



Cover Page

Order ID : P1747

Project ID : Walter Gladwin Recreation Center, Bronx, NY

Client : LiRo Engineers, Inc.

Lab Sample Number

P1747-01
P1747-02
P1747-03
P1747-04
P1747-05
P1747-06
P1747-07
P1747-08
P1747-09
P1747-10

Client Sample Number

MW-01
MW-01-DUP
MW-01
MW-02
TWP-04
TRIP-BLANK-1
MW-01
MW-01-DUP
MW-02
TWP-04

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: 3/28/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

LiRo Engineers, Inc.

Project Name: Walter Gladwin Recreation Center, Bronx, NY

Project # N/A

Chemtech Project # P1747

Test Name: SVOC-NYCD

A. Number of Samples and Date of Receipt:

10 Water samples were received on 03/13/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCD Discharge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCL VOA-10. This data package contains results for SVOC-NYCD.

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 df. The samples were analyzed on instrument BNA_M using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GG. The analysis of SVOC-NYCD was based on method 625.1 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 MW-01 [2-Fluorophenol - 42%, Phenol-d6 - 23%], MW-01RE [2-Fluorophenol - 40% and Phenol-d6 - 22%], All the failure samples in surrogates were reanalyzed to confirm the results as per method and reported in the data.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.



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E. Additional Comments:

As per method, MS/MSD is required to be performed with sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.

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

F. Manual Integration Comments:

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

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

Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A**QA REVIEW GENERAL DOCUMENTATION**

Project #: P1747

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 Custody

✓

Were the samples received within hold time

✓

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

✓**ANALYTICAL:**

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓1st Level QA Review Signature: PRIYANKA DAVE

Date: 03/28/2024

2nd Level QA Review Signature: _____

Date: _____



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LAB CHRONICLE

OrderID: P1747	OrderDate: 3/13/2024 12:28:00 PM
Client: LiRo Engineers, Inc.	Project: Walter Gladwin Recreation Center, Bronx, NY
Contact: Steve Frank	Location: I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	MW-01	Water	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24
P1747-02	MW-01-DUP	Water	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24
P1747-03	MW-01	Water	SVOC-NYCD	625.1	03/13/24	03/14/24	03/15/24	03/13/24
P1747-03RE	MW-01RE	Water	SVOC-NYCD	625.1	03/13/24	03/14/24	03/18/24	03/13/24
P1747-04	MW-02	Water	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24
P1747-05	TWP-04	Water	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24



Hit Summary Sheet
SW-846

SDG No.: P1747
Client: LiRo Engineers, Inc.

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

QC SUMMARY



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Surrogate Summary

SW-846

SDG No.: P1747

Client: LiRo Engineers, Inc.

Analytical Method: 625.1

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P1747-03	MW-01	2-Fluorophenol	100	41.9	42	*	60	140
		Phenol-d6	100	22.8	23	*	60	140
		Nitrobenzene-d5	100	87.3	87		60	140
		2-Fluorobiphenyl	100	86.6	87		60	140
		2,4,6-Tribromophenol	100	98.9	99		60	140
P1747-03RE	MW-01RE	Terphenyl-d14	100	62.4	62		60	140
		2-Fluorophenol	100	40.2	40	*	60	140
		Phenol-d6	100	22.4	22	*	60	140
		Nitrobenzene-d5	100	94.8	95		60	140
		2-Fluorobiphenyl	100	96.0	96		60	140
PB159613BL	PB159613BL	2,4,6-Tribromophenol	100	98.4	98		60	140
		Terphenyl-d14	100	84.2	84		60	140
		2-Fluorophenol	100	91.8	92		60	140
		Phenol-d6	100	84.3	84		60	140
		Nitrobenzene-d5	100	84.1	84		60	140
PB159613BS	PB159613BS	2-Fluorobiphenyl	100	85.8	86		60	140
		2,4,6-Tribromophenol	100	85.2	85		60	140
		Terphenyl-d14	100	77.7	78		60	140
		2-Fluorophenol	100	86.3	86		60	140
		Phenol-d6	100	80.5	81		60	140
PB159613BSD	PB159613BSD	Nitrobenzene-d5	100	82.2	82		60	140
		2-Fluorobiphenyl	100	82.1	82		60	140
		2,4,6-Tribromophenol	100	90.7	91		60	140
		Terphenyl-d14	100	76.6	77		60	140
		2-Fluorophenol	100	84.1	84		60	140
		Phenol-d6	100	78.3	78		60	140
		Nitrobenzene-d5	100	77.7	78		60	140
		2-Fluorobiphenyl	100	79.4	79		60	140
		2,4,6-Tribromophenol	100	87.2	87		60	140
		Terphenyl-d14	100	73.3	73		60	140



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

SDG No.: P1747

Client: LiRo Engineers, Inc.

Analytical Method: 625.1 DataFile: BF137612.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB159613BS	Phenol	50	42.0	ug/L	84				48	130	
	1,2,4-Trichlorobenzene	50	46.8	ug/L	94				44	142	
	Naphthalene	50	43.9	ug/L	88				70	130	



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

SDG No.: P1747

Client: LiRo Engineers, Inc.

Analytical Method: 625.1 DataFile: BF137613.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits	
								Qual	Low	High	RPD
PB159613BSD	Phenol	50	40.4	ug/L	81	4			48	130	20
	1,2,4-Trichlorobenzene	50	44.3	ug/L	89	5			44	142	20
	Naphthalene	50	41.7	ug/L	83	5			70	130	20



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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB159613BL

Lab Name: CHEMTECH

Contract: LIRO01

Lab Code: CHEM Case No.: P1747

SAS No.: P1747 SDG NO.: P1747

Lab File ID: BF137611.D

Lab Sample ID: PB159613BL

Instrument ID: BNA_F

Date Extracted: 03/14/2024

Matrix: (soil/water) Water

Date Analyzed: 03/15/2024

Level: (low/med) LOW

Time Analyzed: 16:03

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB159613BS	PB159613BS	BF137612.D	03/15/2024
PB159613BSD	PB159613BSD	BF137613.D	03/15/2024
MW-01	P1747-03	BF137615.D	03/15/2024

COMMENTS:



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: LIRO01Lab Code: CHEMSAS No.: P1747 SDG NO.: P1747Lab File ID: BF137438.DDFTPP Injection Date: 02/29/2024Instrument ID: BNA_FDFTPP Injection Time: 12:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	41.3
68	Less than 2.0% of mass 69	0.6 (1.5) 1
69	Mass 69 relative abundance	40.2
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	45.4
197	Less than 2.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	25.5
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	14
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.1 (19.1) 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	BF137439.D	02/29/2024	12:44
SSTDICC005	SSTDICC005	BF137440.D	02/29/2024	13:13
SSTDICC010	SSTDICC010	BF137441.D	02/29/2024	13:43
SSTDICC020	SSTDICC020	BF137442.D	02/29/2024	14:12
SSTDICCC040	SSTDICCC040	BF137443.D	02/29/2024	14:41
SSTDICC050	SSTDICC050	BF137444.D	02/29/2024	16:13
SSTDICC060	SSTDICC060	BF137445.D	02/29/2024	16:43
SSTDICC080	SSTDICC080	BF137446.D	02/29/2024	17:14



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: LIRO01Lab Code: CHEMSAS No.: P1747 SDG NO.: P1747Lab File ID: BF137609.DDFTPP Injection Date: 03/15/2024Instrument ID: BNA_FDFTPP Injection Time: 13:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	35.3
68	Less than 2.0% of mass 69	0.5 (1.4) 1
69	Mass 69 relative abundance	35
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	43.1
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	25.1
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	15.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	20.1 (19.5) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF137610.D	03/15/2024	15:34
PB159613BL	PB159613BL	BF137611.D	03/15/2024	16:03
PB159613BS	PB159613BS	BF137612.D	03/15/2024	16:33
PB159613BSD	PB159613BSD	BF137613.D	03/15/2024	17:02
MW-01	P1747-03	BF137615.D	03/15/2024	18:08



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: LIRO01Lab Code: CHEMSAS No.: P1747 SDG NO.: P1747Lab File ID: BM044594.DDFTPP Injection Date: 03/13/2024Instrument ID: BNA_MDFTPP Injection Time: 13:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.4
68	Less than 2.0% of mass 69	0.7 (1.7) 1
69	Mass 69 relative abundance	41.7
70	Less than 2.0% of mass 69	0.1 (0.3) 1
127	10.0 - 80.0% of mass 198	50
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	22.6
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	11.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	13.4 (19.1) 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	BM044595.D	03/13/2024	13:44
SSTDICC005	SSTDICC005	BM044596.D	03/13/2024	14:20
SSTDICC010	SSTDICC010	BM044597.D	03/13/2024	14:56
SSTDICC020	SSTDICC020	BM044598.D	03/13/2024	15:33
SSTDICCC040	SSTDICCC040	BM044599.D	03/13/2024	16:09
SSTDICC050	SSTDICC050	BM044600.D	03/13/2024	16:46
SSTDICC060	SSTDICC060	BM044601.D	03/13/2024	17:22
SSTDICC080	SSTDICC080	BM044602.D	03/13/2024	17:59



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: LIRO01Lab Code: CHEMSAS No.: P1747 SDG NO.: P1747Lab File ID: BM044653.DDFTPP Injection Date: 03/18/2024Instrument ID: BNA_MDFTPP Injection Time: 11:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.5
68	Less than 2.0% of mass 69	0.7 (1.6) 1
69	Mass 69 relative abundance	42.6
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	50.9
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 60.0% of mass 198	23.9
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	13
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.8 (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
SSTDCCC040	SSTDCCC040	BM044654.D	03/18/2024	11:50
MW-01RE	P1747-03RE	BM044656.D	03/18/2024	13:12



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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P1747 SAS No.: P1747 SDG NO.: P1747

EPA Sample No.: SSTDCCC040 Date Analyzed: 03/15/2024

Lab File ID: BF137610.D Time Analyzed: 15:34

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	156491	6.728	579710	8.01	317075	9.76
UPPER LIMIT	312982	7.228	1159420	8.51	634150	10.263
LOWER LIMIT	78245.5	6.228	289855	7.51	158538	9.263
EPA SAMPLE NO.						
01 PB159613BL	164876	6.73	640676	8.00	350327	9.76
02 PB159613BS	174702	6.73	662837	8.01	361357	9.76
03 MW-01	122193	6.72	480505	8.00	271859	9.76
04 PB159613BSD	177128	6.73	685431	8.01	367798	9.76

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.: P1747 SAS No.: P1747 SDG NO.: P1747

EPA Sample No.: SSTDCCC040 Date Analyzed: 03/15/2024

Lab File ID: BF137610.D Time Analyzed: 15:34

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	518790	11.245	315670	13.874	268004	15.298
UPPER LIMIT	1037580	11.745	631340	14.374	536008	15.798
LOWER LIMIT	259395	10.745	157835	13.374	134002	14.798
EPA SAMPLE NO.						
01 PB159613BL	572257	11.24	350600	13.87	288694	15.30
02 PB159613BS	592768	11.25	363148	13.88	315730	15.30
03 MW-01	476309	11.24	380092	13.87	326161	15.30
04 PB159613BSD	614466	11.25	368786	13.88	320365	15.30

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH
Lab Code: CHEM Case No.: P1747 SAS No.: P1747 SDG NO.: P1747
EPA Sample No.: SSTDCCC040 Date Analyzed: 03/18/2024
Lab File ID: BM044654.D Time Analyzed: 11:50
Instrument ID: BNA_M GC Column: ZB-GR ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	181490	7.698	729361	10.48	422995	14.34
UPPER LIMIT	362980	8.198	1458720	10.975	845990	14.839
LOWER LIMIT	90745	7.198	364681	9.975	211498	13.839
EPA SAMPLE NO.						
01 MW-01RE	202767	7.70	772524	10.48	428984	14.34

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.: P1747 SAS No.: P1747 SDG NO.: P1747

EPA Sample No.: SSTDCCC040 Date Analyzed: 03/18/2024

Lab File ID: BM044654.D Time Analyzed: 11:50

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	831298	17.098	768575	21.297	882881	23.544
UPPER LIMIT	1662600	17.598	1537150	21.797	1765760	24.044
LOWER LIMIT	415649	16.598	384288	20.797	441441	23.044
EPA SAMPLE NO.						
01 MW-01RE	830911	17.10	796584	21.30	943523	23.54

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



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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-03	Matrix:	Water
Analytical Method:	625.1	% Solid:	0
Sample Wt/Vol:	970	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type :		Decanted :	N
Injection Volume :		Level :	LOW
Prep Method :	3510C	GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF137615.D	1	03/14/24 11:40	03/15/24 18:08	PB159613

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
108-95-2	Phenol	0.96	U	0.96	5.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.20	ug/L
91-20-3	Naphthalene	1.10	U	1.10	5.20	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	41.9	*	60 - 140	42%	SPK: 100
13127-88-3	Phenol-d6	22.8	*	60 - 140	23%	SPK: 100
4165-60-0	Nitrobenzene-d5	87.3		60 - 140	87%	SPK: 100
321-60-8	2-Fluorobiphenyl	86.6		60 - 140	87%	SPK: 100
118-79-6	2,4,6-Tribromophenol	98.9		60 - 140	99%	SPK: 100
1718-51-0	Terphenyl-d14	62.4		60 - 140	62%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	122000		6.722		
1146-65-2	Naphthalene-d8	481000		8.004		
15067-26-2	Acenaphthene-d10	272000		9.757		
1517-22-2	Phenanthrene-d10	476000		11.239		
1719-03-5	Chrysene-d12	380000		13.874		
1520-96-3	Perylene-d12	326000		15.298		

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\BF031524\
Data File : BF137615.D
Acq On : 15 Mar 2024 18:08
Operator : CG\JU
Sample : P1747-03
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-01

Quant Time: Mar 15 18:37:42 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.722	152	122193	20.000	ng	0.00
21) Naphthalene-d8	8.004	136	480505	20.000	ng	0.00
39) Acenaphthene-d10	9.757	164	271859	20.000	ng	0.00
64) Phenanthrene-d10	11.239	188	476309	20.000	ng	0.00
76) Chrysene-d12	13.874	240	380092	20.000	ng	0.00
86) Perylene-d12	15.298	264	326161	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.328	112	338210	41.920	ng	0.00
7) Phenol-d6	6.357	99	264941	22.750	ng	-0.01
23) Nitrobenzene-d5	7.292	82	902992	87.318	ng	0.00
42) 2,4,6-Tribromophenol	10.545	330	236143	98.913	ng	0.00
45) 2-Fluorobiphenyl	9.086	172	1504691	86.640	ng	0.00
79) Terphenyl-d14	12.827	244	1726159	62.449	ng	0.00

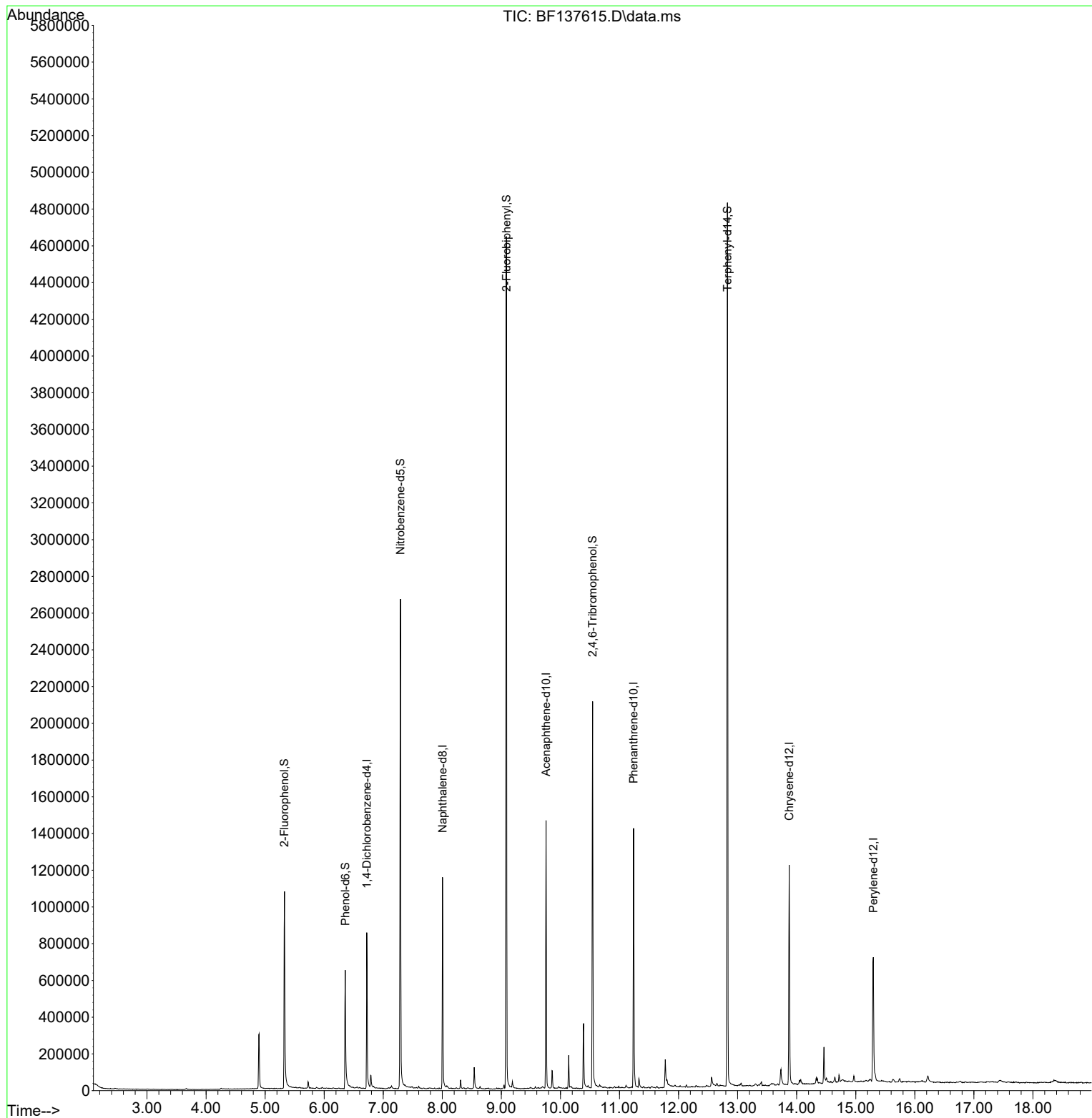
Target Compounds	Qvalue

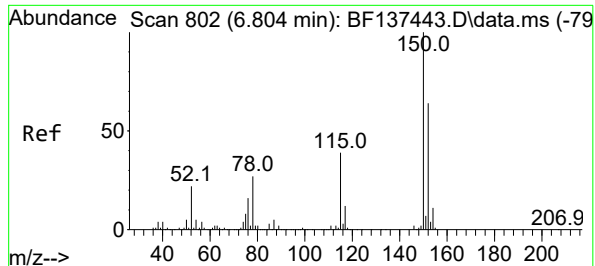
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137615.D
Acq On : 15 Mar 2024 18:08
Operator : CG\JU
Sample : P1747-03
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
MW-01

Quant Time: Mar 15 18:37:42 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration

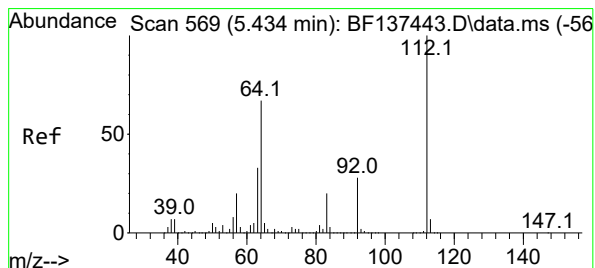
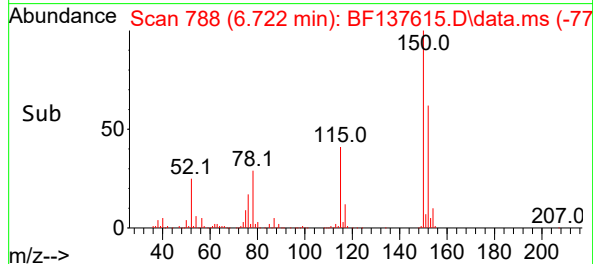
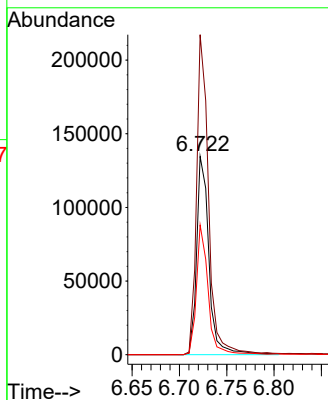
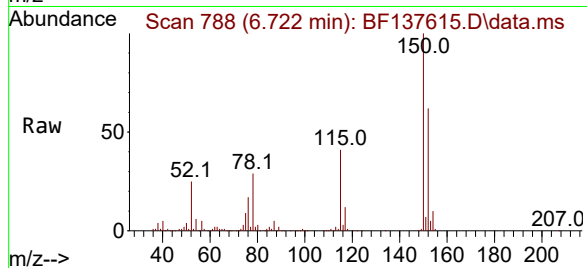




#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.722 min Scan# 71
Delta R.T. -0.006 min
Lab File: BF137615.D
Acq: 15 Mar 2024 18:08

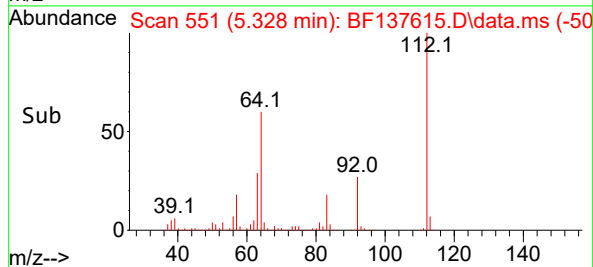
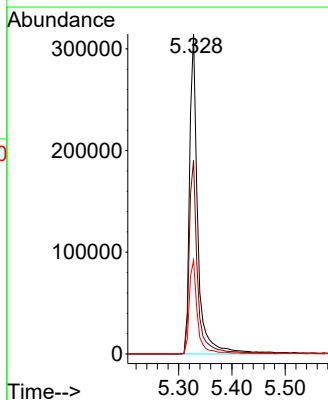
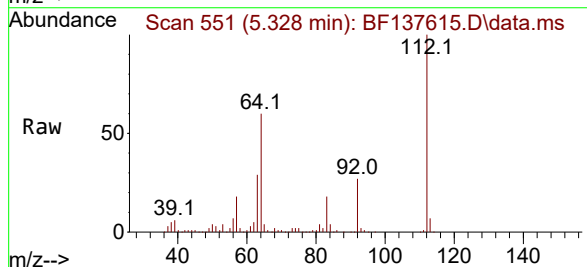
Instrument :
BNA_F
ClientSampleId :
MW-01

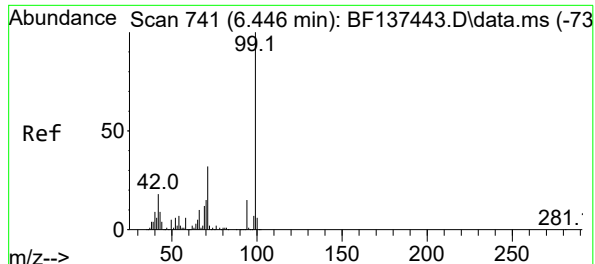
Tgt Ion:152 Resp: 122193
Ion Ratio Lower Upper
152 100
150 161.4 125.8 188.6
115 65.4 48.8 73.2



#5
2-Fluorophenol
Concen: 41.920 ng
RT: 5.328 min Scan# 551
Delta R.T. -0.006 min
Lab File: BF137615.D
Acq: 15 Mar 2024 18:08

Tgt Ion:112 Resp: 338210
Ion Ratio Lower Upper
112 100
64 60.5 53.4 80.2
63 29.2 26.2 39.2

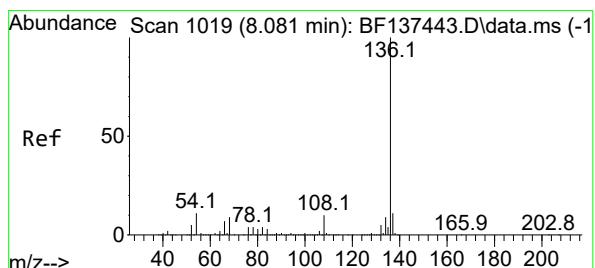
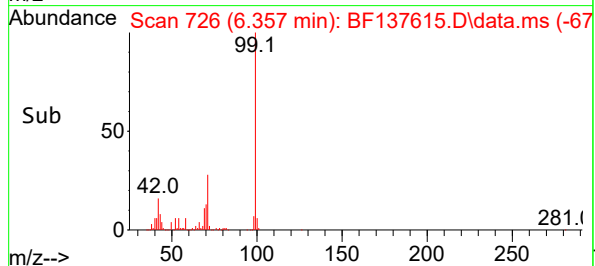
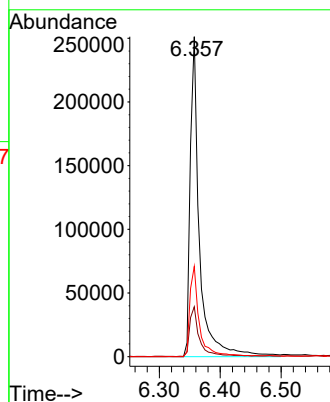
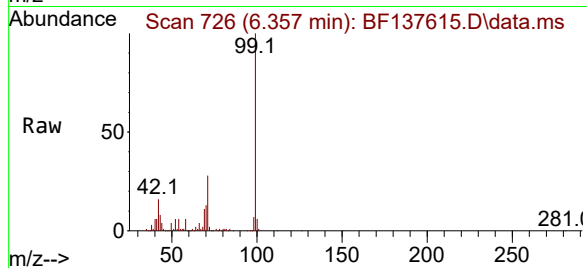




#7
Phenol-d6
Concen: 22.750 ng
RT: 6.357 min Scan# 71
Delta R.T. -0.012 min
Lab File: BF137615.D
Acq: 15 Mar 2024 18:08

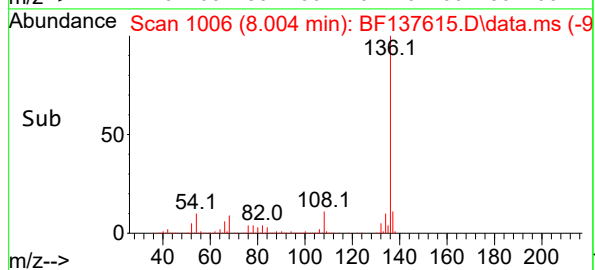
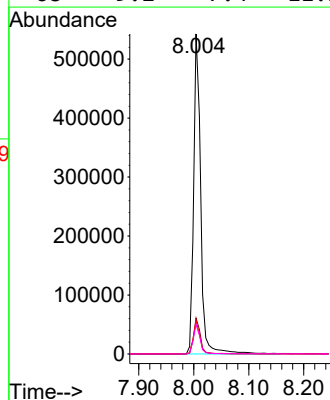
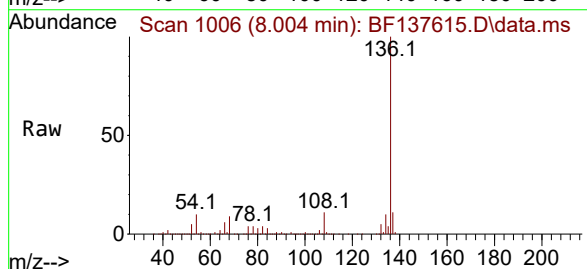
Instrument :
BNA_F
ClientSampleId :
MW-01

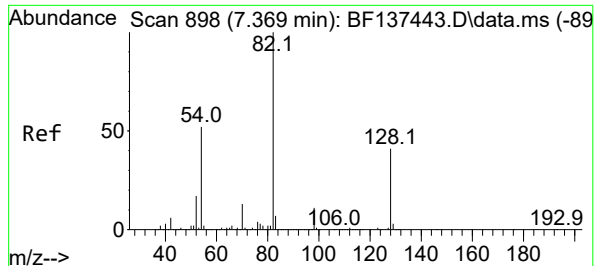
Tgt Ion: 99 Resp: 264941
Ion Ratio Lower Upper
99 100
42 15.6 14.6 21.8
71 28.2 25.3 37.9



#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.004 min Scan# 1006
Delta R.T. -0.006 min
Lab File: BF137615.D
Acq: 15 Mar 2024 18:08

Tgt Ion: 136 Resp: 480505
Ion Ratio Lower Upper
136 100
137 11.2 9.1 13.7
54 10.4 8.5 12.7
68 9.2 7.4 11.2





#23

Nitrobenzene-d5

Concen: 87.318 ng

RT: 7.292 min Scan# 81

Delta R.T. -0.006 min

Lab File: BF137615.D

Acq: 15 Mar 2024 18:08

Instrument :

BNA_F

ClientSampleId :

MW-01

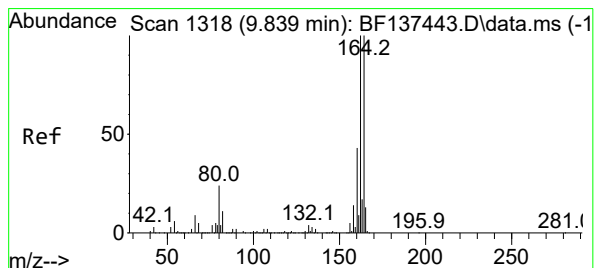
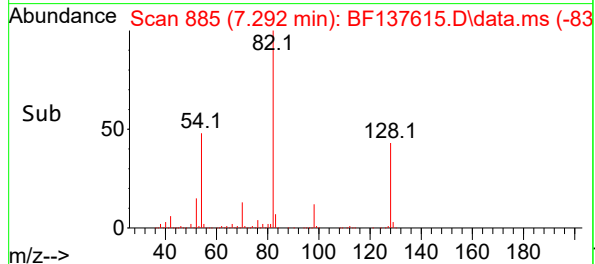
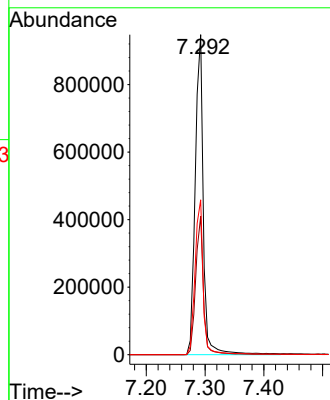
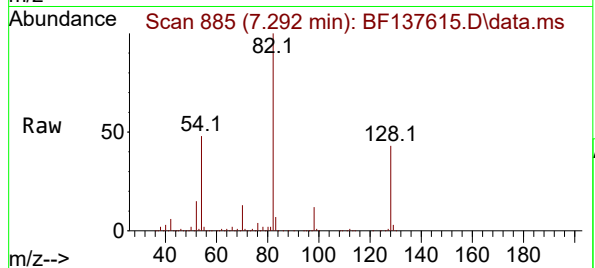
Tgt Ion: 82 Resp: 902992

Ion Ratio Lower Upper

82 100

128 43.3 32.5 48.7

54 48.4 41.5 62.3



#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.757 min Scan# 1304

Delta R.T. -0.006 min

Lab File: BF137615.D

Acq: 15 Mar 2024 18:08

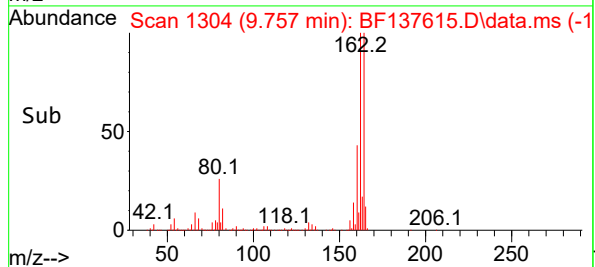
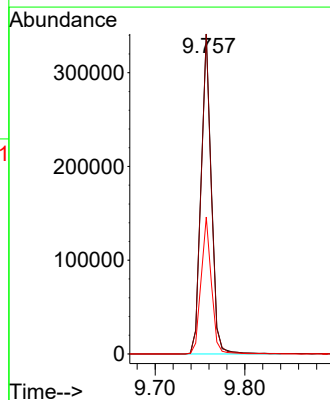
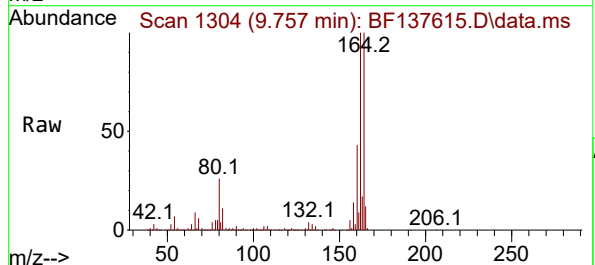
Tgt Ion: 164 Resp: 271859

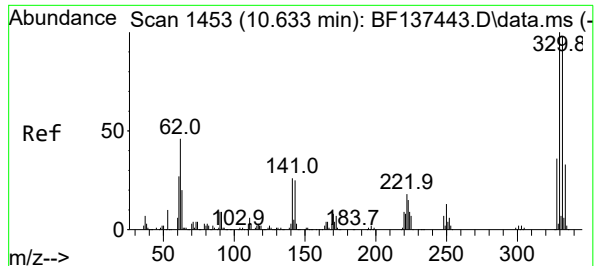
Ion Ratio Lower Upper

164 100

162 100.0 79.8 119.8

160 42.8 34.4 51.6





#42

2,4,6-Tribromophenol

Concen: 98.913 ng

RT: 10.545 min Scan# 1453

Delta R.T. -0.006 min

Lab File: BF137615.D

Acq: 15 Mar 2024 18:08

Instrument :

BNA_F

ClientSampleId :

MW-01

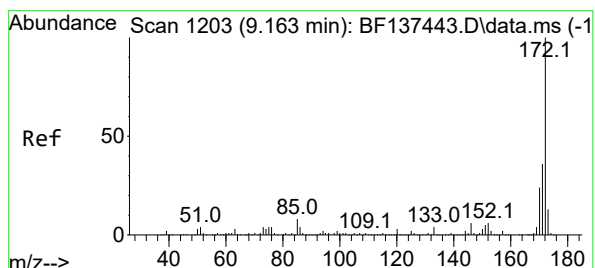
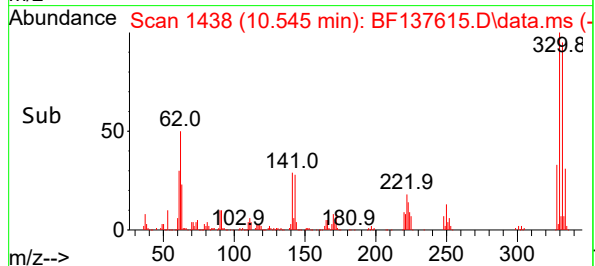
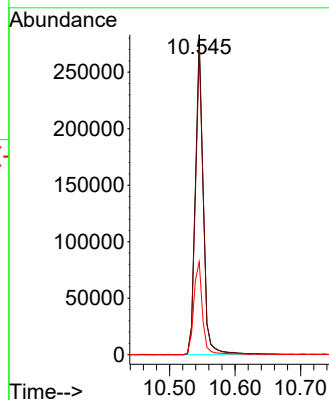
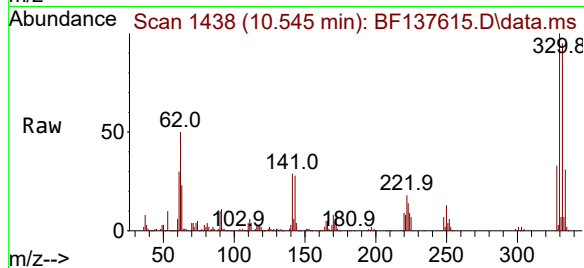
Tgt Ion:330 Resp: 236143

Ion Ratio Lower Upper

330 100

332 96.8 78.0 117.0

141 32.4 27.3 40.9



#45

2-Fluorobiphenyl

Concen: 86.640 ng

RT: 9.086 min Scan# 1190

Delta R.T. -0.000 min

Lab File: BF137615.D

Acq: 15 Mar 2024 18:08

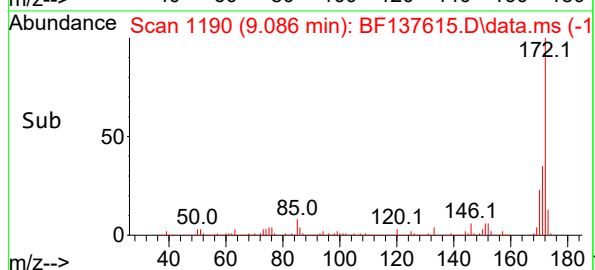
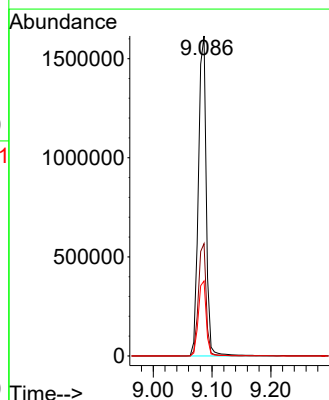
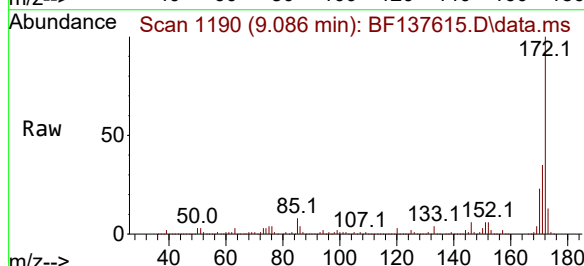
Tgt Ion:172 Resp: 1504691

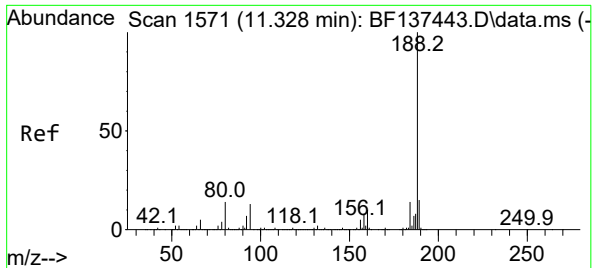
Ion Ratio Lower Upper

172 100

171 35.1 28.5 42.7

170 23.5 19.0 28.6

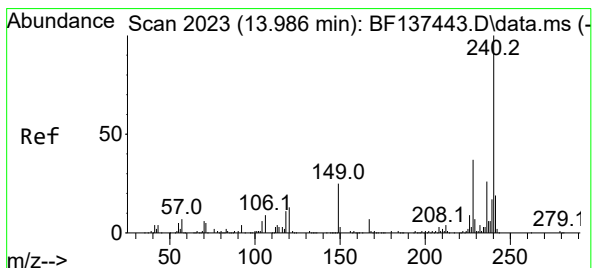
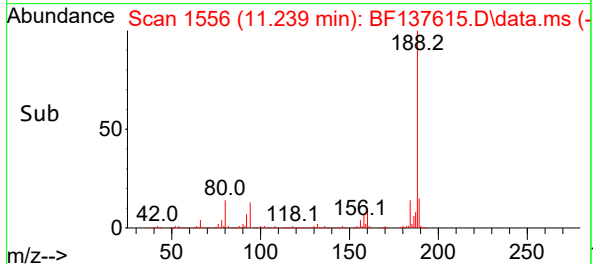
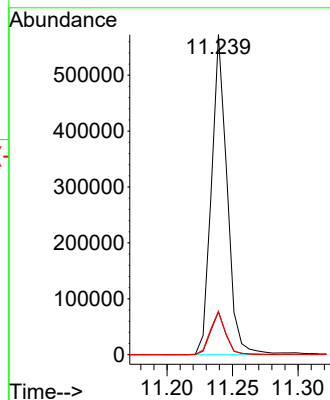
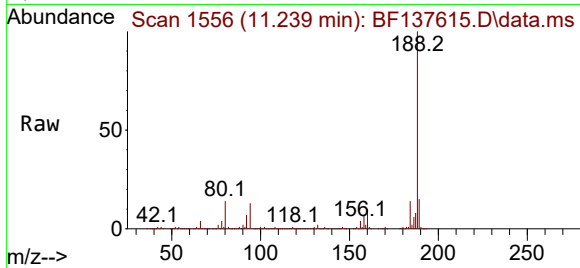




#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.239 min Scan# 11
Delta R.T. -0.000 min
Lab File: BF137615.D
Acq: 15 Mar 2024 18:08

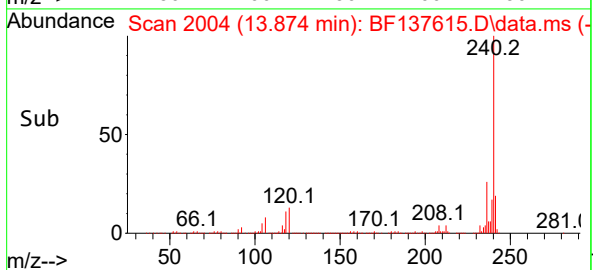
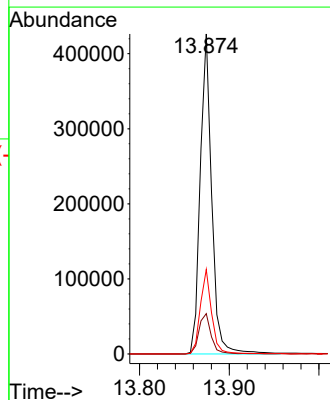
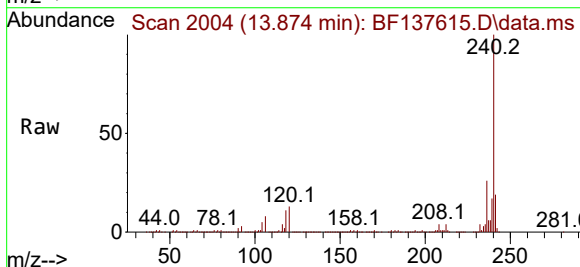
Instrument :
BNA_F
ClientSampleId :
MW-01

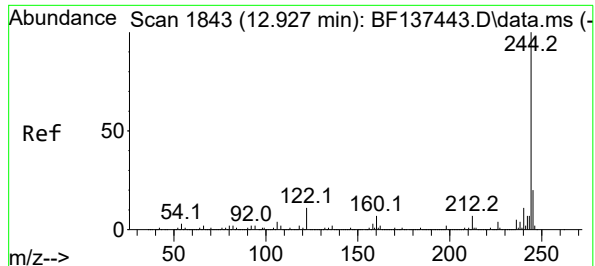
Tgt Ion:188 Resp: 476309
Ion Ratio Lower Upper
188 100
94 13.3 10.6 15.8
80 13.6 11.5 17.3



#76
Chrysene-d12
Concen: 20.000 ng
RT: 13.874 min Scan# 2004
Delta R.T. -0.000 min
Lab File: BF137615.D
Acq: 15 Mar 2024 18:08

Tgt Ion:240 Resp: 380092
Ion Ratio Lower Upper
240 100
120 12.6 10.4 15.6
236 26.4 20.9 31.3

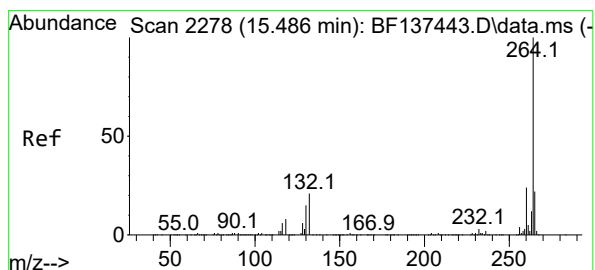
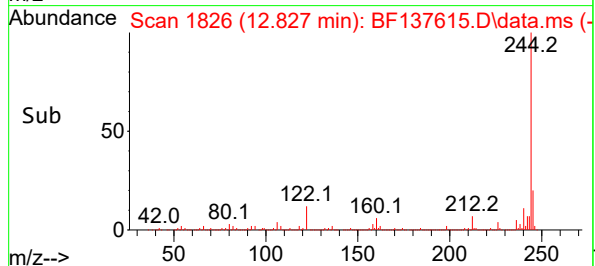
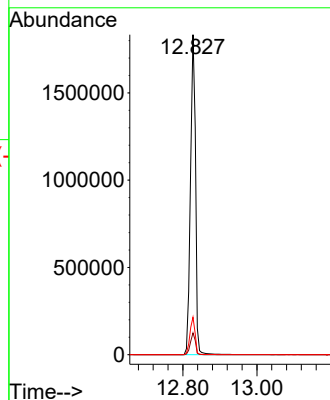
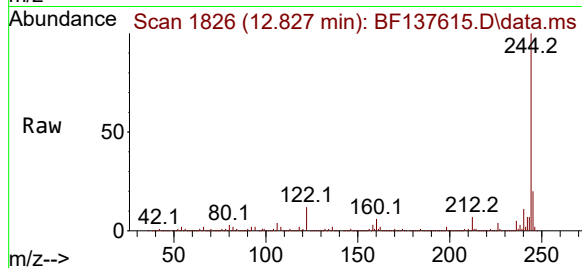




#79
 Terphenyl-d14
 Concen: 62.449 ng
 RT: 12.827 min Scan# 1843
 Delta R.T. -0.000 min
 Lab File: BF137615.D
 Acq: 15 Mar 2024 18:08

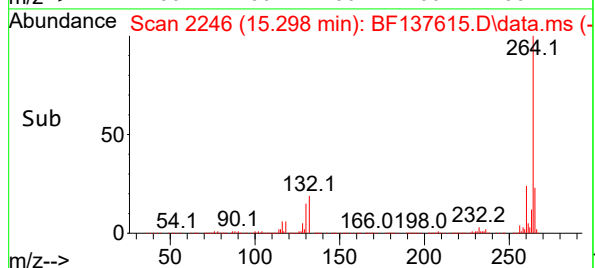
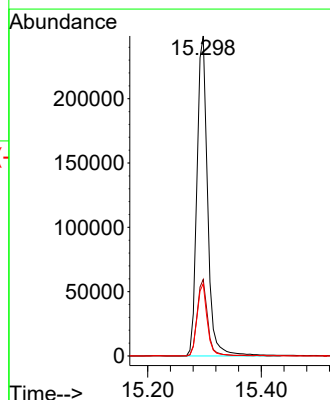
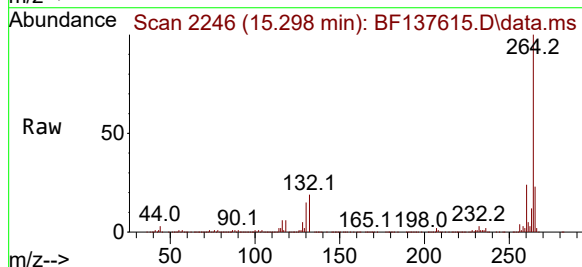
Instrument :
 BNA_F
 ClientSampleId :
 MW-01

Tgt Ion:244 Resp: 1726159
 Ion Ratio Lower Upper
 244 100
 212 6.8 5.4 8.2
 122 11.7 9.1 13.7



#86
 Perylene-d12
 Concen: 20.000 ng
 RT: 15.298 min Scan# 2246
 Delta R.T. -0.000 min
 Lab File: BF137615.D
 Acq: 15 Mar 2024 18:08

Tgt Ion:264 Resp: 326161
 Ion Ratio Lower Upper
 264 100
 260 23.9 19.3 28.9
 265 22.6 17.4 26.0





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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01RE	SDG No.:	P1747
Lab Sample ID:	P1747-03RE	Matrix:	Water
Analytical Method:	625.1	% Solid:	0
Sample Wt/Vol:	970	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type :	Decanted :	N	Level :
Injection Volume :	GPC Factor :	1.0	Level :
Prep Method :			LOW
		GPC Cleanup :	N
			PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM044656.D	1	03/14/24 11:40	03/18/24 13:12	PB159613

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
108-95-2	Phenol	0.96	U	0.96	5.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.20	ug/L
91-20-3	Naphthalene	1.10	U	1.10	5.20	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	40.2	*	60 - 140	40%	SPK: 100
13127-88-3	Phenol-d6	22.4	*	60 - 140	22%	SPK: 100
4165-60-0	Nitrobenzene-d5	94.8		60 - 140	95%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.0		60 - 140	96%	SPK: 100
118-79-6	2,4,6-Tribromophenol	98.4		60 - 140	98%	SPK: 100
1718-51-0	Terphenyl-d14	84.2		60 - 140	84%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	203000		7.698		
1146-65-2	Naphthalene-d8	773000		10.475		
15067-26-2	Acenaphthene-d10	429000		14.339		
1517-22-2	Phenanthrene-d10	831000		17.098		
1719-03-5	Chrysene-d12	797000		21.297		
1520-96-3	Perylene-d12	944000		23.544		

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044656.D
Acq On : 18 Mar 2024 13:12
Operator : MA/JU
Sample : P1747-03RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
MW-01RE

Quant Time: Mar 18 14:03:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.698	152	202767	20.000	ng	0.00
21) Naphthalene-d8	10.475	136	772524	20.000	ng	-0.01
39) Acenaphthene-d10	14.339	164	428984	20.000	ng	-0.01
64) Phenanthrene-d10	17.098	188	830911	20.000	ng	0.00
76) Chrysene-d12	21.297	240	796584	20.000	ng	0.00
86) Perylene-d12	23.544	264	943523	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.304	112	567110	40.157	ng	0.00
7) Phenol-d6	6.869	99	406129	22.353	ng	-0.01
23) Nitrobenzene-d5	8.857	82	1520925	94.847	ng	0.00
42) 2,4,6-Tribromophenol	15.839	330	465749	98.435	ng	0.00
45) 2-Fluorobiphenyl	12.963	172	2989213	95.966	ng	0.00
79) Terphenyl-d14	19.744	244	3832626	84.167	ng	0.00

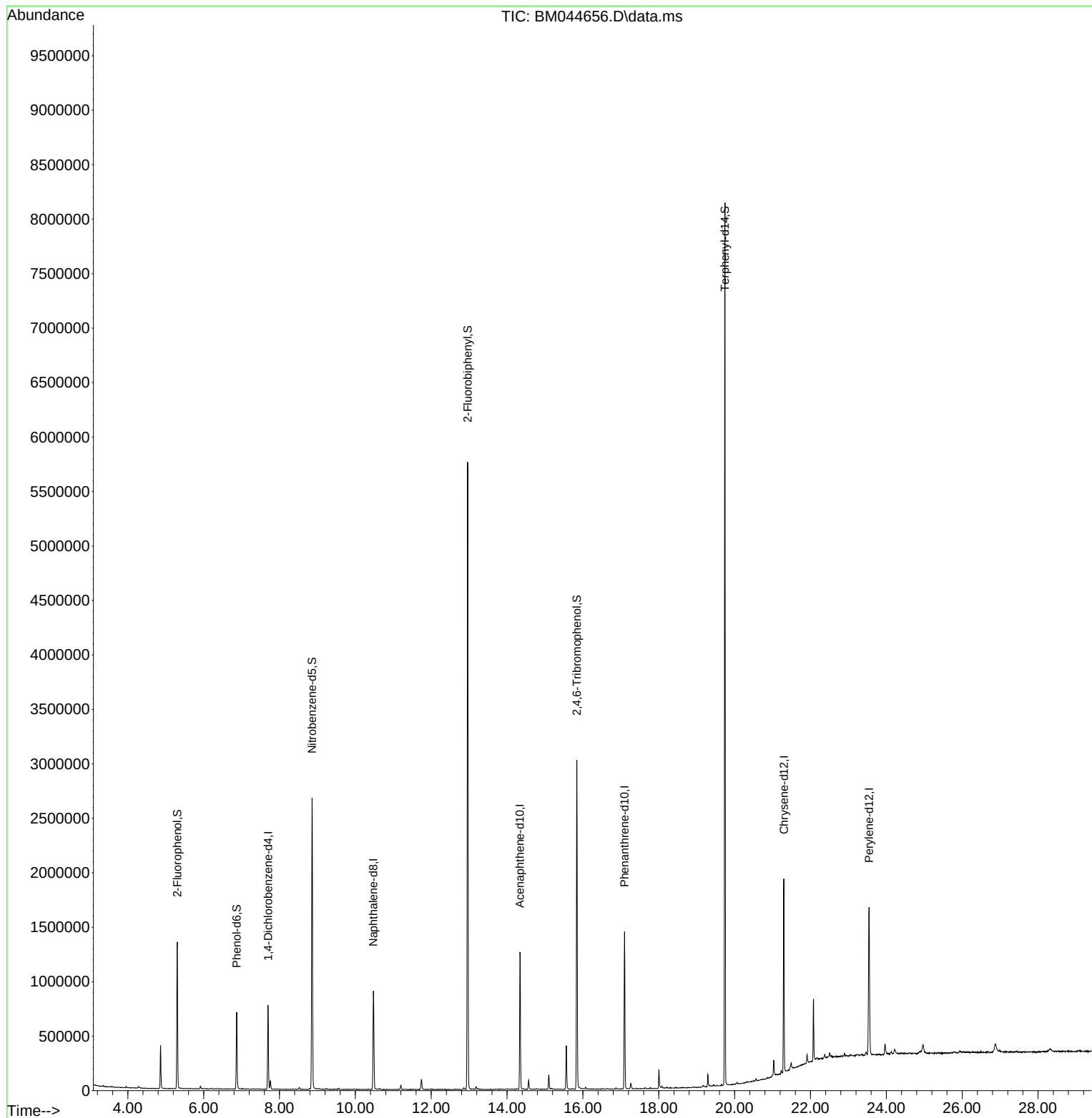
Target Compounds	Qvalue

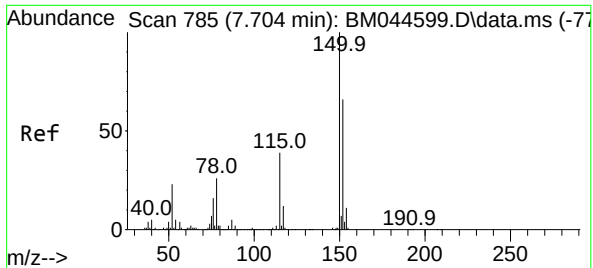
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044656.D
Acq On : 18 Mar 2024 13:12
Operator : MA/JU
Sample : P1747-03RE
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
MW-01RE

Quant Time: Mar 18 14:03:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration

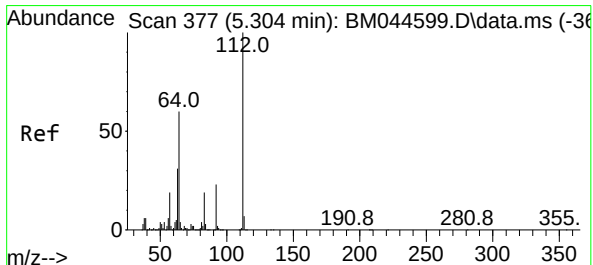
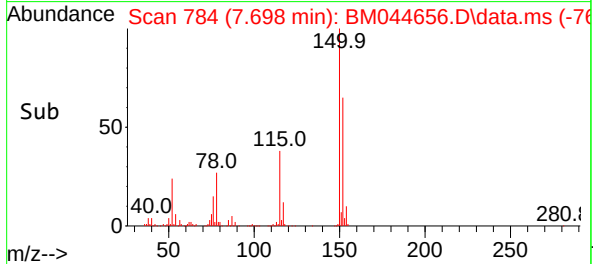
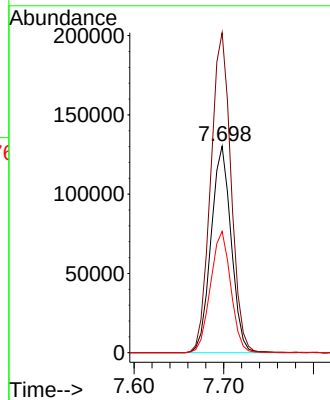
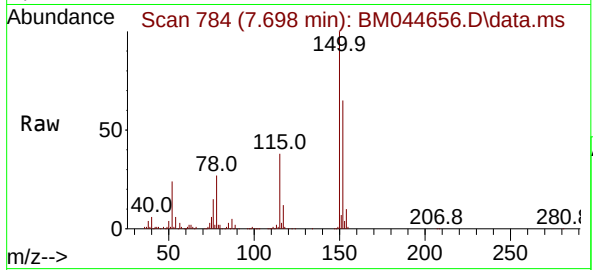




#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 7.698 min Scan# 785
Delta R.T. -0.006 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

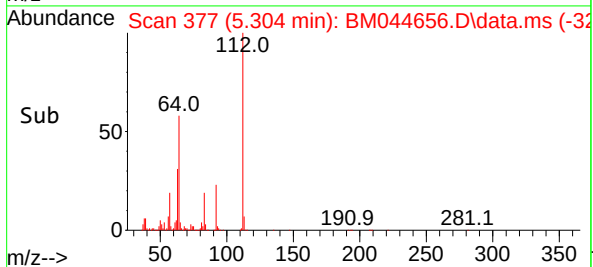
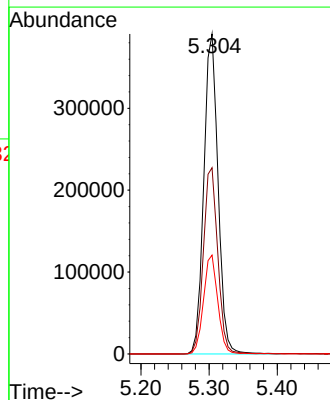
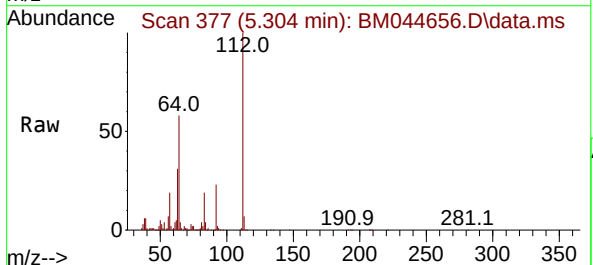
Instrument :
BNA_M
ClientSampleId :
MW-01RE

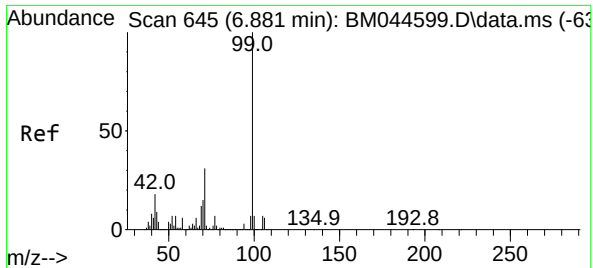
Tgt Ion:152 Resp: 202767
Ion Ratio Lower Upper
152 100
150 154.9 121.9 182.9
115 58.7 47.1 70.7



#5
2-Fluorophenol
Concen: 40.157 ng
RT: 5.304 min Scan# 377
Delta R.T. -0.000 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

Tgt Ion:112 Resp: 567110
Ion Ratio Lower Upper
112 100
64 58.2 47.9 71.9
63 30.9 25.0 37.4

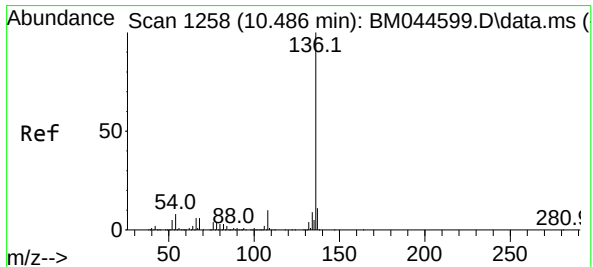
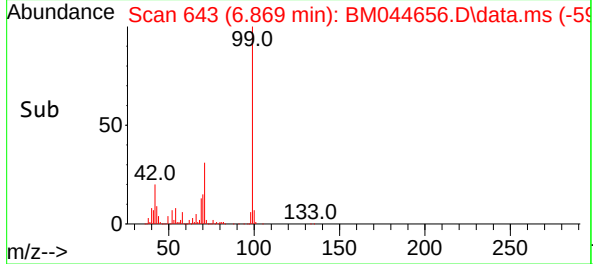
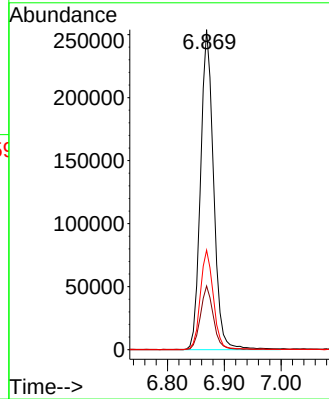
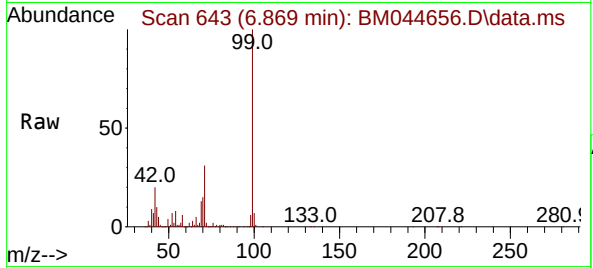




#7
Phenol-d6
Concen: 22.353 ng
RT: 6.869 min Scan# 64
Delta R.T. -0.012 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

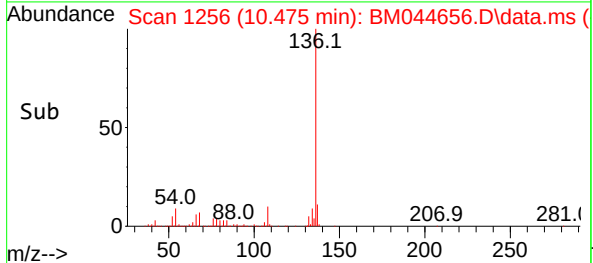
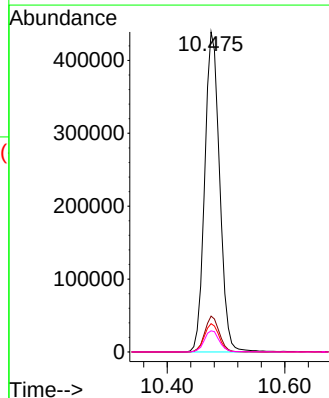
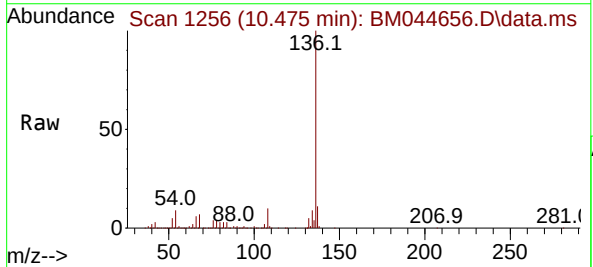
Instrument :
BNA_M
ClientSampleId :
MW-01RE

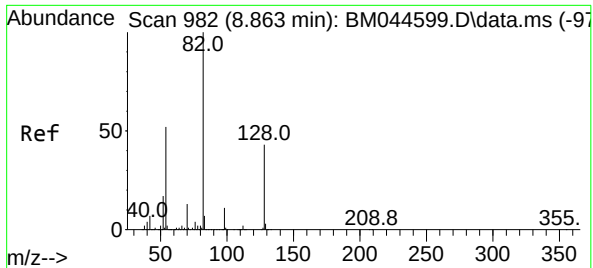
Tgt Ion: 99 Resp: 406129
Ion Ratio Lower Upper
99 100
42 19.9 14.3 21.5
71 31.1 24.5 36.7



#21
Naphthalene-d8
Concen: 20.000 ng
RT: 10.475 min Scan# 1256
Delta R.T. -0.012 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

Tgt Ion: 136 Resp: 772524
Ion Ratio Lower Upper
136 100
137 11.2 8.9 13.3
54 8.9 6.6 10.0
68 6.6 5.0 7.4

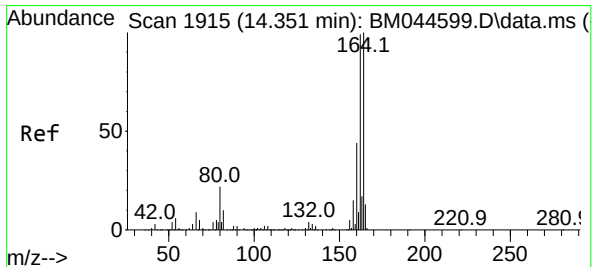
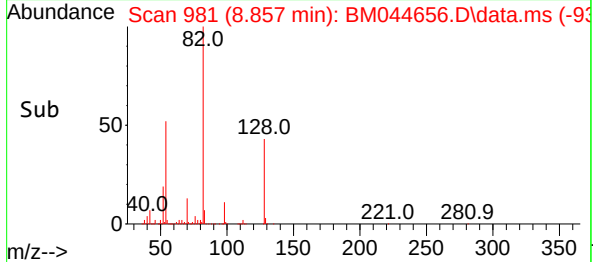
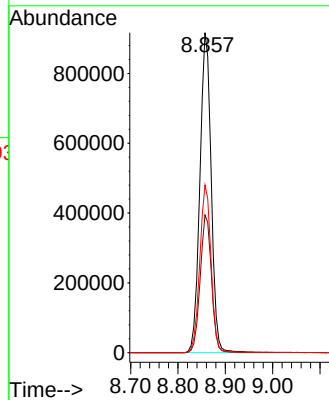
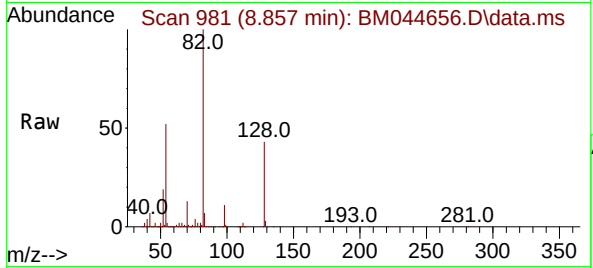




#23
Nitrobenzene-d5
Concen: 94.847 ng
RT: 8.857 min Scan# 91
Delta R.T. -0.006 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

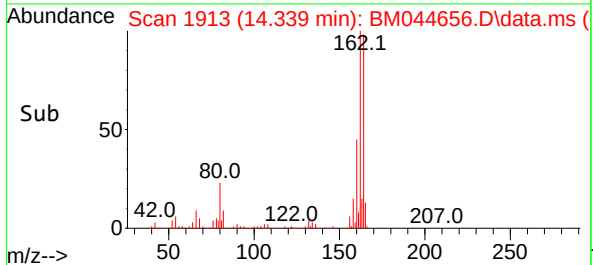
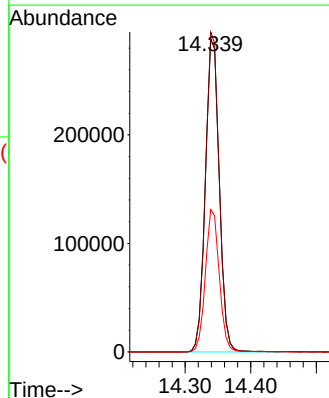
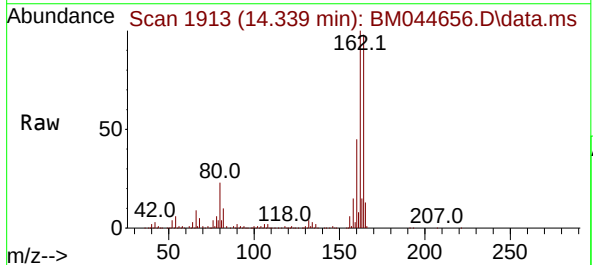
Instrument :
BNA_M
ClientSampleId :
MW-01RE

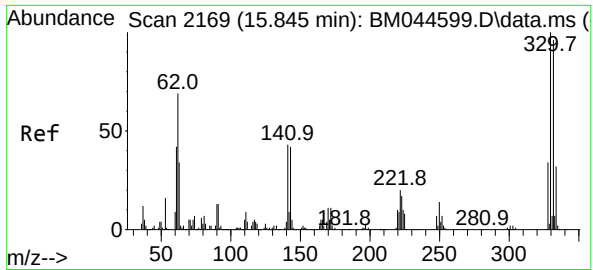
Tgt Ion: 82 Resp: 1520925
Ion Ratio Lower Upper
82 100
128 43.0 34.2 51.4
54 52.4 41.3 61.9



#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 14.339 min Scan# 1913
Delta R.T. -0.012 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

Tgt Ion: 164 Resp: 428984
Ion Ratio Lower Upper
164 100
162 102.2 79.3 118.9
160 45.5 35.2 52.8

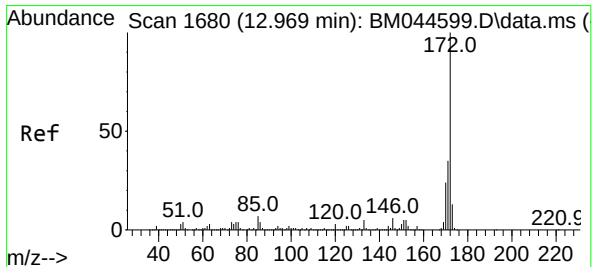
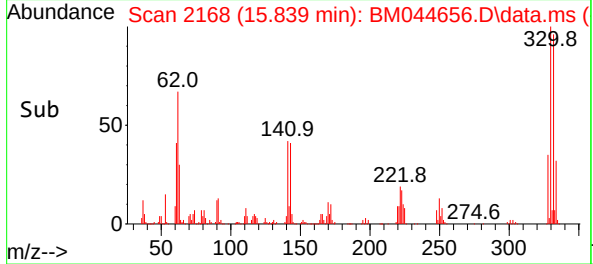
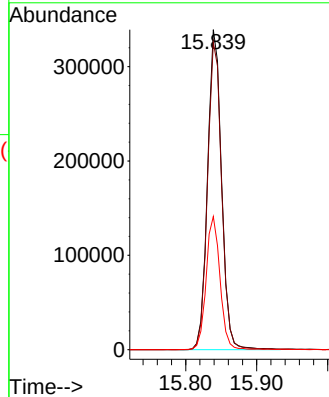
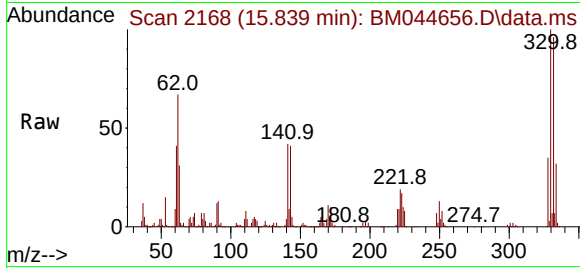




#42
2,4,6-Tribromophenol
Concen: 98.435 ng
RT: 15.839 min Scan# 2168
Delta R.T. -0.006 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

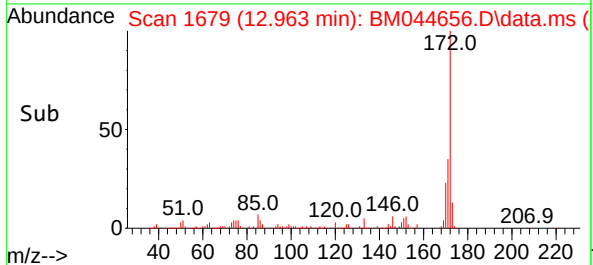
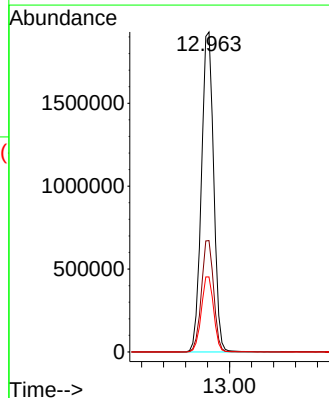
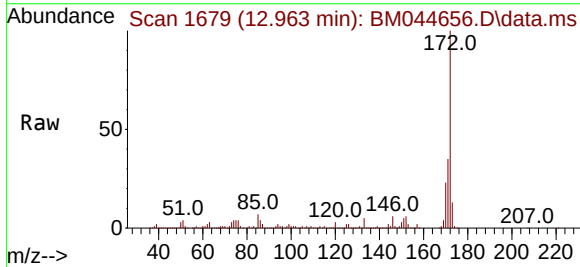
Instrument :
BNA_M
ClientSampleId :
MW-01RE

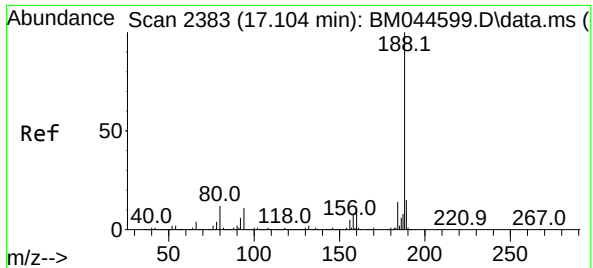
Tgt Ion:330 Resp: 465749
Ion Ratio Lower Upper
330 100
332 97.1 77.8 116.8
141 41.3 33.4 50.0



#45
2-Fluorobiphenyl
Concen: 95.966 ng
RT: 12.963 min Scan# 1679
Delta R.T. -0.006 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

Tgt Ion:172 Resp: 2989213
Ion Ratio Lower Upper
172 100
171 34.8 28.2 42.2
170 23.5 19.0 28.6

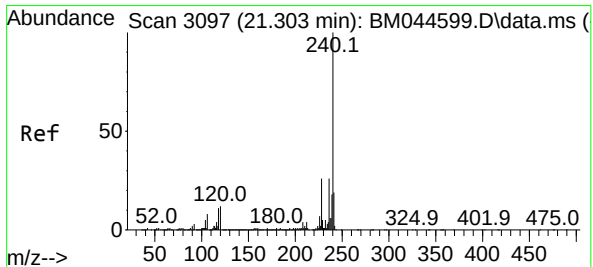
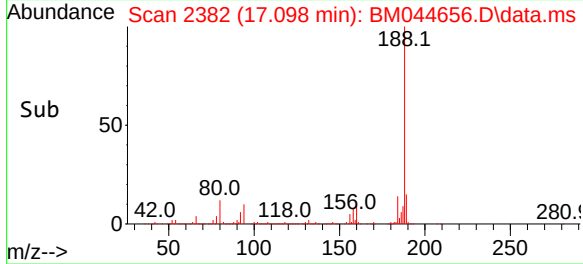
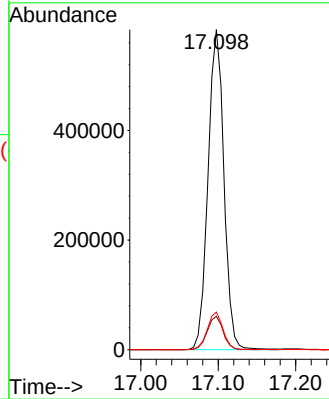
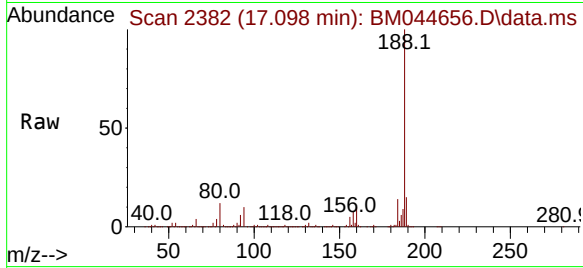




#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 17.098 min Scan# 21
Delta R.T. -0.006 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

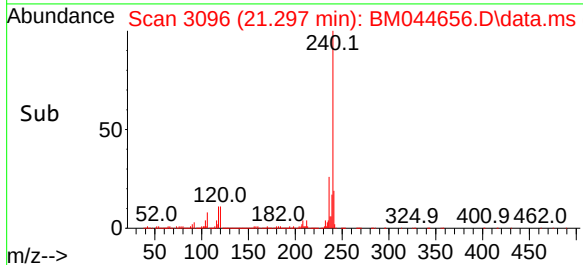
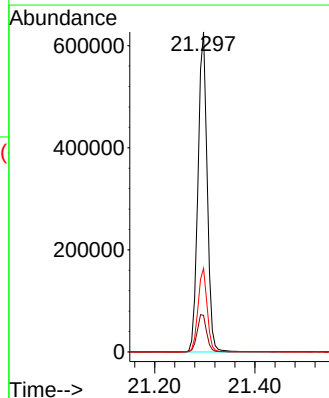
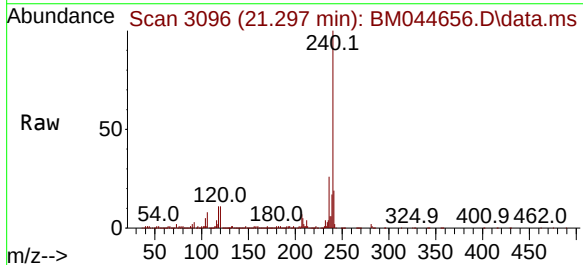
Instrument :
BNA_M
ClientSampleId :
MW-01RE

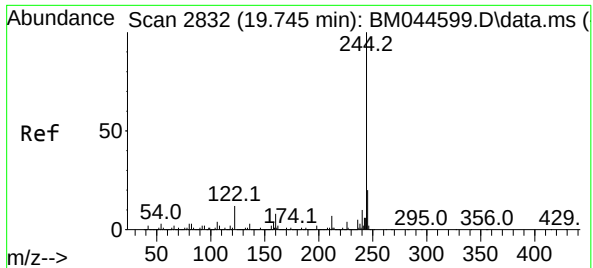
Tgt Ion:188 Resp: 830911
Ion Ratio Lower Upper
188 100
94 10.4 8.4 12.6
80 11.7 9.4 14.0



#76
Chrysene-d12
Concen: 20.000 ng
RT: 21.297 min Scan# 3096
Delta R.T. -0.006 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

Tgt Ion:240 Resp: 796584
Ion Ratio Lower Upper
240 100
120 11.4 9.7 14.5
236 26.1 21.0 31.4

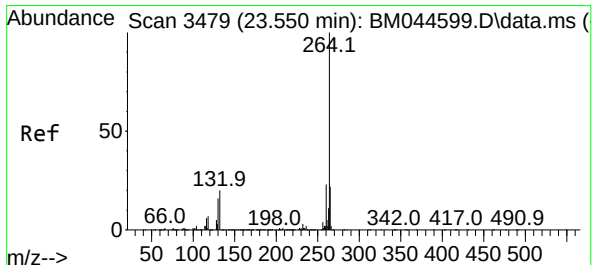
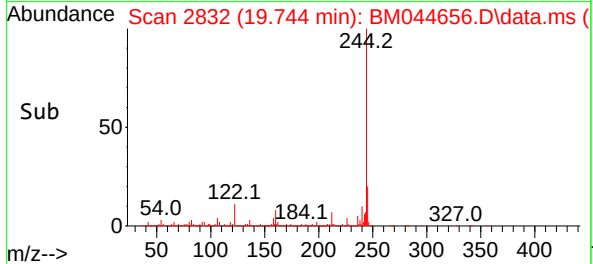
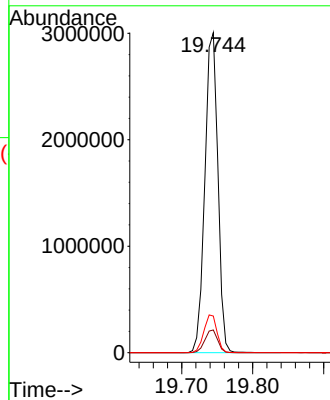
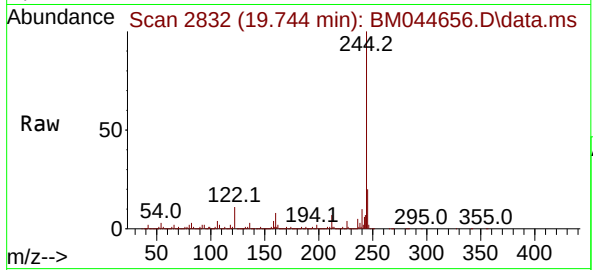




#79
Terphenyl-d14
Concen: 84.167 ng
RT: 19.744 min Scan# 21
Delta R.T. -0.000 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

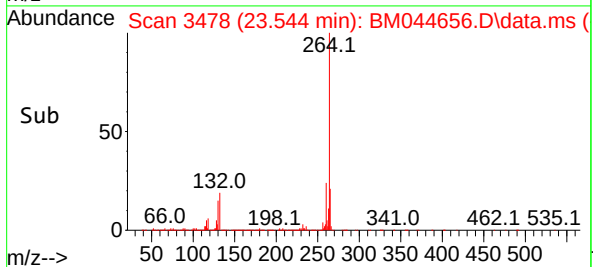
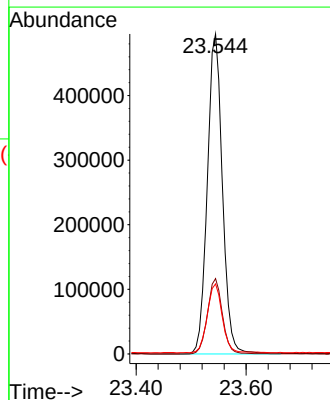
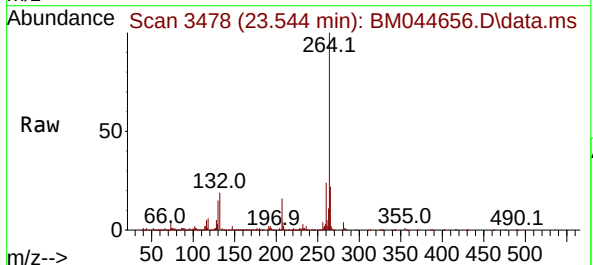
Instrument :
BNA_M
ClientSampleId :
MW-01RE

Tgt Ion:244 Resp: 3832626
Ion Ratio Lower Upper
244 100
212 7.1 5.5 8.3
122 11.4 9.7 14.5



#86
Perylene-d12
Concen: 20.000 ng
RT: 23.544 min Scan# 3478
Delta R.T. -0.006 min
Lab File: BM044656.D
Acq: 18 Mar 2024 13:12

Tgt Ion:264 Resp: 943523
Ion Ratio Lower Upper
264 100
260 23.5 18.3 27.5
265 21.9 17.5 26.3



CALIBRATION SUMMARY



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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P1747 SAS No.: P1747 SDG No.: P1747

Instrument ID: BNA_F Calibration Date(s): 02/29/2024 02/29/2024

Calibration Time(s): 12:44 17:14

LAB FILE ID:		RRF2.5 = BF137439.D			RRF005 = BF137440.D		RRF010 = BF137441.D	
		RRF020 = BF137442.D			RRF040 = BF137443.D		RRF050 = BF137444.D	
COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2-Fluorophenol		1.221	1.350	1.475	1.380	1.318	1.321	7.1
Phenol-d6		1.987	2.007	2.095	1.924	1.832	1.906	7.4
Phenol		2.046	2.142	2.271	2.125	2.004	2.052	7.5
Nitrobenzene-d5		0.418	0.437	0.471	0.441	0.427	0.430	5.4
1,2,4-Trichlorobenzene		0.323	0.326	0.332	0.310	0.302	0.310	6.3
Naphthalene		1.163	1.163	1.192	1.058	1.028	1.073	9.7
2-Fluorobiphenyl		1.509	1.467	1.412	1.240	1.157	1.278	14.5
2,4,6-Tribromophenol		0.169	0.174	0.187	0.175	0.173	0.176	3.3
Terphenyl-d14		1.470	1.472	1.534	1.490	1.441	1.454	4.2

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF022924.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Mar 01 12:53:33 2024
 Response Via : Initial Calibration

Calibration Files

2.5 =BF137439.D 5 =BF137440.D 10 =BF137441.D 20 =BF137442.D 40 =BF137443.D 50 =BF137444.D 60 =BF137445.D 80 =BF137446.D

	Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----									
2)	1,4-Dioxane		0.715	0.716	0.764	0.742	0.710	0.725	0.683	0.722	3.53
3)	Pyridine		1.361	1.529	1.895	1.910	1.832	1.879	1.783	1.741	12.21
4)	n-Nitrosodimet...			0.425	0.628	0.700	0.710	0.727	0.722	0.652	17.91
5) S	2-Fluorophenol		1.221	1.350	1.475	1.380	1.318	1.299	1.200	1.321	7.12
6)	Aniline		2.090	2.322	2.553	2.462	2.343	2.356	2.178	2.329	6.76
7) S	Phenol-d6		1.987	2.007	2.095	1.924	1.832	1.830	1.670	1.906	7.41
8)	2-Chlorophenol		1.432	1.462	1.537	1.417	1.354	1.326	1.221	1.393	7.37
9)	Benzaldehyde		0.824	0.936	1.041	1.001	0.950	0.931	0.854	0.934	8.13
10) C	Phenol		2.046	2.142	2.271	2.125	2.004	1.993	1.780	2.052	7.47
11)	bis(2-Chloroet...		1.600	1.380	1.546	1.577	1.523	1.479	1.418	1.503	5.45
12)	1,3-Dichlorobe...		1.559	1.559	1.620	1.505	1.437	1.415	1.323	1.488	6.87
13) C	1,4-Dichlorobe...		1.659	1.572	1.670	1.544	1.449	1.444	1.323	1.523	8.25
14)	1,2-Dichlorobe...		1.533	1.522	1.553	1.399	1.334	1.286	1.157	1.398	10.61
15)	Benzyl Alcohol		1.046	1.221	1.364	1.272	1.190	1.159	1.054	1.187	9.60
16)	2,2'-oxybis(1-...		2.765	2.745	2.815	2.596	2.486	2.445	2.238	2.584	8.06
17)	2-Methylphenol		1.299	1.348	1.410	1.325	1.277	1.275	1.187	1.303	5.32
18)	Hexachloroethane		0.497	0.502	0.546	0.513	0.493	0.498	0.461	0.501	5.08
19) P	n-Nitroso-di-n...	1.240	1.246	1.252	1.290	1.161	1.097	1.102	1.029	1.177	7.95
20)	3+4-Methylphenols		1.518	1.665	1.745	1.509	1.408	1.379	1.224	1.493	11.80
21) I	Naphthalene-d8	-----ISTD-----									
22)	Acetophenone		0.508	0.525	0.540	0.480	0.467	0.455	0.412	0.484	9.15
23) S	Nitrobenzene-d5		0.418	0.437	0.471	0.441	0.427	0.424	0.396	0.430	5.37
24)	Nitrobenzene		0.406	0.434	0.465	0.440	0.439	0.435	0.407	0.432	4.70
25)	Isophorone		0.816	0.831	0.862	0.820	0.807	0.816	0.772	0.818	3.29
26) C	2-Nitrophenol		0.140	0.162	0.182	0.178	0.183	0.184	0.173	0.172	9.25
27)	2,4-Dimethylph...		0.312	0.330	0.351	0.327	0.319	0.316	0.291	0.321	5.65
28)	bis(2-Chloroet...		0.465	0.498	0.522	0.488	0.476	0.472	0.437	0.480	5.55
29) C	2,4-Dichloroph...		0.279	0.296	0.322	0.302	0.297	0.291	0.273	0.294	5.43
30)	1,2,4-Trichlor...		0.323	0.326	0.332	0.310	0.302	0.299	0.276	0.310	6.26
31)	Naphthalene		1.163	1.163	1.192	1.058	1.028	0.999	0.908	1.073	9.72
32)	Benzoic acid			0.123	0.141	0.165	0.182	0.192	0.200	0.167	17.95
33)	4-Chloroaniline		0.369	0.430	0.467	0.444	0.430	0.428	0.377	0.421	8.42
34) C	Hexachlorobuta...		0.191	0.191	0.195	0.184	0.177	0.177	0.165	0.183	5.73
35)	Caprolactam		0.095	0.096	0.104	0.102	0.102	0.103	0.097	0.100	3.75
36) C	4-Chloro-3-met...		0.328	0.335	0.354	0.336	0.325	0.322	0.304	0.329	4.63
37)	2-Methylnaphth...		0.732	0.748	0.760	0.684	0.654	0.635	0.576	0.684	9.84
38)	1-Methylnaphth...		0.704	0.710	0.718	0.635	0.605	0.593	0.544	0.644	10.53

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF022924.M

39) I	Acenaphthene-d10	-----ISTD-----									
40)	1,2,4,5-Tetrac...	0.576	0.584	0.609	0.563	0.543	0.535	0.498	0.558	6.51	
41) P	Hexachlorocycl...	0.084	0.141	0.190	0.211	0.222	0.230	0.180		31.56	
42) S	2,4,6-Tribromo...	0.169	0.174	0.187	0.175	0.173	0.179	0.172	0.176	3.27	
43) C	2,4,6-Trichlor...	0.355	0.355	0.387	0.375	0.364	0.364	0.347	0.364	3.76	
44)	2,4,5-Trichlor...	0.413	0.398	0.464	0.428	0.417	0.417	0.394	0.419	5.49	
45) S	2-Fluorobiphenyl	1.509	1.467	1.412	1.240	1.157	1.122	1.037	1.278	14.50	
46)	1,1'-Biphenyl	1.595	1.586	1.619	1.465	1.379	1.361	1.242	1.464	9.79	
47)	2-Chloronaphth...	1.192	1.170	1.217	1.122	1.067	1.053	0.991	1.116	7.40	
48)	2-Nitroaniline	0.289	0.345	0.399	0.402	0.411	0.415	0.393	0.379	12.12	
49)	Acenaphthylene	1.993	1.932	1.981	1.798	1.679	1.640	1.479	1.786	10.96	
50)	Dimethylphthalate	1.476	1.481	1.498	1.378	1.327	1.328	1.256	1.392	6.77	
51)	2,6-Dinitrotol...	0.270	0.283	0.315	0.300	0.292	0.298	0.281	0.291	5.08	
52) C	Acenaphthene	1.175	1.160	1.179	1.057	0.997	0.975	0.920	1.066	9.97	
53)	3-Nitroaniline	0.269	0.291	0.311	0.329	0.323	0.328	0.305	0.308	7.07	
54) P	2,4-Dinitrophenol	0.044	0.088	0.122	0.131	0.139	0.142	0.111		34.45	
55)	Dibenzofuran	1.816	1.800	1.834	1.615	1.513	1.461	1.330	1.624	12.26	
56) P	4-Nitrophenol	0.104	0.181	0.206	0.216	0.221	0.214	0.190		23.56	
57)	2,4-Dinitrotol...	0.310	0.356	0.397	0.378	0.370	0.363	0.330	0.358	8.18	
58)	Fluorene	1.447	1.420	1.402	1.211	1.129	1.103	1.018	1.247	13.98	
59)	2,3,4,6-Tetrac...	0.336	0.346	0.363	0.341	0.329	0.327	0.309	0.336	4.97	
60)	Diethylphthalate	1.401	1.415	1.438	1.311	1.250	1.242	1.146	1.315	8.26	
61)	4-Chlorophenyl...	0.701	0.682	0.674	0.589	0.564	0.557	0.513	0.611	12.02	
62)	4-Nitroaniline	0.217	0.238	0.296	0.273	0.277	0.285	0.267	0.265	10.52	
63)	Azobenzene	1.617	1.602	1.647	1.524	1.452	1.424	1.331	1.514	7.70	
64) I	Phenanthrene-d10	-----ISTD-----									
65)	4,6-Dinitro-2-...	0.080	0.107	0.117	0.121	0.123	0.120	0.111		14.69	
66) c	n-Nitrosodiphe...	0.669	0.687	0.699	0.636	0.625	0.612	0.581	0.644	6.64	
67)	4-Bromophenyl-...	0.213	0.219	0.236	0.221	0.216	0.213	0.206	0.218	4.26	
68)	Hexachlorobenzene	0.225	0.225	0.233	0.217	0.217	0.216	0.205	0.220	4.05	
69)	Atrazine	0.190	0.199	0.214	0.197	0.195	0.192	0.184	0.196	4.81	
70) C	Pentachlorophenol	0.105	0.133	0.139	0.142	0.142	0.138	0.133		10.71	
71)	Phenanthrene	1.206	1.195	1.203	1.058	1.036	0.993	0.929	1.088	10.38	
72)	Anthracene	1.203	1.195	1.248	1.088	1.085	1.043	0.963	1.118	9.07	
73)	Carbazole	0.998	1.027	1.062	0.952	0.931	0.909	0.823	0.958	8.39	
74)	Di-n-butylphth...	1.192	1.203	1.255	1.140	1.116	1.071	0.998	1.139	7.62	
75) C	Fluoranthene	1.208	1.167	1.185	1.030	1.005	0.969	0.884	1.064	11.64	
76) I	Chrysene-d12	-----ISTD-----									
77)	Benzidine	0.375	0.497	0.568	0.541	0.514	0.442	0.489		14.41	
78)	Pyrene	1.874	1.929	2.096	2.064	1.969	1.978	1.828	1.962	4.89	
79) S	Terphenyl-d14	1.470	1.472	1.534	1.490	1.441	1.438	1.336	1.454	4.24	
80)	Butylbenzylpht...	0.405	0.441	0.506	0.527	0.540	0.561	0.528	0.501	11.40	
81)	Benzo(a)anthra...	1.401	1.405	1.519	1.416	1.380	1.392	1.300	1.402	4.58	
82)	3,3'-Dichlorob...	0.274	0.318	0.390	0.417	0.398	0.413	0.403	0.373	14.75	
83)	Chrysene	1.427	1.407	1.493	1.447	1.384	1.403	1.356	1.417	3.15	
84)	Bis(2-ethylhex...	0.540	0.560	0.655	0.677	0.668	0.697	0.662	0.637	9.61	
85) c	Di-n-octyl pht...	0.808	0.979	1.196	1.170	1.245	1.324	1.120		17.07	

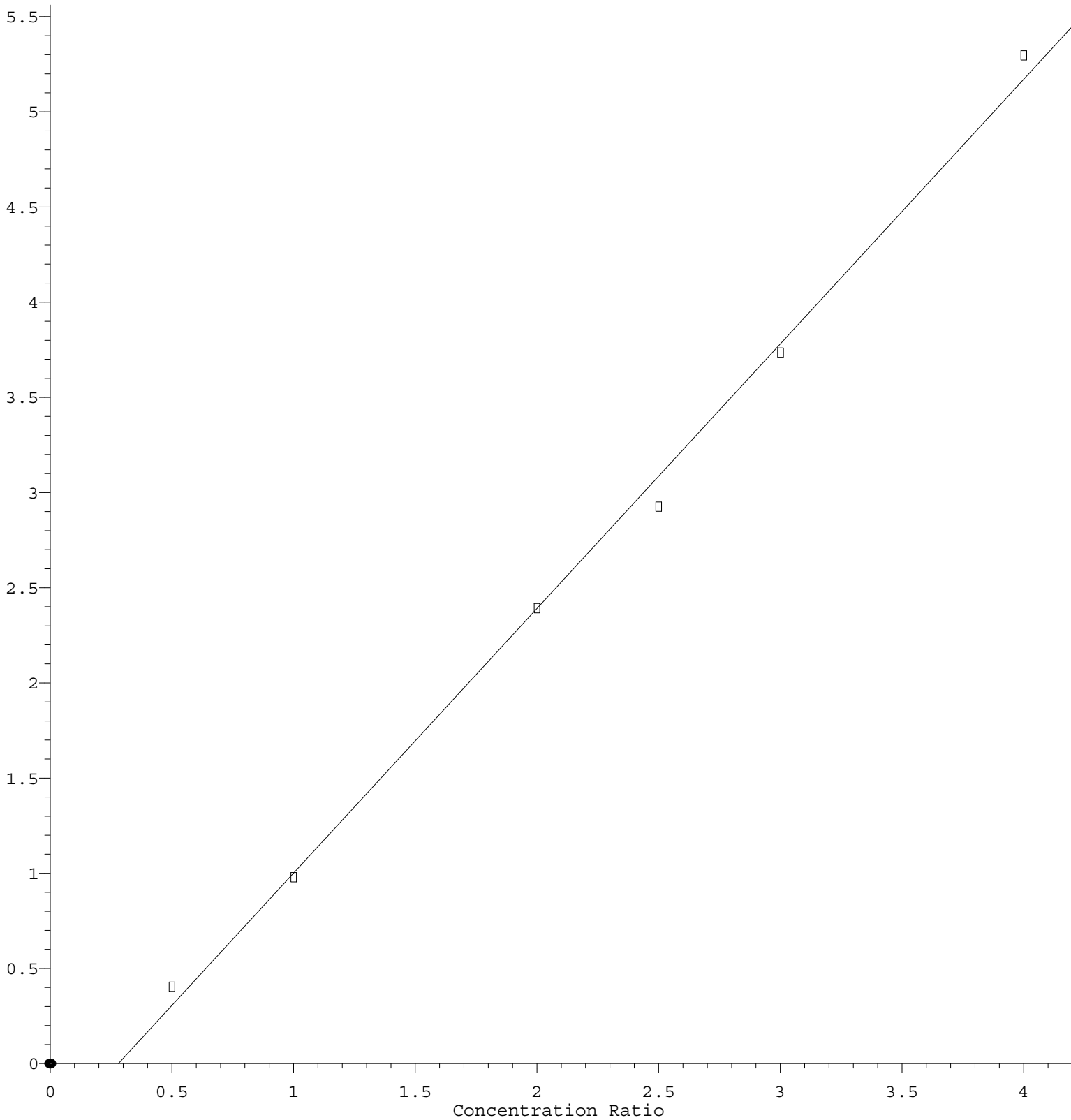
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF022924.M

86) I	Perylene-d12	-----ISTD-----									
87)	Indeno(1,2,3-c...	1.135	1.258	1.395	1.392	1.355	1.373	1.305	1.316	7.16	
88)	Benzo(b)fluora...	1.181	1.174	1.292	1.200	1.166	1.178	1.092	1.183	4.97	
89)	Benzo(k)fluora...	1.372	1.359	1.352	1.231	1.217	1.234	1.129	1.271	7.22	
90) C	Benzo(a)pyrene	1.115	1.144	1.249	1.210	1.165	1.176	1.102	1.166	4.46	
91)	Dibenzo(a,h)an...	0.901	1.008	1.134	1.134	1.101	1.133	1.063	1.068	8.15	
92)	Benzo(g,h,i)pe...	0.943	1.030	1.171	1.162	1.132	1.148	1.088	1.096	7.62	

(#) = Out of Range

Di-n-octyl phthalate

Response Ratio



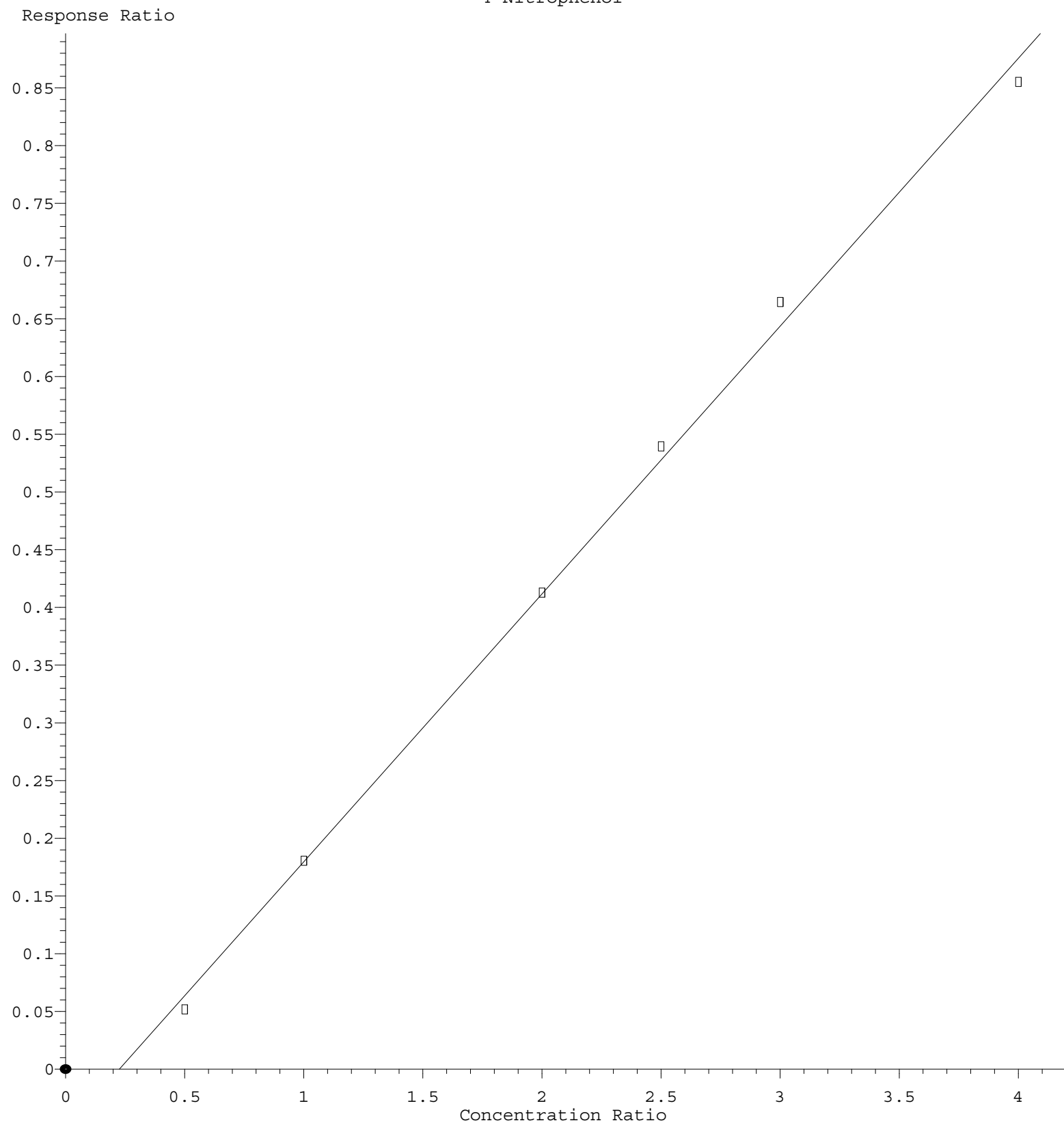
$$\text{Response} = 1.390\text{e}+000 * \text{Amt} - 3.897\text{e}-001$$

Coef of Det (r^2) = 0.996686 Curve Fit: Linear

Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF022924.M

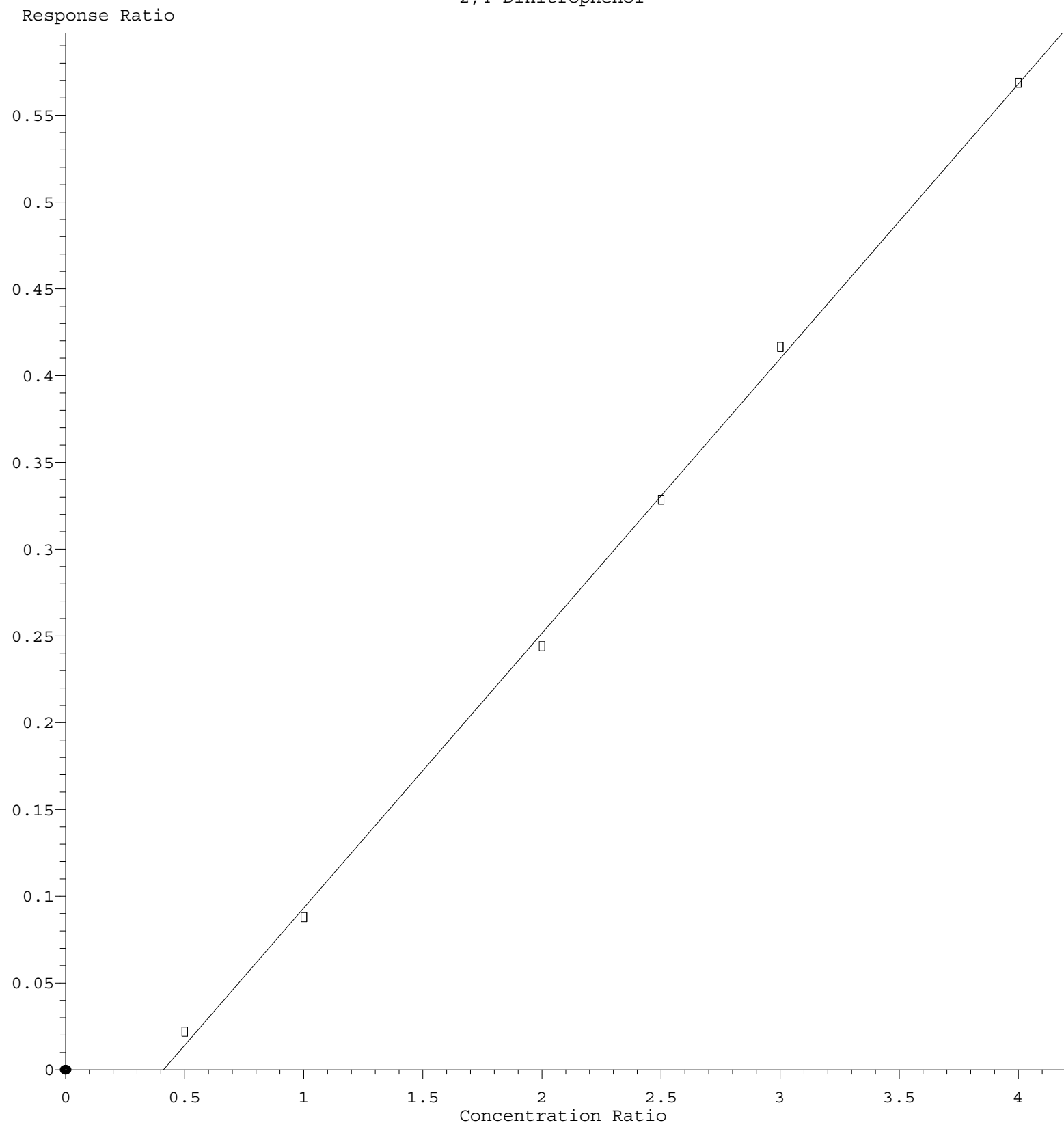
Calibration Table Last Updated: Fri Mar 01 12:53:33 2024

4-Nitrophenol



Response = $2.323 \times 10^{-1} \times \text{Amt} - 5.257 \times 10^{-2}$
 Coef of Det (r^2) = 0.997489 Curve Fit: Linear
 Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF022924.M
 Calibration Table Last Updated: Fri Mar 01 12:53:33 2024

2,4-Dinitrophenol



$$\text{Response} = 1.583\text{e-}001 * \text{Amt} - 6.510\text{e-}002$$

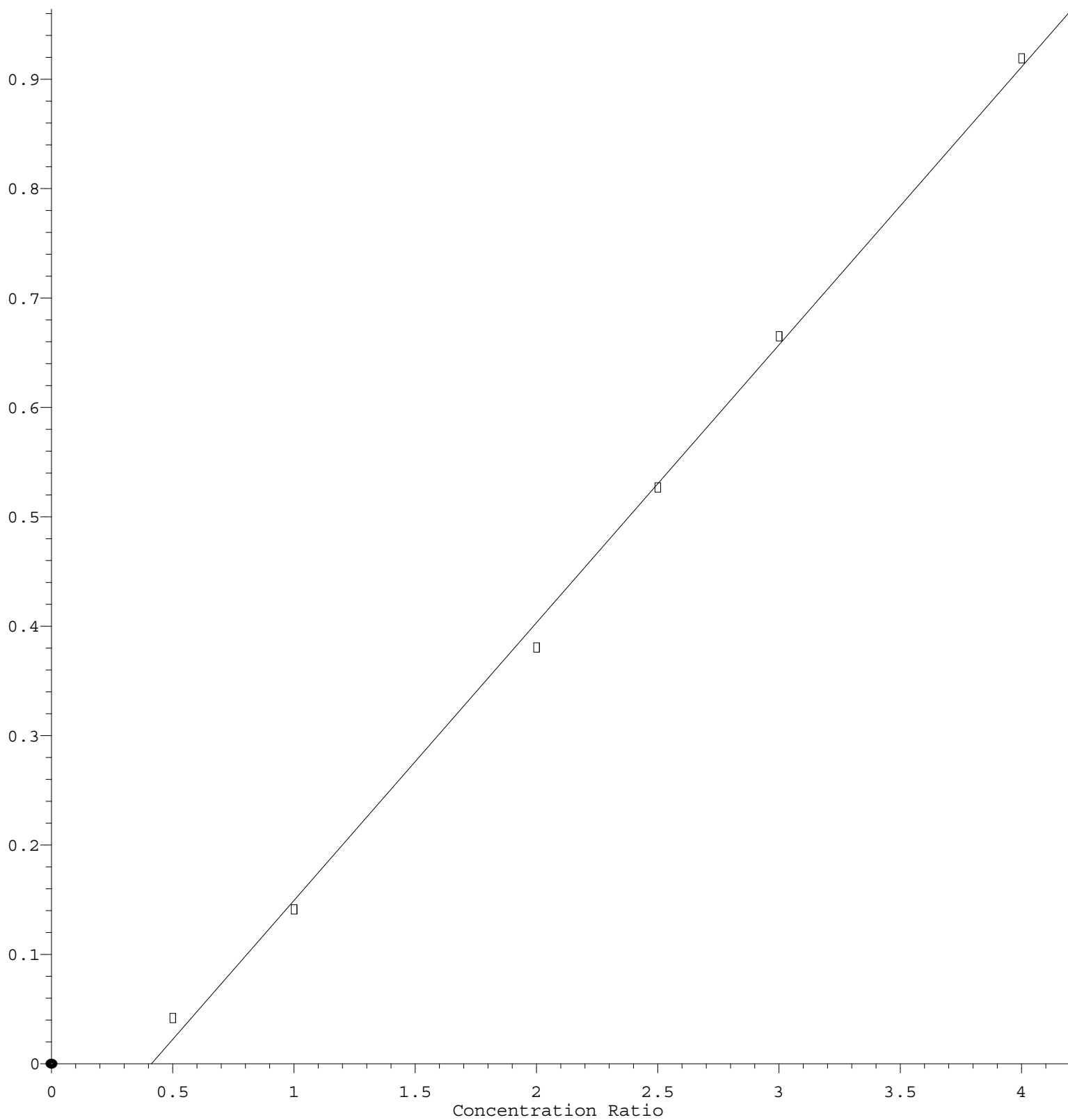
Coef of Det (r^2) = 0.999064 Curve Fit: Linear

Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF022924.M

Calibration Table Last Updated: Fri Mar 01 12:53:33 2024

Hexachlorocyclopentadiene

Response Ratio



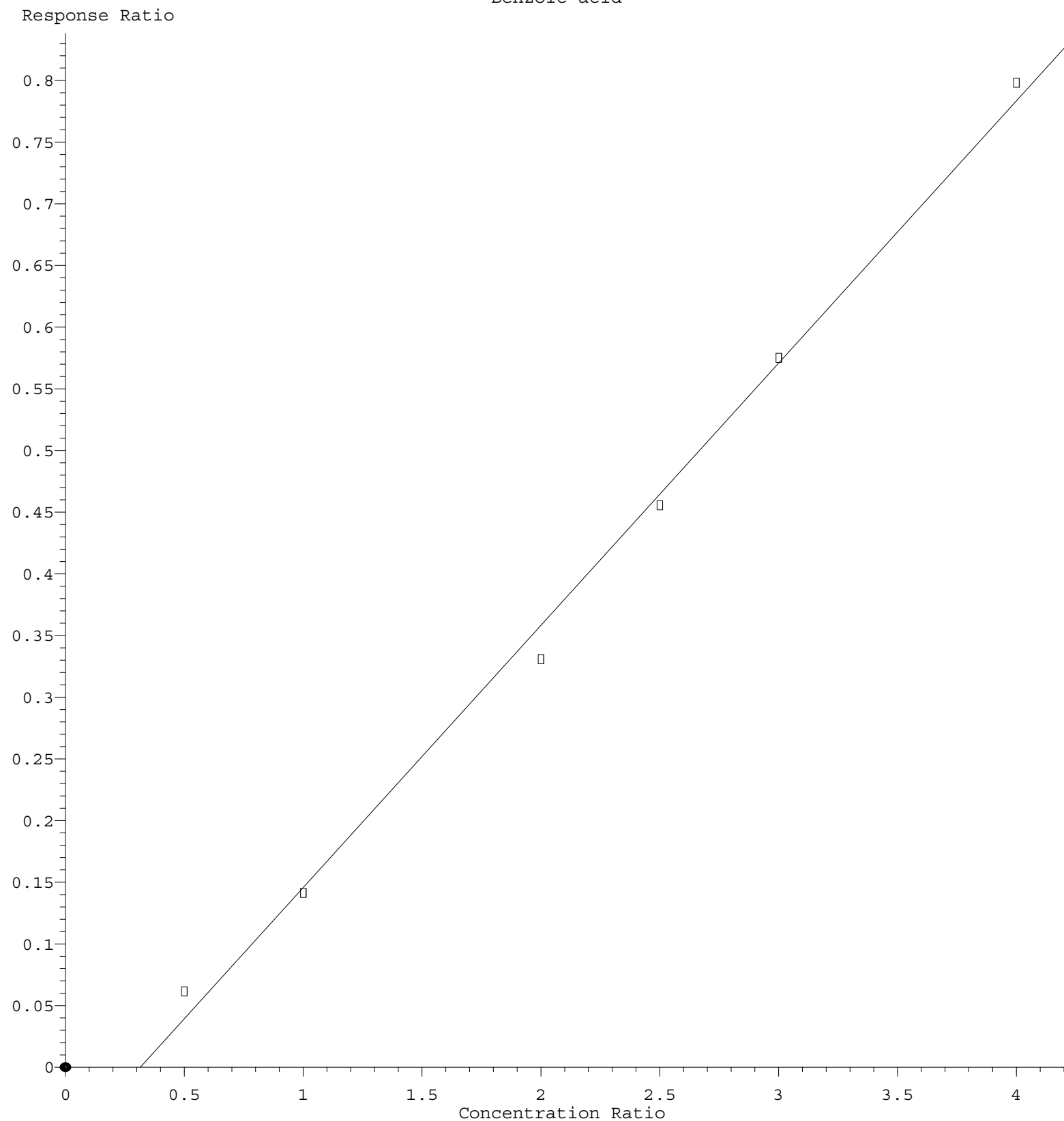
$$\text{Response} = 2.540\text{e-}001 * \text{Amt} - 1.047\text{e-}001$$

Coef of Det (r^2) = 0.997956 Curve Fit: Linear

Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF022924.M

Calibration Table Last Updated: Fri Mar 01 12:53:33 2024

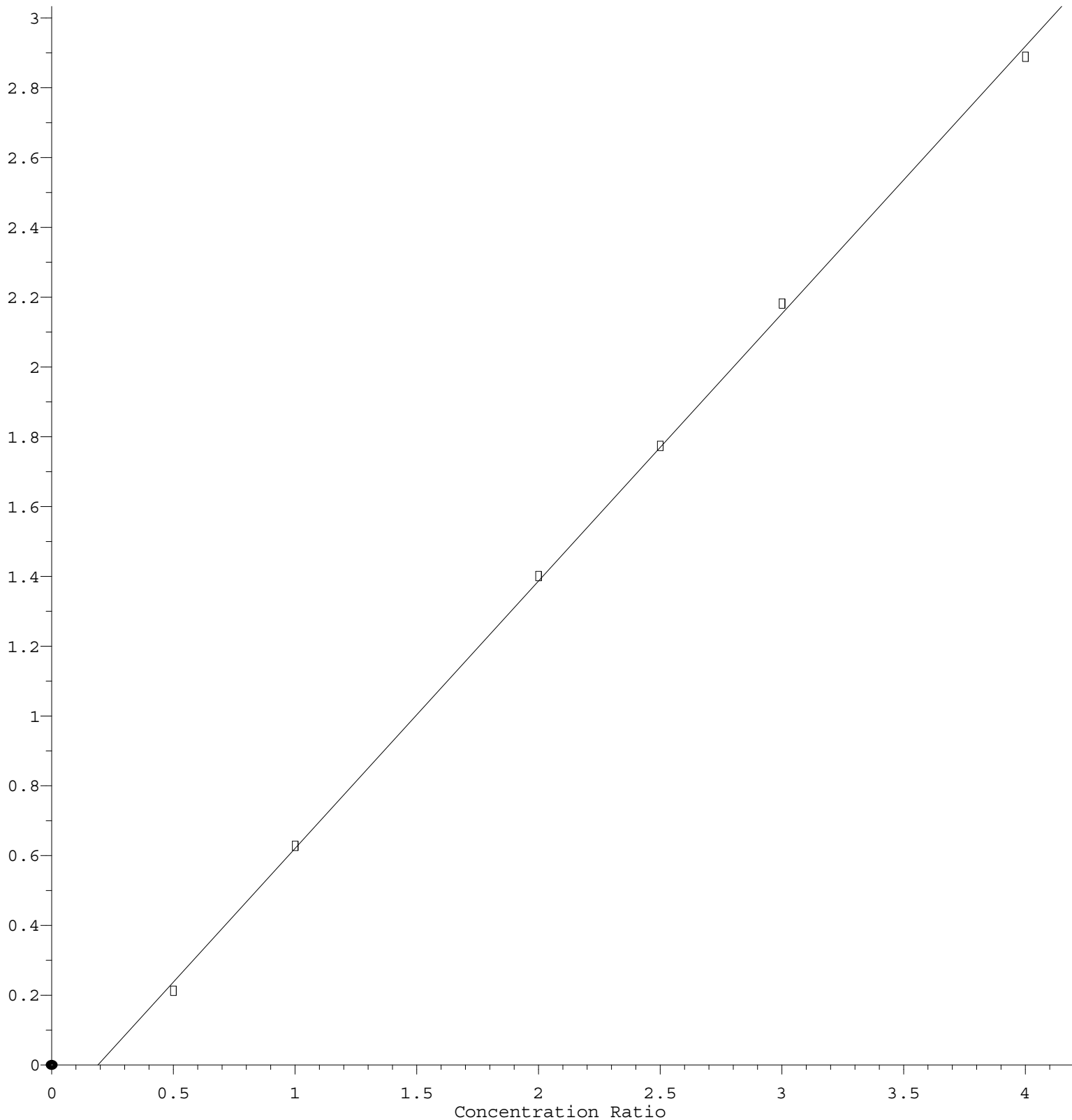
Benzoic acid



Response = $2.126 \times 10^{-1} \times \text{Amt} - 6.696 \times 10^{-2}$
 Coef of Det (r^2) = 0.995829 Curve Fit: Linear
 Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF022924.M
 Calibration Table Last Updated: Fri Mar 01 12:53:33 2024

n-Nitrosodimethylamine

Response Ratio



$$\text{Response} = 7.662\text{e-}001 * \text{Amt} - 1.459\text{e-}001$$

Coef of Det (r^2) = 0.999464 Curve Fit: Linear

Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF022924.M

Calibration Table Last Updated: Fri Mar 01 12:53:33 2024

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137439.D
Acq On : 29 Feb 2024 12:44
Operator : CG\JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Quant Time: Mar 01 02:55:21 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 02:54:30 2024
Response via : Initial Calibration

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

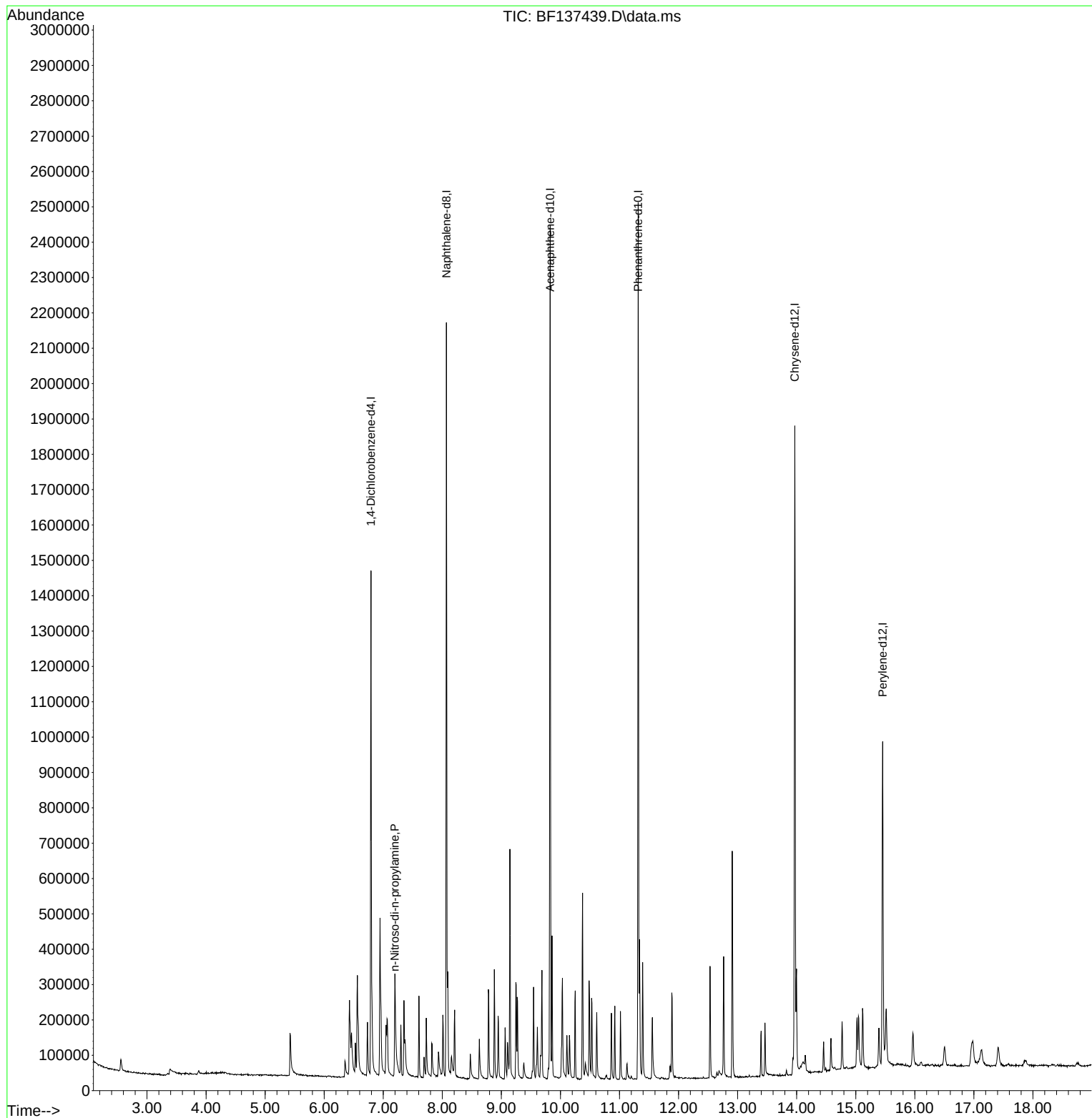
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.792	152	202291	20.000	ng	-0.01
21) Naphthalene-d8	8.069	136	826761	20.000	ng	-0.01
39) Acenaphthene-d10	9.828	164	467354	20.000	ng	-0.01
64) Phenanthrene-d10	11.316	188	837858	20.000	ng	-0.01
76) Chrysene-d12	13.968	240	557717	20.000	ng	-0.02
86) Perylene-d12	15.457	264	412306	20.000	ng	-0.03
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...	7.192	70	31366	2.632	ng	# 90

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137439.D
Acq On : 29 Feb 2024 12:44
Operator : CG\JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC2.5

Quant Time: Mar 01 02:55:21 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 02:54:30 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137440.D
 Acq On : 29 Feb 2024 13:13
 Operator : CG\JU
 Sample : SSTDICC005
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

BNA_F

ClientSampleId :

SSTDICC005

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024

Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:24:54 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Mar 01 03:22:23 2024

Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.792	152	197808	20.000	ng	-0.01
21) Naphthalene-d8	8.069	136	792682	20.000	ng	-0.01
39) Acenaphthene-d10	9.828	164	453146	20.000	ng	-0.01
64) Phenanthrene-d10	11.316	188	801162	20.000	ng	-0.01
76) Chrysene-d12	13.968	240	535363	20.000	ng	-0.02
86) Perylene-d12	15.457	264	387740	20.000	ng	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	5.422	112	120787	9.247	ng	-0.01
7) Phenol-d6	6.422	99	196516	10.422	ng	-0.02
23) Nitrobenzene-d5	7.351	82	165485	9.700	ng	-0.02
42) 2,4,6-Tribromophenol	10.616	330	38383	9.645	ng	-0.02
45) 2-Fluorobiphenyl	9.145	172	341988	11.814	ng	-0.02
79) Terphenyl-d14	12.910	244	393377	10.104	ng	-0.02
Target Compounds						Qvalue
2) 1,4-Dioxane	2.552	88	35347	4.949	ng	98
3) Pyridine	3.346	79	67287m	3.906	ng	
6) Aniline	6.457	93	103369	4.486	ng	91
8) 2-Chlorophenol	6.575	128	70826	5.141	ng	93
9) Benzaldehyde	6.351	77	40771	4.414	ng	93
10) Phenol	6.440	94	101187	4.986	ng	95
11) bis(2-Chloroethyl)ether	6.528	93	79142	5.321	ng	96
12) 1,3-Dichlorobenzene	6.734	146	77088	5.236	ng	97
13) 1,4-Dichlorobenzene	6.810	146	82019	5.457	ng	99
14) 1,2-Dichlorobenzene	6.957	146	75799	5.482	ng	98
15) Benzyl Alcohol	6.939	79	51745	4.408	ng	97
16) 2,2'-oxybis(1-Chloropr...	7.069	45	136734	5.349	ng	97
17) 2-Methylphenol	7.045	107	64249	4.983	ng	98
18) Hexachloroethane	7.298	117	24594	4.958	ng	93
19) n-Nitroso-di-n-propyla...	7.192	70	61606	5.291	ng	96
20) 3+4-Methylphenols	7.204	107	75092	5.086	ng	96
22) Acetophenone	7.198	105	100676	5.249	ng	98
24) Nitrobenzene	7.369	77	80482	4.696	ng	98
25) Isophorone	7.604	82	161757	4.991	ng	99
26) 2-Nitrophenol	7.692	139	27774	4.082	ng	98
27) 2,4-Dimethylphenol	7.728	122	61791	4.860	ng	98
28) bis(2-Chloroethoxy)met...	7.822	93	92246	4.851	ng	98
29) 2,4-Dichlorophenol	7.934	162	55355	4.744	ng	97
30) 1,2,4-Trichlorobenzene	8.010	180	64106	5.221	ng	98
31) Naphthalene	8.092	128	230486	5.419	ng	99
33) 4-Chloroaniline	8.151	127	73094	4.383	ng	96
34) Hexachlorobutadiene	8.210	225	37931	5.233	ng	98
35) Caprolactam	8.481	113	18826	4.757	ng	97
36) 4-Chloro-3-methylphenol	8.628	107	65019	4.985	ng	97
37) 2-Methylnaphthalene	8.781	142	145064	5.350	ng	100
38) 1-Methylnaphthalene	8.881	142	139466	5.462	ng	99
40) 1,2,4,5-Tetrachloroben...	8.945	216	65268	5.159	ng	98
43) 2,4,6-Trichlorophenol	9.063	196	40165	4.875	ng	97
44) 2,4,5-Trichlorophenol	9.104	196	46815	4.933	ng	98
46) 1,1'-Biphenyl	9.245	154	180705	5.448	ng	97
47) 2-Chloronaphthalene	9.269	162	135027	5.340	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137440.D
 Acq On : 29 Feb 2024 13:13
 Operator : CG\JU
 Sample : SSTDICC005
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:24:54 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 2-Nitroaniline	9.375	65	32760	3.812	ng	96
49) Acenaphthylene	9.686	152	225806	5.580	ng	98
50) Dimethylphthalate	9.545	163	167231	5.301	ng	99
51) 2,6-Dinitrotoluene	9.610	165	30548	4.630	ng	96
52) Acenaphthene	9.857	154	133090	5.509	ng	100
53) 3-Nitroaniline	9.786	138	30523	4.374	ng	# 99
55) Dibenzofuran	10.033	168	205754	5.592	ng	97
57) 2,4-Dinitrotoluene	10.016	165	35148	4.336	ng	92
58) Fluorene	10.375	166	163931	5.801	ng	96
59) 2,3,4,6-Tetrachlorophenol	10.151	232	38113m	5.019	ng	
60) Diethylphthalate	10.251	149	158713	5.328	ng	99
61) 4-Chlorophenyl-phenyle...	10.369	204	79443	5.736	ng	97
62) 4-Nitroaniline	10.410	138	24536m	4.090	ng	
63) Azobenzene	10.528	77	183211	5.341	ng	95
66) n-Nitrosodiphenylamine	10.486	169	134075	5.197	ng	98
67) 4-Bromophenyl-phenylether	10.863	248	42729	4.897	ng	93
68) Hexachlorobenzene	10.922	284	45096	5.117	ng	97
69) Atrazine	11.016	200	37975	4.842	ng	95
71) Phenanthrene	11.339	178	241518	5.539	ng	99
72) Anthracene	11.392	178	241012	5.382	ng	97
73) Carbazole	11.551	167	199939	5.212	ng	97
74) Di-n-butylphthalate	11.886	149	238656	5.229	ng	99
75) Fluoranthene	12.533	202	241950	5.677	ng	97
78) Pyrene	12.763	202	250780	4.774	ng	99
80) Butylbenzylphthalate	13.398	149	54150	4.036	ng	96
81) Benzo(a)anthracene	13.957	228	187511	4.997	ng	99
82) 3,3'-Dichlorobenzidine	13.933	252	36620	3.665	ng	95
83) Chrysene	13.998	228	190943	5.035	ng	97
84) Bis(2-ethylhexyl)phtha...	13.963	149	72246	4.237	ng	100
87) Indeno(1,2,3-cd)pyrene	16.956	276	109997	4.311	ng	99
88) Benzo(b)fluoranthene	15.021	252	114440	4.989	ng	98
89) Benzo(k)fluoranthene	15.051	252	133023	5.400	ng	97
90) Benzo(a)pyrene	15.392	252	108037	4.780	ng	98
91) Dibenzo(a,h)anthracene	16.986	278	87364	4.221	ng	98
92) Benzo(g,h,i)perylene	17.415	276	91426	4.301	ng	96

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

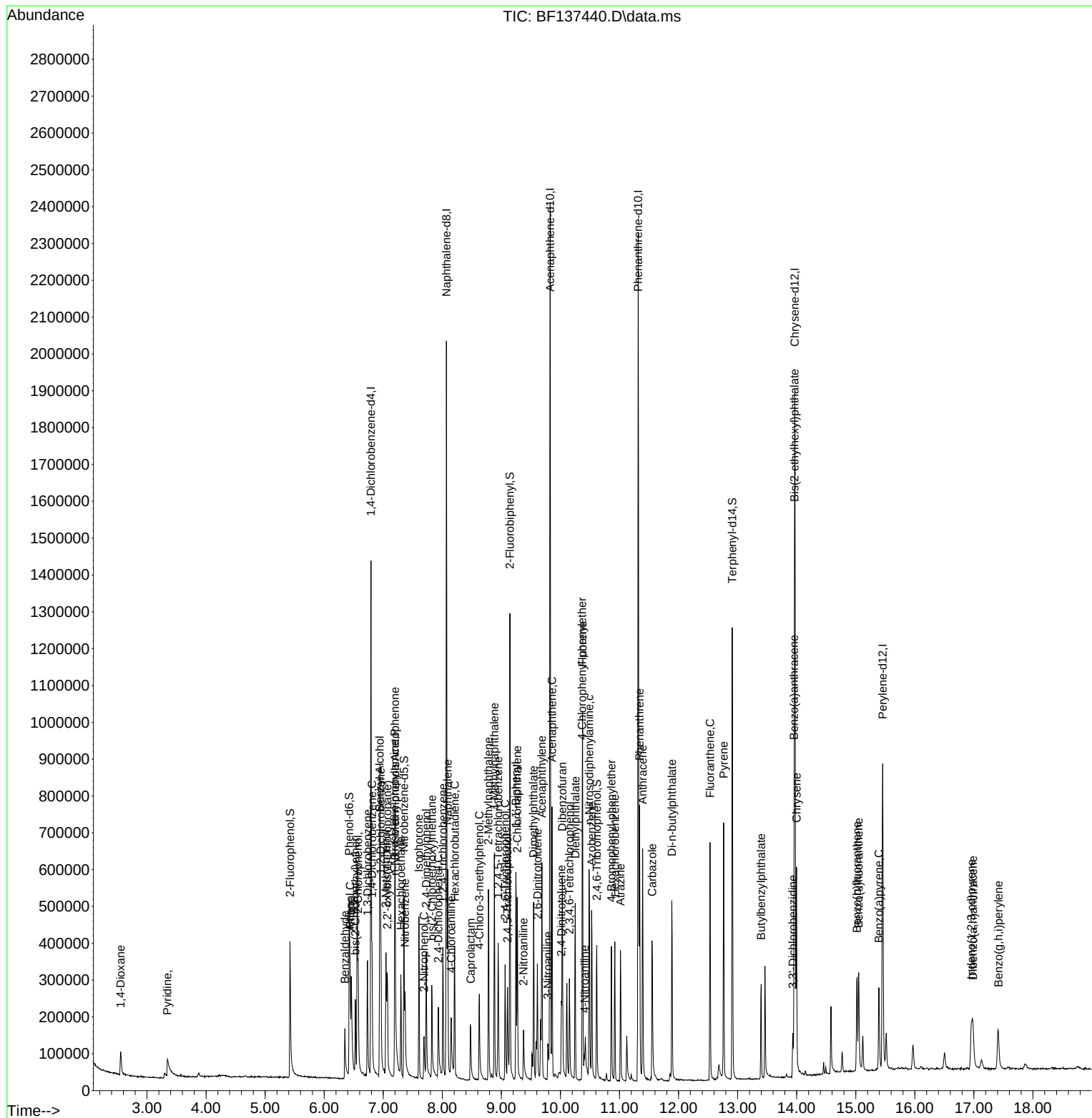
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137440.D
Acq On : 29 Feb 2024 13:13
Operator : CG\JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC005

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:24:54 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:22:23 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137441.D
 Acq On : 29 Feb 2024 13:43
 Operator : CG\JU
 Sample : SSTDICC010
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC010

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:27:05 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.793	152	204171	20.000	ng	-0.01
21) Naphthalene-d8	8.069	136	811505	20.000	ng	-0.01
39) Acenaphthene-d10	9.828	164	462484	20.000	ng	-0.01
64) Phenanthrene-d10	11.316	188	808462	20.000	ng	-0.01
76) Chrysene-d12	13.974	240	502943	20.000	ng	-0.01
86) Perylene-d12	15.457	264	371269	20.000	ng	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	5.422	112	275539	20.436	ng	-0.01
7) Phenol-d6	6.428	99	409676	21.050	ng	-0.02
23) Nitrobenzene-d5	7.351	82	354907	20.321	ng	-0.02
42) 2,4,6-Tribromophenol	10.616	330	80510	19.823	ng	-0.02
45) 2-Fluorobiphenyl	9.145	172	678531	22.966	ng	-0.02
79) Terphenyl-d14	12.916	244	740465	20.245	ng	-0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	2.558	88	73138	9.921	ng	97
3) Pyridine	3.328	79	156102	8.779	ng	98
4) n-Nitrosodimethylamine	3.281	42	43422	9.354	ng	92
6) Aniline	6.457	93	237030	9.967	ng	99
8) 2-Chlorophenol	6.575	128	149280	10.497	ng	93
9) Benzaldehyde	6.346	77	95543	10.020	ng	97
10) Phenol	6.440	94	218679	10.439	ng	93
11) bis(2-Chloroethyl)ether	6.528	93	140884	9.178	ng	99
12) 1,3-Dichlorobenzene	6.734	146	159150	10.473	ng	96
13) 1,4-Dichlorobenzene	6.810	146	160509	10.347	ng	99
14) 1,2-Dichlorobenzene	6.963	146	155399	10.889	ng	97
15) Benzyl Alcohol	6.934	79	124621	10.285	ng	99
16) 2,2'-oxybis(1-Chloropr...	7.069	45	280211	10.620	ng	99
17) 2-Methylphenol	7.045	107	137658	10.345	ng	98
18) Hexachloroethane	7.298	117	51222	10.005	ng	93
19) n-Nitroso-di-n-propyla...	7.198	70	127804	10.634	ng	93
20) 3+4-Methylphenols	7.198	107	169937	11.150	ng	# 83
22) Acetophenone	7.198	105	213065	10.851	ng	98
24) Nitrobenzene	7.369	77	176162	10.041	ng	97
25) Isophorone	7.604	82	337203	10.163	ng	98
26) 2-Nitrophenol	7.687	139	65552	9.411	ng	94
27) 2,4-Dimethylphenol	7.728	122	133867	10.285	ng	97
28) bis(2-Chloroethoxy)met...	7.822	93	201922	10.372	ng	100
29) 2,4-Dichlorophenol	7.928	162	120225	10.065	ng	97
30) 1,2,4-Trichlorobenzene	8.010	180	132187	10.516	ng	99
31) Naphthalene	8.092	128	471857	10.837	ng	98
32) Benzoic acid	7.816	122	49890m	11.506	ng	
33) 4-Chloroaniline	8.145	127	174594	10.226	ng	97
34) Hexachlorobutadiene	8.210	225	77325	10.419	ng	99
35) Caprolactam	8.487	113	38909	9.603	ng	99
36) 4-Chloro-3-methylphenol	8.622	107	135783	10.169	ng	95
37) 2-Methylnaphthalene	8.787	142	303550	10.936	ng	99
38) 1-Methylnaphthalene	8.881	142	288102	11.022	ng	100
40) 1,2,4,5-Tetrachloroben...	8.951	216	135081	10.462	ng	99
41) Hexachlorocyclopentadiene	8.934	237	19349	11.535	ng	96
43) 2,4,6-Trichlorophenol	9.063	196	82066	9.760	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137441.D
 Acq On : 29 Feb 2024 13:43
 Operator : CG\JU
 Sample : SSTDICC010
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :

BNA_F

ClientSampleId :

SSTDICC010

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:27:05 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Mar 01 03:22:23 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.104	196	92124	9.511	ng	98
46) 1,1'-Biphenyl	9.245	154	366768	10.835	ng	96
47) 2-Chloronaphthalene	9.275	162	270641	10.487	ng	97
48) 2-Nitroaniline	9.375	65	79856	9.104	ng	98
49) Acenaphthylene	9.686	152	446840	10.819	ng	100
50) Dimethylphthalate	9.551	163	342563	10.641	ng	98
51) 2,6-Dinitrotoluene	9.616	165	65490	9.726	ng	92
52) Acenaphthene	9.857	154	268287	10.881	ng	99
53) 3-Nitroaniline	9.786	138	67304	9.449	ng	98
54) 2,4-Dinitrophenol	9.898	184	10150	10.998	ng	# 82
55) Dibenzofuran	10.034	168	416247	11.084	ng	97
56) 4-Nitrophenol	9.957	139	23958	8.987	ng	94
57) 2,4-Dinitrotoluene	10.016	165	82304	9.949	ng	93
58) Fluorene	10.375	166	328382	11.386	ng	99
59) 2,3,4,6-Tetrachlorophenol	10.151	232	79944	10.316	ng	94
60) Diethylphthalate	10.251	149	327310	10.766	ng	98
61) 4-Chlorophenyl-phenyle...	10.375	204	157636	11.152	ng	93
62) 4-Nitroaniline	10.398	138	55000m	8.982	ng	
63) Azobenzene	10.533	77	370352	10.579	ng	99
65) 4,6-Dinitro-2-methylph...	10.422	198	32363	7.182	ng	94
66) n-Nitrosodiphenylamine	10.486	169	277596	10.663	ng	98
67) 4-Bromophenyl-phenylether	10.863	248	88394	10.038	ng	92
68) Hexachlorobenzene	10.922	284	91088	10.242	ng	99
69) Atrazine	11.022	200	80631	10.188	ng	99
70) Pentachlorophenol	11.122	266	42364	7.829	ng	98
71) Phenanthrene	11.339	178	483036	10.979	ng	99
72) Anthracene	11.392	178	483238	10.694	ng	99
73) Carbazole	11.551	167	415193	10.727	ng	97
74) Di-n-butylphthalate	11.892	149	486236	10.558	ng	100
75) Fluoranthene	12.533	202	471614	10.966	ng	100
77) Benzidine	12.675	184	94209m	7.654	ng	
78) Pyrene	12.763	202	484994	9.828	ng	99
80) Butylbenzylphthalate	13.398	149	110808	8.792	ng	97
81) Benzo(a)anthracene	13.963	228	353296	10.022	ng	99
82) 3,3'-Dichlorobenzidine	13.933	252	80043	8.527	ng	97
83) Chrysene	13.998	228	353876	9.933	ng	100
84) Bis(2-ethylhexyl)phtha...	13.963	149	140851	8.793	ng	98
85) Di-n-octyl phthalate	14.580	149	203182	11.419	ng	98
87) Indeno(1,2,3-cd)pyrene	16.962	276	233525	9.558	ng	98
88) Benzo(b)fluoranthene	15.021	252	217883	9.921	ng	97
89) Benzo(k)fluoranthene	15.051	252	252298	10.695	ng	99
90) Benzo(a)pyrene	15.392	252	212454	9.817	ng	97
91) Dibenzo(a,h)anthracene	16.986	278	187060	9.438	ng	98
92) Benzo(g,h,i)perylene	17.415	276	191139	9.391	ng	100

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

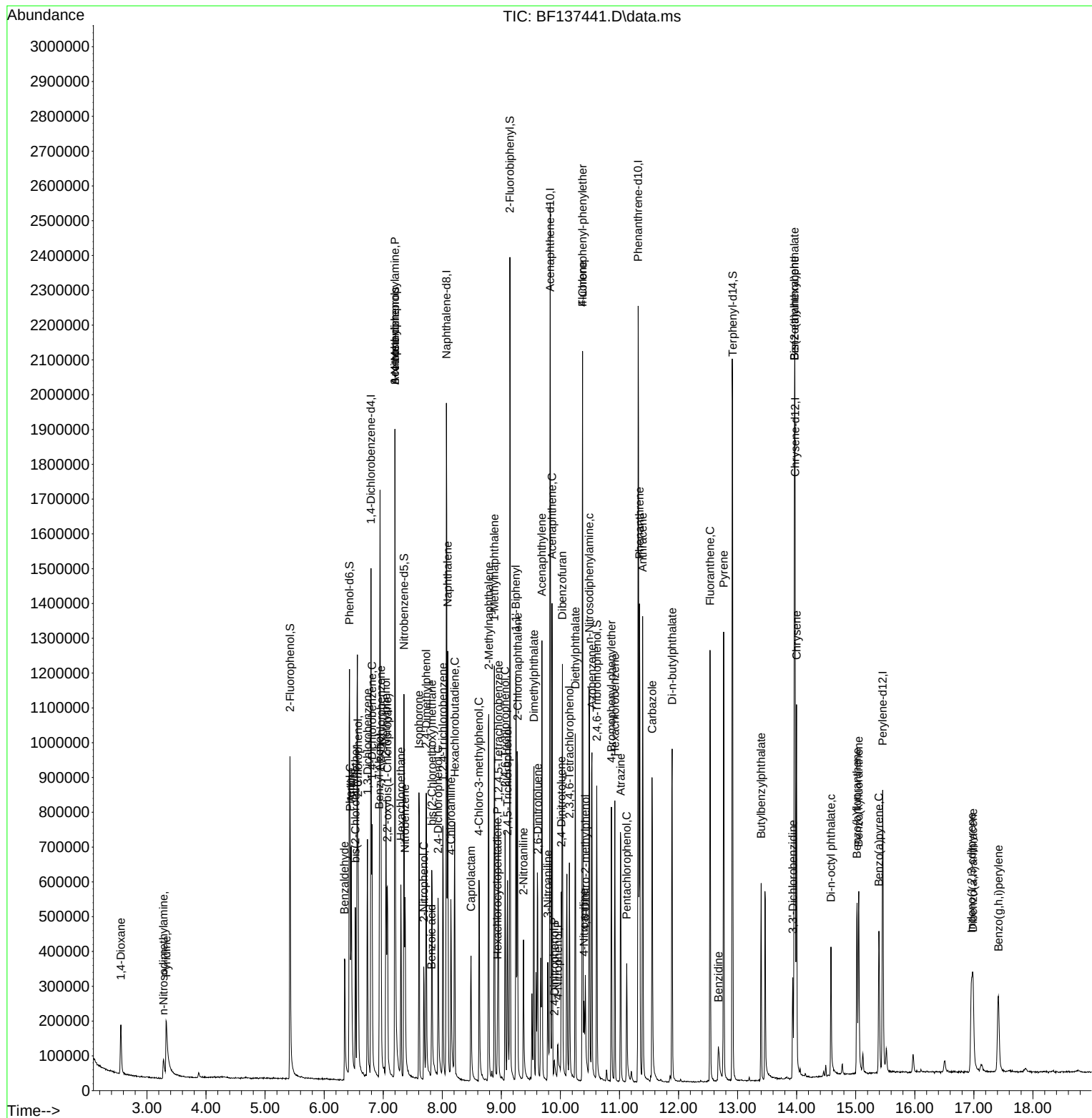
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137441.D
Acq On : 29 Feb 2024 13:43
Operator : CG\JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC010

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:27:05 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:22:23 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137442.D
 Acq On : 29 Feb 2024 14:12
 Operator : CG\JU
 Sample : SSTDICC020
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:28:51 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.792	152	201015	20.000	ng	-0.01
21) Naphthalene-d8	8.075	136	797633	20.000	ng	0.00
39) Acenaphthene-d10	9.827	164	452004	20.000	ng	-0.01
64) Phenanthrene-d10	11.321	188	781783	20.000	ng	0.00
76) Chrysene-d12	13.974	240	452551	20.000	ng	-0.01
86) Perylene-d12	15.462	264	357185	20.000	ng	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.422	112	593074	44.677	ng	-0.01
7) Phenol-d6	6.428	99	842105	43.948	ng	-0.02
23) Nitrobenzene-d5	7.357	82	751746	43.791	ng	-0.01
42) 2,4,6-Tribromophenol	10.621	330	168939	42.561	ng	-0.01
45) 2-Fluorobiphenyl	9.151	172	1276416	44.204	ng	-0.01
79) Terphenyl-d14	12.915	244	1388772	42.199	ng	-0.01
Target Compounds						
						Qvalue
2) 1,4-Dioxane	2.551	88	153478	21.145	ng	97
3) Pyridine	3.316	79	380924	21.760	ng	99
4) n-Nitrosodimethylamine	3.275	42	126170	20.185	ng	98
6) Aniline	6.463	93	513162	21.917	ng	97
8) 2-Chlorophenol	6.581	128	308982	22.068	ng	96
9) Benzaldehyde	6.351	77	209203	22.285	ng	96
10) Phenol	6.445	94	456485	22.133	ng	94
11) bis(2-Chloroethyl)ether	6.534	93	310832	20.567	ng	99
12) 1,3-Dichlorobenzene	6.734	146	325629	21.765	ng	99
13) 1,4-Dichlorobenzene	6.810	146	335623	21.975	ng	98
14) 1,2-Dichlorobenzene	6.963	146	312081	22.210	ng	99
15) Benzyl Alcohol	6.939	79	274204	22.986	ng	97
16) 2,2'-oxybis(1-Chloropr...	7.069	45	565818	21.780	ng	99
17) 2-Methylphenol	7.051	107	283469	21.636	ng	97
18) Hexachloroethane	7.304	117	109785	21.781	ng	97
19) n-Nitroso-di-n-propyla...	7.204	70	259244	21.910	ng	97
20) 3+4-Methylphenols	7.204	107	350765	23.377	ng	90
22) Acetophenone	7.204	105	431062	22.336	ng	98
24) Nitrobenzene	7.375	77	370651	21.493	ng	99
25) Isophorone	7.610	82	687501	21.080	ng	100
26) 2-Nitrophenol	7.692	139	145195	21.207	ng	97
27) 2,4-Dimethylphenol	7.728	122	279615	21.857	ng	100
28) bis(2-Chloroethoxy)met...	7.828	93	416423	21.762	ng	100
29) 2,4-Dichlorophenol	7.933	162	256604	21.856	ng	98
30) 1,2,4-Trichlorobenzene	8.016	180	264844	21.435	ng	98
31) Naphthalene	8.092	128	951132	22.225	ng	99
32) Benzoic acid	7.833	122	112722m	19.058	ng	
33) 4-Chloroaniline	8.145	127	372725	22.211	ng	97
34) Hexachlorobutadiene	8.210	225	155543	21.324	ng	99
35) Caprolactam	8.504	113	83152	20.880	ng	97
36) 4-Chloro-3-methylphenol	8.628	107	282308	21.511	ng	99
37) 2-Methylnaphthalene	8.786	142	606470	22.230	ng	98
38) 1-Methylnaphthalene	8.886	142	572906	22.299	ng	99
40) 1,2,4,5-Tetrachloroben...	8.951	216	275137	21.804	ng	100
41) Hexachlorocyclopentadiene	8.939	237	63787	19.352	ng	97
43) 2,4,6-Trichlorophenol	9.063	196	174989	21.295	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137442.D
 Acq On : 29 Feb 2024 14:12
 Operator : CG\JU
 Sample : SSTDICC020
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:28:51 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.104	196	209616	22.144	ng	97
46) 1,1'-Biphenyl	9.251	154	731660	22.116	ng	99
47) 2-Chloronaphthalene	9.275	162	550194	21.813	ng	99
48) 2-Nitroaniline	9.375	65	180428	21.046	ng	93
49) Acenaphthylene	9.692	152	895605	22.188	ng	98
50) Dimethylphthalate	9.557	163	677193	21.522	ng	100
51) 2,6-Dinitrotoluene	9.616	165	142215	21.609	ng	99
52) Acenaphthene	9.863	154	532926	22.115	ng	98
53) 3-Nitroaniline	9.786	138	140699	20.212	ng	99
54) 2,4-Dinitrophenol	9.892	184	39741	19.333	ng	87
55) Dibenzofuran	10.033	168	828994	22.586	ng	100
56) 4-Nitrophenol	9.951	139	81596	20.070	ng	97
57) 2,4-Dinitrotoluene	10.022	165	179312	22.177	ng	94
58) Fluorene	10.380	166	633906	22.489	ng	97
59) 2,3,4,6-Tetrachlorophenol	10.157	232	163961	21.648	ng	92
60) Diethylphthalate	10.257	149	649853	21.871	ng	99
61) 4-Chlorophenyl-phenyle...	10.374	204	304598	22.049	ng	96
62) 4-Nitroaniline	10.404	138	133686m	22.339	ng	
63) Azobenzene	10.533	77	744620	21.764	ng	98
65) 4,6-Dinitro-2-methylph...	10.427	198	83826	19.238	ng	97
66) n-Nitrosodiphenylamine	10.492	169	546431	21.706	ng	99
67) 4-Bromophenyl-phenylether	10.869	248	184425	21.659	ng	95
68) Hexachlorobenzene	10.927	284	182476	21.217	ng	# 93
69) Atrazine	11.021	200	167122	21.838	ng	96
70) Pentachlorophenol	11.121	266	103798	19.837	ng	99
71) Phenanthrene	11.345	178	940267	22.100	ng	99
72) Anthracene	11.398	178	975293	22.319	ng	98
73) Carbazole	11.557	167	830594	22.191	ng	98
74) Di-n-butylphthalate	11.892	149	981156	22.032	ng	100
75) Fluoranthene	12.539	202	926415	22.276	ng	98
77) Benzidine	12.674	184	224868	20.304	ng	99
78) Pyrene	12.768	202	948326	21.356	ng	99
80) Butylbenzylphthalate	13.398	149	228980	20.191	ng	97
81) Benzo(a)anthracene	13.962	228	687259	21.667	ng	98
82) 3,3'-Dichlorobenzidine	13.933	252	176622	20.910	ng	97
83) Chrysene	13.998	228	675850	21.082	ng	99
84) Bis(2-ethylhexyl)phtha...	13.962	149	296522	20.572	ng	100
85) Di-n-octyl phthalate	14.586	149	443092	19.694	ng	98
87) Indeno(1,2,3-cd)pyrene	16.974	276	498323	21.200	ng	98
88) Benzo(b)fluoranthene	15.021	252	461365	21.836	ng	99
89) Benzo(k)fluoranthene	15.051	252	482841	21.276	ng	98
90) Benzo(a)pyrene	15.398	252	446234	21.431	ng	100
91) Dibenzo(a,h)anthracene	16.992	278	405107	21.246	ng	99
92) Benzo(g,h,i)perylene	17.427	276	418383	21.365	ng	99

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

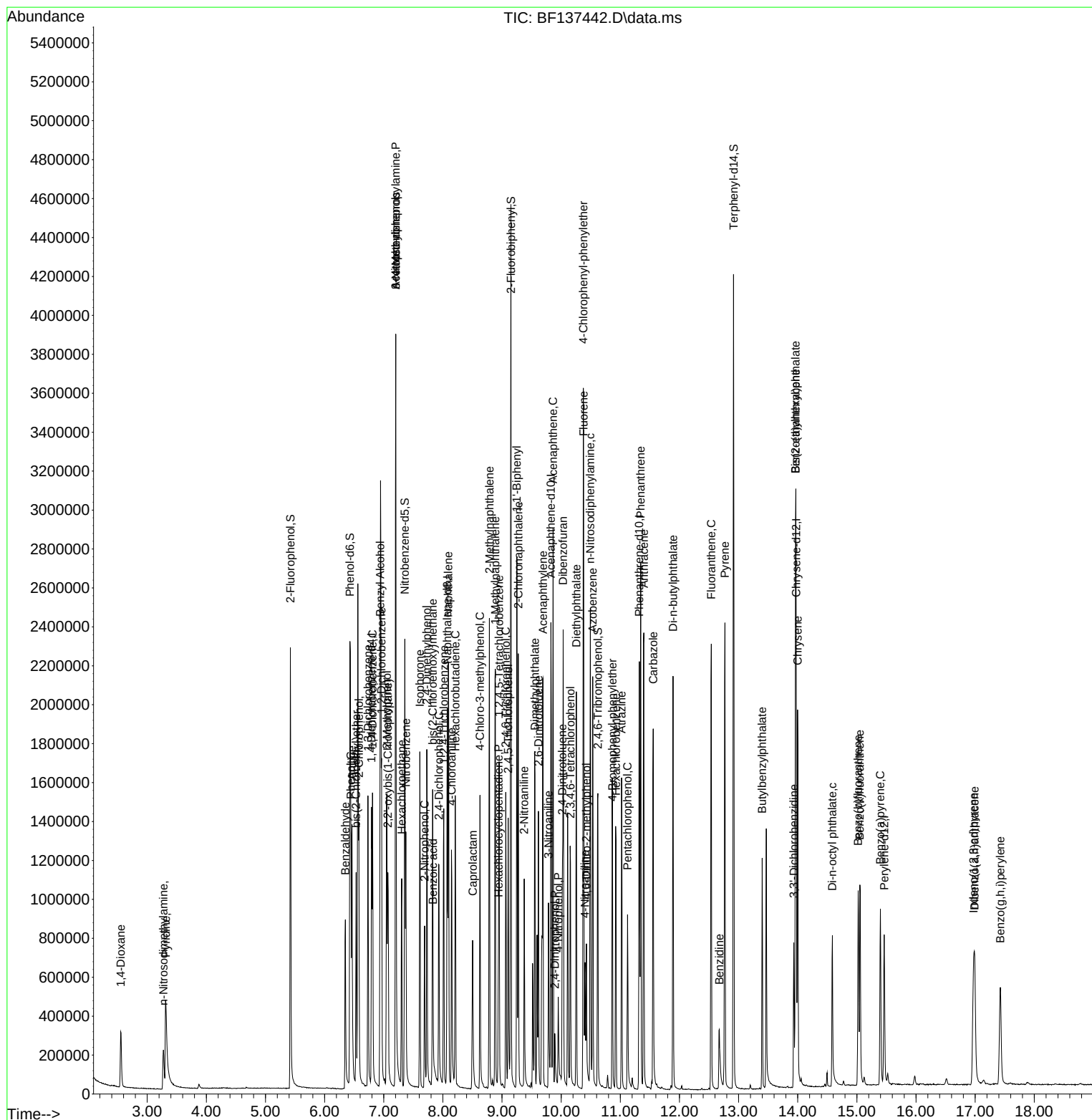
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137442.D
Acq On : 29 Feb 2024 14:12
Operator : CG\JU
Sample : SSTDICC020
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC020

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:28:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:22:23 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137443.D
 Acq On : 29 Feb 2024 14:41
 Operator : CG\JU
 Sample : SSTDICCC040
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICCC040

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:30:12 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.804	152	211004	20.000	ng	0.00
21) Naphthalene-d8	8.081	136	833843	20.000	ng	0.00
39) Acenaphthene-d10	9.839	164	463807	20.000	ng	0.00
64) Phenanthrene-d10	11.328	188	794722	20.000	ng	0.00
76) Chrysene-d12	13.986	240	399789	20.000	ng	0.00
86) Perylene-d12	15.486	264	384521	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.434	112	1164780	83.591	ng	0.00
7) Phenol-d6	6.446	99	1623482	80.715	ng	0.00
23) Nitrobenzene-d5	7.369	82	1469412	81.880	ng	0.00
42) 2,4,6-Tribromophenol	10.633	330	325535	79.925	ng	0.00
45) 2-Fluorobiphenyl	9.163	172	2299816	77.619	ng	0.00
79) Terphenyl-d14	12.927	244	2383259	81.974	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.569	88	313122	41.097	ng	100
3) Pyridine	3.328	79	806165	43.872	ng	100
4) n-Nitrosodimethylamine	3.305	42	295573	40.364	ng	100
6) Aniline	6.469	93	1039027	42.276	ng	100
8) 2-Chlorophenol	6.593	128	598023	40.690	ng	100
9) Benzaldehyde	6.357	77	422597	42.886	ng	100
10) Phenol	6.457	94	896879	41.428	ng	100
11) bis(2-Chloroethyl)ether	6.546	93	665634	41.958	ng	100
12) 1,3-Dichlorobenzene	6.740	146	635170	40.444	ng	100
13) 1,4-Dichlorobenzene	6.822	146	651450	40.634	ng	100
14) 1,2-Dichlorobenzene	6.969	146	590281	40.021	ng	100
15) Benzyl Alcohol	6.945	79	536863	42.874	ng	100
16) 2,2'-oxybis(1-Chloropr...	7.081	45	1095545	40.175	ng	100
17) 2-Methylphenol	7.057	107	559342	40.672	ng	100
18) Hexachloroethane	7.310	117	216621	40.942	ng	100
19) n-Nitroso-di-n-propyla...	7.222	70	490012	39.453	ng	100
20) 3+4-Methylphenols	7.210	107	636790	40.430	ng	100
22) Acetophenone	7.216	105	800623	39.684	ng	100
24) Nitrobenzene	7.387	77	733185	40.670	ng	100
25) Isophorone	7.622	82	1367897	40.121	ng	100
26) 2-Nitrophenol	7.698	139	297397	41.552	ng	100
27) 2,4-Dimethylphenol	7.740	122	544661	40.727	ng	100
28) bis(2-Chloroethoxy)met...	7.834	93	813247	40.654	ng	100
29) 2,4-Dichlorophenol	7.940	162	504360	41.092	ng	100
30) 1,2,4-Trichlorobenzene	8.022	180	517257	40.047	ng	100
31) Naphthalene	8.104	128	1764108	39.431	ng	100
32) Benzoic acid	7.869	122	275789	36.976	ng	100
33) 4-Chloroaniline	8.157	127	739734	42.167	ng	100
34) Hexachlorobutadiene	8.216	225	306994	40.259	ng	100
35) Caprolactam	8.534	113	170362	40.921	ng	100
36) 4-Chloro-3-methylphenol	8.640	107	559595	40.788	ng	100
37) 2-Methylnaphthalene	8.792	142	1139942	39.969	ng	100
38) 1-Methylnaphthalene	8.892	142	1059221	39.437	ng	100
40) 1,2,4,5-Tetrachloroben...	8.957	216	522421	40.347	ng	100
41) Hexachlorocyclopentadiene	8.945	237	176465	38.196	ng	100
43) 2,4,6-Trichlorophenol	9.075	196	347501	41.212	ng	100

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137443.D
 Acq On : 29 Feb 2024 14:41
 Operator : CG\JU
 Sample : SSTDICCC040
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICCC040

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:30:12 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.116	196	397432	40.916	ng	100
46) 1,1'-Biphenyl	9.263	154	1359299	40.042	ng	100
47) 2-Chloronaphthalene	9.287	162	1040431	40.200	ng	100
48) 2-Nitroaniline	9.386	65	373282	42.433	ng	100
49) Acenaphthylene	9.698	152	1667397	40.257	ng	100
50) Dimethylphthalate	9.569	163	1278644	39.603	ng	100
51) 2,6-Dinitrotoluene	9.628	165	278404	41.227	ng	100
52) Acenaphthene	9.875	154	980753	39.662	ng	100
53) 3-Nitroaniline	9.798	138	305425	42.759	ng	100
54) 2,4-Dinitrophenol	9.904	184	113175	39.053	ng	100
55) Dibenzofuran	10.045	168	1497972	39.774	ng	100
56) 4-Nitrophenol	9.963	139	191449	40.068	ng	100
57) 2,4-Dinitrotoluene	10.034	165	350729	42.274	ng	100
58) Fluorene	10.386	166	1122973	38.825	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.163	232	316200m	40.685	ng	
60) Diethylphthalate	10.269	149	1216114	39.887	ng	100
61) 4-Chlorophenyl-phenyle...	10.381	204	546105	38.525	ng	100
62) 4-Nitroaniline	10.416	138	253486	41.280	ng	100
63) Azobenzene	10.545	77	1413626	40.266	ng	100
65) 4,6-Dinitro-2-methylph...	10.439	198	186377	42.078	ng	100
66) n-Nitrosodiphenylamine	10.504	169	1010712	39.495	ng	100
67) 4-Bromophenyl-phenylether	10.875	248	351163	40.569	ng	100
68) Hexachlorobenzene	10.933	284	345261	39.492	ng	100
69) Atrazine	11.039	200	312634	40.186	ng	100
70) Pentachlorophenol	11.133	266	220525	41.459	ng	100
71) Phenanthrene	11.357	178	1682299	38.897	ng	100
72) Anthracene	11.404	178	1729396	38.932	ng	100
73) Carbazole	11.563	167	1513206	39.770	ng	100
74) Di-n-butylphthalate	11.904	149	1811893	40.024	ng	100
75) Fluoranthene	12.545	202	1637659	38.737	ng	100
77) Benzidine	12.680	184	453808	46.384	ng	100
78) Pyrene	12.780	202	1649970	42.061	ng	100
80) Butylbenzylphthalate	13.410	149	421649	42.088	ng	100
81) Benzo(a)anthracene	13.974	228	1131969	40.397	ng	100
82) 3,3'-Dichlorobenzidine	13.945	252	333144	44.646	ng	100
83) Chrysene	14.010	228	1157066	40.856	ng	100
84) Bis(2-ethylhexyl)phtha...	13.974	149	541616	42.534	ng	100
85) Di-n-octyl phthalate	14.598	149	956325	40.023	ng	100
87) Indeno(1,2,3-cd)pyrene	17.045	276	1070760	42.316	ng	100
88) Benzo(b)fluoranthene	15.039	252	922543	40.559	ng	100
89) Benzo(k)fluoranthene	15.074	252	947040	38.763	ng	100
90) Benzo(a)pyrene	15.421	252	930583	41.516	ng	100
91) Dibenzo(a,h)anthracene	17.068	278	871986	42.480	ng	100
92) Benzo(g,h,i)perylene	17.533	276	893656	42.392	ng	100

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

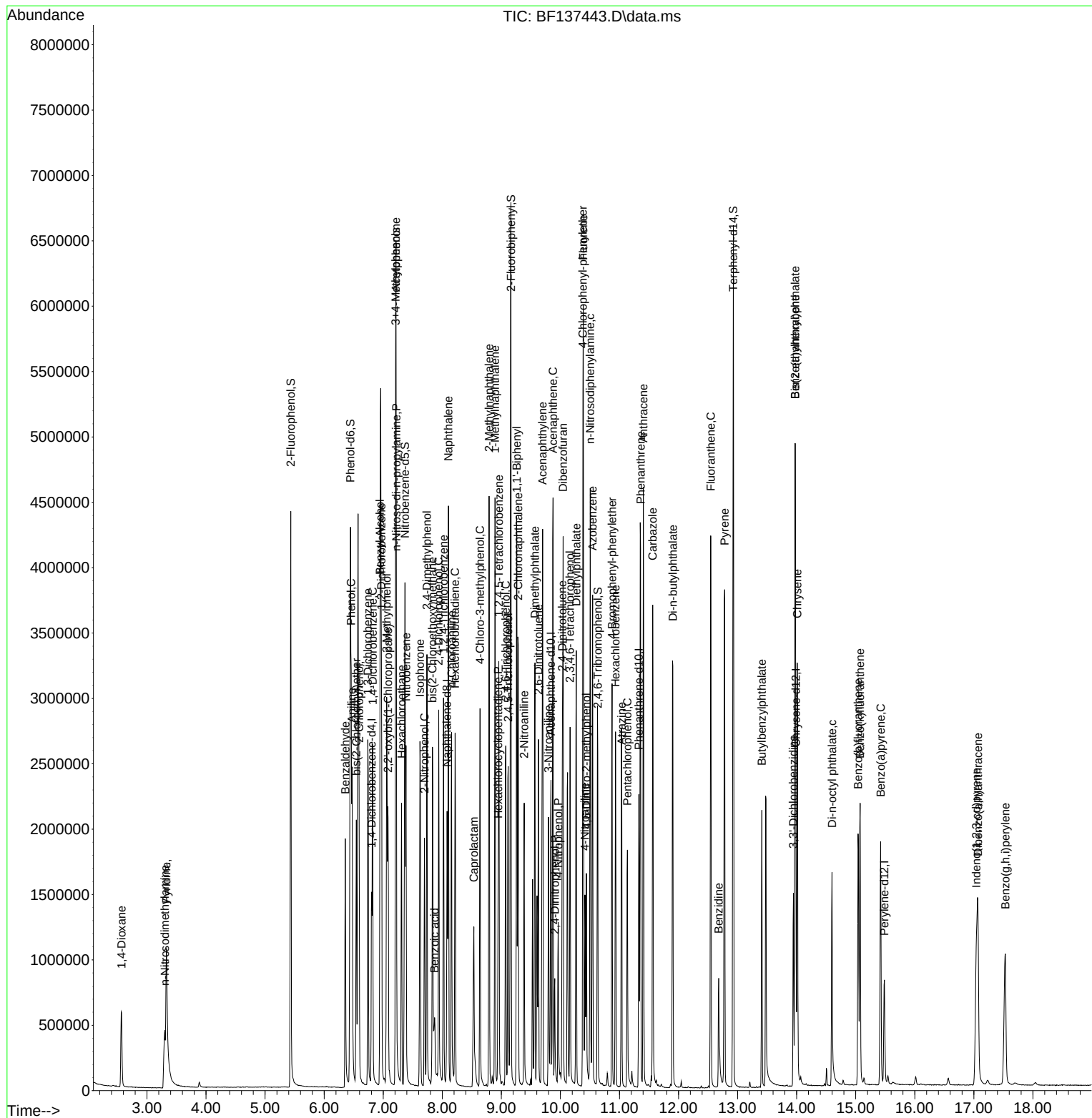
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Acq On    : 29 Feb 2024  14:41  
Operator  : CG\JU  
Sample    : SSTIDICC040  
Misc      :  
ALS Vial  : 6    Sample Multiplier: 1
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Instrument :
BNA_F
ClientSampleId :
SSTDICCC040

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:30:12 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:22:23 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137444.D
 Acq On : 29 Feb 2024 16:13
 Operator : CG\JU
 Sample : SSTDICC050
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC050

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:31:28 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.881	152	209566m	20.000	ng	0.08
21) Naphthalene-d8	8.151	136	813899	20.000	ng	0.07
39) Acenaphthene-d10	9.910	164	455809	20.000	ng	0.07
64) Phenanthrene-d10	11.404	188	761538	20.000	ng	0.08
76) Chrysene-d12	14.068	240	391785	20.000	ng	0.08
86) Perylene-d12	15.598	264	377433	20.000	ng	0.11
System Monitoring Compounds						
5) 2-Fluorophenol	5.534	112	1381413	99.818	ng	0.10
7) Phenol-d6	6.528	99	1919244	96.075	ng	0.08
23) Nitrobenzene-d5	7.445	82	1736142	99.113	ng	0.08
42) 2,4,6-Tribromophenol	10.710	330	395207	98.733	ng	0.08
45) 2-Fluorobiphenyl	9.233	172	2635923	90.524	ng	0.07
79) Terphenyl-d14	13.010	244	2823201	99.090	ng	0.08
Target Compounds						Qvalue
2) 1,4-Dioxane	2.716	88	372144	49.179	ng	100
3) Pyridine	3.510	79	959737	52.587	ng	99
4) n-Nitrosodimethylamine	3.498	42	371739	50.100	ng	# 97
6) Aniline	6.551	93	1227334	50.281	ng	99
8) 2-Chlorophenol	6.669	128	709198	48.586	ng	93
9) Benzaldehyde	6.439	77	497543	50.838	ng	99
10) Phenol	6.539	94	1049665	48.818	ng	93
11) bis(2-Chloroethyl)ether	6.628	93	798035	50.649	ng	98
12) 1,3-Dichlorobenzene	6.822	146	752733	48.259	ng	96
13) 1,4-Dichlorobenzene	6.898	146	759119m	47.675	ng	
14) 1,2-Dichlorobenzene	7.051	146	698971m	47.715	ng	
15) Benzyl Alcohol	7.028	79	623280	50.116	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.157	45	1302329	48.085	ng	99
17) 2-Methylphenol	7.133	107	669014	48.981	ng	99
18) Hexachloroethane	7.386	117	258093	49.115	ng	96
19) n-Nitroso-di-n-propyla...	7.298	70	574527	46.575	ng	98
20) 3+4-Methylphenols	7.292	107	737635	47.154	ng	96
22) Acetophenone	7.292	105	949798	48.231	ng	97
24) Nitrobenzene	7.463	77	894233	50.819	ng	99
25) Isophorone	7.698	82	1641218	49.317	ng	100
26) 2-Nitrophenol	7.769	139	371639	53.197	ng	96
27) 2,4-Dimethylphenol	7.810	122	649242	49.737	ng	99
28) bis(2-Chloroethoxy)met...	7.910	93	969193	49.637	ng	100
29) 2,4-Dichlorophenol	8.016	162	604824	50.485	ng	98
30) 1,2,4-Trichlorobenzene	8.092	180	615192	48.796	ng	99
31) Naphthalene	8.175	128	2092265	47.912	ng	100
32) Benzoic acid	7.957	122	370825	48.788	ng	98
33) 4-Chloroaniline	8.228	127	875470	51.127	ng	97
34) Hexachlorobutadiene	8.292	225	359900	48.353	ng	99
35) Caprolactam	8.610	113	206549m	50.829	ng	
36) 4-Chloro-3-methylphenol	8.710	107	661642	49.408	ng	97
37) 2-Methylnaphthalene	8.869	142	1329720	47.766	ng	99
38) 1-Methylnaphthalene	8.963	142	1231713	46.983	ng	100
40) 1,2,4,5-Tetrachloroben...	9.033	216	618388	48.596	ng	99
41) Hexachlorocyclopentadiene	9.016	237	240138	49.720	ng	99
43) 2,4,6-Trichlorophenol	9.145	196	414464	50.016	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137444.D
 Acq On : 29 Feb 2024 16:13
 Operator : CG\JU
 Sample : SSTDICC050
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :

BNA_F

ClientSampleId :

SSTDICC050

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:31:28 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Mar 01 03:22:23 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.186	196	474826	49.742	ng	97
46) 1,1'-Biphenyl	9.333	154	1571436	47.104	ng	99
47) 2-Chloronaphthalene	9.357	162	1216356	47.822	ng	99
48) 2-Nitroaniline	9.457	65	468529	54.195	ng	91
49) Acenaphthylene	9.774	152	1913279	47.004	ng	100
50) Dimethylphthalate	9.645	163	1512415	47.666	ng	99
51) 2,6-Dinitrotoluene	9.704	165	333084	50.189	ng	94
52) Acenaphthene	9.945	154	1136249	46.757	ng	99
53) 3-Nitroaniline	9.874	138	367521	52.355	ng	98
54) 2,4-Dinitrophenol	9.974	184	149685	49.713	ng	91
55) Dibenzofuran	10.122	168	1723644	46.569	ng	99
56) 4-Nitrophenol	10.039	139	245879	50.974	ng	98
57) 2,4-Dinitrotoluene	10.110	165	421590	51.706	ng	99
58) Fluorene	10.463	166	1286790	45.270	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.239	232	375328	49.141	ng	92
60) Diethylphthalate	10.345	149	1423912	47.522	ng	99
61) 4-Chlorophenyl-phenyle...	10.457	204	642142	46.095	ng	97
62) 4-Nitroaniline	10.498	138	315652	52.306	ng	96
63) Azobenzene	10.621	77	1655066	47.970	ng	98
65) 4,6-Dinitro-2-methylph...	10.516	198	229824	54.147	ng	99
66) n-Nitrosodiphenylamine	10.580	169	1189515	48.507	ng	99
67) 4-Bromophenyl-phenylether	10.951	248	412153	49.690	ng	98
68) Hexachlorobenzene	11.010	284	413523	49.361	ng	96
69) Atrazine	11.116	200	371636	49.852	ng	99
70) Pentachlorophenol	11.210	266	270831	53.136	ng	98
71) Phenanthrene	11.433	178	1971858	47.578	ng	99
72) Anthracene	11.480	178	2065587	48.527	ng	100
73) Carbazole	11.639	167	1772628	48.618	ng	100
74) Di-n-butylphthalate	11.980	149	2124515	48.975	ng	99
75) Fluoranthene	12.627	202	1912701	47.214	ng	98
77) Benzidine	12.757	184	529981	55.276	ng	99
78) Pyrene	12.857	202	1928850	50.174	ng	99
80) Butylbenzylphthalate	13.486	149	529145	53.897	ng	95
81) Benzo(a)anthracene	14.057	228	1351950	49.234	ng	98
82) 3,3'-Dichlorobenzidine	14.021	252	390226	53.364	ng	99
83) Chrysene	14.092	228	1355514	48.841	ng	99
84) Bis(2-ethylhexyl)phtha...	14.057	149	653940	52.405	ng	99
85) Di-n-octyl phthalate	14.680	149	1146318	47.703	ng	100
87) Indeno(1,2,3-cd)pyrene	17.203	276	1278901	51.490	ng	99
88) Benzo(b)fluoranthene	15.145	252	1099875	49.263	ng	98
89) Benzo(k)fluoranthene	15.174	252	1148525	47.893	ng	99
90) Benzo(a)pyrene	15.533	252	1098986	49.950	ng	100
91) Dibenzo(a,h)anthracene	17.227	278	1038798	51.557	ng	99
92) Benzo(g,h,i)perylene	17.692	276	1068514	51.638	ng	99

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

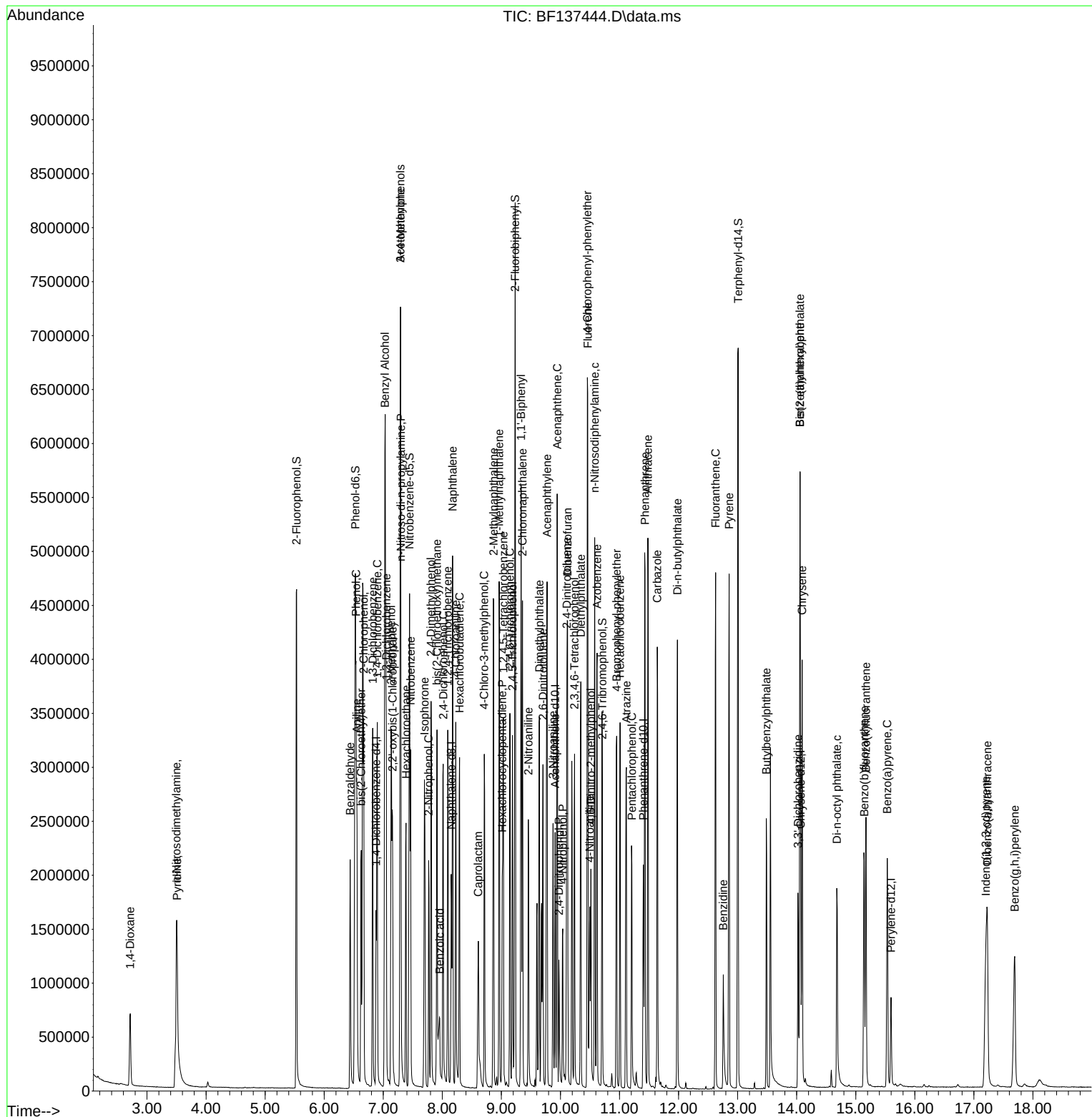
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Data File : BF137444.D
Acq On : 29 Feb 2024 16:13
Operator : CG\JU
Sample : SSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC050

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:31:28 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:22:23 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
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 Acq On : 29 Feb 2024 16:43
 Operator : CG\JU
 Sample : SSTDICC060
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC060

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:33:19 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.881	152	207177m	20.000	ng	0.08
21) Naphthalene-d8	8.151	136	810536	20.000	ng	0.07
39) Acenaphthene-d10	9.910	164	451374	20.000	ng	0.07
64) Phenanthrene-d10	11.404	188	760756	20.000	ng	0.08
76) Chrysene-d12	14.068	240	377521	20.000	ng	0.08
86) Perylene-d12	15.598	264	376339	20.000	ng	0.11
System Monitoring Compounds						
5) 2-Fluorophenol	5.534	112	1614780	118.026	ng	0.10
7) Phenol-d6	6.528	99	2274737	115.183	ng	0.08
23) Nitrobenzene-d5	7.445	82	2059634	118.069	ng	0.08
42) 2,4,6-Tribromophenol	10.710	330	483738	122.038	ng	0.08
45) 2-Fluorobiphenyl	9.234	172	3039062	105.394	ng	0.07
79) Terphenyl-d14	13.010	244	3256693	118.624	ng	0.08
Target Compounds						
						Qvalue
2) 1,4-Dioxane	2.716	88	450442	60.212	ng	100
3) Pyridine	3.516	79	1168108	64.743	ng	99
4) n-Nitrosodimethylamine	3.504	42	451977	60.742	ng	99
6) Aniline	6.557	93	1464430	60.686	ng	98
8) 2-Chlorophenol	6.675	128	824396	57.129	ng	98
9) Benzaldehyde	6.440	77	578336	59.774	ng	100
10) Phenol	6.545	94	1238993	58.288	ng	85
11) bis(2-Chloroethyl)ether	6.628	93	919381	59.023	ng	99
12) 1,3-Dichlorobenzene	6.822	146	879611	57.043	ng	99
13) 1,4-Dichlorobenzene	6.898	146	897406m	57.009	ng	
14) 1,2-Dichlorobenzene	7.051	146	799412m	55.201	ng	
15) Benzyl Alcohol	7.028	79	720558	58.606	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.157	45	1519790	56.762	ng	99
17) 2-Methylphenol	7.140	107	792699	58.705	ng	99
18) Hexachloroethane	7.387	117	309440	59.565	ng	98
19) n-Nitroso-di-n-propyla...	7.304	70	684670	56.144	ng	100
20) 3+4-Methylphenols	7.292	107	857330	55.438	ng	95
22) Acetophenone	7.292	105	1105443	56.368	ng	# 93
24) Nitrobenzene	7.463	77	1058806	60.421	ng	99
25) Isophorone	7.704	82	1984505	59.880	ng	99
26) 2-Nitrophenol	7.775	139	446407	64.165	ng	98
27) 2,4-Dimethylphenol	7.816	122	768390	59.108	ng	99
28) bis(2-Chloroethoxy)met...	7.910	93	1148294	59.053	ng	100
29) 2,4-Dichlorophenol	8.016	162	707897	59.333	ng	99
30) 1,2,4-Trichlorobenzene	8.098	180	726513	57.865	ng	99
31) Naphthalene	8.175	128	2428122	55.834	ng	100
32) Benzoic acid	7.969	122	466104	60.087	ng	99
33) 4-Chloroaniline	8.228	127	1041305	61.064	ng	97
34) Hexachlorobutadiene	8.292	225	430469	58.075	ng	99
35) Caprolactam	8.622	113	250321m	61.856	ng	
36) 4-Chloro-3-methylphenol	8.716	107	783925	58.782	ng	100
37) 2-Methylnaphthalene	8.869	142	1543592	55.678	ng	99
38) 1-Methylnaphthalene	8.969	142	1441537	55.214	ng	99
40) 1,2,4,5-Tetrachloroben...	9.034	216	725031	57.536	ng	100
41) Hexachlorocyclopentadiene	9.016	237	300178	60.600	ng	99
43) 2,4,6-Trichlorophenol	9.145	196	492399	60.005	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137445.D
 Acq On : 29 Feb 2024 16:43
 Operator : CG\JU
 Sample : SSTDICC060
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC060

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:33:19 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.186	196	564958	59.766	ng	95
46) 1,1'-Biphenyl	9.334	154	1842528	55.772	ng	99
47) 2-Chloronaphthalene	9.357	162	1425335	56.589	ng	98
48) 2-Nitroaniline	9.463	65	561891	65.633	ng	99
49) Acenaphthylene	9.775	152	2221079	55.102	ng	99
50) Dimethylphthalate	9.645	163	1798069	57.225	ng	99
51) 2,6-Dinitrotoluene	9.704	165	403249	61.359	ng	99
52) Acenaphthene	9.945	154	1320580	54.876	ng	99
53) 3-Nitroaniline	9.881	138	443820	63.846	ng	93
54) 2,4-Dinitrophenol	9.981	184	187964	60.835	ng	98
55) Dibenzofuran	10.122	168	1978118	53.970	ng	98
56) 4-Nitrophenol	10.039	139	299926	61.740	ng	95
57) 2,4-Dinitrotoluene	10.110	165	492079	60.945	ng	93
58) Fluorene	10.463	166	1493439	53.056	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.239	232	442353m	58.485	ng	
60) Diethylphthalate	10.345	149	1682228	56.695	ng	99
61) 4-Chlorophenyl-phenyle...	10.457	204	753841	54.645	ng	98
62) 4-Nitroaniline	10.498	138	386330	64.647	ng	99
63) Azobenzene	10.622	77	1927655	56.420	ng	99
65) 4,6-Dinitro-2-methylph...	10.522	198	281131	66.304	ng	87
66) n-Nitrosodiphenylamine	10.580	169	1395867	56.980	ng	100
67) 4-Bromophenyl-phenylether	10.951	248	487036	58.778	ng	98
68) Hexachlorobenzene	11.010	284	493947	59.021	ng	97
69) Atrazine	11.116	200	437583	58.759	ng	97
70) Pentachlorophenol	11.210	266	323970	63.627	ng	98
71) Phenanthrene	11.433	178	2265706	54.725	ng	98
72) Anthracene	11.486	178	2380067	55.973	ng	100
73) Carbazole	11.645	167	2075063	56.971	ng	100
74) Di-n-butylphthalate	11.980	149	2444728	56.414	ng	99
75) Fluoranthene	12.627	202	2211333	54.642	ng	98
77) Benzidine	12.757	184	582655	63.066	ng	99
78) Pyrene	12.857	202	2240379	60.480	ng	100
80) Butylbenzylphthalate	13.492	149	635648	67.191	ng	95
81) Benzo(a)anthracene	14.057	228	1576470	59.579	ng	99
82) 3,3'-Dichlorobenzidine	14.021	252	467261	66.313	ng	99
83) Chrysene	14.092	228	1588852	59.412	ng	100
84) Bis(2-ethylhexyl)phtha...	14.057	149	789297	65.641	ng	99
85) Di-n-octyl phthalate	14.680	149	1410174	59.350	ng	100
87) Indeno(1,2,3-cd)pyrene	17.204	276	1550025	62.588	ng	99
88) Benzo(b)fluoranthene	15.145	252	1330337	59.758	ng	99
89) Benzo(k)fluoranthene	15.174	252	1393420	58.274	ng	99
90) Benzo(a)pyrene	15.533	252	1327762	60.523	ng	99
91) Dibenzo(a,h)anthracene	17.233	278	1278819	63.654	ng	99
92) Benzo(g,h,i)perylene	17.698	276	1296436	62.835	ng	99

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

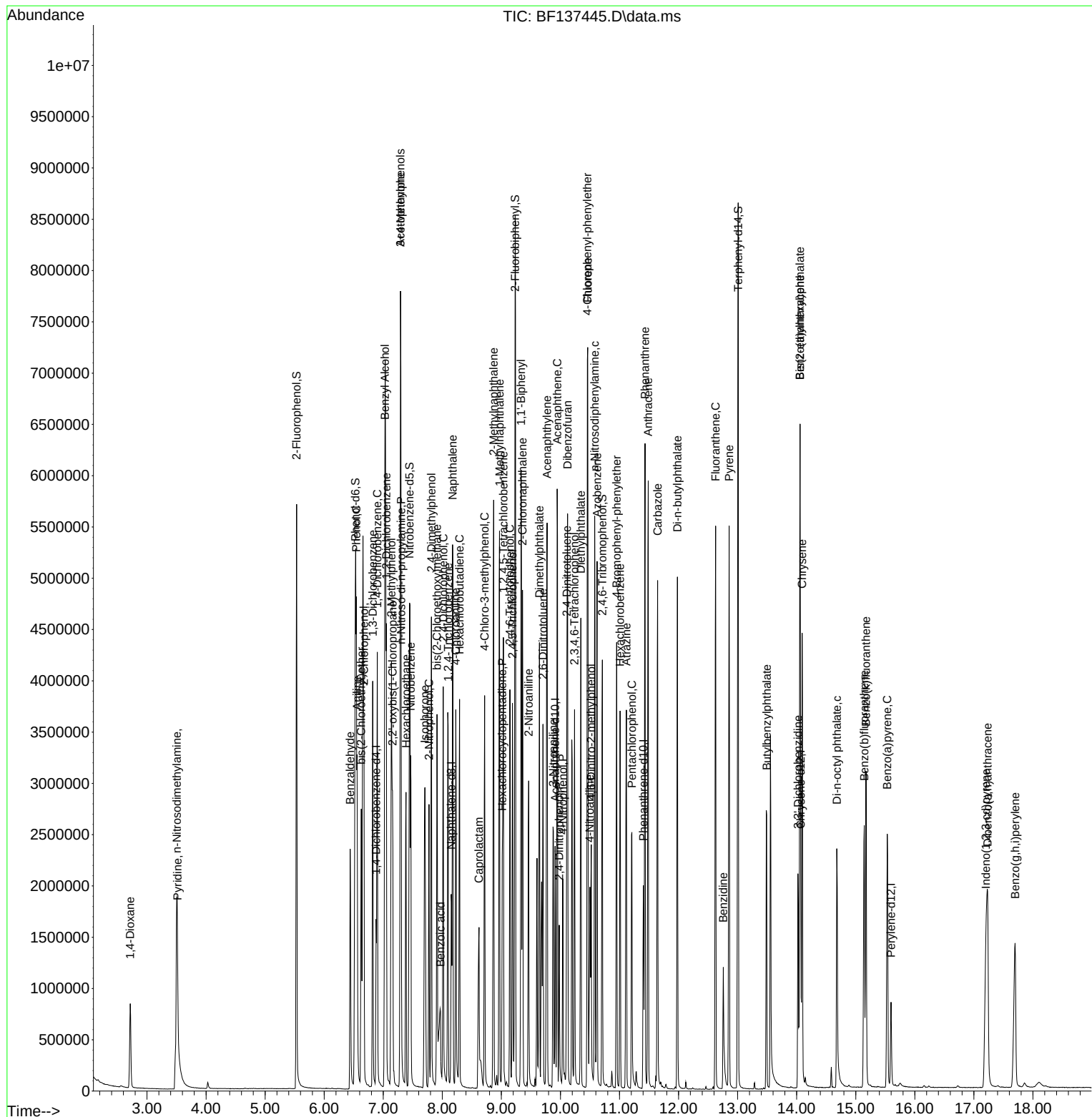
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137445.D
Acq On : 29 Feb 2024 16:43
Operator : CG\JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC060

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:33:19 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:22:23 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137446.D
 Acq On : 29 Feb 2024 17:14
 Operator : CG\JU
 Sample : SSTDICC080
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDICC080

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:35:30 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:22:23 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.886	152	209041m	20.000	ng	0.08
21) Naphthalene-d8	8.157	136	813309	20.000	ng	0.08
39) Acenaphthene-d10	9.916	164	445069	20.000	ng	0.08
64) Phenanthrene-d10	11.410	188	736364	20.000	ng	0.08
76) Chrysene-d12	14.068	240	351464	20.000	ng	0.08
86) Perylene-d12	15.604	264	389716	20.000	ng	0.12
System Monitoring Compounds						
5) 2-Fluorophenol	5.540	112	2007293	145.406	ng	0.11
7) Phenol-d6	6.539	99	2792541	140.142	ng	0.09
23) Nitrobenzene-d5	7.451	82	2578369	147.301	ng	0.08
42) 2,4,6-Tribromophenol	10.716	330	610924	156.307	ng	0.08
45) 2-Fluorobiphenyl	9.239	172	3691386	129.831	ng	0.08
79) Terphenyl-d14	13.015	244	3755156	146.921	ng	0.09
Target Compounds						Qvalue
2) 1,4-Dioxane	2.722	88	570757	75.615	ng	99
3) Pyridine	3.510	79	1491284	81.918	ng	99
4) n-Nitrosodimethylamine	3.522	42	603862	79.198	ng	99
6) Aniline	6.563	93	1821203	74.797	ng	99
8) 2-Chlorophenol	6.681	128	1020937	70.118	ng	99
9) Benzaldehyde	6.445	77	714312	73.170	ng	100
10) Phenol	6.551	94	1488521	69.402	ng	83
11) bis(2-Chloroethyl)ether	6.634	93	1185342	75.419	ng	99
12) 1,3-Dichlorobenzene	6.828	146	1106638	71.126	ng	98
13) 1,4-Dichlorobenzene	6.904	146	1105912m	69.629	ng	
14) 1,2-Dichlorobenzene	7.057	146	967757m	66.229	ng	
15) Benzyl Alcohol	7.034	79	881676	71.072	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.163	45	1871708	69.282	ng	98
17) 2-Methylphenol	7.145	107	992942	72.879	ng	96
18) Hexachloroethane	7.386	117	385350	73.516	ng	96
19) n-Nitroso-di-n-propyla...	7.310	70	860790	69.957	ng	99
20) 3+4-Methylphenols	7.298	107	1023660	65.603	ng	95
22) Acetophenone	7.298	105	1341318	68.162	ng	# 93
24) Nitrobenzene	7.469	77	1324924	75.349	ng	99
25) Isophorone	7.710	82	2511955	75.537	ng	99
26) 2-Nitrophenol	7.781	139	564036	80.796	ng	95
27) 2,4-Dimethylphenol	7.822	122	948026	72.678	ng	99
28) bis(2-Chloroethoxy)met...	7.916	93	1422422	72.901	ng	99
29) 2,4-Dichlorophenol	8.022	162	886882	74.082	ng	98
30) 1,2,4-Trichlorobenzene	8.098	180	897972	71.277	ng	99
31) Naphthalene	8.181	128	2955317	67.725	ng	100
32) Benzoic acid	7.986	122	649132m	81.188	ng	
33) 4-Chloroaniline	8.233	127	1226213	71.662	ng	96
34) Hexachlorobutadiene	8.292	225	537841	72.313	ng	99
35) Caprolactam	8.633	113	315627m	77.728	ng	
36) 4-Chloro-3-methylphenol	8.722	107	988017	73.833	ng	99
37) 2-Methylnaphthalene	8.869	142	1874544	67.385	ng	97
38) 1-Methylnaphthalene	8.969	142	1770217	67.572	ng	99
40) 1,2,4,5-Tetrachloroben...	9.039	216	886892	71.378	ng	99
41) Hexachlorocyclopentadiene	9.022	237	409030	80.597	ng	100
43) 2,4,6-Trichlorophenol	9.151	196	617156	76.273	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137446.D
 Acq On : 29 Feb 2024 17:14
 Operator : CG\JU
 Sample : SSTDICC080
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :

BNA_F

ClientSampleId :

SSTDICC080

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:35:30 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Mar 01 03:22:23 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.198	196	701821	75.296	ng	96
46) 1,1'-Biphenyl	9.339	154	2210708	67.865	ng	99
47) 2-Chloronaphthalene	9.363	162	1764543	71.048	ng	98
48) 2-Nitroaniline	9.469	65	699869	82.908	ng	98
49) Acenaphthylene	9.780	152	2632322	66.229	ng	99
50) Dimethylphthalate	9.651	163	2236619	72.191	ng	99
51) 2,6-Dinitrotoluene	9.716	165	499680	77.109	ng	# 85
52) Acenaphthene	9.951	154	1638433	69.049	ng	99
53) 3-Nitroaniline	9.886	138	542620	79.164	ng	96
54) 2,4-Dinitrophenol	9.986	184	253099	80.069	ng	97
55) Dibenzofuran	10.127	168	2367212	65.500	ng	99
56) 4-Nitrophenol	10.051	139	380622	78.162	ng	97
57) 2,4-Dinitrotoluene	10.116	165	587451	73.787	ng	# 85
58) Fluorene	10.469	166	1812955	65.319	ng	100
59) 2,3,4,6-Tetrachlorophenol	10.245	232	550723m	73.845	ng	
60) Diethylphthalate	10.351	149	2040228	69.735	ng	99
61) 4-Chlorophenyl-phenyle...	10.463	204	913359	67.146	ng	95
62) 4-Nitroaniline	10.510	138	475979	80.777	ng	96
63) Azobenzene	10.627	77	2369794	70.343	ng	98
65) 4,6-Dinitro-2-methylph...	10.527	198	354562	86.392	ng	96
66) n-Nitrosodiphenylamine	10.586	169	1710733	72.147	ng	99
67) 4-Bromophenyl-phenylether	10.957	248	607113	75.697	ng	98
68) Hexachlorobenzene	11.016	284	604907	74.674	ng	96
69) Atrazine	11.121	200	541984	75.189	ng	96
70) Pentachlorophenol	11.210	266	405019	82.180	ng	99
71) Phenanthrene	11.439	178	2735417	68.258	ng	98
72) Anthracene	11.492	178	2836722	68.922	ng	100
73) Carbazole	11.651	167	2423300	68.736	ng	100
74) Di-n-butylphthalate	11.980	149	2940666	70.106	ng	98
75) Fluoranthene	12.633	202	2603446	66.462	ng	97
77) Benzidine	12.763	184	621444	72.252	ng	99
78) Pyrene	12.863	202	2570338	74.532	ng	100
80) Butylbenzylphthalate	13.492	149	742644	84.321	ng	100
81) Benzo(a)anthracene	14.057	228	1827568	74.189	ng	100
82) 3,3'-Dichlorobenzidine	14.027	252	566915	86.420	ng	99
83) Chrysene	14.098	228	1906621	76.580	ng	100
84) Bis(2-ethylhexyl)phtha...	14.057	149	930755	83.145	ng	99
85) Di-n-octyl phthalate	14.686	149	1861517	81.811	ng	100
87) Indeno(1,2,3-cd)pyrene	17.215	276	2033544	79.293	ng	99
88) Benzo(b)fluoranthene	15.151	252	1702306	73.842	ng	99
89) Benzo(k)fluoranthene	15.180	252	1760159	71.085	ng	98
90) Benzo(a)pyrene	15.539	252	1717789	75.614	ng	99
91) Dibenzo(a,h)anthracene	17.245	278	1657182	79.656	ng	99
92) Benzo(g,h,i)perylene	17.709	276	1696728	79.414	ng	99

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

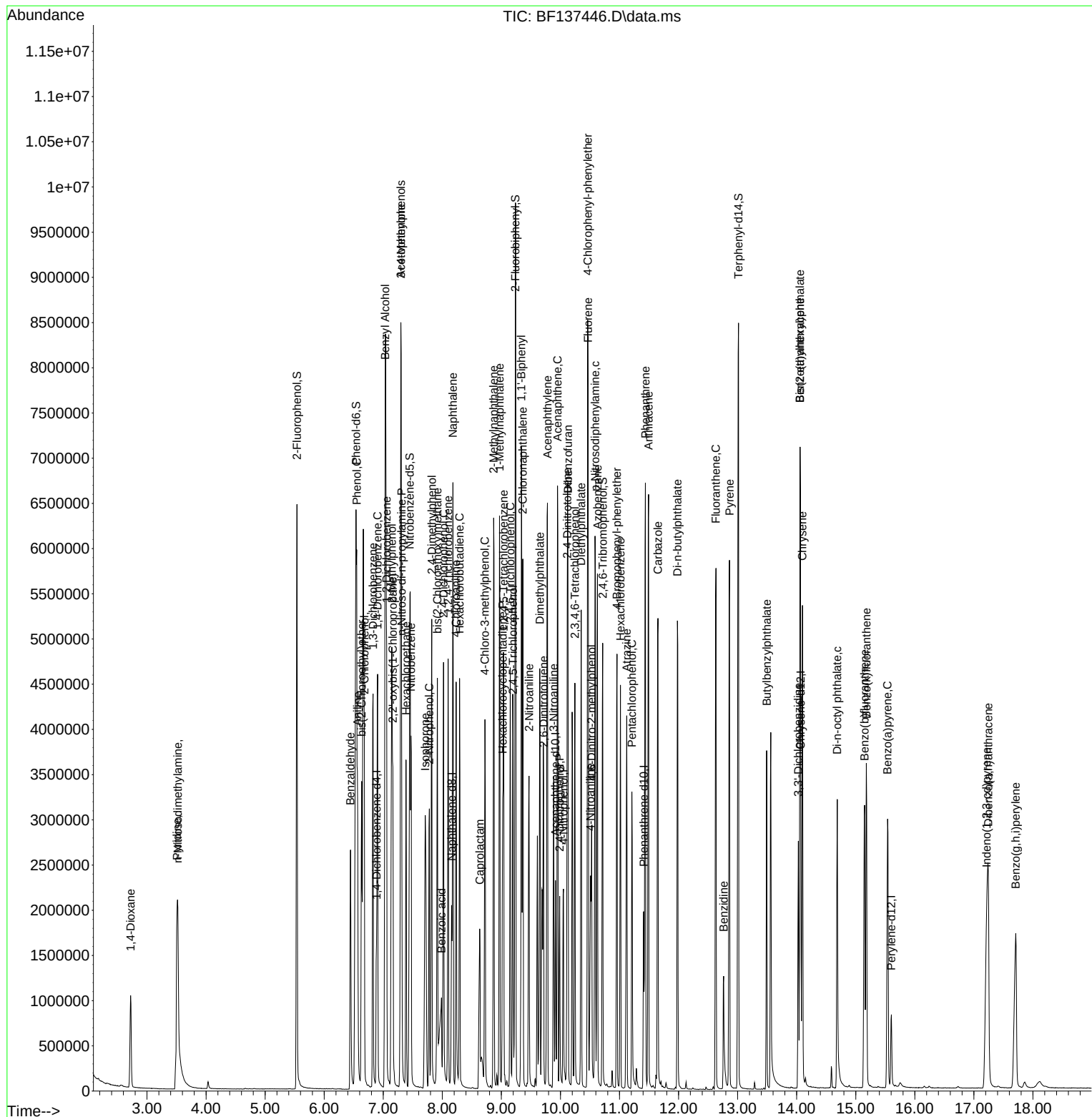
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137446.D
Acq On : 29 Feb 2024 17:14
Operator : CG\JU
Sample : SSTIDCC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDICC080

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:35:30 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:22:23 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137447.D
 Acq On : 29 Feb 2024 17:44
 Operator : CG\JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 ICVBF022924

Manual Integrations
 APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:42:02 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:39:04 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.887	152	202380m	20.000	ng	0.08
21) Naphthalene-d8	8.157	136	807070	20.000	ng	0.08
39) Acenaphthene-d10	9.916	164	448960	20.000	ng	0.08
64) Phenanthrene-d10	11.404	188	775689	20.000	ng	0.08
76) Chrysene-d12	14.069	240	412116	20.000	ng	0.08
86) Perylene-d12	15.598	264	376888	20.000	ng	0.11
System Monitoring Compounds						
5) 2-Fluorophenol	5.534	112	1113807	83.353	ng	0.10
7) Phenol-d6	6.528	99	1566301	81.205	ng	0.08
23) Nitrobenzene-d5	7.445	82	1411647	81.270	ng	0.08
42) 2,4,6-Tribromophenol	10.710	330	320211	81.217	ng	0.08
45) 2-Fluorobiphenyl	9.234	172	2189491	76.340	ng	0.07
79) Terphenyl-d14	13.010	244	2412611	80.502	ng	0.08
Target Compounds						
						Qvalue
2) 1,4-Dioxane	2.722	88	291710	39.925	ng	99
3) Pyridine	3.516	79	757196	42.971	ng	99
4) n-Nitrosodimethylamine	3.499	42	290002	41.212	ng	100
6) Aniline	6.557	93	986655	41.863	ng	98
8) 2-Chlorophenol	6.675	128	578451	41.043	ng	98
9) Benzaldehyde	6.445	77	407691	43.144	ng	99
10) Phenol	6.540	94	865081	41.669	ng	99
11) bis(2-Chloroethyl)ether	6.628	93	615016	40.426	ng	99
12) 1,3-Dichlorobenzene	6.822	146	601861	39.963	ng	100
13) 1,4-Dichlorobenzene	6.898	146	616640m	40.018	ng	
14) 1,2-Dichlorobenzene	7.051	146	571726m	40.423	ng	
15) Benzyl Alcohol	7.028	79	515514	42.931	ng	99
16) 2,2'-oxybis(1-Chloropr...	7.157	45	1043716	39.912	ng	100
17) 2-Methylphenol	7.140	107	530520	40.227	ng	99
18) Hexachloroethane	7.387	117	210398	41.467	ng	94
19) n-Nitroso-di-n-propyla...	7.298	70	467276	39.231	ng	98
20) 3+4-Methylphenols	7.292	107	612232	40.534	ng	97
22) Acetophenone	7.292	105	778724	39.879	ng	97
24) Nitrobenzene	7.463	77	726683	41.647	ng	99
25) Isophorone	7.698	82	1307608	39.625	ng	100
26) 2-Nitrophenol	7.775	139	300263	43.344	ng	99
27) 2,4-Dimethylphenol	7.816	122	523757	40.463	ng	99
28) bis(2-Chloroethoxy)met...	7.910	93	787933	40.695	ng	99
29) 2,4-Dichlorophenol	8.016	162	491596	41.381	ng	98
30) 1,2,4-Trichlorobenzene	8.098	180	502848	40.223	ng	99
31) Naphthalene	8.181	128	1704157	39.355	ng	99
32) Benzoic acid	7.945	122	276980	38.580	ng	99
33) 4-Chloroaniline	8.234	127	707205	41.650	ng	99
34) Hexachlorobutadiene	8.292	225	294070	39.843	ng	99
35) Caprolactam	8.610	113	167783m	41.651	ng	
36) 4-Chloro-3-methylphenol	8.716	107	540415	40.697	ng	97
37) 2-Methylnaphthalene	8.869	142	1102387	39.935	ng	99
38) 1-Methylnaphthalene	8.969	142	1025000	39.428	ng	98
40) 1,2,4,5-Tetrachloroben...	9.034	216	505846	40.358	ng	100
41) Hexachlorocyclopentadiene	9.022	237	189728	41.513	ng	98
43) 2,4,6-Trichlorophenol	9.151	196	332124	40.691	ng	96

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137447.D
 Acq On : 29 Feb 2024 17:44
 Operator : CG\JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :

BNA_F

ClientSampleId :

ICVBF022924

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
 Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:42:02 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Mar 01 03:39:04 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.186	196	386602	41.118	ng	94
46) 1,1'-Biphenyl	9.334	154	1319890	40.167	ng	99
47) 2-Chloronaphthalene	9.357	162	995787	39.747	ng	98
48) 2-Nitroaniline	9.463	65	374109	43.934	ng	97
49) Acenaphthylene	9.775	152	1585044	39.534	ng	100
50) Dimethylphthalate	9.645	163	1236954	39.579	ng	100
51) 2,6-Dinitrotoluene	9.704	165	273800	41.886	ng	98
52) Acenaphthene	9.951	154	941822	39.348	ng	99
53) 3-Nitroaniline	9.875	138	299809	43.361	ng	98
54) 2,4-Dinitrophenol	9.981	184	114438	40.428	ng	99
55) Dibenzofuran	10.122	168	1462732	40.123	ng	99
56) 4-Nitrophenol	10.039	139	193377	41.613	ng	99
57) 2,4-Dinitrotoluene	10.110	165	350315	43.620	ng	100
58) Fluorene	10.469	166	1089363	38.909	ng	98
59) 2,3,4,6-Tetrachlorophenol	10.239	232	309198	41.009	ng	93
60) Diethylphthalate	10.345	149	1178651	39.937	ng	100
61) 4-Chlorophenyl-phenyle...	10.457	204	527323	38.430	ng	98
62) 4-Nitroaniline	10.498	138	260895m	43.902	ng	
63) Azobenzene	10.622	77	1370059	40.315	ng	99
65) 4,6-Dinitro-2-methylph...	10.516	198	187486	43.367	ng	99
66) n-Nitrosodiphenylamine	10.581	169	1006585	40.298	ng	99
67) 4-Bromophenyl-phenylether	10.951	248	342254	40.510	ng	95
68) Hexachlorobenzene	11.010	284	344223	40.339	ng	99
69) Atrazine	11.116	200	308545	40.634	ng	98
70) Pentachlorophenol	11.210	266	219083	42.470	ng	99
71) Phenanthrene	11.433	178	1658765	39.294	ng	100
72) Anthracene	11.486	178	1713181	39.514	ng	99
73) Carbazole	11.645	167	1499052	40.364	ng	99
74) Di-n-butylphthalate	11.980	149	1800912	40.758	ng	100
75) Fluoranthene	12.627	202	1638048	39.697	ng	99
77) Benzidine	12.757	184	417310	41.378	ng	98
78) Pyrene	12.857	202	1647221	40.735	ng	99
80) Butylbenzylphthalate	13.492	149	456407	44.194	ng	98
81) Benzo(a)anthracene	14.057	228	1152322	39.894	ng	99
82) 3,3'-Dichlorobenzidine	14.027	252	324309	42.162	ng	99
83) Chrysene	14.092	228	1176740	40.308	ng	100
84) Bis(2-ethylhexyl)phtha...	14.057	149	578314	44.058	ng	99
85) Di-n-octyl phthalate	14.686	149	936291	38.294	ng	99
87) Indeno(1,2,3-cd)pyrene	17.209	276	1024033	41.289	ng	99
88) Benzo(b)fluoranthene	15.145	252	891083	39.969	ng	99
89) Benzo(k)fluoranthene	15.174	252	982509	41.030	ng	99
90) Benzo(a)pyrene	15.539	252	903892	41.142	ng	99
91) Dibenzo(a,h)anthracene	17.239	278	839026	41.702	ng	99
92) Benzo(g,h,i)perylene	17.698	276	856280	41.441	ng	98

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

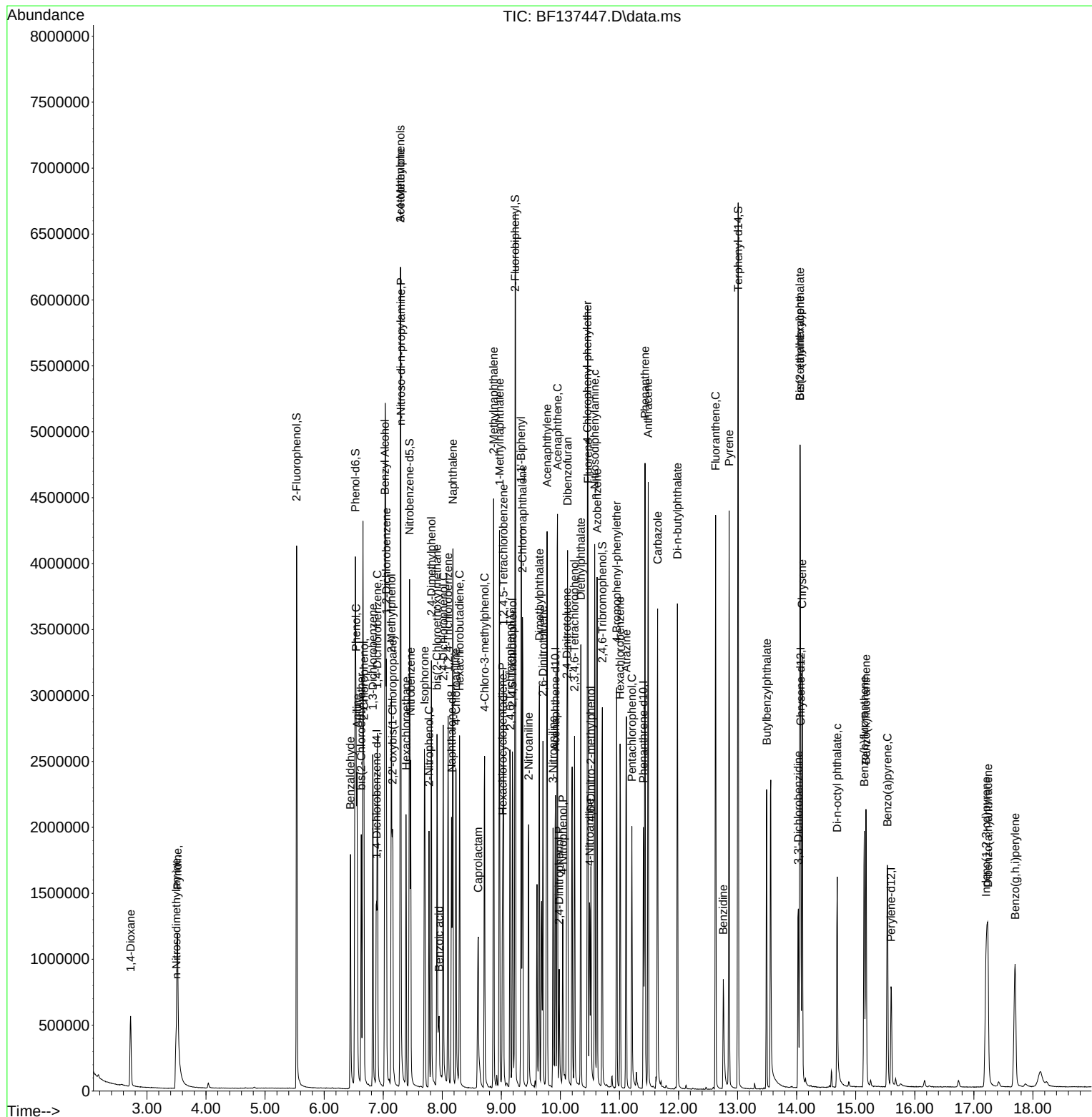
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Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\  
Data File : BF137447.D  
Acq On    : 29 Feb 2024   17:44  
Operator  : CG\JU  
Sample    : SSTDICV040  
Misc      :  
ALS Vial  : 10    Sample Multiplier: 1
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Instrument :
BNA_F
ClientSampleId :
ICVBF022924

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/01/2024
Supervised By :mohammad ahmed 03/02/2024

Quant Time: Mar 01 03:42:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:39:04 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:39:04 2024
 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	96	0.08
2	1,4-Dioxane	0.722	0.721	0.1	93	0.15
3	Pyridine	1.741	1.871	-7.5	94	0.19
4	n-Nitrosodimethylamine	0.652	0.716	-9.8	98	0.19
5 S	2-Fluorophenol	1.321	1.376	-4.2	96	0.10
6	Aniline	2.329	2.438	-4.7	95	0.09
7 S	Phenol-d6	1.906	1.935	-1.5	96	0.08
8	2-Chlorophenol	1.393	1.429	-2.6	97	0.08
9	Benzaldehyde	0.934	1.007	-7.8	96	0.09
10 C	Phenol	2.052	2.137	-4.1	96	0.08
11	bis(2-Chloroethyl)ether	1.503	1.519	-1.1	92	0.08
12	1,3-Dichlorobenzene	1.488	1.487	0.1	95	0.08
13 C	1,4-Dichlorobenzene	1.523	1.523	0.0	95	0.08
14	1,2-Dichlorobenzene	1.398	1.413	-1.1	97	0.08
15	Benzyl Alcohol	1.187	1.274	-7.3	96	0.08
16	2,2'-oxybis(1-Chloropropane	2.584	2.579	0.2	95	0.08
17	2-Methylphenol	1.303	1.311	-0.6	95	0.08
18	Hexachloroethane	0.501	0.520	-3.8	97	0.08
19 P	n-Nitroso-di-n-propylamine	1.177	1.154	2.0	95	0.08
20	3+4-Methylphenols	1.493	1.513	-1.3	96	0.08
21 I	Naphthalene-d8	1.000	1.000	0.0	97	0.08
22	Acetophenone	0.484	0.482	0.4	97	0.08
23 S	Nitrobenzene-d5	0.430	0.437	-1.6	96	0.08
24	Nitrobenzene	0.432	0.450	-4.2	99	0.08
25	Isophorone	0.818	0.810	1.0	96	0.08
26 C	2-Nitrophenol	0.172	0.186	-8.1	101	0.08
27	2,4-Dimethylphenol	0.321	0.324	-0.9	96	0.08
28	bis(2-Chloroethoxy)methane	0.480	0.488	-1.7	97	0.08
29 C	2,4-Dichlorophenol	0.294	0.305	-3.7	97	0.08
30	1,2,4-Trichlorobenzene	0.310	0.312	-0.6	97	0.08
31	Naphthalene	1.073	1.056	1.6	97	0.08
32	Benzoic acid	0.167	0.172	-3.0	100	0.08
33	4-Chloroaniline	0.421	0.438	-4.0	96	0.08
34 C	Hexachlorobutadiene	0.183	0.182	0.5	96	0.08
35	Caprolactam	0.100	0.104	-4.0	98	0.08
36 C	4-Chloro-3-methylphenol	0.329	0.335	-1.8	97	0.08
37	2-Methylnaphthalene	0.684	0.683	0.1	97	0.08
38	1-Methylnaphthalene	0.644	0.635	1.4	97	0.08
39 I	Acenaphthene-d10	1.000	1.000	0.0	97	0.08
40	1,2,4,5-Tetrachlorobenzene	0.558	0.563	-0.9	97	0.08
41 P	Hexachlorocyclopentadiene	0.180	0.211	-17.2	108	0.08
42 S	2,4,6-Tribromophenol	0.176	0.178	-1.1	98	0.08
43 C	2,4,6-Trichlorophenol	0.364	0.370	-1.6	96	0.08
44	2,4,5-Trichlorophenol	0.419	0.431	-2.9	97	0.07
45 S	2-Fluorobiphenyl	1.278	1.219	4.6	95	0.07
46	1,1'-Biphenyl	1.464	1.470	-0.4	97	0.07
47	2-Chloronaphthalene	1.116	1.109	0.6	96	0.07

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137447.D
 Acq On : 29 Feb 2024 17:44
 Operator : CG\JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 ICVBF022924

Quant Time: Mar 01 03:42:02 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:39:04 2024
 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	0.379	0.417	-10.0	100	0.08
49	Acenaphthylene	1.786	1.765	1.2	95	0.08
50	Dimethylphthalate	1.392	1.378	1.0	97	0.08
51	2,6-Dinitrotoluene	0.291	0.305	-4.8	98	0.08
52 C	Acenaphthene	1.066	1.049	1.6	96	0.08
53	3-Nitroaniline	0.308	0.334	-8.4	98	0.08
54 P	2,4-Dinitrophenol	0.111	0.127	-14.4	101	0.08
55	Dibenzofuran	1.624	1.629	-0.3	98	0.08
56 P	4-Nitrophenol	0.190	0.215	-13.2	101	0.08
57	2,4-Dinitrotoluene	0.358	0.390	-8.9	100	0.08
58	Fluorene	1.247	1.213	2.7	97	0.08
59	2,3,4,6-Tetrachlorophenol	0.336	0.344	-2.4	98	0.08
60	Diethylphthalate	1.315	1.313	0.2	97	0.08
61	4-Chlorophenyl-phenylether	0.611	0.587	3.9	97	0.08
62	4-Nitroaniline	0.265	0.291	-9.8	103	0.08
63	Azobenzene	1.514	1.526	-0.8	97	0.08
64 I	Phenanthrene-d10	1.000	1.000	0.0	98	0.08
65	4,6-Dinitro-2-methylphenol	0.111	0.121	-9.0	101	0.08
66 c	n-Nitrosodiphenylamine	0.644	0.649	-0.8	100	0.08
67	4-Bromophenyl-phenylether	0.218	0.221	-1.4	97	0.08
68	Hexachlorobenzene	0.220	0.222	-0.9	100	0.08
69	Atrazine	0.196	0.199	-1.5	99	0.08
70 C	Pentachlorophenol	0.133	0.141	-6.0	99	0.08
71	Phenanthrene	1.088	1.069	1.7	99	0.08
72	Anthracene	1.118	1.104	1.3	99	0.08
73	Carbazole	0.958	0.966	-0.8	99	0.08
74	Di-n-butylphthalate	1.139	1.161	-1.9	99	0.08
75 C	Fluoranthene	1.064	1.056	0.8	100	0.08
76 I	Chrysene-d12	1.000	1.000	0.0	103	0.08
77	Benzydine	0.489	0.506	-3.5	92	0.08
78	Pyrene	1.962	1.998	-1.8	100	0.08
79 S	Terphenyl-d14	1.454	1.464	-0.7	101	0.08
80	Butylbenzylphthalate	0.501	0.554	-10.6	108	0.08
81	Benzo(a)anthracene	1.402	1.398	0.3	102	0.08
82	3,3'-Dichlorobenzidine	0.373	0.393	-5.4	97	0.08
83	Chrysene	1.417	1.428	-0.8	102	0.08
84	Bis(2-ethylhexyl)phthalate	0.637	0.702	-10.2	107	0.08
85 c	Di-n-octyl phthalate	1.120	1.136	-1.4	98	0.09
86 I	Perylene-d12	1.000	1.000	0.0	98	0.11
87	Indeno(1,2,3-cd)pyrene	1.316	1.359	-3.3	96	0.16
88	Benzo(b)fluoranthene	1.183	1.182	0.1	97	0.11
89	Benzo(k)fluoranthene	1.271	1.303	-2.5	104	0.10
90 C	Benzo(a)pyrene	1.166	1.199	-2.8	97	0.12
91	Dibenzo(a,h)anthracene	1.068	1.113	-4.2	96	0.17
92	Benzo(g,h,i)perylene	1.096	1.136	-3.6	96	0.16

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137447.D
Acq On : 29 Feb 2024 17:44
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Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF022924

Quant Time: Mar 01 03:42:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:39:04 2024
Response via : Initial Calibration

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

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	20.000	20.000	0.0	96	0.08
2	1,4-Dioxane	40.000	39.925	0.2	93	0.15
3	Pyridine	40.000	42.971	-7.4	94	0.19
4	n-Nitrosodimethylamine	40.000	41.212	-3.0	98	0.19
5 S	2-Fluorophenol	80.000	83.353	-4.2	96	0.10
6	Aniline	40.000	41.863	-4.7	95	0.09
7 S	Phenol-d6	80.000	81.205	-1.5	96	0.08
8	2-Chlorophenol	40.000	41.043	-2.6	97	0.08
9	Benzaldehyde	40.000	43.144	-7.9	96	0.09
10 C	Phenol	40.000	41.669	-4.2	96	0.08
11	bis(2-Chloroethyl)ether	40.000	40.426	-1.1	92	0.08
12	1,3-Dichlorobenzene	40.000	39.963	0.1	95	0.08
13 C	1,4-Dichlorobenzene	40.000	40.018	-0.0	95	0.08
14	1,2-Dichlorobenzene	40.000	40.423	-1.1	97	0.08
15	Benzyl Alcohol	40.000	42.931	-7.3	96	0.08
16	2,2'-oxybis(1-Chloropropane	40.000	39.912	0.2	95	0.08
17	2-Methylphenol	40.000	40.227	-0.6	95	0.08
18	Hexachloroethane	40.000	41.467	-3.7	97	0.08
19 P	n-Nitroso-di-n-propylamine	40.000	39.231	1.9	95	0.08
20	3+4-Methylphenols	40.000	40.534	-1.3	96	0.08
21 I	Naphthalene-d8	20.000	20.000	0.0	97	0.08
22	Acetophenone	40.000	39.879	0.3	97	0.08
23 S	Nitrobenzene-d5	80.000	81.270	-1.6	96	0.08
24	Nitrobenzene	40.000	41.647	-4.1	99	0.08
25	Isophorone	40.000	39.625	0.9	96	0.08
26 C	2-Nitrophenol	40.000	43.344	-8.4	101	0.08
27	2,4-Dimethylphenol	40.000	40.463	-1.2	96	0.08
28	bis(2-Chloroethoxy)methane	40.000	40.695	-1.7	97	0.08
29 C	2,4-Dichlorophenol	40.000	41.381	-3.5	97	0.08
30	1,2,4-Trichlorobenzene	40.000	40.223	-0.6	97	0.08
31	Naphthalene	40.000	39.355	1.6	97	0.08
32	Benzoic acid	40.000	38.580	3.6	100	0.08
33	4-Chloroaniline	40.000	41.650	-4.1	96	0.08
34 C	Hexachlorobutadiene	40.000	39.843	0.4	96	0.08
35	Caprolactam	40.000	41.651	-4.1	98	0.08
36 C	4-Chloro-3-methylphenol	40.000	40.697	-1.7	97	0.08
37	2-Methylnaphthalene	40.000	39.935	0.2	97	0.08
38	1-Methylnaphthalene	40.000	39.428	1.4	97	0.08
39 I	Acenaphthene-d10	20.000	20.000	0.0	97	0.08
40	1,2,4,5-Tetrachlorobenzene	40.000	40.358	-0.9	97	0.08
41 P	Hexachlorocyclopentadiene	40.000	41.513	-3.8	108	0.08
42 S	2,4,6-Tribromophenol	80.000	81.217	-1.5	98	0.08
43 C	2,4,6-Trichlorophenol	40.000	40.691	-1.7	96	0.08
44	2,4,5-Trichlorophenol	40.000	41.118	-2.8	97	0.07
45 S	2-Fluorobiphenyl	80.000	76.340	4.6	95	0.07
46	1,1'-Biphenyl	40.000	40.167	-0.4	97	0.07
47	2-Chloronaphthalene	40.000	39.747	0.6	96	0.07

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
 Data File : BF137447.D
 Acq On : 29 Feb 2024 17:44
 Operator : CG\JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 ICVBF022924

Quant Time: Mar 01 03:42:02 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 01 03:39:04 2024
 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	43.934	-9.8	100	0.08
49	Acenaphthylene	40.000	39.534	1.2	95	0.08
50	Dimethylphthalate	40.000	39.579	1.1	97	0.08
51	2,6-Dinitrotoluene	40.000	41.886	-4.7	98	0.08
52 C	Acenaphthene	40.000	39.348	1.6	96	0.08
53	3-Nitroaniline	40.000	43.361	-8.4	98	0.08
54 P	2,4-Dinitrophenol	40.000	40.428	-1.1	101	0.08
55	Dibenzofuran	40.000	40.123	-0.3	98	0.08
56 P	4-Nitrophenol	40.000	41.613	-4.0	101	0.08
57	2,4-Dinitrotoluene	40.000	43.620	-9.0	100	0.08
58	Fluorene	40.000	38.909	2.7	97	0.08
59	2,3,4,6-Tetrachlorophenol	40.000	41.009	-2.5	98	0.08
60	Diethylphthalate	40.000	39.937	0.2	97	0.08
61	4-Chlorophenyl-phenylether	40.000	38.430	3.9	97	0.08
62	4-Nitroaniline	40.000	43.902	-9.8	103	0.08
63	Azobenzene	40.000	40.315	-0.8	97	0.08
64 I	Phenanthrene-d10	20.000	20.000	0.0	98	0.08
65	4,6-Dinitro-2-methylphenol	40.000	43.367	-8.4	101	0.08
66 c	n-Nitrosodiphenylamine	40.000	40.298	-0.7	100	0.08
67	4-Bromophenyl-phenylether	40.000	40.510	-1.3	97	0.08
68	Hexachlorobenzene	40.000	40.339	-0.8	100	0.08
69	Atrazine	40.000	40.634	-1.6	99	0.08
70 C	Pentachlorophenol	40.000	42.470	-6.2	99	0.08
71	Phenanthrene	40.000	39.294	1.8	99	0.08
72	Anthracene	40.000	39.514	1.2	99	0.08
73	Carbazole	40.000	40.364	-0.9	99	0.08
74	Di-n-butylphthalate	40.000	40.758	-1.9	99	0.08
75 C	Fluoranthene	40.000	39.697	0.8	100	0.08
76 I	Chrysene-d12	20.000	20.000	0.0	103	0.08
77	Benzydine	40.000	41.378	-3.4	92	0.08
78	Pyrene	40.000	40.735	-1.8	100	0.08
79 S	Terphenyl-d14	80.000	80.502	-0.6	101	0.08
80	Butylbenzylphthalate	40.000	44.194	-10.5	108	0.08
81	Benzo(a)anthracene	40.000	39.894	0.3	102	0.08
82	3,3'-Dichlorobenzidine	40.000	42.162	-5.4	97	0.08
83	Chrysene	40.000	40.308	-0.8	102	0.08
84	Bis(2-ethylhexyl)phthalate	40.000	44.058	-10.1	107	0.08
85 c	Di-n-octyl phthalate	40.000	38.294	4.3	98	0.09
86 I	Perylene-d12	20.000	20.000	0.0	98	0.11
87	Indeno(1,2,3-cd)pyrene	40.000	41.289	-3.2	96	0.16
88	Benzo(b)fluoranthene	40.000	39.969	0.1	97	0.11
89	Benzo(k)fluoranthene	40.000	41.030	-2.6	104	0.10
90 C	Benzo(a)pyrene	40.000	41.142	-2.9	97	0.12
91	Dibenzo(a,h)anthracene	40.000	41.702	-4.3	96	0.17
92	Benzo(g,h,i)perylene	40.000	41.441	-3.6	96	0.16

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137447.D
Acq On : 29 Feb 2024 17:44
Operator : CG\JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
ICVBF022924

Quant Time: Mar 01 03:42:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:39:04 2024
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



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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: LIRO01
 Lab Code: CHEM Case No.: P1747 SAS No.: P1747 SDG No.: P1747
 Instrument ID: BNA_M Calibration Date(s): 03/13/2024 03/13/2024
 Calibration Time(s): 13:44 17:59

LAB FILE ID:		RRF2.5 = BM044595.D			RRF005 = BM044596.D		RRF010 = BM044597.D	
		RRF020 = BM044598.D			RRF040 = BM044599.D		RRF050 = BM044600.D	
COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2-Fluorophenol		1.337	1.392	1.461	1.411	1.381	1.393	3.0
Phenol-d6		1.685	1.757	1.893	1.832	1.802	1.792	3.9
Phenol		1.681	1.748	1.881	1.828	1.804	1.790	3.8
Nitrobenzene-d5		0.387	0.399	0.436	0.427	0.421	0.415	4.3
1,2,4-Trichlorobenzene		0.311	0.314	0.326	0.317	0.312	0.316	1.9
Naphthalene		1.084	1.083	1.148	1.113	1.087	1.098	2.6
2-Fluorobiphenyl		1.451	1.476	1.531	1.463	1.424	1.452	3.5
2,4,6-Tribromophenol		0.190	0.201	0.232	0.228	0.228	0.221	8.1
Terphenyl-d14		1.104	1.133	1.227	1.202	1.140	1.143	5.5

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

Method Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\
 Method File : 8270-BM031324.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Mar 14 02:28:24 2024
 Response Via : Initial Calibration

Calibration Files

2.5 =BM044595.D 5 =BM044596.D 10 =BM044597.D 20 =BM044598.D 40 =BM044599.D 50 =BM044600.D 60 =BM044601.D 80 =BM044602.D

	Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----									
2)	1,4-Dioxane	0.574	0.602	0.622	0.579	0.569	0.588	0.564	0.585	3.52	
3)	Pyridine	1.502	1.573	1.700	1.646	1.632	1.664	1.616	1.619	4.01	
4)	n-Nitrosodimet...	0.619	0.612	0.680	0.663	0.653	0.677	0.638	0.649	4.12	
5) S	2-Fluorophenol	1.337	1.392	1.461	1.411	1.381	1.415	1.353	1.393	2.97	
6)	Aniline	1.994	2.033	2.196	2.168	2.166	2.205	2.093	2.122	3.92	
7) S	Phenol-d6	1.685	1.757	1.893	1.832	1.802	1.838	1.738	1.792	3.92	
8)	2-Chlorophenol	1.303	1.377	1.464	1.411	1.389	1.416	1.352	1.387	3.70	
9)	Benzaldehyde	1.016	1.013	1.036	0.942	0.899	0.883	0.782	0.939	9.75	
10) C	Phenol	1.681	1.748	1.881	1.828	1.804	1.838	1.749	1.790	3.79	
11)	bis(2-Chloroet...	1.444	1.415	1.511	1.479	1.456	1.490	1.434	1.461	2.31	
12)	1,3-Dichlorobe...	1.486	1.516	1.560	1.491	1.463	1.495	1.432	1.492	2.69	
13) C	1,4-Dichlorobe...	1.499	1.518	1.563	1.512	1.474	1.518	1.441	1.504	2.56	
14)	1,2-Dichlorobe...	1.421	1.468	1.519	1.439	1.397	1.435	1.358	1.434	3.57	
15)	Benzyl Alcohol	1.033	1.069	1.226	1.231	1.224	1.261	1.203	1.178	7.56	
16)	2,2'-oxybis(1-...	2.019	2.035	2.122	2.049	1.999	2.043	1.915	2.026	3.08	
17)	2-Methylphenol	1.119	1.153	1.290	1.263	1.244	1.269	1.207	1.221	5.24	
18)	Hexachloroethane	0.534	0.549	0.580	0.562	0.551	0.568	0.547	0.556	2.75	
19) P	n-Nitroso-di-n...	1.001	1.001	1.045	1.176	1.144	1.148	1.156	1.085	1.094	6.52
20)	3+4-Methylphenols	1.457	1.534	1.751	1.714	1.702	1.727	1.645	1.647	6.72	
21) I	Naphthalene-d8	-----ISTD-----									
22)	Acetophenone	0.510	0.510	0.549	0.537	0.527	0.536	0.508	0.525	3.05	
23) S	Nitrobenzene-d5	0.387	0.399	0.436	0.427	0.421	0.429	0.406	0.415	4.29	
24)	Nitrobenzene	0.387	0.398	0.431	0.421	0.413	0.422	0.401	0.410	3.85	
25)	Isophorone	0.632	0.650	0.742	0.748	0.748	0.764	0.730	0.716	7.34	
26) C	2-Nitrophenol	0.143	0.157	0.182	0.188	0.187	0.194	0.189	0.177	10.77	
27)	2,4-Dimethylph...	0.277	0.297	0.325	0.322	0.319	0.329	0.312	0.311	5.87	
28)	bis(2-Chloroet...	0.451	0.456	0.496	0.490	0.479	0.492	0.466	0.476	3.85	
29) C	2,4-Dichloroph...	0.260	0.276	0.311	0.310	0.305	0.315	0.301	0.297	7.03	
30)	1,2,4-Trichlor...	0.311	0.314	0.326	0.317	0.312	0.321	0.309	0.316	1.90	
31)	Naphthalene	1.084	1.083	1.148	1.113	1.087	1.111	1.059	1.098	2.62	
32)	Benzoic acid		0.160	0.222	0.242	0.251	0.258	0.254	0.231	16.04	
33)	4-Chloroaniline	0.417	0.431	0.481	0.476	0.474	0.484	0.461	0.460	5.68	
34) C	Hexachlorobuta...	0.171	0.173	0.183	0.177	0.173	0.180	0.174	0.176	2.42	
35)	Caprolactam	0.076	0.078	0.097	0.103	0.107	0.107	0.102	0.096	13.96	
36) C	4-Chloro-3-met...	0.284	0.295	0.340	0.340	0.343	0.346	0.332	0.326	7.79	
37)	2-Methylnaphth...	0.715	0.722	0.779	0.760	0.752	0.764	0.724	0.745	3.29	
38)	1-Methylnaphth...	0.678	0.667	0.722	0.708	0.699	0.714	0.673	0.694	3.12	

Method Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\
 Method File : 8270-BM031324.M

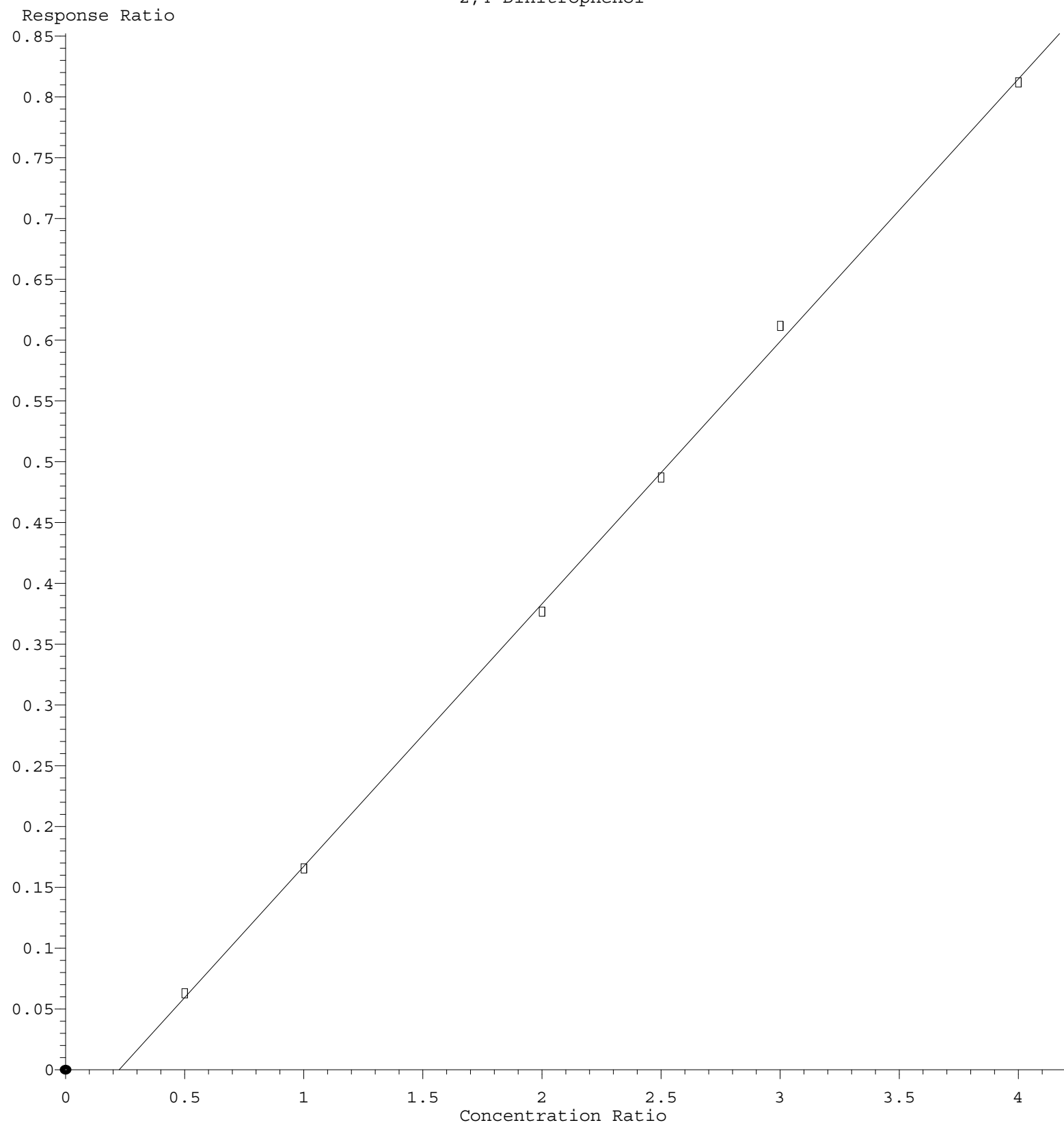
39) I	Acenaphthene-d10	-----ISTD-----									
40)	1,2,4,5-Tetrac...		0.549	0.567	0.582	0.570	0.560	0.582	0.563	0.568	2.13
41) P	Hexachlorocycl...		0.279	0.305	0.319	0.334	0.332	0.350	0.345	0.323	7.63
42) S	2,4,6-Tribromo...		0.190	0.201	0.232	0.228	0.228	0.237	0.229	0.221	8.09
43) C	2,4,6-Trichlor...		0.317	0.354	0.394	0.403	0.399	0.414	0.401	0.383	9.07
44)	2,4,5-Trichlor...		0.398	0.428	0.467	0.469	0.467	0.483	0.467	0.454	6.63
45) S	2-Fluorobiphenyl		1.451	1.476	1.531	1.463	1.424	1.455	1.366	1.452	3.47
46)	1,1'-Biphenyl		1.517	1.550	1.628	1.586	1.550	1.597	1.520	1.564	2.64
47)	2-Chloronaphth...		1.101	1.148	1.204	1.172	1.142	1.184	1.145	1.157	2.90
48)	2-Nitroaniline		0.311	0.341	0.400	0.421	0.422	0.437	0.417	0.392	12.14
49)	Acenaphthylene		1.752	1.817	1.962	1.938	1.908	1.944	1.868	1.884	4.07
50)	Dimethylphthalate		1.425	1.446	1.548	1.533	1.502	1.538	1.480	1.496	3.18
51)	2,6-Dinitrotol...		0.270	0.287	0.323	0.324	0.322	0.333	0.321	0.312	7.50
52) C	Acenaphthene		1.090	1.103	1.179	1.162	1.149	1.173	1.117	1.139	3.11
53)	3-Nitroaniline		0.291	0.316	0.378	0.384	0.391	0.404	0.390	0.365	11.83
54) P	2,4-Dinitrophenol			0.126	0.166	0.188	0.195	0.204	0.203	0.180	16.73
55)	Dibenzofuran		1.772	1.809	1.902	1.842	1.790	1.830	1.709	1.808	3.34
56) P	4-Nitrophenol			0.237	0.302	0.309	0.317	0.323	0.308	0.300	10.49
57)	2,4-Dinitrotol...		0.321	0.354	0.423	0.436	0.437	0.448	0.431	0.407	12.02
58)	Fluorene		1.385	1.397	1.507	1.437	1.396	1.414	1.318	1.408	4.07
59)	2,3,4,6-Tetrac...		0.325	0.336	0.362	0.360	0.361	0.370	0.354	0.353	4.60
60)	Diethylphthalate		1.390	1.445	1.576	1.557	1.545	1.573	1.514	1.514	4.70
61)	4-Chlorophenyl...		0.669	0.675	0.713	0.685	0.670	0.680	0.638	0.676	3.31
62)	4-Nitroaniline		0.275	0.308	0.377	0.395	0.398	0.405	0.392	0.364	14.13
63)	Azobenzene		1.371	1.455	1.651	1.638	1.625	1.646	1.572	1.565	7.05
64) I	Phenanthrene-d10	-----ISTD-----									
65)	4,6-Dinitro-2-...			0.096	0.123	0.130	0.131	0.138	0.135	0.125	12.08
66) c	n-Nitrosodiphe...		0.576	0.599	0.657	0.641	0.624	0.649	0.617	0.623	4.59
67)	4-Bromophenyl-...		0.193	0.199	0.213	0.211	0.207	0.215	0.210	0.207	3.84
68)	Hexachlorobenzene		0.209	0.213	0.227	0.222	0.219	0.228	0.221	0.220	3.15
69)	Atrazine		0.170	0.186	0.204	0.200	0.200	0.206	0.198	0.195	6.52
70) C	Pentachlorophenol		0.122	0.135	0.163	0.168	0.169	0.178	0.172	0.158	13.44
71)	Phenanthrene		1.077	1.088	1.165	1.118	1.096	1.130	1.063	1.105	3.16
72)	Anthracene		1.025	1.077	1.174	1.141	1.110	1.151	1.081	1.109	4.64
73)	Carbazole		0.960	0.997	1.104	1.078	1.057	1.086	1.026	1.044	4.99
74)	Di-n-butylphth...		1.155	1.206	1.390	1.414	1.414	1.452	1.386	1.345	8.59
75) C	Fluoranthene		1.189	1.192	1.297	1.260	1.244	1.270	1.197	1.236	3.50
76) I	Chrysene-d12	-----ISTD-----									
77)	Benzidine			0.428	0.488	0.576	0.572	0.570	0.468	0.517	12.37
78)	Pyrene		1.347	1.392	1.529	1.539	1.478	1.528	1.448	1.466	5.08
79) S	Terphenyl-d14		1.104	1.133	1.227	1.202	1.140	1.158	1.038	1.143	5.48
80)	Butylbenzylpht...		0.496	0.549	0.669	0.722	0.716	0.752	0.720	0.661	14.92
81)	Benzo(a)anthra...		1.309	1.345	1.455	1.429	1.397	1.445	1.360	1.392	3.97
82)	3,3'-Dichlorob...		0.409	0.439	0.510	0.519	0.502	0.514	0.462	0.479	8.97
83)	Chrysene		1.299	1.300	1.380	1.377	1.320	1.362	1.270	1.330	3.26
84)	Bis(2-ethylhex...		0.778	0.859	1.052	1.107	1.072	1.089	1.010	0.995	12.75
85) c	Di-n-octyl pht...		1.313	1.423	1.723	1.900	1.892	1.960	1.873	1.726	14.89

Method Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\
Method File : 8270-BM031324.M

86) I	Perylene-d12	-----ISTD-----								
87)	Indeno(1,2,3-c...	1.359	1.390	1.506	1.477	1.462	1.516	1.411	1.446	4.15
88)	Benzo(b)fluora...	1.092	1.117	1.207	1.207	1.175	1.234	1.196	1.175	4.44
89)	Benzo(k)fluora...	1.129	1.189	1.279	1.226	1.220	1.265	1.150	1.208	4.64
90) C	Benzo(a)pyrene	1.036	1.083	1.194	1.179	1.168	1.217	1.148	1.146	5.64
91)	Dibenzo(a,h)an...	1.148	1.158	1.270	1.246	1.244	1.284	1.182	1.219	4.53
92)	Benzo(g,h,i)pe...	1.149	1.146	1.243	1.211	1.208	1.250	1.191	1.200	3.42

(#) = Out of Range

2,4-Dinitrophenol



$$\text{Response} = 2.160\text{e-}001 * \text{Amt} - 4.870\text{e-}002$$

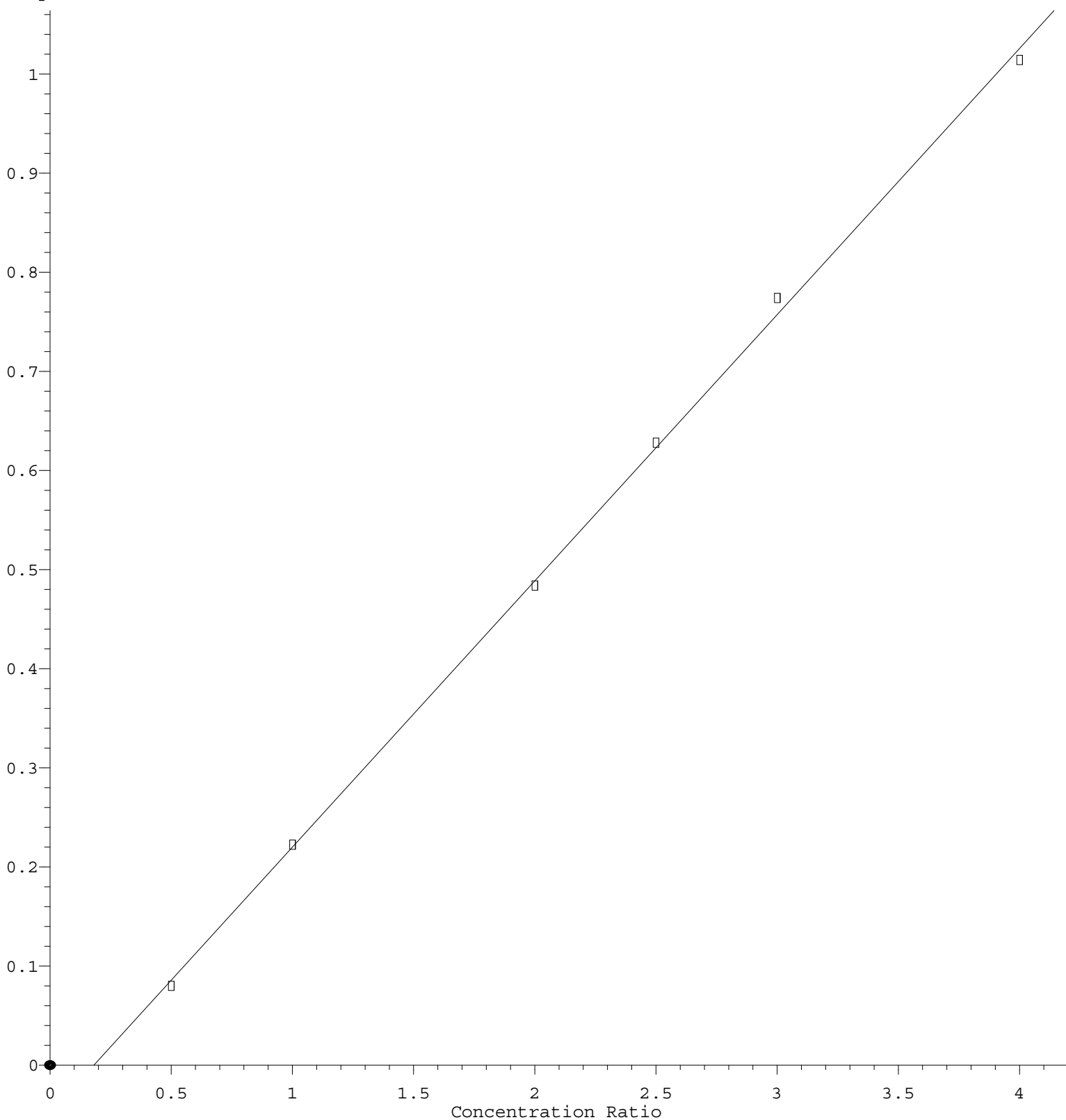
Coef of Det (r^2) = 0.999379 Curve Fit: Linear

Method Name: Z:\svoasrv\HPCHEM1\BNA M\Methods\8270-BM031324.M

Calibration Table Last Updated: Thu Mar 14 02:28:24 2024

Benzoic acid

Response Ratio



$$\text{Response} = 2.688\text{e-}001 * \text{Amt} - 4.864\text{e-}002$$

Coef of Det (r^2) = 0.999160 Curve Fit: Linear

Method Name: Z:\svoasrv\HPCHEM1\BNA M\Methods\8270-BM031324.M

Calibration Table Last Updated: Thu Mar 14 02:28:24 2024

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044595.D
Acq On : 13 Mar 2024 13:44
Operator : MA/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC2.5

Quant Time: Mar 14 01:13:34 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 01:12:46 2024
Response via : Initial Calibration

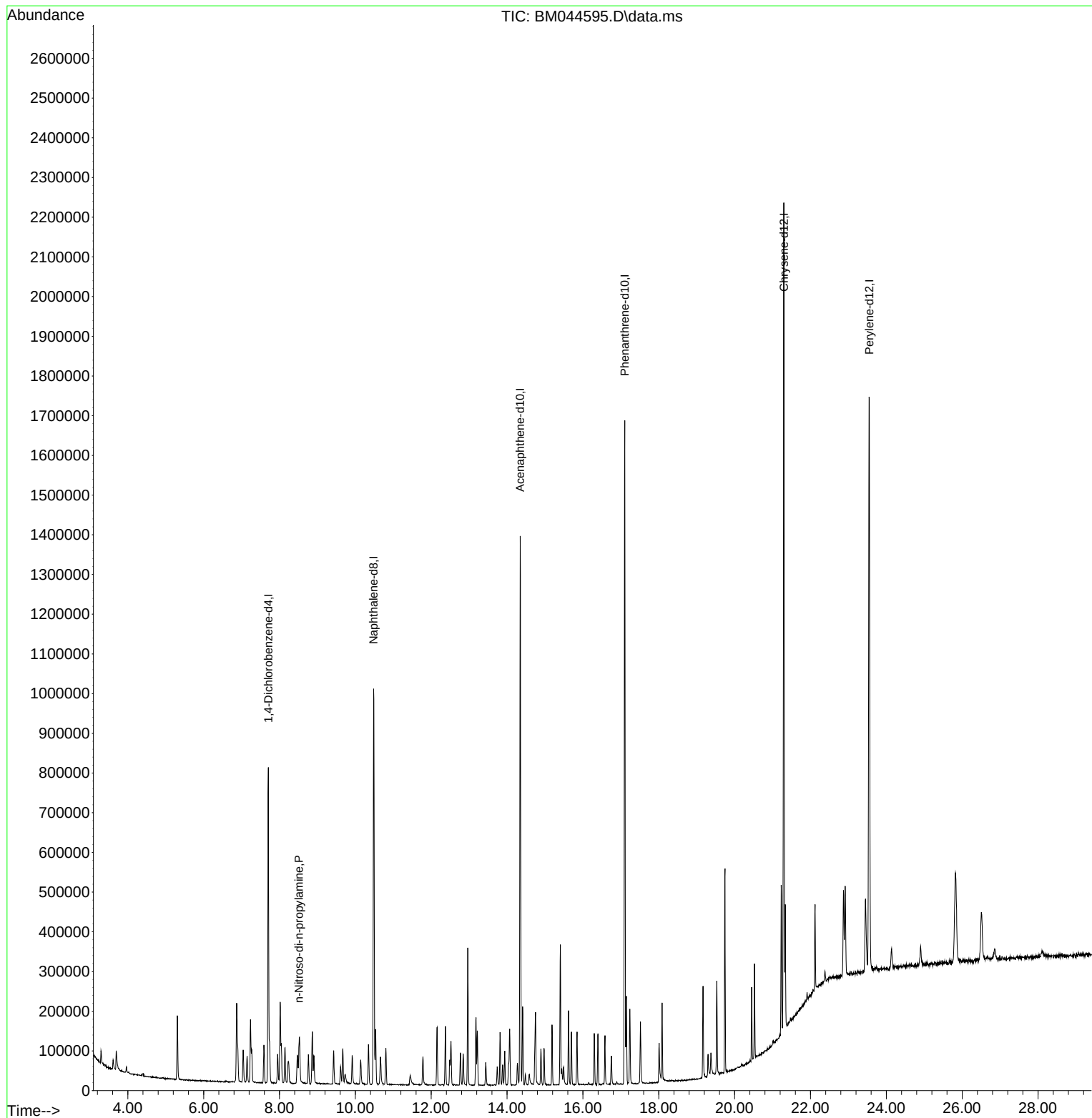
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	213039	20.000	ng	0.00
21) Naphthalene-d8	10.481	136	832524	20.000	ng	0.00
39) Acenaphthene-d10	14.345	164	481175	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	965508	20.000	ng	0.00
76) Chrysene-d12	21.298	240	884226	20.000	ng	0.00
86) Perylene-d12	23.550	264	1042669	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						
19) n-Nitroso-di-n-propyla...	8.510	70	26655	2.286	ng	Qvalue 93

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044595.D
Acq On : 13 Mar 2024 13:44
Operator : MA/JU
Sample : SSTDICC2.5
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC2.5

Quant Time: Mar 14 01:13:34 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 01:12:46 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044596.D
 Acq On : 13 Mar 2024 14:20
 Operator : MA/JU
 Sample : SSTDICC005
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC005

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:49:51 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	213248	20.000	ng	0.00
21) Naphthalene-d8	10.481	136	826873	20.000	ng	0.00
39) Acenaphthene-d10	14.345	164	481890	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	965372	20.000	ng	0.00
76) Chrysene-d12	21.298	240	889817	20.000	ng	0.00
86) Perylene-d12	23.544	264	1052672	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.304	112	142604	9.601	ng	0.00
7) Phenol-d6	6.875	99	179649	9.402	ng	0.00
23) Nitrobenzene-d5	8.863	82	160183	9.333	ng	0.00
42) 2,4,6-Tribromophenol	15.845	330	45693	8.597	ng	0.00
45) 2-Fluorobiphenyl	12.963	172	349657	9.993	ng	0.00
79) Terphenyl-d14	19.745	244	491231	9.657	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.293	88	30586	4.899	ng	95
3) Pyridine	3.687	79	80075m	4.636	ng	
4) n-Nitrosodimethylamine	3.605	42	33008	4.771	ng	# 87
6) Aniline	7.040	93	106324	4.698	ng	99
8) 2-Chlorophenol	7.269	128	69442	4.694	ng	98
9) Benzaldehyde	6.863	77	54185	5.414	ng	97
10) Phenol	6.898	94	89618	4.696	ng	99
11) bis(2-Chloroethyl)ether	7.146	93	76983	4.941	ng	98
12) 1,3-Dichlorobenzene	7.593	146	79228	4.981	ng	98
13) 1,4-Dichlorobenzene	7.740	146	79904	4.984	ng	99
14) 1,2-Dichlorobenzene	8.045	146	75774	4.956	ng	99
15) Benzyl Alcohol	7.951	79	55063	4.383	ng	97
16) 2,2'-oxybis(1-Chloropr...	8.234	45	107653	4.983	ng	100
17) 2-Methylphenol	8.140	107	59658	4.584	ng	95
18) Hexachloroethane	8.763	117	28478	4.805	ng	97
19) n-Nitroso-di-n-propyla...	8.510	70	53363	4.573	ng	99
20) 3+4-Methylphenols	8.469	107	77670	4.422	ng	96
22) Acetophenone	8.528	105	105506	4.857	ng	# 97
24) Nitrobenzene	8.904	77	79909	4.710	ng	97
25) Isophorone	9.428	82	130737	4.415	ng	99
26) 2-Nitrophenol	9.610	139	29612	4.045	ng	97
27) 2,4-Dimethylphenol	9.663	122	57280	4.449	ng	99
28) bis(2-Chloroethoxy)met...	9.916	93	93136	4.736	ng	99
29) 2,4-Dichlorophenol	10.134	162	53726	4.378	ng	96
30) 1,2,4-Trichlorobenzene	10.345	180	64379	4.932	ng	99
31) Naphthalene	10.534	128	223988	4.936	ng	100
33) 4-Chloroaniline	10.663	127	86276	4.532	ng	95
34) Hexachlorobutadiene	10.804	225	35435	4.868	ng	97
35) Caprolactam	11.439	113	15634	3.947	ng	87
36) 4-Chloro-3-methylphenol	11.781	107	58635	4.355	ng	93
37) 2-Methylnaphthalene	12.151	142	147897	4.802	ng	100
38) 1-Methylnaphthalene	12.375	142	140112	4.881	ng	99
40) 1,2,4,5-Tetrachloroben...	12.522	216	66102	4.834	ng	100
41) Hexachlorocyclopentadiene	12.492	237	33604	4.313	ng	98
43) 2,4,6-Trichlorophenol	12.769	196	38206	4.138	ng	99
44) 2,4,5-Trichlorophenol	12.839	196	47918	4.380	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044596.D
 Acq On : 13 Mar 2024 14:20
 Operator : MA/JU
 Sample : SSTDICC005
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC005

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:49:51 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) 1,1'-Biphenyl	13.180	154	182784	4.850	ng	99
47) 2-Chloronaphthalene	13.216	162	132631	4.759	ng	99
48) 2-Nitroaniline	13.439	65	37436	3.959	ng	98
49) Acenaphthylene	14.069	152	211113	4.650	ng	99
50) Dimethylphthalate	13.816	163	171724	4.764	ng	98
51) 2,6-Dinitrotoluene	13.939	165	32523	4.333	ng	96
52) Acenaphthene	14.410	154	131363	4.786	ng	99
53) 3-Nitroaniline	14.269	138	35073	3.990	ng	93
55) Dibenzofuran	14.751	168	213536	4.902	ng	98
57) 2,4-Dinitrotoluene	14.727	165	38670	3.943	ng	92
58) Fluorene	15.404	166	166813	4.918	ng	99
59) 2,3,4,6-Tetrachlorophenol	14.974	232	39114	4.604	ng	98
60) Diethylphthalate	15.186	149	167494	4.590	ng	99
61) 4-Chlorophenyl-phenyle...	15.404	204	80650	4.953	ng	96
62) 4-Nitroaniline	15.439	138	33086m	3.768	ng	
63) Azobenzene	15.698	77	165115	4.378	ng	98
66) n-Nitrosodiphenylamine	15.621	169	139071	4.622	ng	98
67) 4-Bromophenyl-phenylether	16.304	248	46650	4.672	ng	97
68) Hexachlorobenzene	16.398	284	50497	4.757	ng	93
69) Atrazine	16.580	200	40991	4.360	ng	97
70) Pentachlorophenol	16.751	266	29340	3.843	ng	98
71) Phenanthrene	17.145	178	259910	4.872	ng	100
72) Anthracene	17.239	178	247474	4.625	ng	99
73) Carbazole	17.515	167	231591	4.596	ng	100
74) Di-n-butylphthalate	18.086	149	278821	4.294	ng	98
75) Fluoranthene	19.168	202	286891	4.811	ng	98
78) Pyrene	19.527	202	299594	4.594	ng	100
80) Butylbenzylphthalate	20.451	149	110368	3.755	ng	99
81) Benzo(a)anthracene	21.286	228	291288	4.705	ng	99
82) 3,3'-Dichlorobenzidine	21.227	252	90953	4.265	ng	99
83) Chrysene	21.333	228	288918	4.883	ng	98
84) Bis(2-ethylhexyl)phtha...	21.233	149	172994	3.907	ng	99
85) Di-n-octyl phthalate	22.121	149	292112	3.803	ng	99
87) Indeno(1,2,3-cd)pyrene	25.815	276	357651	4.700	ng	99
88) Benzo(b)fluoranthene	22.868	252	287266	4.644	ng	99
89) Benzo(k)fluoranthene	22.915	252	296990	4.670	ng	99
90) Benzo(a)pyrene	23.444	252	272635	4.518	ng	99
91) Dibenzo(a,h)anthracene	25.833	278	302048	4.708	ng	100
92) Benzo(g,h,i)perylene	26.503	276	302483	4.790	ng	96

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

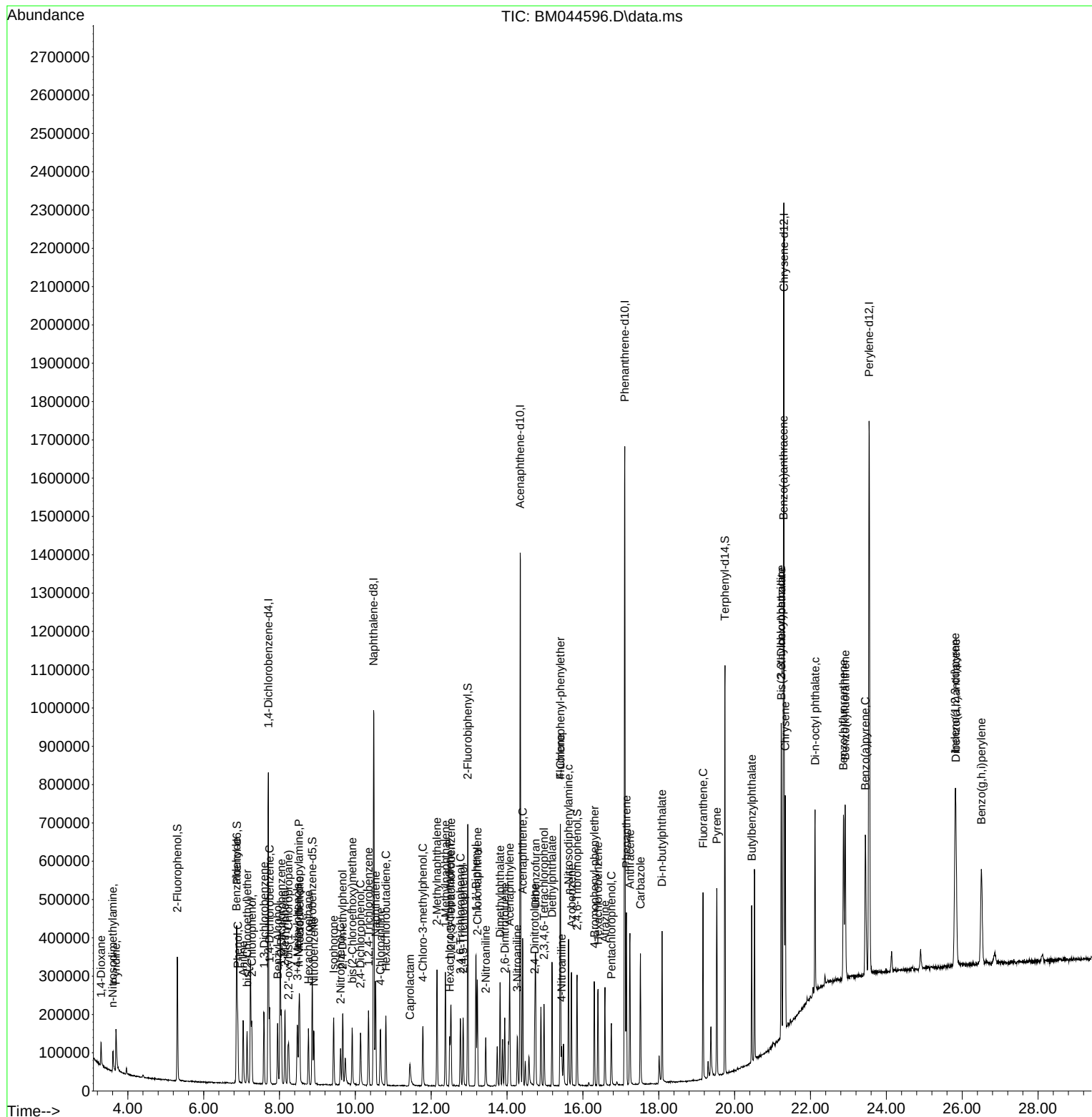
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044596.D
Acq On : 13 Mar 2024 14:20
Operator : MA/JU
Sample : SSTDICC005
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC005

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:49:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 01:48:58 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044597.D
 Acq On : 13 Mar 2024 14:56
 Operator : MA/JU
 Sample : SSTDICC010
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC010

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:51:24 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	202562	20.000	ng	0.00
21) Naphthalene-d8	10.486	136	786584	20.000	ng	0.00
39) Acenaphthene-d10	14.345	164	437813	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	856072	20.000	ng	0.00
76) Chrysene-d12	21.297	240	772257	20.000	ng	0.00
86) Perylene-d12	23.544	264	884415	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.304	112	281977	19.987	ng	0.00
7) Phenol-d6	6.875	99	355866	19.607	ng	0.00
23) Nitrobenzene-d5	8.863	82	314205	19.244	ng	0.00
42) 2,4,6-Tribromophenol	15.845	330	87993	18.222	ng	0.00
45) 2-Fluorobiphenyl	12.963	172	646044	20.322	ng	0.00
79) Terphenyl-d14	19.745	244	875234	19.826	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.293	88	60996	10.286	ng	97
3) Pyridine	3.681	79	159346	9.711	ng	97
4) n-Nitrosodimethylamine	3.604	42	62021	9.437	ng	# 98
6) Aniline	7.039	93	205944	9.580	ng	97
8) 2-Chlorophenol	7.269	128	139511	9.928	ng	98
9) Benzaldehyde	6.863	77	102557	10.789	ng	99
10) Phenol	6.898	94	177001	9.765	ng	100
11) bis(2-Chloroethyl)ether	7.145	93	143272	9.681	ng	100
12) 1,3-Dichlorobenzene	7.587	146	153516	10.160	ng	99
13) 1,4-Dichlorobenzene	7.739	146	153719	10.094	ng	96
14) 1,2-Dichlorobenzene	8.051	146	148707	10.240	ng	97
15) Benzyl Alcohol	7.945	79	108311	9.077	ng	99
16) 2,2'-oxybis(1-Chloropr...	8.234	45	206122m	10.045	ng	
17) 2-Methylphenol	8.139	107	116779	9.446	ng	99
18) Hexachloroethane	8.763	117	55558	9.869	ng	96
19) n-Nitroso-di-n-propyla...	8.510	70	105882	9.552	ng	100
20) 3+4-Methylphenols	8.469	107	155370	9.313	ng	98
22) Acetophenone	8.528	105	200754	9.715	ng	# 97
24) Nitrobenzene	8.904	77	156508	9.697	ng	98
25) Isophorone	9.428	82	255487	9.069	ng	98
26) 2-Nitrophenol	9.610	139	61845	8.880	ng	95
27) 2,4-Dimethylphenol	9.663	122	116938	9.548	ng	98
28) bis(2-Chloroethoxy)met...	9.916	93	179424	9.591	ng	100
29) 2,4-Dichlorophenol	10.133	162	108400	9.286	ng	97
30) 1,2,4-Trichlorobenzene	10.345	180	123416	9.938	ng	97
31) Naphthalene	10.533	128	425832	9.864	ng	99
32) Benzoic acid	9.745	122	62939	9.573	ng	96
33) 4-Chloroaniline	10.657	127	169387	9.353	ng	98
34) Hexachlorobutadiene	10.804	225	68208	9.851	ng	98
35) Caprolactam	11.433	113	30678m	8.142	ng	
36) 4-Chloro-3-methylphenol	11.774	107	116135	9.067	ng	99
37) 2-Methylnaphthalene	12.151	142	283817	9.687	ng	99
38) 1-Methylnaphthalene	12.374	142	262343	9.607	ng	98
40) 1,2,4,5-Tetrachloroben...	12.521	216	124191	9.996	ng	100
41) Hexachlorocyclopentadiene	12.486	237	66823	9.441	ng	97
43) 2,4,6-Trichlorophenol	12.769	196	77510	9.239	ng	96

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044597.D
 Acq On : 13 Mar 2024 14:56
 Operator : MA/JU
 Sample : SSTDICC010
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC010

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:51:24 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.839	196	93630	9.419	ng	98
46) 1,1'-Biphenyl	13.174	154	339387	9.911	ng	100
47) 2-Chloronaphthalene	13.216	162	251400	9.929	ng	99
48) 2-Nitroaniline	13.433	65	74590	8.682	ng	96
49) Acenaphthylene	14.068	152	397724	9.642	ng	99
50) Dimethylphthalate	13.816	163	316516	9.665	ng	99
51) 2,6-Dinitrotoluene	13.939	165	62894	9.223	ng	99
52) Acenaphthene	14.410	154	241421	9.682	ng	97
53) 3-Nitroaniline	14.268	138	69143	8.659	ng	98
54) 2,4-Dinitrophenol	14.480	184	27517	10.329	ng	98
55) Dibenzofuran	14.751	168	395982	10.006	ng	98
56) 4-Nitrophenol	14.574	139	51943	7.920	ng	98
57) 2,4-Dinitrotoluene	14.727	165	77585	8.707	ng	95
58) Fluorene	15.404	166	305907	9.926	ng	98
59) 2,3,4,6-Tetrachlorophenol	14.974	232	73526	9.527	ng	97
60) Diethylphthalate	15.186	149	316214	9.539	ng	100
61) 4-Chlorophenyl-phenyle...	15.404	204	147806	9.990	ng	98
62) 4-Nitroaniline	15.439	138	67469	8.458	ng	95
63) Azobenzene	15.698	77	318422	9.292	ng	98
65) 4,6-Dinitro-2-methylph...	15.486	198	41154	7.666	ng	93
66) n-Nitrosodiphenylamine	15.621	169	256440	9.612	ng	96
67) 4-Bromophenyl-phenylether	16.304	248	85165	9.618	ng	96
68) Hexachlorobenzene	16.398	284	90958	9.663	ng	95
69) Atrazine	16.580	200	79694	9.559	ng	97
70) Pentachlorophenol	16.751	266	57763	8.531	ng	98
71) Phenanthrene	17.145	178	465499	9.840	ng	99
72) Anthracene	17.239	178	461049	9.717	ng	100
73) Carbazole	17.515	167	426945	9.554	ng	100
74) Di-n-butylphthalate	18.086	149	516047	8.962	ng	99
75) Fluoranthene	19.168	202	510128	9.646	ng	98
77) Benzidine	19.368	184	165425	8.536	ng	99
78) Pyrene	19.533	202	537549	9.497	ng	99
80) Butylbenzylphthalate	20.450	149	211948	8.309	ng	100
81) Benzo(a)anthracene	21.280	228	519229	9.663	ng	100
82) 3,3'-Dichlorobenzidine	21.227	252	169657	9.168	ng	99
83) Chrysene	21.333	228	502061	9.778	ng	98
84) Bis(2-ethylhexyl)phtha...	21.233	149	331694	8.631	ng	98
85) Di-n-octyl phthalate	22.121	149	549627	8.245	ng	98
87) Indeno(1,2,3-cd)pyrene	25.821	276	614826	9.616	ng	98
88) Benzo(b)fluoranthene	22.868	252	493889	9.502	ng	99
89) Benzo(k)fluoranthene	22.915	252	525975	9.844	ng	99
90) Benzo(a)pyrene	23.450	252	478840	9.446	ng	99
91) Dibenzo(a,h)anthracene	25.832	278	512146	9.502	ng	99
92) Benzo(g,h,i)perylene	26.509	276	506765	9.551	ng	98

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

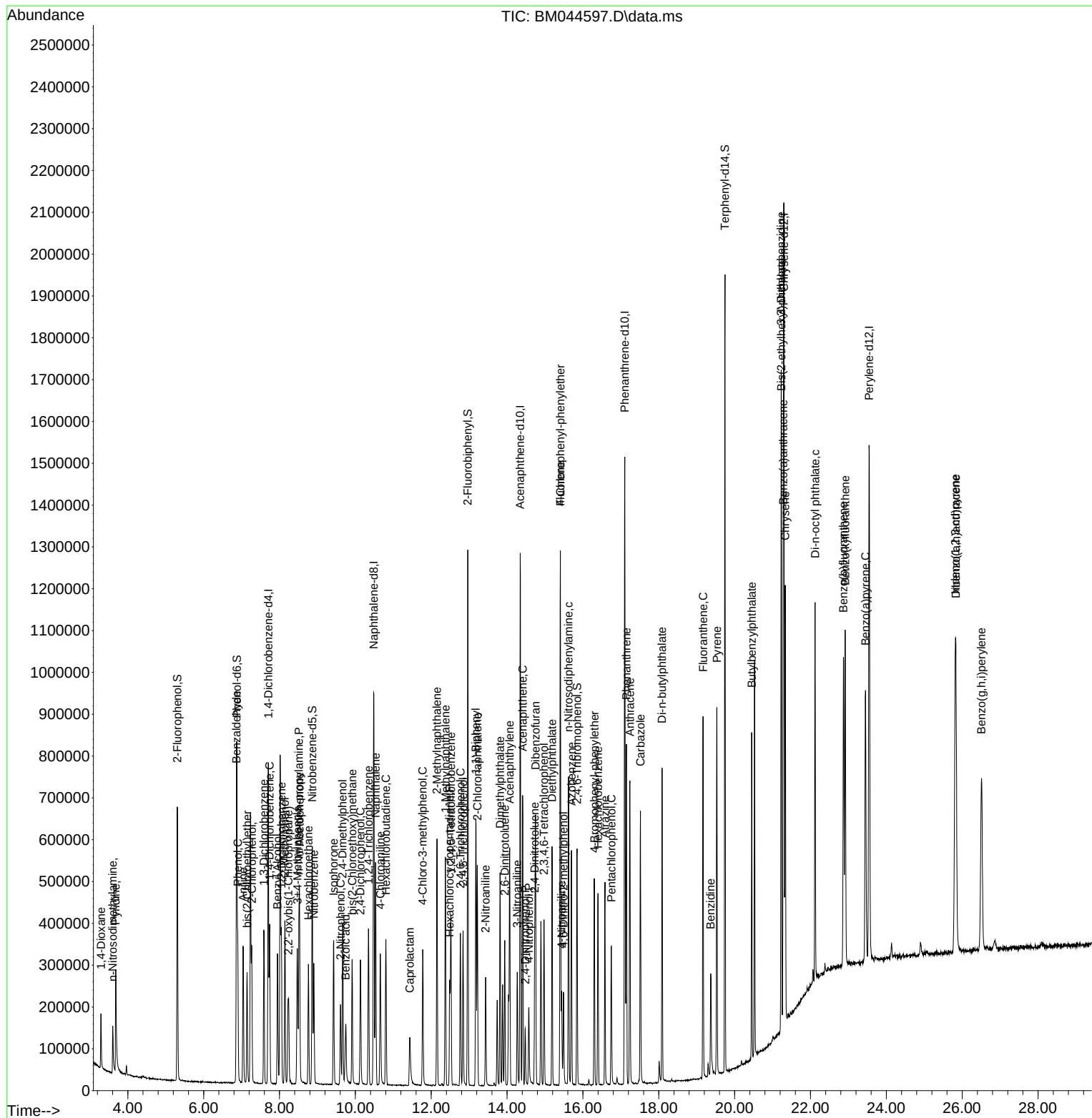
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044597.D
Acq On : 13 Mar 2024 14:56
Operator : MA/JU
Sample : SSTDICC010
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC010

Manual Integrations
APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:51:24 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 01:48:58 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044598.D
 Acq On : 13 Mar 2024 15:33
 Operator : MA/JU
 Sample : SSTDICC020
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDICC020

Quant Time: Mar 14 01:52:38 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 01:48:58 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	216574	20.000	ng	0.00
21) Naphthalene-d8	10.486	136	859456	20.000	ng	0.00
39) Acenaphthene-d10	14.345	164	493661	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	966761	20.000	ng	0.00
76) Chrysene-d12	21.297	240	868664	20.000	ng	0.00
86) Perylene-d12	23.544	264	991296	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.304	112	632817	41.953	ng	0.00
7) Phenol-d6	6.875	99	819882	42.249	ng	0.00
23) Nitrobenzene-d5	8.863	82	748892	41.978	ng	0.00
42) 2,4,6-Tribromophenol	15.845	330	228866	42.033	ng	0.00
45) 2-Fluorobiphenyl	12.963	172	1511785	42.176	ng	0.00
79) Terphenyl-d14	19.745	244	2132232	42.940	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.293	88	134764	21.255	ng	100
3) Pyridine	3.681	79	368223	20.989	ng	99
4) n-Nitrosodimethylamine	3.599	42	147201	20.949	ng	94
6) Aniline	7.045	93	475644	20.695	ng	98
8) 2-Chlorophenol	7.269	128	317057	21.103	ng	99
9) Benzaldehyde	6.863	77	224346	22.074	ng	99
10) Phenol	6.898	94	407413	21.022	ng	98
11) bis(2-Chloroethyl)ether	7.145	93	327192	20.677	ng	98
12) 1,3-Dichlorobenzene	7.592	146	337800	20.910	ng	100
13) 1,4-Dichlorobenzene	7.740	146	338544	20.793	ng	99
14) 1,2-Dichlorobenzene	8.045	146	328911	21.183	ng	99
15) Benzyl Alcohol	7.945	79	265504	20.811	ng	98
16) 2,2'-oxybis(1-Chloropr...	8.234	45	459597	20.949	ng	99
17) 2-Methylphenol	8.139	107	279276	21.129	ng	98
18) Hexachloroethane	8.763	117	125625	20.871	ng	98
19) n-Nitroso-di-n-propyla...	8.510	70	254594	21.483	ng	99
20) 3+4-Methylphenols	8.469	107	379113	21.254	ng	98
22) Acetophenone	8.528	105	471670	20.889	ng	# 99
24) Nitrobenzene	8.904	77	370536	21.011	ng	99
25) Isophorone	9.428	82	637366	20.707	ng	98
26) 2-Nitrophenol	9.610	139	156738	20.597	ng	99
27) 2,4-Dimethylphenol	9.663	122	278938	20.844	ng	99
28) bis(2-Chloroethoxy)met...	9.916	93	426496	20.865	ng	100
29) 2,4-Dichlorophenol	10.133	162	267345	20.961	ng	99
30) 1,2,4-Trichlorobenzene	10.345	180	280079	20.642	ng	98
31) Naphthalene	10.533	128	986271	20.910	ng	100
32) Benzoic acid	9.775	122	191215	20.173	ng	97
33) 4-Chloroaniline	10.657	127	413158	20.879	ng	100
34) Hexachlorobutadiene	10.804	225	157421	20.808	ng	99
35) Caprolactam	11.439	113	83579	20.301	ng	94
36) 4-Chloro-3-methylphenol	11.775	107	291818	20.851	ng	98
37) 2-Methylnaphthalene	12.151	142	669243	20.905	ng	100
38) 1-Methylnaphthalene	12.374	142	620177	20.786	ng	98
40) 1,2,4,5-Tetrachloroben...	12.522	216	287253	20.505	ng	99
41) Hexachlorocyclopentadiene	12.492	237	157591	19.746	ng	100
43) 2,4,6-Trichlorophenol	12.769	196	194662	20.579	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044598.D
 Acq On : 13 Mar 2024 15:33
 Operator : MA/JU
 Sample : SSTDICC020
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDICC020

Quant Time: Mar 14 01:52:38 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 01:48:58 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.839	196	230522	20.567	ng	100
46) 1,1'-Biphenyl	13.174	154	803800	20.818	ng	100
47) 2-Chloronaphthalene	13.216	162	594363	20.818	ng	99
48) 2-Nitroaniline	13.433	65	197337	20.370	ng	97
49) Acenaphthylene	14.069	152	968795	20.830	ng	99
50) Dimethylphthalate	13.816	163	764167	20.695	ng	100
51) 2,6-Dinitrotoluene	13.939	165	159585	20.754	ng	99
52) Acenaphthene	14.410	154	582138	20.705	ng	100
53) 3-Nitroaniline	14.269	138	186794	20.746	ng	99
54) 2,4-Dinitrophenol	14.480	184	81731	19.840	ng	97
55) Dibenzofuran	14.751	168	939036	21.044	ng	97
56) 4-Nitrophenol	14.574	139	149101	20.163	ng	97
57) 2,4-Dinitrotoluene	14.727	165	208614	20.764	ng	96
58) Fluorene	15.404	166	744044	21.412	ng	98
59) 2,3,4,6-Tetrachlorophenol	14.974	232	178880	20.555	ng	99
60) Diethylphthalate	15.186	149	778246	20.820	ng	99
61) 4-Chlorophenyl-phenyle...	15.404	204	351889	21.094	ng	98
62) 4-Nitroaniline	15.439	138	186243	20.707	ng	97
63) Azobenzene	15.698	77	815079	21.095	ng	99
65) 4,6-Dinitro-2-methylph...	15.486	198	119160	19.654	ng	98
66) n-Nitrosodiphenylamine	15.621	169	634825	21.070	ng	99
67) 4-Bromophenyl-phenylether	16.304	248	206360	20.637	ng	99
68) Hexachlorobenzene	16.398	284	219239	20.625	ng	97
69) Atrazine	16.580	200	196986	20.922	ng	97
70) Pentachlorophenol	16.745	266	157745	20.631	ng	98
71) Phenanthrene	17.145	178	1125992	21.076	ng	100
72) Anthracene	17.239	178	1135304	21.188	ng	100
73) Carbazole	17.515	167	1067040	21.144	ng	99
74) Di-n-butylphthalate	18.086	149	1343655	20.663	ng	99
75) Fluoranthene	19.168	202	1253800	20.994	ng	98
77) Benzidine	19.368	184	423489	19.428	ng	99
78) Pyrene	19.533	202	1328030	20.859	ng	99
80) Butylbenzylphthalate	20.450	149	581540	20.268	ng	98
81) Benzo(a)anthracene	21.286	228	1263755	20.909	ng	99
82) 3,3'-Dichlorobenzidine	21.227	252	443419	21.301	ng	99
83) Chrysene	21.333	228	1198768	20.756	ng	99
84) Bis(2-ethylhexyl)phtha...	21.233	149	913792	21.139	ng	99
85) Di-n-octyl phthalate	22.121	149	1496645	19.960	ng	99
87) Indeno(1,2,3-cd)pyrene	25.821	276	1492650	20.829	ng	100
88) Benzo(b)fluoranthene	22.874	252	1196190	20.533	ng	99
89) Benzo(k)fluoranthene	22.921	252	1268050	21.174	ng	100
90) Benzo(a)pyrene	23.450	252	1184038	20.838	ng	99
91) Dibenzo(a,h)anthracene	25.838	278	1258524	20.832	ng	99
92) Benzo(g,h,i)perylene	26.509	276	1231982	20.716	ng	99

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

Instrument :
BNA_M
ClientSampleId :
SSTDICC020

Abundance

TIC: BM044598.D\data.ms

Time-->

1,4-Dioxane
N-Nitrosodiphenylamine,
2-Fluorophenol,S
Benzaldehyde,Phenol-d6,S
Phenol,C
bis(2-chlorophenyl)ether
1,3-bis(2-chlorophenyl)propane
1,3-bis(2-chlorophenyl)propane,d3,l
Benzaldehyde,Phenol-d3,l
Benzaldehyde,Phenol-d3,s
2,2'-oxybis(1-chlorophenyl),P
3,4-Methylenediphenylamine,P
Hexachlorocyclopentadiene
Nitrobenzene-d5,S
Isophorone
2-Nitrophenol,C2,4-Dimethylphenol
Benzoic acid
bis(2-chloroethoxy)methane
2,4-Dichlorophenol
Hexachlorobutadiene,C
Caprolactam
4-Chloro-3-methylphenol,C
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,5-Trichlorophenol,C
2-Chloro-4-nitrophenyl
2-Nitroaniline
2,6-Dinitrotoluene
Acenaphthylene
Acenaphthene,C
2,4-Dinitrophenol,P
2,4-Dinitrophenol,S
2,3,4-Trichlorophenol
Diethylphthalate
4-Chloro-2-nitrophenol
N-Nitrosodiphenylamine,c
4-Chloro-2-nitrophenol,S
4-Chloro-2-nitrophenyl ether
4-Chloro-2-nitrophenyl ether
Pentachlorophenol,C
Phenanthrene
Carbazole
Di-n-butylphthalate
Benzidine
Fluoranthene,C
Pyrene
Butylbenzylphthalate
Terphenyl-d14-S
Crysotolene
Benzo(a)anthracene
Bis(2-ethylhexyl)phthalate
Di-n-octyl phthalate,c
Benzofuran
Benzofuran
Benzofuran
Perylene,C
Perylene,C
Dibenzofuran
Dibenzofuran
Benzo(g,h,i)perylene

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044599.D
 Acq On : 13 Mar 2024 16:09
 Operator : MA/JU
 Sample : SSTDICCC040
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDICCC040

Quant Time: Mar 14 01:53:55 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 01:48:58 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	237331	20.000	ng	0.00
21) Naphthalene-d8	10.486	136	938226	20.000	ng	0.00
39) Acenaphthene-d10	14.351	164	534669	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	1040658	20.000	ng	0.00
76) Chrysene-d12	21.303	240	895964	20.000	ng	0.00
86) Perylene-d12	23.550	264	1033796	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.304	112	1339787	81.053	ng	0.00
7) Phenol-d6	6.881	99	1739231	81.786	ng	0.00
23) Nitrobenzene-d5	8.863	82	1604038	82.363	ng	0.00
42) 2,4,6-Tribromophenol	15.845	330	487943	82.741	ng	0.00
45) 2-Fluorobiphenyl	12.969	172	3129755	80.617	ng	0.00
79) Terphenyl-d14	19.745	244	4309140	84.135	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.293	88	275005	39.581	ng	100
3) Pyridine	3.675	79	781168	40.633	ng	100
4) n-Nitrosodimethylamine	3.599	42	314731	40.874	ng	100
6) Aniline	7.045	93	1029072	40.858	ng	100
8) 2-Chlorophenol	7.269	128	669720	40.677	ng	100
9) Benzaldehyde	6.863	77	446910	40.126	ng	100
10) Phenol	6.904	94	867528	40.848	ng	100
11) bis(2-Chloroethyl)ether	7.145	93	701905	40.478	ng	100
12) 1,3-Dichlorobenzene	7.592	146	707929	39.989	ng	100
13) 1,4-Dichlorobenzene	7.739	146	717819	40.231	ng	100
14) 1,2-Dichlorobenzene	8.051	146	683165	40.150	ng	100
15) Benzyl Alcohol	7.951	79	584371	41.798	ng	100
16) 2,2'-oxybis(1-Chloropr...	8.239	45	972434	40.448	ng	100
17) 2-Methylphenol	8.145	107	599467	41.387	ng	100
18) Hexachloroethane	8.763	117	266857	40.457	ng	100
19) n-Nitroso-di-n-propyla...	8.516	70	543109	41.819	ng	100
20) 3+4-Methylphenols	8.475	107	813626	41.625	ng	100
22) Acetophenone	8.528	105	1007097	40.858	ng	100
24) Nitrobenzene	8.910	77	789576	41.014	ng	100
25) Isophorone	9.428	82	1404446	41.797	ng	100
26) 2-Nitrophenol	9.610	139	352254	42.404	ng	100
27) 2,4-Dimethylphenol	9.669	122	604099	41.352	ng	100
28) bis(2-Chloroethoxy)met...	9.916	93	919180	41.193	ng	100
29) 2,4-Dichlorophenol	10.133	162	580946	41.725	ng	100
30) 1,2,4-Trichlorobenzene	10.345	180	595268	40.188	ng	100
31) Naphthalene	10.533	128	2087648	40.544	ng	100
32) Benzoic acid	9.810	122	453964	39.621	ng	100
33) 4-Chloroaniline	10.657	127	892311	41.308	ng	100
34) Hexachlorobutadiene	10.804	225	331620	40.154	ng	100
35) Caprolactam	11.451	113	192883	42.917	ng	100
36) 4-Chloro-3-methylphenol	11.780	107	638314	41.779	ng	100
37) 2-Methylnaphthalene	12.151	142	1425714	40.795	ng	100
38) 1-Methylnaphthalene	12.374	142	1328250	40.780	ng	100
40) 1,2,4,5-Tetrachloroben...	12.522	216	609637	40.180	ng	100
41) Hexachlorocyclopentadiene	12.492	237	356841	41.283	ng	100
43) 2,4,6-Trichlorophenol	12.769	196	431024	42.071	ng	100

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044599.D
 Acq On : 13 Mar 2024 16:09
 Operator : MA/JU
 Sample : SSTDICCC040
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDICCC040

Quant Time: Mar 14 01:53:55 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 01:48:58 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.839	196	502036	41.355	ng	100
46) 1,1'-Biphenyl	13.180	154	1696355	40.566	ng	100
47) 2-Chloronaphthalene	13.221	162	1253482	40.536	ng	100
48) 2-Nitroaniline	13.439	65	450460	42.933	ng	100
49) Acenaphthylene	14.068	152	2072304	41.139	ng	100
50) Dimethylphthalate	13.821	163	1638803	40.978	ng	100
51) 2,6-Dinitrotoluene	13.945	165	346279	41.580	ng	100
52) Acenaphthene	14.415	154	1242048	40.788	ng	100
53) 3-Nitroaniline	14.274	138	410406	42.085	ng	100
54) 2,4-Dinitrophenol	14.480	184	201388	39.387	ng	100
55) Dibenzofuran	14.751	168	1969371	40.749	ng	100
56) 4-Nitrophenol	14.574	139	330262	41.236	ng	100
57) 2,4-Dinitrotoluene	14.733	165	466177	42.840	ng	100
58) Fluorene	15.404	166	1536969	40.838	ng	100
59) 2,3,4,6-Tetrachlorophenol	14.974	232	385337	40.884	ng	100
60) Diethylphthalate	15.192	149	1665174	41.132	ng	100
61) 4-Chlorophenyl-phenyle...	15.404	204	732831	40.560	ng	100
62) 4-Nitroaniline	15.439	138	422711	43.394	ng	100
63) Azobenzene	15.698	77	1752090	41.868	ng	100
65) 4,6-Dinitro-2-methylph...	15.492	198	270792	41.493	ng	100
66) n-Nitrosodiphenylamine	15.621	169	1334289	41.140	ng	100
67) 4-Bromophenyl-phenylether	16.304	248	438630	40.749	ng	100
68) Hexachlorobenzene	16.398	284	462668	40.435	ng	100
69) Atrazine	16.586	200	416899	41.136	ng	100
70) Pentachlorophenol	16.751	266	350470	42.582	ng	100
71) Phenanthrene	17.145	178	2327426	40.471	ng	100
72) Anthracene	17.239	178	2375731	41.189	ng	100
73) Carbazole	17.515	167	2243578	41.300	ng	100
74) Di-n-butylphthalate	18.086	149	2942785	42.041	ng	100
75) Fluoranthene	19.168	202	2622750	40.798	ng	100
77) Benzidine	19.368	184	1032304	45.915	ng	100
78) Pyrene	19.533	202	2757743	41.996	ng	100
80) Butylbenzylphthalate	20.450	149	1293839	43.718	ng	100
81) Benzo(a)anthracene	21.286	228	2561358	41.086	ng	100
82) 3,3'-Dichlorobenzidine	21.227	252	929442	43.289	ng	100
83) Chrysene	21.339	228	2468320	41.435	ng	100
84) Bis(2-ethylhexyl)phtha...	21.233	149	1983976	44.498	ng	100
85) Di-n-octyl phthalate	22.121	149	3405267	44.031	ng	100
87) Indeno(1,2,3-cd)pyrene	25.827	276	3053247	40.855	ng	100
88) Benzo(b)fluoranthene	22.874	252	2496152	41.087	ng	100
89) Benzo(k)fluoranthene	22.921	252	2535151	40.591	ng	100
90) Benzo(a)pyrene	23.450	252	2437356	41.132	ng	100
91) Dibenzo(a,h)anthracene	25.844	278	2576892	40.900	ng	100
92) Benzo(g,h,i)perylene	26.521	276	2504754	40.386	ng	100

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

Instrument :
BNA_M
ClientSampleId :
SSTDICCC040

Abundance

TIC: BM044599.D\data.ms

Time-->

1.4-Dioxane
n-Nitrosodimethylamine
2-Fluorophenol, S
Benzaldehyde Phenol-d6, S
bis(2-chlorophenyl) ether
1,4-Dichlorobenzene
1,3-Dichlorobenzene, C
2,2'-oxybis(1-chlorophenyl)
3,4-Methylenedioxyphenylamine, P
Nitrobenzene-d5, S
Isophorone
2-Nitrophenol, C
2,4-Dimethylphenol
Benzoic acid
bis(2-chloroethoxy)methane
2,1,2-Trichloroethane
Naphthalene
Hexachlorocyclopentadiene, C
Caprolactam
4-Chloro-3-methylphenol, C
2-Methylnaphthalene
Hexachlorocyclopentadiene, C
2,4,6-Trichlorophenol, C
2-Nitroaniline
2-Chloronaphthalene
Dimethylphthalate
2,6-Dimethyltoluene
Acenaphthylene
Acenaphthene, C
2,4-Dinitrophenol, P
2,3,4,6-Tetrachlorophthalate
Diethylphthalate
4,6-Dinitrophenol
4,6-Dinitrophenylamine, c
2,3,8-Trinitrophenol, S
4-Bromobenzylphenylether
Pentachlorophenol, C
Phenanthrene-d10
Phenanthrene
Carbazole
Di-n-butylphthalate
Fluoranthene, C
Pyrene
Terphenyl-d14, S
Butylbenzylphthalate
Chrysene-d12
Chrysene
Bis(2-ethylhexyl)phthalate
Bis(2-ethylhexyl)anthracene
Di-n-octyl phthalate, c
Benzobenzophenanthrene
Benzo(a)pyrene, C
Perylene-d12, I
Indeno(1,2,3-cd)pyrene
Benzo(g,h,i)perylene
Benzo(a)anthracene

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044600.D
 Acq On : 13 Mar 2024 16:46
 Operator : MA/JU
 Sample : SSTDICC050
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDICC050

Quant Time: Mar 14 01:55:01 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 01:48:58 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	241079	20.000	ng	0.00
21) Naphthalene-d8	10.487	136	957634	20.000	ng	0.00
39) Acenaphthene-d10	14.351	164	549170	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	1076849	20.000	ng	0.00
76) Chrysene-d12	21.304	240	944233	20.000	ng	0.00
86) Perylene-d12	23.550	264	1088504	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.310	112	1664729	99.145	ng	0.00
7) Phenol-d6	6.881	99	2172022	100.550	ng	0.00
23) Nitrobenzene-d5	8.869	82	2014736	101.355	ng	0.00
42) 2,4,6-Tribromophenol	15.851	330	624734	103.140	ng	0.00
45) 2-Fluorobiphenyl	12.969	172	3909849	98.052	ng	0.00
79) Terphenyl-d14	19.745	244	5383902	99.746	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.293	88	343165	48.624	ng	99
3) Pyridine	3.675	79	983706	50.373	ng	99
4) n-Nitrosodimethylamine	3.599	42	393639	50.327	ng	99
6) Aniline	7.046	93	1305705	51.036	ng	99
8) 2-Chlorophenol	7.269	128	837397	50.071	ng	99
9) Benzaldehyde	6.863	77	541690	47.880	ng	98
10) Phenol	6.904	94	1087288	50.399	ng	100
11) bis(2-Chloroethyl)ether	7.146	93	877560	49.821	ng	98
12) 1,3-Dichlorobenzene	7.593	146	881732	49.032	ng	98
13) 1,4-Dichlorobenzene	7.740	146	888161	49.004	ng	99
14) 1,2-Dichlorobenzene	8.051	146	841889	48.709	ng	99
15) Benzyl Alcohol	7.951	79	737416	51.924	ng	99
16) 2,2'-oxybis(1-Chloropr...	8.240	45	1204658	49.328	ng	99
17) 2-Methylphenol	8.146	107	749883	50.967	ng	99
18) Hexachloroethane	8.763	117	332097	49.565	ng	99
19) n-Nitroso-di-n-propyla...	8.516	70	691669	52.430	ng	99
20) 3+4-Methylphenols	8.475	107	1026078	51.678	ng	98
22) Acetophenone	8.528	105	1262618	50.186	ng	# 99
24) Nitrobenzene	8.910	77	988943	50.329	ng	99
25) Isophorone	9.428	82	1789920	52.189	ng	99
26) 2-Nitrophenol	9.610	139	446643	52.677	ng	100
27) 2,4-Dimethylphenol	9.669	122	762727	51.152	ng	100
28) bis(2-Chloroethoxy)met...	9.916	93	1147535	50.385	ng	99
29) 2,4-Dichlorophenol	10.134	162	731202	51.452	ng	99
30) 1,2,4-Trichlorobenzene	10.345	180	746871	49.401	ng	100
31) Naphthalene	10.534	128	2603497	49.538	ng	100
32) Benzoic acid	9.822	122	601405	50.347	ng	99
33) 4-Chloroaniline	10.657	127	1135487	51.500	ng	100
34) Hexachlorobutadiene	10.804	225	414933	49.224	ng	99
35) Caprolactam	11.457	113	255412	55.679	ng	98
36) 4-Chloro-3-methylphenol	11.781	107	821002	52.647	ng	99
37) 2-Methylnaphthalene	12.151	142	1799233	50.439	ng	98
38) 1-Methylnaphthalene	12.375	142	1672935	50.321	ng	99
40) 1,2,4,5-Tetrachloroben...	12.522	216	768666	49.323	ng	100
41) Hexachlorocyclopentadiene	12.492	237	455228	51.275	ng	99
43) 2,4,6-Trichlorophenol	12.769	196	547639	52.042	ng	97

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044600.D
 Acq On : 13 Mar 2024 16:46
 Operator : MA/JU
 Sample : SSTDICC050
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDICC050

Quant Time: Mar 14 01:55:01 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 01:48:58 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.839	196	641078	51.414	ng	99
46) 1,1'-Biphenyl	13.181	154	2128014	49.545	ng	100
47) 2-Chloronaphthalene	13.222	162	1568107	49.372	ng	99
48) 2-Nitroaniline	13.439	65	578842	53.712	ng	100
49) Acenaphthylene	14.069	152	2620219	50.642	ng	100
50) Dimethylphthalate	13.822	163	2062052	50.200	ng	100
51) 2,6-Dinitrotoluene	13.945	165	442574	51.740	ng	97
52) Acenaphthene	14.416	154	1577532	50.437	ng	100
53) 3-Nitroaniline	14.275	138	536721	53.585	ng	99
54) 2,4-Dinitrophenol	14.480	184	267460	49.606	ng	97
55) Dibenzofuran	14.751	168	2457996	49.517	ng	100
56) 4-Nitrophenol	14.575	139	435889	52.987	ng	98
57) 2,4-Dinitrotoluene	14.733	165	599313	53.621	ng	98
58) Fluorene	15.404	166	1917195	49.596	ng	99
59) 2,3,4,6-Tetrachlorophenol	14.975	232	495153	51.148	ng	99
60) Diethylphthalate	15.192	149	2121187	51.012	ng	99
61) 4-Chlorophenyl-phenyle...	15.404	204	919700	49.559	ng	99
62) 4-Nitroaniline	15.445	138	546437	54.614	ng	98
63) Azobenzene	15.698	77	2231598	51.918	ng	99
65) 4,6-Dinitro-2-methylph...	15.492	198	351623	52.067	ng	97
66) n-Nitrosodiphenylamine	15.622	169	1681218	50.095	ng	98
67) 4-Bromophenyl-phenylether	16.304	248	557125	50.018	ng	99
68) Hexachlorobenzene	16.398	284	590863	49.903	ng	97
69) Atrazine	16.586	200	537714	51.273	ng	99
70) Pentachlorophenol	16.751	266	456078	53.551	ng	98
71) Phenanthrene	17.145	178	2950055	49.573	ng	100
72) Anthracene	17.239	178	2987261	50.051	ng	100
73) Carbazole	17.516	167	2844574	50.604	ng	100
74) Di-n-butylphthalate	18.086	149	3806254	52.549	ng	100
75) Fluoranthene	19.168	202	3349614	50.353	ng	100
77) Benzidine	19.368	184	1349923	56.972	ng	99
78) Pyrene	19.533	202	3489237	50.419	ng	100
80) Butylbenzylphthalate	20.451	149	1690609	54.205	ng	100
81) Benzo(a)anthracene	21.286	228	3297869	50.196	ng	99
82) 3,3'-Dichlorobenzidine	21.227	252	1184857	52.364	ng	100
83) Chrysene	21.339	228	3116883	49.648	ng	98
84) Bis(2-ethylhexyl)phtha...	21.233	149	2529999	53.844	ng	99
85) Di-n-octyl phthalate	22.121	149	4465068	54.783	ng	100
87) Indeno(1,2,3-cd)pyrene	25.833	276	3977695	50.550	ng	100
88) Benzo(b)fluoranthene	22.880	252	3196520	49.970	ng	99
89) Benzo(k)fluoranthene	22.921	252	3321106	50.503	ng	100
90) Benzo(a)pyrene	23.456	252	3177375	50.926	ng	100
91) Dibenzo(a,h)anthracene	25.850	278	3385533	51.034	ng	99
92) Benzo(g,h,i)perylene	26.527	276	3286327	50.324	ng	99

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

Instrument :
BNA_M
ClientSampleId :
SSTDICC050

Abundance

TIC: BM044600.D\data.ms

Time-->

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044601.D
 Acq On : 13 Mar 2024 17:22
 Operator : MA/JU
 Sample : SSTDICC060
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC060

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:56:13 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	226796	20.000	ng	0.00
21) Naphthalene-d8	10.487	136	895728	20.000	ng	0.00
39) Acenaphthene-d10	14.351	164	504309	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	973038	20.000	ng	0.00
76) Chrysene-d12	21.303	240	844386	20.000	ng	0.00
86) Perylene-d12	23.550	264	962618	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.305	112	1925523	121.899	ng	0.00
7) Phenol-d6	6.881	99	2500565	123.049	ng	0.00
23) Nitrobenzene-d5	8.869	82	2307750	124.120	ng	0.00
42) 2,4,6-Tribromophenol	15.851	330	716269	128.771	ng	0.00
45) 2-Fluorobiphenyl	12.969	172	4401273	120.194	ng	0.00
79) Terphenyl-d14	19.745	244	5865612	121.520	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.293	88	399970	60.241	ng	98
3) Pyridine	3.675	79	1132419m	61.640	ng	
4) n-Nitrosodimethylamine	3.599	42	460574	62.593	ng	99
6) Aniline	7.046	93	1500542	62.345	ng	99
8) 2-Chlorophenol	7.269	128	963346	61.229	ng	99
9) Benzaldehyde	6.863	77	600811	56.450	ng	99
10) Phenol	6.904	94	1250492	61.615	ng	98
11) bis(2-Chloroethyl)ether	7.146	93	1014025	61.194	ng	99
12) 1,3-Dichlorobenzene	7.593	146	1017157	60.125	ng	99
13) 1,4-Dichlorobenzene	7.740	146	1033106	60.592	ng	99
14) 1,2-Dichlorobenzene	8.051	146	976386	60.048	ng	100
15) Benzyl Alcohol	7.951	79	858110	64.228	ng	99
16) 2,2'-oxybis(1-Chloropr...	8.240	45	1390176	60.510	ng	99
17) 2-Methylphenol	8.145	107	863325	62.373	ng	99
18) Hexachloroethane	8.763	117	386491	61.316	ng	98
19) n-Nitroso-di-n-propyla...	8.516	70	786439	63.369	ng	98
20) 3+4-Methylphenols	8.475	107	1175072	62.909	ng	98
22) Acetophenone	8.534	105	1440701	61.222	ng	# 99
24) Nitrobenzene	8.910	77	1134521	61.728	ng	99
25) Isophorone	9.434	82	2052684	63.987	ng	99
26) 2-Nitrophenol	9.610	139	520763	65.663	ng	99
27) 2,4-Dimethylphenol	9.669	122	883016	63.312	ng	99
28) bis(2-Chloroethoxy)met...	9.916	93	1321626	62.039	ng	99
29) 2,4-Dichlorophenol	10.134	162	847493	63.756	ng	99
30) 1,2,4-Trichlorobenzene	10.345	180	862637	61.002	ng	99
31) Naphthalene	10.534	128	2985281	60.728	ng	100
32) Benzoic acid	9.834	122	693324	61.212	ng	99
33) 4-Chloroaniline	10.657	127	1299356	63.005	ng	100
34) Hexachlorobutadiene	10.804	225	484371	61.433	ng	99
35) Caprolactam	11.463	113	288843	67.318	ng	100
36) 4-Chloro-3-methylphenol	11.781	107	931054	63.831	ng	99
37) 2-Methylnaphthalene	12.151	142	2052611	61.519	ng	99
38) 1-Methylnaphthalene	12.375	142	1918945	61.710	ng	99
40) 1,2,4,5-Tetrachloroben...	12.522	216	881197	61.574	ng	100
41) Hexachlorocyclopentadiene	12.492	237	529485	64.944	ng	99
43) 2,4,6-Trichlorophenol	12.769	196	626145	64.795	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044601.D
 Acq On : 13 Mar 2024 17:22
 Operator : MA/JU
 Sample : SSTDICC060
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC060

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:56:13 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.839	196	731024	63.843	ng	100
46) 1,1'-Biphenyl	13.180	154	2416296	61.261	ng	100
47) 2-Chloronaphthalene	13.222	162	1791568	61.425	ng	99
48) 2-Nitroaniline	13.439	65	660410	66.732	ng	99
49) Acenaphthylene	14.069	152	2940981	61.898	ng	100
50) Dimethylphthalate	13.822	163	2326754	61.683	ng	99
51) 2,6-Dinitrotoluene	13.945	165	504367	64.209	ng	99
52) Acenaphthene	14.416	154	1774837	61.794	ng	99
53) 3-Nitroaniline	14.275	138	610618	66.385	ng	98
54) 2,4-Dinitrophenol	14.480	184	308455	61.145	ng	96
55) Dibenzofuran	14.751	168	2768691	60.737	ng	99
56) 4-Nitrophenol	14.574	139	489286	64.769	ng	99
57) 2,4-Dinitrotoluene	14.733	165	677285	65.988	ng	99
58) Fluorene	15.404	166	2139097	60.258	ng	99
59) 2,3,4,6-Tetrachlorophenol	14.980	232	559453	62.931	ng	99
60) Diethylphthalate	15.192	149	2380196	62.333	ng	99
61) 4-Chlorophenyl-phenyle...	15.404	204	1029490	60.410	ng	98
62) 4-Nitroaniline	15.445	138	613382	66.758	ng	98
63) Azobenzene	15.698	77	2489765	63.077	ng	99
65) 4,6-Dinitro-2-methylph...	15.492	198	402072	65.889	ng	97
66) n-Nitrosodiphenylamine	15.621	169	1893714	62.446	ng	99
67) 4-Bromophenyl-phenylether	16.304	248	627409	62.338	ng	99
68) Hexachlorobenzene	16.398	284	665365	62.191	ng	97
69) Atrazine	16.586	200	601520	63.477	ng	99
70) Pentachlorophenol	16.751	266	519707	67.532	ng	98
71) Phenanthrene	17.145	178	3299647	61.363	ng	100
72) Anthracene	17.239	178	3358958	62.283	ng	100
73) Carbazole	17.515	167	3171309	62.435	ng	100
74) Di-n-butylphthalate	18.086	149	4239670	64.777	ng	100
75) Fluoranthene	19.168	202	3706906	61.669	ng	99
77) Benzidine	19.368	184	1443536	68.127	ng	99
78) Pyrene	19.533	202	3870523	62.542	ng	100
80) Butylbenzylphthalate	20.451	149	1904226	68.273	ng	100
81) Benzo(a)anthracene	21.286	228	3661633	62.323	ng	99
82) 3,3'-Dichlorobenzidine	21.227	252	1301609	64.326	ng	98
83) Chrysene	21.339	228	3448900	61.432	ng	99
84) Bis(2-ethylhexyl)phtha...	21.233	149	2759363	65.669	ng	100
85) Di-n-octyl phthalate	22.121	149	4966069	68.135	ng	99
87) Indeno(1,2,3-cd)pyrene	25.833	276	4378231	62.916	ng	99
88) Benzo(b)fluoranthene	22.880	252	3564133	63.003	ng	99
89) Benzo(k)fluoranthene	22.927	252	3652205	62.800	ng	99
90) Benzo(a)pyrene	23.456	252	3514799	63.701	ng	99
91) Dibenzo(a,h)anthracene	25.850	278	3707719	63.200	ng	99
92) Benzo(g,h,i)perylene	26.527	276	3611090	62.529	ng	99

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

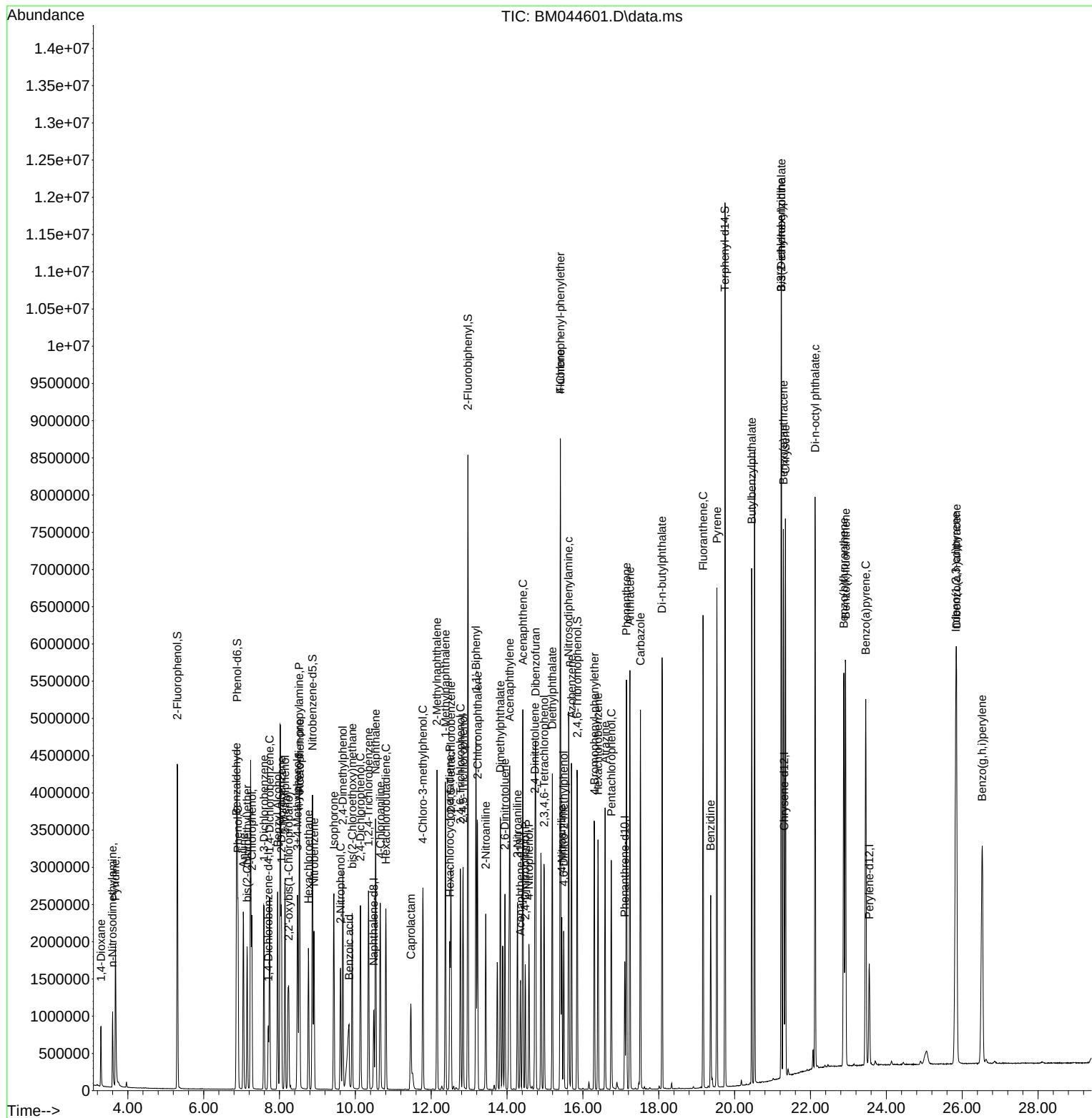
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044601.D
Acq On : 13 Mar 2024 17:22
Operator : MA/JU
Sample : SSTDICC060
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC060

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:56:13 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 01:48:58 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044602.D
 Acq On : 13 Mar 2024 17:59
 Operator : MA/JU
 Sample : SSTDICC080
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC080

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024

Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:57:51 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	221904	20.000	ng	0.00
21) Naphthalene-d8	10.487	136	866713	20.000	ng	0.00
39) Acenaphthene-d10	14.351	164	481666	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	929636	20.000	ng	0.00
76) Chrysene-d12	21.304	240	801798	20.000	ng	0.00
86) Perylene-d12	23.550	264	925524	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.310	112	2401780	155.402	ng	0.00
7) Phenol-d6	6.881	99	3085924	155.201	ng	0.00
23) Nitrobenzene-d5	8.869	82	2814189	156.425	ng	0.00
42) 2,4,6-Tribromophenol	15.851	330	883691	166.339	ng	0.00
45) 2-Fluorobiphenyl	12.969	172	5261930	150.453	ng	0.00
79) Terphenyl-d14	19.751	244	6656148	145.223	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.293	88	500326	77.018	ng	99
3) Pyridine	3.675	79	1434586m	79.809	ng	
4) n-Nitrosodimethylamine	3.599	42	566194	78.643	ng	96
6) Aniline	7.052	93	1858123	78.904	ng	100
8) 2-Chlorophenol	7.269	128	1200027	77.954	ng	100
9) Benzaldehyde	6.863	77	693961	66.639	ng	98
10) Phenol	6.910	94	1552279	78.170	ng	99
11) bis(2-Chloroethyl)ether	7.152	93	1273261	78.532	ng	98
12) 1,3-Dichlorobenzene	7.593	146	1271076	76.791	ng	99
13) 1,4-Dichlorobenzene	7.740	146	1279072	76.671	ng	99
14) 1,2-Dichlorobenzene	8.051	146	1205204	75.754	ng	99
15) Benzyl Alcohol	7.951	79	1067999	81.700	ng	98
16) 2,2'-oxybis(1-Chloropr...	8.240	45	1699558	75.607	ng	100
17) 2-Methylphenol	8.146	107	1070996	79.082	ng	100
18) Hexachloroethane	8.763	117	485479	78.718	ng	99
19) n-Nitroso-di-n-propyla...	8.522	70	962894	79.297	ng	100
20) 3+4-Methylphenols	8.481	107	1460331	79.905	ng	99
22) Acetophenone	8.534	105	1761799	77.373	ng	99
24) Nitrobenzene	8.910	77	1390024	78.162	ng	100
25) Isophorone	9.434	82	2532105	81.574	ng	99
26) 2-Nitrophenol	9.610	139	653915	85.213	ng	98
27) 2,4-Dimethylphenol	9.669	122	1080909	80.095	ng	99
28) bis(2-Chloroethoxy)met...	9.916	93	1614209	78.310	ng	100
29) 2,4-Dichlorophenol	10.134	162	1042221	81.030	ng	99
30) 1,2,4-Trichlorobenzene	10.345	180	1070911	78.265	ng	99
31) Naphthalene	10.534	128	3669802	77.152	ng	100
32) Benzoic acid	9.845	122	878930	79.074	ng	99
33) 4-Chloroaniline	10.657	127	1598899	80.125	ng	100
34) Hexachlorobutadiene	10.804	225	603353	79.085	ng	99
35) Caprolactam	11.475	113	354779m	85.453	ng	
36) 4-Chloro-3-methylphenol	11.781	107	1150144	81.490	ng	100
37) 2-Methylnaphthalene	12.151	142	2509816	77.741	ng	99
38) 1-Methylnaphthalene	12.375	142	2333371	77.550	ng	98
40) 1,2,4,5-Tetrachloroben...	12.522	216	1083904	79.298	ng	100
41) Hexachlorocyclopentadiene	12.492	237	663990	85.271	ng	100
43) 2,4,6-Trichlorophenol	12.769	196	773160	83.770	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044602.D
 Acq On : 13 Mar 2024 17:59
 Operator : MA/JU
 Sample : SSTDICC080
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

SSTDICC080

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:57:51 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 01:48:58 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.839	196	899068	82.210	ng	99
46) 1,1'-Biphenyl	13.181	154	2929183	77.755	ng	100
47) 2-Chloronaphthalene	13.222	162	2206090	79.193	ng	99
48) 2-Nitroaniline	13.439	65	802868	84.941	ng	98
49) Acenaphthylene	14.075	152	3599014	79.308	ng	100
50) Dimethylphthalate	13.828	163	2851432	79.146	ng	100
51) 2,6-Dinitrotoluene	13.945	165	617580	82.317	ng	99
52) Acenaphthene	14.416	154	2152722	78.474	ng	99
53) 3-Nitroaniline	14.275	138	750932	85.478	ng	100
54) 2,4-Dinitrophenol	14.480	184	391084	79.693	ng	98
55) Dibenzofuran	14.751	168	3292810	75.631	ng	98
56) 4-Nitrophenol	14.580	139	594334	82.374	ng	97
57) 2,4-Dinitrotoluene	14.733	165	830749	84.744	ng	98
58) Fluorene	15.404	166	2538989	74.886	ng	100
59) 2,3,4,6-Tetrachlorophenol	14.980	232	682502	80.381	ng	99
60) Diethylphthalate	15.198	149	2916535	79.969	ng	99
61) 4-Chlorophenyl-phenyle...	15.404	204	1228833	75.497	ng	99
62) 4-Nitroaniline	15.451	138	754964	86.030	ng	96
63) Azobenzene	15.698	77	3028353	80.329	ng	99
65) 4,6-Dinitro-2-methylph...	15.498	198	500880	85.914	ng	96
66) n-Nitrosodiphenylamine	15.627	169	2293996	79.177	ng	100
67) 4-Bromophenyl-phenylether	16.304	248	779989	81.116	ng	99
68) Hexachlorobenzene	16.404	284	822203	80.438	ng	93
69) Atrazine	16.586	200	734545	81.134	ng	98
70) Pentachlorophenol	16.751	266	638600	86.855	ng	98
71) Phenanthrene	17.151	178	3953291	76.952	ng	100
72) Anthracene	17.239	178	4019274	78.006	ng	99
73) Carbazole	17.516	167	3816722	78.650	ng	100
74) Di-n-butylphthalate	18.092	149	5153846	82.421	ng	99
75) Fluoranthene	19.168	202	4450510	77.497	ng	100
77) Benzidine	19.368	184	1499961	74.550	ng	99
78) Pyrene	19.533	202	4644376	79.032	ng	99
80) Butylbenzylphthalate	20.451	149	2309018	87.184	ng	100
81) Benzo(a)anthracene	21.286	228	4362793	78.202	ng	100
82) 3,3'-Dichlorobenzidine	21.227	252	1481037	77.081	ng	99
83) Chrysene	21.339	228	4072919	76.401	ng	98
84) Bis(2-ethylhexyl)phtha...	21.233	149	3239100	81.181	ng	100
85) Di-n-octyl phthalate	22.121	149	6006307	86.784	ng	99
87) Indeno(1,2,3-cd)pyrene	25.839	276	5224021	78.079	ng	99
88) Benzo(b)fluoranthene	22.880	252	4428386	81.418	ng	99
89) Benzo(k)fluoranthene	22.927	252	4255943	76.115	ng	99
90) Benzo(a)pyrene	23.456	252	4249775	80.108	ng	100
91) Dibenzo(a,h)anthracene	25.850	278	4377577	77.609	ng	99
92) Benzo(g,h,i)perylene	26.527	276	4410472	79.432	ng	99

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

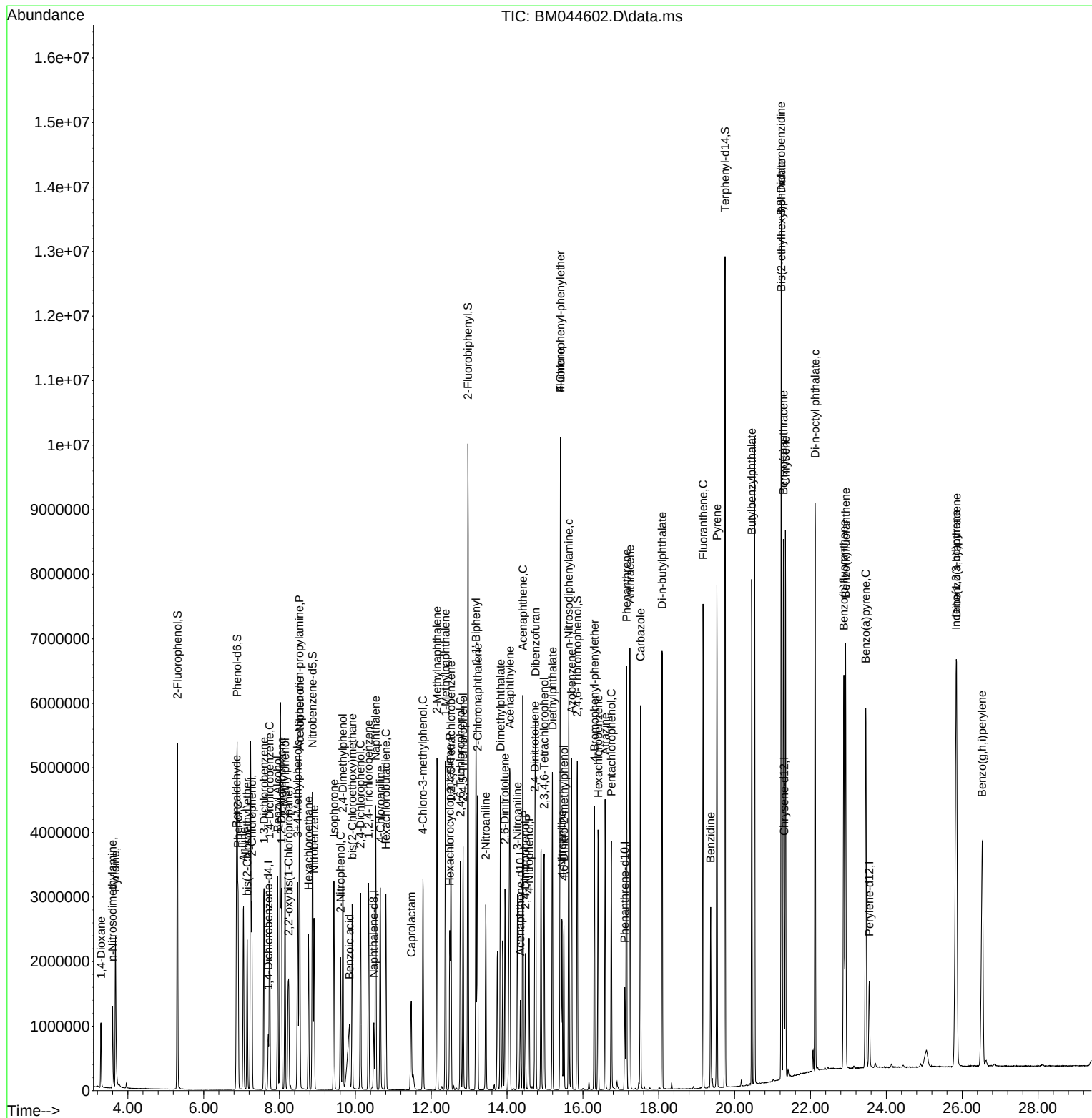
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Data File : BM044602.D
Acq On : 13 Mar 2024 17:59
Operator : MA/JU
Sample : SSTDICC080
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDICC080

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 01:57:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 01:48:58 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044603.D
 Acq On : 13 Mar 2024 18:35
 Operator : MA/JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

ICVBM031324

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024

Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 02:30:41 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.704	152	229344	20.000	ng	0.00
21) Naphthalene-d8	10.481	136	924510	20.000	ng	0.00
39) Acenaphthene-d10	14.351	164	529080	20.000	ng	0.00
64) Phenanthrene-d10	17.104	188	1012509	20.000	ng	0.00
76) Chrysene-d12	21.297	240	875627	20.000	ng	0.00
86) Perylene-d12	23.550	264	1015451	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.304	112	1241298	77.710	ng	0.00
7) Phenol-d6	6.875	99	1544193	75.143	ng	0.00
23) Nitrobenzene-d5	8.863	82	1409228	73.434	ng	0.00
42) 2,4,6-Tribromophenol	15.845	330	463436	79.416	ng	0.00
45) 2-Fluorobiphenyl	12.963	172	2787610	72.563	ng	0.00
79) Terphenyl-d14	19.745	244	3767443	75.267	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.293	88	258978	38.573	ng	98
3) Pyridine	3.675	79	659960	35.545	ng	99
4) n-Nitrosodimethylamine	3.599	42	287873	38.688	ng	97
6) Aniline	7.045	93	970701	39.883	ng	99
8) 2-Chlorophenol	7.269	128	670062	42.115	ng	98
9) Benzaldehyde	6.863	77	407085	37.823	ng	95
10) Phenol	6.904	94	844903	41.168	ng	99
11) bis(2-Chloroethyl)ether	7.145	93	686525	40.970	ng	97
12) 1,3-Dichlorobenzene	7.587	146	733316	42.865	ng	99
13) 1,4-Dichlorobenzene	7.740	146	743539	43.124	ng	99
14) 1,2-Dichlorobenzene	8.045	146	706602	42.973	ng	99
15) Benzyl Alcohol	7.945	79	563048m	41.675	ng	
16) 2,2'-oxybis(1-Chloropr...	8.234	45	945384m	40.692	ng	
17) 2-Methylphenol	8.140	107	545233	38.954	ng	100
18) Hexachloroethane	8.763	117	277054	43.465	ng	99
19) n-Nitroso-di-n-propyla...	8.516	70	511747	40.777	ng	99
20) 3+4-Methylphenols	8.469	107	743066	39.339	ng	96
22) Acetophenone	8.528	105	1007223	41.469	ng	98
24) Nitrobenzene	8.904	77	742388	39.135	ng	100
25) Isophorone	9.428	82	1391931	42.039	ng	99
26) 2-Nitrophenol	9.610	139	350298	42.794	ng	97
27) 2,4-Dimethylphenol	9.669	122	508270	35.308	ng	98
28) bis(2-Chloroethoxy)met...	9.916	93	882717	40.146	ng	99
29) 2,4-Dichlorophenol	10.134	162	575595	41.954	ng	98
30) 1,2,4-Trichlorobenzene	10.345	180	606494	41.553	ng	99
31) Naphthalene	10.533	128	2016920	39.752	ng	100
32) Benzoic acid	9.804	122	441219	39.129	ng	98
33) 4-Chloroaniline	10.657	127	835593	39.256	ng	99
34) Hexachlorobutadiene	10.804	225	336454	41.344	ng	96
35) Caprolactam	11.451	113	185873	41.999	ng	92
36) 4-Chloro-3-methylphenol	11.775	107	614912	40.844	ng	99
37) 2-Methylnaphthalene	12.151	142	1314437	38.169	ng	99
38) 1-Methylnaphthalene	12.375	142	1273132	39.667	ng	100
40) 1,2,4,5-Tetrachloroben...	12.522	216	615995	41.028	ng	100
41) Hexachlorocyclopentadiene	12.492	237	364480	42.613	ng	100
43) 2,4,6-Trichlorophenol	12.769	196	419156	41.344	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044603.D
 Acq On : 13 Mar 2024 18:35
 Operator : MA/JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampleId :

ICVBM031324

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
 Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 02:30:41 2024

Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Mar 14 02:28:24 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.839	196	452422	37.662	ng	98
46) 1,1'-Biphenyl	13.180	154	1685262	40.726	ng	99
47) 2-Chloronaphthalene	13.216	162	1270586	41.523	ng	99
48) 2-Nitroaniline	13.433	65	411438	39.628	ng	98
49) Acenaphthylene	14.069	152	2097723	42.083	ng	99
50) Dimethylphthalate	13.822	163	1530785	38.682	ng	100
51) 2,6-Dinitrotoluene	13.945	165	332084	40.297	ng	94
52) Acenaphthene	14.416	154	1181395	39.206	ng	99
53) 3-Nitroaniline	14.269	138	390576	40.475	ng	100
54) 2,4-Dinitrophenol	14.480	184	200003	39.513	ng	95
55) Dibenzofuran	14.751	168	1854979	38.788	ng	99
56) 4-Nitrophenol	14.574	139	326357	41.179	ng	93
57) 2,4-Dinitrotoluene	14.733	165	439630	40.828	ng	99
58) Fluorene	15.404	166	1456783	39.116	ng	100
59) 2,3,4,6-Tetrachlorophenol	14.974	232	372033	39.889	ng	99
60) Diethylphthalate	15.192	149	1552228	38.747	ng	99
61) 4-Chlorophenyl-phenyle...	15.404	204	681396	38.112	ng	99
62) 4-Nitroaniline	15.439	138	396470	41.130	ng	97
63) Azobenzene	15.698	77	1596848	38.561	ng	98
65) 4,6-Dinitro-2-methylph...	15.492	198	245174	38.612	ng	98
66) n-Nitrosodiphenylamine	15.621	169	1256243	39.810	ng	99
67) 4-Bromophenyl-phenylether	16.298	248	408653	39.020	ng	94
68) Hexachlorobenzene	16.398	284	476702	42.820	ng	96
69) Atrazine	16.586	200	391323	39.686	ng	98
70) Pentachlorophenol	16.745	266	300867	37.571	ng	99
71) Phenanthrene	17.145	178	2234644	39.938	ng	99
72) Anthracene	17.239	178	2259058	40.255	ng	100
73) Carbazole	17.515	167	2148209	40.644	ng	100
74) Di-n-butylphthalate	18.086	149	2791371	40.986	ng	100
75) Fluoranthene	19.168	202	2482353	39.687	ng	98
77) Benzidine	19.368	184	1082825	47.847	ng	99
78) Pyrene	19.533	202	2602731	40.556	ng	100
80) Butylbenzylphthalate	20.450	149	1223539	42.303	ng	97
81) Benzo(a)anthracene	21.286	228	2469701	40.536	ng	99
82) 3,3'-Dichlorobenzidine	21.227	252	913405	43.530	ng	99
83) Chrysene	21.339	228	2256259	38.755	ng	99
84) Bis(2-ethylhexyl)phtha...	21.233	149	1839208	42.209	ng	99
85) Di-n-octyl phthalate	22.121	149	3243996	42.920	ng	99
87) Indeno(1,2,3-cd)pyrene	25.827	276	2993871	40.784	ng	100
88) Benzo(b)fluoranthene	22.874	252	2531653	42.424	ng	99
89) Benzo(k)fluoranthene	22.921	252	2368340	38.605	ng	99
90) Benzo(a)pyrene	23.450	252	2225530	38.236	ng	100
91) Dibenzo(a,h)anthracene	25.844	278	2520475	40.727	ng	99
92) Benzo(g,h,i)perylene	26.521	276	2424090	39.791	ng	99

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

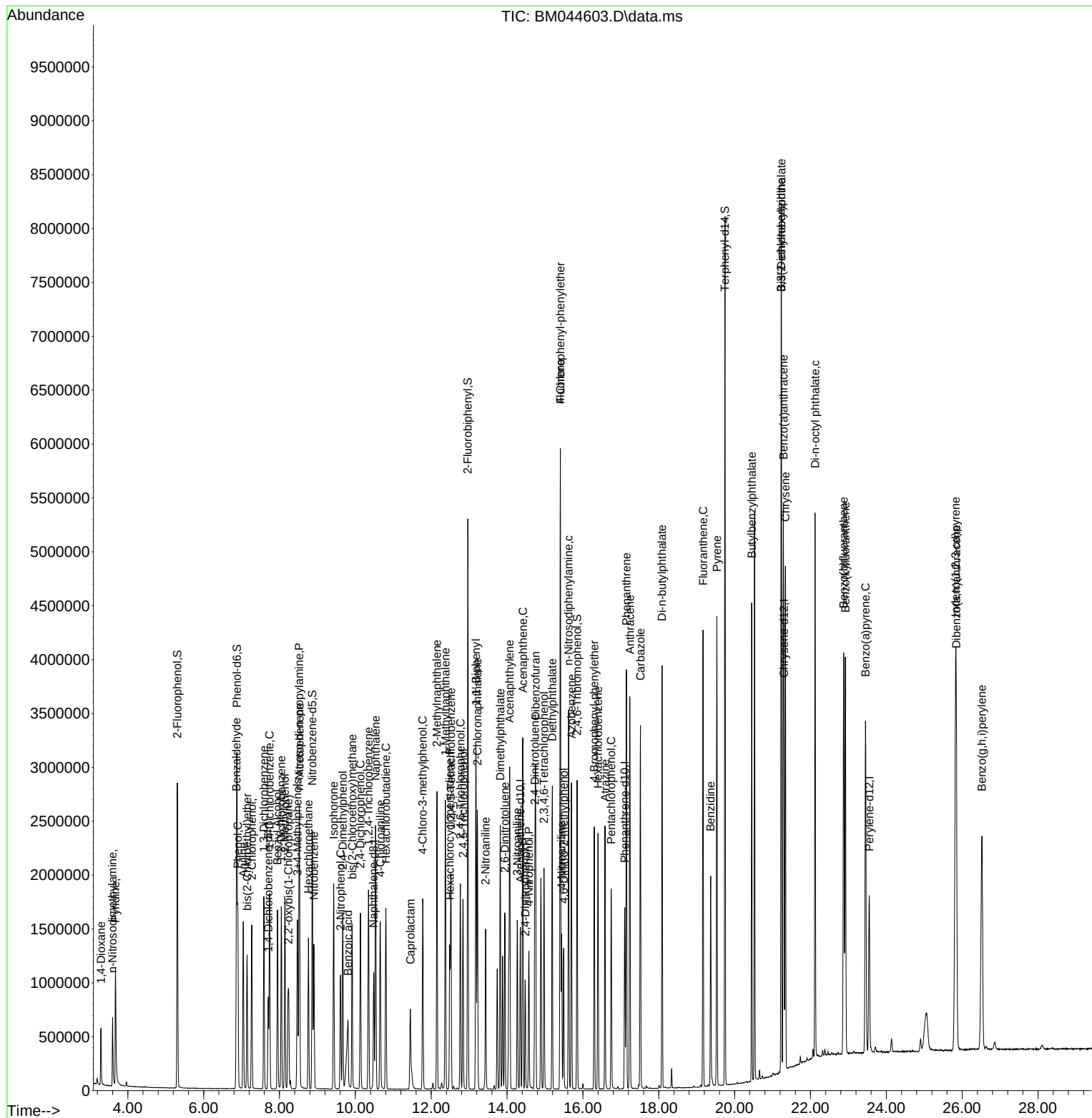
Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044603.D
Acq On : 13 Mar 2024 18:35
Operator : MA/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM031324

Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay 03/14/2024
Supervised By :mohammad ahmed 03/15/2024

Quant Time: Mar 14 02:30:41 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044603.D
 Acq On : 13 Mar 2024 18:35
 Operator : MA/JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 ICVBM031324

Quant Time: Mar 14 02:30:41 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 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	97	0.00
2	1,4-Dioxane	0.585	0.565	3.4	94	0.00
3	Pyridine	1.619	1.439	11.1	84	0.00
4	n-Nitrosodimethylamine	0.649	0.628	3.2	91	0.00
5 S	2-Fluorophenol	1.393	1.353	2.9	93	0.00
6	Aniline	2.122	2.116	0.3	94	0.00
7 S	Phenol-d6	1.792	1.683	6.1	89	0.00
8	2-Chlorophenol	1.387	1.461	-5.3	100	0.00
9	Benzaldehyde	0.939	0.887	5.5	91	0.00
10 C	Phenol	1.790	1.842	-2.9	97	0.00
11	bis(2-Chloroethyl)ether	1.461	1.497	-2.5	98	0.00
12	1,3-Dichlorobenzene	1.492	1.599	-7.2	104	0.00
13 C	1,4-Dichlorobenzene	1.504	1.621	-7.8	104	0.00
14	1,2-Dichlorobenzene	1.434	1.540	-7.4	103	0.00
15	Benzyl Alcohol	1.178	1.228	-4.2	96	0.00
16	2,2'-oxybis(1-Chloropropane	2.026	2.061	-1.7	97	0.00
17	2-Methylphenol	1.221	1.189	2.6	91	0.00
18	Hexachloroethane	0.556	0.604	-8.6	104	0.00
19 P	n-Nitroso-di-n-propylamine	1.094	1.116	-2.0	94	0.00
20	3+4-Methylphenols	1.647	1.620	1.6	91	0.00
21 I	Naphthalene-d8	1.000	1.000	0.0	99	0.00
22	Acetophenone	0.525	0.545	-3.8	100	0.00
23 S	Nitrobenzene-d5	0.415	0.381	8.2	88	0.00
24	Nitrobenzene	0.410	0.402	2.0	94	0.00
25	Isophorone	0.716	0.753	-5.2	99	0.00
26 C	2-Nitrophenol	0.177	0.189	-6.8	99	0.00
27	2,4-Dimethylphenol	0.311	0.275	11.6	84	0.00
28	bis(2-Chloroethoxy)methane	0.476	0.477	-0.2	96	0.00
29 C	2,4-Dichlorophenol	0.297	0.311	-4.7	99	0.00
30	1,2,4-Trichlorobenzene	0.316	0.328	-3.8	102	0.00
31	Naphthalene	1.098	1.091	0.6	97	0.00
32	Benzoic acid	0.231	0.239	-3.5	97	0.00
33	4-Chloroaniline	0.460	0.452	1.7	94	0.00
34 C	Hexachlorobutadiene	0.176	0.182	-3.4	101	0.00
35	Caprolactam	0.096	0.101	-5.2	96	0.00
36 C	4-Chloro-3-methylphenol	0.326	0.333	-2.1	96	0.00
37	2-Methylnaphthalene	0.745	0.711	4.6	92	0.00
38	1-Methylnaphthalene	0.694	0.689	0.7	96	0.00
39 I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00
40	1,2,4,5-Tetrachlorobenzene	0.568	0.582	-2.5	101	0.00
41 P	Hexachlorocyclopentadiene	0.323	0.344	-6.5	102	0.00
42 S	2,4,6-Tribromophenol	0.221	0.219	0.9	95	0.00
43 C	2,4,6-Trichlorophenol	0.383	0.396	-3.4	97	0.00
44	2,4,5-Trichlorophenol	0.454	0.428	5.7	90	0.00
45 S	2-Fluorobiphenyl	1.452	1.317	9.3	89	0.00
46	1,1'-Biphenyl	1.564	1.593	-1.9	99	0.00
47	2-Chloronaphthalene	1.157	1.201	-3.8	101	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044603.D
 Acq On : 13 Mar 2024 18:35
 Operator : MA/JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 ICVBM031324

Quant Time: Mar 14 02:30:41 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 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	0.392	0.389	0.8	91	0.00
49	Acenaphthylene	1.884	1.982	-5.2	101	0.00
50	Dimethylphthalate	1.496	1.447	3.3	93	0.00
51	2,6-Dinitrotoluene	0.312	0.314	-0.6	96	0.00
52 C	Acenaphthene	1.139	1.116	2.0	95	0.00
53	3-Nitroaniline	0.365	0.369	-1.1	95	0.00
54 P	2,4-Dinitrophenol	0.180	0.189	-5.0	99	0.00
55	Dibenzofuran	1.808	1.753	3.0	94	0.00
56 P	4-Nitrophenol	0.300	0.308	-2.7	99	0.00
57	2,4-Dinitrotoluene	0.407	0.415	-2.0	94	0.00
58	Fluorene	1.408	1.377	2.2	95	0.00
59	2,3,4,6-Tetrachlorophenol	0.353	0.352	0.3	97	0.00
60	Diethylphthalate	1.514	1.467	3.1	93	0.00
61	4-Chlorophenyl-phenylether	0.676	0.644	4.7	93	0.00
62	4-Nitroaniline	0.364	0.375	-3.0	94	0.00
63	Azobenzene	1.565	1.509	3.6	91	0.00
64 I	Phenanthrene-d10	1.000	1.000	0.0	97	0.00
65	4,6-Dinitro-2-methylphenol	0.125	0.121	3.2	91	0.00
66 c	n-Nitrosodiphenylamine	0.623	0.620	0.5	94	0.00
67	4-Bromophenyl-phenylether	0.207	0.202	2.4	93	0.00
68	Hexachlorobenzene	0.220	0.235	-6.8	103	0.00
69	Atrazine	0.195	0.193	1.0	94	0.00
70 C	Pentachlorophenol	0.158	0.149	5.7	86	0.00
71	Phenanthrene	1.105	1.104	0.1	96	0.00
72	Anthracene	1.109	1.116	-0.6	95	0.00
73	Carbazole	1.044	1.061	-1.6	96	0.00
74	Di-n-butylphthalate	1.345	1.378	-2.5	95	0.00
75 C	Fluoranthene	1.236	1.226	0.8	95	0.00
76 I	Chrysene-d12	1.000	1.000	0.0	98	0.00
77	Benzydine	0.517	0.618	-19.5	105	0.00
78	Pyrene	1.466	1.486	-1.4	94	0.00
79 S	Terphenyl-d14	1.143	1.076	5.9	87	0.00
80	Butylbenzylphthalate	0.661	0.699	-5.7	95	0.00
81	Benzo(a)anthracene	1.392	1.410	-1.3	96	0.00
82	3,3'-Dichlorobenzidine	0.479	0.522	-9.0	98	0.00
83	Chrysene	1.330	1.288	3.2	91	0.00
84	Bis(2-ethylhexyl)phthalate	0.995	1.050	-5.5	93	0.00
85 c	Di-n-octyl phthalate	1.726	1.852	-7.3	95	0.00
86 I	Perylene-d12	1.000	1.000	0.0	98	0.00
87	Indeno(1,2,3-cd)pyrene	1.446	1.474	-1.9	98	0.00
88	Benzo(b)fluoranthene	1.175	1.247	-6.1	101	0.00
89	Benzo(k)fluoranthene	1.208	1.166	3.5	93	0.00
90 C	Benzo(a)pyrene	1.146	1.096	4.4	91	0.00
91	Dibenzo(a,h)anthracene	1.219	1.241	-1.8	98	0.00
92	Benzo(g,h,i)perylene	1.200	1.194	0.5	97	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044603.D
Acq On : 13 Mar 2024 18:35
Operator : MA/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM031324

Quant Time: Mar 14 02:30:41 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration

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

Compound	AvgRF	CCRF	%Dev Area	% Dev(min)

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044603.D
 Acq On : 13 Mar 2024 18:35
 Operator : MA/JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 ICVBM031324

Quant Time: Mar 14 02:30:41 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 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	97	0.00
2	1,4-Dioxane	40.000	38.573	3.6	94	0.00
3	Pyridine	40.000	35.545	11.1	84	0.00
4	n-Nitrosodimethylamine	40.000	38.688	3.3	91	0.00
5 S	2-Fluorophenol	80.000	77.710	2.9	93	0.00
6	Aniline	40.000	39.883	0.3	94	0.00
7 S	Phenol-d6	80.000	75.143	6.1	89	0.00
8	2-Chlorophenol	40.000	42.115	-5.3	100	0.00
9	Benzaldehyde	40.000	37.823	5.4	91	0.00
10 C	Phenol	40.000	41.168	-2.9	97	0.00
11	bis(2-Chloroethyl)ether	40.000	40.970	-2.4	98	0.00
12	1,3-Dichlorobenzene	40.000	42.865	-7.2	104	0.00
13 C	1,4-Dichlorobenzene	40.000	43.124	-7.8	104	0.00
14	1,2-Dichlorobenzene	40.000	42.973	-7.4	103	0.00
15	Benzyl Alcohol	40.000	41.675	-4.2	96	0.00
16	2,2'-oxybis(1-Chloropropane	40.000	40.692	-1.7	97	0.00
17	2-Methylphenol	40.000	38.954	2.6	91	0.00
18	Hexachloroethane	40.000	43.465	-8.7	104	0.00
19 P	n-Nitroso-di-n-propylamine	40.000	40.777	-1.9	94	0.00
20	3+4-Methylphenols	40.000	39.339	1.7	91	0.00
21 I	Naphthalene-d8	20.000	20.000	0.0	99	0.00
22	Acetophenone	40.000	41.469	-3.7	100	0.00
23 S	Nitrobenzene-d5	80.000	73.434	8.2	88	0.00
24	Nitrobenzene	40.000	39.135	2.2	94	0.00
25	Isophorone	40.000	42.039	-5.1	99	0.00
26 C	2-Nitrophenol	40.000	42.794	-7.0	99	0.00
27	2,4-Dimethylphenol	40.000	35.308	11.7	84	0.00
28	bis(2-Chloroethoxy)methane	40.000	40.146	-0.4	96	0.00
29 C	2,4-Dichlorophenol	40.000	41.954	-4.9	99	0.00
30	1,2,4-Trichlorobenzene	40.000	41.553	-3.9	102	0.00
31	Naphthalene	40.000	39.752	0.6	97	0.00
32	Benzoic acid	40.000	39.129	2.2	97	0.00
33	4-Chloroaniline	40.000	39.256	1.9	94	0.00
34 C	Hexachlorobutadiene	40.000	41.344	-3.4	101	0.00
35	Caprolactam	40.000	41.999	-5.0	96	0.00
36 C	4-Chloro-3-methylphenol	40.000	40.844	-2.1	96	0.00
37	2-Methylnaphthalene	40.000	38.169	4.6	92	0.00
38	1-Methylnaphthalene	40.000	39.667	0.8	96	0.00
39 I	Acenaphthene-d10	20.000	20.000	0.0	99	0.00
40	1,2,4,5-Tetrachlorobenzene	40.000	41.028	-2.6	101	0.00
41 P	Hexachlorocyclopentadiene	40.000	42.613	-6.5	102	0.00
42 S	2,4,6-Tribromophenol	80.000	79.416	0.7	95	0.00
43 C	2,4,6-Trichlorophenol	40.000	41.344	-3.4	97	0.00
44	2,4,5-Trichlorophenol	40.000	37.662	5.8	90	0.00
45 S	2-Fluorobiphenyl	80.000	72.563	9.3	89	0.00
46	1,1'-Biphenyl	40.000	40.726	-1.8	99	0.00
47	2-Chloronaphthalene	40.000	41.523	-3.8	101	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
 Data File : BM044603.D
 Acq On : 13 Mar 2024 18:35
 Operator : MA/JU
 Sample : SSTDICV040
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 ICVBM031324

Quant Time: Mar 14 02:30:41 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
48	2-Nitroaniline	40.000	39.628	0.9	91	0.00
49	Acenaphthylene	40.000	42.083	-5.2	101	0.00
50	Dimethylphthalate	40.000	38.682	3.3	93	0.00
51	2,6-Dinitrotoluene	40.000	40.297	-0.7	96	0.00
52 C	Acenaphthene	40.000	39.206	2.0	95	0.00
53	3-Nitroaniline	40.000	40.475	-1.2	95	0.00
54 P	2,4-Dinitrophenol	40.000	39.513	1.2	99	0.00
55	Dibenzofuran	40.000	38.788	3.0	94	0.00
56 P	4-Nitrophenol	40.000	41.179	-2.9	99	0.00
57	2,4-Dinitrotoluene	40.000	40.828	-2.1	94	0.00
58	Fluorene	40.000	39.116	2.2	95	0.00
59	2,3,4,6-Tetrachlorophenol	40.000	39.889	0.3	97	0.00
60	Diethylphthalate	40.000	38.747	3.1	93	0.00
61	4-Chlorophenyl-phenylether	40.000	38.112	4.7	93	0.00
62	4-Nitroaniline	40.000	41.130	-2.8	94	0.00
63	Azobenzene	40.000	38.561	3.6	91	0.00
64 I	Phenanthrene-d10	20.000	20.000	0.0	97	0.00
65	4,6-Dinitro-2-methylphenol	40.000	38.612	3.5	91	0.00
66 c	n-Nitrosodiphenylamine	40.000	39.810	0.5	94	0.00
67	4-Bromophenyl-phenylether	40.000	39.020	2.4	93	0.00
68	Hexachlorobenzene	40.000	42.820	-7.1	103	0.00
69	Atrazine	40.000	39.686	0.8	94	0.00
70 C	Pentachlorophenol	40.000	37.571	6.1	86	0.00
71	Phenanthrene	40.000	39.938	0.2	96	0.00
72	Anthracene	40.000	40.255	-0.6	95	0.00
73	Carbazole	40.000	40.644	-1.6	96	0.00
74	Di-n-butylphthalate	40.000	40.986	-2.5	95	0.00
75 C	Fluoranthene	40.000	39.687	0.8	95	0.00
76 I	Chrysene-d12	20.000	20.000	0.0	98	0.00
77	Benzidine	40.000	47.847	-19.6	105	0.00
78	Pyrene	40.000	40.556	-1.4	94	0.00
79 S	Terphenyl-d14	80.000	75.267	5.9	87	0.00
80	Butylbenzylphthalate	40.000	42.303	-5.8	95	0.00
81	Benzo(a)anthracene	40.000	40.536	-1.3	96	0.00
82	3,3'-Dichlorobenzidine	40.000	43.530	-8.8	98	0.00
83	Chrysene	40.000	38.755	3.1	91	0.00
84	Bis(2-ethylhexyl)phthalate	40.000	42.209	-5.5	93	0.00
85 c	Di-n-octyl phthalate	40.000	42.920	-7.3	95	0.00
86 I	Perylene-d12	20.000	20.000	0.0	98	0.00
87	Indeno(1,2,3-cd)pyrene	40.000	40.784	-2.0	98	0.00
88	Benzo(b)fluoranthene	40.000	42.424	-6.1	101	0.00
89	Benzo(k)fluoranthene	40.000	38.605	3.5	93	0.00
90 C	Benzo(a)pyrene	40.000	38.236	4.4	91	0.00
91	Dibenzo(a,h)anthracene	40.000	40.727	-1.8	98	0.00
92	Benzo(g,h,i)perylene	40.000	39.791	0.5	97	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044603.D
Acq On : 13 Mar 2024 18:35
Operator : MA/JU
Sample : SSTDICV040
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
ICVBM031324

Quant Time: Mar 14 02:30:41 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
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



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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: LIRO01
 Lab Code: CHEM Case No.: P1747 SAS No.: P1747 SDG No.: P1747
 Instrument ID: BNA_F Calibration Date/Time: 03/15/2024 15:34
 Lab File ID: BF137610.D Init. Calib. Date(s): 02/29/2024 02/29/2024
 EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:44 17:14
 GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.321	1.324		0.2	
Phenol-d6	1.906	1.756		-7.9	
Phenol	2.052	1.929		-6.0	20.0
Nitrobenzene-d5	0.430	0.417		-3.0	
1,2,4-Trichlorobenzene	0.310	0.304		-1.9	
Naphthalene	1.073	1.032		-3.8	
2-Fluorobiphenyl	1.278	1.209		-5.4	
2,4,6-Tribromophenol	0.176	0.172		-2.3	
Terphenyl-d14	1.454	1.253		-13.8	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137610.D
 Acq On : 15 Mar 2024 15:34
 Operator : CG\JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.728	152	156491	20.000	ng	0.00
21) Naphthalene-d8	8.010	136	579710	20.000	ng	0.00
39) Acenaphthene-d10	9.763	164	317075	20.000	ng	0.00
64) Phenanthrene-d10	11.245	188	518790	20.000	ng	0.00
76) Chrysene-d12	13.874	240	315670	20.000	ng	0.00
86) Perylene-d12	15.298	264	268004	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.334	112	829020	80.234	ng	0.00
7) Phenol-d6	6.369	99	1099485	73.718	ng	0.00
23) Nitrobenzene-d5	7.292	82	966313	77.451	ng	0.00
42) 2,4,6-Tribromophenol	10.551	330	218774	78.569	ng	0.00
45) 2-Fluorobiphenyl	9.086	172	1533611	75.713	ng	0.00
79) Terphenyl-d14	12.827	244	1581833	68.907	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	2.369	88	215341	38.115	ng	96
3) Pyridine	3.069	79	508765	37.339	ng	99
4) n-Nitrosodimethylamine	3.040	42	190199	35.533	ng	96
6) Aniline	6.393	93	666833	36.590	ng	99
8) 2-Chlorophenol	6.510	128	418087	38.363	ng	96
9) Benzaldehyde	6.275	77	272232	37.257	ng	99
10) Phenol	6.381	94	603675	37.604	ng	98
11) bis(2-Chloroethyl)ether	6.469	93	447547	38.045	ng	96
12) 1,3-Dichlorobenzene	6.669	146	443854	38.114	ng	95
13) 1,4-Dichlorobenzene	6.745	146	452254	37.956	ng	99
14) 1,2-Dichlorobenzene	6.898	146	410332	37.520	ng	97
15) Benzyl Alcohol	6.875	79	349531	37.644	ng	99
16) 2,2'-oxybis(1-Chloropr...	7.010	45	686913	33.970	ng	98
17) 2-Methylphenol	6.987	107	372410	36.519	ng	98
18) Hexachloroethane	7.234	117	153325	39.080	ng	95
19) n-Nitroso-di-n-propyla...	7.145	70	317372	34.459	ng	99
20) 3+4-Methylphenols	7.140	107	437619	37.469	ng	92
22) Acetophenone	7.140	105	540017	38.500	ng	# 99
24) Nitrobenzene	7.316	77	489210	39.033	ng	95
25) Isophorone	7.551	82	862387	36.383	ng	98
26) 2-Nitrophenol	7.628	139	208524	41.907	ng	96
27) 2,4-Dimethylphenol	7.669	122	363298	39.074	ng	98
28) bis(2-Chloroethoxy)met...	7.763	93	528711	38.016	ng	99
29) 2,4-Dichlorophenol	7.869	162	340547	39.909	ng	98
30) 1,2,4-Trichlorobenzene	7.951	180	352561	39.262	ng	99
31) Naphthalene	8.034	128	1196746	38.476	ng	98
32) Benzoic acid	7.792	122	140556	29.105	ng	99
33) 4-Chloroaniline	8.087	127	482118	39.530	ng	98
34) Hexachlorobutadiene	8.145	225	210821	39.767	ng	99
35) Caprolactam	8.457	113	111921	38.681	ng	90
36) 4-Chloro-3-methylphenol	8.569	107	360723	37.819	ng	97
37) 2-Methylnaphthalene	8.722	142	749830	37.816	ng	99
38) 1-Methylnaphthalene	8.822	142	700945	37.538	ng	98
40) 1,2,4,5-Tetrachloroben...	8.886	216	350401	39.585	ng	100
41) Hexachlorocyclopentadiene	8.869	237	146006	44.495	ng	99
43) 2,4,6-Trichlorophenol	8.998	196	225760	39.164	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137610.D
 Acq On : 15 Mar 2024 15:34
 Operator : CG\JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration

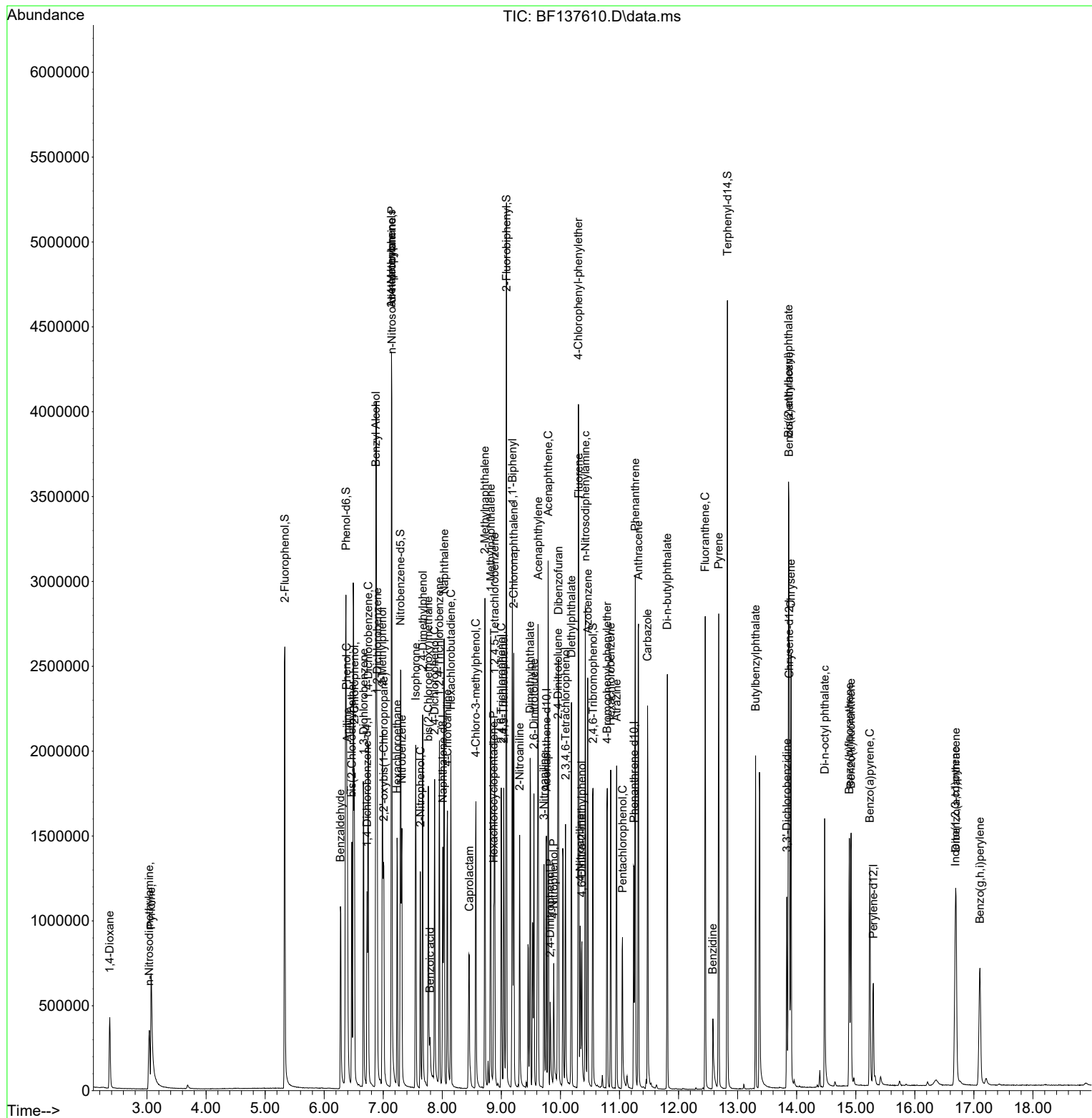
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.039	196	266606	40.149	ng	98
46) 1,1'-Biphenyl	9.186	154	895726	38.597	ng	99
47) 2-Chloronaphthalene	9.210	162	682605	38.579	ng	99
48) 2-Nitroaniline	9.310	65	241850	40.215	ng	98
49) Acenaphthylene	9.622	152	1078559	38.091	ng	99
50) Dimethylphthalate	9.486	163	835006	37.831	ng	99
51) 2,6-Dinitrotoluene	9.551	165	183019	39.644	ng	95
52) Acenaphthene	9.792	154	636687	37.663	ng	98
53) 3-Nitroaniline	9.722	138	194602	39.852	ng	95
54) 2,4-Dinitrophenol	9.828	184	72329	37.044	ng	95
55) Dibenzofuran	9.969	168	980492	38.082	ng	98
56) 4-Nitrophenol	9.886	139	122910	37.903	ng	98
57) 2,4-Dinitrotoluene	9.957	165	231872	40.881	ng	97
58) Fluorene	10.310	166	727541	36.794	ng	99
59) 2,3,4,6-Tetrachlorophenol	10.086	232	196408	36.885	ng	94
60) Diethylphthalate	10.186	149	804097	38.578	ng	99
61) 4-Chlorophenyl-phenyle...	10.304	204	360402	37.190	ng	94
62) 4-Nitroaniline	10.333	138	149079	35.520	ng	97
63) Azobenzene	10.463	77	853498	35.561	ng	99
65) 4,6-Dinitro-2-methylph...	10.363	198	116155	40.172	ng	87
66) n-Nitrosodiphenylamine	10.422	169	646494	38.699	ng	100
67) 4-Bromophenyl-phenylether	10.792	248	223918	39.628	ng	98
68) Hexachlorobenzene	10.851	284	226572	39.700	ng	96
69) Atrazine	10.951	200	201915	39.759	ng	97
70) Pentachlorophenol	11.051	266	124567	36.106	ng	99
71) Phenanthrene	11.269	178	1071047	37.935	ng	99
72) Anthracene	11.322	178	1129285	38.944	ng	98
73) Carbazole	11.475	167	955793	38.481	ng	98
74) Di-n-butylphthalate	11.810	149	1144148	38.716	ng	100
75) Fluoranthene	12.451	202	1061266	38.455	ng	99
77) Benzidine	12.580	184	221666	28.694	ng	99
78) Pyrene	12.680	202	1080426	34.881	ng	99
80) Butylbenzylphthalate	13.304	149	388075	49.059	ng	98
81) Benzo(a)anthracene	13.868	228	813528	36.770	ng	99
82) 3,3'-Dichlorobenzidine	13.833	252	244230	41.452	ng	98
83) Chrysene	13.904	228	845864	37.827	ng	100
84) Bis(2-ethylhexyl)phtha...	13.863	149	503140	50.042	ng	100
85) Di-n-octyl phthalate	14.474	149	786661	41.461	ng	97
87) Indeno(1,2,3-cd)pyrene	16.686	276	645627	36.607	ng	97
88) Benzo(b)fluoranthene	14.892	252	626780	39.536	ng	98
89) Benzo(k)fluoranthene	14.921	252	666018	39.113	ng	99
90) Benzo(a)pyrene	15.239	252	604260	38.678	ng	100
91) Dibenzo(a,h)anthracene	16.698	278	518447	36.238	ng	98
92) Benzo(g,h,i)perylene	17.104	276	546609	37.202	ng	98

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137610.D
Acq On : 15 Mar 2024 15:34
Operator : CG\JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration



Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137610.D
 Acq On : 15 Mar 2024 15:34
 Operator : CG\JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_F
 LabSampleId :
 SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 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	74	0.00
2	1,4-Dioxane	40.000	38.115	4.7	69	0.00
3	Pyridine	40.000	37.339	6.7	63	0.00
4	n-Nitrosodimethylamine	40.000	35.533	11.2	64	0.00
5 S	2-Fluorophenol	80.000	80.234	-0.3	71	0.00
6	Aniline	40.000	36.590	8.5	64	0.00
7 S	Phenol-d6	80.000	73.718	7.9	68	0.00
8	2-Chlorophenol	40.000	38.363	4.1	70	0.00
9	Benzaldehyde	40.000	37.257	6.9	64	0.00
10 C	Phenol	40.000	37.604	6.0	67	0.00
11	bis(2-Chloroethyl)ether	40.000	38.045	4.9	67	0.00
12	1,3-Dichlorobenzene	40.000	38.114	4.7	70	0.00
13 C	1,4-Dichlorobenzene	40.000	37.956	5.1	69	0.00
14	1,2-Dichlorobenzene	40.000	37.520	6.2	70	0.00
15	Benzyl Alcohol	40.000	37.644	5.9	65	0.00
16	2,2'-oxybis(1-Chloropropane	40.000	33.970	15.1	63	0.00
17	2-Methylphenol	40.000	36.519	8.7	67	0.00
18	Hexachloroethane	40.000	39.080	2.3	71	0.00
19 P	n-Nitroso-di-n-propylamine	40.000	34.459	13.9	65	0.00
20	3+4-Methylphenols	40.000	37.469	6.3	69	0.00
21 I	Naphthalene-d8	20.000	20.000	0.0	70	0.00
22	Acetophenone	40.000	38.500	3.8	67	0.00
23 S	Nitrobenzene-d5	80.000	77.451	3.2	66	0.00
24	Nitrobenzene	40.000	39.033	2.4	67	0.00
25	Isophorone	40.000	36.383	9.0	63	0.00
26 C	2-Nitrophenol	40.000	41.907	-4.8	70	0.00
27	2,4-Dimethylphenol	40.000	39.074	2.3	67	0.00
28	bis(2-Chloroethoxy)methane	40.000	38.016	5.0	65	0.00
29 C	2,4-Dichlorophenol	40.000	39.909	0.2	68	0.00
30	1,2,4-Trichlorobenzene	40.000	39.262	1.8	68	0.00
31	Naphthalene	40.000	38.476	3.8	68	0.00
32	Benzoic acid	40.000	29.105	27.2#	51	0.00
33	4-Chloroaniline	40.000	39.530	1.2	65	0.00
34 C	Hexachlorobutadiene	40.000	39.767	0.6	69	0.00
35	Caprolactam	40.000	38.681	3.3	66	0.00
36 C	4-Chloro-3-methylphenol	40.000	37.819	5.5	64	0.00
37	2-Methylnaphthalene	40.000	37.816	5.5	66	0.00
38	1-Methylnaphthalene	40.000	37.538	6.2	66	0.00
39 I	Acenaphthene-d10	20.000	20.000	0.0	68	0.00
40	1,2,4,5-Tetrachlorobenzene	40.000	39.585	1.0	67	0.00
41 P	Hexachlorocyclopentadiene	40.000	44.495	-11.2	83	0.00
42 S	2,4,6-Tribromophenol	80.000	78.569	1.8	67	0.00
43 C	2,4,6-Trichlorophenol	40.000	39.164	2.1	65	0.00
44	2,4,5-Trichlorophenol	40.000	40.149	-0.4	67	0.00
45 S	2-Fluorobiphenyl	80.000	75.713	5.4	67	0.00
46	1,1'-Biphenyl	40.000	38.597	3.5	66	0.00
47	2-Chloronaphthalene	40.000	38.579	3.6	66	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137610.D
 Acq On : 15 Mar 2024 15:34
 Operator : CG\JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_F
 LabSampleId :
 SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
48	2-Nitroaniline	40.000	40.215	-0.5	65	0.00
49	Acenaphthylene	40.000	38.091	4.8	65	0.00
50	Dimethylphthalate	40.000	37.831	5.4	65	0.00
51	2,6-Dinitrotoluene	40.000	39.644	0.9	66	0.00
52 C	Acenaphthene	40.000	37.663	5.8	65	0.00
53	3-Nitroaniline	40.000	39.852	0.4	64	0.00
54 P	2,4-Dinitrophenol	40.000	37.044	7.4	64	0.00
55	Dibenzofuran	40.000	38.082	4.8	65	0.00
56 P	4-Nitrophenol	40.000	37.903	5.2	64	0.00
57	2,4-Dinitrotoluene	40.000	40.881	-2.2	66	0.00
58	Fluorene	40.000	36.794	8.0	65	0.00
59	2,3,4,6-Tetrachlorophenol	40.000	36.885	7.8	62	0.00
60	Diethylphthalate	40.000	38.578	3.6	66	0.00
61	4-Chlorophenyl-phenylether	40.000	37.190	7.0	66	0.00
62	4-Nitroaniline	40.000	35.520	11.2	59	0.00
63	Azobenzene	40.000	35.561	11.1	60	0.00
64 I	Phenanthrene-d10	20.000	20.000	0.0	65	0.00
65	4,6-Dinitro-2-methylphenol	40.000	40.172	-0.4	62	0.00
66 c	n-Nitrosodiphenylamine	40.000	38.699	3.3	64	0.00
67	4-Bromophenyl-phenylether	40.000	39.628	0.9	64	0.00
68	Hexachlorobenzene	40.000	39.700	0.7	66	0.00
69	Atrazine	40.000	39.759	0.6	65	0.00
70 C	Pentachlorophenol	40.000	36.106	9.7	56	0.00
71	Phenanthrene	40.000	37.935	5.2	64	0.00
72	Anthracene	40.000	38.944	2.6	65	0.00
73	Carbazole	40.000	38.481	3.8	63	0.00
74	Di-n-butylphthalate	40.000	38.716	3.2	63	0.00
75 C	Fluoranthene	40.000	38.455	3.9	65	0.00
76 I	Chrysene-d12	20.000	20.000	0.0	79	0.00
77	Benzydine	40.000	28.694	28.3#	49	0.00
78	Pyrene	40.000	34.881	12.8	65	0.00
79 S	Terphenyl-d14	80.000	68.907	13.9	66	0.00
80	Butylbenzylphthalate	40.000	49.059	-22.6	92	0.00
81	Benzo(a)anthracene	40.000	36.770	8.1	72	0.00
82	3,3'-Dichlorobenzidine	40.000	41.452	-3.6	73	0.00
83	Chrysene	40.000	37.827	5.4	73	0.00
84	Bis(2-ethylhexyl)phthalate	40.000	50.042	-25.1#	93	0.00
85 c	Di-n-octyl phthalate	40.000	41.461	-3.7	82	0.00
86 I	Perylene-d12	20.000	20.000	0.0	70	0.00
87	Indeno(1,2,3-cd)pyrene	40.000	36.607	8.5	60	0.00
88	Benzo(b)fluoranthene	40.000	39.536	1.2	68	0.00
89	Benzo(k)fluoranthene	40.000	39.113	2.2	70	0.00
90 C	Benzo(a)pyrene	40.000	38.678	3.3	65	0.00
91	Dibenzo(a,h)anthracene	40.000	36.238	9.4	59	0.00
92	Benzo(g,h,i)perylene	40.000	37.202	7.0	61	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137610.D
Acq On : 15 Mar 2024 15:34
Operator : CG\JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137610.D
 Acq On : 15 Mar 2024 15:34
 Operator : CG\JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_F
 LabSampleId :
 SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 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	74	0.00
2	1,4-Dioxane	0.722	0.688	4.7	69	0.00
3	Pyridine	1.741	1.626	6.6	63	0.00
4	n-Nitrosodimethylamine	0.652	0.608	6.7	64	0.00
5 S	2-Fluorophenol	1.321	1.324	-0.2	71	0.00
6	Aniline	2.329	2.131	8.5	64	0.00
7 S	Phenol-d6	1.906	1.756	7.9	68	0.00
8	2-Chlorophenol	1.393	1.336	4.1	70	0.00
9	Benzaldehyde	0.934	0.870	6.9	64	0.00
10 C	Phenol	2.052	1.929	6.0	67	0.00
11	bis(2-Chloroethyl)ether	1.503	1.430	4.9	67	0.00
12	1,3-Dichlorobenzene	1.488	1.418	4.7	70	0.00
13 C	1,4-Dichlorobenzene	1.523	1.445	5.1	69	0.00
14	1,2-Dichlorobenzene	1.398	1.311	6.2	70	0.00
15	Benzyl Alcohol	1.187	1.117	5.9	65	0.00
16	2,2'-oxybis(1-Chloropropane	2.584	2.195	15.1	63	0.00
17	2-Methylphenol	1.303	1.190	8.7	67	0.00
18	Hexachloroethane	0.501	0.490	2.2	71	0.00
19 P	n-Nitroso-di-n-propylamine	1.177	1.014	13.8	65	0.00
20	3+4-Methylphenols	1.493	1.398	6.4	69	0.00
21 I	Naphthalene-d8	1.000	1.000	0.0	70	0.00
22	Acetophenone	0.484	0.466	3.7	67	0.00
23 S	Nitrobenzene-d5	0.430	0.417	3.0	66	0.00
24	Nitrobenzene	0.432	0.422	2.3	67	0.00
25	Isophorone	0.818	0.744	9.0	63	0.00
26 C	2-Nitrophenol	0.172	0.180	-4.7	70	0.00
27	2,4-Dimethylphenol	0.321	0.313	2.5	67	0.00
28	bis(2-Chloroethoxy)methane	0.480	0.456	5.0	65	0.00
29 C	2,4-Dichlorophenol	0.294	0.294	0.0	68	0.00
30	1,2,4-Trichlorobenzene	0.310	0.304	1.9	68	0.00
31	Naphthalene	1.073	1.032	3.8	68	0.00
32	Benzoic acid	0.167	0.121	27.5#	51	0.00
33	4-Chloroaniline	0.421	0.416	1.2	65	0.00
34 C	Hexachlorobutadiene	0.183	0.182	0.5	69	0.00
35	Caprolactam	0.100	0.097	3.0	66	0.00
36 C	4-Chloro-3-methylphenol	0.329	0.311	5.5	64	0.00
37	2-Methylnaphthalene	0.684	0.647	5.4	66	0.00
38	1-Methylnaphthalene	0.644	0.605	6.1	66	0.00
39 I	Acenaphthene-d10	1.000	1.000	0.0	68	0.00
40	1,2,4,5-Tetrachlorobenzene	0.558	0.553	0.9	67	0.00
41 P	Hexachlorocyclopentadiene	0.180	0.230	-27.8#	83	0.00
42 S	2,4,6-Tribromophenol	0.176	0.172	2.3	67	0.00
43 C	2,4,6-Trichlorophenol	0.364	0.356	2.2	65	0.00
44	2,4,5-Trichlorophenol	0.419	0.420	-0.2	67	0.00
45 S	2-Fluorobiphenyl	1.278	1.209	5.4	67	0.00
46	1,1'-Biphenyl	1.464	1.412	3.6	66	0.00
47	2-Chloronaphthalene	1.116	1.076	3.6	66	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137610.D
 Acq On : 15 Mar 2024 15:34
 Operator : CG\JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_F
 LabSampleId :
 SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 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	0.379	0.381	-0.5	65	0.00
49	Acenaphthylene	1.786	1.701	4.8	65	0.00
50	Dimethylphthalate	1.392	1.317	5.4	65	0.00
51	2,6-Dinitrotoluene	0.291	0.289	0.7	66	0.00
52 C	Acenaphthene	1.066	1.004	5.8	65	0.00
53	3-Nitroaniline	0.308	0.307	0.3	64	0.00
54 P	2,4-Dinitrophenol	0.111	0.114	-2.7	64	0.00
55	Dibenzofuran	1.624	1.546	4.8	65	0.00
56 P	4-Nitrophenol	0.190	0.194	-2.1	64	0.00
57	2,4-Dinitrotoluene	0.358	0.366	-2.2	66	0.00
58	Fluorene	1.247	1.147	8.0	65	0.00
59	2,3,4,6-Tetrachlorophenol	0.336	0.310	7.7	62	0.00
60	Diethylphthalate	1.315	1.268	3.6	66	0.00
61	4-Chlorophenyl-phenylether	0.611	0.568	7.0	66	0.00
62	4-Nitroaniline	0.265	0.235	11.3	59	0.00
63	Azobenzene	1.514	1.346	11.1	60	0.00
64 I	Phenanthrene-d10	1.000	1.000	0.0	65	0.00
65	4,6-Dinitro-2-methylphenol	0.111	0.112	-0.9	62	0.00
66 c	n-Nitrosodiphenylamine	0.644	0.623	3.3	64	0.00
67	4-Bromophenyl-phenylether	0.218	0.216	0.9	64	0.00
68	Hexachlorobenzene	0.220	0.218	0.9	66	0.00
69	Atrazine	0.196	0.195	0.5	65	0.00
70 C	Pentachlorophenol	0.133	0.120	9.8	56	0.00
71	Phenanthrene	1.088	1.032	5.1	64	0.00
72	Anthracene	1.118	1.088	2.7	65	0.00
73	Carbazole	0.958	0.921	3.9	63	0.00
74	Di-n-butylphthalate	1.139	1.103	3.2	63	0.00
75 C	Fluoranthene	1.064	1.023	3.9	65	0.00
76 I	Chrysene-d12	1.000	1.000	0.0	79	0.00
77	Benzidine	0.489	0.351	28.2#	49#	0.00
78	Pyrene	1.962	1.711	12.8	65	0.00
79 S	Terphenyl-d14	1.454	1.253	13.8	66	0.00
80	Butylbenzylphthalate	0.501	0.615	-22.8	92	0.00
81	Benzo(a)anthracene	1.402	1.289	8.1	72	0.00
82	3,3'-Dichlorobenzidine	0.373	0.387	-3.8	73	0.00
83	Chrysene	1.417	1.340	5.4	73	0.00
84	Bis(2-ethylhexyl)phthalate	0.637	0.797	-25.1#	93	0.00
85 c	Di-n-octyl phthalate	1.120	1.246	-11.2	82	0.00
86 I	Perylene-d12	1.000	1.000	0.0	70	0.00
87	Indeno(1,2,3-cd)pyrene	1.316	1.205	8.4	60	0.00
88	Benzo(b)fluoranthene	1.183	1.169	1.2	68	0.00
89	Benzo(k)fluoranthene	1.271	1.243	2.2	70	0.00
90 C	Benzo(a)pyrene	1.166	1.127	3.3	65	0.00
91	Dibenzo(a,h)anthracene	1.068	0.967	9.5	59	0.00
92	Benzo(g,h,i)perylene	1.096	1.020	6.9	61	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137610.D
Acq On : 15 Mar 2024 15:34
Operator : CG\JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_F
LabSampleId :
SSTDCCC040

Quant Time: Mar 15 16:29:26 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration

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

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0



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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: LIRO01
 Lab Code: CHEM Case No.: P1747 SAS No.: P1747 SDG No.: P1747
 Instrument ID: BNA_M Calibration Date/Time: 03/18/2024 11:50
 Lab File ID: BM044654.D Init. Calib. Date(s): 03/13/2024 03/13/2024
 EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 13:44 17:59
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.393	1.339		-3.9	
Phenol-d6	1.792	1.757		-2.0	
Phenol	1.790	1.737		-3.0	20.0
Nitrobenzene-d5	0.415	0.407		-1.9	
1,2,4-Trichlorobenzene	0.316	0.303		-4.1	
Naphthalene	1.098	1.055		-3.9	
2-Fluorobiphenyl	1.452	1.423		-2.0	
2,4,6-Tribromophenol	0.221	0.228		3.2	
Terphenyl-d14	1.143	1.150		0.6	

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
 Data File : BM044654.D
 Acq On : 18 Mar 2024 11:50
 Operator : MA/JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDCCC040

Quant Time: Mar 18 12:22:52 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.698	152	181490	20.000	ng	0.00
21) Naphthalene-d8	10.475	136	729361	20.000	ng	-0.01
39) Acenaphthene-d10	14.339	164	422995	20.000	ng	-0.01
64) Phenanthrene-d10	17.098	188	831298	20.000	ng	0.00
76) Chrysene-d12	21.297	240	768575	20.000	ng	0.00
86) Perylene-d12	23.544	264	882881	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.298	112	972100	76.903	ng	0.00
7) Phenol-d6	6.869	99	1275770	78.450	ng	-0.01
23) Nitrobenzene-d5	8.857	82	1186909	78.398	ng	0.00
42) 2,4,6-Tribromophenol	15.839	330	386225	82.784	ng	0.00
45) 2-Fluorobiphenyl	12.957	172	2407373	78.381	ng	-0.01
79) Terphenyl-d14	19.739	244	3534688	80.453	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.287	88	201225	37.873	ng	99
3) Pyridine	3.669	79	562722	38.299	ng	99
4) n-Nitrosodimethylamine	3.593	42	237194	40.282	ng	96
6) Aniline	7.040	93	741308	38.489	ng	100
8) 2-Chlorophenol	7.263	128	488158	38.772	ng	99
9) Benzaldehyde	6.857	77	323237	37.951	ng	100
10) Phenol	6.898	94	630478	38.820	ng	99
11) bis(2-Chloroethyl)ether	7.140	93	513979	38.760	ng	99
12) 1,3-Dichlorobenzene	7.581	146	516772	38.172	ng	98
13) 1,4-Dichlorobenzene	7.734	146	523849	38.393	ng	99
14) 1,2-Dichlorobenzene	8.039	146	499568	38.393	ng	99
15) Benzyl Alcohol	7.945	79	424124	39.670	ng	99
16) 2,2'-oxybis(1-Chloropr...	8.228	45	712806	38.771	ng	100
17) 2-Methylphenol	8.134	107	438662	39.604	ng	99
18) Hexachloroethane	8.757	117	196297	38.916	ng	100
19) n-Nitroso-di-n-propyla...	8.504	70	404247	40.704	ng	98
20) 3+4-Methylphenols	8.463	107	589091	39.411	ng	97
22) Acetophenone	8.522	105	744059	38.831	ng	# 99
24) Nitrobenzene	8.898	77	578842	38.678	ng	99
25) Isophorone	9.422	82	1027888	39.350	ng	99
26) 2-Nitrophenol	9.604	139	255766	39.606	ng	98
27) 2,4-Dimethylphenol	9.663	122	449177	39.552	ng	99
28) bis(2-Chloroethoxy)met...	9.904	93	676920	39.024	ng	99
29) 2,4-Dichlorophenol	10.128	162	427991	39.542	ng	99
30) 1,2,4-Trichlorobenzene	10.339	180	442341	38.415	ng	99
31) Naphthalene	10.528	128	1538711	38.441	ng	100
32) Benzoic acid	9.798	122	321801	36.448	ng	99
33) 4-Chloroaniline	10.645	127	660289	39.320	ng	98
34) Hexachlorobutadiene	10.798	225	252651	39.353	ng	99
35) Caprolactam	11.439	113	142944	40.941	ng	100
36) 4-Chloro-3-methylphenol	11.769	107	470711	39.632	ng	98
37) 2-Methylnaphthalene	12.145	142	1055148	38.838	ng	99
38) 1-Methylnaphthalene	12.363	142	985735	38.930	ng	98
40) 1,2,4,5-Tetrachloroben...	12.510	216	459124	38.249	ng	100
41) Hexachlorocyclopentadiene	12.480	237	262394	38.371	ng	99
43) 2,4,6-Trichlorophenol	12.763	196	321778	39.699	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
 Data File : BM044654.D
 Acq On : 18 Mar 2024 11:50
 Operator : MA/JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 SSTDCCC040

Quant Time: Mar 18 12:22:52 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 Response via : Initial Calibration

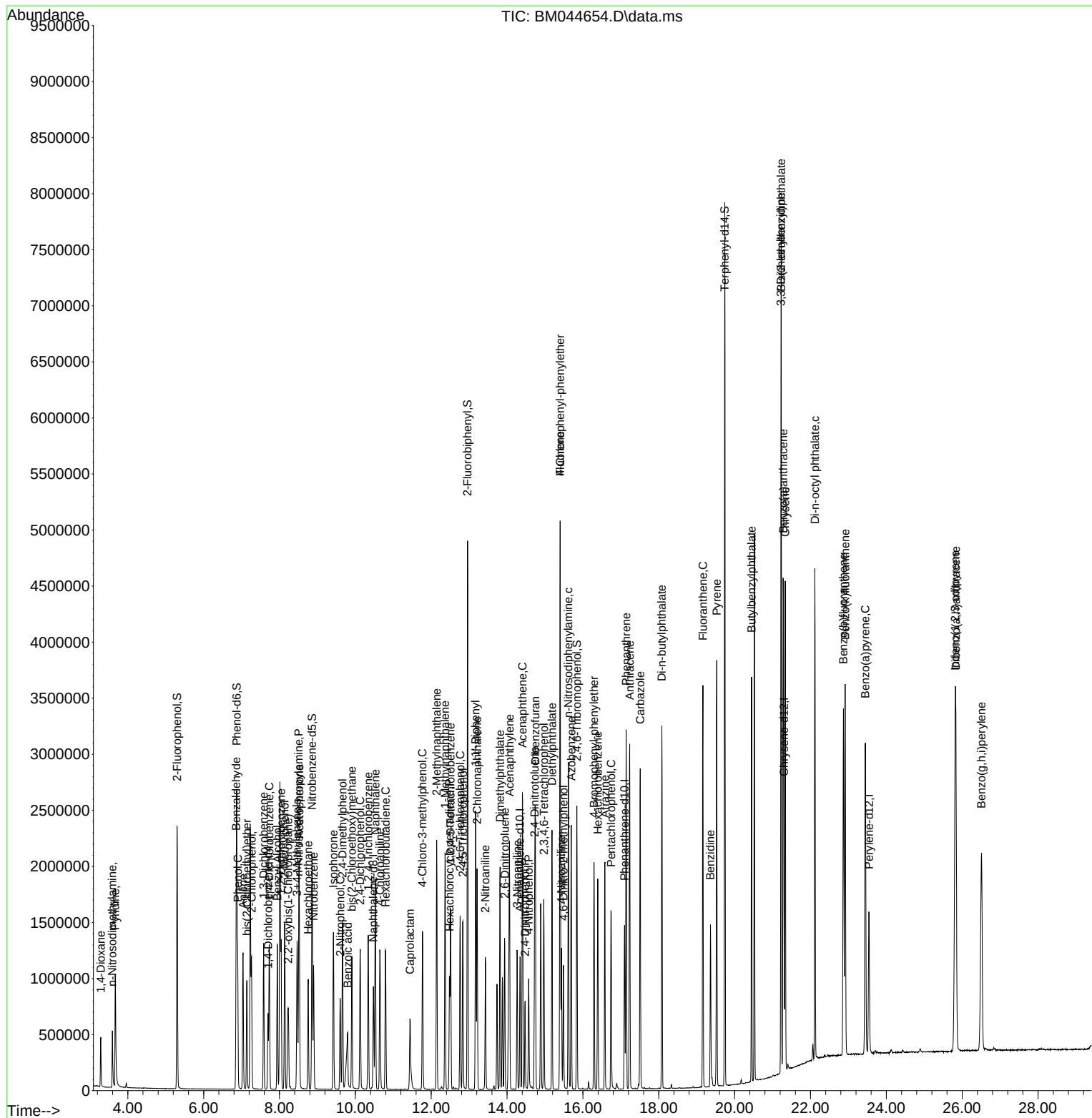
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	12.833	196	374843	39.030	ng	99
46) 1,1'-Biphenyl	13.169	154	1268204	38.334	ng	100
47) 2-Chloronaphthalene	13.210	162	939119	38.388	ng	99
48) 2-Nitroaniline	13.427	65	330784	39.850	ng	98
49) Acenaphthylene	14.063	152	1557483	39.081	ng	99
50) Dimethylphthalate	13.816	163	1235820	39.060	ng	100
51) 2,6-Dinitrotoluene	13.939	165	258773	39.276	ng	98
52) Acenaphthene	14.404	154	935736	38.842	ng	99
53) 3-Nitroaniline	14.268	138	309859	40.163	ng	99
54) 2,4-Dinitrophenol	14.474	184	146639	36.610	ng	98
55) Dibenzofuran	14.745	168	1483980	38.812	ng	99
56) 4-Nitrophenol	14.568	139	244946	38.658	ng	98
57) 2,4-Dinitrotoluene	14.727	165	353097	41.015	ng	96
58) Fluorene	15.398	166	1185624	39.819	ng	100
59) 2,3,4,6-Tetrachlorophenol	14.968	232	293140	39.313	ng	99
60) Diethylphthalate	15.186	149	1259809	39.334	ng	100
61) 4-Chlorophenyl-phenyle...	15.398	204	569891	39.869	ng	100
62) 4-Nitroaniline	15.433	138	316717	41.096	ng	98
63) Azobenzene	15.692	77	1326946	40.080	ng	99
65) 4,6-Dinitro-2-methylph...	15.486	198	203554	39.045	ng	97
66) n-Nitrosodiphenylamine	15.615	169	1017936	39.290	ng	98
67) 4-Bromophenyl-phenylether	16.292	248	335299	38.995	ng	96
68) Hexachlorobenzene	16.392	284	361763	39.579	ng	96
69) Atrazine	16.580	200	328384	40.562	ng	98
70) Pentachlorophenol	16.745	266	267722	40.720	ng	100
71) Phenanthrene	17.139	178	1800161	39.186	ng	100
72) Anthracene	17.233	178	1821982	39.544	ng	100
73) Carbazole	17.509	167	1727700	39.814	ng	100
74) Di-n-butylphthalate	18.080	149	2264458	40.498	ng	99
75) Fluoranthene	19.162	202	2048324	39.887	ng	99
77) Benzidine	19.362	184	812869	40.922	ng	100
78) Pyrene	19.527	202	2149138	38.152	ng	100
80) Butylbenzylphthalate	20.445	149	998779	39.342	ng	98
81) Benzo(a)anthracene	21.280	228	2088001	39.045	ng	99
82) 3,3'-Dichlorobenzidine	21.221	252	750622	40.755	ng	99
83) Chrysene	21.333	228	1958641	38.329	ng	99
84) Bis(2-ethylhexyl)phtha...	21.227	149	1596144	41.733	ng	99
85) Di-n-octyl phthalate	22.115	149	2700199	40.701	ng	99
87) Indeno(1,2,3-cd)pyrene	25.815	276	2481143	38.875	ng	100
88) Benzo(b)fluoranthene	22.868	252	2040620	39.330	ng	99
89) Benzo(k)fluoranthene	22.915	252	2036080	38.173	ng	99
90) Benzo(a)pyrene	23.444	252	1982770	39.180	ng	99
91) Dibenzo(a,h)anthracene	25.832	278	2114627	39.300	ng	99
92) Benzo(g,h,i)perylene	26.509	276	2028168	38.291	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044654.D
Acq On : 18 Mar 2024 11:50
Operator : MA/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTDCCC040

Quant Time: Mar 18 12:22:52 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
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 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	76	0.00
2	1,4-Dioxane	0.585	0.554	5.3	73	0.00
3	Pyridine	1.619	1.550	4.3	72	0.00
4	n-Nitrosodimethylamine	0.649	0.653	-0.6	75	0.00
5 S	2-Fluorophenol	1.393	1.339	3.9	73	0.00
6	Aniline	2.122	2.042	3.8	72	0.00
7 S	Phenol-d6	1.792	1.757	2.0	73	-0.01
8	2-Chlorophenol	1.387	1.345	3.0	73	0.00
9	Benzaldehyde	0.939	0.891	5.1	72	0.00
10 C	Phenol	1.790	1.737	3.0	73	0.00
11	bis(2-Chloroethyl)ether	1.461	1.416	3.1	73	0.00
12	1,3-Dichlorobenzene	1.492	1.424	4.6	73	-0.01
13 C	1,4-Dichlorobenzene	1.504	1.443	4.1	73	0.00
14	1,2-Dichlorobenzene	1.434	1.376	4.0	73	-0.01
15	Benzyl Alcohol	1.178	1.168	0.8	73	0.00
16	2,2'-oxybis(1-Chloropropane	2.026	1.964	3.1	73	-0.01
17	2-Methylphenol	1.221	1.209	1.0	73	-0.01
18	Hexachloroethane	0.556	0.541	2.7	74	0.00
19 P	n-Nitroso-di-n-propylamine	1.094	1.114	-1.8	74	-0.01
20	3+4-Methylphenols	1.647	1.623	1.5	72	-0.01
21 I	Naphthalene-d8	1.000	1.000	0.0	78	-0.01
22	Acetophenone	0.525	0.510	2.9	74	0.00
23 S	Nitrobenzene-d5	0.415	0.407	1.9	74	0.00
24	Nitrobenzene	0.410	0.397	3.2	73	-0.01
25	Isophorone	0.716	0.705	1.5	73	0.00
26 C	2-Nitrophenol	0.177	0.175	1.1	73	0.00
27	2,4-Dimethylphenol	0.311	0.308	1.0	74	0.00
28	bis(2-Chloroethoxy)methane	0.476	0.464	2.5	74	-0.01
29 C	2,4-Dichlorophenol	0.297	0.293	1.3	74	0.00
30	1,2,4-Trichlorobenzene	0.316	0.303	4.1	74	0.00
31	Naphthalene	1.098	1.055	3.9	74	0.00
32	Benzoic acid	0.231	0.221	4.3	71	-0.01
33	4-Chloroaniline	0.460	0.453	1.5	74	-0.01
34 C	Hexachlorobutadiene	0.176	0.173	1.7	76	0.00
35	Caprolactam	0.096	0.098	-2.1	74	-0.01
36 C	4-Chloro-3-methylphenol	0.326	0.323	0.9	74	-0.01
37	2-Methylnaphthalene	0.745	0.723	3.0	74	0.00
38	1-Methylnaphthalene	0.694	0.676	2.6	74	-0.01
39 I	Acenaphthene-d10	1.000	1.000	0.0	79	-0.01
40	1,2,4,5-Tetrachlorobenzene	0.568	0.543	4.4	75	-0.01
41 P	Hexachlorocyclopentadiene	0.323	0.310	4.0	74	-0.01
42 S	2,4,6-Tribromophenol	0.221	0.228	-3.2	79	0.00
43 C	2,4,6-Trichlorophenol	0.383	0.380	0.8	75	0.00
44	2,4,5-Trichlorophenol	0.454	0.443	2.4	75	0.00
45 S	2-Fluorobiphenyl	1.452	1.423	2.0	77	-0.01
46	1,1'-Biphenyl	1.564	1.499	4.2	75	-0.01
47	2-Chloronaphthalene	1.157	1.110	4.1	75	-0.01

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
 Data File : BM044654.D
 Acq On : 18 Mar 2024 11:50
 Operator : MA/JU
 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_M
 LabSampleId :
 SSTDCCC040

Quant Time: Mar 18 12:22:52 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 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	0.392	0.391	0.3	73	-0.01
49	Acenaphthylene	1.884	1.841	2.3	75	0.00
50	Dimethylphthalate	1.496	1.461	2.3	75	0.00
51	2,6-Dinitrotoluene	0.312	0.306	1.9	75	0.00
52 C	Acenaphthene	1.139	1.106	2.9	75	-0.01
53	3-Nitroaniline	0.365	0.366	-0.3	76	0.00
54 P	2,4-Dinitrophenol	0.180	0.173	3.9	73	0.00
55	Dibenzofuran	1.808	1.754	3.0	75	0.00
56 P	4-Nitrophenol	0.300	0.290	3.3	74	0.00
57	2,4-Dinitrotoluene	0.407	0.417	-2.5	76	0.00
58	Fluorene	1.408	1.401	0.5	77	0.00
59	2,3,4,6-Tetrachlorophenol	0.353	0.347	1.7	76	0.00
60	Diethylphthalate	1.514	1.489	1.7	76	0.00
61	4-Chlorophenyl-phenylether	0.676	0.674	0.3	78	0.00
62	4-Nitroaniline	0.364	0.374	-2.7	75	0.00
63	Azobenzene	1.565	1.569	-0.3	76	0.00
64 I	Phenanthrene-d10	1.000	1.000	0.0	80	0.00
65	4,6-Dinitro-2-methylphenol	0.125	0.122	2.4	75	0.00
66 c	n-Nitrosodiphenylamine	0.623	0.612	1.8	76	0.00
67	4-Bromophenyl-phenylether	0.207	0.202	2.4	76	-0.01
68	Hexachlorobenzene	0.220	0.218	0.9	78	0.00
69	Atrazine	0.195	0.198	-1.5	79	0.00
70 C	Pentachlorophenol	0.158	0.161	-1.9	76	0.00
71	Phenanthrene	1.105	1.083	2.0	77	0.00
72	Anthracene	1.109	1.096	1.2	77	0.00
73	Carbazole	1.044	1.039	0.5	77	0.00
74	Di-n-butylphthalate	1.345	1.362	-1.3	77	0.00
75 C	Fluoranthene	1.236	1.232	0.3	78	0.00
76 I	Chrysene-d12	1.000	1.000	0.0	86	0.00
77	Benzidine	0.517	0.529	-2.3	79	0.00
78	Pyrene	1.466	1.398	4.6	78	0.00
79 S	Terphenyl-d14	1.143	1.150	-0.6	82	0.00
80	Butylbenzylphthalate	0.661	0.650	1.7	77	0.00
81	Benzo(a)anthracene	1.392	1.358	2.4	82	0.00
82	3,3'-Dichlorobenzidine	0.479	0.488	-1.9	81	0.00
83	Chrysene	1.330	1.274	4.2	79	0.00
84	Bis(2-ethylhexyl)phthalate	0.995	1.038	-4.3	80	0.00
85 c	Di-n-octyl phthalate	1.726	1.757	-1.8	79	0.00
86 I	Perylene-d12	1.000	1.000	0.0	85	0.00
87	Indeno(1,2,3-cd)pyrene	1.446	1.405	2.8	81	-0.01
88	Benzo(b)fluoranthene	1.175	1.156	1.6	82	0.00
89	Benzo(k)fluoranthene	1.208	1.153	4.6	80	0.00
90 C	Benzo(a)pyrene	1.146	1.123	2.0	81	0.00
91	Dibenzo(a,h)anthracene	1.219	1.198	1.7	82	-0.01
92	Benzo(g,h,i)perylene	1.200	1.149	4.2	81	-0.01

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044654.D
Acq On : 18 Mar 2024 11:50
Operator : MA/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Mar 18 12:22:52 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration

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

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
 Data File : BM044654.D
 Acq On : 18 Mar 2024 11:50
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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	20.000	20.000	0.0	76	0.00
2	1,4-Dioxane	40.000	37.873	5.3	73	0.00
3	Pyridine	40.000	38.299	4.3	72	0.00
4	n-Nitrosodimethylamine	40.000	40.282	-0.7	75	0.00
5 S	2-Fluorophenol	80.000	76.903	3.9	73	0.00
6	Aniline	40.000	38.489	3.8	72	0.00
7 S	Phenol-d6	80.000	78.450	1.9	73	-0.01
8	2-Chlorophenol	40.000	38.772	3.1	73	0.00
9	Benzaldehyde	40.000	37.951	5.1	72	0.00
10 C	Phenol	40.000	38.820	2.9	73	0.00
11	bis(2-Chloroethyl)ether	40.000	38.760	3.1	73	0.00
12	1,3-Dichlorobenzene	40.000	38.172	4.6	73	-0.01
13 C	1,4-Dichlorobenzene	40.000	38.393	4.0	73	0.00
14	1,2-Dichlorobenzene	40.000	38.393	4.0	73	-0.01
15	Benzyl Alcohol	40.000	39.670	0.8	73	0.00
16	2,2'-oxybis(1-Chloropropane	40.000	38.771	3.1	73	-0.01
17	2-Methylphenol	40.000	39.604	1.0	73	-0.01
18	Hexachloroethane	40.000	38.916	2.7	74	0.00
19 P	n-Nitroso-di-n-propylamine	40.000	40.704	-1.8	74	-0.01
20	3+4-Methylphenols	40.000	39.411	1.5	72	-0.01
21 I	Naphthalene-d8	20.000	20.000	0.0	78	-0.01
22	Acetophenone	40.000	38.831	2.9	74	0.00
23 S	Nitrobenzene-d5	80.000	78.398	2.0	74	0.00
24	Nitrobenzene	40.000	38.678	3.3	73	-0.01
25	Isophorone	40.000	39.350	1.6	73	0.00
26 C	2-Nitrophenol	40.000	39.606	1.0	73	0.00
27	2,4-Dimethylphenol	40.000	39.552	1.1	74	0.00
28	bis(2-Chloroethoxy)methane	40.000	39.024	2.4	74	-0.01
29 C	2,4-Dichlorophenol	40.000	39.542	1.1	74	0.00
30	1,2,4-Trichlorobenzene	40.000	38.415	4.0	74	0.00
31	Naphthalene	40.000	38.441	3.9	74	0.00
32	Benzoic acid	40.000	36.448	8.9	71	-0.01
33	4-Chloroaniline	40.000	39.320	1.7	74	-0.01
34 C	Hexachlorobutadiene	40.000	39.353	1.6	76	0.00
35	Caprolactam	40.000	40.941	-2.4	74	-0.01
36 C	4-Chloro-3-methylphenol	40.000	39.632	0.9	74	-0.01
37	2-Methylnaphthalene	40.000	38.838	2.9	74	0.00
38	1-Methylnaphthalene	40.000	38.930	2.7	74	-0.01
39 I	Acenaphthene-d10	20.000	20.000	0.0	79	-0.01
40	1,2,4,5-Tetrachlorobenzene	40.000	38.249	4.4	75	-0.01
41 P	Hexachlorocyclopentadiene	40.000	38.371	4.1	74	-0.01
42 S	2,4,6-Tribromophenol	80.000	82.784	-3.5	79	0.00
43 C	2,4,6-Trichlorophenol	40.000	39.699	0.8	75	0.00
44	2,4,5-Trichlorophenol	40.000	39.030	2.4	75	0.00
45 S	2-Fluorobiphenyl	80.000	78.381	2.0	77	-0.01
46	1,1'-Biphenyl	40.000	38.334	4.2	75	-0.01
47	2-Chloronaphthalene	40.000	38.388	4.0	75	-0.01

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
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 Sample : SSTDCCC040
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_M
 LabSampleId :
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 Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 02:28:24 2024
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
48	2-Nitroaniline	40.000	39.850	0.4	73	-0.01
49	Acenaphthylene	40.000	39.081	2.3	75	0.00
50	Dimethylphthalate	40.000	39.060	2.3	75	0.00
51	2,6-Dinitrotoluene	40.000	39.276	1.8	75	0.00
52 C	Acenaphthene	40.000	38.842	2.9	75	-0.01
53	3-Nitroaniline	40.000	40.163	-0.4	76	0.00
54 P	2,4-Dinitrophenol	40.000	36.610	8.5	73	0.00
55	Dibenzofuran	40.000	38.812	3.0	75	0.00
56 P	4-Nitrophenol	40.000	38.658	3.4	74	0.00
57	2,4-Dinitrotoluene	40.000	41.015	-2.5	76	0.00
58	Fluorene	40.000	39.819	0.5	77	0.00
59	2,3,4,6-Tetrachlorophenol	40.000	39.313	1.7	76	0.00
60	Diethylphthalate	40.000	39.334	1.7	76	0.00
61	4-Chlorophenyl-phenylether	40.000	39.869	0.3	78	0.00
62	4-Nitroaniline	40.000	41.096	-2.7	75	0.00
63	Azobenzene	40.000	40.080	-0.2	76	0.00
64 I	Phenanthrene-d10	20.000	20.000	0.0	80	0.00
65	4,6-Dinitro-2-methylphenol	40.000	39.045	2.4	75	0.00
66 c	n-Nitrosodiphenylamine	40.000	39.290	1.8	76	0.00
67	4-Bromophenyl-phenylether	40.000	38.995	2.5	76	-0.01
68	Hexachlorobenzene	40.000	39.579	1.1	78	0.00
69	Atrazine	40.000	40.562	-1.4	79	0.00
70 C	Pentachlorophenol	40.000	40.720	-1.8	76	0.00
71	Phenanthrene	40.000	39.186	2.0	77	0.00
72	Anthracene	40.000	39.544	1.1	77	0.00
73	Carbazole	40.000	39.814	0.5	77	0.00
74	Di-n-butylphthalate	40.000	40.498	-1.2	77	0.00
75 C	Fluoranthene	40.000	39.887	0.3	78	0.00
76 I	Chrysene-d12	20.000	20.000	0.0	86	0.00
77	Benzydine	40.000	40.922	-2.3	79	0.00
78	Pyrene	40.000	38.152	4.6	78	0.00
79 S	Terphenyl-d14	80.000	80.453	-0.6	82	0.00
80	Butylbenzylphthalate	40.000	39.342	1.6	77	0.00
81	Benzo(a)anthracene	40.000	39.045	2.4	82	0.00
82	3,3'-Dichlorobenzidine	40.000	40.755	-1.9	81	0.00
83	Chrysene	40.000	38.329	4.2	79	0.00
84	Bis(2-ethylhexyl)phthalate	40.000	41.733	-4.3	80	0.00
85 c	Di-n-octyl phthalate	40.000	40.701	-1.8	79	0.00
86 I	Perylene-d12	20.000	20.000	0.0	85	0.00
87	Indeno(1,2,3-cd)pyrene	40.000	38.875	2.8	81	-0.01
88	Benzo(b)fluoranthene	40.000	39.330	1.7	82	0.00
89	Benzo(k)fluoranthene	40.000	38.173	4.6	80	0.00
90 C	Benzo(a)pyrene	40.000	39.180	2.1	81	0.00
91	Dibenzo(a,h)anthracene	40.000	39.300	1.8	82	-0.01
92	Benzo(g,h,i)perylene	40.000	38.291	4.3	81	-0.01

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044654.D
Acq On : 18 Mar 2024 11:50
Operator : MA/JU
Sample : SSTDCCC040
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
LabSampleId :
SSTDCCC040

Quant Time: Mar 18 12:22:52 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration

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

Compound	Amount	Calc.	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

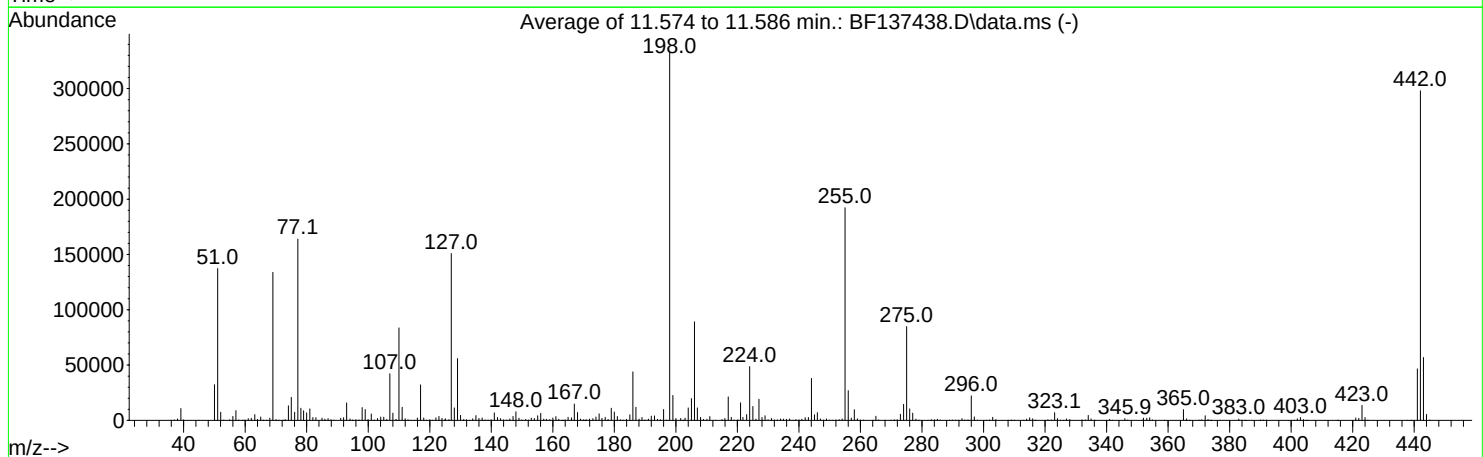
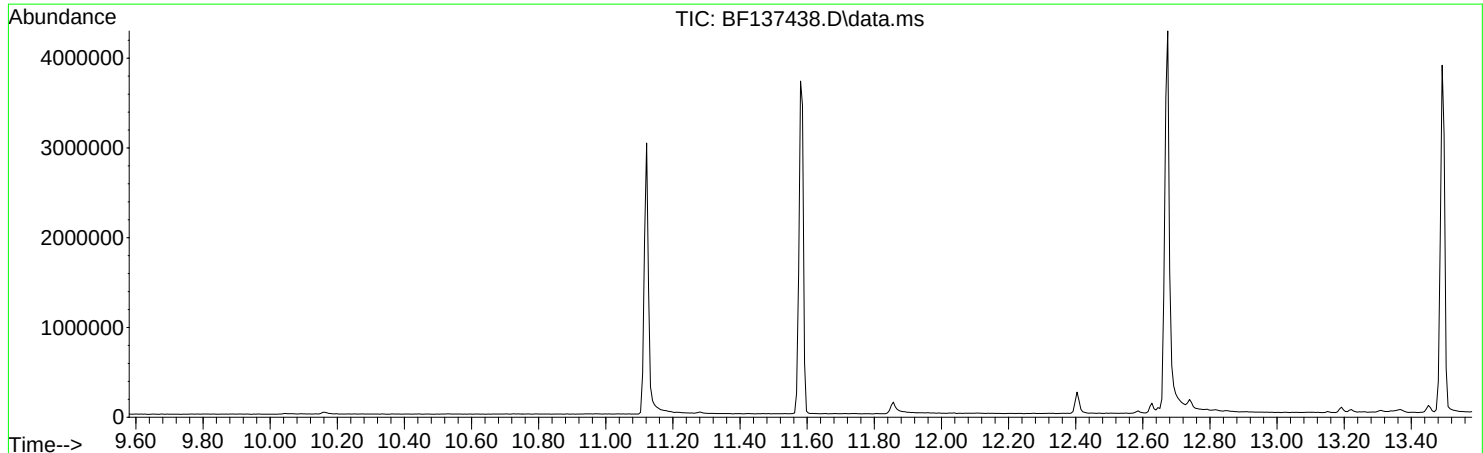
QC SAMPLE DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137438.D
Acq On : 29 Feb 2024 12:14
Operator : CG\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-BF022924.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Mar 01 12:53:33 2024



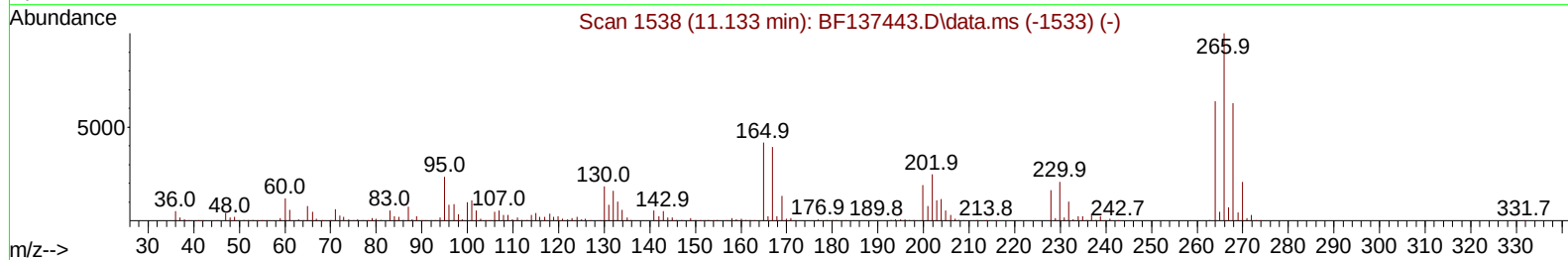
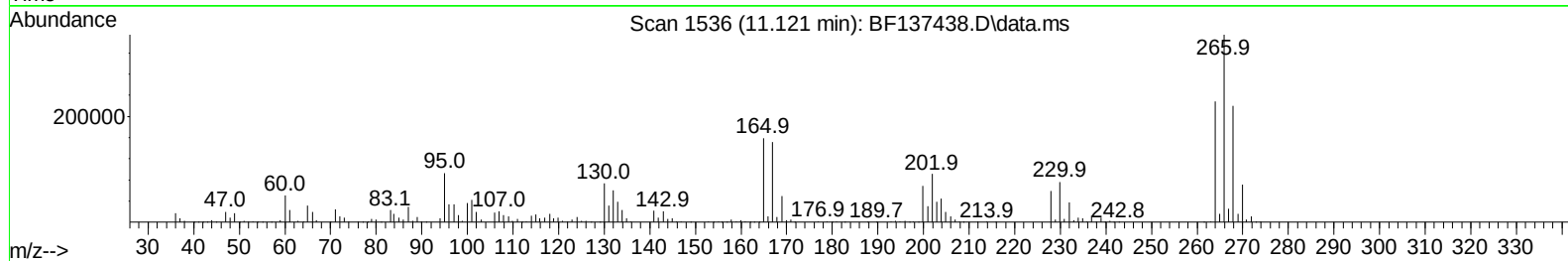
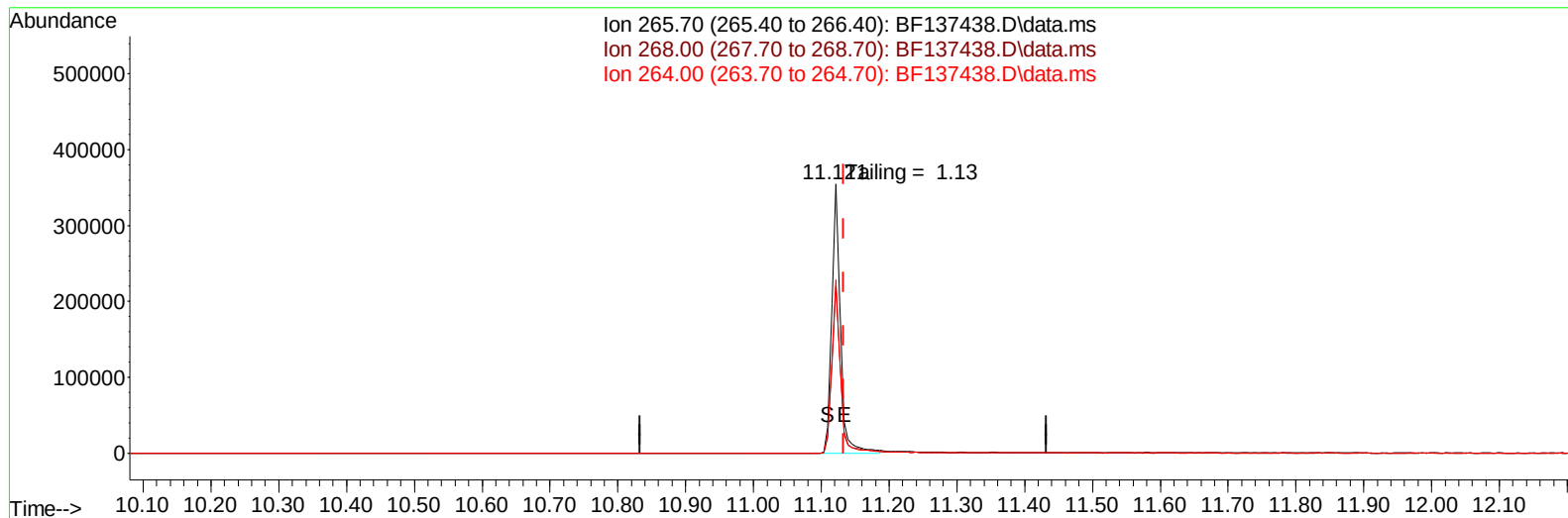
AutoFind: Scans 1613, 1614, 1615; Background Corrected with Scan 1608

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	41.3	137316	PASS
68	69	0.00	2	1.5	2001	PASS
69	198	0.00	100	40.2	133872	PASS
70	69	0.00	2	0.5	695	PASS
127	198	10	80	45.4	150923	PASS
197	198	0.00	2	0.1	294	PASS
198	198	100	100	100.0	332629	PASS
199	198	5	9	6.8	22609	PASS
275	198	10	60	25.5	84720	PASS
365	198	1	100	2.9	9638	PASS
441	198	0.01	100	14.0	46649	PASS
442	442	50	100	100.0	298093	PASS
443	442	15	24	19.1	56885	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137438.D
Acq On : 29 Feb 2024 12:14
Operator : CG\JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: Mar 01 03:46:48 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:39:04 2024
Response via : Initial Calibration



TIC: BF137438.D\data.ms

(70) Pentachlorophenol (C)

11.121min (-0.012) 648810.93 ng

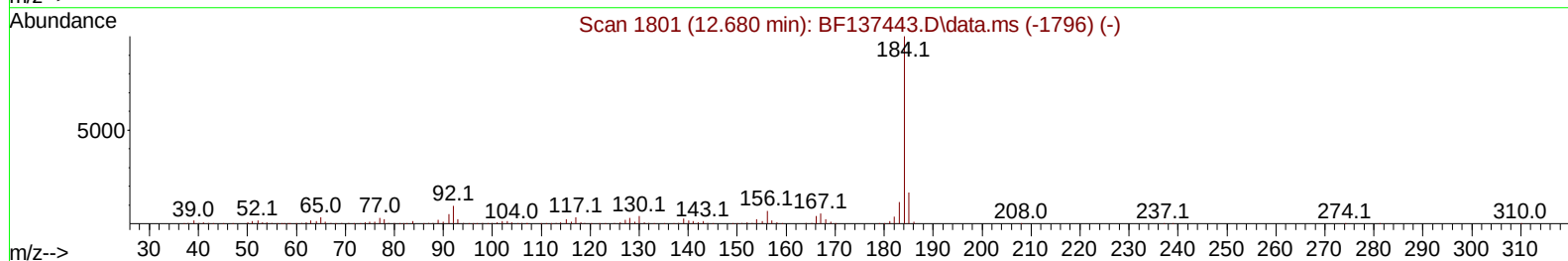
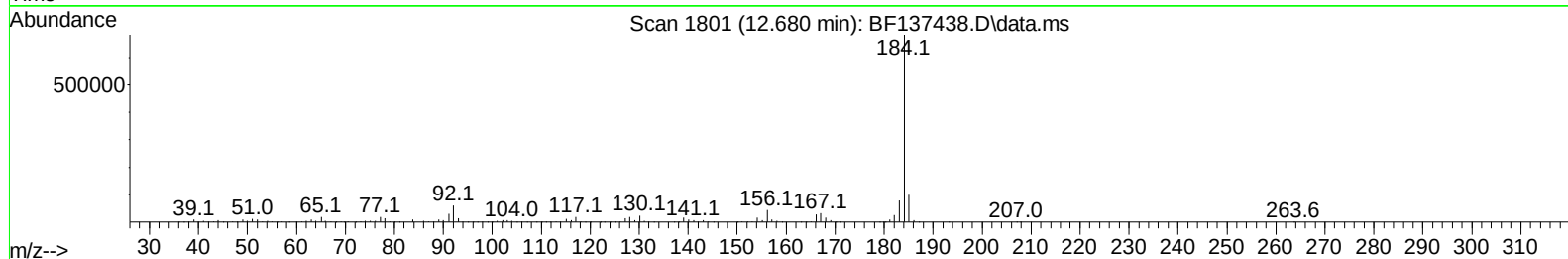
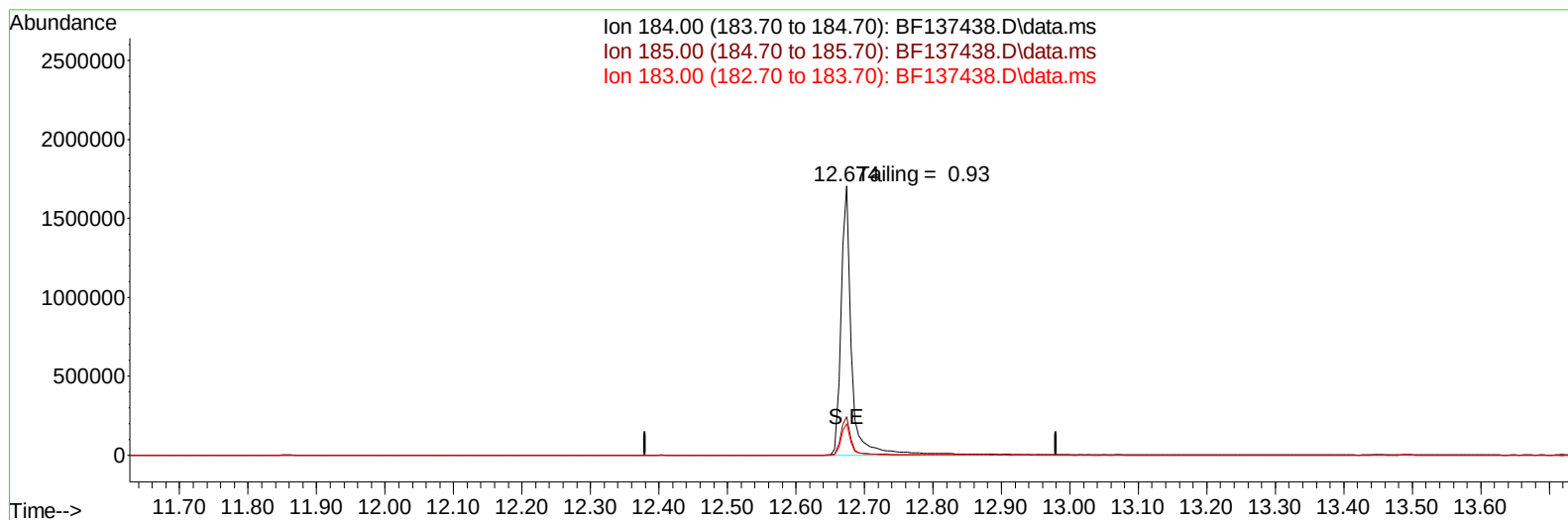
response 319291

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.70	62.17
264.00	63.60	64.52
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF022924\
Data File : BF137438.D
Acq On : 29 Feb 2024 12:14
Operator : CG\JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: Mar 01 03:46:48 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Mar 01 03:39:04 2024
Response via : Initial Calibration



TIC: BF137438.D\data.ms

(77) Benzidine

12.680min (-12.680) 0.00 ng

response 0

Ion	Exp%	Act%
184.00	100.00	0.00
185.00	16.50	0.00#
183.00	11.60	0.00#
0.00	0.00	0.00

DDT Breakdown

Date	Instrument Name	DFTPP Data File
2/29/2024	BNA_F	<u>BF137438.D</u>
Compound Name	Response	Retention Time
DDT	638313	13.492
DDD	13327	13.192
DDE	1300	12.857
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
14627	652940	2.24

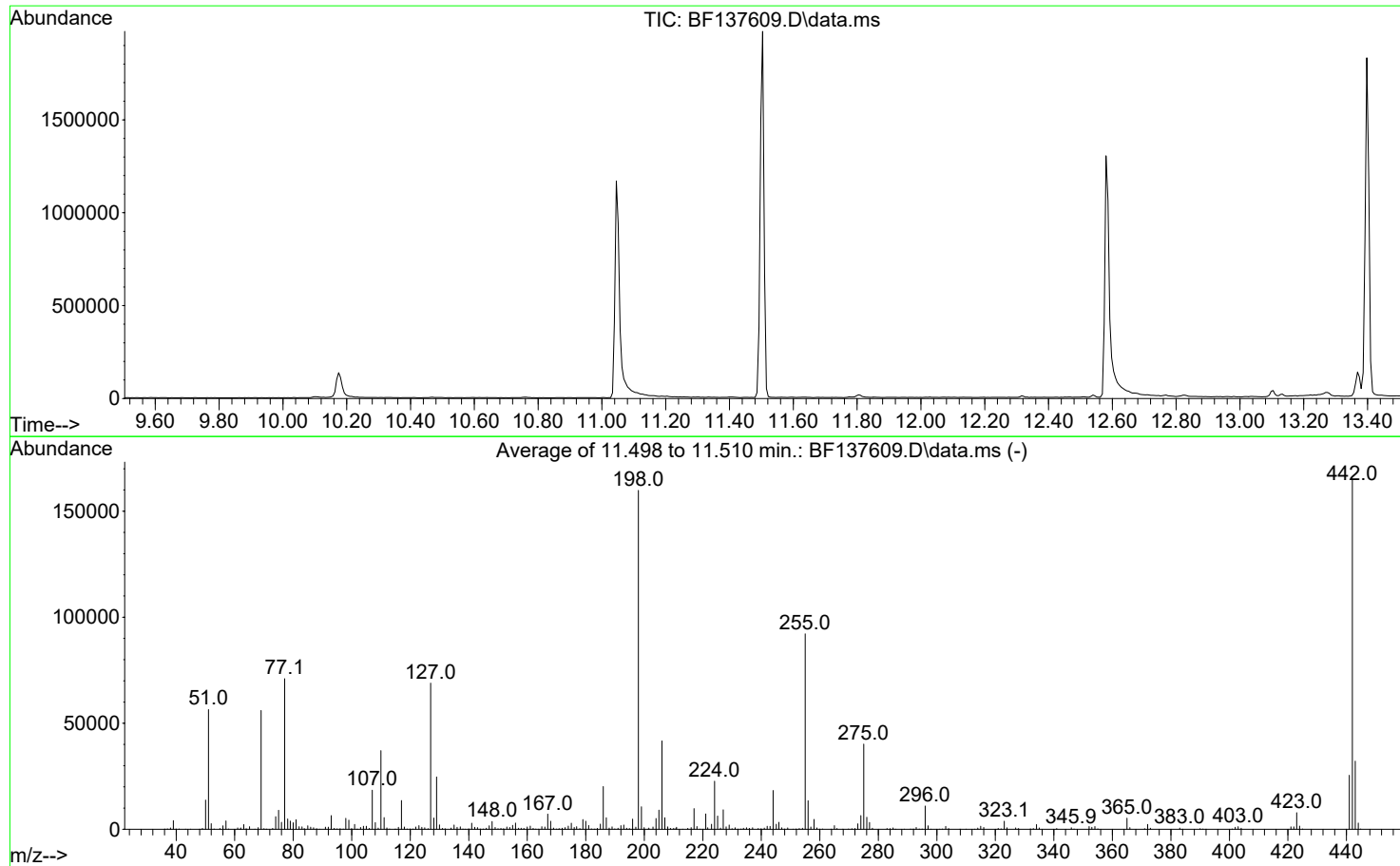
Instrument :
BNA_F
ClientSampleId :
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137609.D
Acq On : 15 Mar 2024 13:52
Operator : CG\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-BF022924.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Mar 14 14:45:20 2024



AutoFind: Scans 1600, 1601, 1602; Background Corrected with Scan 1595

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.3	56472	PASS
68	69	0.00	2	1.4	790	PASS
69	198	0.00	100	35.0	56007	PASS
70	69	0.00	2	0.5	302	PASS
127	198	10	80	43.1	68904	PASS
197	198	0.00	2	0.6	1025	PASS
198	198	100	100	100.0	159851	PASS
199	198	5	9	6.7	10648	PASS
275	198	10	60	25.1	40149	PASS
365	198	1	100	3.3	5249	PASS
441	198	0.01	100	15.9	25447	PASS
442	442	50	100	100.0	164912	PASS
443	442	15	24	19.5	32165	PASS

DDT Breakdown

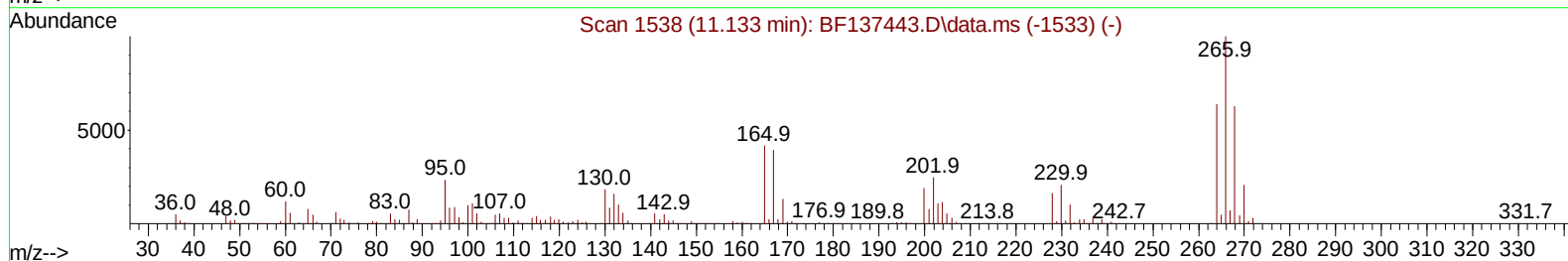
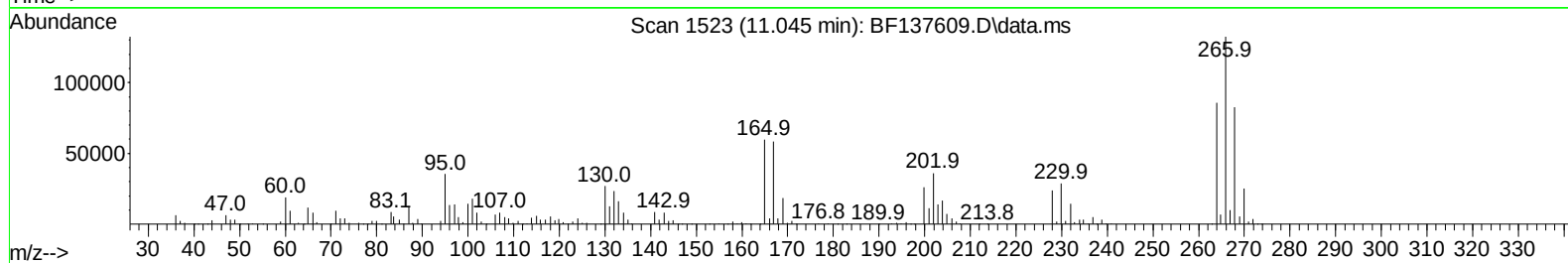
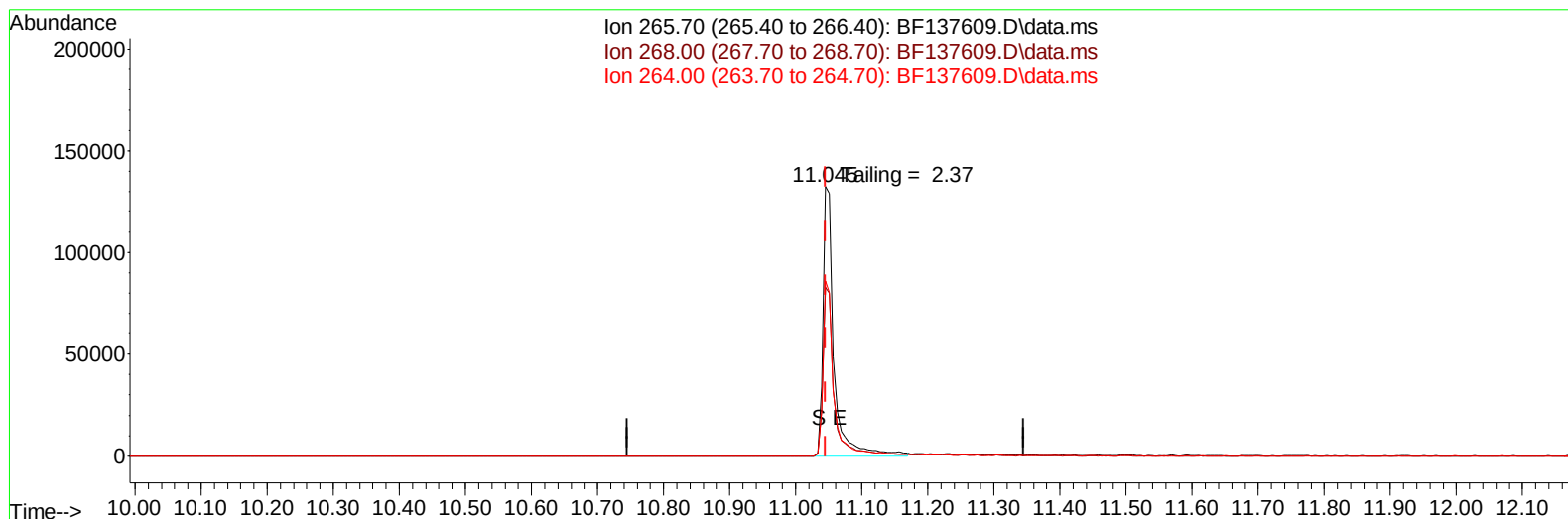
Date	Instrument Name	DFTPP Data File
3/15/2024	BNA_F	<u>BF137609.D</u>
Compound Name	Response	Retention Time
DDT	290744	13.398
DDD	8640	13.104
DDE	973	12.763
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
9613	300357	3.20

Instrument :
BNA_F
ClientSampleId :
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137609.D
Acq On : 15 Mar 2024 13:52
Operator : CG\JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: Mar 16 00:12:34 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration



TIC: BF137609.D\data.ms

(70) Pentachlorophenol (C)

11.045min (-0.000) 33669.70 ng

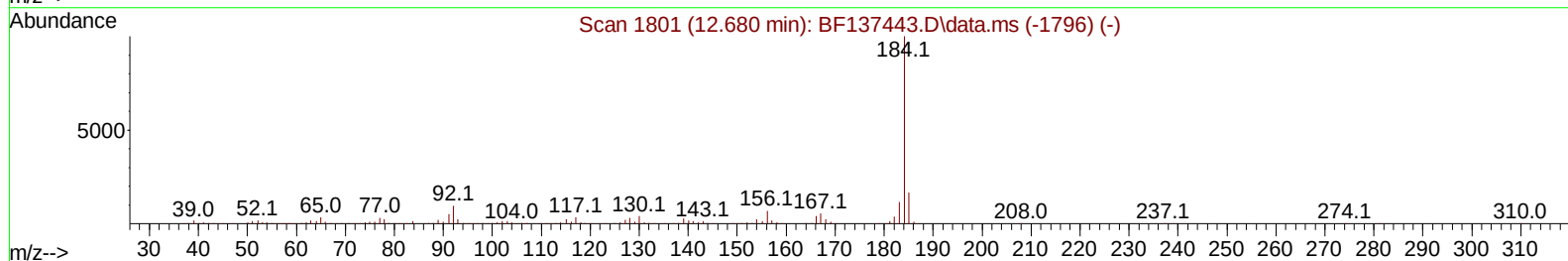
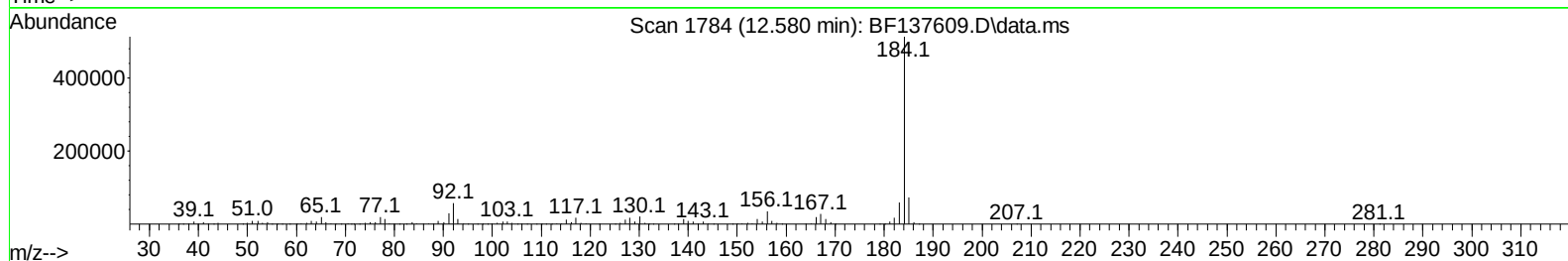
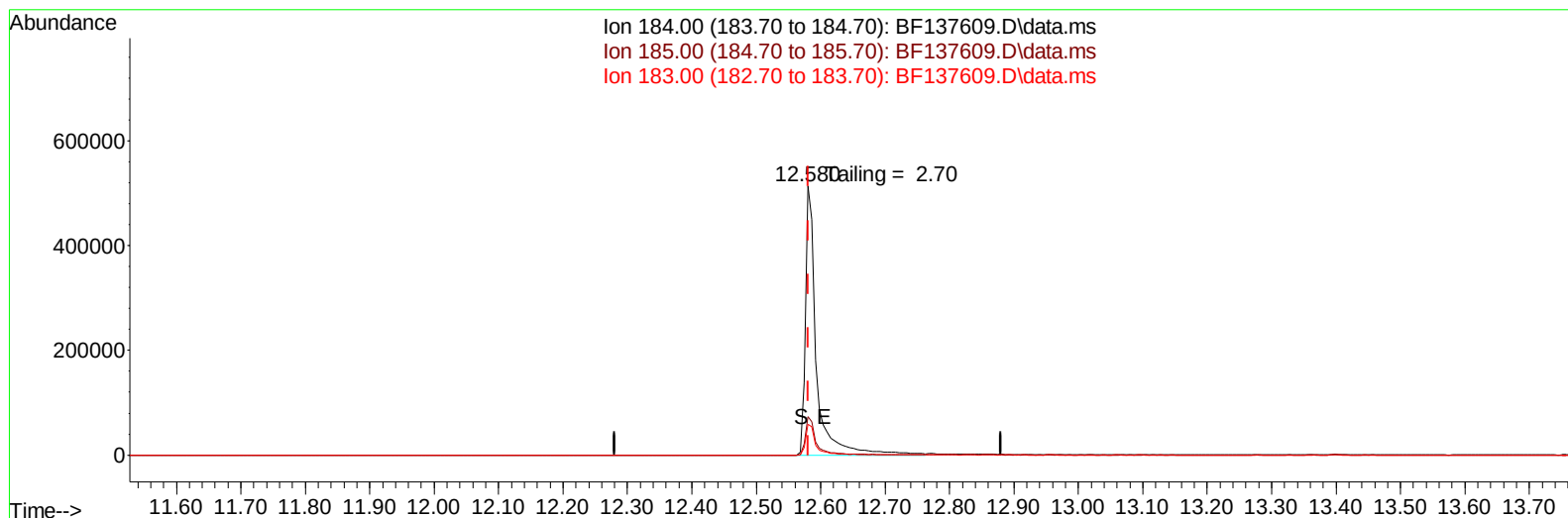
response 154051

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.70	62.51
264.00	63.60	64.96
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137609.D
Acq On : 15 Mar 2024 13:52
Operator : CG\JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
DFTPP

Quant Time: Mar 16 00:12:34 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration



TIC: BF137609.D\data.ms

(77) Benzidine

12.580min (-0.000) 0.00 ng

response 609901

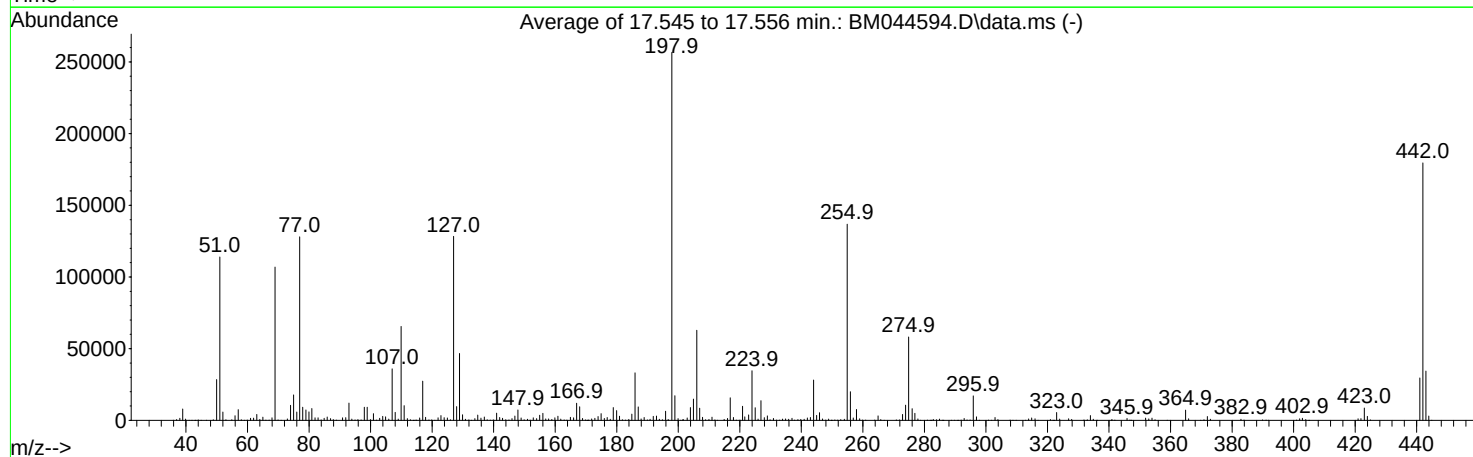
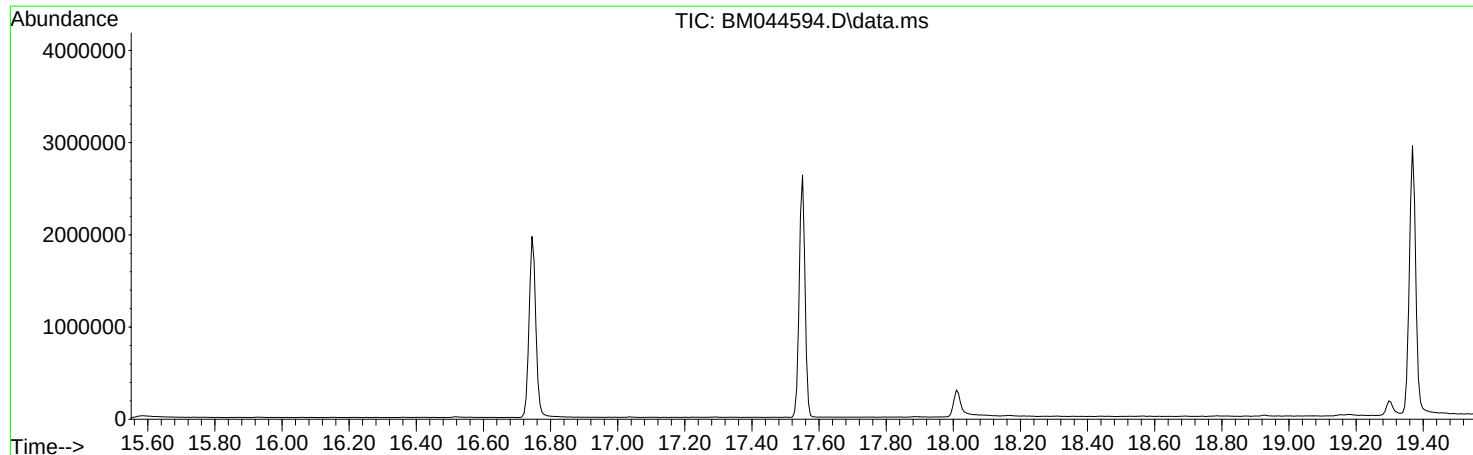
Ion	Exp%	Act%
184.00	100.00	100.00
185.00	16.50	14.38
183.00	11.60	11.44
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044594.D
Acq On : 13 Mar 2024 13:07
Operator : MA/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Mar 14 02:28:24 2024



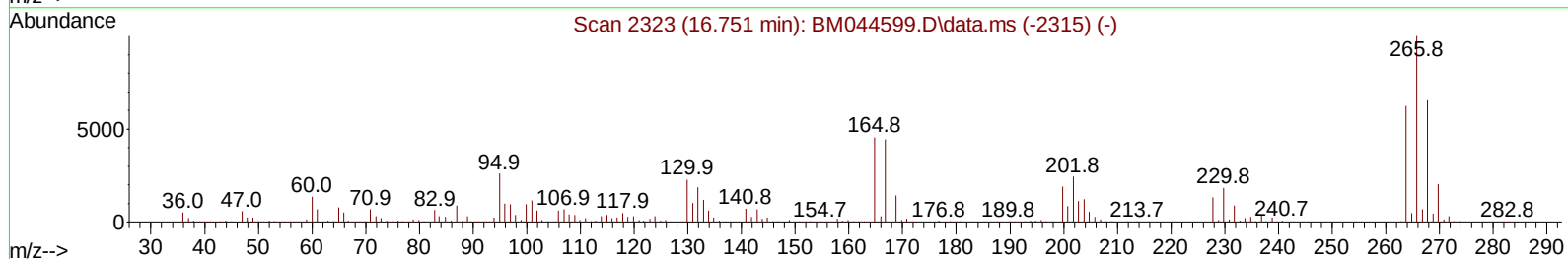
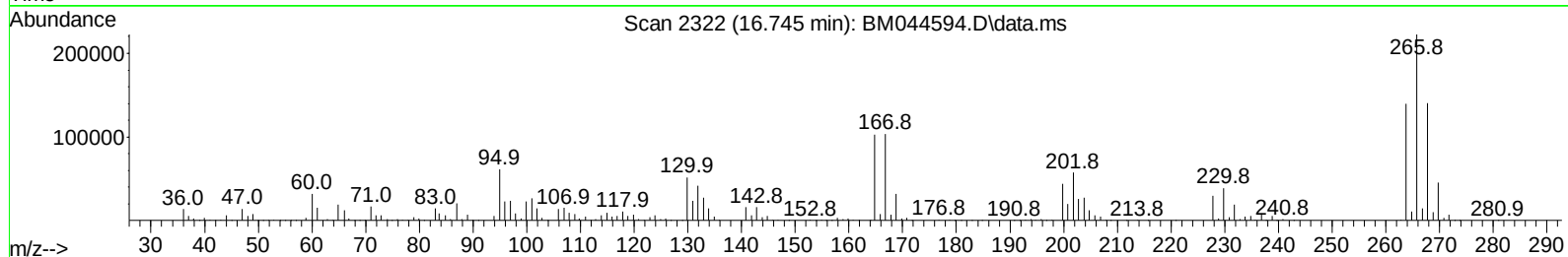
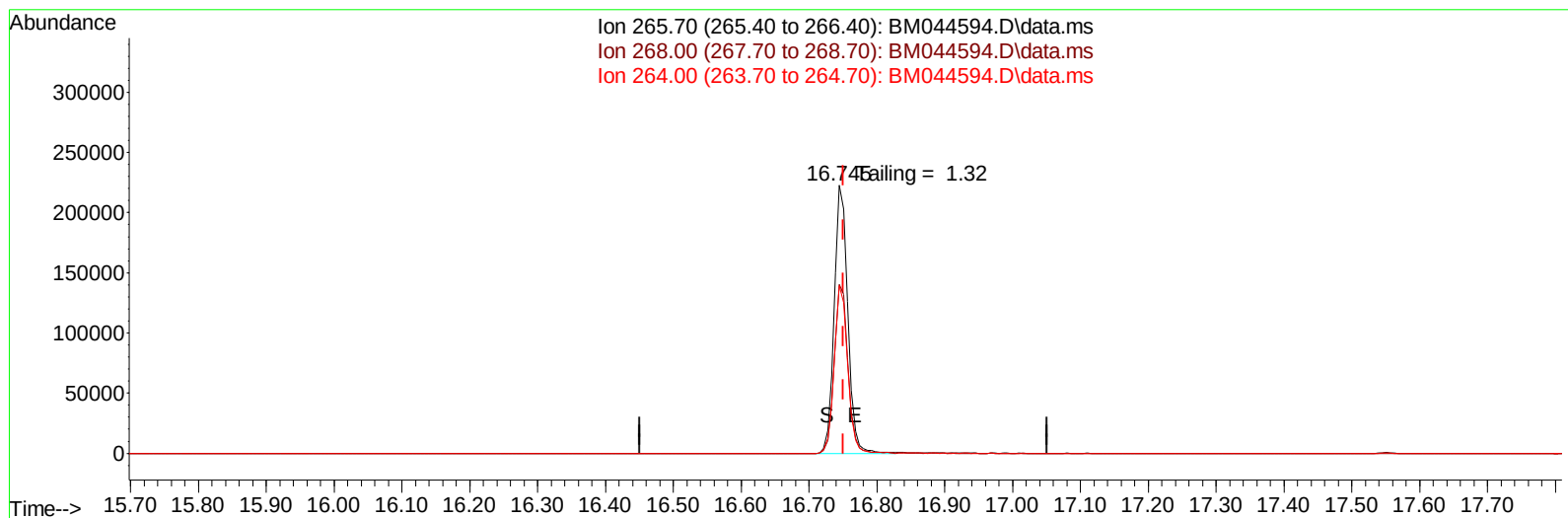
AutoFind: Scans 2458, 2459, 2460; Background Corrected with Scan 2451

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.4	113920	PASS
68	69	0.00	2	1.7	1802	PASS
69	198	0.00	100	41.7	106907	PASS
70	69	0.00	2	0.3	336	PASS
127	198	10	80	50.0	128304	PASS
197	198	0.00	2	0.2	515	PASS
198	198	100	100	100.0	256576	PASS
199	198	5	9	6.7	17192	PASS
275	198	10	60	22.6	58109	PASS
365	198	1	100	2.8	7112	PASS
441	198	0.01	100	11.5	29544	PASS
442	442	50	100	100.0	179584	PASS
443	442	15	24	19.1	34328	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044594.D
Acq On : 13 Mar 2024 13:07
Operator : MA/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Mar 14 02:09:55 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:00:45 2024
Response via : Initial Calibration



TIC: BM044594.D\data.ms

(70) Pentachlorophenol (C)

16.745min (-0.006) 0.00 ng

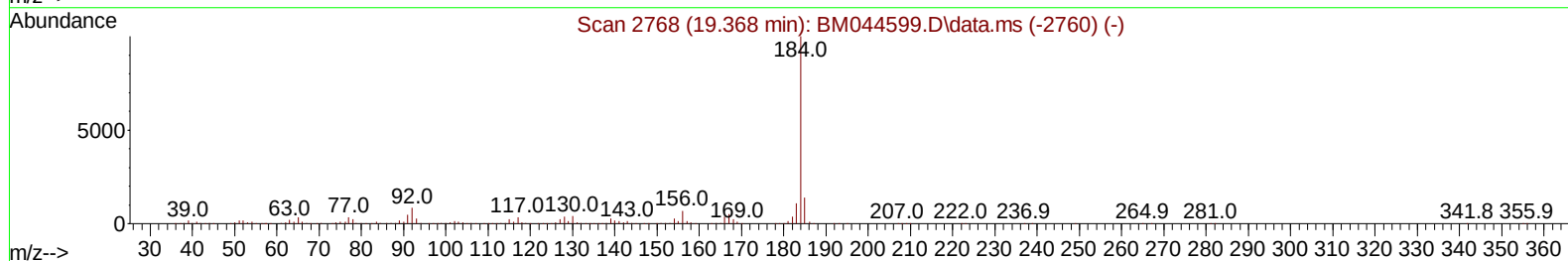
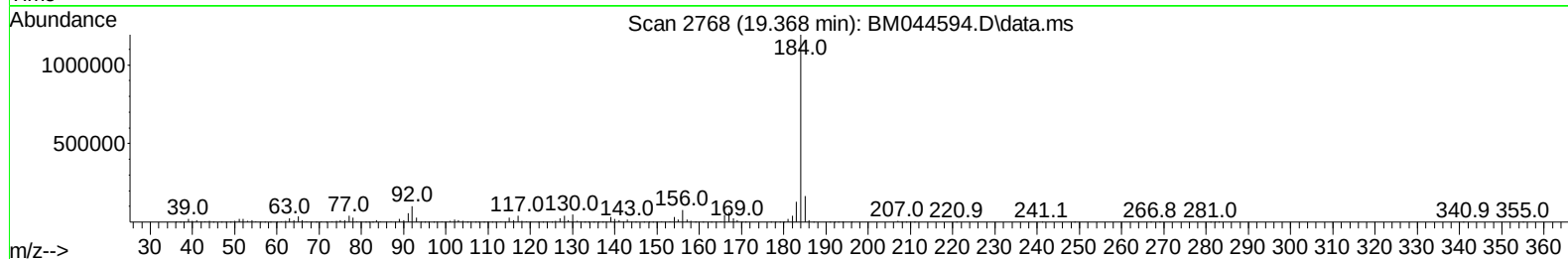
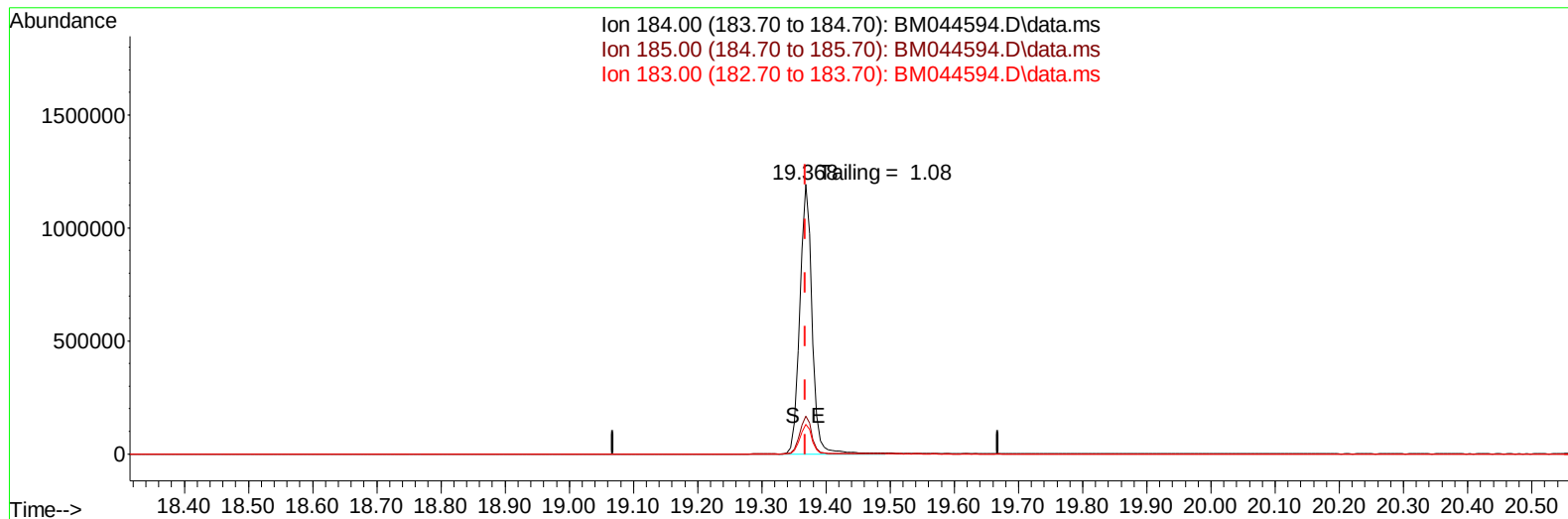
response 310142

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	65.50	63.14
264.00	62.30	62.59
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031324\
Data File : BM044594.D
Acq On : 13 Mar 2024 13:07
Operator : MA/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Mar 14 02:09:55 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:00:45 2024
Response via : Initial Calibration



TIC: BM044594.D\data.ms

(77) Benzidine

19.368min (+ 0.000) 0.00 ng

response 1626042

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	13.80	14.01
183.00	10.90	11.02
0.00	0.00	0.00

DDT Breakdown

Date	Instrument Name	DFTPP Data File
3/13/2024	BNA_M	<u>BM044594.D</u>
Compound Name	Response	Retention Time
DDT	881540	20.597
DDD	10643	20.209
DDE	0	19.851
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
10643	892183	1.19

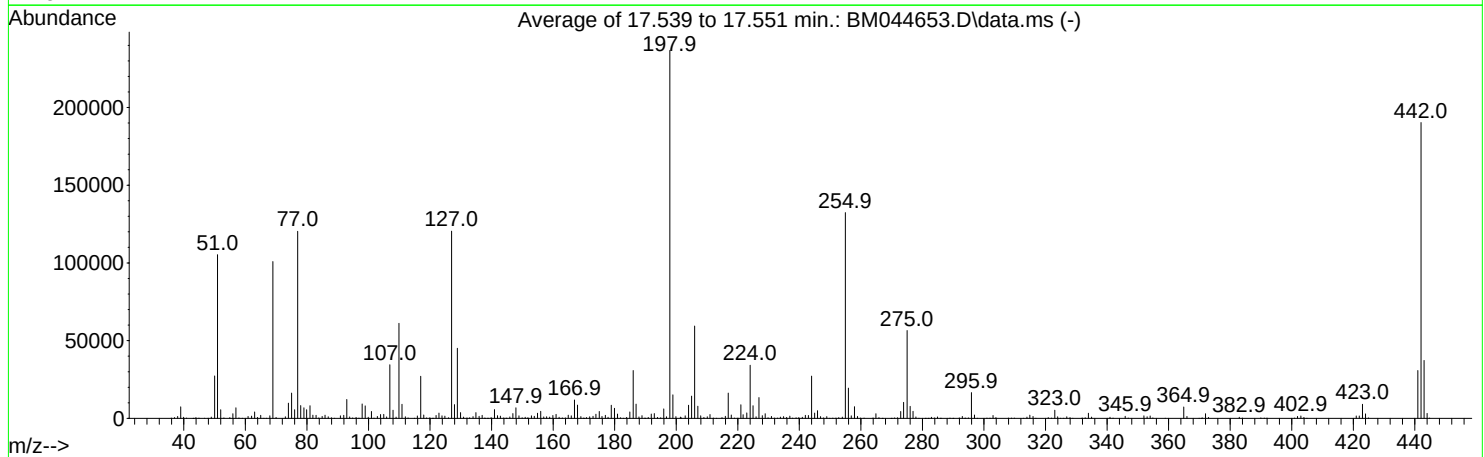
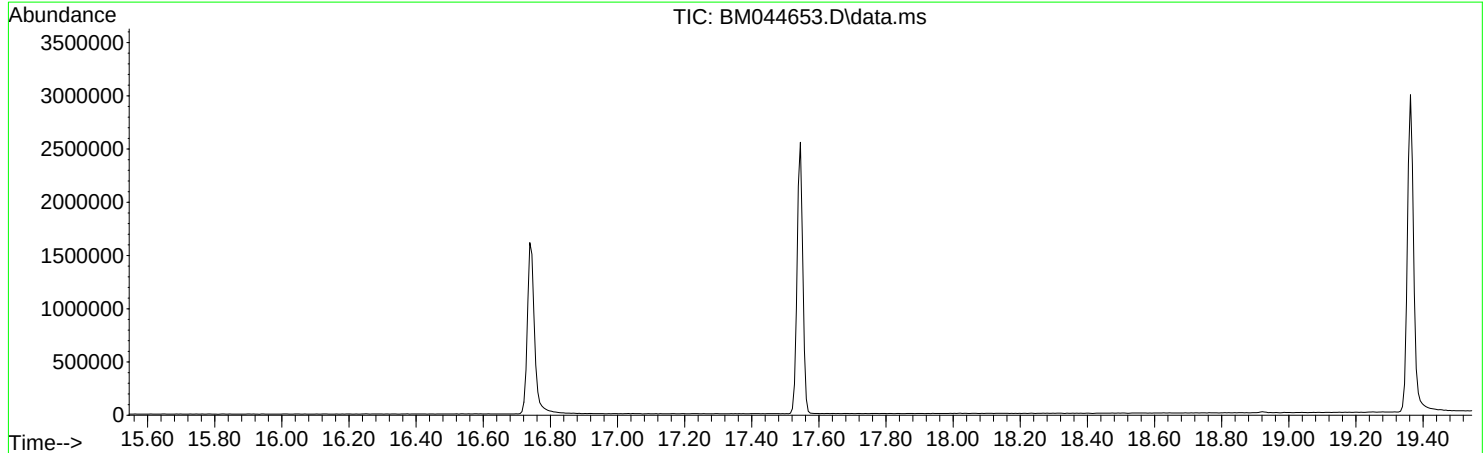
Instrument :
BNA_M
ClientSampleId :
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044653.D
Acq On : 18 Mar 2024 11:14
Operator : MA/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Mar 14 02:28:24 2024



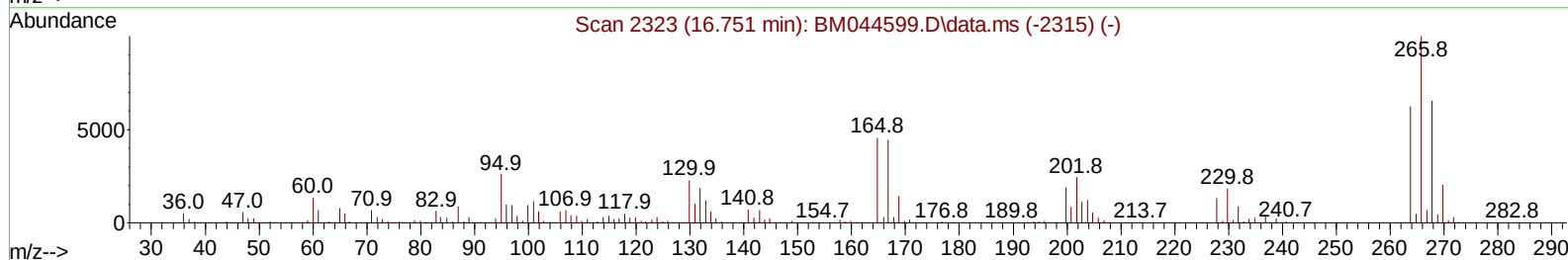
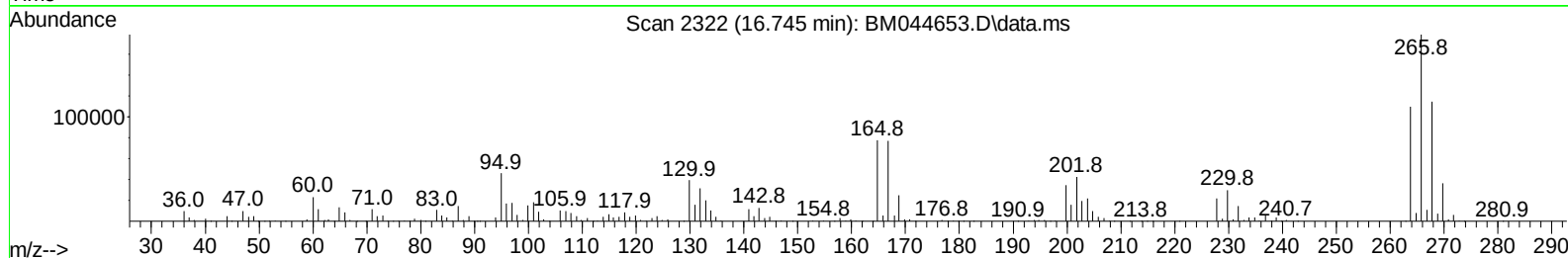
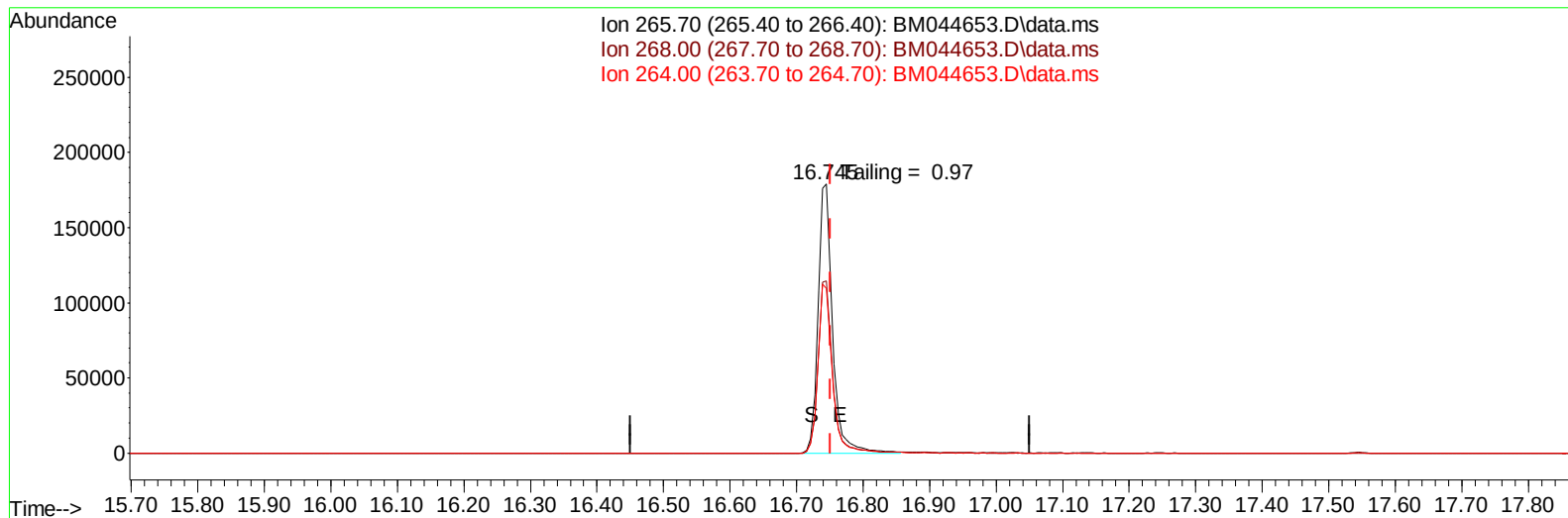
AutoFind: Scans 2457, 2458, 2459; Background Corrected with Scan 2450

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.5	105319	PASS
68	69	0.00	2	1.6	1622	PASS
69	198	0.00	100	42.6	100848	PASS
70	69	0.00	2	0.6	654	PASS
127	198	10	80	50.9	120485	PASS
197	198	0.00	2	0.4	1037	PASS
198	198	100	100	100.0	236672	PASS
199	198	5	9	6.4	15125	PASS
275	198	10	60	23.9	56501	PASS
365	198	1	100	3.1	7296	PASS
441	198	0.01	100	13.0	30816	PASS
442	442	50	100	100.0	190379	PASS
443	442	15	24	19.6	37288	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044653.D
Acq On : 18 Mar 2024 11:14
Operator : MA/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Mar 19 00:47:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration



TIC: BM044653.D\data.ms

(70) Pentachlorophenol (C)

16.745min (-0.006) 0.00 ng

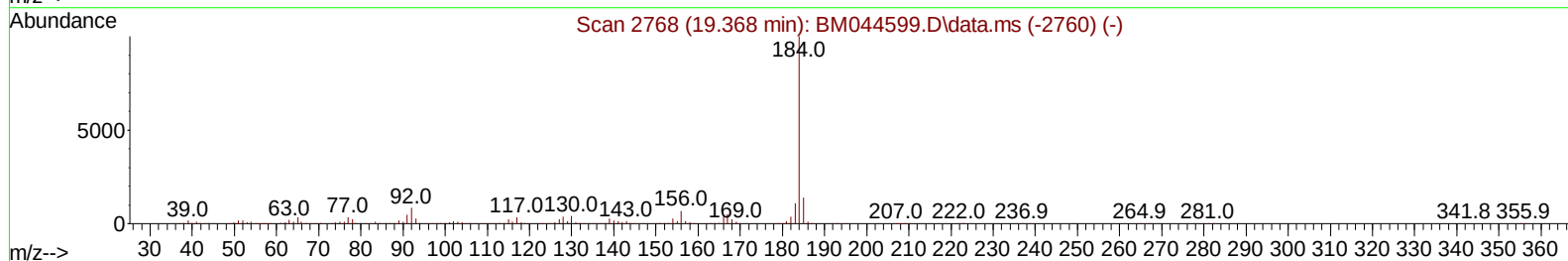
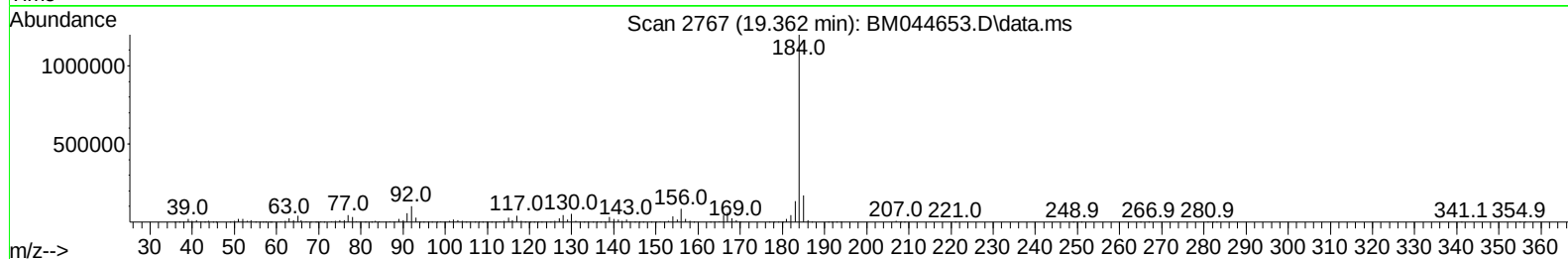
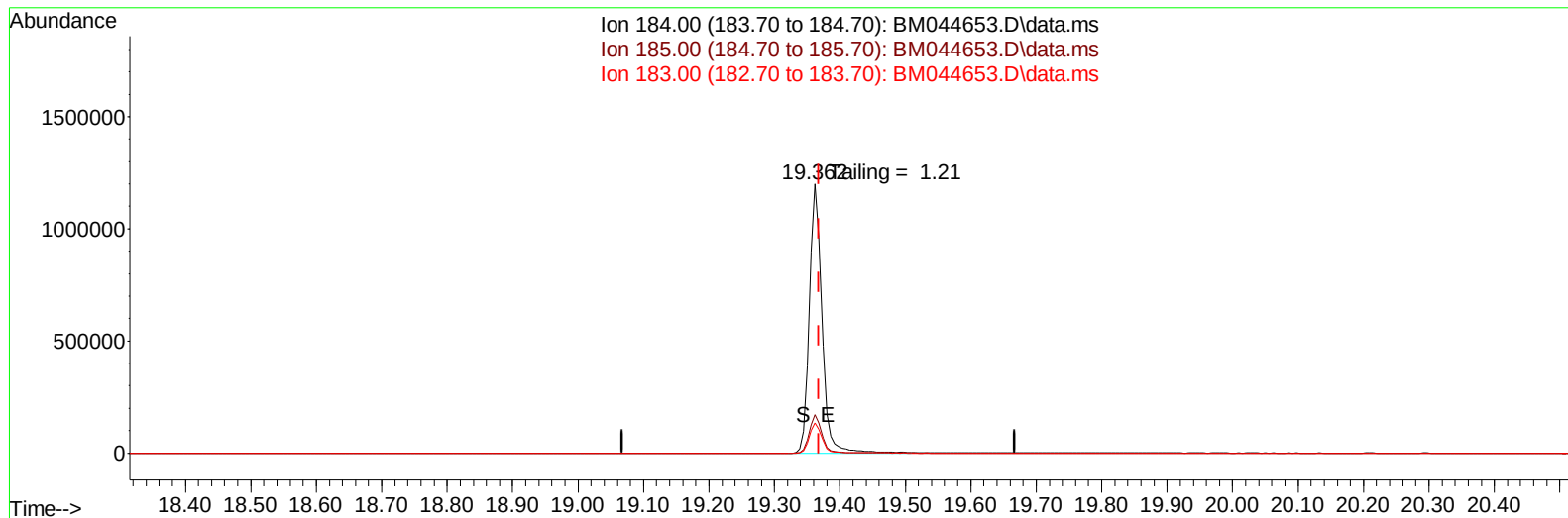
response 273803

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	65.50	64.00
264.00	62.30	61.28
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM031824\
Data File : BM044653.D
Acq On : 18 Mar 2024 11:14
Operator : MA/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP

Quant Time: Mar 19 00:47:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_M\Methods\8270-BM031324.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 02:28:24 2024
Response via : Initial Calibration



TIC: BM044653.D\data.ms

(77) Benzidine

19.362min (-0.006) 0.00 ng

response 1592721

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	13.80	14.20
183.00	10.90	11.30
0.00	0.00	0.00

DDT Breakdown

Date	Instrument Name	DFTPP Data File
3/18/2024	BNA_M	<u>BM044653.D</u>
Compound Name	Response	Retention Time
DDT	796654	20.597
DDD	12284	20.203
DDE	1303	19.645
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
13587	810241	1.68

Instrument :
BNA_M
ClientSampleId :
DFTPP



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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159613BL	SDG No.:	P1747
Lab Sample ID:	PB159613BL	Matrix:	Water
Analytical Method:	625.1	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-NYCD
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF137611.D	1	03/14/24 11:40	03/15/24 16:03	PB159613

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
108-95-2	Phenol	0.93	U	0.93	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.00	ug/L
91-20-3	Naphthalene	1.00	U	1.00	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	91.8		60 - 140	92%	SPK: 100
13127-88-3	Phenol-d6	84.3		60 - 140	84%	SPK: 100
4165-60-0	Nitrobenzene-d5	84.1		60 - 140	84%	SPK: 100
321-60-8	2-Fluorobiphenyl	85.8		60 - 140	86%	SPK: 100
118-79-6	2,4,6-Tribromophenol	85.2		60 - 140	85%	SPK: 100
1718-51-0	Terphenyl-d14	77.7		60 - 140	78%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	165000	6.728			
1146-65-2	Naphthalene-d8	641000	8.004			
15067-26-2	Acenaphthene-d10	350000	9.757			
1517-22-2	Phenanthrene-d10	572000	11.239			
1719-03-5	Chrysene-d12	351000	13.874			
1520-96-3	Perylene-d12	289000	15.298			

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\BF031524\
Data File : BF137611.D
Acq On : 15 Mar 2024 16:03
Operator : CG\JU
Sample : PB159613BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB159613BL

Quant Time: Mar 15 16:21:04 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.728	152	164876	20.000	ng	0.00
21) Naphthalene-d8	8.004	136	640676	20.000	ng	0.00
39) Acenaphthene-d10	9.757	164	350327	20.000	ng	0.00
64) Phenanthrene-d10	11.239	188	572257	20.000	ng	0.00
76) Chrysene-d12	13.874	240	350600	20.000	ng	0.00
86) Perylene-d12	15.298	264	288694	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.346	112	999815	91.842	ng	0.01
7) Phenol-d6	6.363	99	1325230	84.335	ng	0.00
23) Nitrobenzene-d5	7.292	82	1159958	84.124	ng	0.00
42) 2,4,6-Tribromophenol	10.545	330	262153	85.212	ng	0.00
45) 2-Fluorobiphenyl	9.086	172	1920864	85.830	ng	0.00
79) Terphenyl-d14	12.827	244	1981254	77.708	ng	0.00

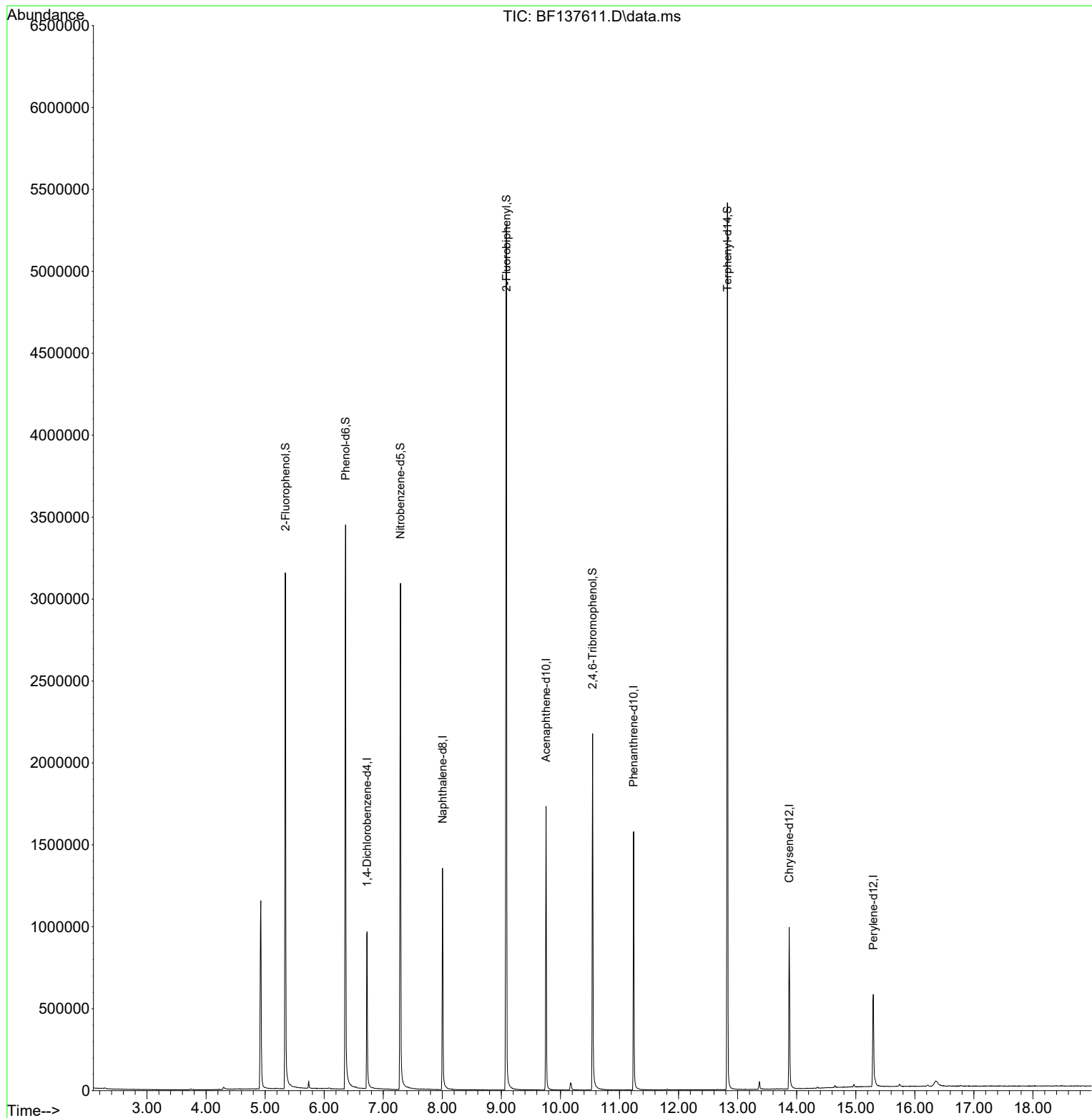
Target Compounds	Qvalue

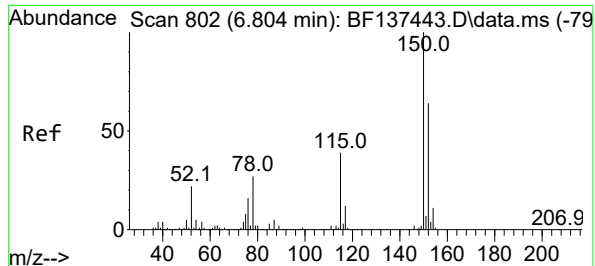
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
Data File : BF137611.D
Acq On : 15 Mar 2024 16:03
Operator : CG\JU
Sample : PB159613BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
PB159613BL

Quant Time: Mar 15 16:21:04 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration

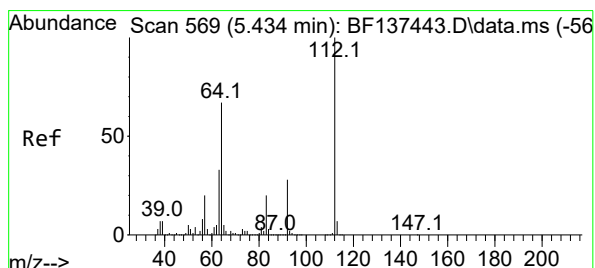
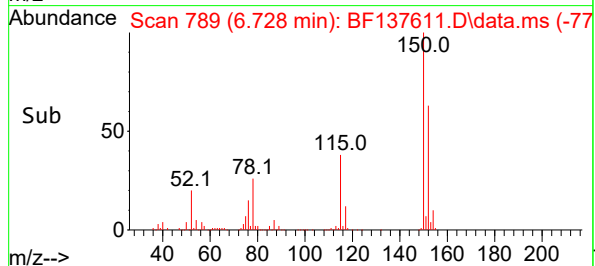
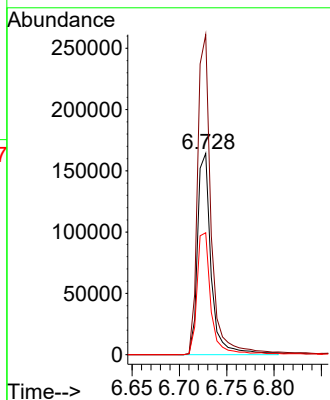
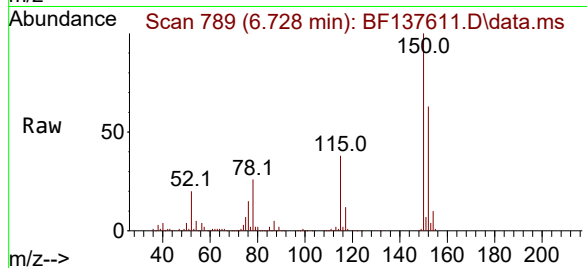




#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.728 min Scan# 71
Delta R.T. -0.000 min
Lab File: BF137611.D
Acq: 15 Mar 2024 16:03

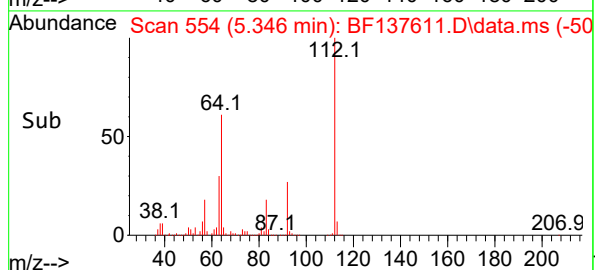
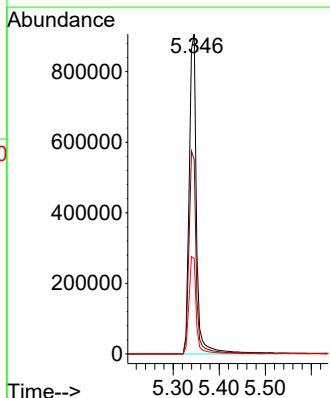
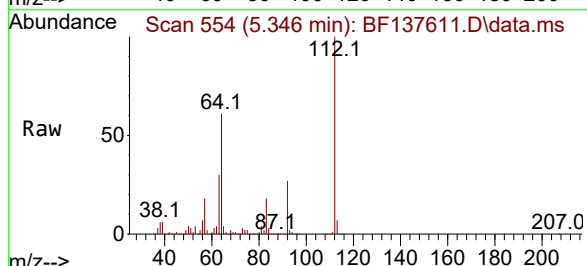
Instrument :
BNA_F
ClientSampleId :
PB159613BL

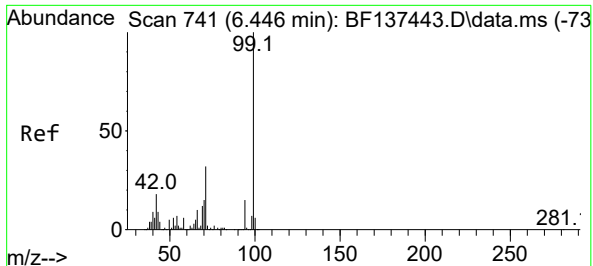
Tgt Ion:152 Resp: 164876
Ion Ratio Lower Upper
152 100
150 159.0 125.8 188.6
115 60.6 48.8 73.2



#5
2-Fluorophenol
Concen: 91.842 ng
RT: 5.346 min Scan# 554
Delta R.T. 0.012 min
Lab File: BF137611.D
Acq: 15 Mar 2024 16:03

Tgt Ion:112 Resp: 999815
Ion Ratio Lower Upper
112 100
64 60.8 53.4 80.2
63 29.8 26.2 39.2

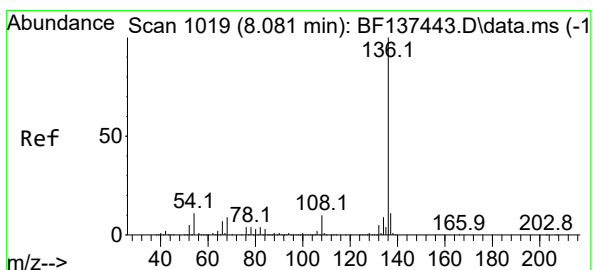
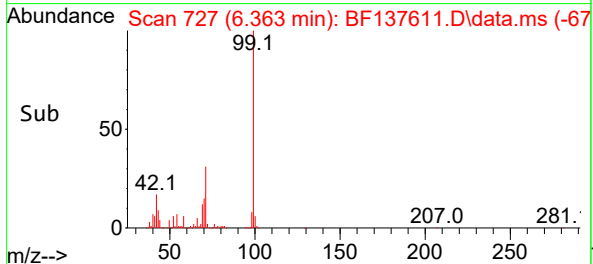
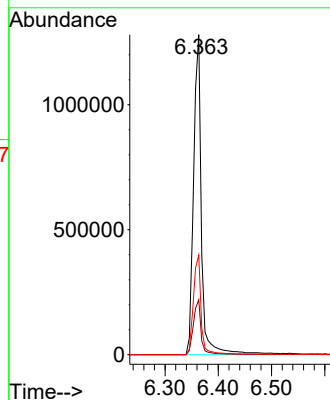
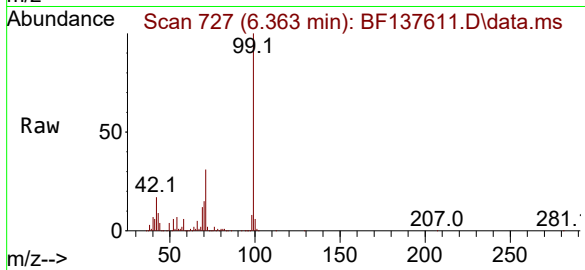




#7
Phenol-d6
Concen: 84.335 ng
RT: 6.363 min Scan# 71
Delta R.T. -0.006 min
Lab File: BF137611.D
Acq: 15 Mar 2024 16:03

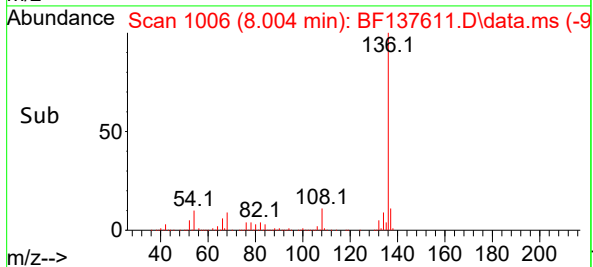
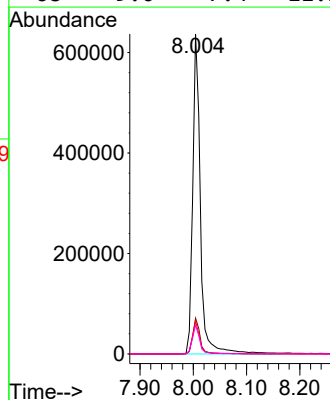
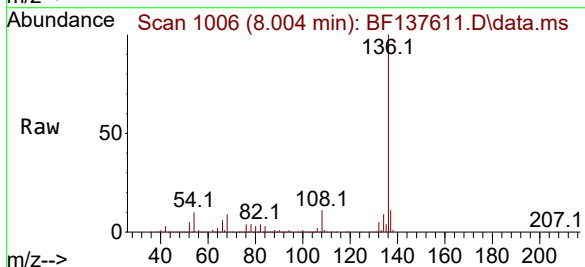
Instrument :
BNA_F
ClientSampleId :
PB159613BL

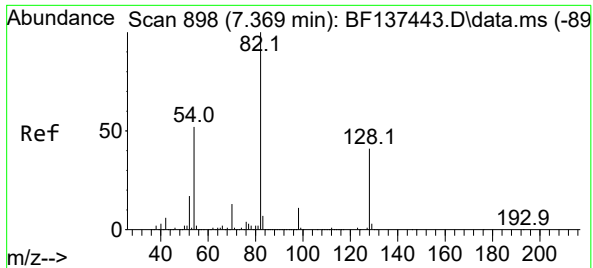
Tgt Ion: 99 Resp: 1325230
Ion Ratio Lower Upper
99 100
42 17.2 14.6 21.8
71 31.1 25.3 37.9



#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.004 min Scan# 1006
Delta R.T. -0.006 min
Lab File: BF137611.D
Acq: 15 Mar 2024 16:03

Tgt Ion: 136 Resp: 640676
Ion Ratio Lower Upper
136 100
137 11.2 9.1 13.7
54 10.3 8.5 12.7
68 9.0 7.4 11.2





#23

Nitrobenzene-d5

Concen: 84.124 ng

RT: 7.292 min Scan# 81

Delta R.T. -0.006 min

Lab File: BF137611.D

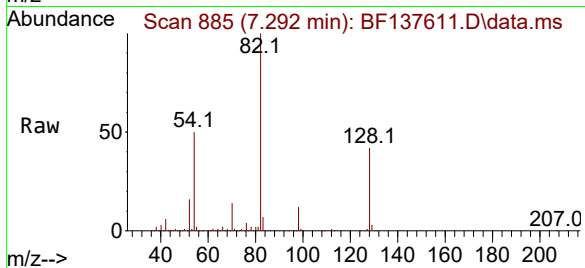
Acq: 15 Mar 2024 16:03

Instrument :

BNA_F

ClientSampleId :

PB159613BL



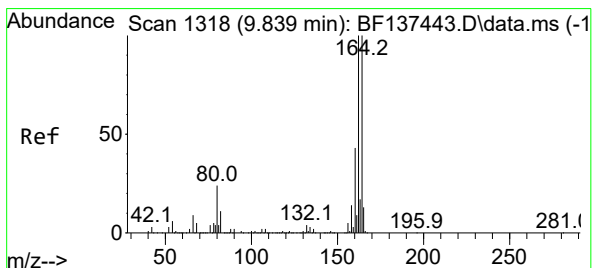
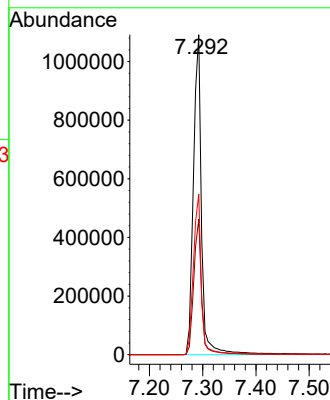
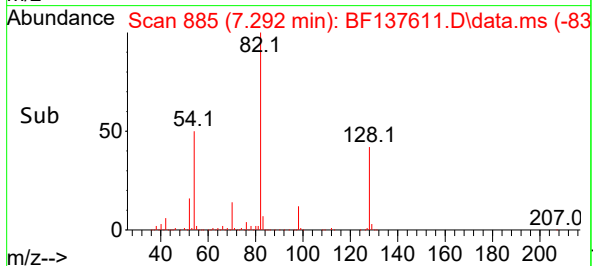
Tgt Ion: 82 Resp: 1159958

Ion Ratio Lower Upper

82 100

128 42.4 32.5 48.7

54 50.1 41.5 62.3



#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.757 min Scan# 1304

Delta R.T. -0.006 min

Lab File: BF137611.D

Acq: 15 Mar 2024 16:03

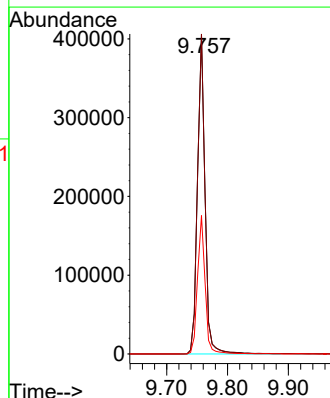
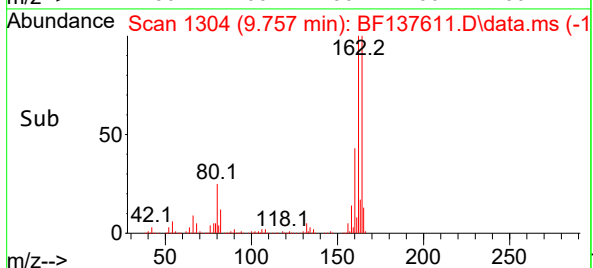
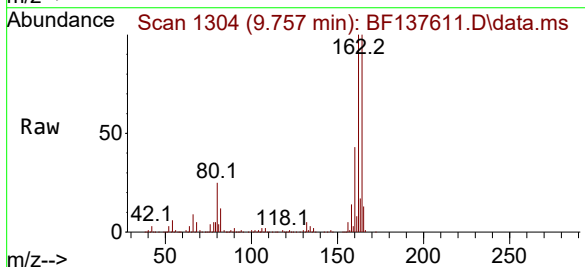
Tgt Ion: 164 Resp: 350327

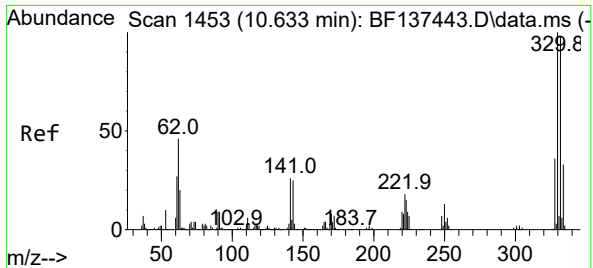
Ion Ratio Lower Upper

164 100

162 100.1 79.8 119.8

160 43.3 34.4 51.6

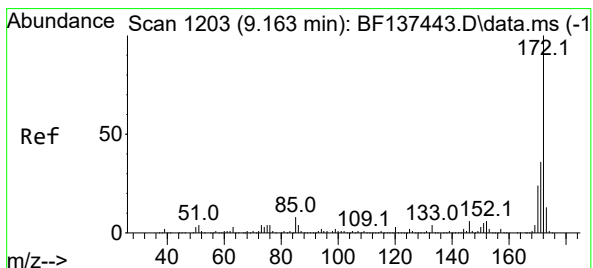
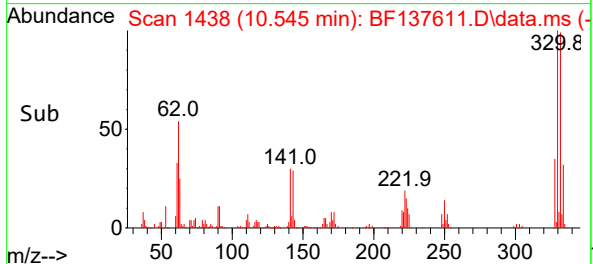
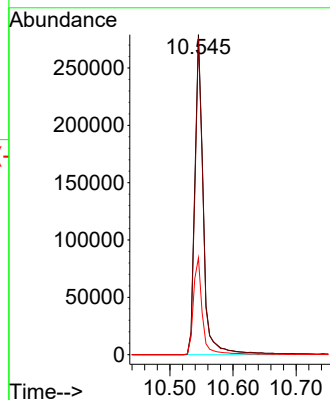
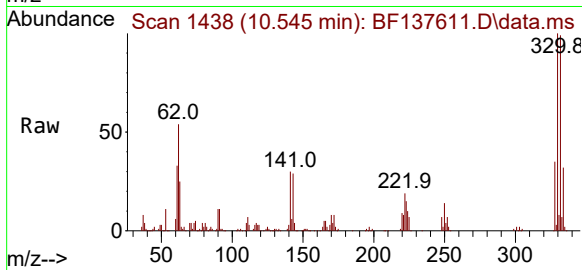




#42
2,4,6-Tribromophenol
Concen: 85.212 ng
RT: 10.545 min Scan# 1453
Delta R.T. -0.006 min
Lab File: BF137611.D
Acq: 15 Mar 2024 16:03

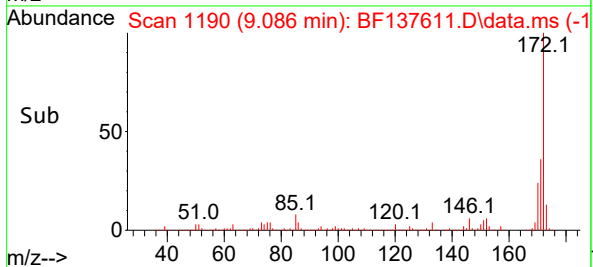
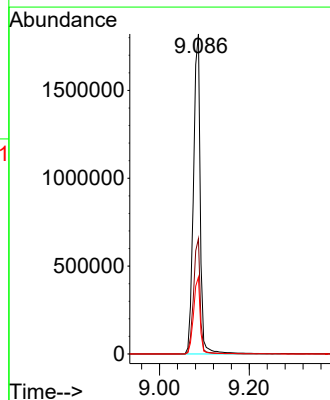
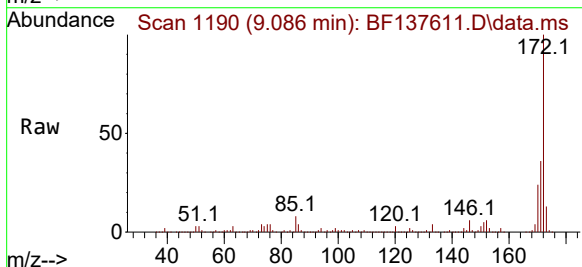
Instrument :
BNA_F
ClientSampleId :
PB159613BL

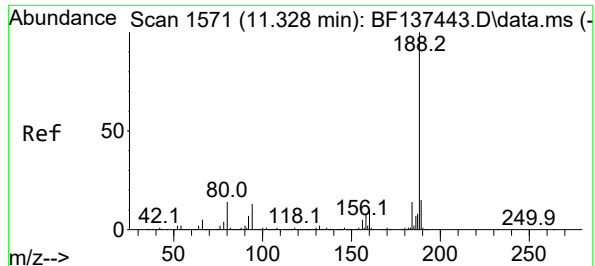
Tgt Ion:330 Resp: 262153
Ion Ratio Lower Upper
330 100
332 96.7 78.0 117.0
141 32.0 27.3 40.9



#45
2-Fluorobiphenyl
Concen: 85.830 ng
RT: 9.086 min Scan# 1190
Delta R.T. -0.000 min
Lab File: BF137611.D
Acq: 15 Mar 2024 16:03

Tgt Ion:172 Resp: 1920864
Ion Ratio Lower Upper
172 100
171 36.0 28.5 42.7
170 24.0 19.0 28.6





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.239 min Scan# 1

Delta R.T. -0.000 min

Lab File: BF137611.D

Acq: 15 Mar 2024 16:03

Instrument :

BNA_F

ClientSampleId :

PB159613BL

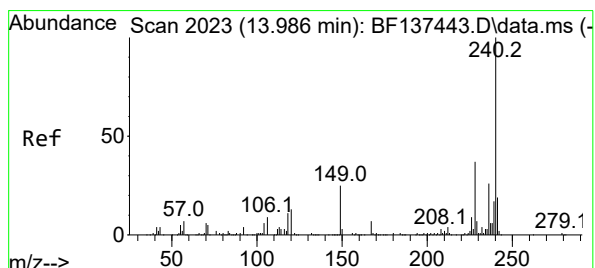
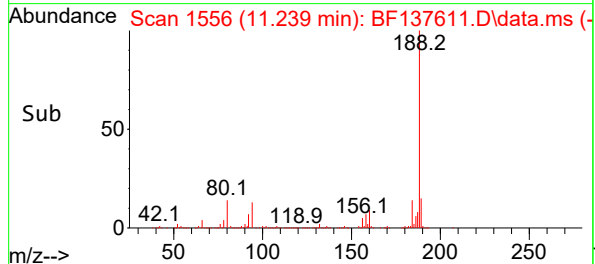
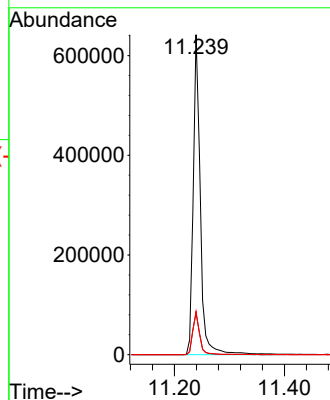
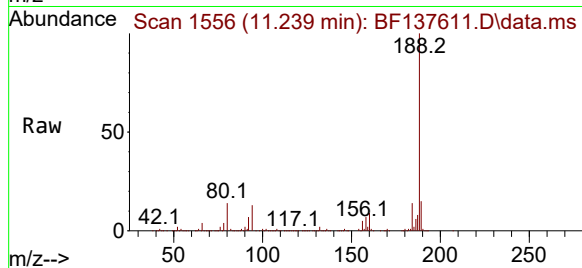
Tgt Ion:188 Resp: 572257

Ion Ratio Lower Upper

188 100

94 13.0 10.6 15.8

80 13.6 11.5 17.3



#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.874 min Scan# 2004

Delta R.T. -0.000 min

Lab File: BF137611.D

Acq: 15 Mar 2024 16:03

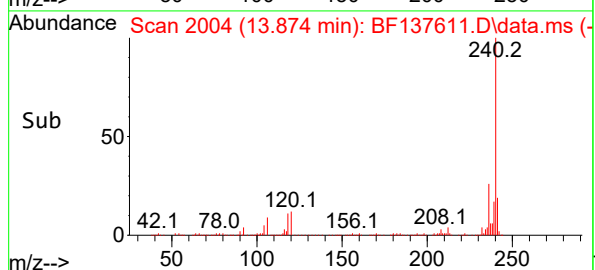
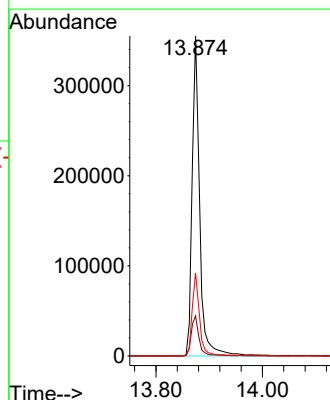
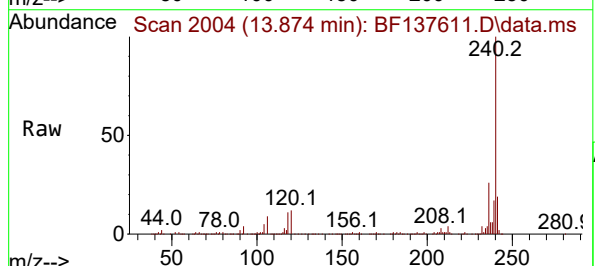
Tgt Ion:240 Resp: 350600

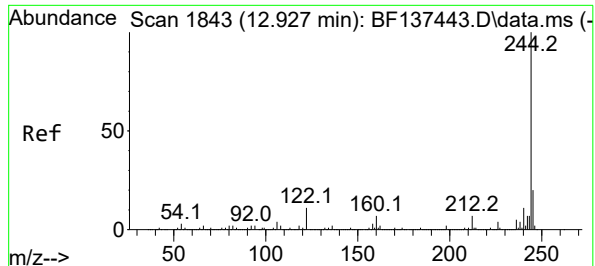
Ion Ratio Lower Upper

240 100

120 12.5 10.4 15.6

236 26.0 20.9 31.3





#79

Terphenyl-d14

Concen: 77.708 ng

RT: 12.827 min Scan# 1826

Delta R.T. -0.000 min

Lab File: BF137611.D

Acq: 15 Mar 2024 16:03

Instrument :

BNA_F

ClientSampleId :

PB159613BL

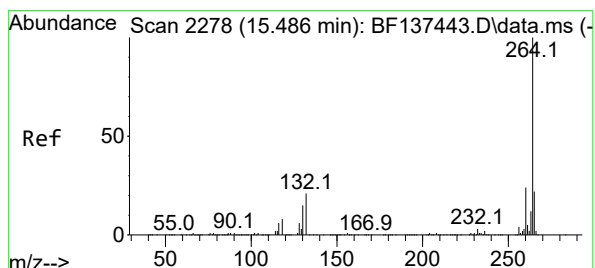
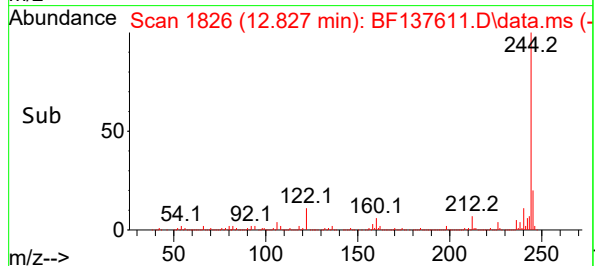
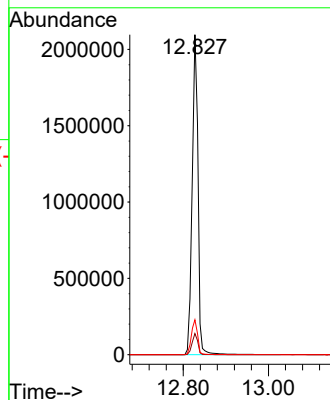
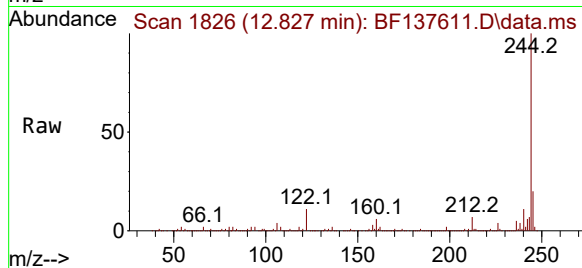
Tgt Ion:244 Resp: 1981254

Ion Ratio Lower Upper

244 100

212 6.6 5.4 8.2

122 10.9 9.1 13.7



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.298 min Scan# 2246

Delta R.T. -0.000 min

Lab File: BF137611.D

Acq: 15 Mar 2024 16:03

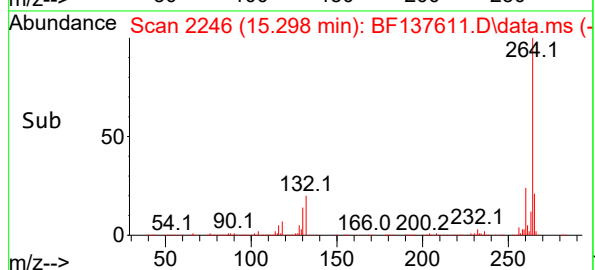
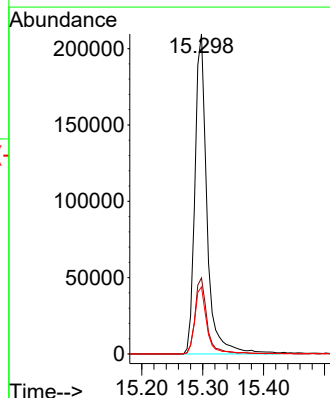
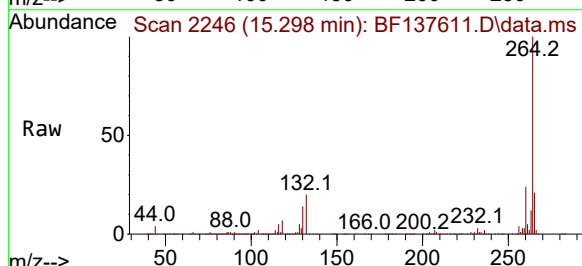
Tgt Ion:264 Resp: 288694

Ion Ratio Lower Upper

264 100

260 23.8 19.3 28.9

265 21.0 17.4 26.0





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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159613BS	SDG No.:	P1747
Lab Sample ID:	PB159613BS	Matrix:	Water
Analytical Method:	625.1	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-NYCD
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF137612.D	1	03/14/24 11:40	03/15/24 16:33	PB159613

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
108-95-2	Phenol	42.0		0.93	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	46.8		1.10	5.00	ug/L
91-20-3	Naphthalene	43.9		1.00	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	86.3		60 - 140	86%	SPK: 100
13127-88-3	Phenol-d6	80.5		60 - 140	81%	SPK: 100
4165-60-0	Nitrobenzene-d5	82.2		60 - 140	82%	SPK: 100
321-60-8	2-Fluorobiphenyl	82.1		60 - 140	82%	SPK: 100
118-79-6	2,4,6-Tribromophenol	90.7		60 - 140	91%	SPK: 100
1718-51-0	Terphenyl-d14	76.6		60 - 140	77%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	175000	6.728			
1146-65-2	Naphthalene-d8	663000	8.01			
15067-26-2	Acenaphthene-d10	361000	9.763			
1517-22-2	Phenanthrene-d10	593000	11.245			
1719-03-5	Chrysene-d12	363000	13.88			
1520-96-3	Perylene-d12	316000	15.298			

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\BF031524\
 Data File : BF137612.D
 Acq On : 15 Mar 2024 16:33
 Operator : CG\JU
 Sample : PB159613BS
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 PB159613BS

Quant Time: Mar 15 17:08:38 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.728	152	174702	20.000	ng	0.00
21) Naphthalene-d8	8.010	136	662837	20.000	ng	0.00
39) Acenaphthene-d10	9.763	164	361357	20.000	ng	0.00
64) Phenanthrene-d10	11.245	188	592768	20.000	ng	0.00
76) Chrysene-d12	13.880	240	363148	20.000	ng	0.00
86) Perylene-d12	15.298	264	315730	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.345	112	995643	86.315	ng	0.01
7) Phenol-d6	6.369	99	1340961	80.536	ng	0.00
23) Nitrobenzene-d5	7.298	82	1172464	82.188	ng	0.00
42) 2,4,6-Tribromophenol	10.551	330	287751	90.678	ng	0.00
45) 2-Fluorobiphenyl	9.086	172	1894969	82.088	ng	0.00
79) Terphenyl-d14	12.827	244	2023816	76.634	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	2.457	88	224795	35.641	ng	97
3) Pyridine	3.157	79	515338	33.879	ng	98
4) n-Nitrosodimethylamine	3.128	42	244662	40.364	ng	94
6) Aniline	6.392	93	435225	21.392	ng	97
8) 2-Chlorophenol	6.510	128	557361	45.811	ng	97
9) Benzaldehyde	6.275	77	122849	15.060	ng	98
10) Phenol	6.381	94	751908	41.956	ng	99
11) bis(2-Chloroethyl)ether	6.469	93	570401	43.434	ng	96
12) 1,3-Dichlorobenzene	6.663	146	585591	45.043	ng	99
13) 1,4-Dichlorobenzene	6.745	146	596601	44.851	ng	97
14) 1,2-Dichlorobenzene	6.892	146	566523	46.401	ng	98
15) Benzyl Alcohol	6.875	79	483762	46.669	ng	99
16) 2,2'-oxybis(1-Chloropr...	7.004	45	885184	39.212	ng	97
17) 2-Methylphenol	6.992	107	450083	39.535	ng	96
18) Hexachloroethane	7.234	117	207624	47.404	ng	93
19) n-Nitroso-di-n-propyla...	7.145	70	413146	40.182	ng	99
20) 3+4-Methylphenols	7.145	107	526306	40.365	ng	91
22) Acetophenone	7.139	105	730654	45.559	ng	# 97
24) Nitrobenzene	7.316	77	621312	43.356	ng	96
25) Isophorone	7.551	82	1156497	42.672	ng	98
26) 2-Nitrophenol	7.628	139	279809	49.181	ng	98
27) 2,4-Dimethylphenol	7.669	122	389015	36.593	ng	98
28) bis(2-Chloroethoxy)met...	7.763	93	696885	43.825	ng	99
29) 2,4-Dichlorophenol	7.869	162	451781	46.304	ng	97
30) 1,2,4-Trichlorobenzene	7.951	180	479999	46.750	ng	99
31) Naphthalene	8.034	128	1561468	43.906	ng	99
32) Benzoic acid	7.810	122	218112	37.251	ng	99
33) 4-Chloroaniline	8.086	127	160930	11.540	ng	98
34) Hexachlorobutadiene	8.145	225	277114	45.716	ng	99
35) Caprolactam	8.457	113	142183m	42.977	ng	
36) 4-Chloro-3-methylphenol	8.575	107	483331	44.318	ng	100
37) 2-Methylnaphthalene	8.722	142	958288	42.268	ng	99
38) 1-Methylnaphthalene	8.822	142	895227	41.930	ng	99
40) 1,2,4,5-Tetrachloroben...	8.886	216	471493	46.737	ng	99
41) Hexachlorocyclopentadiene	8.875	237	375667	90.090	ng	99
43) 2,4,6-Trichlorophenol	9.004	196	304596	46.365	ng	98

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137612.D
 Acq On : 15 Mar 2024 16:33
 Operator : CG\JU
 Sample : PB159613BS
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 PB159613BS

Quant Time: Mar 15 17:08:38 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration

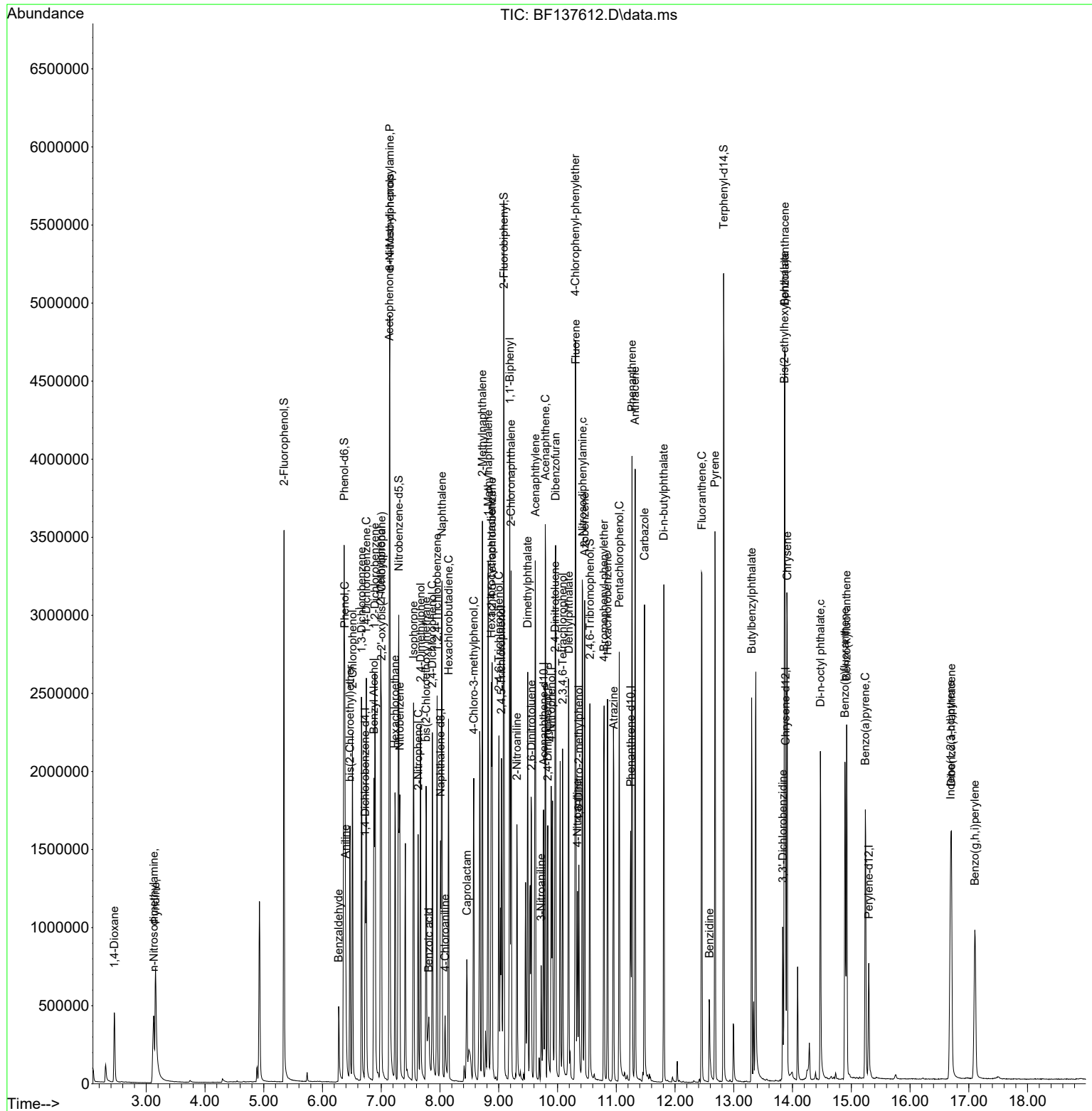
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.045	196	313978	41.489	ng	97
46) 1,1'-Biphenyl	9.186	154	1167783	44.154	ng	99
47) 2-Chloronaphthalene	9.210	162	920989	45.674	ng	100
48) 2-Nitroaniline	9.310	65	314759	45.925	ng	96
49) Acenaphthylene	9.622	152	1450673	44.954	ng	99
50) Dimethylphthalate	9.492	163	1096537	43.592	ng	99
51) 2,6-Dinitrotoluene	9.557	165	244086	46.392	ng	# 85
52) Acenaphthene	9.792	154	814115	42.258	ng	99
53) 3-Nitroaniline	9.722	138	117680	21.146	ng	96
54) 2,4-Dinitrophenol	9.833	184	213563	82.890	ng	96
55) Dibenzofuran	9.969	168	1244208	42.402	ng	99
56) 4-Nitrophenol	9.892	139	323334	81.570	ng	97
57) 2,4-Dinitrotoluene	9.957	165	302206	46.752	ng	95
58) Fluorene	10.310	166	941923	41.799	ng	98
59) 2,3,4,6-Tetrachlorophenol	10.086	232	269720	44.445	ng	97
60) Diethylphthalate	10.192	149	1031893	43.440	ng	99
61) 4-Chlorophenyl-phenyle...	10.304	204	461022	41.744	ng	95
62) 4-Nitroaniline	10.339	138	198458	41.491	ng	95
63) Azobenzene	10.463	77	1115848	40.795	ng	99
65) 4,6-Dinitro-2-methylph...	10.363	198	177220	53.642	ng	93
66) n-Nitrosodiphenylamine	10.428	169	853503	44.714	ng	98
67) 4-Bromophenyl-phenylether	10.792	248	294709	45.647	ng	97
68) Hexachlorobenzene	10.851	284	325277	49.882	ng	96
69) Atrazine	10.957	200	278984	48.079	ng	99
70) Pentachlorophenol	11.051	266	338315	85.822	ng	99
71) Phenanthrene	11.269	178	1401800	43.454	ng	99
72) Anthracene	11.322	178	1442288	43.531	ng	99
73) Carbazole	11.480	167	1283586	45.228	ng	99
74) Di-n-butylphthalate	11.810	149	1517474	44.941	ng	100
75) Fluoranthene	12.457	202	1408808	44.677	ng	97
77) Benzidine	12.586	184	283892	31.944	ng	98
78) Pyrene	12.680	202	1443057	40.498	ng	99
80) Butylbenzylphthalate	13.304	149	532373	58.501	ng	100
81) Benzo(a)anthracene	13.868	228	1130005	44.396	ng	100
82) 3,3'-Dichlorobenzidine	13.833	252	217841	32.139	ng	99
83) Chrysene	13.910	228	1145267	44.520	ng	99
84) Bis(2-ethylhexyl)phtha...	13.863	149	682034	58.966	ng	99
85) Di-n-octyl phthalate	14.474	149	1138781	50.724	ng	97
87) Indeno(1,2,3-cd)pyrene	16.692	276	936119	45.055	ng	98
88) Benzo(b)fluoranthene	14.892	252	974015	52.151	ng	99
89) Benzo(k)fluoranthene	14.921	252	895953	44.663	ng	99
90) Benzo(a)pyrene	15.239	252	847002	46.020	ng	99
91) Dibenzo(a,h)anthracene	16.704	278	741531	43.996	ng	98
92) Benzo(g,h,i)perylene	17.104	276	745212	43.052	ng	99

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137612.D
 Acq On : 15 Mar 2024 16:33
 Operator : CG\JU
 Sample : PB159613BS
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 PB159613BS

Quant Time: Mar 15 17:08:38 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration





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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159613BSD	SDG No.:	P1747
Lab Sample ID:	PB159613BSD	Matrix:	Water
Analytical Method:	625.1	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-NYCD
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF137613.D	1	03/14/24 11:40	03/15/24 17:02	PB159613

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
108-95-2	Phenol	40.4		0.93	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	44.3		1.10	5.00	ug/L
91-20-3	Naphthalene	41.7		1.00	5.00	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	84.1		60 - 140	84%	SPK: 100
13127-88-3	Phenol-d6	78.3		60 - 140	78%	SPK: 100
4165-60-0	Nitrobenzene-d5	77.7		60 - 140	78%	SPK: 100
321-60-8	2-Fluorobiphenyl	79.4		60 - 140	79%	SPK: 100
118-79-6	2,4,6-Tribromophenol	87.2		60 - 140	87%	SPK: 100
1718-51-0	Terphenyl-d14	73.3		60 - 140	73%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	177000	6.728			
1146-65-2	Naphthalene-d8	685000	8.01			
15067-26-2	Acenaphthene-d10	368000	9.763			
1517-22-2	Phenanthrene-d10	614000	11.245			
1719-03-5	Chrysene-d12	369000	13.88			
1520-96-3	Perylene-d12	320000	15.298			

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\BF031524\
 Data File : BF137613.D
 Acq On : 15 Mar 2024 17:02
 Operator : CG\JU
 Sample : PB159613BSD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 PB159613BSD

Quant Time: Mar 15 17:31:24 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.728	152	177128	20.000	ng	0.00
21) Naphthalene-d8	8.010	136	685431	20.000	ng	0.00
39) Acenaphthene-d10	9.763	164	367798	20.000	ng	0.00
64) Phenanthrene-d10	11.245	188	614466	20.000	ng	0.00
76) Chrysene-d12	13.880	240	368786	20.000	ng	0.00
86) Perylene-d12	15.298	264	320365	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.346	112	983725	84.114	ng	0.01
7) Phenol-d6	6.369	99	1322552	78.343	ng	0.00
23) Nitrobenzene-d5	7.298	82	1145949	77.682	ng	0.00
42) 2,4,6-Tribromophenol	10.551	330	281537	87.166	ng	0.00
45) 2-Fluorobiphenyl	9.087	172	1866014	79.418	ng	0.00
79) Terphenyl-d14	12.827	244	1965064	73.272	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	2.458	88	218717	34.203	ng	98
3) Pyridine	3.158	79	501996	32.549	ng	97
4) n-Nitrosodimethylamine	3.128	42	234254	38.329	ng	95
6) Aniline	6.393	93	420678	20.394	ng	97
8) 2-Chlorophenol	6.510	128	535564	43.417	ng	96
9) Benzaldehyde	6.275	77	117699	14.231	ng	99
10) Phenol	6.381	94	734682	40.433	ng	98
11) bis(2-Chloroethyl)ether	6.469	93	557105	41.840	ng	96
12) 1,3-Dichlorobenzene	6.663	146	568620	43.139	ng	99
13) 1,4-Dichlorobenzene	6.746	146	572560	42.454	ng	99
14) 1,2-Dichlorobenzene	6.893	146	543169	43.879	ng	99
15) Benzyl Alcohol	6.875	79	456426	43.429	ng	98
16) 2,2'-oxybis(1-Chloropr...	7.004	45	868103	37.929	ng	97
17) 2-Methylphenol	6.993	107	434207	37.618	ng	96
18) Hexachloroethane	7.234	117	199481	44.921	ng	95
19) n-Nitroso-di-n-propyla...	7.145	70	401136	38.480	ng	100
20) 3+4-Methylphenols	7.145	107	513738	38.862	ng	93
22) Acetophenone	7.140	105	721068	43.479	ng	# 97
24) Nitrobenzene	7.316	77	607968	41.026	ng	95
25) Isophorone	7.551	82	1130268	40.329	ng	99
26) 2-Nitrophenol	7.628	139	272974	46.398	ng	98
27) 2,4-Dimethylphenol	7.669	122	379404	34.513	ng	99
28) bis(2-Chloroethoxy)met...	7.763	93	681016	41.415	ng	99
29) 2,4-Dichlorophenol	7.869	162	436012	43.215	ng	99
30) 1,2,4-Trichlorobenzene	7.951	180	470267	44.292	ng	99
31) Naphthalene	8.034	128	1532682	41.676	ng	99
32) Benzoic acid	7.810	122	222951	36.894	ng	94
33) 4-Chloroaniline	8.087	127	153512	10.645	ng	97
34) Hexachlorobutadiene	8.145	225	271423	43.301	ng	99
35) Caprolactam	8.457	113	139233m	40.698	ng	
36) 4-Chloro-3-methylphenol	8.575	107	470919	41.757	ng	97
37) 2-Methylnaphthalene	8.722	142	951497	40.585	ng	100
38) 1-Methylnaphthalene	8.822	142	868297	39.328	ng	100
40) 1,2,4,5-Tetrachloroben...	8.887	216	454517	44.265	ng	99
41) Hexachlorocyclopentadiene	8.875	237	373005	88.087	ng	98
43) 2,4,6-Trichlorophenol	9.004	196	299826	44.840	ng	99

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\
 Data File : BF137613.D
 Acq On : 15 Mar 2024 17:02
 Operator : CG\JU
 Sample : PB159613BSD
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 PB159613BSD

Quant Time: Mar 15 17:31:24 2024
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Mar 14 14:45:20 2024
 Response via : Initial Calibration

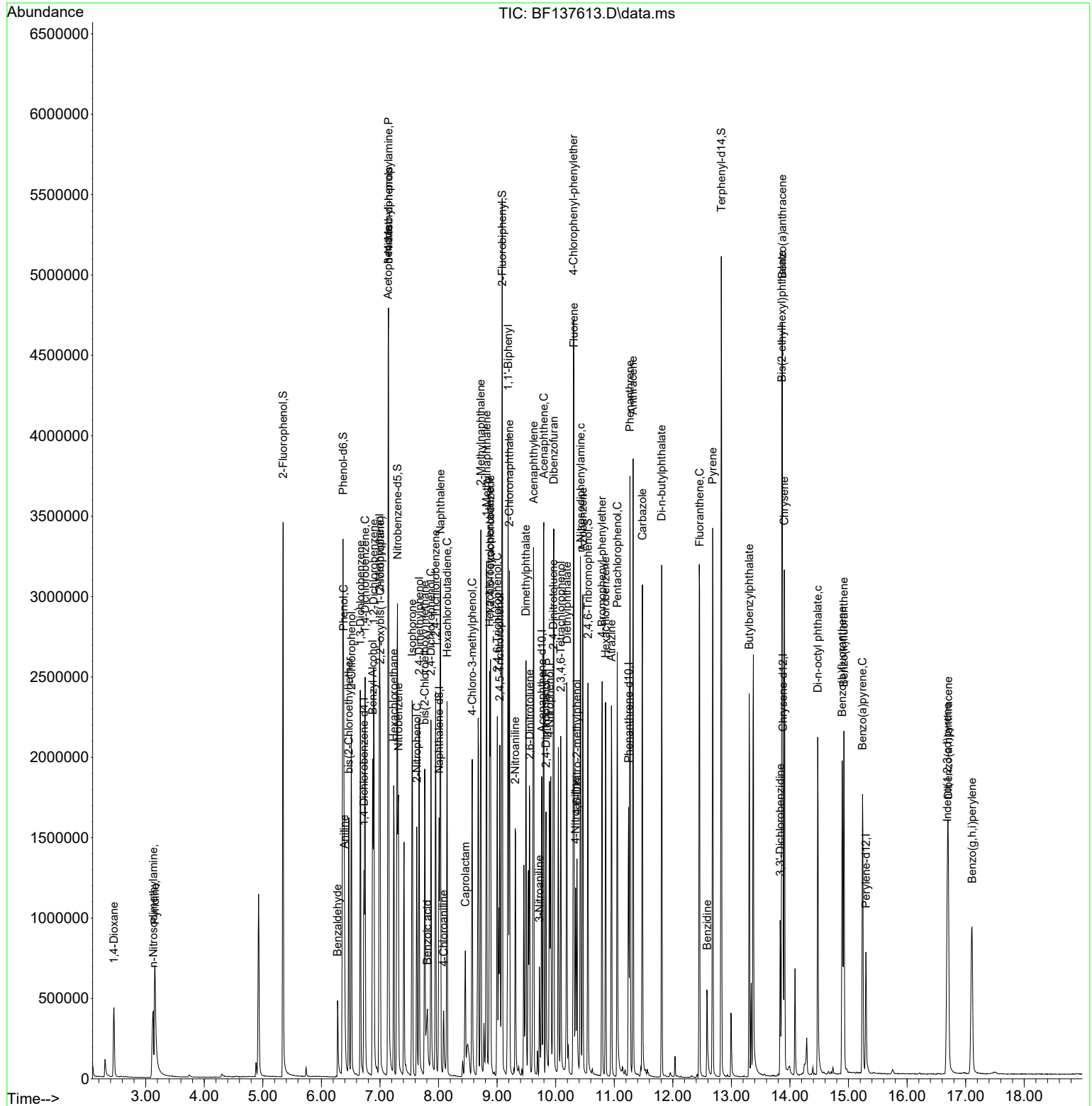
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,4,5-Trichlorophenol	9.045	196	318434	41.341	ng	97
46) 1,1'-Biphenyl	9.187	154	1149175	42.689	ng	98
47) 2-Chloronaphthalene	9.210	162	895177	43.616	ng	99
48) 2-Nitroaniline	9.310	65	312118	44.742	ng	94
49) Acenaphthylene	9.622	152	1434483	43.674	ng	99
50) Dimethylphthalate	9.492	163	1073034	41.910	ng	100
51) 2,6-Dinitrotoluene	9.557	165	236906	44.239	ng	# 85
52) Acenaphthene	9.798	154	801057	40.852	ng	99
53) 3-Nitroaniline	9.722	138	113663	20.066	ng	100
54) 2,4-Dinitrophenol	9.834	184	214961	82.063	ng	96
55) Dibenzofuran	9.969	168	1211173	40.554	ng	99
56) 4-Nitrophenol	9.892	139	314960	78.260	ng	98
57) 2,4-Dinitrotoluene	9.957	165	300938	45.741	ng	98
58) Fluorene	10.310	166	911016	39.719	ng	99
59) 2,3,4,6-Tetrachlorophenol	10.086	232	264703	42.854	ng	95
60) Diethylphthalate	10.192	149	1021887	42.266	ng	99
61) 4-Chlorophenyl-phenyle...	10.304	204	448022	39.856	ng	96
62) 4-Nitroaniline	10.339	138	196911	40.447	ng	95
63) Azobenzene	10.463	77	1097286	39.414	ng	99
65) 4,6-Dinitro-2-methylph...	10.363	198	172114	50.257	ng	94
66) n-Nitrosodiphenylamine	10.428	169	834526	42.176	ng	100
67) 4-Bromophenyl-phenylether	10.792	248	290367	43.386	ng	99
68) Hexachlorobenzene	10.851	284	315595	46.688	ng	98
69) Atrazine	10.951	200	269068	44.732	ng	97
70) Pentachlorophenol	11.051	266	332299	81.319	ng	98
71) Phenanthrene	11.269	178	1369706	40.959	ng	99
72) Anthracene	11.322	178	1410556	41.070	ng	99
73) Carbazole	11.480	167	1267394	43.081	ng	98
74) Di-n-butylphthalate	11.810	149	1477415	42.209	ng	99
75) Fluoranthene	12.457	202	1375345	42.076	ng	96
77) Benzidine	12.586	184	289042	32.027	ng	98
78) Pyrene	12.680	202	1413949	39.074	ng	99
80) Butylbenzylphthalate	13.304	149	520002	56.268	ng	99
81) Benzo(a)anthracene	13.869	228	1094091	42.328	ng	100
82) 3,3'-Dichlorobenzidine	13.833	252	217356	31.577	ng	97
83) Chrysene	13.904	228	1128419	43.194	ng	99
84) Bis(2-ethylhexyl)phtha...	13.863	149	650352	55.367	ng	99
85) Di-n-octyl phthalate	14.474	149	1096493	48.385	ng	97
87) Indeno(1,2,3-cd)pyrene	16.686	276	915313	43.416	ng	97
88) Benzo(b)fluoranthene	14.892	252	945152	49.874	ng	99
89) Benzo(k)fluoranthene	14.921	252	848549	41.687	ng	99
90) Benzo(a)pyrene	15.239	252	824227	44.135	ng	99
91) Dibenzo(a,h)anthracene	16.704	278	714794	41.796	ng	98
92) Benzo(g,h,i)perylene	17.110	276	730592	41.597	ng	97

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

```
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF031524\  
Data File : BF137613.D  
Acq On    : 15 Mar 2024   17:02  
Operator  : CG\JU  
Sample    : PB159613BSD  
Misc      :  
ALS Vial  : 5    Sample Multiplier: 1
```

Instrument :
BNA_F
ClientSampleId :
PB159613BSD

Quant Time: Mar 15 17:31:24 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF022924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 14 14:45:20 2024
Response via : Initial Calibration





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Manual Integration Report

Sequence:

BF022924

Instrument

BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC005	BF137440.D	2,3,4,6-Tetrachlorophen ol	Jagrut	3/1/2024 6:27:26 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC005	BF137440.D	4-Nitroaniline	Jagrut	3/1/2024 6:27:26 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC005	BF137440.D	Pyridine	Jagrut	3/1/2024 6:27:26 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC010	BF137441.D	4-Nitroaniline	Jagrut	3/1/2024 6:27:33 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC010	BF137441.D	Benzidine	Jagrut	3/1/2024 6:27:33 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC010	BF137441.D	Benzoic acid	Jagrut	3/1/2024 6:27:33 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC020	BF137442.D	4-Nitroaniline	Jagrut	3/1/2024 6:27:35 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC020	BF137442.D	Benzoic acid	Jagrut	3/1/2024 6:27:35 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICCC040	BF137443.D	2,3,4,6-Tetrachlorophen ol	Jagrut	3/1/2024 6:27:37 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC050	BF137444.D	1,2-Dichlorobenzene	Jagrut	3/1/2024 6:27:50 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC050	BF137444.D	1,4-Dichlorobenzene	Jagrut	3/1/2024 6:27:50 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC050	BF137444.D	1,4-Dichlorobenzene-d4	Jagrut	3/1/2024 6:27:50 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC050	BF137444.D	Caprolactam	Jagrut	3/1/2024 6:27:50 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software



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Manual Integration Report

Sequence:

BF022924

Instrument

BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC060	BF137445.D	1,2-Dichlorobenzene	Jagrut	3/1/2024 6:27:52 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC060	BF137445.D	1,4-Dichlorobenzene	Jagrut	3/1/2024 6:27:52 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC060	BF137445.D	1,4-Dichlorobenzene-d4	Jagrut	3/1/2024 6:27:52 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC060	BF137445.D	2,3,4,6-Tetrachlorophen ol	Jagrut	3/1/2024 6:27:52 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC060	BF137445.D	Caprolactam	Jagrut	3/1/2024 6:27:52 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC080	BF137446.D	1,2-Dichlorobenzene	Jagrut	3/1/2024 6:27:55 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC080	BF137446.D	1,4-Dichlorobenzene	Jagrut	3/1/2024 6:27:55 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC080	BF137446.D	1,4-Dichlorobenzene-d4	Jagrut	3/1/2024 6:27:55 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC080	BF137446.D	2,3,4,6-Tetrachlorophen ol	Jagrut	3/1/2024 6:27:55 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC080	BF137446.D	Benzoic acid	Jagrut	3/1/2024 6:27:55 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICC080	BF137446.D	Caprolactam	Jagrut	3/1/2024 6:27:55 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICV040	BF137447.D	1,2-Dichlorobenzene	Jagrut	3/1/2024 6:27:58 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICV040	BF137447.D	1,4-Dichlorobenzene	Jagrut	3/1/2024 6:27:58 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software



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Manual Integration Report

Sequence:

BF022924

Instrument

BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICV040	BF137447.D	1,4-Dichlorobenzene-d4	Jagrut	3/1/2024 6:27:58 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICV040	BF137447.D	4-Nitroaniline	Jagrut	3/1/2024 6:27:58 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software
SSTDICV040	BF137447.D	Caprolactam	Jagrut	3/1/2024 6:27:58 PM	mohammad	3/2/2024 1:28:10 AM	Peak Integrated by Software



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Manual Integration Report

Sequence:	BF031524	Instrument	BNA_f

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB159613BS	BF137612.D	Caprolactam	Jagrut	3/18/2024 10:10:37 AM	mohammad	3/19/2024 2:04:07 AM	Peak Integrated by Software
PB159613BSD	BF137613.D	Caprolactam	Jagrut	3/18/2024 10:10:39 AM	mohammad	3/19/2024 2:04:07 AM	Peak Integrated by Software



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Manual Integration Report

Sequence:

bm031324

Instrument

BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC005	BM044596.D	4-Nitroaniline	Jagrut	3/14/2024 10:19:23 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICC005	BM044596.D	Pyridine	Jagrut	3/14/2024 10:19:23 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICC010	BM044597.D	2,2"-oxybis(1-Chloropropane)	Jagrut	3/14/2024 10:19:26 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICC010	BM044597.D	Caprolactam	Jagrut	3/14/2024 10:19:26 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICC060	BM044601.D	Pyridine	Jagrut	3/14/2024 10:19:28 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICC080	BM044602.D	Caprolactam	Jagrut	3/14/2024 10:19:30 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICC080	BM044602.D	Pyridine	Jagrut	3/14/2024 10:19:30 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICV040	BM044603.D	2,2"-oxybis(1-Chloropropane)	Jagrut	3/14/2024 10:19:33 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software
SSTDICV040	BM044603.D	Benzyl Alcohol	Jagrut	3/14/2024 10:19:33 AM	mohammad	3/15/2024 3:29:47 AM	Peak Integrated by Software



Manual Integration Report

Sequence:

BM031824

Instrument

BNA_m

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason



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

Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QC Batch ID # BF022924

Review By	Jagrut	Review On	3/1/2024 6:28:22 PM		
Supervise By	mohammad	Supervise On	3/2/2024 1:28:10 AM		
SubDirectory	BF022924	HP Acquire Method	BNA_F	HP Processing Method	bf022924
STD. NAME		STD REF.#			
Tune/Reschk		SP6397			
Initial Calibration Stds		SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427			
CCC		SP6423			
Internal Standard/PEM		S12014 10ul/1000ul sample			
ICV/I.BLK		SP6406			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	Sampled	Data File Name	Date-Time	Operator	Status
1	DFTPP	BF137438.D	29 Feb 2024 12:14	CG\JU	Ok
2	SSTDICC2.5	BF137439.D	29 Feb 2024 12:44	CG\JU	Ok
3	SSTDICC005	BF137440.D	29 Feb 2024 13:13	CG\JU	Ok,M
4	SSTDICC010	BF137441.D	29 Feb 2024 13:43	CG\JU	Ok,M
5	SSTDICC020	BF137442.D	29 Feb 2024 14:12	CG\JU	Ok,M
6	SSTDICCC040	BF137443.D	29 Feb 2024 14:41	CG\JU	Ok,M
7	SSTDICC050	BF137444.D	29 Feb 2024 16:13	CG\JU	Ok,M
8	SSTDICC060	BF137445.D	29 Feb 2024 16:43	CG\JU	Ok,M
9	SSTDICC080	BF137446.D	29 Feb 2024 17:14	CG\JU	Ok,M
10	SSTDICV040	BF137447.D	29 Feb 2024 17:44	CG\JU	Ok,M
11	PB159345BL	BF137448.D	29 Feb 2024 18:14	CG\JU	Ok,M
12	SP6439	BF137449.D	29 Feb 2024 18:56	CG\JU	Ok,M

M : Manual Integration



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Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QC Batch ID # BF031524

Review By	Jagrut	Review On	3/18/2024 10:11:21 AM
Supervise By	mohammad	Supervise On	3/19/2024 2:04:07 AM
SubDirectory	BF031524	HP Acquire Method	BNA_F
		HP Processing Method	bf022924

STD. NAME	STD REF.#
Tune/Reschk	SP6397
Initial Calibration Stds	SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427
CCC	SP6423
Internal Standard/PEM	S12017 10ul/1000ul sample
ICV/I.BLK	SP6406
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	Data File Name	Date-Time	Operator	Status
1	DFTPP	BF137609.D	15 Mar 2024 13:52	CG\JU	Ok
2	SSTDCCC040	BF137610.D	15 Mar 2024 15:34	CG\JU	Ok
3	PB159613BL	BF137611.D	15 Mar 2024 16:03	CG\JU	Ok
4	PB159613BS	BF137612.D	15 Mar 2024 16:33	CG\JU	Ok,M
5	PB159613BSD	BF137613.D	15 Mar 2024 17:02	CG\JU	Ok,M
6	PB159613BL	BF137614.D	15 Mar 2024 17:31	CG\JU	Not Ok
7	P1747-03	BF137615.D	15 Mar 2024 18:08	CG\JU	ReRun
8	P1771-01	BF137616.D	15 Mar 2024 18:37	CG\JU	Ok,M
9	P1771-01DL	BF137617.D	15 Mar 2024 19:05	CG\JU	Not Ok
10	P1771-05	BF137618.D	15 Mar 2024 19:34	CG\JU	Ok
11	P1771-07	BF137619.D	15 Mar 2024 20:03	CG\JU	Ok,M
12	P1769-01DL	BF137620.D	15 Mar 2024 20:32	CG\JU	Dilution

M : Manual Integration



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

Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QC Batch ID # BM031324

Review By	Jagrut	Review On	3/14/2024 10:20:01 AM		
Supervise By	mohammad	Supervise On	3/15/2024 3:29:47 AM		
SubDirectory	BM031324	HP Acquire Method	BNA_M	HP Processing Method	bm031324
STD. NAME		STD REF.#			
Tune/Reschk		SP6397			
Initial Calibration Stds		SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427			
CCC		SP6423			
Internal Standard/PEM		S12016 10ul/1000ul sample			
ICV/I.BLK		SP6406			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleID	Data File Name	Date-Time	Operator	Status
1	DFTPP	BM044594.D	13 Mar 2024 13:07	MA/JU	Ok
2	SSTDICC2.5	BM044595.D	13 Mar 2024 13:44	MA/JU	Ok
3	SSTDICC005	BM044596.D	13 Mar 2024 14:20	MA/JU	Ok,M
4	SSTDICC010	BM044597.D	13 Mar 2024 14:56	MA/JU	Ok,M
5	SSTDICC020	BM044598.D	13 Mar 2024 15:33	MA/JU	Ok
6	SSTDICCC040	BM044599.D	13 Mar 2024 16:09	MA/JU	Ok
7	SSTDICC050	BM044600.D	13 Mar 2024 16:46	MA/JU	Ok
8	SSTDICC060	BM044601.D	13 Mar 2024 17:22	MA/JU	Ok,M
9	SSTDICC080	BM044602.D	13 Mar 2024 17:59	MA/JU	Ok,M
10	SSTDICV040	BM044603.D	13 Mar 2024 18:35	MA/JU	Ok,M
11	PB159533BL	BM044604.D	13 Mar 2024 19:11	MA/JU	Ok
12	PB159537BS	BM044605.D	13 Mar 2024 19:48	MA/JU	Ok,M
13	PB159537BSD	BM044606.D	13 Mar 2024 20:24	MA/JU	Ok,M
14	P1723-02	BM044607.D	13 Mar 2024 21:00	MA/JU	Ok,M
15	PB159537BL	BM044608.D	13 Mar 2024 21:36	MA/JU	Ok

M : Manual Integration



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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QC Batch ID # BM031824

Review By	Jagrut	Review On	3/18/2024 5:15:46 PM
Supervise By		Supervise On	
SubDirectory	BM031824	HP Acquire Method	BNA_M
		HP Processing Method	BM031324
STD. NAME	STD REF.#		
Tune/Reschk	SP6397		
Initial Calibration Stds	SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427		
CCC	SP6423		
Internal Standard/PEM	S12017 10ul/1000ul sample		
ICV/I.BLK	SP6406		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BM044653.D	18 Mar 2024 11:14	MA/JU	Ok
2	SSTDCCC040	BM044654.D	18 Mar 2024 11:50	MA/JU	Ok
3	PB159613BL	BM044655.D	18 Mar 2024 12:27	MA/JU	Ok
4	P1747-03RE	BM044656.D	18 Mar 2024 13:12	MA/JU	Confirms

M : Manual Integration



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Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QC Batch ID # BF022924

Review By	Jagrut	Review On	3/1/2024 6:28:22 PM				
Supervise By	mohammad	Supervise On	3/2/2024 1:28:10 AM				
SubDirectory	BF022924	HP Acquire Method	BNA_F	HP Processing Method	bf022924		
STD. NAME		STD REF.#					
Tune/Reschk		SP6397					
Initial Calibration Stds		SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427					
CCC		SP6423					
Internal Standard/PEM		S12014 10ul/1000ul sample					
ICV/I.BLK		SP6406					
Surrogate Standard							
MS/MSD Standard							
LCS Standard							

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BF137438.D	29 Feb 2024 12:14		CG\JU	Ok
2	SSTDICC2.5	SSTDICC2.5	BF137439.D	29 Feb 2024 12:44		CG\JU	Ok
3	SSTDICC005	SSTDICC005	BF137440.D	29 Feb 2024 13:13	Compound #4,32,41,54,56,65,70,77,85 removed from 5ppm	CG\JU	Ok,M
4	SSTDICC010	SSTDICC010	BF137441.D	29 Feb 2024 13:43		CG\JU	Ok,M
5	SSTDICC020	SSTDICC020	BF137442.D	29 Feb 2024 14:12	Compound #4,32,41,54,56,85 Kept on LR	CG\JU	Ok,M
6	SSTDICCC040	SSTDICCC040	BF137443.D	29 Feb 2024 14:41	Method is Good For DOD and Good for 625.1 Method	CG\JU	Ok,M
7	SSTDICC050	SSTDICC050	BF137444.D	29 Feb 2024 16:13		CG\JU	Ok,M
8	SSTDICC060	SSTDICC060	BF137445.D	29 Feb 2024 16:43		CG\JU	Ok,M
9	SSTDICC080	SSTDICC080	BF137446.D	29 Feb 2024 17:14		CG\JU	Ok,M
10	SSTDICV040	ICVBF022924	BF137447.D	29 Feb 2024 17:44		CG\JU	Ok,M
11	PB159345BL	PB159345BL	BF137448.D	29 Feb 2024 18:14		CG\JU	Ok,M
12	SP6439	SP6439	BF137449.D	29 Feb 2024 18:56	8270/625 SPIKE	CG\JU	Ok,M

M : Manual Integration



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Instrument ID: BNA_F

Daily Analysis Runlog For Sequence/QC Batch ID # BF031524

Review By	Jagrut	Review On	3/18/2024 10:11:21 AM				
Supervise By	mohammad	Supervise On	3/19/2024 2:04:07 AM				
SubDirectory	BF031524	HP Acquire Method	BNA_F	HP Processing Method	bf022924		
STD. NAME		STD REF.#					
Tune/Reschk		SP6397					
Initial Calibration Stds		SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427					
CCC		SP6423					
Internal Standard/PEM		S12017 10ul/1000ul sample					
ICV/I.BLK		SP6406					
Surrogate Standard							
MS/MSD Standard							
LCS Standard							

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BF137609.D	15 Mar 2024 13:52		CG\JU	Ok
2	SSTDCCC040	SSTDCCC040	BF137610.D	15 Mar 2024 15:34		CG\JU	Ok
3	PB159613BL	PB159613BL	BF137611.D	15 Mar 2024 16:03		CG\JU	Ok
4	PB159613BS	PB159613BS	BF137612.D	15 Mar 2024 16:33		CG\JU	Ok,M
5	PB159613BSD	PB159613BSD	BF137613.D	15 Mar 2024 17:02		CG\JU	Ok,M
6	PB159613BL	PB159613BL	BF137614.D	15 Mar 2024 17:31	Analyzed for Contamination check.	CG\JU	Not Ok
7	P1747-03	MW-01	BF137615.D	15 Mar 2024 18:08	Surrogate Fail	CG\JU	ReRun
8	P1771-01	COMP-1	BF137616.D	15 Mar 2024 18:37		CG\JU	Ok,M
9	P1771-01DL	COMP-1DL	BF137617.D	15 Mar 2024 19:05	Not Required	CG\JU	Not Ok
10	P1771-05	COMP-3	BF137618.D	15 Mar 2024 19:34		CG\JU	Ok
11	P1771-07	COMP-4	BF137619.D	15 Mar 2024 20:03		CG\JU	Ok,M
12	P1769-01DL	MW-2DL	BF137620.D	15 Mar 2024 20:32	Need Further 5X	CG\JU	Dilution

M : Manual Integration



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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QC Batch ID # BM031324

Review By	Jagrut	Review On	3/14/2024 10:20:01 AM				
Supervise By	mohammad	Supervise On	3/15/2024 3:29:47 AM				
SubDirectory	BM031324	HP Acquire Method	BNA_M	HP Processing Method	bm031324		
STD. NAME		STD REF.#					
Tune/Reschk Initial Calibration Stds		SP6397 SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427					
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard		SP6423 S12016 10ul/1000ul sample SP6406					

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BM044594.D	13 Mar 2024 13:07		MA/JU	Ok
2	SSTDICC2.5	SSTDICC2.5	BM044595.D	13 Mar 2024 13:44		MA/JU	Ok
3	SSTDICC005	SSTDICC005	BM044596.D	13 Mar 2024 14:20	Compound#32,54,56,65,77 removed from 5 ppm	MA/JU	Ok,M
4	SSTDICC010	SSTDICC010	BM044597.D	13 Mar 2024 14:56		MA/JU	Ok,M
5	SSTDICC020	SSTDICC020	BM044598.D	13 Mar 2024 15:33	Compound #32,54 Kept on LR	MA/JU	Ok
6	SSTDICCC040	SSTDICCC040	BM044599.D	13 Mar 2024 16:09	The Calibration is Good For 8270 DOD and also for 625.1 Method.	MA/JU	Ok
7	SSTDICC050	SSTDICC050	BM044600.D	13 Mar 2024 16:46		MA/JU	Ok
8	SSTDICC060	SSTDICC060	BM044601.D	13 Mar 2024 17:22		MA/JU	Ok,M
9	SSTDICC080	SSTDICC080	BM044602.D	13 Mar 2024 17:59		MA/JU	Ok,M
10	SSTDICV040	ICVBM031324	BM044603.D	13 Mar 2024 18:35		MA/JU	Ok,M
11	PB159533BL	PB159533BL	BM044604.D	13 Mar 2024 19:11		MA/JU	Ok
12	PB159537BS	PB159537BS	BM044605.D	13 Mar 2024 19:48		MA/JU	Ok,M
13	PB159537BSD	PB159537BSD	BM044606.D	13 Mar 2024 20:24		MA/JU	Ok,M
14	P1723-02	EFF-WW	BM044607.D	13 Mar 2024 21:00		MA/JU	Ok,M
15	PB159537BL	PB159537BL	BM044608.D	13 Mar 2024 21:36		MA/JU	Ok

M : Manual Integration



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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QC Batch ID # BM031824

Review By	Jagrut	Review On	3/18/2024 5:15:46 PM					
Supervise By		Supervise On						
SubDirectory	BM031824	HP Acquire Method	BNA_M	HP Processing Method	BM031324			
STD. NAME		STD REF.#						
Tune/Reschk		SP6397						
Initial Calibration Stds		SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,SP6427						
CCC		SP6423						
Internal Standard/PEM		S12017 10ul/1000ul sample						
ICV/I.BLK		SP6406						
Surrogate Standard								
MS/MSD Standard								
LCS Standard								

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BM044653.D	18 Mar 2024 11:14		MA/JU	Ok
2	SSTDCCC040	SSTDCCC040	BM044654.D	18 Mar 2024 11:50		MA/JU	Ok
3	PB159613BL	PB159613BL	BM044655.D	18 Mar 2024 12:27		MA/JU	Ok
4	P1747-03RE	MW-01RE	BM044656.D	18 Mar 2024 13:12	Surrogate Fail	MA/JU	Confirm

M : Manual Integration

SOP ID: M625.1-BNA-20

Clean Up SOP #: N/A

Matrix: Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3574

Extraction By: RP

Filter By: RP

pH Meter ID: N/A

Hood ID: 3,6,7

Extraction Start Date: 03/14/2024

Extraction Start Time: 11:40

Extraction End Date: 03/14/2024

Extraction End Time: 16:35

Concentration By: RS

Supervisor By: rajesh

Extraction Method: ☒ Separatory Funnel☐ Continuous Liquid/Liquid☐ Sonication☐ Waste Dilution☐ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1.	1.0ML	50/100 PPM	SP6439
Surrogate	1.0ML	100 PPM	SP6438
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	E3707
Baked Na2SO4	N/A	EP2458
10N NaOH	N/A	EP2439
H2SO4 1:1	N/A	EP2416
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673. pH Adjusted <2 with 1:1 H2SO4 & >11 with 10 N NaOH.

KD Bath ID: WATER BATH-1

Envap ID: NE VAP-02

KD Bath Temperature: 60 °C

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
03/14/24 16:40	RP (Ext. Lab) Preparation Group	RC/SVOC Analysis Group

Analytical Method: M625.1-BNA-20

Concentration Date: 03/14/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB159613BL	SBLK613	SVOC-NYCD	1000	6	ritesh	rajesh	1			SEP-9
PB159613BS	SLCS613	SVOC-NYCD	1000	6	ritesh	rajesh	1			10
PB159613BS D	SLCSD613	SVOC-NYCD	1000	6	ritesh	rajesh	1			11
P1747-03	MW-01	SVOC-NYCD	970	6	ritesh	rajesh	1	N		12

* Extracts relinquished on the same date as received.

8
3/14/24

WORKLIST(Hardcopy Internal Chain)

Worklist Name : P1747S

Worklist ID : 178615

Department : Extraction

Date : 03-14-2024 11:38:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P1747-03	MMW-01	Water	SVOC-NYCD	Cool 4 deg C	LIR001	I31	03/13/2024	625.1

Date/Time 03/14/24 11:39
 Raw Sample Received by: PS (Sep 24)
 Raw Sample Relinquished by: CL SM

Date/Time 03/14/24 11:50
 Raw Sample Received by: CL SM
 Raw Sample Relinquished by: PS (Sep 24)



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Prep Standard - Chemical Standard Summary

Order ID : P1747

Test : SVOC-NYCD

Prepbatch ID : PB159613,

Sequence ID/Qc Batch ID: BF031524,BM031824,

Standard ID :

EP2416,EP2439,EP2458,SP6397,SP6405,SP6406,SP6419,SP6420,SP6421,SP6422,SP6423,SP6424,SP6425,SP6426,
SP6427,SP6438,SP6439,

Chemical ID :

E3551,E3657,E3673,E3678,E3699,E3706,E3707,M5673,S10101,S10243,S10396,S10591,S10798,S10971,S10995,S 11
014,S11089,S11094,S11100,S11136,S11137,S11142,S11144,S11292,S11293,S11294,S11295,S11296,S11297,S11298,S
11299,S11411,S11523,S11556,S11584,S11585,S11587,S11588,S11589,S11590,S11596,S11597,S11751,S11752,S11753
,S11754,S11755,S11881,S11883,S11884,S11885,S11886,S11887,S11888,S11889,S12013,S12017 10ul/1000ul
sample,S9923,W2606,

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
314	1.1 H2SO4 SOLN	EP2416	11/29/2023	05/29/2024	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/29/2023
<u>FROM</u>	1000.00000ml of M5673 + 1000.00000ml of W2606 = Final Quantity: 2000.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1874	10 N SODIUM HYDROXIDE SOLN	EP2439	01/19/2024	06/03/2024	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/19/2024
<u>FROM</u>	1000.00000ml of W2606 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml							

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2458	03/08/2024	07/03/2024	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 03/08/2024
<u>FROM</u>	4000.00000gram of E3551 = Final Quantity: 4000.000 gram							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3895	50 ug/ml DFTPP 8270E	SP6397	01/15/2024	06/29/2024	Jagrut Upadhyay	None	None	mohammad ahmed 01/15/2024
<u>FROM</u>	1.00000ml of S10243 + 19.00000ml of E3673 = Final Quantity: 20.000 ml							

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[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
416	40 ng BNA ICV, 40 PPM	SP6406	01/19/2024	05/15/2024	Jagrut Upadhyay	None	None	mohammad ahmed 01/22/2024
<u>FROM</u>	0.01000ml of S11523 + 0.60000ml of E3678 + 0.40000ml of SP6405 = Final Quantity: 1.010 ml							

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3764	8270/625 Stock solution 100 ng	SP6419	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.26700ml of S10101 + 0.40000ml of S11411 + 0.50000ml of S9923 + 1.00000ml of S10798 + 1.00000ml of S11089 + 1.00000ml of S11094 + 1.00000ml of S11100 + 1.00000ml of S11144 + 3.83300ml of E3706 = Final Quantity: 10.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
413	80 ng BNA ICC, 80 PPM	SP6420	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.20000ml of E3706 + 0.80000ml of SP6419 = Final Quantity: 1.010 ml							

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
412	60 ng BNA ICC, 60 PPM	SP6421	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.40000ml of E3706 + 0.60000ml of SP6419 = Final Quantity: 1.010 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
411	50 ng BNA ICC, 50 PPM	SP6422	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.50000ml of E3706 + 0.50000ml of SP6419 = Final Quantity: 1.010 ml							

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
410	40 ng BNA ICC, 40 PPM	SP6423	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.60000ml of E3706 + 0.40000ml of SP6419 = Final Quantity: 1.010 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3678	20 ng BNA ICC, 20 PPM	SP6424	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.80000ml of E3706 + 0.20000ml of SP6419 = Final Quantity: 1.010 ml							

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
408	10 ng BNA ICC, 10 PPM	SP6425	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.90000ml of E3706 + 0.10000ml of SP6419 = Final Quantity: 1.010 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
407	5 ng BNA ICC, 5 PPM	SP6426	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.95000ml of E3706 + 0.05000ml of SP6419 = Final Quantity: 1.010 ml							

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
175	2.5 ng BNA ICC, 2.5 PPM	SP6427	02/22/2024	05/02/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/23/2024
<u>FROM</u>	0.01000ml of S12013 + 0.50000ml of E3706 + 0.50000ml of SP6426 = Final Quantity: 1.010 ml							

<u>Recipe</u>	<u>ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration</u> <u>Date</u>	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
	20	625 Surrogate Solution, 100 PPM BN/100 PPM ACID	SP6438	02/27/2024	07/11/2024	Jagrut Upadhyay	None	None	mohammad ahmed 02/27/2024
<u>FROM</u>	1.00000ml of S10971 + 2.00000ml of S10995 + 97.00000ml of E3699 = Final Quantity: 100.000 ml								

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
171	8270/625 Spike Solution, 50/100 PPM	SP6439	02/29/2024	05/14/2024	Jagrut Upadhyay	None	None	Yogesh Patel 03/12/2024
<u>FROM</u> 0.10000ml of S11137 + 0.30000ml of S11136 + 0.40000ml of S10396 + 0.40000ml of S10591 + 0.40000ml of S11014 + 0.40000ml of S11142 + 0.90000ml of S11299 + 0.90000ml of S11597 + 0.90000ml of S11881 + 1.10000ml of S11754 + 1.30000ml of S11292 + 1.30000ml of S11293 + 1.30000ml of S11294 + 1.30000ml of S11295 + 1.30000ml of S11296 + 1.30000ml of S11297 + 1.30000ml of S11298 + 1.30000ml of S11584 + 1.30000ml of S11585 + 1.30000ml of S11587 + 1.30000ml of S11588 + 1.30000ml of S11589 + 1.30000ml of S11590 + 1.30000ml of S11596 + 1.30000ml of S11752 + 1.30000ml of S11753 + 1.30000ml of S11755 + 1.30000ml of S11883 + 1.30000ml of S11884 + 1.30000ml of S11885 + 1.30000ml of S11886 + 1.30000ml of S11887 + 1.30000ml of S11888 + 1.30000ml of S11889 + 163.00000ml of E3699 = Final Quantity: 200.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/03/2024	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	06/03/2024	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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	23K0962009	06/29/2024	12/29/2023 / Rajesh	12/15/2023 / Rajesh	E3673

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)	23K0962009	07/16/2024	01/16/2024 / Rajesh	01/11/2024 / Rajesh	E3678

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)	23H14626005	08/21/2024	02/21/2024 / RUPESH	02/14/2024 / RUPESH	E3699

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)	24A1562007	08/19/2024	02/19/2024 / RUPESH	01/31/2024 / RUPESH	E3706

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24A1562007	08/28/2024	02/28/2024 / Rajesh	02/19/2024 / Rajesh	E3707

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)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673

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	05/02/2024	11/02/2023 / Jagrut	12/09/2021 / Christian	S10101

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH ₂ Cl ₂ , 1mL,	A0182667	07/15/2024	01/15/2024 / Jagrut	03/18/2022 / Christian	S10243

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	05/15/2024	11/15/2023 / yogesh	05/18/2022 / Christian	S10396

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	08/29/2024	02/29/2024 / Jagrut	07/05/2022 / Christian	S10591

CHEMICAL RECEIPT LOG BOOK

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	08/22/2024	02/22/2024 / Jagrut	09/20/2022 / Christian	S10798

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	A0188108	07/11/2024	01/11/2024 / Jagrut	12/28/2022 / Christian	S10971

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH ₂ Cl ₂ ,5ml	A0189418	07/11/2024	01/11/2024 / Jagrut	12/28/2022 / Christian	S10995

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]	A0193449	05/14/2024	11/14/2023 / yogesh	01/13/2023 / Christian	S11014

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	08/22/2024	02/22/2024 / Jagrut	02/07/2023 / Christian	S11089

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)	441819	06/01/2024	02/22/2024 / Jagrut	02/07/2023 / Christian	S11094

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	478725	08/22/2024	02/22/2024 / Jagrut	02/07/2023 / Christian	S11100

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]	A0194698	08/29/2024	02/29/2024 / Jagrut	02/20/2023 / Christian	S11136

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]	A0194698	05/15/2024	11/15/2023 / yogesh	02/20/2023 / Christian	S11137

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	07/18/2024	01/18/2024 / Rahul	02/20/2023 / Christian	S11142

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	406703	08/22/2024	02/22/2024 / Jagrut	03/06/2023 / Christian	S11144

days)

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]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11292

[CS 4978-1]



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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]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11293

[CS 4978-1]

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]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11294

[CS 4978-1]

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]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11295

[CS 4978-1]

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]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11296

[CS 4978-1]

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]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11297

[CS 4978-1]

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]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11298

[CS 4978-1]

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0197354	08/29/2024	02/29/2024 / Jagrut	04/24/2023 / Christian	S11299

[CS 4978-1]

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	503442	06/27/2024	12/27/2023 / Rahul	07/17/2023 / yogesh	S11411

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	A0196843	07/17/2024	01/17/2024 / Rahul	08/28/2023 / Yogesh	S11523

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]	A0201940	05/15/2024	11/15/2023 / yogesh	09/18/2023 / Kiran	S11556

[CS 4978-1]

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]	A0201998	07/18/2024	01/18/2024 / Rahul	09/18/2023 / Kiran	S11584

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0201998	07/23/2024	01/23/2024 / Rahul	09/18/2023 / Kiran	S11585

[CS 4978-2]

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0201998	08/29/2024	02/29/2024 / Jagrut	09/18/2023 / Kiran	S11587

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0201998	08/29/2024	02/29/2024 / Jagrut	09/18/2023 / Kiran	S11588

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0201998	08/29/2024	02/29/2024 / Jagrut	09/18/2023 / Kiran	S11589

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0201998	08/29/2024	02/29/2024 / Jagrut	09/18/2023 / Kiran	S11590

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0201998	05/15/2024	11/15/2023 / yogesh	09/18/2023 / Kiran	S11596

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0201998	08/29/2024	02/29/2024 / Jagrut	09/18/2023 / Kiran	S11597

[CS 4978-2]

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	07/18/2024	01/18/2024 / Rahul	11/21/2023 / Rahul	S11751

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	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / Rahul	S11752

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	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / Rahul	S11753

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	07/23/2024	01/23/2024 / Rahul	11/21/2023 / Rahul	S11754

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	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / Rahul	S11755

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]	A0197982	07/19/2024	01/19/2024 / Jagrut	11/21/2023 / rahul	S11881

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0197982	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / rahul	S11883

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0197982	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / rahul	S11884

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0197982	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / rahul	S11885

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0197982	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / rahul	S11886

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0197982	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / rahul	S11887

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0197982	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / rahul	S11888

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0197982	08/29/2024	02/29/2024 / Jagrut	11/21/2023 / rahul	S11889

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH ₂ Cl ₂ , 1mL	A0201320	08/20/2024	02/20/2024 / Rahul	12/21/2023 / Rahul	S12013

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	459696	06/27/2024	12/27/2023 / Rahul	09/03/2021 / Christian	S9923

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	10/24/2024	10/24/2019 / apatel	10/24/2019 / apatel	W2606



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Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-010074-07	406703	≤ -10 °C	Methylene Chloride	3/30/2025	3,3'-Dichlorobenzidine Solution, 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
3,3'-dichlorobenzidine	91-94-1	99.5	74.3.26P	989 ± 7.53

Received on
02/07/23
by
CG
S11084
to
S11088

*Not a certified value

Certified By: _____

Jacob Mulloy
Chemist

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Page 1 of 1

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

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Certified By: _____

Shane Overcash
Chemist

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Page 1 of 1

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

Received on
09/20/22
by CG

S10795
to
S10799

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Certified By: _____

Shane Overcash
Chemist

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Page 1 of 1

Catalog No.: Lot No.: **Storage:** **Solvent:** **Exp. Date:** **Description:**
Z-112090 440246 $\leq -10^{\circ}\text{C}$ Methylene Chloride 2/16/2026 CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL
-04

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

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S9236
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Certified By: _____

Erica Castiglione
Chemist



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Page 1 of 1

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-010442-07	441819	≤ -10 °C	Methylene Chloride	6/1/2024	Benzaldehyde Solution, 1000 mg/L, 1.3 mL	
Compound			CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
benzaldehyde			100-52-7	99.5	442.3.2.1P	1001 ± 12.89

Received on
02/07/23
by CG
S 11094
to
S 11095

*Not a certified value

Katherine Wood

Certified By: _____

Katherine Wood
Chemist

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Page 1 of 1

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-010223 -01	459696	≤ -10 °C	Methylene Chloride	7/13/2024	1,4-Dioxane Solution, 2,000 mg/L, 1 mL	
Compound			CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane			123-91-1	100	223.1.3P	1993 ± 21.11

Received

on

04/22/22

by

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S10318

to

S10322

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Certified By: _____

Joanna Radu

Joanna Radu
Chemist

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Page 1 of 4

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:
Z-110381-01 478725 $\leq -10^{\circ}\text{C}$ Methylene Chloride 3/29/2027 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	997.8 $\pm$ 9.78
acenaphthylene	208-96-8	97.6	14.290.1P	1001 $\pm$ 9.81
aniline	62-53-3	99.9	64.7.1P	999.6 $\pm$ 9.79
anthracene	120-12-7	99.5	15.7.1P	999.4 $\pm$ 9.8
azobenzene	103-33-3	98.1	252.7.2P	1001 $\pm$ 9.82
benzo[a]anthracene	56-55-3	98.7	16.7.2.5P	1002 $\pm$ 5.75
benzo[b]fluoranthene	205-99-2	98.7	17.1.16P	1000 $\pm$ 9.8
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1005 $\pm$ 11.01
benzo[ghi]perylene	191-24-2	95	19.286.3.1P	999.4 $\pm$ 13.96
benzo[a]pyrene	50-32-8	98.3	20.286.1P	999.9 $\pm$ 5.74
benzyl alcohol	100-51-6	99.9	65.18.1P	1002 $\pm$ 9.83
bis(2-chloroethoxy)methane	111-91-1	98.5	31.3.11P	1000 $\pm$ 17.05
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1000 $\pm$ 13.85
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.14P	999.7 $\pm$ 14.69
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	1006 $\pm$ 9.86
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	1004 $\pm$ 17.12
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1.1P	1000 $\pm$ 13.85
butyl benzyl phthalate	85-68-7	98	36.1.5P	990.8 $\pm$ 16.9
carbazole	86-74-8	99	239.7.1P	996.9 $\pm$ 9.81

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Certified By: _____

Clint Tipton
Chemist

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Page 2 of 4

Catalog No.: Z-110381-01

Lot No.: 478725

Expiration Date: 3/29/2027

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
4-chloroaniline	106-47-8	100	66.7.1P	1004 ± 9.83
4-chlorophenylphenyl ether	7005-72-3	98	37.158.2P	1000 ± 17.05
4-chloro-3-methylphenol	59-50-7	99.9	102.7.1.1P	999.7 ± 5.74
2-chloronaphthalene	91-58-7	99.8	42.7.5.2P	1010 ± 9.89
2-chlorophenol	95-57-8	99.9	103.1.3.1P	999.7 ± 5.74
chrysene	218-01-9	96	21.286.2P	1001 ± 13.98
dibenz[a,h]anthracene	53-70-3	99.44	22.286.3P	1010 ± 9.85
dibenzofuran	132-64-9	100	67.7.2.1P	1001 ± 9.76
di-n-butyl phthalate	84-74-2	99.8	40.9.2P	999.8 ± 17.05
1,2-dichlorobenzene	95-50-1	99.5	43.1.2P	992.4 ± 9.72
1,3-dichlorobenzene	541-73-1	99.8	44.1.2P	993.8 ± 9.73
1,4-dichlorobenzene	106-46-7	99.9	45.29.2P	991.8 ± 9.71
2,4-dichlorophenol	120-83-2	99.2	104.9.1.1P	1011 ± 5.8
diethyl phthalate	84-66-2	99.8	38.7.1P	999.1 ± 13.84
2,4-dimethylphenol	105-67-9	99.6	105.7.1.1P	999.3 ± 13.84
dimethyl phthalate	131-11-3	99.9	39.9.2P	1001 ± 13.87
1,2-dinitrobenzene	528-29-0	99.86	86.7.3.1P	1001 ± 9.76
1,3-dinitrobenzene	99-65-0	100	313.7.2P	1002 ± 9.83
1,4-dinitrobenzene	100-25-4	99.5	907.1.2P	998.5 ± 13.95
2,4-dinitrophenol	51-28-5	99.9	106.1.6DP	1000 ± 13.85
2,4-dinitrotoluene	121-14-2	100	87.7.3P	1002 ± 13.88
2,6-dinitrotoluene	606-20-2	99.4	88.7.2.1P	1001 ± 13.87
di-n-octyl phthalate	117-84-0	99.1	41.7.5P	989.4 ± 13.7
diphenylamine	122-39-4	99.9	78.29.1P	999.8 ± 17.05
2,3,5,6-tetrachlorophenol	935-95-5	99	1112.18.1P	1012 ± 14.14
fluoranthene	206-44-0	98.6	23.7.3P	1005 ± 5.77
fluorene	86-73-7	98.5	24.29.1P	1002 ± 9.82

*Not a certified value

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

Certified By:



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 gravimetrically.

Certificate of Analysis

Page 3 of 4

Catalog No.: Z-110381-01

Lot No.: 478725

Expiration Date: 3/29/2027

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	994.2 ± 13.88
hexachlorobutadiene	87-68-3	98	47.158.3.1P	988.2 ± 13.8
hexachlorocyclopentadiene	77-47-4	96.5	48.2.1P	994.5 ± 13.88
hexachloroethane	67-72-1	99.9	49.1.4P	993.4 ± 9.73
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.3P	1002 ± 5.75
isophorone	78-59-1	98.8	90.1.2P	999.9 ± 5.74
2-methyl-4,6-dinitrophenol	534-52-1	100	107.1.4.3DP	1003 ± 5.76
1-methylnaphthalene	90-12-0	98.4	249.7.4P	1001 ± 9.81
2-methylnaphthalene	91-57-6	97.4	68.7.2P	1008 ± 5.79
2-methylphenol	95-48-7	99.6	114.7.3P	1002 ± 13.88
3-methylphenol	108-39-4	99.1	115.7.4P	499.7 ± 6.92
4-methylphenol	106-44-5	99.5	116.7.1P	500.5 ± 6.93
naphthalene	91-20-3	99.8	26.9.2P	998.8 ± 5.73
2-nitroaniline	88-74-4	99.7	69.29.1P	1003 ± 9.82
3-nitroaniline	99-09-2	100	70.7.2P	1000 ± 9.79
4-nitroaniline	100-01-6	99.7	71.29.1P	999.8 ± 9.79
nitrobenzene	98-95-3	100	94.7.1P	1001 ± 13.87
2-nitrophenol	88-75-5	99.1	108.29.1P	1000 ± 13.85
4-nitrophenol	100-02-7	99.9	109.8.1P	1000 ± 5.74
N-nitrosodimethylamine	62-75-9	99.5	57.3.19P	999.4 ± 14.68
N-nitrosodi-n-propylamine	621-64-7	99.8	59.286.1P	1001 ± 17.07
pentachlorophenol	87-86-5	99	110.1.7P	1000 ± 13.85
phenanthrene	85-01-8	98.9	27.1.3P	1002 ± 13.99
phenol	108-95-2	100	112.7.1P	1011 ± 13.97
pyrene	129-00-0	98.5	28.9.1.1P	1011 ± 5.8
pyridine	110-86-1	100	101.24.1P	999.6 ± 9.74
2,3,4,6-Tetrachlorophenol	58-90-2	91.8	120.421.1P	999.7 ± 13.96

*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:



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 gravimetrically.

Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 478725

Expiration Date: 3/29/2027

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	999.2 ± 9.79
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	1010 ± 13.99
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	1001 ± 13.87

*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

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

Certified By:



Clint Tipton
Chemist



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Received on
03/10/22
by
CG
S10242
to
S10247

Catalog No. : 31615 **Lot No.:** A0182667
Description : GC/MS Tuning Mixture
GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2025 **Storage:** 10°C or colder
Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachlorophenol CAS # 87-86-5 (Lot 211229RSR) Purity 99%	1,003.6 µg/mL	+/- 5.8897 µg/mL +/- 45.7132 µg/mL +/- 66.0037 µg/mL	Gravimetric Unstressed Stressed
2	DFTPP (Decafluorotriphenylphosphine) CAS # 5074-71-5 (Lot Q117-147) Purity 95%	1,006.6 µg/mL	+/- 5.9074 µg/mL +/- 45.8508 µg/mL +/- 66.2023 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine CAS # 92-87-5 (Lot 211228JLM) Purity 99%	1,008.4 µg/mL	+/- 5.9179 µg/mL +/- 45.9318 µg/mL +/- 66.3193 µg/mL	Gravimetric Unstressed Stressed
4	4,4'-DDT CAS # 50-29-3 (Lot 210916JLM) Purity 99%	1,007.6 µg/mL	+/- 5.9132 µg/mL +/- 45.8954 µg/mL +/- 66.2667 µg/mL	Gravimetric Unstressed Stressed
Solvent:	Methylene chloride CAS # 75-09-2 Purity 99%			

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

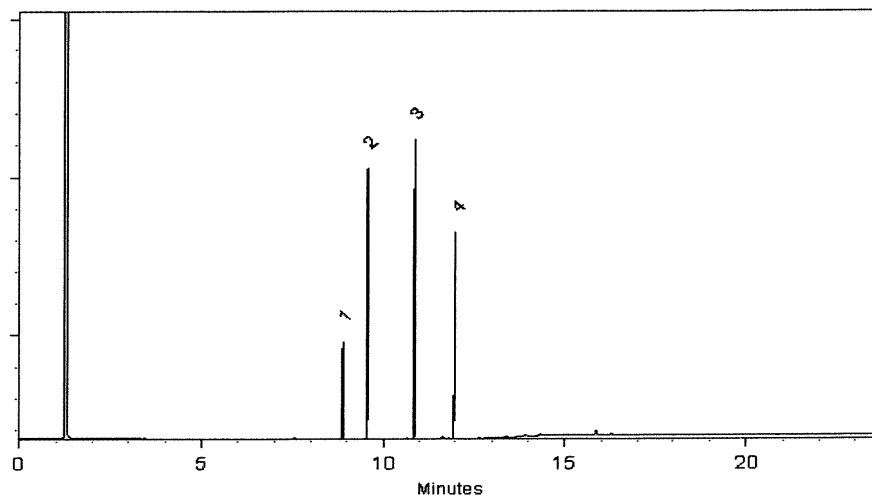
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Morgan Craighead - Mix Technician

Date Mixed: 08-Mar-2022

Balance: B345965662

Marlene Cowan - Operations Tech I

Date Passed: 10-Mar-2022

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



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Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

Received by
CG ON
05/18/22
S10393
+U
S10402

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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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 Suckal - 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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



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. : 31087 **Lot No.:** A0188108
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 : August 31, 2030 **Storage:** 10°C or colder
Ship: Ambient

Received by
CG on
12/28/22
S10951
to
S10980

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Fluorophenol CAS # 367-12-4 Purity 99% (Lot STBF3761V)	10,088.5 µg/mL	+/- 58.6554 µg/mL Gravimetric +/- 294.4162 µg/mL Unstressed +/- 357.2628 µg/mL Stressed
2	Phenol-d6 CAS # 13127-88-3 Purity 99% (Lot PR-31262)	10,043.3 µg/mL	+/- 58.3923 µg/mL Gravimetric +/- 293.0957 µg/mL Unstressed +/- 355.6603 µg/mL Stressed
3	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99% (Lot MKCJ7664)	10,010.0 µg/mL	+/- 58.1990 µg/mL Gravimetric +/- 292.1253 µg/mL Unstressed +/- 354.4829 µg/mL Stressed

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

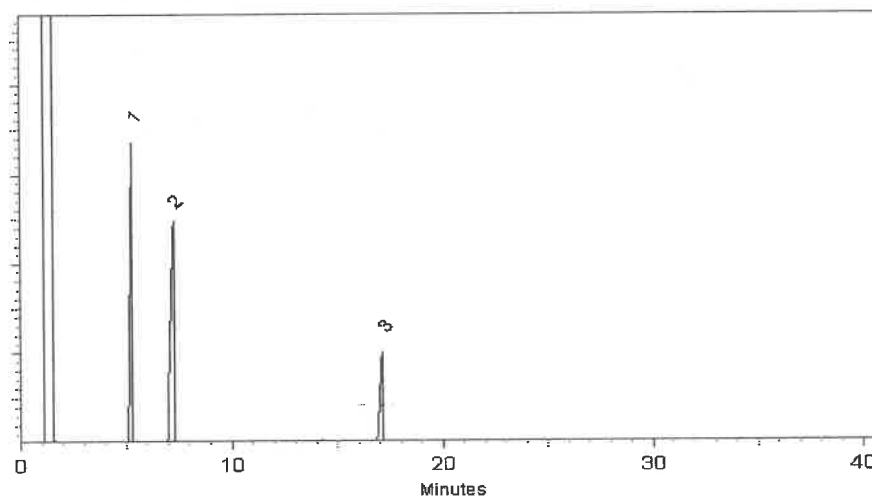
250°C

Det. Temp:

330°C

Det. Type:

FID



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


Morgan Craighead - Mix Technician

Date Mixed: 02-Aug-2022 Balance: 1127510105


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Aug-2022

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



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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Received by
CG on
12/28/22
\$10981
to
S11010

Catalog No. : 31086 **Lot No.:** A0189418
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 : August 31, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Nitrobenzene-d5 CAS # 4165-60-0 (Lot PR-29940A) Purity 99%	5,009.8 µg/mL	+/- 29.1271 µg/mL Gravimetric +/- 225.6421 µg/mL Unstressed +/- 250.3778 µg/mL Stressed
2	2-Fluorobiphenyl CAS # 321-60-8 (Lot 00021384) Purity 99%	5,026.6 µg/mL	+/- 29.2250 µg/mL Gravimetric +/- 226.4003 µg/mL Unstressed +/- 251.2191 µg/mL Stressed
3	p-Terphenyl-d14 CAS # 1718-51-0 (Lot PR-30504) Purity 99%	5,027.3 µg/mL	+/- 29.2289 µg/mL Gravimetric +/- 226.4304 µg/mL Unstressed +/- 251.2524 µg/mL Stressed

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

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

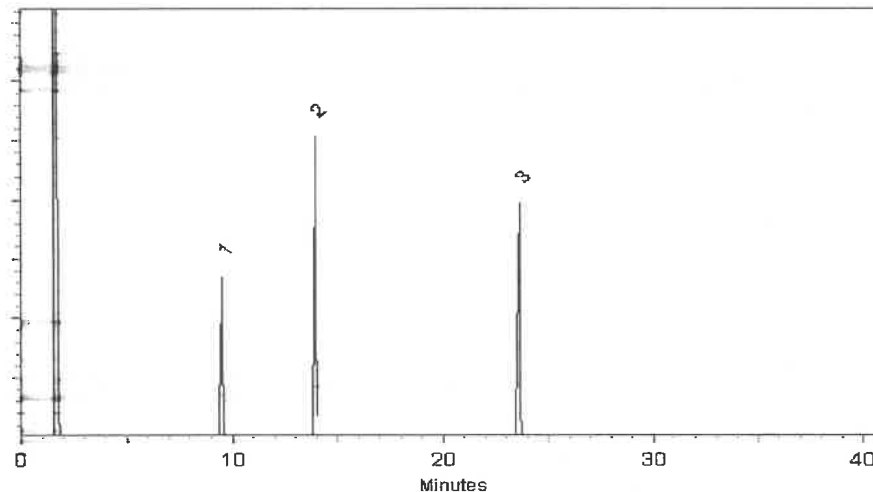
250°C

Det. Temp:

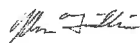
330°C

Det. Type:

FID



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


John Friedline - Operations Technician I

Date Mixed: 09-Sep-2022

Balance: 1128353505


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Sep-2022

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



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Fax: 1-814-353-1309

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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. : 555872 **Lot No.:** A0193449
Description : Custom Pentachlorophenol Standard
Custom Pentachlorophenol Standard 25,000µg/mL, Methanol,
1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2026 **Storage:** 10°C or colder
Ship: Ambient

Received on
01/13/23
by
CG
S11011
+0
S11015

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP221012	99%	25,050.0 µg/mL	+/- 778.6378

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

Russ Bookhamer

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Jan-2023

Balance: B442140311

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:

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

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

- 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.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555870 Lot No.: A0194698
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 : February 28, 2026 Storage: 10°C or colder
Ship: Ambient

CERTIFIED

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)
1	2,4-Dinitrophenol	51-28-5	DR221221RSR	99%	25,195.0 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 8

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:

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ty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability
ty and shipping stability uncertainty and were combined using the following formula:

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

erage factor of 2, which gives a level of confidence of approximately 95%.

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Notes:

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Γ traceable weights, and/or dilutions with Class A glassware.

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Ship: Ambient

CERTIFIED

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)
1	2,4-Dinitrophenol	51-28-5	DR221221RSR	99%	25,195.0 µg/mL

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

Russ Bookhamer

Russ Bookhamer - Operations Technician I

Date Mixed: 15-Feb-2023

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gravimetric



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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%

Dan F. Brown

Russ Bookhamer - Operations Technician I

Date Mixed: 15-Feb-2023

Balance: B442140311

Manufactured under Restek
Registered Quality
Certificate #FM1

ified Reference Material Notes

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Notes:

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Catalog No. : 555223 **Lot No.:** A0197354
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 : April 30, 2025 **Storage:** 10°C or colder
Handling: This product is photosensitive. **Ship:** Ambient

Received on
04/24/23
by
CG
~~SP11277~~ S11277
to
S11306

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	S230321RSR	99%	1,000.0 µg/mL	+/- 22.9569
2	Atrazine	1912-24-9	5FYWL	99%	1,001.0 µg/mL	+/- 22.9799
3	Benzidine	92-87-5	S221205RSR	99%	1,000.0 µg/mL	+/- 22.9569
4	epsilon-Caprolactam	105-60-2	I16X016	99%	1,001.0 µg/mL	+/- 22.9799

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

Matt Fragassi - Mix Technician

Date Mixed: 24-Apr-2023

Balance: 1122030677

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



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**PRODUCTOS
QUÍMICOS
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 ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO 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 foreign 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.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3



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:

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

Storage: Room Temperature

Pellets

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	$\leq 0.005 \%$	$< 0.005 \%$	PASS
Chloride	$\leq 0.005 \%$	0.002 %	PASS
Heavy Metals	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Iron	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Magnesium	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Mercury	$\leq 0.1 \text{ ppm}$	$< 0.1 \text{ ppm}$	PASS
Nickel	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Nitrogen Compounds	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Phosphate	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Potassium	$\leq 0.02 \%$	$< 0.02 \%$	PASS
Purity	$\geq 97.0 \%$	99.2 %	PASS
Sodium Carbonate	$\leq 1.0 \%$	0.5 %	PASS
Sulfate	$\leq 0.003 \%$	$< 0.003 \%$	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

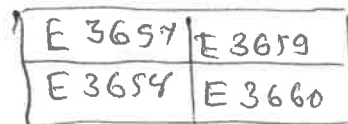
This document has been electronically produced and is valid without a signature.

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.



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



Material No.: 9266-A4
Batch No.: 23K0962009
Manufactured Date: 2023-10-05
Expiration Date: 2025-01-03
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	3
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	10
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.2 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG23J05873

E 3673

Ken Koehnlein
Sr. Manager, Quality Assurance

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



Material No.: 9266-A4
Batch No.: 23K0962009
Manufactured Date: 2023-10-05
Expiration Date: 2025-01-03
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	3
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μ eq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG23J05873

E 3678

Ken Koehnlein
Sr. Manager, Quality Assurance

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03
Batch No.: 23H1462005
Manufactured Date: 2023-07-26
Expiration Date: 2026-07-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

E3699

RS
2/14

Ken Koehnlein
Sr. Manager, Quality Assurance

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



Material No.: 9266-A4
Batch No.: 24A1562007
Manufactured Date: 2023-12-14
Expiration Date: 2025-03-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	< 1
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Titration Acid (μ eq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG23L14152

E 3706

REC.
AS 2/19/24

Ken Koehnlein
Sr. Manager, Quality Assurance

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



Material No.: 9266-A4
Batch No.: 24A1562007
Manufactured Date: 2023-12-14
Expiration Date: 2025-03-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	< 1
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.1 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG23L14152

E 3707

Ken Koehnlein
Sr. Manager, Quality Assurance

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

 **avantor**™



Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO ₂)	≤ 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 and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 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	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

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



Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

A handwritten signature in cursive script that reads 'James Ethier'.
Jamie Ethier
Vice President Global Quality



5580 Skyline 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: 07/17/23

Rev 0 Page 1 of 1

511440
511412
511412

Certificate of Analysis

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:
Z-110094-02 503442 ≤ -10 °C Methylene Chloride 8/26/2024 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	5052 ± 122.61
2-fluorobiphenyl	321-60-8	99.7	8.7.1.1P	5005 ± 121.47
nitrobenzene-d ₄	4165-60-0	100	7.9.2P	5040 ± 122.21
p-terphenyl-d ₁₄	1718-51-0	99.6	9.12.9P	5027 ± 122

*Not a certified value

Certified By: Joanna Radu
Joanna Radu
Chemist

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309
www.restek.com

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31206

Lot No.: A0196843

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 : March 31, 2029

Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

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%	2,010.0 µg/mL	+/- 90.5322
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,010.0 µg/mL	+/- 90.5316
3	Acenaphthene-d10	15067-26-2	PR-31822	99%	2,010.0 µg/mL	+/- 90.5334
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,010.3 µg/mL	+/- 90.5466
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,010.4 µg/mL	+/- 90.5490
6	Perylene-d12	1520-96-3	PR-33205	99%	2,010.2 µg/mL	+/- 90.5421

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

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

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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:

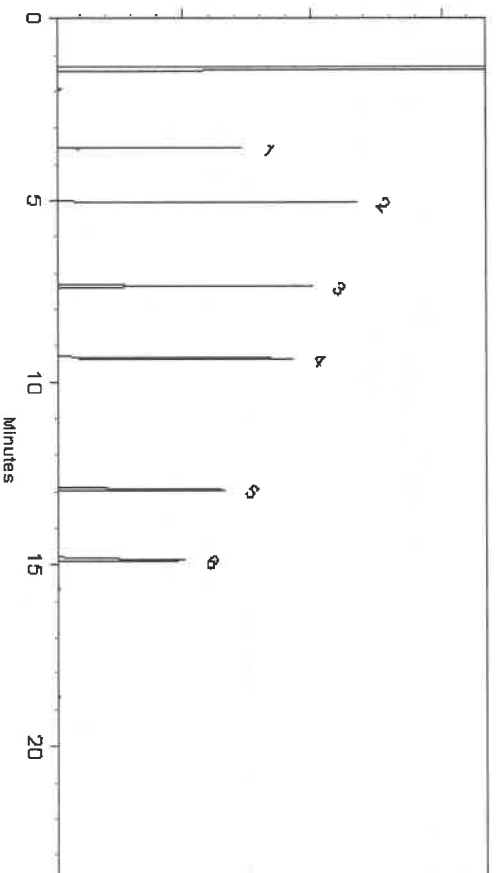
FID

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.

[Signature]
Jess Hoy - Operations Tech I

Date Mixed:

10-Apr-2023

Balance Serial #

1128353505

[Signature]
Jennifer Polino - Operations Tech III - ARM QC

Date Passed:

14-Apr-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:

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

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

- 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.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 555223 **Lot No.:** A0201940
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: September 30, 2025 **Storage:** 10°C or colder
Handling: This product is photosensitive. **Ship:** Ambient

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09/19/

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	S230321RSR	99%	1,001.0 µg/mL	+/- 22.9799
2	Atrazine	1912-24-9	5FYWL	99%	1,010.0 µg/mL	+/- 23.1865
3	Benzidine	92-87-5	S221205RSR	99%	1,008.0 µg/mL	+/- 23.1406
4	epsilon-Caprolactam	105-60-2	I16X016	99%	1,008.0 µg/mL	+/- 23.1406

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

REVIEWED

By Jennifer Pollino at 7:10 am, Sep 13, 2023

Sam Moodler - Operations Tech I

Date Mixed: 13-Sep-2023

Balance: B345965662

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:

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

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

- 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.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555224 **Lot No.:** A0201998

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 : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

S11569

S11598

KS

09/19/2

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	MKCS1444	99%	1,003.5 µg/mL	+/- 29.497807
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 µg/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD230209RSRA	99%	1,003.4 µg/mL	+/- 29.494867
4	Benzoic acid	65-85-0	MKCR2694	99%	1,002.2 µg/mL	+/- 29.459594
5	Biphenyl	92-52-4	MKCL6515	99%	1,002.1 µg/mL	+/- 29.456654

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

Penelope Riglin - Operations Tech I

Date Mixed: 14-Sep-2023

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:

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

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

- 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.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555224 **Lot No.:** A0201998

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 : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

S11569

S11598

KS

09/19/2

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	MKCS1444	99%	1,003.5 µg/mL	+/- 29.497807
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 µg/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD230209RSRA	99%	1,003.4 µg/mL	+/- 29.494867
4	Benzoic acid	65-85-0	MKCR2694	99%	1,002.2 µg/mL	+/- 29.459594
5	Biphenyl	92-52-4	MKCL6515	99%	1,002.1 µg/mL	+/- 29.456654

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

Penelope Riglin - Operations Tech I

Date Mixed: 14-Sep-2023

Balance: 1128360905

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

General Certified Reference Material Notes

Expiration Notes:

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- Purity values are rounded to the nearest whole number.

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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chromatographic plus



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Catalog No. : 31853 **Lot No.:** A0196453
Description : 1,4-dioxane
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2028 **Storage:** 0°C or colder
Ship: Ambient

S11749
↓
S11794 } RC / 11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBN3770	99%	2,013.0 µg/mL	+/- 25.0521

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant flow 1.8 mL/min.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

340°C

Det. Type:

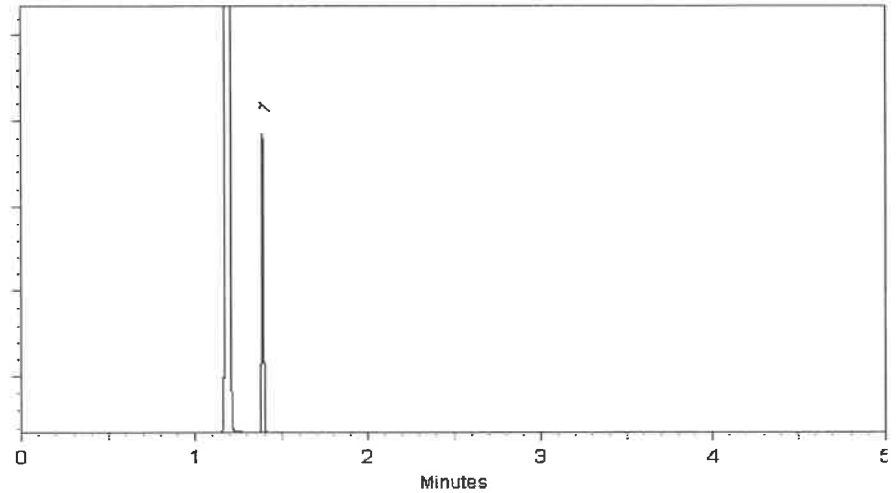
FID

Split Vent:

100 ml/min.

Inj. Vol

1µl



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

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023 Balance Serial # B707717271

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

- 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

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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:

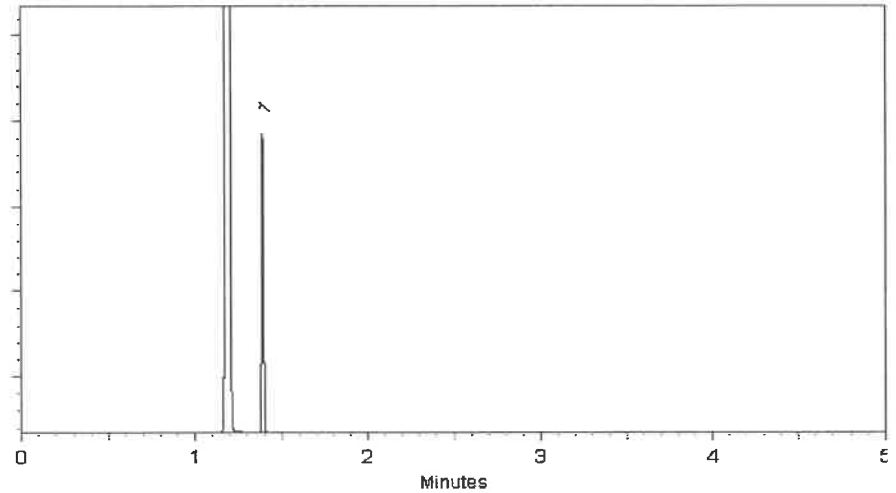
FID

Split Vent:

100 ml/min.

Inj. Vol

1µl



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Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023 Balance Serial # B707717271

Jennifer Pollino
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:

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Purity Notes:

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- Purity values are rounded to the nearest whole number.

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

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

Manufacturing Notes:

- 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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chromatographic plus



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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:

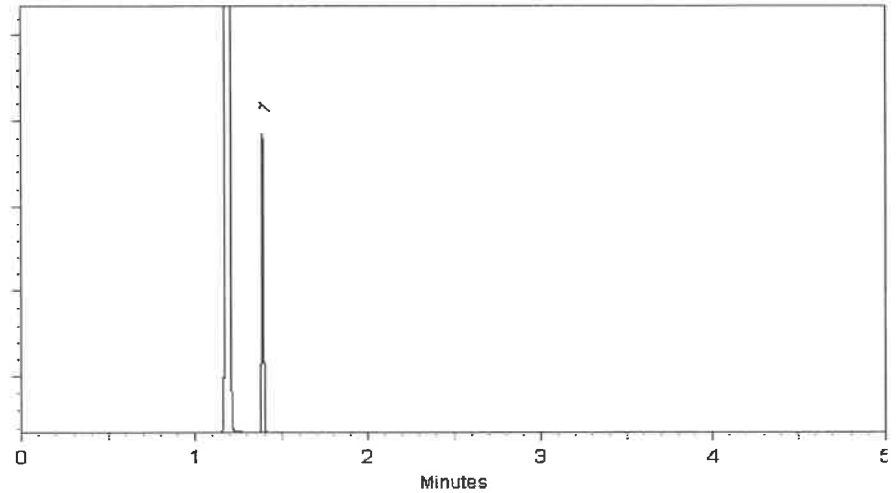
FID

Split Vent:

100 mL/min.

Inj. Vol

1µl



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Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023

Balance Serial # B707717271

Jennifer Pollino
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:

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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

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@ 9.6°C/min. (hold 2.86 min.)

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250°C

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Det. Type:

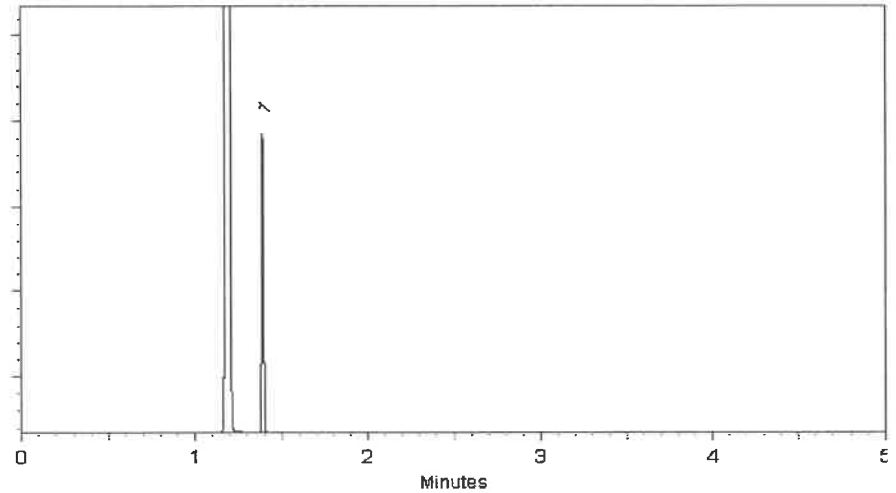
FID

Split Vent:

100 ml/min.

Inj. Vol

1µl



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Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023

Balance Serial # B707717271

Jennifer Pollino
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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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

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30m x 0.25mm x 0.25µm
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@ 9.6°C/min. (hold 2.86 min.)

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340°C

Det. Type:

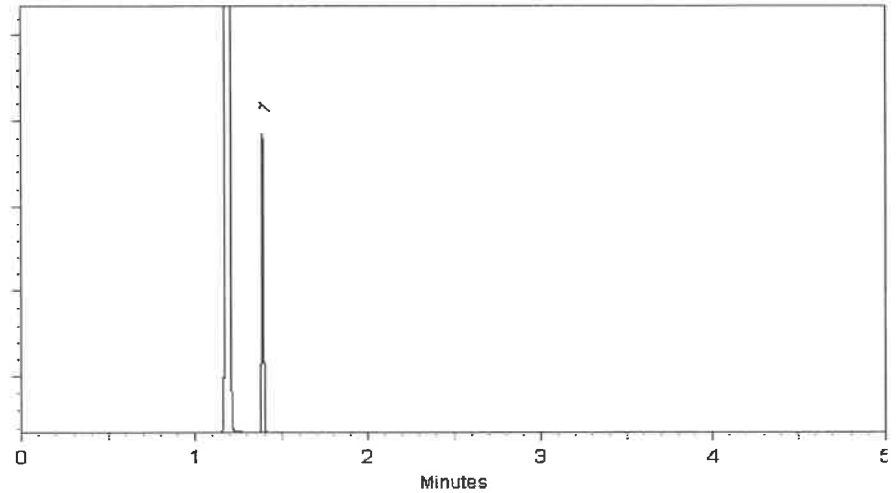
FID

Split Vent:

100 mL/min.

Inj. Vol

1µl



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Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023 Balance Serial # B707717271

Jennifer Pollino
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:

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chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 31850 **Lot No.:** A0197982

Description : 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : November 30, 2024 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/-	36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/-	36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/-	36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/-	36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/-	36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/-	36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/-	36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/-	36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/-	36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/-	36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/-	36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/-	36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/-	36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/-	36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/-	36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/-	36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/-	36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/-	36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/-	36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/-	36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/-	36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/-	36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/-	36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/-	36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/-	36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/-	36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/-	36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/-	36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/-	36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/-	36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/-	36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/-	36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/-	36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/-	36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/-	36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

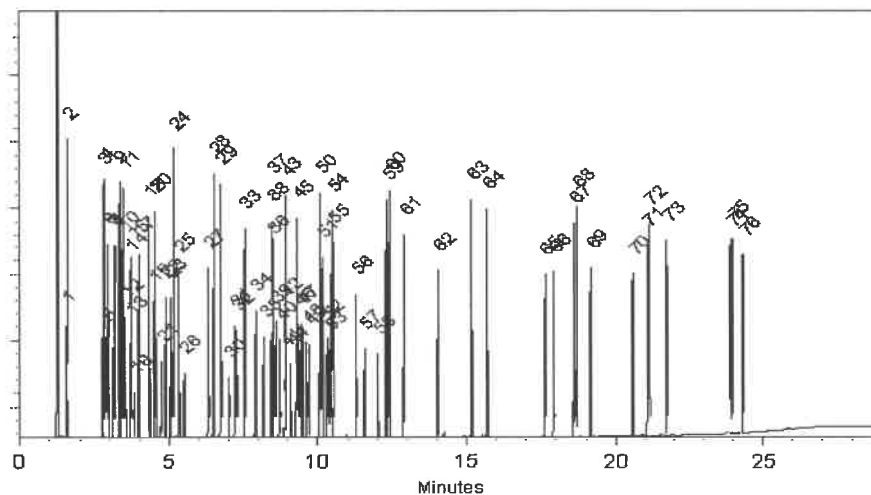
FID

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.: A0197982
Description: 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: November 30, 2024 Storage: 0°C or colder
Handling: Sonication required. Mix is photosensitive. Ship: Ambient

511877
↓
511906
RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/-	36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/-	36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/-	36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/-	36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/-	36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/-	36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/-	36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/-	36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/-	36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/-	36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/-	36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/-	36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/-	36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/-	36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/-	36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/-	36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/-	36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/-	36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/-	36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/-	36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/-	36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/-	36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/-	36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/-	36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/-	36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/-	36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/-	36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/-	36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/-	36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/-	36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/-	36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/-	36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/-	36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/-	36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/-	36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

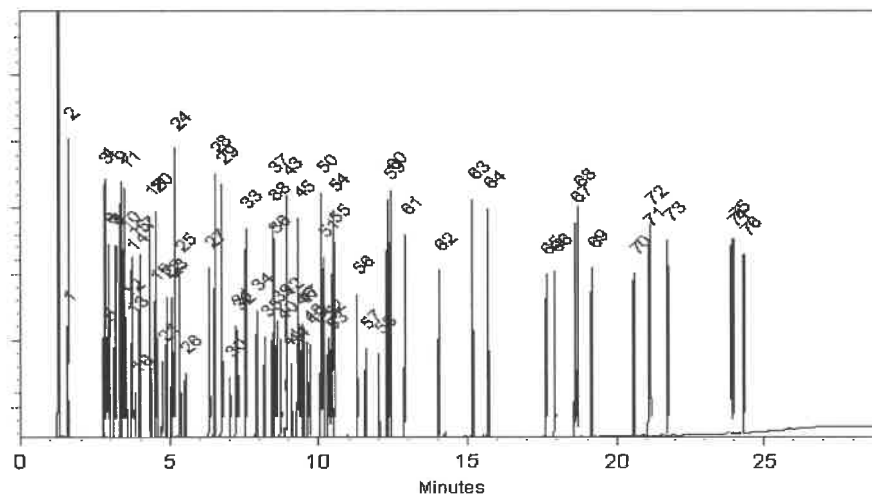
FID

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.:** A0197982

Description : 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : November 30, 2024 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

511877
↓
511906

RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/- 36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/- 36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/- 36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/- 36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/- 36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/- 36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/- 36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/- 36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/- 36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/- 36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/- 36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/- 36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/- 36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/- 36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/- 36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/- 36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/- 36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/- 36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/- 36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/- 36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/- 36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/- 36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/- 36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/- 36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/- 36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/- 36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/- 36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/- 36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/- 36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/- 36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/- 36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/- 36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/- 36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/- 36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/- 36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/- 36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

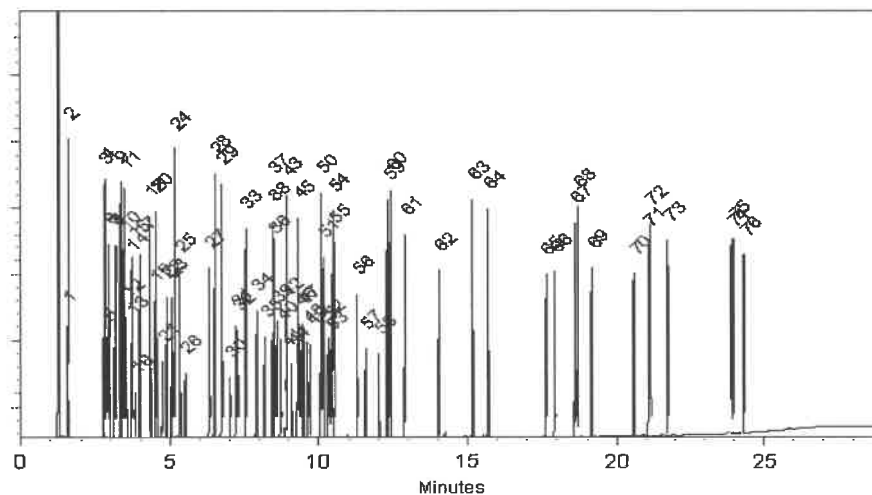
FID

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.: A0197982
Description: 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: November 30, 2024 Storage: 0°C or colder
Handling: Sonication required. Mix is photosensitive. Ship: Ambient

511877
↓
511906
RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/-	36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/-	36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/-	36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/-	36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/-	36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/-	36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/-	36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/-	36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/-	36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/-	36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/-	36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/-	36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/-	36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/-	36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/-	36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/-	36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/-	36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/-	36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/-	36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/-	36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/-	36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/-	36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/-	36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/-	36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/-	36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/-	36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/-	36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/-	36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/-	36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/-	36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/-	36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/-	36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/-	36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/-	36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/-	36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

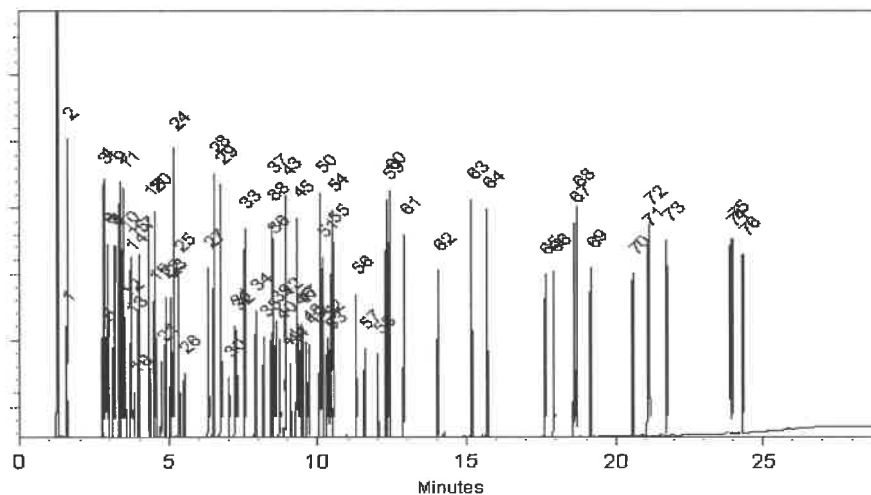
FID

Split Vent:

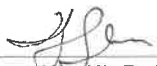
100 ml/min.

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.: A0197982
Description: 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: November 30, 2024 Storage: 0°C or colder
Handling: Sonication required. Mix is photosensitive. Ship: Ambient

511877
↓
511906
RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/-	36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/-	36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/-	36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/-	36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/-	36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/-	36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/-	36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/-	36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/-	36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/-	36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/-	36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/-	36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/-	36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/-	36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/-	36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/-	36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/-	36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/-	36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/-	36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/-	36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/-	36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/-	36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/-	36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/-	36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/-	36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/-	36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/-	36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/-	36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/-	36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/-	36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/-	36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/-	36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/-	36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/-	36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/-	36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

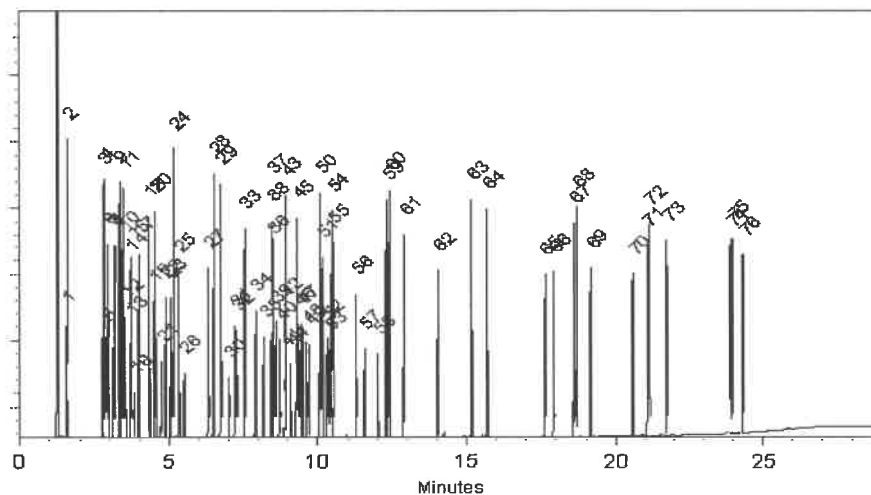
FID

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.: A0197982
Description: 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: November 30, 2024 Storage: 0°C or colder
Handling: Sonication required. Mix is photosensitive. Ship: Ambient

511877
↓
511906
RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/-	36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/-	36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/-	36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/-	36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/-	36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/-	36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/-	36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/-	36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/-	36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/-	36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/-	36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/-	36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/-	36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/-	36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/-	36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/-	36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/-	36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/-	36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/-	36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/-	36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/-	36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/-	36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/-	36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/-	36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/-	36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/-	36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/-	36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/-	36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/-	36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/-	36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/-	36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/-	36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/-	36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/-	36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/-	36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

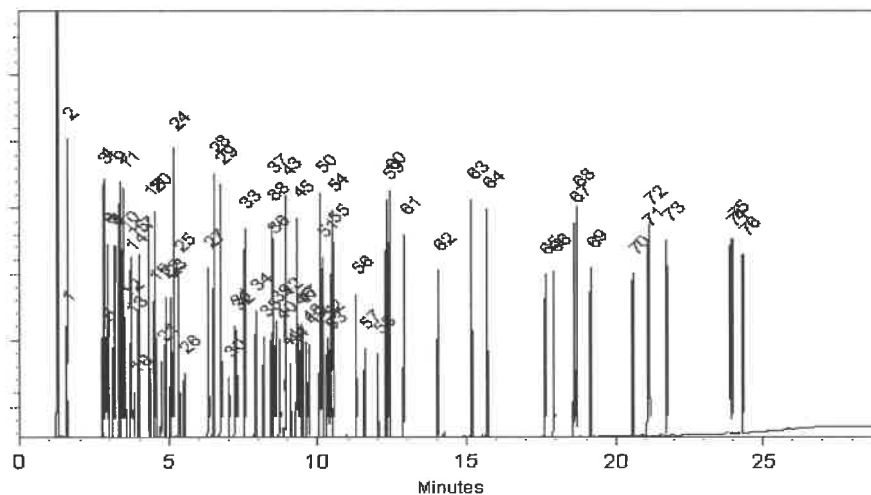
FID

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.:** A0197982

Description : 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : November 30, 2024 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

511877
↓
511906

RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/-	36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/-	36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/-	36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/-	36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/-	36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/-	36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/-	36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/-	36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/-	36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/-	36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/-	36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/-	36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/-	36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/-	36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/-	36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/-	36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/-	36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/-	36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/-	36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/-	36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/-	36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/-	36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/-	36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/-	36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/-	36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/-	36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/-	36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/-	36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/-	36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/-	36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/-	36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/-	36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/-	36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/-	36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/-	36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

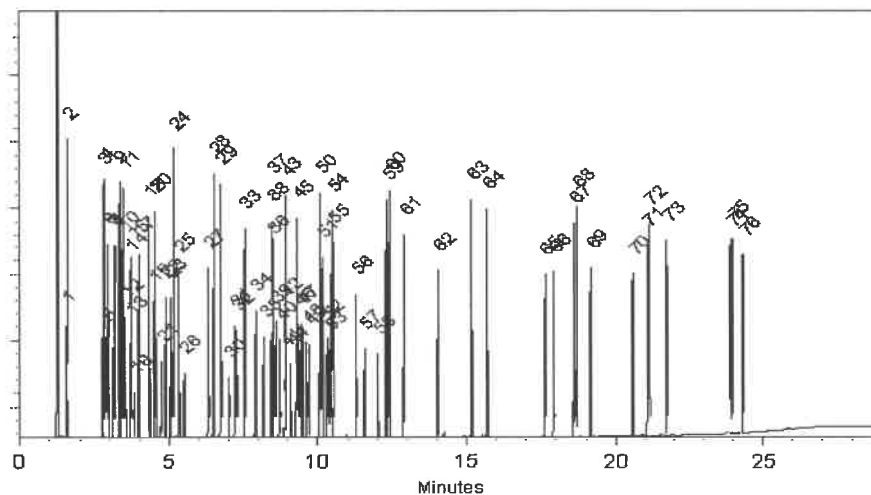
FID

Split Vent:

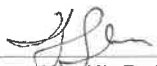
100 ml/min.

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.:** A0197982

Description : 8270 MegaMix®
8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : November 30, 2024 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

511877
↓
511906

RC/
11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBN7324	99%	1,006.9 µg/mL	+/- 36.6352
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,007.4 µg/mL	+/- 36.6514
3	Phenol	108-95-2	MKCK1120	99%	1,005.3 µg/mL	+/- 36.5746
4	Aniline	62-53-3	X22F726	99%	1,004.6 µg/mL	+/- 36.5503
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,005.1 µg/mL	+/- 36.5665
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,007.1 µg/mL	+/- 36.6392
7	1,3-Dichlorobenzene	541-73-1	BCBZ7498	99%	1,006.7 µg/mL	+/- 36.6251
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,005.6 µg/mL	+/- 36.5867
9	Benzyl alcohol	100-51-6	SHBK5943	99%	1,005.4 µg/mL	+/- 36.5786
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,003.9 µg/mL	+/- 36.5240
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,002.3 µg/mL	+/- 36.4654
12	2,2'-oxybis(1-chloropropane)	108-60-1	230329JLM	99%	1,004.3 µg/mL	+/- 36.5402
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2671
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	501.9 µg/mL	+/- 18.2631
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,004.0 µg/mL	+/- 36.5281
16	Hexachloroethane	67-72-1	QTORH	99%	1,006.1 µg/mL	+/- 36.6029
17	Nitrobenzene	98-95-3	10224044	99%	1,003.1 µg/mL	+/- 36.4957

18	Isophorone	78-59-1	MKCC9506	99%	1,003.8	µg/mL	+/-	36.5220
19	2-Nitrophenol	88-75-5	RP230509C	99%	1,005.8	µg/mL	+/-	36.5948
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,004.2	µg/mL	+/-	36.5341
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,006.3	µg/mL	+/-	36.6130
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,004.0	µg/mL	+/-	36.5281
23	1,2,4-Trichlorobenzene	120-82-1	SHBM0526	99%	1,007.1	µg/mL	+/-	36.6413
24	Naphthalene	91-20-3	MKCH0219	99%	1,006.7	µg/mL	+/-	36.6271
25	4-Chloroaniline	106-47-8	WXBC4601V	99%	1,005.4	µg/mL	+/-	36.5806
26	Hexachlorobutadiene	87-68-3	X05J	99%	1,006.4	µg/mL	+/-	36.6170
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.7	µg/mL	+/-	36.5543
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,002.3	µg/mL	+/-	36.4679
29	1-Methylnaphthalene	90-12-0	5234.00-3	99%	1,000.0	µg/mL	+/-	36.3825
30	Hexachlorocyclopentadiene	77-47-4	0012019	99%	1,006.1	µg/mL	+/-	36.6049
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.9	µg/mL	+/-	36.5604
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,006.5	µg/mL	+/-	36.6176
33	2-Chloronaphthalene	91-58-7	RPN70	99%	1,004.4	µg/mL	+/-	36.5422
34	2-Nitroaniline	88-74-4	RP230509A	99%	1,002.3	µg/mL	+/-	36.4654
35	1,4-Dinitrobenzene	100-25-4	RP230512A	99%	1,001.5	µg/mL	+/-	36.4371
36	Acenaphthylene	208-96-8	L10L	95%	1,003.4	µg/mL	+/-	36.5066
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.8	µg/mL	+/-	36.5564
38	Dimethylphthalate	131-11-3	10117699	99%	1,004.7	µg/mL	+/-	36.5543
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.8	µg/mL	+/-	36.6312
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,006.4	µg/mL	+/-	36.6170
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3825
42	3-Nitroaniline	99-09-2	MKCH5457	99%	1,004.8	µg/mL	+/-	36.5584
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,005.8	µg/mL	+/-	36.5948
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,004.3	µg/mL	+/-	36.5402
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,005.8	µg/mL	+/-	36.5928
46	4-Nitrophenol	100-02-7	RP230511A	99%	1,005.8	µg/mL	+/-	36.5948
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,005.9	µg/mL	+/-	36.5988
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230513	99%	1,004.9	µg/mL	+/-	36.5624
49	Fluorene	86-73-7	10236068	99%	1,005.4	µg/mL	+/-	36.5806
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCQ0984	99%	1,004.3	µg/mL	+/-	36.5382
51	Diethylphthalate	84-66-2	BCCD3396	99%	1,007.1	µg/mL	+/-	36.6392
52	4-Nitroaniline	100-01-6	RP220906	99%	1,005.3	µg/mL	+/-	36.5766
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230505JLM	99%	1,003.8	µg/mL	+/-	36.5200

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.5	µg/mL	+/- 36.4735
55	Azobenzene	103-33-3	BCCG7339	98%	1,003.5	µg/mL	+/- 36.5106
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,005.6	µg/mL	+/- 36.5847
57	Hexachlorobenzene	118-74-1	14257500	99%	1,005.9	µg/mL	+/- 36.5988
58	Pentachlorophenol	87-86-5	RP230504	99%	1,004.2	µg/mL	+/- 36.5362
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,004.1	µg/mL	+/- 36.5321
60	Anthracene	120-12-7	MKCR0570	99%	1,008.3	µg/mL	+/- 36.6857
61	Carbazole	86-74-8	14351100	99%	1,005.1	µg/mL	+/- 36.5665
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.4	µg/mL	+/- 36.6170
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.7	µg/mL	+/- 36.5159
64	Pyrene	129-00-0	BCCG7845	99%	1,004.3	µg/mL	+/- 36.5382
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,003.4	µg/mL	+/- 36.5058
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,003.4	µg/mL	+/- 36.5079
67	Benz(a)anthracene	56-55-3	0012022BAA	97%	1,004.9	µg/mL	+/- 36.5624
68	Chrysene	218-01-9	RP230512B	99%	1,006.2	µg/mL	+/- 36.6089
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,003.8	µg/mL	+/- 36.5220
70	Di-n-octyl phthalate	117-84-0	13994100	99%	1,004.2	µg/mL	+/- 36.5341
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,008.4	µg/mL	+/- 36.6877
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,004.1	µg/mL	+/- 36.5301
73	Benzo(a)pyrene	50-32-8	J6IUE	99%	1,006.4	µg/mL	+/- 36.6170
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,002.0	µg/mL	+/- 36.4557
75	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	1,006.1	µg/mL	+/- 36.6029
76	Benzo(g,h,i)perylene	191-24-2	RP230511B	98%	1,006.8	µg/mL	+/- 36.6295

* 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:

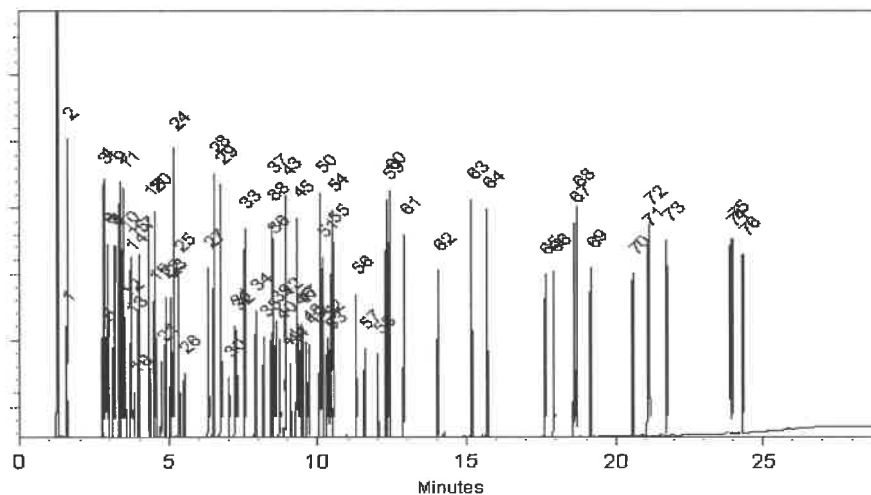
FID

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.


Tom Suckar - Mix Technician

Date Mixed: 11-May-2023

Balance Serial # 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 18-May-2023

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



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



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.:** A0201320

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 : July 31, 2029 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12013
↓
S12042 } RC
12/26/23

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%	2,017.0 µg/mL	+/- 90.8469
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,011.3 µg/mL	+/- 90.5917
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,008.6 µg/mL	+/- 90.4685
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,019.4 µg/mL	+/- 90.9550
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,013.7 µg/mL	+/- 90.6968
6	Perylene-d12	1520-96-3	PR-33205	99%	2,012.7 µg/mL	+/- 90.6517

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

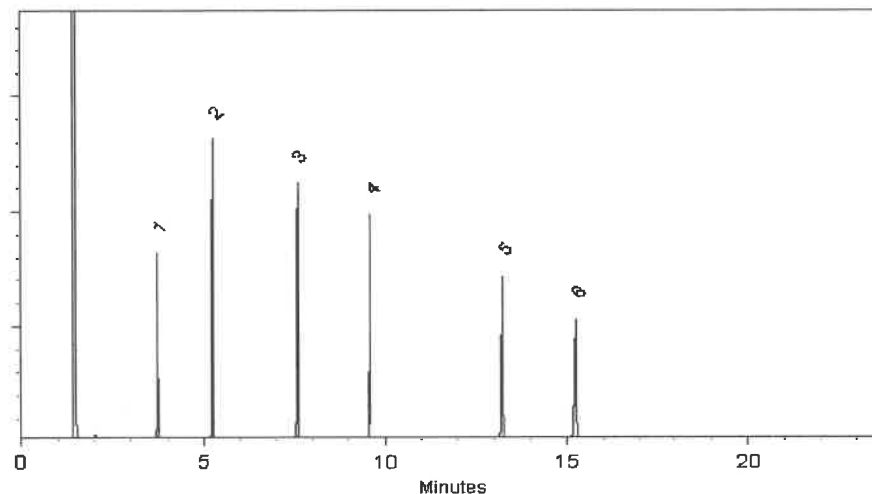
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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

Peter Robbins - Operations Technician I

Date Mixed: 23-Aug-2023

Balance Serial # B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 25-Aug-2023

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

SHIPPING DOCUMENTS

CHEMTECH

CHAIN OF CUSTODY RECORD

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

CHEMTECH PROJECT NO.

QUOTE NO.

COC Number 2043853

P1747

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LIRD Engineers, Inc.
ADDRESS: 703 Lorimer street
CITY: Brooklyn STATE: NY ZIP: 11211
ATTENTION: Steve Frank / Amy Hewson
PHONE: 716 882-5476 FAX: _____

CLIENT PROJECT INFORMATION

PROJECT NAME: Walter Gladwin Park Rec. Center
PROJECT NO.: 19-294-0265.01 LOCATION: Bronx, NY
PROJECT MANAGER: Steve Frank
e-mail: franks@lird-hill.com
PHONE: 716 882-5476 FAX: _____

CLIENT BILLING INFORMATION

BILL TO: _____ PO#: _____
ADDRESS: Scime
CITY: _____ STATE: _____ ZIP: _____
ATTENTION: _____ PHONE: _____

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: 5 day TAT _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

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

TCL VOCs
SVOCs
PCBs
Pesticides
TAL metals*
NYCDEP Sanitary or Combined Sewer Discharge Parameters

ANALYSIS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-OTHER	
1.	mw-01	GW		X	3/12/24	0800	7	X	X	X	X	X						
2.	mw-01 DUP	GW		X	↓	0830	7	X	X	X	X	X						
3.	mw-01	GW		X	3/13/24	1000	14								X			
4.	mw-02	GW		X	3/12/24	1200	7	X	X	X	X	X						
5.	TWP-04	GW		X	↓	1100	7	X	X	X	X	X						
6.	Trip Blank #1	DI water		X	—	—	2	X										
7.																		
8.																		
9.																		
10.																		

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. Eva Jlu	DATE/TIME: 3/13/24	RECEIVED BY: P 1230 3-13-24	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.4°C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.	Comments: * TAL metals (filtered & unfiltered)
RELINQUISHED BY SAMPLER: 3.	DATE/TIME: 630 3-13-24	RECEIVED BY: 3.	

Page 1 of 1

CLIENT: ☐ Hand Delivered ☐ Other _____
CHEMTECH: ☒ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO



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-0649
DOD ELAP (L-A-B)	L2219
Maine	2022022
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-21-00137
Texas	T104704488-23-16



LOGIN REPORT/SAMPLE TRANSFER

Order ID : P1747 LIRO01

Order Date : 3/13/2024 12:28:00 PM

Project Mgr :

Client Name : LiRo Engineers, Inc.

Project Name : Walter Gladwin Recreation

Report Type : NYS ASP A

Client Contact : Steve Frank

Receive DateTime : 3/13/2024 12:00:00 AM

EDD Type : NYSDEC EDD V-3

Invoice Name : LiRo Engineers, Inc.

Purchase Order :

Hard Copy Date :

Invoice Contact : Steve Frank

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P1747-01	MW-01	Water	03/12/2024	08:00	VOC-TCLVOA-10		8260-Low	5 Bus. Days	
P1747-02	MW-01-DUP	Water	03/12/2024	08:30	VOC-TCLVOA-10		8260-Low	5 Bus. Days	
P1747-03	MW-01	Water	03/13/2024	10:00	VOC-NYCD	NYCDischarge	624.1	5 Bus. Days	
P1747-04	MW-02	Water	03/12/2024	12:00	VOC-TCLVOA-10		8260-Low	5 Bus. Days	
P1747-05	MW-04	Water	03/12/2024	11:00	VOC-TCLVOA-10		8260-Low	5 Bus. Days	
P1747-06	TRIP-BLANK	Water	03/12/2024	00:00	VOC-TCLVOA-10		8260-Low	5 Bus. Days	

Relinquished By :

Date / Time :

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room