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LAB CHRONICLE

OrderID:	P4871	**OrderDate:**	11/15/2024 9:09:00 AM
Client:	AECOM	**Project:**	Meeker Ave Plumes Superfund Site RI FS
Contact:	Amit Haryani	**Location:**	M11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4871-01	**WC-10-A-202411**	**TCLP**			**11/13/24**			**11/14/24**
			TCLP BNA	8270E		11/18/24	11/18/24	

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Hit Summary Sheet
SW-846

SDG No.: P4871

Client: AECOM

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

SAMPLE DATA

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Report of Analysis

Client:	AECOM	Date Collected:	11/13/24
Project:	Meeker Ave Plumes Superfund Site RI FS	Date Received:	11/14/24
Client Sample ID:	WC-10-A-202411	SDG No.:	P4871
Lab Sample ID:	P4871-01	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140460.D	1	11/18/24 08:35	11/18/24 18:06	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	15.5	UQ	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	8.40	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	11.3	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	11.5	U	11.5	100	ug/L
67-72-1	Hexachloroethane	10.1	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	12.7	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	12.7	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	8.90	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	10.1	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	15.2	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	11.4	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	18.5	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	129		10 - 139	86%	SPK: 150
13127-88-3	Phenol-d6	106		10 - 134	71%	SPK: 150
4165-60-0	Nitrobenzene-d5	97.8		49 - 133	98%	SPK: 100
321-60-8	2-Fluorobiphenyl	123		52 - 132	123%	SPK: 100
118-79-6	2,4,6-Tribromophenol	195		44 - 137	130%	SPK: 150
1718-51-0	Terphenyl-d14	122		48 - 125	122%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	133000	6.875			
1146-65-2	Naphthalene-d8	502000	8.151			
15067-26-2	Acenaphthene-d10	224000	9.904			
1517-22-2	Phenanthrene-d10	534000	11.398			
1719-03-5	Chrysene-d12	279000	14.039			
1520-96-3	Perylene-d12	12400	15.533			

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Report of Analysis

Client:	AECOM			Date Collected:	11/13/24
Project:	Meeker Ave Plumes Superfund Site RI FS			Date Received:	11/14/24
Client Sample ID:	WC-10-A-202411			SDG No.:	P4871
Lab Sample ID:	P4871-01			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	100	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140460.D	1	11/18/24 08:35	11/18/24 18:06	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	AECOM	Date Collected:	11/18/24
Project:	Meeker Ave Plumes Superfund Site RI FS	Date Received:	11/18/24
Client Sample ID:	PB165019TB	SDG No.:	P4871
Lab Sample ID:	PB165019TB	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140464.D	1	11/18/24 08:35	11/19/24 11:00	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	15.5	UQ	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	8.40	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	11.3	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	11.5	U	11.5	100	ug/L
67-72-1	Hexachloroethane	10.1	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	12.7	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	12.7	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	8.90	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	10.1	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	15.2	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	11.4	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	18.5	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	126		10 - 139	84%	SPK: 150
13127-88-3	Phenol-d6	121		10 - 134	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	86.6		49 - 133	87%	SPK: 100
321-60-8	2-Fluorobiphenyl	87.6		52 - 132	88%	SPK: 100
118-79-6	2,4,6-Tribromophenol	124		44 - 137	83%	SPK: 150
1718-51-0	Terphenyl-d14	85.9		48 - 125	86%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	144000	6.869			
1146-65-2	Naphthalene-d8	545000	8.151			
15067-26-2	Acenaphthene-d10	303000	9.904			
1517-22-2	Phenanthrene-d10	577000	11.398			
1719-03-5	Chrysene-d12	370000	14.057			
1520-96-3	Perylene-d12	302000	15.574			

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Report of Analysis

Client:	AECOM			Date Collected:	11/18/24
Project:	Meeker Ave Plumes Superfund Site RI FS			Date Received:	11/18/24
Client Sample ID:	PB165019TB			SDG No.:	P4871
Lab Sample ID:	PB165019TB			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	100	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140464.D	1	11/18/24 08:35	11/19/24 11:00	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: P4871

Client: AECOM

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
P4848-02MS	TP-1MS	2-Fluorophenol	150	140	93		10	139
		Phenol-d6	150	136	91		10	134
		Nitrobenzene-d5	100	101	101		49	133
		2-Fluorobiphenyl	100	99.0	99		52	132
		2,4,6-Tribromophenol	150	159	106		44	137
		Terphenyl-d14	100	110	110		48	125
P4848-02MSD	TP-1MSD	2-Fluorophenol	150	144	96		10	139
		Phenol-d6	150	138	92		10	134
		Nitrobenzene-d5	100	104	104		49	133
		2-Fluorobiphenyl	100	100	100		52	132
		2,4,6-Tribromophenol	150	159	106		44	137
		Terphenyl-d14	100	113	113		48	125
P4871-01	WC-10-A-202411	2-Fluorophenol	150	129	86		10	139
		Phenol-d6	150	106	71		10	134
		Nitrobenzene-d5	100	97.8	98		49	133
		2-Fluorobiphenyl	100	123	123		52	132
		2,4,6-Tribromophenol	150	195	130		44	137
		Terphenyl-d14	100	122	122		48	125
PB165019TB	PB165019TB	2-Fluorophenol	150	126	84		10	139
		Phenol-d6	150	121	81		10	134
		Nitrobenzene-d5	100	86.6	87		49	133
		2-Fluorobiphenyl	100	87.6	88		52	132
		2,4,6-Tribromophenol	150	124	83		44	137
		Terphenyl-d14	100	85.9	86		48	125
PB165052BL	PB165052BL	2-Fluorophenol	150	138	92		10	139
		Phenol-d6	150	132	88		10	134
		Nitrobenzene-d5	100	92.2	92		49	133
		2-Fluorobiphenyl	100	92.9	93		52	132
		2,4,6-Tribromophenol	150	133	88		44	137
		Terphenyl-d14	100	102	102		48	125
PB165052BS	PB165052BS	2-Fluorophenol	150	136	91		10	139
		Phenol-d6	150	133	89		10	134
		Nitrobenzene-d5	100	90.2	90		49	133
		2-Fluorobiphenyl	100	91.1	91		52	132
		2,4,6-Tribromophenol	150	143	95		44	137
		Terphenyl-d14	100	89.0	89		48	125

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4871

Client: AECOM

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: P4848-02MS		**Client Sample ID: TP-1MS**						**DataFile: BF140465.D**			
Pyridine	500	0	320	ug/L	64				10	109	
1,4-Dichlorobenzene	500	0	400	ug/L	80				55	125	
2-Methylphenol	500	0	500	ug/L	100				37	126	
3+4-Methylphenols	500	0	510	ug/L	102				31	127	
Hexachloroethane	500	0	400	ug/L	80				49	110	
Nitrobenzene	500	0	460	ug/L	92				62	112	
Hexachlorobutadiene	500	0	430	ug/L	86				52	125	
2,4,6-Trichlorophenol	500	0	530	ug/L	106				78	112	
2,4,5-Trichlorophenol	500	0	520	ug/L	104				71	111	
2,4-Dinitrotoluene	500	0	530	ug/L	106				50	142	
Hexachlorobenzene	500	0	530	ug/L	106				72	115	
Pentachlorophenol	1000	0	1100	ug/L	110				25	139	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4871

Client: AECOM

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: P4848-02MSD		**Client Sample ID: TP-1MSD**						**DataFile: BF140466.D**			
Pyridine	500	0	320	ug/L	64	0			10	109	20
1,4-Dichlorobenzene	500	0	410	ug/L	82	2			55	125	20
2-Methylphenol	500	0	510	ug/L	102	2			37	126	20
3+4-Methylphenols	500	0	520	ug/L	104	2			31	127	20
Hexachloroethane	500	0	410	ug/L	82	2			49	110	20
Nitrobenzene	500	0	460	ug/L	92	0			62	112	20
Hexachlorobutadiene	500	0	440	ug/L	88	2			52	125	20
2,4,6-Trichlorophenol	500	0	550	ug/L	110	4			78	112	20
2,4,5-Trichlorophenol	500	0	520	ug/L	104	0			71	111	20
2,4-Dinitrotoluene	500	0	540	ug/L	108	2			50	142	20
Hexachlorobenzene	500	0	540	ug/L	108	2			72	115	20
Pentachlorophenol	1000	0	1100	ug/L	110	0			25	139	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4871

Client: AECOM

Analytical Method: 8270E **DataFile:** BF140596.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB165052BS	Pyridine	50	49.3	ug/L	99		*		29	97	
	1,4-Dichlorobenzene	50	46.6	ug/L	93				76	103	
	2-Methylphenol	50	49.4	ug/L	99				69	109	
	3+4-Methylphenols	50	49.2	ug/L	98				67	106	
	Hexachloroethane	50	46.3	ug/L	93				76	118	
	Nitrobenzene	50	44.6	ug/L	89				58	106	
	Hexachlorobutadiene	50	44.9	ug/L	90				69	101	
	2,4,6-Trichlorophenol	50	48.0	ug/L	96				61	110	
	2,4,5-Trichlorophenol	50	47.2	ug/L	94				70	106	
	2,4-Dinitrotoluene	50	48.7	ug/L	97				60	115	
	Hexachlorobenzene	50	46.6	ug/L	93				73	106	
	Pentachlorophenol	100	100	ug/L	100				47	114	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165052BL

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG NO.: P4871

Lab File ID: BF140605.D Lab Sample ID: PB165052BL

Instrument ID: BNA_F Date Extracted: 11/18/2024

Matrix: (soil/water) water Date Analyzed: 11/25/2024

Level: (low/med) LOW Time Analyzed: 16:17

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
WC-10-A-202411	P4871-01	BF140460.D	11/18/2024
TP-1MS	P4848-02MS	BF140465.D	11/19/2024
PB165019TB	PB165019TB	BF140464.D	11/19/2024
TP-1MSD	P4848-02MSD	BF140466.D	11/19/2024
PB165052BS	PB165052BS	BF140596.D	11/25/2024

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM SAS No.: P4871 SDG NO.: P4871

Lab File ID: BF140331.D DFTPP Injection Date: 11/13/2024

Instrument ID: BNA_F DFTPP Injection Time: 08:35

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	36.9
68	Less than 2.0% of mass 69	0.7 (1.8) 1
69	Mass 69 relative abundance	38
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	48.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 60.0% of mass 198	28.3
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	14
442	Greater than 50% of mass 198	88.6
443	15.0 - 24.0% of mass 442	16.7 (18.8) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF140332.D	11/13/2024	09:01
SSTDICC005	SSTDICC005	BF140333.D	11/13/2024	09:27
SSTDICC010	SSTDICC010	BF140334.D	11/13/2024	09:53
SSTDICC020	SSTDICC020	BF140335.D	11/13/2024	10:29
SSTDICC050	SSTDICC050	BF140337.D	11/13/2024	11:21
SSTDICC060	SSTDICC060	BF140338.D	11/13/2024	11:47
SSTDICC080	SSTDICC080	BF140339.D	11/13/2024	12:13
SSTDICCC040	SSTDICCC040	BF140340.D	11/13/2024	12:48

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM SAS No.: P4871 SDG NO.: P4871

Lab File ID: BF140455.D DFTPP Injection Date: 11/18/2024

Instrument ID: BNA_F DFTPP Injection Time: 15:48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	33.7
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	34.7
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	45.8
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	6.4
275	10.0 - 60.0% of mass 198	27.9
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	16.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.2 (18.2) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF140456.D	11/18/2024	16:14
WC-10-A-202411	P4871-01	BF140460.D	11/18/2024	18:06

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM SAS No.: P4871 SDG NO.: P4871

Lab File ID: BF140462.D DFTPP Injection Date: 11/19/2024

Instrument ID: BNA_F DFTPP Injection Time: 09:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	37.8
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	38.6
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	49.9
197	Less than 2.0% of mass 198	0.8
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	27.6
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	14.7
442	Greater than 50% of mass 198	91.9
443	15.0 - 24.0% of mass 442	17 (18.5) 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	BF140463.D	11/19/2024	10:34
PB165019TB	PB165019TB	BF140464.D	11/19/2024	11:00
TP-1MS	P4848-02MS	BF140465.D	11/19/2024	11:36
TP-1MSD	P4848-02MSD	BF140466.D	11/19/2024	12:02

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM SAS No.: P4871 SDG NO.: P4871

Lab File ID: BF140526.D DFTPP Injection Date: 11/21/2024

Instrument ID: BNA_F DFTPP Injection Time: 10:17

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	33.3
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	35.5
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	48
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	29.2
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	15.7
442	Greater than 50% of mass 198	99.8
443	15.0 - 24.0% of mass 442	18.1 (18.1) 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	BF140528.D	11/21/2024	11:13
SSTDICC005	SSTDICC005	BF140529.D	11/21/2024	11:39
SSTDICC010	SSTDICC010	BF140530.D	11/21/2024	12:05
SSTDICC020	SSTDICC020	BF140531.D	11/21/2024	12:32
SSTDICCC040	SSTDICCC040	BF140532.D	11/21/2024	12:58
SSTDICC050	SSTDICC050	BF140533.D	11/21/2024	13:25
SSTDICC060	SSTDICC060	BF140534.D	11/21/2024	13:51
SSTDICC080	SSTDICC080	BF140535.D	11/21/2024	14:18

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM SAS No.: P4871 SDG NO.: P4871

Lab File ID: BF140589.D DFTPP Injection Date: 11/25/2024

Instrument ID: BNA_F DFTPP Injection Time: 09:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.8
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	36.7
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	48.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 60.0% of mass 198	28.6
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	15.5
442	Greater than 50% of mass 198	98.2
443	15.0 - 24.0% of mass 442	18.5 (18.9) 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	BF140590.D	11/25/2024	09:33
PB165052BS	PB165052BS	BF140596.D	11/25/2024	12:09

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM SAS No.: P4871 SDG NO.: P4871

Lab File ID: BF140603.D DFTPP Injection Date: 11/25/2024

Instrument ID: BNA_F DFTPP Injection Time: 15:23

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	32.9
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	34.8
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	46.5
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	28
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	15.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.4 (18.4) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF140604.D	11/25/2024	15:49
PB165052BL	PB165052BL	BF140605.D	11/25/2024	16:17

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/18/2024

Lab File ID: BF140456.D Time Analyzed: 16:14

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	136246	6.875	509583	8.16	277583	9.91
	UPPER LIMIT	272492	7.375	1019170	8.657	555166	10.41
	LOWER LIMIT	68123	6.375	254792	7.657	138792	9.41
	EPA SAMPLE NO.						
01	WC-10-A-202411	133008	6.88	502386	8.15	224448	9.90

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.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/18/2024

Lab File ID: BF140456.D Time Analyzed: 16:14

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	499315	11.398	237967	14.045	262467		15.533
	UPPER LIMIT	998630	11.898	475934	14.545	524934		16.033
	LOWER LIMIT	249658	10.898	118984	13.545	131234		15.033
	EPA SAMPLE NO.							
01	WC-10-A-202411	533842	11.40	279485	14.04	12426	*	15.53

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.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/19/2024

Lab File ID: BF140463.D Time Analyzed: 10:34

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	137275	6.875	502770	8.16	278131	9.91
	UPPER LIMIT	274550	7.375	1005540	8.657	556262	10.41
	LOWER LIMIT	68637.5	6.375	251385	7.657	139066	9.41
	EPA SAMPLE NO.						
01	PB165019TB	144350	6.87	545389	8.15	303191	9.90
02	TP-1MS	148608	6.88	566127	8.15	313272	9.91
03	TP-1MSD	147727	6.88	561678	8.15	311833	9.91

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

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

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

Alliance TECHNICAL GROUP
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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/19/2024

Lab File ID: BF140463.D Time Analyzed: 10:34

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	524892	11.398	344697	14.069	292973	15.592
	UPPER LIMIT	1049780	11.898	689394	14.569	585946	16.092
	LOWER LIMIT	262446	10.898	172349	13.569	146487	15.092
	EPA SAMPLE NO.						
01	PB165019TB	576588	11.40	369743	14.06	301857	15.57
02	TP-1MS	585294	11.40	347810	14.06	308234	15.57
03	TP-1MSD	573421	11.40	332365	14.06	278980	15.58

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.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/25/2024

Lab File ID: BF140590.D Time Analyzed: 09:33

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	105131	6.869	390145	8.15	212616	9.91
	UPPER LIMIT	210262	7.369	780290	8.651	425232	10.41
	LOWER LIMIT	52565.5	6.369	195073	7.651	106308	9.41
	EPA SAMPLE NO.						
01	PB165052BS	94726	6.87	366046	8.15	205183	9.91

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.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/25/2024

Lab File ID: BF140590.D Time Analyzed: 09:33

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	399326	11.398	244297	14.051	211888	15.545
	UPPER LIMIT	798652	11.898	488594	14.551	423776	16.045
	LOWER LIMIT	199663	10.898	122149	13.551	105944	15.045
	EPA SAMPLE NO.						
01	PB165052BS	398573	11.40	258584	14.06	208347	15.56

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

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

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

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/25/2024

Lab File ID: BF140604.D Time Analyzed: 15:49

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	106607	6.869	393427	8.15	218835	9.91
	UPPER LIMIT	213214	7.369	786854	8.651	437670	10.41
	LOWER LIMIT	53303.5	6.369	196714	7.651	109418	9.41
	EPA SAMPLE NO.						
01	PB165052BL	100879	6.87	377922	8.15	213827	9.90

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.: P4871 SAS No.: P4871 SDG NO.: P4871

EPA Sample No.: SSTDCCC040 Date Analyzed: 11/25/2024

Lab File ID: BF140604.D Time Analyzed: 15:49

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	396344	11.398	217927	14.051	192376	15.551
	UPPER LIMIT	792688	11.898	435854	14.551	384752	16.051
	LOWER LIMIT	198172	10.898	108964	13.551	96188	15.051
	EPA SAMPLE NO.						
01	PB165052BL	407609	11.40	220442	14.05	187220	15.55

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

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

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

QC SAMPLE DATA

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Report of Analysis

Client:	AECOM	Date Collected:	
Project:	Meeker Ave Plumes Superfund Site RI FS	Date Received:	
Client Sample ID:	PB165052BL	SDG No.:	P4871
Lab Sample ID:	PB165052BL	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140605.D	1	11/18/24 08:35	11/25/24 16:17	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	1.60	U	1.60	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.84	U	0.84	5.00	ug/L
95-48-7	2-Methylphenol	1.10	U	1.10	5.00	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.0	ug/L
67-72-1	Hexachloroethane	1.00	U	1.00	5.00	ug/L
98-95-3	Nitrobenzene	1.30	U	1.30	5.00	ug/L
87-68-3	Hexachlorobutadiene	1.30	U	1.30	5.00	ug/L
88-06-2	2,4,6-Trichlorophenol	0.89	U	0.89	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	1.00	U	1.00	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	1.50	U	1.50	5.00	ug/L
118-74-1	Hexachlorobenzene	1.10	U	1.10	5.00	ug/L
87-86-5	Pentachlorophenol	1.90	U	1.90	10.0	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	138		10 - 139	92%	SPK: 150
13127-88-3	Phenol-d6	132		10 - 134	88%	SPK: 150
4165-60-0	Nitrobenzene-d5	92.2		49 - 133	92%	SPK: 100
321-60-8	2-Fluorobiphenyl	92.9		52 - 132	93%	SPK: 100
118-79-6	2,4,6-Tribromophenol	133		44 - 137	88%	SPK: 150
1718-51-0	Terphenyl-d14	102		48 - 125	102%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	101000	6.869			
1146-65-2	Naphthalene-d8	378000	8.151			
15067-26-2	Acenaphthene-d10	214000	9.904			
1517-22-2	Phenanthrene-d10	408000	11.398			
1719-03-5	Chrysene-d12	220000	14.045			
1520-96-3	Perylene-d12	187000	15.545			

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Report of Analysis

Client:	AECOM			Date Collected:	
Project:	Meeker Ave Plumes Superfund Site RI FS			Date Received:	
Client Sample ID:	PB165052BL			SDG No.:	P4871
Lab Sample ID:	PB165052BL			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140605.D	1	11/18/24 08:35	11/25/24 16:17	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	AECOM	Date Collected:	
Project:	Meeker Ave Plumes Superfund Site RI FS	Date Received:	
Client Sample ID:	PB165052BS	SDG No.:	P4871
Lab Sample ID:	PB165052BS	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140596.D	1	11/18/24 08:35	11/25/24 12:09	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	49.3		1.60	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	46.6		0.84	5.00	ug/L
95-48-7	2-Methylphenol	49.4		1.10	5.00	ug/L
65794-96-9	3+4-Methylphenols	49.2		1.20	10.0	ug/L
67-72-1	Hexachloroethane	46.3		1.00	5.00	ug/L
98-95-3	Nitrobenzene	44.6		1.30	5.00	ug/L
87-68-3	Hexachlorobutadiene	44.9		1.30	5.00	ug/L
88-06-2	2,4,6-Trichlorophenol	48.0		0.89	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	47.2		1.00	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	48.7		1.50	5.00	ug/L
118-74-1	Hexachlorobenzene	46.6		1.10	5.00	ug/L
87-86-5	Pentachlorophenol	100	E	1.90	10.0	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	136		10 - 139	91%	SPK: 150
13127-88-3	Phenol-d6	133		10 - 134	89%	SPK: 150
4165-60-0	Nitrobenzene-d5	90.2		49 - 133	90%	SPK: 100
321-60-8	2-Fluorobiphenyl	91.1		52 - 132	91%	SPK: 100
118-79-6	2,4,6-Tribromophenol	143		44 - 137	95%	SPK: 150
1718-51-0	Terphenyl-d14	89.0		48 - 125	89%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	94700	6.869			
1146-65-2	Naphthalene-d8	366000	8.151			
15067-26-2	Acenaphthene-d10	205000	9.91			
1517-22-2	Phenanthrene-d10	399000	11.398			
1719-03-5	Chrysene-d12	259000	14.057			
1520-96-3	Perylene-d12	208000	15.556			

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Fax : 908 789 8922

Report of Analysis

Client:	AECOM			Date Collected:	
Project:	Meeker Ave Plumes Superfund Site RI FS			Date Received:	
Client Sample ID:	PB165052BS			SDG No.:	P4871
Lab Sample ID:	PB165052BS			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140596.D	1	11/18/24 08:35	11/25/24 12:09	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	AECOM	Date Collected:	11/14/24
Project:	Meeker Ave Plumes Superfund Site RI FS	Date Received:	11/14/24
Client Sample ID:	TP-1MS	SDG No.:	P4871
Lab Sample ID:	P4848-02MS	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140465.D	1	11/18/24 08:35	11/19/24 11:36	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	320		15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	400		8.40	50.0	ug/L
95-48-7	2-Methylphenol	500		11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	510		11.5	100	ug/L
67-72-1	Hexachloroethane	400		10.1	50.0	ug/L
98-95-3	Nitrobenzene	460		12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	430		12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	530		8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	520		10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	530		15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	530		11.4	50.0	ug/L
87-86-5	Pentachlorophenol	1100	E	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	140		10 - 139	93%	SPK: 150
13127-88-3	Phenol-d6	136		10 - 134	91%	SPK: 150
4165-60-0	Nitrobenzene-d5	101		49 - 133	101%	SPK: 100
321-60-8	2-Fluorobiphenyl	99.0		52 - 132	99%	SPK: 100
118-79-6	2,4,6-Tribromophenol	159		44 - 137	106%	SPK: 150
1718-51-0	Terphenyl-d14	110		48 - 125	110%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	149000	6.875			
1146-65-2	Naphthalene-d8	566000	8.151			
15067-26-2	Acenaphthene-d10	313000	9.91			
1517-22-2	Phenanthrene-d10	585000	11.404			
1719-03-5	Chrysene-d12	348000	14.057			
1520-96-3	Perylene-d12	308000	15.568			

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Report of Analysis

Client:	AECOM			Date Collected:	11/14/24
Project:	Meeker Ave Plumes Superfund Site RI FS			Date Received:	11/14/24
Client Sample ID:	TP-1MS			SDG No.:	P4871
Lab Sample ID:	P4848-02MS			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	100	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140465.D	1	11/18/24 08:35	11/19/24 11:36	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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J = Estimated Value
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N = Presumptive Evidence of a Compound
* = Values outside of QC limits
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Report of Analysis

Client:	AECOM	Date Collected:	11/14/24
Project:	Meeker Ave Plumes Superfund Site RI FS	Date Received:	11/14/24
Client Sample ID:	TP-1MSD	SDG No.:	P4871
Lab Sample ID:	P4848-02MSD	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140466.D	1	11/18/24 08:35	11/19/24 12:02	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	320		15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	410		8.40	50.0	ug/L
95-48-7	2-Methylphenol	510		11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	520		11.5	100	ug/L
67-72-1	Hexachloroethane	410		10.1	50.0	ug/L
98-95-3	Nitrobenzene	460		12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	440		12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	550		8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	520		10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	540		15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	540		11.4	50.0	ug/L
87-86-5	Pentachlorophenol	1100	E	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	144		10 - 139	96%	SPK: 150
13127-88-3	Phenol-d6	138		10 - 134	92%	SPK: 150
4165-60-0	Nitrobenzene-d5	104		49 - 133	104%	SPK: 100
321-60-8	2-Fluorobiphenyl	100		52 - 132	100%	SPK: 100
118-79-6	2,4,6-Tribromophenol	159		44 - 137	106%	SPK: 150
1718-51-0	Terphenyl-d14	113		48 - 125	113%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	148000	6.875			
1146-65-2	Naphthalene-d8	562000	8.151			
15067-26-2	Acenaphthene-d10	312000	9.91			
1517-22-2	Phenanthrene-d10	573000	11.398			
1719-03-5	Chrysene-d12	332000	14.063			
1520-96-3	Perylene-d12	279000	15.58			

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Report of Analysis

Client:	AECOM			Date Collected:	11/14/24
Project:	Meeker Ave Plumes Superfund Site RI FS			Date Received:	11/14/24
Client Sample ID:	TP-1MSD			SDG No.:	P4871
Lab Sample ID:	P4848-02MSD			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	100	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140466.D	1	11/18/24 08:35	11/19/24 12:02	PB165052

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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J = Estimated Value
B = Analyte Found in Associated Method Blank
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* = Values outside of QC limits
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() = Laboratory InHouse Limit
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CALIBRATION SUMMARY

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF111324.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Nov 13 14:40:06 2024
Response Via : Initial Calibration

Calibration Files
2.5 =BF140332.D 5 =BF140333.D 10 =BF140334.D 20 =BF140335.D 40 =BF140340.D 50 =BF140337.D 60 =BF140338.D 80 =BF1403
39.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------							
2)		1,4-Dioxane		0.582	0.546	0.530	0.515	0.495	0.506	0.480	0.522	6.53
3)		Pyridine		1.430	1.343	1.323	1.316	1.189	1.237	1.147	1.283	7.61
4)		n-Nitrosodimet...		0.658	0.632	0.651	0.659	0.644	0.671	0.627	0.649	2.39
5)	S	2-Fluorophenol		1.329	1.257	1.223	1.150	1.090	1.118	1.032	1.171	8.84
6)		Aniline		1.587	1.527	1.495	1.451	1.267	1.270	1.066	1.381	13.42
7)	S	Phenol-d6		1.773	1.691	1.643	1.605	1.483	1.507	1.407	1.587	8.09
8)		2-Chlorophenol		1.397	1.349	1.332	1.263	1.176	1.184	1.106	1.258	8.49
9)		Benzaldehyde		1.101	1.087	1.017	0.891	0.828	0.783		0.951	14.32
10)	C	Phenol		1.799	1.793	1.743	1.724	1.582	1.597	1.478	1.674	7.31
11)		bis(2-Chloroet...		1.359	1.294	1.306	1.263	1.227	1.249	1.179	1.268	4.60
12)		1,3-Dichlorobe...		1.585	1.475	1.454	1.374	1.291	1.317	1.221	1.388	8.98
13)	C	1,4-Dichlorobe...		1.590	1.534	1.486	1.391	1.306	1.326	1.221	1.408	9.49
14)		1,2-Dichlorobe...		1.494	1.429	1.398	1.294	1.212	1.214	1.108	1.307	10.63
15)		Benzyl Alcohol		1.172	1.193	1.199	1.211	1.100	1.108	1.020	1.143	6.10
16)		2,2'-oxybis(1-...		1.906	1.826	1.815	1.816	1.666	1.684	1.549	1.752	7.01
17)		2-Methylphenol		1.092	1.062	1.072	1.064	0.998	1.016	0.942	1.035	5.07
18)		Hexachloroethane		0.562	0.543	0.550	0.514	0.500	0.506	0.468	0.520	6.30
19)	P	n-Nitroso-di-n...	1.032	1.029	1.003	0.986	0.982	0.883	0.905	0.848	0.959	7.30
20)		3+4-Methylphenols		1.436	1.427	1.359	1.351	1.200	1.198	1.091	1.294	10.21
21)	I	Naphthalene-d8	----------	ISTD	----------							
22)		Acetophenone		0.532	0.508	0.481	0.450	0.434	0.441	0.411	0.465	9.35
23)	S	Nitrobenzene-d5		0.411	0.401	0.399	0.375	0.368	0.379	0.354	0.384	5.28
24)		Nitrobenzene		0.423	0.421	0.406	0.393	0.390	0.394	0.371	0.400	4.61
25)		Isophorone		0.736	0.702	0.692	0.674	0.654	0.671	0.634	0.680	4.87
26)	C	2-Nitrophenol		0.175	0.179	0.181	0.179	0.175	0.181	0.171	0.177	1.99
27)		2,4-Dimethylph...		0.238	0.236	0.232	0.223	0.221	0.227	0.214	0.227	3.86
28)		bis(2-Chloroet...		0.461	0.442	0.430	0.407	0.398	0.404	0.379	0.417	6.80
29)	C	2,4-Dichloroph...		0.307	0.296	0.287	0.275	0.272	0.272	0.255	0.281	6.20
30)		1,2,4-Trichlor...		0.346	0.331	0.325	0.302	0.298	0.301	0.283	0.312	7.15
31)		Naphthalene		1.160	1.105	1.064	0.982	0.950	0.955	0.886	1.015	9.60
32)		Benzoic acid		0.162	0.178	0.180	0.212	0.215	0.226	0.226	0.200	13.01
33)		4-Chloroaniline		0.390	0.386	0.370	0.340	0.333	0.340	0.311	0.353	8.36
34)	C	Hexachlorobuta...		0.220	0.214	0.210	0.193	0.188	0.190	0.178	0.199	7.73
35)		Caprolactam		0.098	0.093	0.094	0.092	0.091	0.095	0.089	0.093	3.27
36)	C	4-Chloro-3-met...		0.331	0.327	0.320	0.309	0.299	0.304	0.287	0.311	5.14
37)		2-Methylnaphth...		0.751	0.706	0.683	0.632	0.610	0.607	0.565	0.651	10.01
38)		1-Methylnaphth...		0.734	0.696	0.673	0.625	0.589	0.592	0.550	0.637	10.39

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF111324.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.646	0.585	0.583	0.531	0.524	0.517	0.485	0.553	9.85
41)	P	Hexachlorocycl...		0.111	0.143	0.139	0.156	0.159	0.145	0.142	12.04
42)	S	2,4,6-Tribromo...	0.220	0.211	0.207	0.193	0.191	0.189	0.182	0.199	6.88
43)	C	2,4,6-Trichlor...	0.380	0.374	0.374	0.360	0.360	0.352	0.341	0.363	3.87
44)		2,4,5-Trichlor...	0.421	0.417	0.412	0.389	0.387	0.390	0.361	0.397	5.41
45)	S	2-Fluorobiphenyl	1.524	1.396	1.351	1.172	1.125	1.110	1.031	1.244	14.50
46)		1,1'-Biphenyl	1.690	1.571	1.565	1.404	1.368	1.343	1.244	1.455	10.80
47)		2-Chloronaphth...	1.279	1.182	1.149	1.065	1.064	1.049	0.971	1.108	9.20
48)		2-Nitroaniline	0.378	0.365	0.384	0.364	0.365	0.366	0.351	0.368	2.91
49)		Acenaphthylene	1.940	1.802	1.786	1.636	1.582	1.552	1.441	1.677	10.29
50)		Dimethylphthalate	1.464	1.358	1.371	1.261	1.246	1.244	1.181	1.304	7.47
51)		2,6-Dinitrotol...	0.317	0.303	0.313	0.297	0.291	0.289	0.268	0.297	5.57
52)	C	Acenaphthene	1.259	1.204	1.192	1.096	1.091	1.079	1.006	1.133	7.78
53)		3-Nitroaniline	0.333	0.327	0.335	0.310	0.307	0.298	0.275	0.312	6.92
54)	P	2,4-Dinitrophenol		0.109	0.148	0.147	0.178	0.170	0.168	0.153	16.27
55)		Dibenzofuran	1.904	1.736	1.715	1.558	1.502	1.466	1.344	1.603	11.92
56)	P	4-Nitrophenol	0.199	0.217	0.239	0.236	0.240	0.237	0.225	0.228	6.67
57)		2,4-Dinitrotol...	0.414	0.400	0.417	0.387	0.387	0.382	0.351	0.391	5.77
58)		Fluorene	1.525	1.403	1.365	1.202	1.168	1.137	1.066	1.267	13.14
59)		2,3,4,6-Tetrac...	0.322	0.328	0.326	0.318	0.308	0.302	0.288	0.313	4.61
60)		Diethylphthalate	1.525	1.417	1.398	1.287	1.272	1.246	1.185	1.333	8.85
61)		4-Chlorophenyl...	0.739	0.688	0.669	0.604	0.583	0.567	0.528	0.625	12.01
62)		4-Nitroaniline	0.335	0.325	0.328	0.319	0.316	0.313	0.297	0.319	3.86
63)		Azobenzene	1.498	1.391	1.380	1.293	1.251	1.244	1.163	1.317	8.55
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...	0.080	0.098	0.113	0.109	0.117	0.120	0.116	0.108	13.00
66)	c	n-Nitrosodiphe...	0.651	0.630	0.600	0.559	0.541	0.541	0.522	0.578	8.57
67)		4-Bromophenyl-...	0.227	0.210	0.209	0.194	0.191	0.188	0.180	0.200	8.14
68)		Hexachlorobenzene	0.251	0.242	0.232	0.218	0.209	0.215	0.208	0.225	7.54
69)		Atrazine	0.191	0.183	0.135	0.145	0.155	0.205	0.209	0.175	17.03
70)	C	Pentachlorophenol	0.097	0.108	0.124	0.127	0.131	0.130	0.130	0.121	10.87
71)		Phenanthrene	1.096	1.053	0.986	0.903	0.868	0.851	0.820	0.940	11.33
72)		Anthracene	1.071	1.018	0.966	0.889	0.860	0.839	0.803	0.921	10.81
73)		Carbazole	1.053	1.009	0.963	0.876	0.846	0.834	0.783	0.909	11.02
74)		Di-n-butylphth...	1.214	1.177	1.150	1.074	1.036	1.023	0.964	1.091	8.37
75)	C	Fluoranthene	1.256	1.201	1.141	1.018	0.962	0.933	0.867	1.054	13.92
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine		0.634	0.684	0.653	0.742	0.953	0.939	0.768	18.64
78)		Pyrene	1.748	1.706	1.643	1.679	1.728	1.800	1.672	1.711	3.08
79)	S	Terphenyl-d14	1.226	1.185	1.108	1.123	1.139	1.190	1.093	1.152	4.26
80)		Butylbenzylpht...	0.640	0.638	0.654	0.690	0.670	0.681	0.628	0.657	3.56
81)		Benzo(a)anthra...	1.451	1.418	1.351	1.263	1.229	1.294	1.195	1.314	7.31
82)		3,3'-Dichlorob...	0.438	0.431	0.433	0.402	0.406	0.416	0.399	0.418	3.79
83)		Chrysene	1.394	1.241	1.235	1.168	1.137	1.123	1.099	1.199	8.44
84)		Bis(2-ethylhex...	0.886	0.890	0.897	0.927	0.858	0.869	0.813	0.877	4.07
85)	c	Di-n-octyl pht...	1.231	1.217	1.270	1.290	1.187	1.241	1.212	1.235	2.86

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF111324.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.116	1.150	1.138	1.258	1.316	1.354	1.317	1.235	8.02
88)		Benzo(b)fluora...	1.405	1.352	1.471	1.263	1.235	1.233	1.199	1.308	7.82
89)		Benzo(k)fluora...	1.286	1.241	1.120	1.060	0.952	0.935	0.888	1.069	14.47
90)	C	Benzo(a)pyrene	1.100	1.053	1.054	1.005	0.970	0.980	0.948	1.016	5.40
91)		Dibenzo(a,h)an...	0.941	0.952	0.944	1.039	1.074	1.121	1.077	1.021	7.30
92)		Benzo(g,h,i)pe...	0.941	0.963	0.954	1.063	1.122	1.146	1.120	1.044	8.55

(#) = Out of Range

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF112124.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Nov 21 15:23:48 2024
Response Via : Initial Calibration

Calibration Files
2.5 =BF140528.D 5 =BF140529.D 10 =BF140530.D 20 =BF140531.D 40 =BF140532.D 50 =BF140533.D 60 =BF140534.D 80 =BF1405
35.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------							
2)		1,4-Dioxane		0.501	0.502	0.576	0.489	0.452	0.454	0.477	0.493	8.46
3)		Pyridine		0.981	1.019	1.121	1.192	1.062	1.087	1.128	1.084	6.54
4)		n-Nitrosodimet...		0.616	0.611	0.661	0.648	0.632	0.632	0.660	0.637	3.15
5)	S	2-Fluorophenol		1.261	1.233	1.202	1.174	1.117	1.127	1.091	1.172	5.40
6)		Aniline		1.159	1.195	1.133	1.251	1.042	1.020	0.835	1.091	12.73
7)	S	Phenol-d6		1.729	1.617	1.559	1.602	1.465	1.470	1.407	1.550	7.14
8)		2-Chlorophenol		1.385	1.328	1.278	1.283	1.201	1.208	1.145	1.261	6.51
9)		Benzaldehyde			1.007	0.970	0.738	0.752	0.635		0.820	19.55
10)	C	Phenol		1.723	1.648	1.620	1.667	1.514	1.490	1.417	1.583	6.98
11)		bis(2-Chloroet...		1.292	1.242	1.214	1.246	1.146	1.200	1.138	1.211	4.56
12)		1,3-Dichlorobe...		1.600	1.493	1.433	1.399	1.345	1.361	1.288	1.417	7.31
13)	C	1,4-Dichlorobe...		1.613	1.501	1.456	1.428	1.358	1.372	1.314	1.435	7.04
14)		1,2-Dichlorobe...		1.503	1.434	1.375	1.355	1.268	1.266	1.210	1.344	7.71
15)		Benzyl Alcohol		1.234	1.174	1.161	1.224	1.113	1.090	1.048	1.149	5.98
16)		2,2'-oxybis(1-...		1.650	1.480	1.434	1.463	1.335	1.377	1.276	1.431	8.43
17)		2-Methylphenol		1.121	1.034	1.033	1.042	0.956	0.959	0.922	1.009	6.74
18)		Hexachloroethane		0.598	0.545	0.549	0.537	0.514	0.510	0.499	0.536	6.17
19)	P	n-Nitroso-di-n...	0.972	1.002	0.949	0.916	0.946	0.856	0.857	0.829	0.916	6.82
20)		3+4-Methylphenols		1.495	1.362	1.305	1.347	1.211	1.209	1.154	1.298	8.98
21)	I	Naphthalene-d8	----------	ISTD	----------							
22)		Acetophenone		0.536	0.511	0.494	0.481	0.463	0.460	0.468	0.488	5.75
23)	S	Nitrobenzene-d5		0.409	0.403	0.395	0.392	0.377	0.377	0.383	0.391	3.21
24)		Nitrobenzene		0.439	0.409	0.409	0.401	0.388	0.391	0.392	0.404	4.35
25)		Isophorone		0.694	0.654	0.657	0.662	0.629	0.634	0.635	0.652	3.44
26)	C	2-Nitrophenol		0.178	0.172	0.185	0.180	0.178	0.180	0.180	0.179	2.17
27)		2,4-Dimethylph...		0.221	0.214	0.213	0.224	0.204	0.207	0.218	0.214	3.40
28)		bis(2-Chloroet...		0.428	0.408	0.403	0.397	0.378	0.384	0.383	0.397	4.37
29)	C	2,4-Dichloroph...		0.301	0.291	0.290	0.282	0.277	0.274	0.271	0.284	3.82
30)		1,2,4-Trichlor...		0.342	0.338	0.332	0.317	0.317	0.312	0.312	0.324	3.91
31)		Naphthalene		1.116	1.075	1.062	1.013	0.993	0.983	0.970	1.030	5.32
32)		Benzoic acid			0.101	0.126	0.177	0.185	0.192	0.202	0.164	24.72
33)		4-Chloroaniline		0.308	0.318	0.309	0.325	0.303	0.308	0.289	0.308	3.71
34)	C	Hexachlorobuta...		0.227	0.225	0.219	0.212	0.209	0.207	0.204	0.215	4.15
35)		Caprolactam		0.091	0.091	0.091	0.090	0.085	0.085	0.083	0.088	3.99
36)	C	4-Chloro-3-met...		0.348	0.318	0.317	0.327	0.307	0.307	0.301	0.318	4.95
37)		2-Methylnaphth...		0.724	0.680	0.669	0.650	0.623	0.620	0.615	0.654	6.09
38)		1-Methylnaphth...		0.707	0.665	0.659	0.638	0.611	0.608	0.601	0.641	5.98

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF112124.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.635	0.604	0.606	0.563	0.561	0.565	0.565	0.586	5.02
41)	P	Hexachlorocycl...		0.055	0.090	0.114	0.121	0.129	0.133	0.107	27.80
42)	S	2,4,6-Tribromo...	0.222	0.209	0.220	0.216	0.210	0.210	0.211	0.214	2.52
43)	C	2,4,6-Trichlor...	0.384	0.358	0.375	0.366	0.364	0.360	0.365	0.367	2.45
44)		2,4,5-Trichlor...	0.402	0.396	0.410	0.404	0.390	0.397	0.392	0.399	1.80
45)	S	2-Fluorobiphenyl	1.550	1.402	1.423	1.291	1.255	1.240	1.235	1.342	8.90
46)		1,1'-Biphenyl	1.666	1.530	1.563	1.447	1.427	1.418	1.403	1.493	6.50
47)		2-Chloronaphth...	1.251	1.145	1.162	1.106	1.082	1.084	1.091	1.131	5.39
48)		2-Nitroaniline	0.367	0.351	0.379	0.367	0.363	0.357	0.359	0.363	2.50
49)		Acenaphthylene	1.890	1.765	1.808	1.662	1.628	1.623	1.590	1.710	6.58
50)		Dimethylphthalate	1.455	1.329	1.346	1.299	1.267	1.270	1.254	1.317	5.28
51)		2,6-Dinitrotol...	0.314	0.299	0.307	0.301	0.291	0.293	0.286	0.299	3.24
52)	C	Acenaphthene	1.182	1.110	1.134	1.063	1.052	1.037	1.026	1.086	5.29
53)		3-Nitroaniline	0.307	0.297	0.309	0.300	0.289	0.281	0.262	0.292	5.71
54)	P	2,4-Dinitrophenol		0.057	0.089	0.140	0.145	0.150	0.154	0.122	32.70
55)		Dibenzofuran	1.898	1.739	1.739	1.622	1.559	1.531	1.509	1.657	8.53
56)	P	4-Nitrophenol		0.160	0.195	0.207	0.212	0.214	0.208	0.199	10.31
57)		2,4-Dinitrotol...	0.403	0.403	0.416	0.404	0.386	0.389	0.379	0.397	3.24
58)		Fluorene	1.509	1.409	1.399	1.295	1.263	1.224	1.210	1.330	8.37
59)		2,3,4,6-Tetrac...	0.307	0.296	0.308	0.312	0.305	0.305	0.312	0.306	1.72
60)		Diethylphthalate	1.495	1.375	1.393	1.311	1.292	1.268	1.234	1.338	6.66
61)		4-Chlorophenyl...	0.739	0.682	0.685	0.639	0.619	0.605	0.599	0.653	7.90
62)		4-Nitroaniline	0.307	0.301	0.315	0.312	0.310	0.309	0.291	0.306	2.67
63)		Azobenzene	1.406	1.320	1.320	1.235	1.205	1.206	1.179	1.267	6.55
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...		0.073	0.090	0.110	0.110	0.117	0.113	0.102	16.74
66)	c	n-Nitrosodiphe...	0.632	0.618	0.597	0.578	0.577	0.580	0.558	0.591	4.39
67)		4-Bromophenyl-...	0.218	0.215	0.206	0.200	0.200	0.205	0.198	0.206	3.79
68)		Hexachlorobenzene	0.257	0.240	0.239	0.233	0.232	0.236	0.232	0.238	3.65
69)		Atrazine	0.181	0.171	0.131	0.140	0.147	0.196	0.198	0.166	16.37
70)	C	Pentachlorophenol		0.071	0.090	0.116	0.115	0.121	0.118	0.105	19.24
71)		Phenanthrene	1.074	1.020	0.970	0.944	0.925	0.916	0.881	0.961	6.87
72)		Anthracene	1.038	0.994	0.958	0.925	0.905	0.904	0.859	0.940	6.47
73)		Carbazole	1.004	0.949	0.930	0.889	0.876	0.862	0.821	0.905	6.75
74)		Di-n-butylphth...	1.144	1.075	1.074	1.023	1.021	1.007	0.967	1.044	5.56
75)	C	Fluoranthene	1.186	1.111	1.114	1.014	0.999	0.962	0.921	1.044	9.11
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine	0.268	0.422	0.296	0.575	0.734	1.025	0.751	0.581	47.31
78)		Pyrene	1.905	1.801	1.897	1.853	1.791	1.898	1.799	1.849	2.79
79)	S	Terphenyl-d14	1.351	1.254	1.308	1.283	1.228	1.313	1.254	1.284	3.31
80)		Butylbenzylpht...	0.676	0.644	0.694	0.679	0.655	0.674	0.641	0.666	2.96
81)		Benzo(a)anthra...	1.409	1.319	1.379	1.286	1.295	1.338	1.242	1.324	4.30
82)		3,3'-Dichlorob...	0.375	0.383	0.393	0.413	0.406	0.419	0.394	0.397	4.03
83)		Chrysene	1.354	1.263	1.218	1.201	1.137	1.173	1.128	1.211	6.50
84)		Bis(2-ethylhex...	0.904	0.828	0.862	0.833	0.824	0.841	0.797	0.841	4.00
85)	c	Di-n-octyl pht...	1.198	1.133	1.147	1.132	1.147	1.169	1.121	1.150	2.29

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF112124.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.209	1.283	1.299	1.304	1.306	1.409	1.313	1.303	4.51
88)		Benzo(b)fluora...	1.347	1.256	1.380	1.186	1.248	1.207	1.168	1.256	6.41
89)		Benzo(k)fluora...	1.243	1.236	1.059	1.101	1.022	1.055	0.980	1.099	9.34
90)	C	Benzo(a)pyrene	1.062	1.050	1.063	1.007	0.998	1.014	0.957	1.021	3.81
91)		Dibenzo(a,h)an...	1.015	1.038	1.063	1.068	1.075	1.149	1.064	1.067	3.90
92)		Benzo(g,h,i)pe...	1.033	1.090	1.078	1.085	1.094	1.161	1.083	1.089	3.48

(#) = Out of Range

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG No.: P4871

Instrument ID: BNA_F Calibration Date/Time: 11/18/2024 16:14

Lab File ID: BF140456.D Init. Calib. Date(s): 11/13/2024 11/13/2024

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 09:01 12:48

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.283	1.283		0.0	
2-Fluorophenol	1.171	1.145		-2.2	
Phenol-d6	1.587	1.518		-4.3	
1,4-Dichlorobenzene	1.408	1.381		-1.9	20.0
2-Methylphenol	1.035	0.997		-3.7	
3+4-Methylphenols	1.295	1.232		-4.9	
Nitrobenzene-d5	0.384	0.371		-3.4	
Hexachloroethane	0.520	0.518		-0.4	
Nitrobenzene	0.400	0.389		-2.8	
Hexachlorobutadiene	0.199	0.198		-0.5	20.0
2,4,6-Trichlorophenol	0.363	0.357		-1.7	20.0
2-Fluorobiphenyl	1.244	1.247		0.2	
2,4,5-Trichlorophenol	0.397	0.402		1.3	
2,4-Dinitrotoluene	0.391	0.388		-0.8	
2,4,6-Tribromophenol	0.199	0.196		-1.5	
Hexachlorobenzene	0.225	0.232		3.1	
Pentachlorophenol	0.121	0.115		-5.0	20.0
Terphenyl-d14	1.152	1.275		10.7	

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG No.: P4871

Instrument ID: BNA_F Calibration Date/Time: 11/19/2024 10:34

Lab File ID: BF140463.D Init. Calib. Date(s): 11/13/2024 11/13/2024

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 09:01 12:48

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.283	1.308		1.9	
2-Fluorophenol	1.171	1.209		3.2	
Phenol-d6	1.587	1.607		1.3	
1,4-Dichlorobenzene	1.408	1.437		2.1	20.0
2-Methylphenol	1.035	1.061		2.5	
3+4-Methylphenols	1.295	1.288		-0.5	
Nitrobenzene-d5	0.384	0.393		2.3	
Hexachloroethane	0.520	0.523		0.6	
Nitrobenzene	0.400	0.412		3.0	
Hexachlorobutadiene	0.199	0.203		2.0	20.0
2,4,6-Trichlorophenol	0.363	0.376		3.6	20.0
2-Fluorobiphenyl	1.244	1.257		1.0	
2,4,5-Trichlorophenol	0.397	0.420		5.8	
2,4-Dinitrotoluene	0.391	0.413		5.6	
2,4,6-Tribromophenol	0.199	0.209		5.0	
Hexachlorobenzene	0.225	0.231		2.7	
Pentachlorophenol	0.121	0.124		2.5	20.0
Terphenyl-d14	1.152	1.112		-3.5	

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG No.: P4871

Instrument ID: BNA_F Calibration Date/Time: 11/25/2024 09:33

Lab File ID: BF140590.D Init. Calib. Date(s): 11/21/2024 11/21/2024

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:13 14:18

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.084	1.124		3.7	
2-Fluorophenol	1.172	1.119		-4.5	
Phenol-d6	1.550	1.507		-2.8	
1,4-Dichlorobenzene	1.435	1.399		-2.5	20.0
2-Methylphenol	1.010	0.988		-2.2	
3+4-Methylphenols	1.298	1.252		-3.5	
Nitrobenzene-d5	0.391	0.377		-3.6	
Hexachloroethane	0.536	0.520		-3.0	
Nitrobenzene	0.404	0.386		-4.5	
Hexachlorobutadiene	0.215	0.212		-1.4	20.0
2,4,6-Trichlorophenol	0.367	0.368		0.3	20.0
2-Fluorobiphenyl	1.342	1.315		-2.0	
2,4,5-Trichlorophenol	0.399	0.405		1.5	
2,4-Dinitrotoluene	0.397	0.407		2.5	
2,4,6-Tribromophenol	0.214	0.210		-1.9	
Hexachlorobenzene	0.238	0.233		-2.1	
Pentachlorophenol	0.105	0.110		4.8	20.0
Terphenyl-d14	1.284	1.204		-6.2	

All other compounds must meet a minimum RRF of 0.010.

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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: AECO02

Lab Code: CHEM Case No.: P4871 SAS No.: P4871 SDG No.: P4871

Instrument ID: BNA_F Calibration Date/Time: 11/25/2024 15:49

Lab File ID: BF140604.D Init. Calib. Date(s): 11/21/2024 11/21/2024

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:13 14:18

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.084	1.248		15.1	
2-Fluorophenol	1.172	1.153		-1.6	
Phenol-d6	1.550	1.521		-1.9	
1,4-Dichlorobenzene	1.435	1.401		-2.4	20.0
2-Methylphenol	1.010	1.019		0.9	
3+4-Methylphenols	1.298	1.259		-3.0	
Nitrobenzene-d5	0.391	0.378		-3.3	
Hexachloroethane	0.536	0.521		-2.8	
Nitrobenzene	0.404	0.392		-3.0	
Hexachlorobutadiene	0.215	0.210		-2.3	20.0
2,4,6-Trichlorophenol	0.367	0.358		-2.5	20.0
2-Fluorobiphenyl	1.342	1.282		-4.5	
2,4,5-Trichlorophenol	0.399	0.395		-1.0	
2,4-Dinitrotoluene	0.397	0.389		-2.0	
2,4,6-Tribromophenol	0.214	0.206		-3.7	
Hexachlorobenzene	0.238	0.236		-0.8	
Pentachlorophenol	0.105	0.106		1.0	20.0
Terphenyl-d14	1.284	1.258		-2.0	

All other compounds must meet a minimum RRF of 0.010.