2025 9:54:09 AM	Jagrut	5/6/2025 10:53:06 AM	Peak Integrated by Software
SSTDICC005	BF142296.D	Pyridine	Rahul	5/6/2025 9:54:09 AM	Jagrut	5/6/2025 10:53:06 AM	Peak Integrated by Software
SSTDICC010	BF142297.D	4-Chloroaniline	Rahul	5/6/2025 9:54:13 AM	Jagrut	5/6/2025 10:53:10 AM	Peak Integrated by Software
SSTDICC010	BF142297.D	Benzoic acid	Rahul	5/6/2025 9:54:13 AM	Jagrut	5/6/2025 10:53:10 AM	Peak Integrated by Software
SSTDICC010	BF142297.D	bis(2-Chloroethyl)ether	Rahul	5/6/2025 9:54:13 AM	Jagrut	5/6/2025 10:53:10 AM	Peak Integrated by Software
SSTDICC020	BF142298.D	4-Chloroaniline	Rahul	5/6/2025 9:54:17 AM	Jagrut	5/6/2025 10:53:16 AM	Peak Integrated by Software
SSTDICC020	BF142298.D	Benzoic acid	Rahul	5/6/2025 9:54:17 AM	Jagrut	5/6/2025 10:53:16 AM	Peak Integrated by Software
SSTDICCC040	BF142299.D	4-Chloroaniline	Rahul	5/6/2025 9:54:21 AM	Jagrut	5/6/2025 10:53:20 AM	Peak Integrated by Software
SSTDICCC040	BF142299.D	bis(2-Chloroethyl)ether	Rahul	5/6/2025 9:54:21 AM	Jagrut	5/6/2025 10:53:20 AM	Peak Integrated by Software
SSTDICCC040	BF142299.D	Phenol	Rahul	5/6/2025 9:54:21 AM	Jagrut	5/6/2025 10:53:20 AM	Peak Integrated by Software
SSTDICC050	BF142300.D	4-Chloroaniline	Rahul	5/6/2025 9:54:25 AM	Jagrut	5/6/2025 10:53:28 AM	Peak Integrated by Software
SSTDICC050	BF142300.D	Benzoic acid	Rahul	5/6/2025 9:54:25 AM	Jagrut	5/6/2025 10:53:28 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	bf050525	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC050	BF142300.D	bis(2-Chloroethyl)ether	Rahul	5/6/2025 9:54:25 AM	Jagrut	5/6/2025 10:53:28 AM	Peak Integrated by Software
SSTDICC050	BF142300.D	Phenol	Rahul	5/6/2025 9:54:25 AM	Jagrut	5/6/2025 10:53:28 AM	Peak Integrated by Software
SSTDICC060	BF142301.D	4-Chloroaniline	Rahul	5/6/2025 9:54:28 AM	Jagrut	5/6/2025 10:53:32 AM	Peak Integrated by Software
SSTDICC060	BF142301.D	Benzoic acid	Rahul	5/6/2025 9:54:28 AM	Jagrut	5/6/2025 10:53:32 AM	Peak Integrated by Software
SSTDICC060	BF142301.D	bis(2-Chloroethyl)ether	Rahul	5/6/2025 9:54:28 AM	Jagrut	5/6/2025 10:53:32 AM	Peak Integrated by Software
SSTDICC060	BF142301.D	Phenol	Rahul	5/6/2025 9:54:28 AM	Jagrut	5/6/2025 10:53:32 AM	Peak Integrated by Software
SSTDICC080	BF142302.D	4-Chloroaniline	Rahul	5/6/2025 9:54:34 AM	Jagrut	5/6/2025 10:53:38 AM	Peak Integrated by Software
SSTDICC080	BF142302.D	Benzoic acid	Rahul	5/6/2025 9:54:34 AM	Jagrut	5/6/2025 10:53:38 AM	Peak Integrated by Software
SSTDICC080	BF142302.D	bis(2-Chloroethyl)ether	Rahul	5/6/2025 9:54:34 AM	Jagrut	5/6/2025 10:53:38 AM	Peak Integrated by Software
SSTDICC080	BF142302.D	Caprolactam	Rahul	5/6/2025 9:54:34 AM	Jagrut	5/6/2025 10:53:38 AM	Peak Integrated by Software
SSTDICC080	BF142302.D	Phenol	Rahul	5/6/2025 9:54:34 AM	Jagrut	5/6/2025 10:53:38 AM	Peak Integrated by Software
SSTDICV040	BF142303.D	4-Chloroaniline	Rahul	5/6/2025 9:54:37 AM	Jagrut	5/6/2025 10:53:42 AM	Peak Integrated by Software
SSTDICV040	BF142303.D	Benzoic acid	Rahul	5/6/2025 9:54:37 AM	Jagrut	5/6/2025 10:53:42 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	bf050525	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICV040	BF142303.D	bis(2-Chloroethyl)ether	Rahul	5/6/2025 9:54:37 AM	Jagrut	5/6/2025 10:53:42 AM	Peak Integrated by Software
SSTDICV040	BF142303.D	Phenol	Rahul	5/6/2025 9:54:37 AM	Jagrut	5/6/2025 10:53:42 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	bf051325	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDCCC040	BF142336.D	Benzoic acid	Rahul	5/14/2025 2:06:26 PM	Jagrut	5/14/2025 5:14:40 PM	Peak Integrated by Software
PB167951BS	BF142338.D	Caprolactam	Rahul	5/14/2025 2:06:31 PM	Jagrut	5/14/2025 5:14:42 PM	Peak Integrated by Software
Q1993-02MS	BF142341.D	Caprolactam	Rahul	5/14/2025 2:06:34 PM	Jagrut	5/14/2025 5:14:44 PM	Peak Integrated by Software
Q1993-03MSD	BF142342.D	Caprolactam	Rahul	5/14/2025 2:06:37 PM	Jagrut	5/14/2025 5:14:46 PM	Peak Integrated by Software

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF050525

Review By	Rahul	Review On	5/6/2025 9:56:17 AM				
Supervise By	Jagrut	Supervise On	5/6/2025 10:53:56 AM				
SubDirectory	BF050525	HP Acquire Method	BNA_F		HP Processing Method	bf050525	

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12662,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BF142294.D	05 May 2025 13:24	RC/JU	Ok
2	SSTDICC2.5	BF142295.D	05 May 2025 13:54	RC/JU	Ok
3	SSTDICC005	BF142296.D	05 May 2025 14:23	RC/JU	Ok,M
4	SSTDICC010	BF142297.D	05 May 2025 14:52	RC/JU	Ok,M
5	SSTDICC020	BF142298.D	05 May 2025 15:21	RC/JU	Ok,M
6	SSTDICCC040	BF142299.D	05 May 2025 15:50	RC/JU	Ok,M
7	SSTDICC050	BF142300.D	05 May 2025 16:18	RC/JU	Ok,M
8	SSTDICC060	BF142301.D	05 May 2025 16:47	RC/JU	Ok,M
9	SSTDICC080	BF142302.D	05 May 2025 17:15	RC/JU	Ok,M
10	SSTDICV040	BF142303.D	05 May 2025 18:13	RC/JU	Ok,M
11	PB167836BL	BF142304.D	05 May 2025 18:41	RC/JU	Not Ok

M : Manual Integration

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF051325

Review By	Rahul	Review On	5/14/2025 2:19:00 PM				
Supervise By	Jagrut	Supervise On	5/14/2025 5:15:10 PM				
SubDirectory	BF051325	HP Acquire Method	BNA_F		HP Processing Method	bf050525	

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12664,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BF142335.D	13 May 2025 10:20	RC/JU	Ok
2	SSTDCCC040	BF142336.D	13 May 2025 10:49	RC/JU	Ok,M
3	PB167951BL	BF142337.D	13 May 2025 11:17	RC/JU	Ok
4	PB167951BS	BF142338.D	13 May 2025 11:46	RC/JU	Ok,M
5	Q1985-01	BF142339.D	13 May 2025 12:19	RC/JU	ReRun
6	Q1993-01	BF142340.D	13 May 2025 12:47	RC/JU	Ok
7	Q1993-02MS	BF142341.D	13 May 2025 13:16	RC/JU	Ok,M
8	Q1993-03MSD	BF142342.D	13 May 2025 13:45	RC/JU	Ok,M
9	Q1986-10	BF142343.D	13 May 2025 14:13	RC/JU	Ok
10	Q2008-01	BF142344.D	13 May 2025 15:17	RC/JU	Ok
11	Q2002-01	BF142345.D	13 May 2025 15:45	RC/JU	Ok,M
12	Q2007-01	BF142346.D	13 May 2025 16:14	RC/JU	Ok
13	Q2007-07	BF142347.D	13 May 2025 16:43	RC/JU	Ok
14	Q2007-13	BF142348.D	13 May 2025 17:11	RC/JU	Ok
15	Q2007-19	BF142349.D	13 May 2025 17:40	RC/JU	Ok
16	Q2007-25	BF142350.D	13 May 2025 18:09	RC/JU	Ok
17	Q2004-07	BF142351.D	13 May 2025 18:37	RC/JU	Ok
18	Q2004-11	BF142352.D	13 May 2025 19:06	RC/JU	Ok
19	Q2004-05	BF142353.D	13 May 2025 19:35	RC/JU	Ok
20	Q2007-31	BF142354.D	13 May 2025 20:04	RC/JU	Ok
21	Q2004-02	BF142355.D	13 May 2025 20:32	RC/JU	Ok

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF051325

Review By	Rahul	Review On	5/14/2025 2:19:00 PM		
Supervise By	Jagrut	Supervise On	5/14/2025 5:15:10 PM		
SubDirectory	BF051325	HP Acquire Method	BNA_F	HP Processing Method	bf050525

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12664,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q2004-02MS	BF142356.D	13 May 2025 21:01	RC/JU	Ok,M
23	Q2004-02MSD	BF142357.D	13 May 2025 21:30	RC/JU	Ok,M
24	Q2004-04	BF142358.D	13 May 2025 21:59	RC/JU	Ok,M

M : Manual Integration

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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF050525

Review By	Rahul	Review On	5/6/2025 9:56:17 AM		
Supervise By	Jagrut	Supervise On	5/6/2025 10:53:56 AM		
SubDirectory	BF050525	HP Acquire Method	BNA_F	HP Processing Method	bf050525

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12662,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BF142294.D	05 May 2025 13:24		RC/JU	Ok
2	SSTDICC2.5	SSTDICC2.5	BF142295.D	05 May 2025 13:54		RC/JU	Ok
3	SSTDICC005	SSTDICC005	BF142296.D	05 May 2025 14:23	Compound#32-54-65-77-85 removed from 5 ppm	RC/JU	Ok,M
4	SSTDICC010	SSTDICC010	BF142297.D	05 May 2025 14:52		RC/JU	Ok,M
5	SSTDICC020	SSTDICC020	BF142298.D	05 May 2025 15:21		RC/JU	Ok,M
6	SSTDICCC040	SSTDICCC040	BF142299.D	05 May 2025 15:50	Compound#26-54-65-80-84-85 kept on LR & #32 kept on QR	RC/JU	Ok,M
7	SSTDICC050	SSTDICC050	BF142300.D	05 May 2025 16:18		RC/JU	Ok,M
8	SSTDICC060	SSTDICC060	BF142301.D	05 May 2025 16:47		RC/JU	Ok,M
9	SSTDICC080	SSTDICC080	BF142302.D	05 May 2025 17:15	Compound#9 removed from 80 ppm	RC/JU	Ok,M
10	SSTDICV040	ICVBF050525	BF142303.D	05 May 2025 18:13		RC/JU	Ok,M
11	PB167836BL	PB167836BL	BF142304.D	05 May 2025 18:41	Analyzed for contamination check.	RC/JU	Not Ok

M : Manual Integration

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Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF051325

Review By	Rahul	Review On	5/14/2025 2:19:00 PM		
Supervise By	Jagrut	Supervise On	5/14/2025 5:15:10 PM		
SubDirectory	BF051325	HP Acquire Method	BNA_F	HP Processing Method	bf050525

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12664,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BF142335.D	13 May 2025 10:20		RC/JU	Ok
2	SSTDCCC040	SSTDCCC040	BF142336.D	13 May 2025 10:49	CCC fail high side for many com. and low for com.#77	RC/JU	Ok,M
3	PB167951BL	PB167951BL	BF142337.D	13 May 2025 11:17	Use for all Except Q1985-01 (DOD)	RC/JU	Ok
4	PB167951BS	PB167951BS	BF142338.D	13 May 2025 11:46	Use for all Except Q1985-01 (DOD)	RC/JU	Ok,M
5	Q1985-01	RW8-BW-20250507	BF142339.D	13 May 2025 12:19	CCC fail high side for com. #74, END CCC missing	RC/JU	ReRun
6	Q1993-01	MW-3-20250508	BF142340.D	13 May 2025 12:47		RC/JU	Ok
7	Q1993-02MS	MW-3-20250508MS	BF142341.D	13 May 2025 13:16	Use for all Except Q1985-01 (DOD)	RC/JU	Ok,M
8	Q1993-03MSD	MW-3-20250508MSD	BF142342.D	13 May 2025 13:45	Use for all Except Q1985-01 (DOD)	RC/JU	Ok,M
9	Q1986-10	VNJ-218	BF142343.D	13 May 2025 14:13		RC/JU	Ok
10	Q2008-01	IDW-AQ-DRUM-633-05	BF142344.D	13 May 2025 15:17		RC/JU	Ok
11	Q2002-01	EO-02-05092025	BF142345.D	13 May 2025 15:45		RC/JU	Ok,M
12	Q2007-01	OR-636-COMP-10	BF142346.D	13 May 2025 16:14		RC/JU	Ok
13	Q2007-07	OR-636-COMP-11	BF142347.D	13 May 2025 16:43		RC/JU	Ok
14	Q2007-13	OR-636-COMP-12	BF142348.D	13 May 2025 17:11		RC/JU	Ok
15	Q2007-19	OR-636-COMP-13	BF142349.D	13 May 2025 17:40		RC/JU	Ok
16	Q2007-25	OR-636-COMP-14	BF142350.D	13 May 2025 18:09		RC/JU	Ok

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Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QCBatch ID # BF051325

Review By	Rahul	Review On	5/14/2025 2:19:00 PM		
Supervise By	Jagrut	Supervise On	5/14/2025 5:15:10 PM		
SubDirectory	BF051325	HP Acquire Method	BNA_F	HP Processing Method	bf050525

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6784,SP6785,SP6786,SP6787,SP6788,SP6790,SP6789,SP6791
CCC	SP6787
Internal Standard/PEM	S12664,10ul/1000ul sample
ICV/I.BLK	SP6770
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

17	Q2004-07	205510	BF142351.D	13 May 2025 18:37		RC/JU	Ok
18	Q2004-11	STONE-STOCK	BF142352.D	13 May 2025 19:06		RC/JU	Ok
19	Q2004-05	R0202	BF142353.D	13 May 2025 19:35		RC/JU	Ok
20	Q2007-31	OR-636-COMP-15	BF142354.D	13 May 2025 20:04		RC/JU	Ok
21	Q2004-02	VNJ-220	BF142355.D	13 May 2025 20:32		RC/JU	Ok
22	Q2004-02MS	VNJ-220MS	BF142356.D	13 May 2025 21:01		RC/JU	Ok,M
23	Q2004-02MSD	VNJ-220MSD	BF142357.D	13 May 2025 21:30		RC/JU	Ok,M
24	Q2004-04	2811	BF142358.D	13 May 2025 21:59		RC/JU	Ok,M

M : Manual Integration

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB167951

SOP ID:	M3510C,3580A-Extraction SVOC-20				
Clean Up SOP #:	N/A			**Extraction Start Date :**	05/12/2025
Matrix :	Water			**Extraction Start Time :**	08:40
Weigh By:	N/A	**Extraction By:**	RJ	**Extraction End Date :**	05/12/2025
Balance check:	N/A	**Filter By:**	RJ	**Extraction End Time :**	15:25
Balance ID:	N/A	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	E3880	**Hood ID:**	4,5,6,7	**Supervisor By :**	RUPESH

Extraction Method: ☑ Seperatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☐ Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	50/100 PPM	SP6782
Surrogate	1.0ML	100/150 PPM	SP6754
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3930
Baked Na2SO4	N/A	EP2611
10N NaoH	N/A	EP2609
H2SO4 1:1	N/A	EP2610
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210443. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH. Q2008 Added at 11:01 AM.

KD Bath ID:	WATER BATH-1,2	**Envap ID:**	NEVAP-02
KD Bath Temperature:	60 °C	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
5/12/25	RS (Ext Lab)	RC/SVOC
15:30	**Preparation Group**	**Analysis Group**

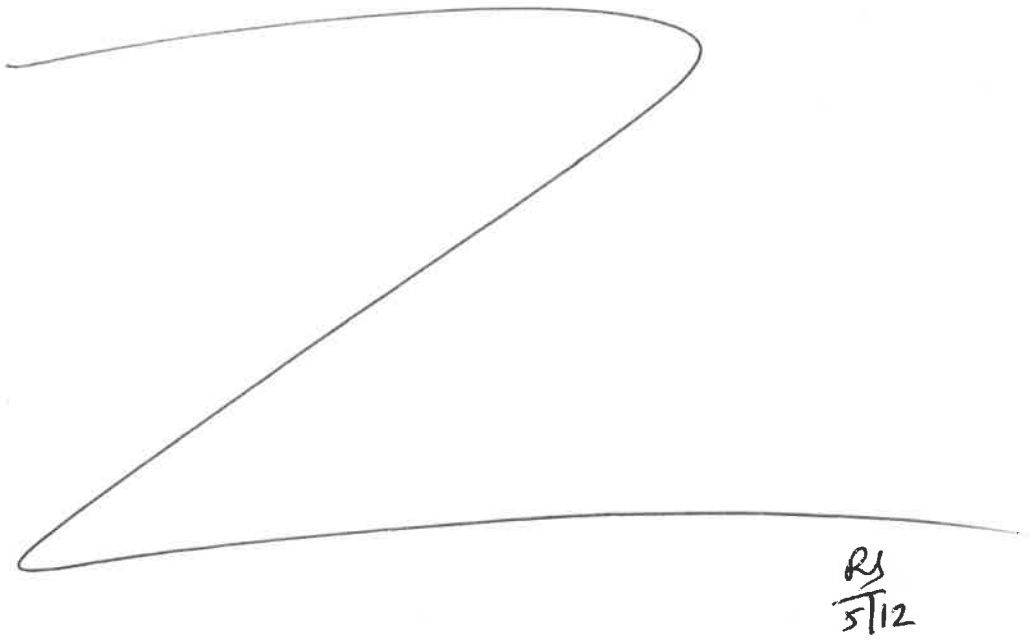
Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB167951

Analytical Method: M3510C,3580A-Extraction SVOC-20 **Concentration Date:** 05/12/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167951BL	SBLK951	SVOC-TCL BNA -20	1000	6	RUPESH	ritesh	1			SEP-1
PB167951BS	SLCS951	SVOC-TCL BNA -20	1000	6	RUPESH	ritesh	1			2
Q1985-01	RW8-BW-20250507	SVOC-TCL BNA -20	1000	6	RUPESH	ritesh	1	G		3
Q1993-01	MW-3-20250508	SVOCMS Group1	1000	6	RUPESH	ritesh	1	C		4
Q1993-02	Q1993-01MS	SVOCMS Group1	1000	6	RUPESH	ritesh	1	C		5
Q1993-03	Q1993-01MSD	SVOCMS Group1	1000	6	RUPESH	ritesh	1	C		6
Q1993-04	MW-3-20250508-A	SVOCMS Group1	990	6	RUPESH	ritesh	1	C		7
Q1993-05	MW-2-20250508	SVOCMS Group1	1000	6	RUPESH	ritesh	1	C		8
Q1993-06	MW-1-20250508	SVOCMS Group1	1000	6	RUPESH	ritesh	1	C		9
Q1993-07	MW-4-20250508	SVOCMS Group1	990	6	RUPESH	ritesh	1	C		10
Q1993-08	EB-20250508	SVOCMS Group1	1000	6	RUPESH	ritesh	1	C		11
Q2000-02	38073-040323	SVOCMS Group2	1000	6	RUPESH	ritesh	1			12
Q2005-01	252806	SVOC-TCL BNA -20	1000	6	RUPESH	ritesh	1	N		13
Q2008-01	IDW-AQ-DRUM-633-0509 2025	SVOC-TCL BNA -20	940	2	RUPESH	ritesh	1	F		14



RS
5/12

* **Extracts relinguished on the same date as received.**

167951
8:40

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1985 **WorkList ID :** 189440 **Department :** Extraction **Date :** 05-12-2025 08:33:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1985-01	RW8-BW-20250507	Water	SVOC-TCL BNA -20	Cool 4 deg C	TETR06	L41	05/07/2025	8270E
Q1993-01	MW-3-20250508	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q1993-02	Q1993-01MS	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q1993-03	Q1993-01MSD	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q1993-04	MW-3-20250508-A	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q1993-05	MW-2-20250508	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q1993-06	MW-1-20250508	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q1993-07	MW-4-20250508	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q1993-08	EB-20250508	Water	SVOCMS Group1	Cool 4 deg C	PARS02	L51	05/08/2025	8270E
Q2000-02	38073-040323	Water	SVOCMS Group2	Cool 4 deg C	ALLI03	QA Of	05/08/2025	8270E
Q2005-01	252806	Water	SVOC-TCL BNA -20	Cool 4 deg C	PSEG03	L41	05/09/2025	8270E

Date/Time 5/12/25 8:35
Raw Sample Received by: RJ (Ext Labs)
Raw Sample Relinquished by: [signature]

Date/Time 5/12/25 9:20
Raw Sample Received by: [signature]
Raw Sample Relinquished by: RJ (Ext Labs)

167951

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2008 **WorkList ID :** 189453 **Department :** Extraction **Date :** 05-12-2025 11:01:27

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2008-01	IDW-AQ-DRUM-633-05092025	Water	SVOC-TCL BNA -20	Cool 4 deg C	JACO05	L41	05/09/2025	8270E

Date/Time 5/12/25 11:01

Raw Sample Received by: RS (Ext-lab)

Raw Sample Relinquished by:

Date/Time 5/12/25 11:25

Raw Sample Received by:

Raw Sample Relinquished by: RS (Ext-lab)

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Prep Standard - Chemical Standard Summary

Order ID : Q2008

Test : SVOC-TCL BNA -20

Prepbatch ID : PB167951,

Sequence ID/Qc Batch ID: BF051325,BF051325,BF051425,BF051525,BF051525,BP051425,BP051425,

Standard ID :
EP2609,EP2610,EP2611,SP6754,SP6757,SP6769,SP6770,SP6782,SP6783,SP6784,SP6785,SP6786,SP6787,SP6788,SP6789,SP6790,SP6791,

Chemical ID :
10ul/1000ul sample,E3551,E3657,E3902,E3904,E3921,E3926,E3930,M6157,S10104,S10399,S10584,S11143,S11162,S11484,S11496,S11650,S11788,S11789,S11790,S11798,S11799,S12115,S12190,S12191,S12192,S12193,S12194,S12195,S12209,S12210,S12211,S12212,S12213,S12214,S12215,S12216,S12271,S12277,S12486,S12488,S12489,S12490,S12491,S12492,S12493,S12494,S12495,S12496,S12534,S12535,S12536,S12537,S12538,S12539,S12540,S12541,S12542,S12577,S12658,S12662,S12664,S12793,S12974,S12976,S12977,S12978,S12979,S12980,S12981,S12982,S12983,S13078,W3112,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1874	10 N SODIUM HYDROXIDE SOLN	EP2609	05/07/2025	11/07/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/07/2025

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
314	1.1 H2SO4 SOLN	EP2610	05/07/2025	11/07/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/07/2025

FROM 1000.00000ml of M6157 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

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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	EP2611	05/09/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/09/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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SVOC STANDARD PREPARATION LOG

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
18	Second Source Calibration Stock Standard, 100 PPM, (8270/625/CLP)	SP6769	04/10/2025	09/10/2025	Jagrut Upadhyay	None	None	Sohil Jodhani 04/16/2025

FROM 0.04000ml of S12195 + 0.08000ml of S12216 + 0.10000ml of S11788 + 0.20000ml of S12486 + 0.20000ml of S12534 + 0.20000ml of S12974 + 1.18000ml of E3926 = Final Quantity: 2.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
416	40 ng BNA ICV, 40 PPM	SP6770	04/10/2025	09/10/2025	Jagrut Upadhyay	None	None	Sohil Jodhani 04/16/2025

FROM 0.01000ml of S12658 + 0.60000ml of E3926 + 0.40000ml of SP6769 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
171	8270/625 Spike Solution, 50/100 PPM	SP6782	04/30/2025	05/31/2025	Rahul Chavli	None	None	Jagrut Upadhyay 05/15/2025

FROM 0.10000ml of S12488 + 0.20000ml of S12534 + 0.20000ml of S12983 + 0.40000ml of S10399 + 0.40000ml of S10584 + 0.40000ml of S11143 + 0.40000ml of S11484 + 0.40000ml of S11650 + 0.50000ml of S12542 + 0.80000ml of S12974 + 1.00000ml of S12496 + 1.10000ml of S11789 + 1.10000ml of S12492 + 1.20000ml of S11799 + 1.20000ml of S12491 + 1.20000ml of S12493 + 1.20000ml of S12976 + 1.20000ml of S12980 + 1.20000ml of S12982 + 1.30000ml of S11798 + 1.30000ml of S12490 + 1.30000ml of S12495 + 1.30000ml of S12535 + 1.30000ml of S12537 + 1.30000ml of S12538 + 1.30000ml of S12540 + 1.30000ml of S12541 + 1.30000ml of S12979 + 1.30000ml of S12981 + 1.40000ml of S11790 + 1.40000ml of S12489 + 1.40000ml of S12494 + 1.40000ml of S12536 + 1.40000ml of S12539 + 1.40000ml of S12977 + 1.40000ml of S12978 + 163.00000ml of E3921 = Final Quantity: 200.000 ml

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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	SP6783	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.26700ml of S10104 + 0.40000ml of S11496 + 0.50000ml of S12115 + 1.00000ml of S11162 + 1.00000ml of S12271 + 1.00000ml of S12277 + 1.00000ml of S12793 + 1.00000ml of S13078 + 3.83300ml of E3930 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
413	80 ng BNA ICC, 80 PPM	SP6784	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.20000ml of E3930 + 0.80000ml of SP6783 = Final Quantity: 1.010 ml

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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	SP6785	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.40000ml of E3930 + 0.60000ml of SP6783 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
411	50 ng BNA ICC, 50 PPM	SP6786	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.50000ml of E3930 + 0.50000ml of SP6783 = Final Quantity: 1.010 ml

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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	SP6787	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.60000ml of E3930 + 0.40000ml of SP6783 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3678	20 ng BNA ICC, 20 PPM	SP6788	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.80000ml of E3930 + 0.20000ml of SP6783 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
407	5 ng BNA ICC, 5 PPM	SP6789	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.95000ml of E3930 + 0.05000ml of SP6783 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
408	10 ng BNA ICC, 10 PPM	SP6790	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.90000ml of E3930 + 0.10000ml of SP6783 = Final Quantity: 1.010 ml

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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	SP6791	05/05/2025	06/21/2025	Jagrut Upadhyay	None	None	Rahul Chavli 05/16/2025

FROM 0.01000ml of S12662 + 0.50000ml of E3930 + 0.50000ml of SP6789 = Final Quantity: 1.010 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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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 #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	09/18/2025	03/18/2025 / RUPESH	02/12/2025 / RUPESH	E3902

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	01/07/2026	03/13/2025 /	12/27/2024 / RUPESH	E3904

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	6789	09/24/2025	03/14/2025 / Rajesh	03/13/2025 / Rajesh	E3921

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	10/08/2025	04/08/2025 / Rajesh	02/07/2025 / Rajesh	E3926

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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)	25A0262002	02/20/2026	05/02/2025 / RUPESH	03/09/2025 / RUPESH	E3930

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	24i1262013	11/07/2025	05/07/2025 / RUPESH	02/18/2025 / Mohan	M6157

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml	440246	07/30/2025	01/30/2025 / anahy	12/09/2021 / Christian	S10104

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555871 / Custom Standard, 4-nitrophenol Std [CS 5238-4]	A0185300	05/31/2025	04/30/2025 / Rahul	05/18/2022 / Christian	S10399

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555868 / Custom Standard, Benzidine Std [CS 5328-1]	A0186373	06/30/2025	01/29/2025 / anahy	07/05/2022 / Christian	S10584

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555869 / Custom Standard, hexachlorocyclopentadiene Std [CS 5328-2]	A0194702	07/29/2025	01/29/2025 / anahy	02/20/2023 / Christian	S11143

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110817-01 / Custom 8270 Mix, 4-55, 1000 mg/L, 1 ml, (Maximum Expiration: 90 Days)	414125	06/21/2025	05/05/2025 / Jagrut	03/06/2023 / Christian	S11162

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555870 / Custom Standard, 2,4-dinitrophenol Std [CS 5328-3]	A0200549	10/30/2025	04/30/2025 / Rahul	08/10/2023 / yogesh	S11484

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	506889	10/28/2025	04/28/2025 / Jagrut	08/11/2023 / Yogesh	S11496

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0201728	07/29/2025	01/29/2025 / anahy	11/09/2023 / Yogesh	S11650

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	09/10/2025	03/10/2025 / anahy	11/21/2023 / Rahul	S11788

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	10/25/2025	04/25/2025 / Jagrut	11/21/2023 / Rahul	S11789

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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	A0196453	10/30/2025	04/30/2025 / Rahul	11/21/2023 / Rahul	S11790

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0200655	10/30/2025	04/30/2025 / Rahul	11/21/2023 / rahul	S11798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0200655	10/30/2025	04/30/2025 / Rahul	11/21/2023 / rahul	S11799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	454157	10/28/2025	04/28/2025 / Jagrut	03/08/2024 / Rahul	S12115

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12190

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12191

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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	S12192

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12193

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12194

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12195

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12209

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12210

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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	S12211

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12212

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12213

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12214

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12215

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12216

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	520963	10/28/2025	04/28/2025 / Jagrut	05/24/2024 / Rahul	S12271

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-010442-07 / Benzaldehyde Solution, 1000 mg/L, 1.3 ml, (Maximum Expiration: 90 Days)	495833	11/05/2025	05/05/2025 / Jagrut	05/24/2024 / Rahul	S12277

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12486

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/25/2025	04/25/2025 / Jagrut	07/23/2024 / RAHUL	S12488

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12489

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12490

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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	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12491

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12492

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12493

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12494

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12495

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12496

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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	10/10/2025	04/10/2025 / Jagrut	07/23/2024 / RAHUL	S12534

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12535

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12536

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12537

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12538

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12539

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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	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12540

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	11/01/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12541

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0214017	10/30/2025	04/30/2025 / Rahul	07/23/2024 / RAHUL	S12542

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL,	A0212955	06/30/2027	03/31/2025 / Rahul	08/01/2024 / Rahul	S12577

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0212266	04/30/2030	04/07/2025 / anahy	09/20/2024 / anahy	S12658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0212266	11/01/2025	05/01/2025 / Rahul	09/20/2024 / anahy	S12662

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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	11/12/2025	05/12/2025 / Rahul	09/20/2024 / anahy	S12664

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	06/21/2025	05/05/2025 / Jagrut	05/24/2024 / Rahul	S12793

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/10/2025	03/10/2025 / anahy	12/11/2024 / anahy	S12974

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12976

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12977

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12978

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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]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12979

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12980

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12982

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-010074-07 / 3,3'-Dichlorobenzidine Solution, 1,000 mg/L, 1 ml, (Maximum Expiration: 180 days)	525551	11/05/2025	05/05/2025 / Jagrut	03/10/2025 / anahy	S13078

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

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110817-01	414125	≤ -10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-55, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acetophenone	98-86-2	99.2	85.8.1P	998 ± 11.5
benzoic acid	65-85-0	100	123.7.1P	1010 ± 5.88
biphenyl	92-52-4	99.9	366.29.1P	999 ± 5.82
1,2,4,5-tetrachlorobenzene	95-94-3	99.7	53.7.2P	993 ± 5.79

Received on
02/07/23
by
CG
S11089
to
S11093

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: _____
Shane Overcash
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
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by TUV USA to ISO 9001:2015

Date Received: _____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-112090-04	440246	≤ -10 °C	Methylene Chloride	2/16/2026	CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
2-chlorophenol-d_4	93951-73-6	99.3	248.12.7P	7487 ± 17.2
2-fluorophenol	367-12-4	99.8	10.7.3.3P	7513 ± 17.26
phenol-d6	13127-88-3	99.9	949.120.8P	7481 ± 17.19
2,4,6-tribromophenol	118-79-6	99.8	12.1.6P	7469 ± 17.17

Received on
02/25/21
by
CG

S9236
to
S9240

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: Erica Castiglione

Erica Castiglione
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received by CG on 05/19/22

S10393 to S10402

Catalog No. : 555871 **Lot No.:** A0185300

Description : Custom 4-Nitrophenol Standard

Custom 4-Nitrophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	4-Nitrophenol	25,060.0 µg/mL	+/- 231.9100 µg/mL	Gravimetric
	CAS # 100-02-7 (Lot MKCN1089)		+/- 753.2622 µg/mL	Unstressed
	Purity 99%		+/- 905.6020 µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Katelyn McGinnis - Operations Tech I

Date Mixed: 16-May-2022 **Balance:** 1128342314

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received by
CG
on
07/05/22
S 10583
to
S 10592

Catalog No. : 555868 **Lot No.:** A0186373

Description : Custom Benzidine Standard

Custom Benzidine Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2025 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzidine	25,200.0 µg/mL	+/- 233.2055 µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 220511RSR)		+/- 351.6606 µg/mL	Unstressed
	Purity 99%		+/- 512.6054 µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Tom Suckar - Mix Technician **Date Mixed:** 16-Jun-2022 **Balance:** 1122030677

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
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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

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RG-02-01, Ed. 3

Recd. by RB on 7/24/23 E3551

VWR®

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

E 3657	E 3659
E 3654	E 3660

PO: PO2-798 PRODUCT CODE: SHIP DATE: 12/9/2024

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor | J.T.Baker

Material No.: 9254-03
Batch No.: 24H2762008
Manufactured Date: 2024-04-18
Expiration Date:2027-04-18
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3902

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

PO: PO2-1308 PRODUCT CODE: SHIP DATE: 2/7/25

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date:2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3926

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

PO: PO2-1178.2 PRODUCT CODE: SHIP DATE: 1/20/2025

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date:2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3930

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor | J.T.Baker

M615 MB

Material No.: 9673-33
Batch No.: 24I1262013
Manufactured Date: 2024-08-07
Retest Date:2029-08-06
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H_2SO_4)	95.0 - 98.0 %	96.2 %
Appearance	Passes Test	Passes Test
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	<1 ppm
ACS - Substances Reducing Permanganate(as SO2)	<= 2 ppm	<2 ppm
Ammonium (NH_4)	<= 1 ppm	<1 ppm
Chloride (Cl)	<= 0.1 ppm	<0.1 ppm
Nitrate (NO_3)	<= 0.2 ppm	0.1 ppm
Phosphate (PO_4)	<= 0.5 ppm	<0.1 ppm
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	<5.0 ppb
Arsenic & Antimony (as As)	<= 4.0 ppb	<2.0 ppb
Trace Impurities - Boron (B)	<= 10.0 ppb	<5.0 ppb
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	<1.0 ppb
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	<1.0 ppb
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	<0.3 ppb
Trace Impurities - Copper (Cu)	<= 1.0 ppb	<1.0 ppb
Trace Impurities - Gold (Au)	<= 10.0 ppb	<5.0 ppb
Heavy Metals (as Pb)	<= 500.0 ppb	<100.0 ppb
Trace Impurities - Iron (Fe)	<= 50.0 ppb	<1.0 ppb
Trace Impurities - Lead (Pb)	<= 0.5 ppb	<0.5 ppb
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	<1.0 ppb
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	<1.0 ppb
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	<0.1 ppb
Trace Impurities - Nickel (Ni)	<= 2.0 ppb	<0.3 ppb
Trace Impurities - Potassium (K)	<= 500.0 ppb	<10.0 ppb
Trace Impurities - Selenium (Se)	<= 50.0 ppb	7.2 ppb
Trace Impurities - Silicon (Si)	<= 100.0 ppb	12.8 ppb
Trace Impurities - Silver (Ag)	<= 1.0 ppb	<1.0 ppb

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker

Material No.: 9673-33
Batch No.: 24I1262013

Test	Specification	Result
Trace Impurities - Sodium (Na)	<= 500.0 ppb	<5.0 ppb
Trace Impurities - Strontium (Sr)	<= 5.0 ppb	<1.0 ppb
Trace Impurities - Tin (Sn)	<= 5.0 ppb	1.1 ppb
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	<1.0 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

J Croak

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

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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.

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.

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5580 Skylane Blvd
Santa Rosa, CA 95403

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(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

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.

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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. : 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.
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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. : 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.)

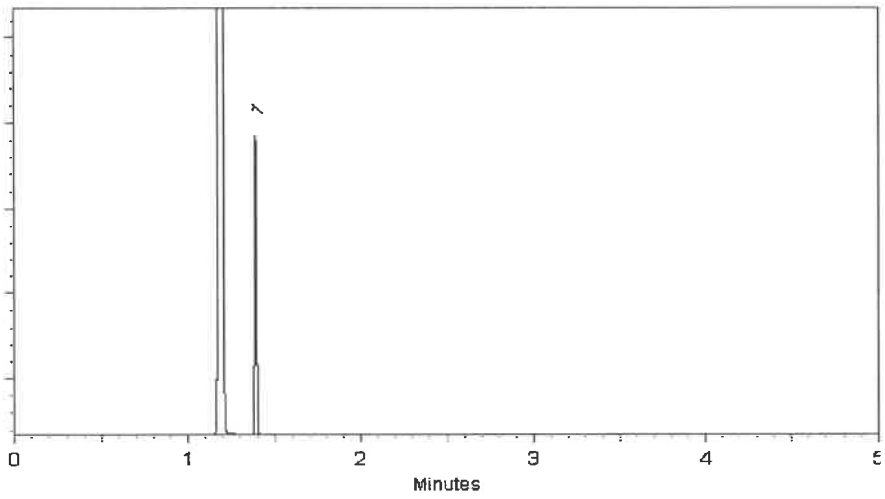
Inj. Temp:
250°C

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.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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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:

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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. : 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.)

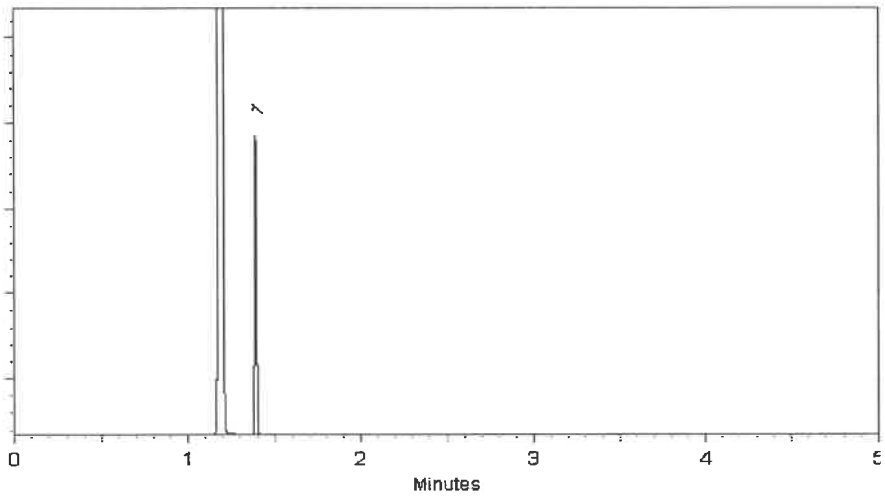
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



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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.
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Certified Uncertainty Value Notes:

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Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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.)

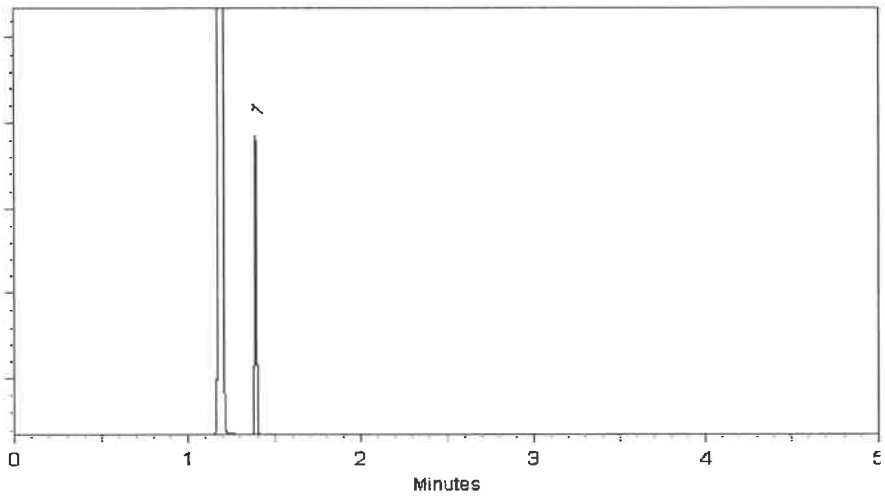
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



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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.
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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:

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Manufacturing Notes:

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 31853 **Lot No.:** A0200655

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11795 ↓ S11808 RC 11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBQ1693	99%	2,007.0 µg/mL	+/- 24.9775

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

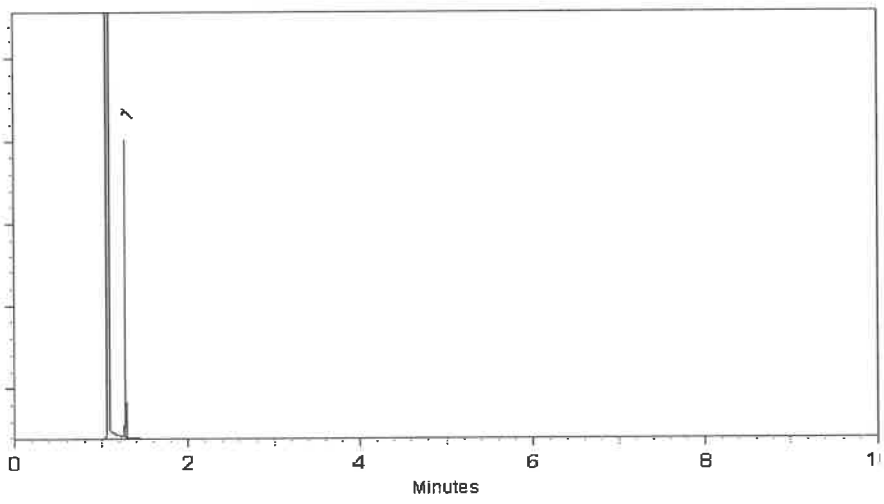
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



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Penelope Riglin - Operations Tech I

Date Mixed: 06-Aug-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
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Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

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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. : 31853 **Lot No.:** A0200655

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11795 ↓ S11808 RC 11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBQ1693	99%	2,007.0 µg/mL	+/- 24.9775

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

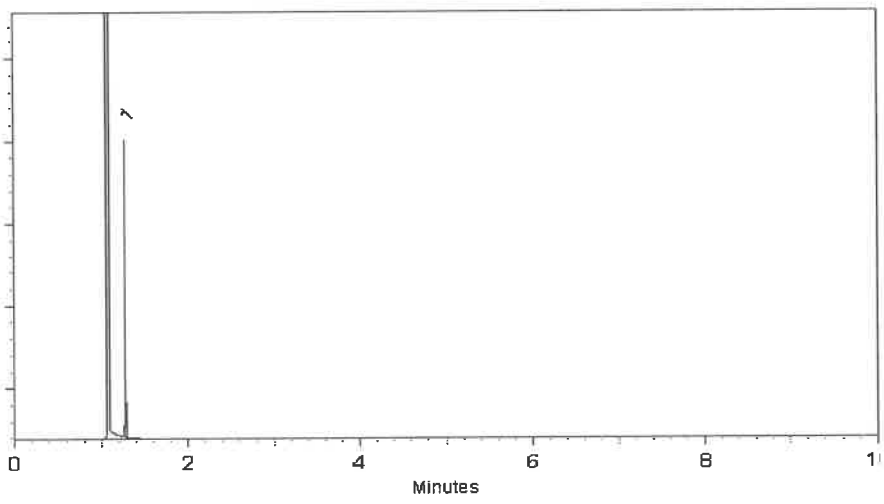
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 06-Aug-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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-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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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.)

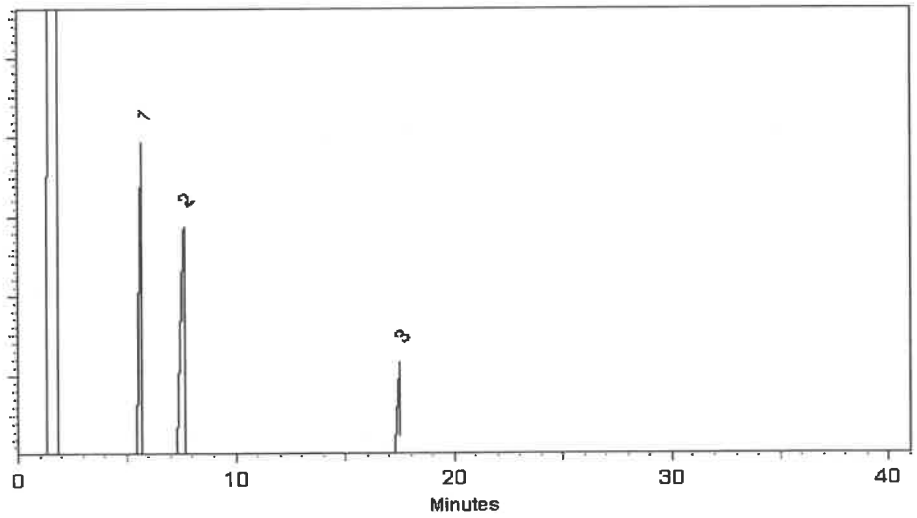
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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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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.)

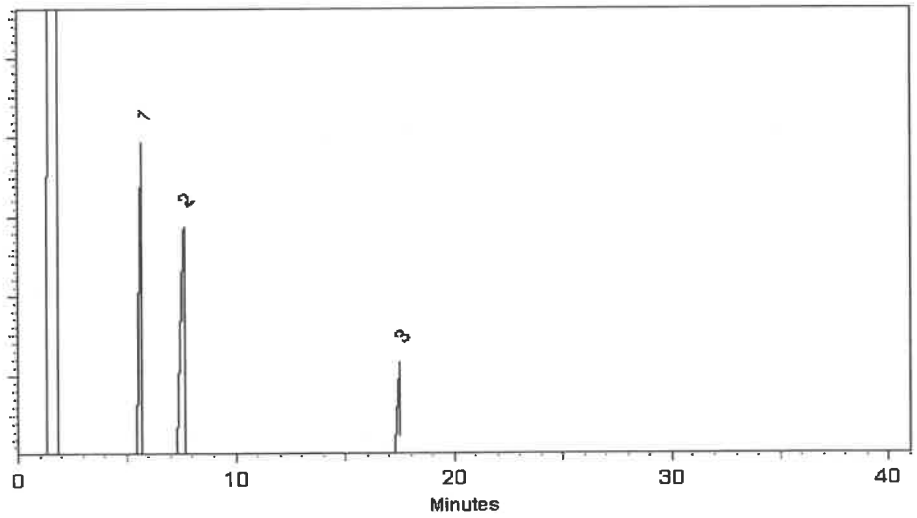
Inj. Temp:
250°C

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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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.)

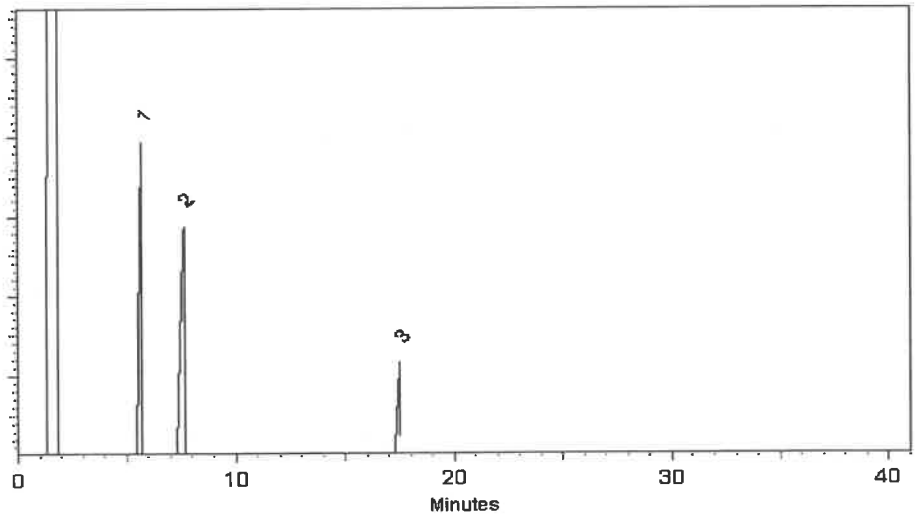
Inj. Temp:
250°C

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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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.)

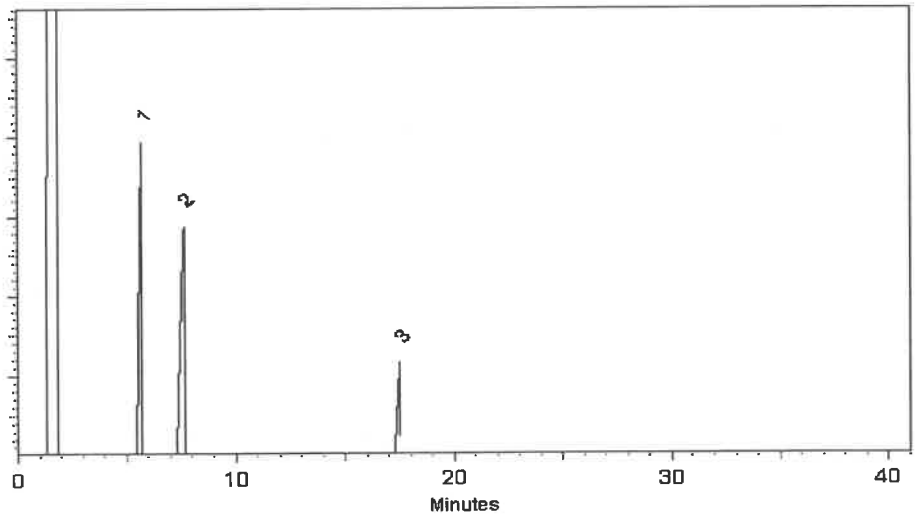
Inj. Temp:
250°C

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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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
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* 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:
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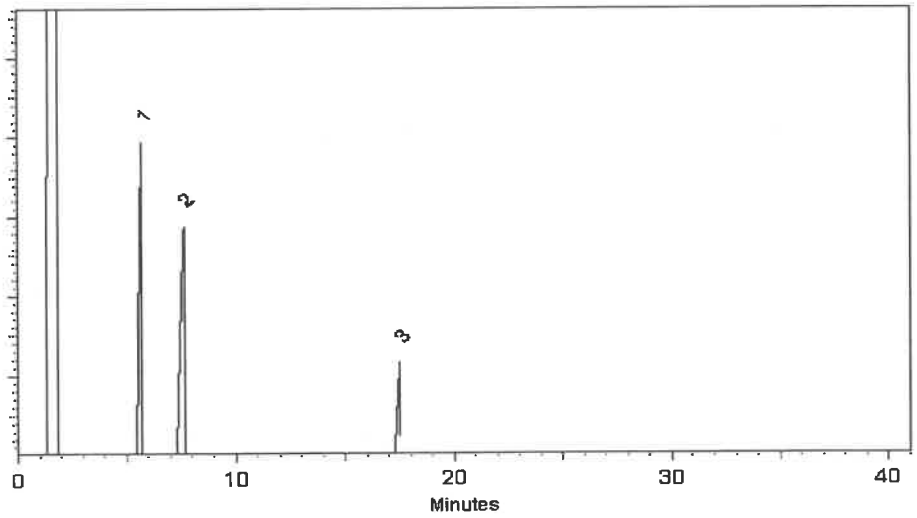
Split Vent:
2 ml/min.

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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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
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
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Carrier Gas:
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Temp. Program:
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@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
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Det. Type:
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Split Vent:
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Inj. Vol
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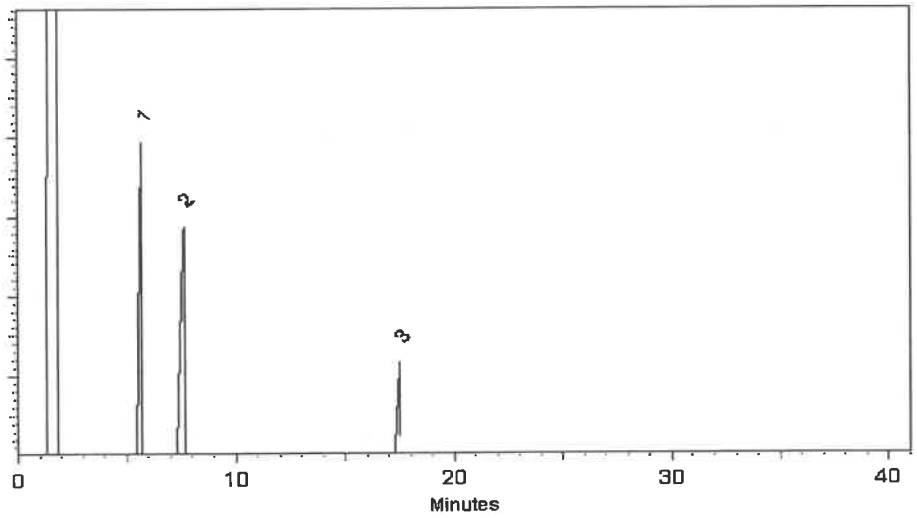

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Penelope Riglin - Operations Tech I

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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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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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.)

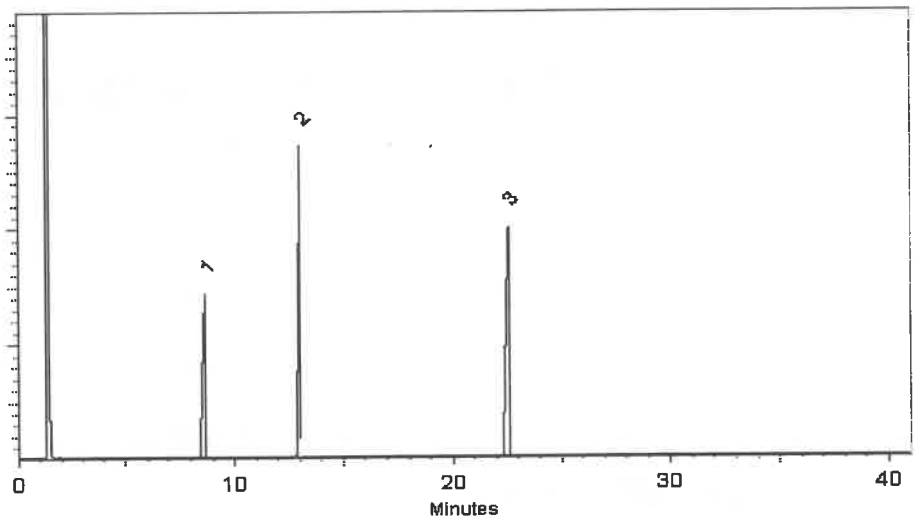
Inj. Temp:
250°C

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

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Split Vent:
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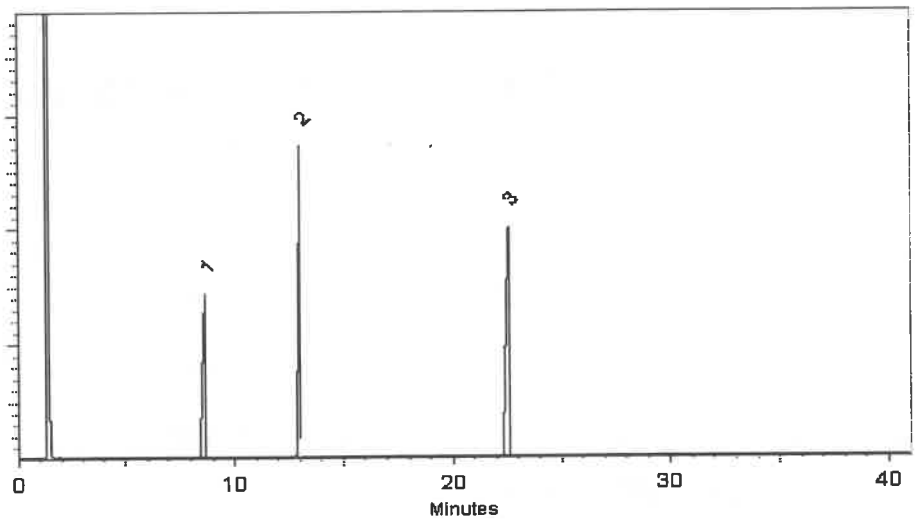

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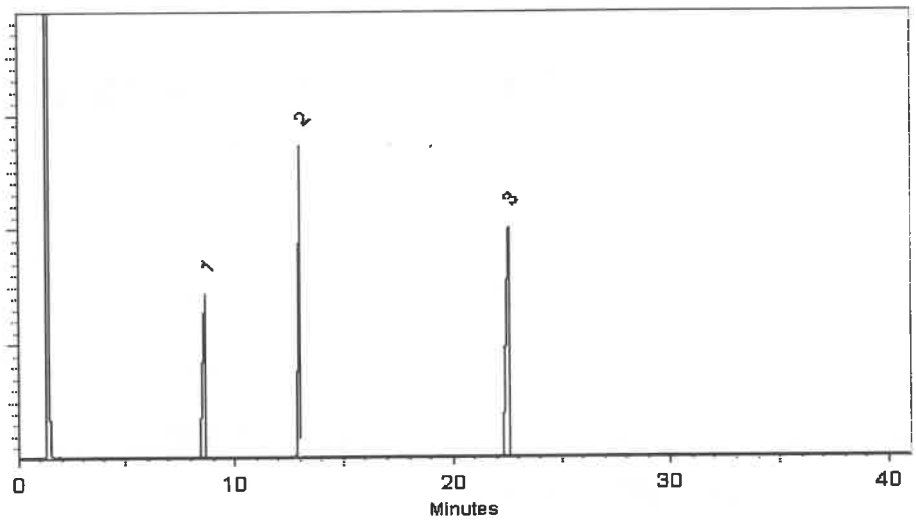

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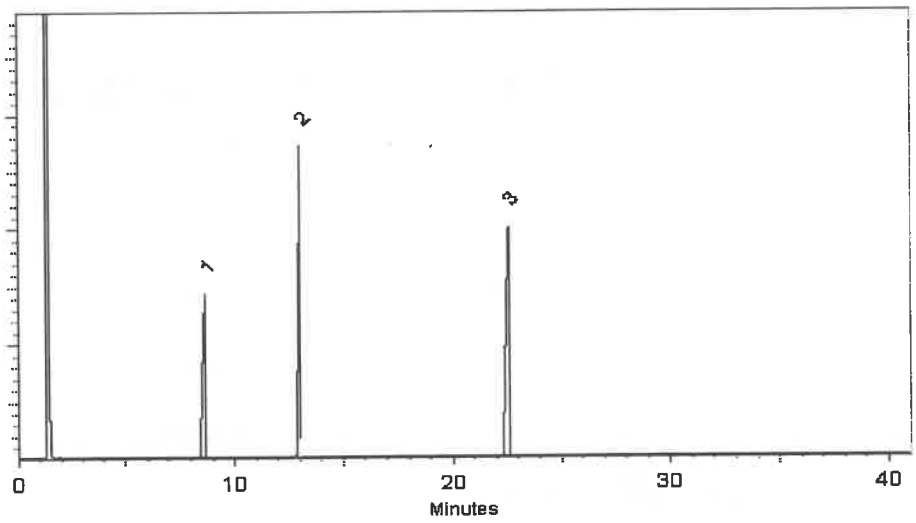

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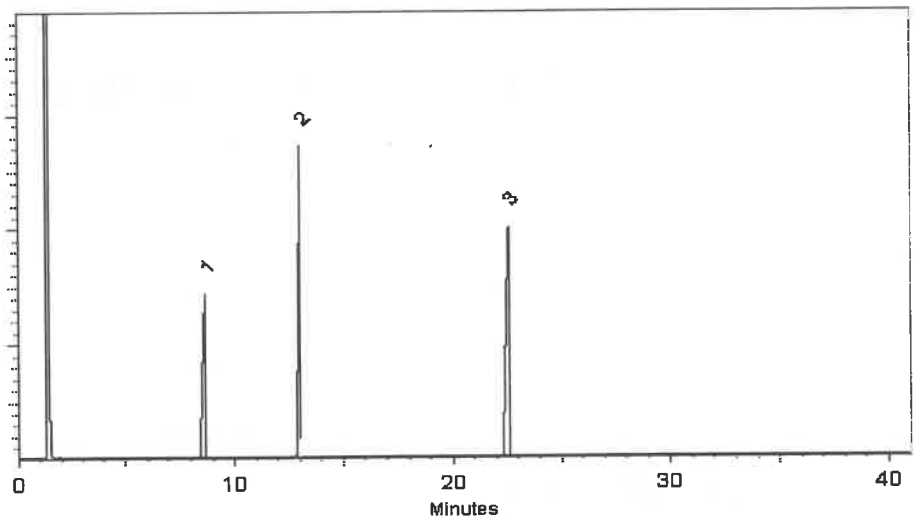

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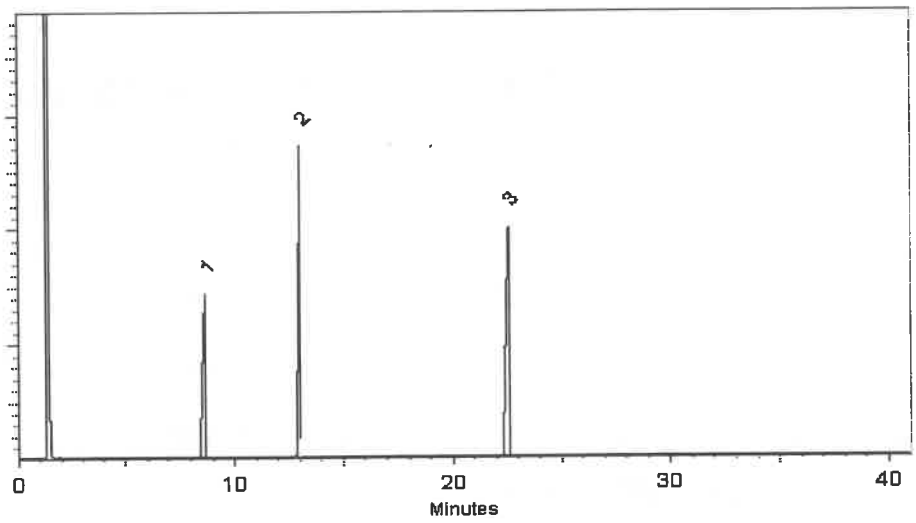

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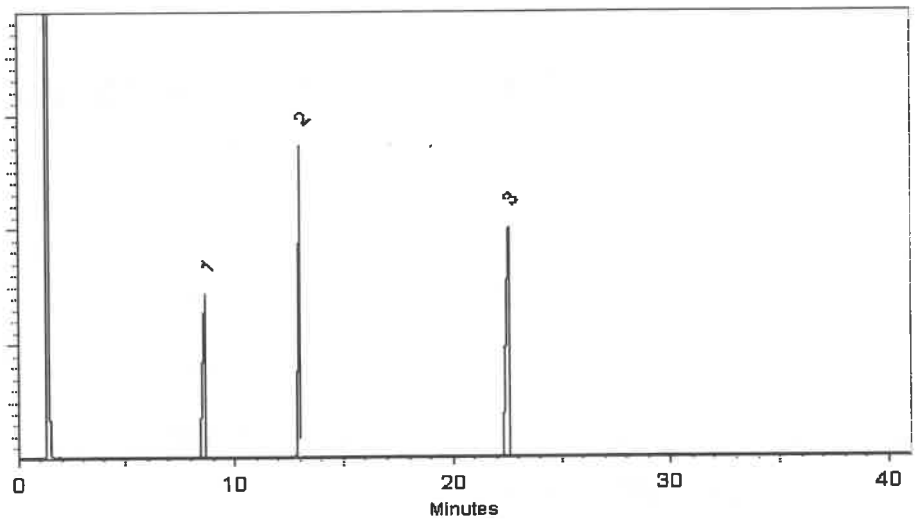

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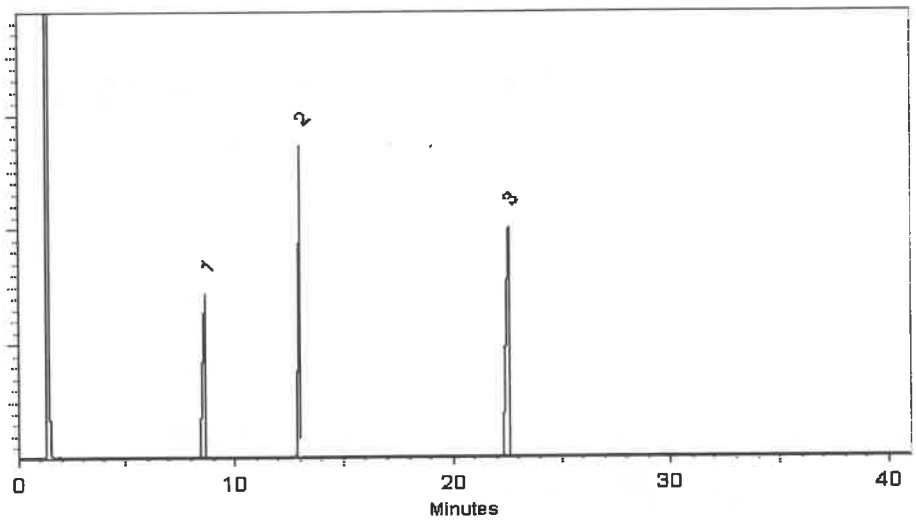

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CPI INTERNATIONAL

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

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: Z-110381-01 **Lot No.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	999.9 ± 13.96
hexachlorobutadiene	87-68-3	97.4	47.1.4P	1000 ± 9.79
hexachlorocyclopentadiene	77-47-4	99.2	48.2.2P	1001 ± 9.8
hexachloroethane	67-72-1	99.9	49.1.4P	1003 ± 9.82
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.4P	999.4 ± 22.23
isophorone	78-59-1	98.9	90.1.4P	999.9 ± 13.85
2-methyl-4,6-dinitrophenol	534-52-1	99.6	107.421.2DP	991 ± 24.09
1-methylnaphthalene	90-12-0	97.1	249.7.5P	999.2 ± 13.95
2-methylnaphthalene	91-57-6	97.4	68.7.2P	1006 ± 22.38
2-methylphenol	95-48-7	99.6	114.7.3P	1001 ± 13.87
3-methylphenol	108-39-4	99.1	115.7.4P	499.7 ± 6.92
4-methylphenol	106-44-5	99.5	116.7.1P	501.2 ± 6.94
naphthalene	91-20-3	99.8	26.9.1P	1018 ± 9.97
2-nitroaniline	88-74-4	99.7	69.29.1P	999.6 ± 9.79
3-nitroaniline	99-09-2	100	70.7.3P	1000 ± 9.74
4-nitroaniline	100-01-6	99.7	71.29.1P	1001 ± 9.8
nitrobenzene	98-95-3	100	94.7.1P	1000 ± 13.85
2-nitrophenol	88-75-5	99.1	108.29.1P	996.5 ± 13.81
4-nitrophenol	100-02-7	100	109.7.1P	1000 ± 13.82
N-nitrosodimethylamine	62-75-9	99.5	57.3.19P	998.5 ± 14.67
N-nitrosodi-n-propylamine	621-64-7	99.8	59.286.1P	996.8 ± 17
pentachlorophenol	87-86-5	99	110.1.7P	1004 ± 13.92
phenanthrene	85-01-8	99.7	27.1.5P	999 ± 12.87
phenol	108-95-2	100	112.7.1P	998.5 ± 13.8
pyrene	129-00-0	99.2	28.9.2P	998.9 ± 9.78
pyridine	110-86-1	100	101.24.1P	999 ± 9.73
2,3,4,6-Tetrachlorophenol	58-90-2	91.8	120.421.1P	996.5 ± 13.92

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: Z-110381-01 **Lot No.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	999.6 ± 9.79
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	999.5 ± 13.85
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	996 ± 13.8

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
Chemist

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CPI INTERNATIONAL

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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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0214021

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,3'-Dichlorobenzidine	91-94-1	S240326RSR	99%	1,004.0 µg/mL	+/- 23.0487
2	Atrazine	1912-24-9	5FYWL	99%	1,005.0 µg/mL	+/- 23.0717
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 µg/mL	+/- 23.0947
4	epsilon-Caprolactam	105-60-2	Y16H012	99%	1,000.0 µg/mL	+/- 22.9569

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12449 ↓ S12508 } RC 7/24/24

Rebecca Gingerich - Operations Tech II

Date Mixed: 18-Jul-2024 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

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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. : 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.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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- 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:

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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. : 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 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:

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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:

- 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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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:

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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.

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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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0214021

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,3'-Dichlorobenzidine	91-94-1	S240326RSR	99%	1,004.0 µg/mL	+/- 23.0487
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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

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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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
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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

General Certified Reference Material Notes

Expiration 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)
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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

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. : 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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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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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
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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

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. : 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:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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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

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:

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Fax: 1-814-353-1309

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Certificate of Analysis

gravimetric

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ISO/IEC 17025 Accredited
Testing Laboratory
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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. : 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

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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

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Catalog No. : 555224 **Lot No.:** A0214017

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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

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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%

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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

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Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

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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

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Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

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Expiration Date : July 31, 2026 **Storage:** 10°C or colder

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Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** A0214017

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,005.0 µg/mL	+/- 29.541899
2	Acetophenone	98-86-2	STBH8205	99%	1,005.0 µg/mL	+/- 29.541899
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,008.0 µg/mL	+/- 29.630084
4	Benzoic acid	65-85-0	MKCR2694	99%	1,010.0 µg/mL	+/- 29.688874
5	Biphenyl	92-52-4	MKCS5928	99%	1,008.0 µg/mL	+/- 29.630084

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12509 ↓ S12568 } RC/ 7/24/24

Jess Hoy - Operations Tech I

Date Mixed: 18-Jul-2024 **Balance:** 1128360905

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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

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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.)

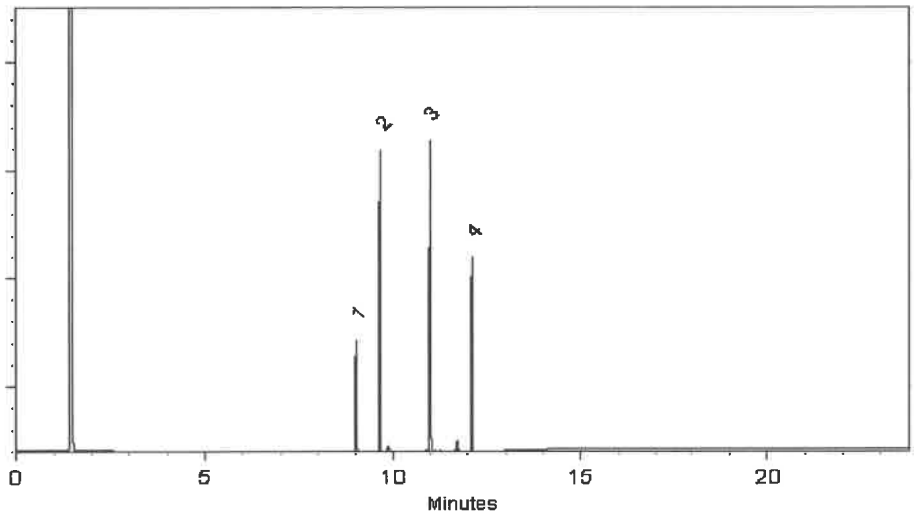
Inj. Temp:
250°C

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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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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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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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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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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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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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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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.

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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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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.

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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.

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-010074-07	525551	-18°C +/- 4°C	Methylene Chloride	9/3/2029	3,3'-Dichlorobenzidine Solution, 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
3,3'-dichlorobenzidine	91-94-1	97.9	74.421.2P	994.7 ± 30.56

This RM is intended for use as a calibration standard or a quality control standard for chromatography equipment such as GC, GC/MS, HPLC, and HPLC/MS. It may also be used for various USEPA, NIOSH and ASTM methods.

Recommended storage container for ampuled products after opening is a 12 mm x 32 mm amber vial with screw cap Teflon lined silicon septum. The modeled % change per day can be calculated using the following:

$$\% \text{ Change} = 116192x^{-2.578} + 40.383e^{-0.03y}$$

where x = boiling point of the most volatile analyte in the mix (in degrees K)
y = boiling point of the solvent (in degrees K)

This model assumes the container is stored at -10 °C and is unopened during storage. The user should determine what the acceptable error for their process is and calculate the maximum number of days the opened ampule should be stored. The minimum sample size recommended for use is 1µL.

S13078 ↓ S13087 } AC 3/10/25

Manufactured by

Raevyn Steele
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

*Not a certified valu

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q2008/09
COC Number 2047098

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: JACOBS
ADDRESS: 412 MT KEMBLE AVE, SUITE 100
CITY MORRISTOWN STATE: NJ ZIP: 07960
ATTENTION: JOHN YNFANTE
PHONE: 281-414-1719 FAX: —

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PRINCETON
PROJECT NO. D3868221 LOCATION: PRINCETON JUNCTION NJ
PROJECT MANAGER: MARY MURPHY
e-mail: MARY.MURPHY@JACOBS.COM
PHONE: 201-936-0586 FAX: —

CLIENT BILLING INFORMATION

BILL TO: MARY.MURPHY@JACOBS.COM PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) ____ DAYS*
HARDCOPY (DATA PACKAGE) ____ DAYS*
EDD: RUSH 2 DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☒ Level 2 (Results + QC)
- ~~Level 3 (Results + QC + Raw Data)~~ KW
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced
- ☐ US EPA CLP
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other
- ☐ EDD FORMAT

ANALYSIS

1. SVOC TCL ~~BNA-20~~ 8270 full
2. DRO 8015M
3. PCBs
4. OXIDIZING LIQ 1040
5. FLASH POINT 1010B
6. PH 9040C
7. VOC TCL ~~-10~~ 8260 full
8. GRO 8015M
9. METALS ICP TAL 6010/7470

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1 E	2 E	3 E	4 E	5 E	6 A/E	7 A/E	8 B/E	9	COMMENTS
1.	IDW-AQ-DRUM-633-05092025	AQ		X	5/9/25	1230	10	X	X	X	X	X	X	X	X		
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

(Rows 2–10 lined out, initialed KW)

Specify Preservatives: A-HCl, B-HNO3, 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. [signature]	5/9/25 15:05	1. [signature] 5-9-25 1505
2.		2.
3. [signature]	5-9-25 1650	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.0° °C

Comments: LEVEL 2 EDD REQUESTED.
Temp 3.0°C (Adjustment factor + 0) IR Gun #1, PH 1-3 LOT# 80A0441

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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 : Q2008 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : Mary I. Murphy
Invoice Name : JACOBS Engineering Grou
Invoice Contact : Mary I. Murphy

Order Date : 5/9/2025 3:21:23 PM
Project Name : Former Schlumberger Site I
Receive DateTime : 5/9/2025 ~~12:00:00~~ AM
Purchase Order : 16:50

Project Mgr :
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2008-01	IDW-AQ-DRUM-633-05092025	Water	05/09/2025	12:30					
					VOC-TCLVOA-10		8260D		2 Bus. Days

Relinquished By :
Date / Time : 5/12/25 1000

Received By :
Date / Time : 05/12/25 10:20

Rpt # 5

Storage Area : VOA Refridgerator Room