LABORATORY DATA CONSULTANTS, INC.
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SESI Consulting Engineers
12A Maple Avenue
Pine Brook, NJ 07058
ATTN: Mr. Todd T. Kelly
ttk@sesi.org

October 6, 2020

SUBJECT: 500 Main St., New Rochelle, Data Validation

Dear Mr. Kelly,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on September 15, 2020. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #49146:

SDG #	Fraction
460-214636-1, 460-214767-1 460-214780-1, 460-215088-1 460-216046-1, 460-214419-1	Volatiles, Semivolatiles, Organochlorine Pesticides, Polychlorinated Biphenyls, Metals, Cyanide, Perfluoroalkyl & Polyfluoroalkyl Substances

The data validation was performed under Category B guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA Region 2 Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C, SOP HW-24, Revision 4; October 2014
- USEPA Region 2 Standard Operating Procedure for Semivolatile Data Validation SW-846 Method 8270D, SOP HW-35A, Revision 0; June 2015
- USEPA Region 2 Standard Operating Procedure for Validating Pesticide Compounds, Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B, SOP HW-44, Revision 1.1; December 2010
- USEPA Region 2 Standard Operating Procedure for Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A, SOP HW-45, Revision 1; October 2006
- USEPA Region 2 Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program, SOP HW-3a/b/c, Revision 1; September 2016
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, EPA 540-R-2017-002; January 2017
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, EPA 540-R2017-001; January 2017
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

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Please feel free to contact us if you have any questions.

Sincerely,

Christina Rink

Christina Rink
crink@lab-data.com
Project Manager/Senior Chemist

730 pages-ADV

Attachment 1

Category B EDD

LDC#49146 (SESI Consulting Engineers, Pine Brook, NJ / 500 Main St., New Rochelle)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260C)		SVOA (8270D)		PAHs (8270D -SIM)		Pest. (8081B)		PCBs (8082A)		Metals (6010D)		Metals (6020B)		Hg (7470A /7471B)		PFAs (537M)		CN- (9012B)															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	460-214636-1	09/15/20	10/06/20	0	3	0	3	-	-	0	3	0	3	0	3	-	-	0	3	0	3	0	3														
B	460-214767-1	09/15/20	10/06/20	1	8	0	8	-	-	0	8	0	8	0	8	-	-	0	8	0	8	0	8														
C	460-214780-1	09/15/20	10/06/20	1	17	0	17	-	-	0	17	0	17	0	17	-	-	0	17	0	17	0	17														
D	460-215088-1	09/15/20	10/06/20	1	6	0	6	-	-	0	6	0	6	0	6	-	-	0	6	0	6	0	6														
F	460-216046-1	09/15/20	10/06/20	4	0	3	0	3	0	3	0	3	0	-	-	3	0	3	0	3	0	3	0														
F	460-214419-1	09/15/20	10/06/20	0	5	0	5	-	-	0	5	0	5	0	5	-	-	0	5	0	5	0	5														
Total	J/CR			7	39	3	39	3	0	3	39	3	39	0	39	3	0	3	39	3	39	3	39	0	0	0	0	0	0	0	0	0	0	0	0	0	343

Shaded cells indicate Category B validation (all other cells are Category A validation). These sample counts do not include MS/MSD, and DUPs

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Site:	500 Main Street, New Rochelle, NY
Laboratory:	Eurofins
Report No.:	460-214636-1
Reviewer:	Felomina Tanguilig, Stella Cuenco, and Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date:	October 5, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-2(2-3)	460-214636-1	VOC, SVOC, Pesticide, PCB, PFAS
SB-6(1-2)	460-214636-2	VOC, SVOC, Pesticide, PCB, PFAS
SB-10(1-2)	460-214636-3	VOC, SVOC, Pesticide, PCB, PFAS

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed soil samples were collected on July 29, 2020 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260C, semivolatile organic compounds (SVOC) by SW-846 method 8270D, organochlorine pesticides by SW-846 method 8081B, polychlorinated biphenyls (PCB) by SW-846 method 8082A, and perfluoroalkyl and polyfluoroalkyl substances (PFAS) by method 537 modified. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C,* SOP HW-24, Revision 4 (October 2014), the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation SW-846 Method 8270D,* SOP HW-35A, Revision 0 (June 2015), the USEPA Region 2 *Standard Operating Procedure for Validating Pesticide Compounds, Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B,* SOP HW-44, Revision 1.1 (December 2010), the USEPA Region 2 *Standard Operating Procedure for Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A,* SOP HW-45, Revision 1 (October 2006), the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-2017-002 (January 2017), and the Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (January 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- GC/Electron Capture Detector (GC/ECD) Instrument Performance Checks
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards/Labeled Compounds
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

VOC and SVOC

All criteria were met.

GC/ECD Instrument Performance Checks

Pesticide

All criteria were met.

LC/MS Instrument Performance Checks

PFAS

All criteria were met.

Initial and Continuing Calibrations

VOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/03/20	CCV-MS4	Dichlorodifluoromethane	21.2	SB-2(2-3)	XX	UJ nondetects
		Bromomethane	80.1	SB-6(1-2)	XX	UJ nondetects
		Carbon disulfide	23.8	SB-10(1-2)	XX	UJ nondetects
		Bromoform	25.7		XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The dichlorodifluoromethane, bromomethane, carbon disulfide, and bromoform results for the samples listed above were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/01/20	CCV 460-713399	Benzaldehyde	44.6	SB-2(2-3)	XX	UJ nondetects
		2,4-Dinitrophenol	25.5	SB-6(1-2)	XX	UJ nondetects
				SB-10(1-2)		

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzaldehyde and 2,4-dinitrophenol results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Pesticide, PCB, and PFAS

All criteria were met.

Blanks

VOC, SVOC, Pesticide, and PCB

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

PFAS

Contamination was detected in the associated pesticide method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 320-400499/1-A	Perfluorooctanesulfonic acid	0.349 ug/Kg	RL	SB-2(2-3) SB-6(1-2) SB-10(1-2)

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SB-6(1-2)	Perfluorooctanesulfonic acid	0.41 ug/Kg	0.51U ug/Kg
SB-10(1-2)	Perfluorooctanesulfonic acid	0.25 ug/Kg	0.49U ug/Kg

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

VOC, SVOC, Pesticide, and PCB

All criteria were met.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

VOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-713574	Bromomethane	174 (68-136)	181 (68-136)	SB-2(2-3) SB-6(1-2) SB-10(1-2)	None

- Within control limits

Validation action was not required for bromomethane due to high LCS/LCSD recoveries as positive results only are affected and this compound was not detected in the associated samples.

SVOC, Pesticide, PCB, and PFAS

All criteria were met.

Internal Standards

VOC, SVOC, Pesticide, and PCB

All criteria were met.

Labeled Compounds

PFAS

All criteria were met.

Moisture Content

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC and PFAS analyses. These results were qualified as estimated (J) by the laboratory.

No results were reported below the RL and above the MDL in the SVOC, pesticide, and PCB analyses.

Dilutions were not required for VOC, SVOC, pesticide, PCB, and PFAS analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146A1a
SDG #: 460-214636-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A / N	%RSD ≤ 20, r² ICV ≤ 36 no ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	LCS ID
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = Jdet
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
3 1 tr	SB-2(2-3)	460-214636-1	Soil	07/29/20
3 2 tr	SB-6(1-2)	460-214636-2	Soil	07/29/20
3 3 tr	SB-10(1-2)	460-214636-3	Soil	07/29/20
4				
5				
6				
7				
8				
9				

Notes:

1	MB 460-712923					
2	-713574					
3	LB3 460-712909					

LDC #: 49146A1a

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260 C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% (20%) and relative response factors (RRF) ≥ 0.05?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓		✓	
Were all percent differences (%D) ≤ 20% / 30%?	✓		✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) ≥ 0.05?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	

Validation Area				
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 49146A/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	7/31/20	CCV-MS4	B	138.6		MB 460-712923,	J/UJ/A ND
✓	0559	(CCV 460-712923)	D	33.5		LB3 460-712909	↓
	8/3/20	CCV-MS4	JJ	21.2		1→3,	J/UJ/A ND
	0552	(CCV 460-713574)	B	80.1		MB 460-713574	
✓			G	23.8		↓	↓
			X	25.7		↓	↓

LDC #: 49146Δ1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS 460-712923	B	237 (68-136)	229 (68-136)	( )	MB 460-712923	Jdet/P ND
	LCS/D		( )	( )	( )	LB3 460-712909	
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS/D 460-713574	B	174 (68-136)	181 (68-136)	( )	1 → 3,	Jdet/P ND
			( )	( )	( )	MB 460-713574	
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146A1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/25/2020	Z	1.5684	1.5684	1.5938	1.5938	8	8
			K	0.6068	0.6068	0.5977	0.5977	6.1	6.1
	CVOAMS4		HHHH	1.3766	1.3766	1.2666	1.2666	7.3	7.3
			EE	0.6520	0.6520	0.6523	0.6523	4.4	4.4
			JJJ	1.7070	1.7070	1.6958	1.6958	2.7	2.7

LDC #: 49146A1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 0559	7/31/20	Z (IS1)	1.5938	1.690	1.690	6.0	6.0
			K (IS2)	0.5977	0.5813	0.5813	2.7	2.7
			HHHH (IS3)	1.2666	1.404	1.404	10.9	10.9
			EE (IS4)	0.6523	0.6494	0.6494	1.1	1.1
			JJJ (IS5)	1.6958	1.704	1.704	0.5	0.5
2	CCV 0552	8/3/20	Z (IS1)	1.5938	1.662	1.662	4.3	4.3
			K (IS2)	0.5977	0.5432	0.5432	9.1	9.1
			HHHH (IS3)	1.2666	1.389	1.389	9.6	9.6
			EE (IS4)	0.6523	0.6226	0.6226	4.6	4.6
			JJJ (IS5)	1.6958	1.676	1.676	1.2	1.2
3			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	45.3	91	91	0
1,2-Dichloroethane-d4	↓	47.5	95	95	↓
Toluene-d8	↓	47.6	95	95	↓
Bromofluorobenzene	↓	48.7	97	97	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49146A1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCSID 460-713574

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	0.0200	0.0200	0.0161	0.0166	80	80	83	83	3	3
Trichloroethene			0.0190	~~0.0188~~ 0.0191	95	95	95	95	0	0
Benzene			0.0185	0.0188	93	93	94	94	1	1
Toluene			0.0186	0.0188	93	93	94	94	1	1
Chlorobenzene			0.0197	0.0198	98	98	99	99	1	1

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1 , K :

Conc. = $\frac{(4854)(50.0)(5)(1/1000)}{(897057)(0.5997)(6.47)(0.909)}$

0.003835 mg/kg

weight = 6.47 %s = 90.9

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration mg/kg	Qualification
	#1	K	0.00038	0.003835	

LDC #: 49146A2a
SDG #: 460-214636-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	%RSD ≤20, r² ~~ICV~~ no ICV
IV.	Continuing calibration	SW	CCV ≤20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	A	LCS ID
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	No Results < RL ~~>~~ MDL
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-2(2-3)	460-214636-1	Soil	07/29/20
2	SB-6(1-2)	460-214636-2	Soil	07/29/20
3	SB-10(1-2)	460-214636-3	Soil	07/29/20
4				
5				
6				
7				
8				
9				

Notes:

+	MB 460-713327						

LDC #: 49146A2a **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: Semivolatiles (EPA SW 846 Method 8270 D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15/30% or 20% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% or 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recoveries (%R) was less than 10%, was a reanalysis performed to confirm %R ?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	CC. Dimethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	GGGG. C30-Hopane	I1. Methyl methanesulfonate
B. Bis (2-chloroethyl) ether	DD. Acenaphthylene	FFF. Di-n-octylphthalate	HHHH. 1-Methylphenanthrene	J1. Ethyl methanesulfonate
C. 2-Chlorophenol	EE. 2,6-Dinitrotoluene	GGG. Benzo(b)fluoranthene	IIII. 1,4-Dioxane	K1. o,o',o''-Triethylphosphorothioate
D. 1,3-Dichlorobenzene	FF. 3-Nitroaniline	HHH. Benzo(k)fluoranthene	JJJJ. Acetophenone	L1. n-Phenylene diamine
E. 1,4-Dichlorobenzene	GG. Acenaphthene	III. Benzo(a)pyrene	KKKK. Atrazine	M1. 1,4-Naphthoquinone
F. 1,2-Dichlorobenzene	HH. 2,4-Dinitrophenol	JJJ. Indeno(1,2,3-cd)pyrene	LLLL. Benzaldehyde	N1. N-Nitro-o-toluidine
G. 2-Methylphenol	II. 4-Nitrophenol	KKK. Dibenz(a,h)anthracene	MMMM. Caprolactam	O1. 1,3,5-Trinitrobenzene
H. 2,2'-Oxybis(1-chloropropane)	JJ. Dibenzofuran	LLL. Benzo(g,h,i)perylene	NNNN. 2,6-Dichlorophenol	P1. Pentachlorobenzene
I. 4-Methylphenol	KK. 2,4-Dinitrotoluene	MMM. Bis(2-Chloroisopropyl)ether	OOOO. 1,2-Diphenylhydrazine	Q1. 4-Aminobiphenyl
J. N-Nitroso-di-n-propylamine	LL. Diethylphthalate	NNN. Aniline	PPPP. 3-Methylphenol	R1. 2-Naphthylamine
K. Hexachloroethane	MM. 4-Chlorophenyl-phenyl ether	OOO. N-Nitrosodimethylamine	QQQQ. 3&4-Methylphenol	S1. Triphenylene
L. Nitrobenzene	NN. Fluorene	PPP. Benzoic Acid	RRRR. 4-Dimethyldibenzothiophene (4MDT)	T1. Octachlorostyrene
M. Isophorone	OO. 4-Nitroaniline	QQQ. Benzyl alcohol	SSSS. 2/3-Dimethyldibenzothiophene (4MDT)	U1. Famphur
N. 2-Nitrophenol	PP. 4,6-Dinitro-2-methylphenol	RRR. Pyridine	TTTT. 1-Methyldibenzothiophene (1MDT)	V1. 1,4-phenylenediamine
O. 2,4-Dimethylphenol	QQ. N-Nitrosodiphenylamine	SSS. Benzidine	UUUU.. 2,3,4,6-Tetrachlorophenol	W1. Methapyrilene
P. Bis(2-chloroethoxy)methane	RR. 4-Bromophenyl-phenylether	TTT. 1-Methylnaphthalene	VVVV. 1,2,4,5-Tetrachlorobenzene	X1. Pentachloroethane
Q. 2,4-Dichlorophenol	SS. Hexachlorobenzene	UUU.Benzo(b)thiophene	WWWW.. 2-Picoline	Y1. 3,3'-Dimethylbenzidine
R. 1,2,4-Trichlorobenzene	TT. Pentachlorophenol	VVV.Benzonaphthothiophene	XXXX. 3-Methylcholanthrene	Z1. o-Toluidine
S. Naphthalene	UU. Phenanthrene	WWW.Benzo(e)pyrene	YYYY. a,a-Dimethylphenethylamine	A2. 1-Naphthylamine
T. 4-Chloroaniline	VV. Anthracene	XXX. 2,6-Dimethylnaphthalene	ZZZZ. Hexachloropropene	B2. 4-Aminobiphenyl
U. Hexachlorobutadiene	WW. Carbazole	YYY. 2,3,5-Trimethylnaphthalene	A1. N-Nitrosodiethylamine	C2. 4-Nitroquinoline-1-oxide
V. 4-Chloro-3-methylphenol	XX. Di-n-butylphthalate	ZZZ. Perylene	B1. N-Nitrosodi-n-butylamine	D2. Hexachloropene
W. 2-Methylnaphthalene	YY. Fluoranthene	AAAA. Dibenzothiophene	C1. N-Nitrosomethylethylamine	E2. Bis (2-chloro-1-methylethyl) ether
X. Hexachlorocyclopentadiene	ZZ. Pyrene	BBBB. Benzo(a)fluoranthene	D1. N-Nitrosomorpholine	F2. Bifenthrin
Y. 2,4,6-Trichlorophenol	AAA. Butylbenzylphthalate	CCCC. Benzo(b)fluorene	E1. N-Nitrosopyrrolidine	G2. Cyfluthrin
Z. 2,4,5-Trichlorophenol	BBB. 3,3'-Dichlorobenzidine	DDDD. cis/trans-Decalin	F1. Phenacetin	H2. Cypermethrin
AA. 2-Chloronaphthalene	CCC. Benzo(a)anthracene	EEEE. 1,1'-Biphenyl	G1. 2-Acetylaminofluorene	I2. Permethrin (cis/trans)
BB. 2-Nitroaniline	DDD. Chrysene	FFFF. Retene	H1. Pronamide	J2. 5-Nitro-o-toluidine

LDC #: 49146A2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤20mid/50low level %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <20.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	8/1/20	CCV	LLL	44.6		All	J/UJ/A ND
	2247	CCV 460-713399	HH	25.5		↓	↓
			PP	24.8			

LDC #: 49146A2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ___FT___

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:
Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20 ug/ml std)	Recalculated (RRF 20 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS12	7/29/2020	A	1.7043	1.7043	1.7872	1.7872	3.2	3.2
			S	1.0373	1.0373	1.0185	1.0185	4.4	4.4
			GG	1.3376	1.3376	1.3186	1.3186	5.6	5.6
			UU	1.1542	1.1542	1.1505	1.1505	4.3	4.3
			DDD	1.3903	1.3903	1.3540	1.3540	5.0	5.0
			III	1.0808	1.0808	1.0402	1.0402	5.8	5.8

LDC #: 49146A2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv 247	8/1/20	A (1st IS)	1.7872	1.890	1.890	5.8	5.8
			S (2nd IS)	1.0185	1.031	1.031	1.3	1.3
			GG (3rd IS)	1.3186	1.270	1.270	3.7	3.7
			UU (4th IS)	1.1505	1.167	1.167	1.4	1.4
			DDD (5th IS)	1.3540	1.345	1.345	0.7	0.7
			III (6th IS)	1.0402	1.072	1.072	3.1	3.1
2			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					
3			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	50.0	36.9	74	74	0
2-Fluorobiphenyl		36.6	73	73	
Terphenyl-d14		43.9	88	88	
Phenol-d5		36.3	73	73	
2-Fluorophenol		36.4	73	73	
2,4,6-Tribromophenol		39.5	79	79	
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 49146A2a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS ID 460-71332

Compound	Spike Added (mg/kg)		Spike Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	3.33	3.33	2.98	3.02	89	89	91	91	2	2
N-Nitroso-di-n-propylamine			2.72	2.77	88	88	83	83	2	2
4-Chloro-3-methylphenol			2.97	2.99	89	89	90	90	1	1
Acenaphthene			2.85	2.97	86	86	89	89	4	4
Pentachlorophenol	6.67	6.67	6.18	6.36	93	93	95	95	3	3
Pyrene			3.05	3.08	59	59	92	92	1	1

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. LCS 460-713322 GG

Conc. = $\frac{338755\ (40.0)\ (1)}{240237\ (1.3186)\ (15)}$

= 2.85 mg/kg

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	LCS	GG	2.85	2.85	

LDC #: 49146A3a
SDG #: 460-214636-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/01/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC Organochlorine Pesticides (EPA SW846 Method 8081B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC Instrument Performance Check	A	
III.	Initial calibration/~~ICV~~	A / N	%RSD ≤ 20
IV.	Continuing calibration	A	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes /17	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	A	LCS ID
X.	Field duplicates	N	
XI.	Compound quantitation/RL/LOQ/LODs	A	ND Results < RL > MDL
XII.	Target compound identification	A	
XIII.	System Performance	A	
XIV	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-2(2-3)	460-214636-1	Soil	07/29/20
2	SB-6(1-2)	460-214636-2	Soil	07/29/20
3	SB-10(1-2)	460-214636-3	Soil	07/29/20
4				
5				
6				
7				
8				
9				
10				

Notes:

	MB 460-713802						

Method: Pesticides (EPA SW 846 Method 8081B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and at beginning of each 12-hour shift?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. ***Surrogate spikes/Internal Standards***				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recovery (%R) was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were internal standard area counts within ± 50% of the average area calculated during calibration?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
Were relative percent difference (RPD) of the results between two columns ≤ 40%?	✓			
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146A3a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 100ppb	Recalculated 100ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/29/2020	Gamma-BHC CLP2	1.4340	1.4340	1.5197	1.5197	6.9	6.9
	GC12		Gamma-BHC CLP1	1.4714	1.4714	1.5221	1.5221	2.1	2.1
			4,4'-DDT CLP2	1.1058	1.1058	1.1546	1.1546	5.9	5.9
			4,4'-DDT CLP1	1.0782	1.0782	1.0854	1.0854	1.4	1.4

LDC #: 49146 A3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC / HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 0452	8/4/20	gamma BHC CLP2	100	93.7	93.7	6.3	6.3
			4,4'-DDT ↓	100	90.3	90.3	9.7	9.7
			↓ CLP1	100	93.8	93.8	6.2	6.2
			↓ ↓	100	93.3	93.3	6.7	6.7
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A3a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	CLP1	50.0	53.1	106	106	0
↓	CLP2	↓	52.4	105	105	↓
TCMX	CLP1		48.8	98	98	
↓	CLP2		53.8	108	108	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146A3a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
LCS = Laboratory Control Sample

SA = Spike added
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS/P 460-713802

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
4,4-DDT	0.133	0.133	0.117	0.119	88	88	89	89	1	1
gamma BHC	↓	↓	0.121	0.122	91	91	91	91	0	0

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A3a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-71380 Compound Name 4,4'DDT

Concentration = $\frac{3368 49641 \ (100)\ (10)}{166105968\ (1.1546)\ (15)\ (1000)}$ =

= 0.1171 mg/kg

10/15

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	LCS	4,4'-DDT	0.117	0.1171	

Comments:

LDC #: 49146A3b
SDG #: 460-214636-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC Polychlorinated Biphenyls (EPA SW846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	Initial calibration/~~ICV~~	A / N	%D PSD ≤ 20 no ICV
III.	Continuing calibration	A	CCV ≤ 20
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes 1/7	A	
VII.	Matrix spike/Matrix spike duplicates	N	CS
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	N	
X.	Compound quantitation/RL/LOQ/LODs	A	NJ Results < RL > MDL
XI.	Target compound identification	A	
XII.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-2(2-3)	460-214636-1	Soil	07/29/20
2	SB-6(1-2)	460-214636-2	Soil	07/29/20
3	SB-10(1-2)	460-214636-3	Soil	07/29/20
4				
5				
6				
7				
8				
9				
10				
11				
12				

Notes:

-	MB 460-713807						

LDC #: 49146A3b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: ✓ GC ___ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?			✓	
Were the RT windows properly established?	✓			
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
III. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
V. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed per analytical or extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Field duplicates				

Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146A3b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: _____

METHOD: GC X HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 1000ppb	Recalculated 1000ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/26/2020 GC13	PCB 1260-1 RTX CLP1	0.0235	0.0235	0.0244	0.0244	6.9	6.9
			PCB 1260-1 RTX CLP2	0.0501	0.0501	0.0517	0.0517	3.3	3.3

LDC #: 49146A3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	ccv 0456	8/4/20	PCB 1260-1 cvp1	100 U	970	970.4	3.0 U	3.0
			cvp2	100 U	940	940.3	6.0 U	6.0
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A3b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	dvp 1	50.0	55.0	110	110	0
↓	2		50.4	101	101	
TCMX	dvp 1		53.4	107	107	
↓	2	↓	51.5	103	103	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146A3b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added
LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 460-71388 3

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Aroclor 1260	0.333	0.333	0.333	0.342	100	100	103	103	3	3

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146A36

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-713803 Compound Name Aroclor 1260

Concentration = $\frac{499.046\ (10)}{(15)\ (1000)}$ = 0.3326 mg/kg

10/15

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	LCS	Aroclor 1260	0.333	0.3326	
	1260-1 = 7920653 (20.0) / 14291921 (0.0244) = 454.266				
		454.266 + 420.0 +	444.9 + 508.6 +	500.9 + 513.0 +	535.5 + 615.3
				B	
		Ave	= 499.046		

Comments: _____

LDC #: 49146A96
SDG #: 460-214636-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer: R
2nd Reviewer:

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	RSD≤20 Tr≤50/30 IC≤30
IV.	Continuing calibration/ISC	A/A	D≤30 ISC≤50
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	
X.	Labeled Compounds	A	
VI.	Compound quantitation RL/LOQ/LODs	SW	<RL - J+/A
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-2(2-3)	460-214636-1	Soil	07/29/20
2	SB-6(1-2)	460-214636-2	Soil	07/29/20
3	SB-10(1-2)	460-214636-3	Soil	07/29/20
4				
5				
6				
7				
8				
9				
10				

Notes:

	400 L99						

LDC #: 49146A96 **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: JT

Method: LC/MS PFAS (EPA Method 537Mod)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Were cooler temperature criteria met?	√			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the validation criteria?	√			
III. Initial calibration and Initial Calibration Verification				
Did the laboratory perform a 5-point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 20%?	√			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?			√	
Were all analytes within 70-130% or percent differences (%D) ≤30% of their true value for each calibration standard except the lowest point (50-150%)?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
IV. Continuing calibration and Instrument Sensitivity Check				
Was a continuing calibration analyzed prior to sample analysis, after every 10 samples and at the end of the analytical sequence?	√			
Were all percent differences (%D) of the continuing calibration ≤ 30%?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were all percent differences (%D) of the Instrument Sensitivity Check ≤ 50%?	√			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?	√			
VI. Field blanks				
Were field blanks identified in this SDG?		√		
Were target compounds detected in the field blanks?			√	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?		√		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			√	

LDC #: 49146A9v

VALIDATION FINDINGS CHECKLIST

Reviewer: JC

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	√			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		√		
Were target compounds detected in the field duplicates?			√	
XI. Labeled compounds				
Were labeled compound percent recoveries (%R) within the QC limits?	√			
XII. Compound quantitation				
Did the laboratory reporting limits (RL) meet the QAPP RLs?			√	
Did reported results include both branched and linear isomers?	√			
Were the correct ion transition, labeled compound and relative response factor (RRF) used to quantitate the compound?	√			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	√			
XIII. Target compound identification				
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were two transitions and the ion transition ratio per analyte monitored and documented except for PFBA and PFPeA?	√			
Were ion ratios within QC limits?	√			
XIV. System performance				
System performance was found to be acceptable.	√			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. Perfluorobutanoic acid (PFBA)			
B. Perfluoropentanoic acis (PFPeA)			
C. Perfluorohexanoic acid (PFHxA)			
D. Perfluoroheptanoic acid (PFHpA)			
E. Perfluorooctanoic acid (PFOA)			
F. Perfluorononanoic acid (PFNA)			
G. Perfluorodecanoic acid (PFDA)			
H. Perfluoroundecanoic acid (PFUnA)			
I. Perfluorododecanoic acid (PFDoA)			
J. Perfluorotridecanoic acid (PFTriA)			
K. Perfluorotetradecanoic acid (PFTeA)			
L. Perfluorobutanesulfonic acid (PFBS)			
M. Perfluorohexanesulfonic acid (PFHxS)			
N. Perfluoroheptanesulfonic acid (PFHpS)			
O. Perfluorooctanesulfonic acid (PFOS)			
P. Perfluorodecanesulfonic acid (PFDS)			
Q. Perfluorooctanesulfonamide (FOSA)			
R. N-Methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
S. N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			
T. 6:2 FTS			
U. 8:2 FTS			

LDC #: 49146A96

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JC

METHOD: LC/MS PFAS (EPA Method 537M)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 8/3/20
Conc. units: ng/kg **Associated Samples:** All

Compound	Blank ID	Sample Identification								
MB 320-400499/1-A		2	3							
0	0.349	0.41/0.511	0.25/0.491							

Blank extraction date:
Conc. units: **Associated Samples:**

Compound	Blank ID	Sample Identification								

LDC #: 49146A96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S = Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound	Reported RRF (RRF 1.0/0.928)	Recalculated RRF (RRF 1.0/0.928)	Reported Average RRF	Recalculated Average RRF	Reported %RSD	Recalculated %RSD
1	ICAL	7/31/2020	PFOA (13C4-PFOA)	1.0607	1.0607	1.0496	1.0496	12.3	12.3
	A13		PFOS (13C4-PFOS)	1.0315	1.0315	1.0427	1.0427	2.9	2.9
2			PFOA (13C4-PFOA)						
			PFOS (13C4-PFOS)						

LDC #: 49146A96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (Actual Conc - Cx)/Actual Conc
Cx = (Ax)(Cis)/(Ais)(ave. RRF)

Where:
Ax = Area of compound
Ais = Area of associated internal standard
Cx = Concentration of compound
Cis = Concentration of internal standard
ave. RRF = initial calibration average RRF

#	Standard ID	Calibration Date	Compound	Average RRF	Reported RRF	Recalculated RRF	Reported %D	Recalculated %D
1	2020.08.05_A13_PFC_B_024	8/6/2020	PFOA (13C4-PFOA)	1.0496	1.019	1.019	2.9	2.9
			PFOS (13C4-PFOS)	1.0427	1.116	1.116	7.0	7.0
2	2020.08.05_A13_PFC_B_036	8/6/2020	PFOA (13C4-PFOA)	1.0496	1.058	1.058	0.8	0.8
			PFOS (13C4-PFOS)	1.0427	1.059	1.059	1.6	1.6

LDC #: 49146A96

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS 320-400499

Compound	SA (ug/Kg)		SSC (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	2.00		2.060		103	103				
PFOS	1.86		2.583		139	139				

LDC #: 49146A96

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)\,(Vo)\,(Df)}{(RRF)\,(Wt)\,(\%S)}$$

Where:

Ax = Area or height of the peak for the compound to be measured
Ais = Area or height of the peak for the internal standard
Cis = Concentration of the internal standard
DF = Dilution factor
Vt = Volume of extract in milliters (mL)
RRF = Average relative response factor
Wt = Weight of sample in grams (g)
%S = Percent solids

Sample #	Compound	Ax	Ais	Cis	DF	RRF	Vt (mL)	Wt (g)	%S	Calculated Concentration (ug/Kg)	Reported Concentration (ug/Kg)	% Diff
2	PFOS	299481	3408956	2.39	1	1.0427	10	5.36	0.919	0.41	0.41	0

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-214636-1
Reviewer: Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 1, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-2(2-3)	460-214636-1	Metals, Cyanide
SB-6(1-2)	460-214636-2	Metals, Cyanide
SB-10(1-2)	460-214636-3	Metals, Cyanide
SB-2(2-3)MS	460-214636-1MS	Metals
SB-2(2-3)DUP	460-214636-1DUP	Metals

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed soil samples were collected on July 29, 2020 and were analyzed for metals by SW-846 methods 6010D/7471B and cyanide by SW-846 method 9012B. The data validation was performed in accordance with USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program,* SOP HW-3a/c, Revision 1 (September 2016) and the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review,* EPA 540-R-2017-001 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The inorganic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Instrument Calibration
- Contract Required Quantitation Limit (CRQL) Standard Recoveries
- Blank Analysis Results
- Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Results
- Matrix Spike (MS) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Certified Reference Material (CRM) Results
- Serial Dilution Results
- Moisture Content
- Detection Limits Results
- Sample Quantitation Results

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

Instrument Calibration

All criteria were met.

CRQL Standard Recoveries

Metals

All criteria were met.

Blank Results

Metals

Analytes were detected below the reporting limits in the laboratory blank samples. The following table summarizes the contamination and validation actions taken.

Blank ID	Analyte	Level Detected	Action Level	Associated Samples
ICB/CCB	Lead	2.52 ug/L	RL	SB-2(2-3)
	Zinc	1.31 ug/L	RL	SB-6(1-2)
				SB-10(1-2)

Blank Actions for analytes detected below the reporting limit(RL).
If the sample result is < RL, report the result as nondetect (U) at the RL.
If the sample result is > RL or nondetect, no action is required.
Blank Actions for analytes detected above the reporting limit or RL.
If the sample result is < RL and <action level; report the result as nondetect (U) at the RL.
If the sample result is > RL and < action level; report the result as nondetect (U) at the reported value.
If the sample result is > action level or nondetect, no action is required.

No samples were qualified since the associated sample results were greater than the action limit.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Cyanide

Contamination was not detected in the laboratory blank samples.

A field blank was not associated with this sample set. Validation action was not required on this basis.

ICP ICS Results

Metals

Analytes were within control limits in the ICSA and ICSAB analyses.

MS/MSD Results

Metals

MS analyses were performed on sample SB-2(2-3) for mercury analysis. All criteria were met.

Cyanide

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Metals

Laboratory duplicates were performed on sample SB-2(2-3) for mercury analysis. All criteria were met.

Cyanide

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

CRM Results

All criteria were met.

Serial Dilution Results

Metals

A serial dilution analysis was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Detection Limits Results

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the metals analyses. These results were estimated (J) by the laboratory.

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the cyanide analysis.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	Metals Analyses Reported
SB-2(2-3) SB-6(1-2) SB-10(1-2)	2-fold dilution due to sample matrix for 6010D metals

Dilutions were not required for cyanide analysis.

Sample Quantitation Results

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146A4b
SDG #: 460-214636-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010D/7471B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	SW	
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	A	Hg only
VII.	Duplicate sample analysis	A	
VIII.	Serial Dilution	N	
IX.	Laboratory control samples	A	CRM
X.	Field Duplicates	N	
XI.	Sample Result Verification	A	Results <RL: Sdet
XII	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-2(2-3) 6010D: 2x (matrix)	460-214636-1	Soil	07/29/20
2	SB-6(1-2)	460-214636-2	Soil	07/29/20
3	SB-10(1-2)	460-214636-3	Soil	07/29/20
4	SB-2(2-3)MS	460-214636-1MS	Soil	07/29/20
5	SB-2(2-3)DUP	460-214636-1DUP	Soil	07/29/20
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes:

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times met?	X			
Were all water samples preserved to a pH of <2.			X	
II. ICP-MS Tune				
Were mass resolutions within 0.1 amu for all isotopes in the tuning solution?			X	
Were %RSDs of isoptoes in the tuning solution ≤5%?			X	
III. Calibration				
Were all instuments calibrated daily?	X			
Were the proper standards used?	X			
Were all initial and continuing calibration verifications within the 90-110% (80-120% for mercury) QC limits?	X			
Were the low level standard checks within 70-130%?			X	
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?	X			
V. Interference Check Sample				
Were the interference check samples performed daily?	X			
Were the AB solution recoveries within 80-120%?	X			
VI. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)	X			
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?	X			
VII. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
VIII. Internal Standards				
Were all percent recoveries within the 30-120% (60-125% for EPA Method 200.8) QC limits?			X	
If the recoveries were outside the limits, was a reanalysis performed?			X	
IX. Serial Dilution				
Were all percent differences <10%?			X	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			X	
X. Sample Result Verification				
Were all reporting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			
XII. Field Duplicates				
Were field duplicates identifed in this SDG?		X		
Were target analytes detected in the field duplicates?			X	
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

All elements are applicable to each sample as noted below.

Sample ID	Target Analyte List
All	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn, Hg
QC: 4, 5	Hg

Analysis Method

ICP	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
ICP-MS	
CVAA	Hg

VALIDATION FINDINGS WORKSHEET
Laboratory Blank Contamination (PB/ICB/CCB)

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Soil preparation factor applied (if applicable): NA

Sample Concentration, unless otherwise noted: mg/Kg Associated Samples: All

				Sample Identification								
Analyte	**PB (units)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	No quals (>RL)								
Pb		2.52	RL									
Zn		1.31	RL									

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

An intial calibration verification (ICV), continuing calibration verification (CCV), low level calibration check (LLCC), and interference check sample (ICSAB) percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis

True = concentration of each analyte in the source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalcuated %R	Reported %R	Acceptable (Y/N)
ICV	ICP	Be	1020	1000	102	102	Y
CCV	ICP	Se	988.1	1000	99	99	Y
ICSAB	ICP	Ag	110	100	110	110	Y
ICV	CVAA	Hg	5.15	5	103	103	Y
CCV	CVAA	Hg	5.02	5	100	100	Y

Quality Control Sample Recalculations

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

Percent recoveries (%R) for the laboratory control sample (LCS), matrix spike (MS), and post digestion spike (PDS) were recalculated using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentration of each analyte in the source

The sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentration

D = Duplicate sample concentration

The serial dilution percent difference (%D) was recalculated using the following formula.

%D = (Absolute value (I - SDR)) x 100 / (I)

I = Initial sample result

SDR = Serial dilution result (with a 5x dilution applied)

Sample ID	Type of Analysis	Element	Found/S/I	True/D/SDR	Recalcuated %R/RPD/%D	Reported %R/RPD/%D	Acceptable (Y/N)
CRM	LCS	Mn	705.4	677	104.2	104.2	Y
4	MS	Hg	0.0931	0.0859	108	108	Y
5	Duplicate	Hg	0.0041U	0.00553	NC	NC	Y
	PDS						
	Serial dilution						

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Analytes were recalculated and verified using the following equation:
Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids x Initial weight)

Sample ID	Analyte	Raw Data (ug/L)	Dilution	Initial Weight (g)	Final Volume (mL)	Percent solids (%)	Reported Result (mg/Kg)	Recalcuated Result (mg/Kg)	Acceptable (Y/N)
1	Al	28520	2	1.08	100	90.9	5810	5810	Y
2	Hg	0.1066	1	0.66	50	91.9	0.0088	0.0088	Y
3	V	83.43	2	1.03	100	92.2	17.6	17.6	Y

LDC #: 49146A6
SDG #: 460-214636-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer: CM
2nd Reviewer: KK

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A A	
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Laboratory Blanks	A	
V	Field blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Laboratory control samples	A	CRM
IX.	Field duplicates	N	
X.	Sample result verification	A	no results<RL
XI	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-2(2-3)	460-214636-1	Soil	07/29/20
2	SB-6(1-2)	460-214636-2	Soil	07/29/20
3	SB-10(1-2)	460-214636-3	Soil	07/29/20
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes:

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times were met?	X			
II. Calibration				
Were all instuments calibrated at the requried frequency?	X			
Were the proper number of standards used?	X			
Were all initial and continuing calibration verifications within the QC limits?	X			
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
Were balance checks performed as required?			X	
III. Blanks				
Was a method blank assoicated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?		X		
IV. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
V. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			
X. Sample Result Verification				
Were all reproting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
XII. Field Duplicates				
Were field duplicates identifed in this SDG?		X		
Were target analytes detected in the field duplicates?			X	
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

LDC #: 49146A6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR

Method: Inorganics

The correlation coefficient (r) for the calibration of _Cr6+___ was recalculated.Calibration date:___8/4/20__

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found} \times 100}{\text{True}}$$

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cr6+	s1	0	-0.00159	*0.99973*	0.99974	Y
		s2	0.01	0.388			
		s3	0.025	0.794			
		s4	0.05	2.14			
		s5	0.1	3.96			
		s6	0.2	8.55			
		s7	0.4	16.8			
Calibration verification	Cr6+	ICV	0.2	0.196	98	98	Y
Calibration verification	Cr6+	CCV	0.2	0.204	102	102	Y
Calibration verification	Cr6+	CCV	0.2	0.204	102	102	Y

Comments:

METHOD: Inorganics

Percent recoveries (%R) for the laboratory control sample (LCS) and matrix spike (MS) were recalcuated using the following formula.
%R = (Found/True) x 100
Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)
True = concentraiton of each analyte in the source
The sample and duplciate relative percent difference (RPD) was recalcuated using the following formula.
RPD = (Absolute value(S-D)x 200) / (S+D)
S = Original sample concentraiton
D = Duplciate sample concentration

Sample ID	Type of Analysis	Element	Found/S	True/D	Recalcuated %R/RPD	Reported %R/RPD	Acceptable (Y/N)
CRM	LCS	CN	77.28	89.4	86.4	86.4	Y
	MS						
	Duplicate						

METHOD: Inorganics

Analytes were recalcuated and verified using the following equation.

Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids (if applicable) x Initial weight or volume)

Sample ID	Analyte	Raw Data (unit)	Dilution	Initial Weight/ Volume (unit)	Final Volume (unit)	Percent solids (%)	Reported Result (unit)	Recalcuated Result (unit)	Acceptable (Y/N)
All	CN = ND								

500 Main St., New Rochelle - LDC# 49146A

SDG: 4602146361

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	Perfluorooctanoic acid (PFOA)	8/6/2020		Y	N	U		U	0.20	0.085	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROUNDECANOIC ACID (PFUnA)	8/6/2020		Y	N	U		U	0.20	0.035	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/6/2020		Y	N	U		U	0.20	0.050	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROPENTANOIC ACID (PFPeA)	8/6/2020		Y	N	U		U	0.20	0.076	ug/kg
SB-10(1-2)-20200729	460-214636-3	Perfluorooctane Sulfonamide (FOSA)	8/6/2020		Y	N	U		U	0.20	0.081	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUORONONANOIC ACID	8/6/2020		Y	N	U		U	0.20	0.035	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROHEXANOIC ACID (PFHxA)	8/6/2020		Y	N	U		U	0.20	0.041	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROHEXANESULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.031	ug/kg
SB-10(1-2)-20200729	460-214636-3	Perfluoroheptanoic Acid (PFHpA)	8/6/2020		Y	N	U		U	0.20	0.029	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/6/2020		Y	N	U		U	0.20	0.035	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUORODODECANOIC ACID (PFDoA)	8/6/2020		Y	N	U		U	0.20	0.066	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROOCTANE SULFONIC ACID	8/6/2020		Y	N	BJ	U	U	0.49	0.20	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUORODECANE SULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.038	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROBUTANESULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.025	ug/kg
SB-10(1-2)-20200729	460-214636-3	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/6/2020		Y	N	U		U	1.97	0.36	ug/kg
SB-10(1-2)-20200729	460-214636-3	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/6/2020		Y	N	U		U	1.97	0.38	ug/kg
SB-10(1-2)-20200729	460-214636-3	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/6/2020		Y	N	U		U	1.97	0.15	ug/kg
SB-10(1-2)-20200729	460-214636-3	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/6/2020		Y	N	U		U	1.97	0.25	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROBUTYRIC ACID (PFBA)	8/6/2020	0.13	Y	Y	J		J	0.20	0.028	ug/kg
SB-10(1-2)-20200729	460-214636-3	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/6/2020		Y	N	U		U	0.20	0.053	ug/kg

SDG: 4602146361

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	PERFLUORODECANOIC ACID (PFDA)	8/6/2020		Y	N	U		U	0.20	0.022	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROHEXANESULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.031	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROHEXANOIC ACID (PFHxA)	8/6/2020		Y	N	U		U	0.20	0.042	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUORONONANOIC ACID	8/6/2020		Y	N	U		U	0.20	0.036	ug/kg
SB-2(2-3)-20200729	460-214636-1	Perfluorooctane Sulfonamide (FOSA)	8/6/2020		Y	N	U		U	0.20	0.083	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROOCTANE SULFONIC ACID	8/6/2020		Y	N	U		U	0.51	0.20	ug/kg
SB-2(2-3)-20200729	460-214636-1	Perfluoroheptanoic Acid (PFHpA)	8/6/2020		Y	N	U		U	0.20	0.029	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/6/2020		Y	N	U		U	0.20	0.055	ug/kg
SB-2(2-3)-20200729	460-214636-1	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/6/2020		Y	N	U		U	2.02	0.15	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/6/2020		Y	N	U		U	0.20	0.052	ug/kg
SB-2(2-3)-20200729	460-214636-1	Perfluorooctanoic acid (PFOA)	8/6/2020		Y	N	U		U	0.20	0.087	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/6/2020		Y	N	U		U	0.20	0.035	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUORODECANOIC ACID (PFDA)	8/6/2020		Y	N	U		U	0.20	0.022	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROBUTANESULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.025	ug/kg
SB-2(2-3)-20200729	460-214636-1	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/6/2020		Y	N	U		U	2.02	0.39	ug/kg
SB-2(2-3)-20200729	460-214636-1	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/6/2020		Y	N	U		U	2.02	0.25	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROBUTYRIC ACID (PFBA)	8/6/2020	0.33	Y	Y				0.20	0.028	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROPENTANOIC ACID (PFPeA)	8/6/2020	1.04	Y	Y				0.20	0.078	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUOROUNDECANOIC ACID (PFUnA)	8/6/2020		Y	N	U		U	0.20	0.036	ug/kg
SB-2(2-3)-20200729	460-214636-1	PERFLUORODODECANOIC ACID (PFDoA)	8/6/2020		Y	N	U		U	0.20	0.068	ug/kg
SB-2(2-3)-20200729	460-214636-1	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/6/2020		Y	N	U		U	2.02	0.37	ug/kg

SDG: 4602146361

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-2(2-3)-20200729	460-214636-1	PERFLUORODECANE SULFONIC ACID	8/6/2020		Y	N	U		U	0.30	0.30	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUORODECANOIC ACID (PFDA)	8/6/2020		Y	N	U		U	0.20	0.022	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROUNDECANOIC ACID (PFUnA)	8/6/2020		Y	N	U		U	0.20	0.037	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/6/2020		Y	N	U		U	0.20	0.055	ug/kg
SB-6(1-2)-20200729	460-214636-2	Perfluorooctanoic acid (PFOA)	8/6/2020		Y	N	U		U	0.20	0.087	ug/kg
SB-6(1-2)-20200729	460-214636-2	Perfluorooctane Sulfonamide (FOSA)	8/6/2020		Y	N	U		U	0.20	0.083	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUORONONANOIC ACID	8/6/2020		Y	N	U		U	0.20	0.037	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROHEXANOIC ACID (PFHxA)	8/6/2020		Y	N	U		U	0.20	0.043	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROHEXANESULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.031	ug/kg
SB-6(1-2)-20200729	460-214636-2	Perfluoroheptanoic Acid (PFHpA)	8/6/2020		Y	N	U		U	0.20	0.029	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROBUTYRIC ACID (PFBA)	8/6/2020	0.15	Y	Y	J		J	0.20	0.028	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUORODODECANOIC ACID (PFDoA)	8/6/2020		Y	N	U		U	0.20	0.068	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/6/2020		Y	N	U		U	0.20	0.052	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUORODECANE SULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.040	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROBUTANESULFONIC ACID	8/6/2020		Y	N	U		U	0.20	0.025	ug/kg
SB-6(1-2)-20200729	460-214636-2	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/6/2020		Y	N	U		U	2.03	0.38	ug/kg
SB-6(1-2)-20200729	460-214636-2	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/6/2020		Y	N	U		U	2.03	0.40	ug/kg
SB-6(1-2)-20200729	460-214636-2	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/6/2020		Y	N	U		U	2.03	0.15	ug/kg
SB-6(1-2)-20200729	460-214636-2	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/6/2020		Y	N	U		U	2.03	0.25	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROOCTANE SULFONIC ACID	8/6/2020		Y	N	BJ	U	U	0.51	0.20	ug/kg
SB-6(1-2)-20200729	460-214636-2	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/6/2020		Y	N	U		U	0.20	0.036	ug/kg

Analytical Method	E537(M)										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-6(1-2)-20200729	460-214636-2	PERFLUOROPENTANOIC ACID (PFPeA)	8/6/2020		Y	N	U		U	0.20	0.078	ug/kg

Analytical Method	SW6010										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-10(1-2)-20200729	460-214636-3	NICKEL	8/5/2020	15.0	Y	Y				8.4	0.55	mg/kg
SB-10(1-2)-20200729	460-214636-3	ANTIMONY	8/5/2020		Y	N	U		U	4.2	1.2	mg/kg
SB-10(1-2)-20200729	460-214636-3	ARSENIC	8/5/2020		Y	N	U		U	3.2	0.65	mg/kg
SB-10(1-2)-20200729	460-214636-3	BERYLLIUM	8/5/2020		Y	N	U		U	0.42	0.067	mg/kg
SB-10(1-2)-20200729	460-214636-3	CADMIUM	8/5/2020		Y	N	U		U	0.84	0.073	mg/kg
SB-10(1-2)-20200729	460-214636-3	SELENIUM	8/5/2020		Y	N	U		U	4.2	0.71	mg/kg
SB-10(1-2)-20200729	460-214636-3	THALLIUM	8/5/2020		Y	N	U		U	4.2	0.65	mg/kg
SB-10(1-2)-20200729	460-214636-3	BARIUM	8/5/2020	58.2	Y	Y				42.1	4.1	mg/kg
SB-10(1-2)-20200729	460-214636-3	POTASSIUM	8/5/2020	2530	Y	Y				1050	64.7	mg/kg
SB-10(1-2)-20200729	460-214636-3	SILVER	8/5/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-10(1-2)-20200729	460-214636-3	MANGANESE	8/5/2020	356	Y	Y				3.2	0.24	mg/kg
SB-10(1-2)-20200729	460-214636-3	MAGNESIUM	8/5/2020	2200	Y	Y				1050	71.3	mg/kg
SB-10(1-2)-20200729	460-214636-3	LEAD	8/5/2020	3.9	Y	Y				2.1	0.34	mg/kg
SB-10(1-2)-20200729	460-214636-3	IRON	8/5/2020	12700	Y	Y				31.6	21.7	mg/kg
SB-10(1-2)-20200729	460-214636-3	COPPER	8/5/2020	13.8	Y	Y				5.3	1.3	mg/kg
SB-10(1-2)-20200729	460-214636-3	CHROMIUM, TOTAL	8/5/2020	15.9	Y	Y				2.1	1.5	mg/kg
SB-10(1-2)-20200729	460-214636-3	VANADIUM	8/5/2020	17.6	Y	Y				10.5	0.98	mg/kg
SB-10(1-2)-20200729	460-214636-3	CALCIUM	8/5/2020	655	Y	Y	J		J	1050	77.8	mg/kg
SB-10(1-2)-20200729	460-214636-3	ZINC	8/5/2020	22.5	Y	Y				6.3	1.1	mg/kg
SB-10(1-2)-20200729	460-214636-3	COBALT	8/5/2020	6.1	Y	Y	J		J	10.5	0.58	mg/kg
SB-10(1-2)-20200729	460-214636-3	ALUMINUM	8/5/2020	7340	Y	Y				42.1	6.0	mg/kg

SDG: 4602146361

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	SODIUM	8/5/2020	237	Y	Y	J		J	1050	91.6	mg/kg
SB-2(2-3)-20200729	460-214636-1	THALLIUM	8/5/2020		Y	N	U		U	4.1	0.63	mg/kg
SB-2(2-3)-20200729	460-214636-1	BARIUM	8/5/2020	38.1	Y	Y	J		J	40.7	3.9	mg/kg
SB-2(2-3)-20200729	460-214636-1	ANTIMONY	8/5/2020		Y	N	U		U	4.1	1.2	mg/kg
SB-2(2-3)-20200729	460-214636-1	ARSENIC	8/5/2020		Y	N	U		U	3.1	0.63	mg/kg
SB-2(2-3)-20200729	460-214636-1	CADMIUM	8/5/2020		Y	N	U		U	0.81	0.070	mg/kg
SB-2(2-3)-20200729	460-214636-1	SELENIUM	8/5/2020		Y	N	U		U	4.1	0.69	mg/kg
SB-2(2-3)-20200729	460-214636-1	SILVER	8/5/2020		Y	N	U		U	2.0	1.1	mg/kg
SB-2(2-3)-20200729	460-214636-1	CALCIUM	8/5/2020	761	Y	Y	J		J	1020	75.3	mg/kg
SB-2(2-3)-20200729	460-214636-1	SODIUM	8/5/2020	158	Y	Y	J		J	1020	88.6	mg/kg
SB-2(2-3)-20200729	460-214636-1	COBALT	8/5/2020	6.0	Y	Y	J		J	10.2	0.56	mg/kg
SB-2(2-3)-20200729	460-214636-1	ZINC	8/5/2020	16.1	Y	Y				6.1	1.1	mg/kg
SB-2(2-3)-20200729	460-214636-1	VANADIUM	8/5/2020	15.7	Y	Y				10.2	0.95	mg/kg
SB-2(2-3)-20200729	460-214636-1	LEAD	8/5/2020	3.5	Y	Y				2.0	0.33	mg/kg
SB-2(2-3)-20200729	460-214636-1	POTASSIUM	8/5/2020	1500	Y	Y				1020	62.5	mg/kg
SB-2(2-3)-20200729	460-214636-1	CHROMIUM, TOTAL	8/5/2020	11.7	Y	Y				2.0	1.4	mg/kg
SB-2(2-3)-20200729	460-214636-1	BERYLLIUM	8/5/2020	0.24	Y	Y	J		J	0.41	0.065	mg/kg
SB-2(2-3)-20200729	460-214636-1	IRON	8/5/2020	12500	Y	Y				30.6	21.0	mg/kg
SB-2(2-3)-20200729	460-214636-1	ALUMINUM	8/5/2020	5810	Y	Y				40.7	5.8	mg/kg
SB-2(2-3)-20200729	460-214636-1	MAGNESIUM	8/5/2020	1430	Y	Y				1020	69.0	mg/kg
SB-2(2-3)-20200729	460-214636-1	MANGANESE	8/5/2020	463	Y	Y				3.1	0.23	mg/kg
SB-2(2-3)-20200729	460-214636-1	NICKEL	8/5/2020	10.9	Y	Y				8.1	0.54	mg/kg
SB-2(2-3)-20200729	460-214636-1	COPPER	8/5/2020	13.3	Y	Y				5.1	1.3	mg/kg
SB-6(1-2)-20200729	460-214636-2	ARSENIC	8/5/2020		Y	N	U		U	3.0	0.63	mg/kg
SB-6(1-2)-20200729	460-214636-2	SELENIUM	8/5/2020		Y	N	U		U	4.1	0.69	mg/kg

SDG: 4602146361

Analytical Method	SW6010											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-6(1-2)-20200729	460-214636-2	SILVER	8/5/2020		Y	N	U		U	2.0	1.1	mg/kg
SB-6(1-2)-20200729	460-214636-2	ANTIMONY	8/5/2020		Y	N	U		U	4.1	1.2	mg/kg
SB-6(1-2)-20200729	460-214636-2	ZINC	8/5/2020	21.7	Y	Y				6.1	1.1	mg/kg
SB-6(1-2)-20200729	460-214636-2	VANADIUM	8/5/2020	17.6	Y	Y				10.2	0.95	mg/kg
SB-6(1-2)-20200729	460-214636-2	NICKEL	8/5/2020	19.2	Y	Y				8.1	0.53	mg/kg
SB-6(1-2)-20200729	460-214636-2	MAGNESIUM	8/5/2020	1950	Y	Y				1020	68.8	mg/kg
SB-6(1-2)-20200729	460-214636-2	LEAD	8/5/2020	4.0	Y	Y				2.0	0.33	mg/kg
SB-6(1-2)-20200729	460-214636-2	CHROMIUM, TOTAL	8/5/2020	17.3	Y	Y				2.0	1.4	mg/kg
SB-6(1-2)-20200729	460-214636-2	COPPER	8/5/2020	15.2	Y	Y				5.1	1.3	mg/kg
SB-6(1-2)-20200729	460-214636-2	POTASSIUM	8/5/2020	2110	Y	Y				1020	62.4	mg/kg
SB-6(1-2)-20200729	460-214636-2	THALLIUM	8/5/2020		Y	N	U		U	4.1	0.63	mg/kg
SB-6(1-2)-20200729	460-214636-2	BARIUM	8/5/2020	52.5	Y	Y				40.7	3.9	mg/kg
SB-6(1-2)-20200729	460-214636-2	IRON	8/5/2020	14300	Y	Y				30.5	20.9	mg/kg
SB-6(1-2)-20200729	460-214636-2	CALCIUM	8/5/2020	794	Y	Y	J		J	1020	75.1	mg/kg
SB-6(1-2)-20200729	460-214636-2	MANGANESE	8/5/2020	586	Y	Y				3.0	0.23	mg/kg
SB-6(1-2)-20200729	460-214636-2	ALUMINUM	8/5/2020	7300	Y	Y				40.7	5.8	mg/kg
SB-6(1-2)-20200729	460-214636-2	CADMIUM	8/5/2020	0.11	Y	Y	J		J	0.81	0.070	mg/kg
SB-6(1-2)-20200729	460-214636-2	COBALT	8/5/2020	5.8	Y	Y	J		J	10.2	0.56	mg/kg
SB-6(1-2)-20200729	460-214636-2	SODIUM	8/5/2020	149	Y	Y	J		J	1020	88.4	mg/kg
SB-6(1-2)-20200729	460-214636-2	BERYLLIUM	8/5/2020	0.25	Y	Y	J		J	0.41	0.065	mg/kg
Analytical Method	SW7471B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-10(1-2)-20200729	460-214636-3	MERCURY	8/5/2020	0.044	Y	Y				0.018	0.0041	mg/kg
SB-2(2-3)-20200729	460-214636-1	MERCURY	8/5/2020		Y	N	U		U	0.018	0.0041	mg/kg

Analytical Method	SW7471B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-6(1-2)-20200729	460-214636-2	MERCURY	8/5/2020	0.0088	Y	Y	J		J	0.017	0.0040	mg/kg

Analytical Method	SW8081B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-10(1-2)-20200729	460-214636-3	GAMMA BHC (LINDANE)	8/4/2020		Y	N	U		U	0.0022	0.00067	mg/kg
SB-10(1-2)-20200729	460-214636-3	BETA ENDOSULFAN	8/4/2020		Y	N	U		U	0.0073	0.0019	mg/kg
SB-10(1-2)-20200729	460-214636-3	ALPHA ENDOSULFAN	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-10(1-2)-20200729	460-214636-3	HEPTACHLOR	8/4/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-10(1-2)-20200729	460-214636-3	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00074	mg/kg
SB-10(1-2)-20200729	460-214636-3	ALDRIN	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-10(1-2)-20200729	460-214636-3	ENDRIN KETONE	8/4/2020		Y	N	U		U	0.0073	0.0014	mg/kg
SB-10(1-2)-20200729	460-214636-3	P,P'-DDT	8/4/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-10(1-2)-20200729	460-214636-3	CHLORDANE	8/4/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-10(1-2)-20200729	460-214636-3	METHOXYCHLOR	8/4/2020		Y	N	U		U	0.0073	0.0017	mg/kg
SB-10(1-2)-20200729	460-214636-3	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00081	mg/kg
SB-10(1-2)-20200729	460-214636-3	P,P'-DDD	8/4/2020		Y	N	U		U	0.0073	0.0012	mg/kg
SB-10(1-2)-20200729	460-214636-3	P,P'-DDE	8/4/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-10(1-2)-20200729	460-214636-3	trans-Chlordane	8/4/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-10(1-2)-20200729	460-214636-3	TOXAPHENE	8/4/2020		Y	N	U		U	0.073	0.026	mg/kg
SB-10(1-2)-20200729	460-214636-3	HEPTACHLOR EPOXIDE	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-10(1-2)-20200729	460-214636-3	ENDOSULFAN SULFATE	8/4/2020		Y	N	U		U	0.0073	0.00091	mg/kg
SB-10(1-2)-20200729	460-214636-3	ENDRIN	8/4/2020		Y	N	U		U	0.0073	0.0010	mg/kg
SB-10(1-2)-20200729	460-214636-3	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00044	mg/kg
SB-10(1-2)-20200729	460-214636-3	ENDRIN ALDEHYDE	8/4/2020		Y	N	U		U	0.0073	0.0017	mg/kg

SDG: 4602146361

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	DIELDRIN	8/4/2020		Y	N	U		U	0.0022	0.00094	mg/kg
SB-10(1-2)-20200729	460-214636-3	Chlordane (Technical)	8/4/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-10(1-2)-20200729	460-214636-3	ALPHA CHLORDANE	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-10(1-2)-20200729	460-214636-3	ENDOSULFAN	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ENDRIN	8/4/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-2(2-3)-20200729	460-214636-1	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00083	mg/kg
SB-2(2-3)-20200729	460-214636-1	BETA ENDOSULFAN	8/4/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-2(2-3)-20200729	460-214636-1	CHLORDANE	8/4/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-2(2-3)-20200729	460-214636-1	Chlordane (Technical)	8/4/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-2(2-3)-20200729	460-214636-1	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-2(2-3)-20200729	460-214636-1	DIELDRIN	8/4/2020		Y	N	U		U	0.0022	0.00096	mg/kg
SB-2(2-3)-20200729	460-214636-1	ENDOSULFAN SULFATE	8/4/2020		Y	N	U		U	0.0074	0.00092	mg/kg
SB-2(2-3)-20200729	460-214636-1	ALPHA ENDOSULFAN	8/4/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ENDRIN ALDEHYDE	8/4/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-2(2-3)-20200729	460-214636-1	ENDRIN KETONE	8/4/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-2(2-3)-20200729	460-214636-1	GAMMA BHC (LINDANE)	8/4/2020		Y	N	U		U	0.0022	0.00068	mg/kg
SB-2(2-3)-20200729	460-214636-1	HEPTACHLOR	8/4/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-2(2-3)-20200729	460-214636-1	HEPTACHLOR EPOXIDE	8/4/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-2(2-3)-20200729	460-214636-1	METHOXYCHLOR	8/4/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-2(2-3)-20200729	460-214636-1	P,P'-DDD	8/4/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-2(2-3)-20200729	460-214636-1	P,P'-DDE	8/4/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-2(2-3)-20200729	460-214636-1	P,P'-DDT	8/4/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-2(2-3)-20200729	460-214636-1	TOXAPHENE	8/4/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-2(2-3)-20200729	460-214636-1	trans-Chlordane	8/4/2020		Y	N	U		U	0.0074	0.0013	mg/kg

SDG: 4602146361

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-2(2-3)-20200729	460-214636-1	ENDOSULFAN	8/4/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ALDRIN	8/4/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ALPHA CHLORDANE	8/4/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-2(2-3)-20200729	460-214636-1	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-6(1-2)-20200729	460-214636-2	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00074	mg/kg
SB-6(1-2)-20200729	460-214636-2	P,P'-DDT	8/4/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-6(1-2)-20200729	460-214636-2	P,P'-DDE	8/4/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-6(1-2)-20200729	460-214636-2	P,P'-DDD	8/4/2020		Y	N	U		U	0.0073	0.0012	mg/kg
SB-6(1-2)-20200729	460-214636-2	METHOXYCHLOR	8/4/2020		Y	N	U		U	0.0073	0.0017	mg/kg
SB-6(1-2)-20200729	460-214636-2	HEPTACHLOR EPOXIDE	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-6(1-2)-20200729	460-214636-2	ALPHA CHLORDANE	8/4/2020		Y	N	U		U	0.0073	0.0012	mg/kg
SB-6(1-2)-20200729	460-214636-2	TOXAPHENE	8/4/2020		Y	N	U		U	0.073	0.026	mg/kg
SB-6(1-2)-20200729	460-214636-2	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00082	mg/kg
SB-6(1-2)-20200729	460-214636-2	trans-Chlordane	8/4/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-6(1-2)-20200729	460-214636-2	BETA ENDOSULFAN	8/4/2020		Y	N	U		U	0.0073	0.0019	mg/kg
SB-6(1-2)-20200729	460-214636-2	CHLORDANE	8/4/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-6(1-2)-20200729	460-214636-2	Chlordane (Technical)	8/4/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-6(1-2)-20200729	460-214636-2	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/4/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-6(1-2)-20200729	460-214636-2	DIELDRIN	8/4/2020		Y	N	U		U	0.0022	0.00095	mg/kg
SB-6(1-2)-20200729	460-214636-2	ENDOSULFAN	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-6(1-2)-20200729	460-214636-2	ALPHA ENDOSULFAN	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-6(1-2)-20200729	460-214636-2	HEPTACHLOR	8/4/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-6(1-2)-20200729	460-214636-2	ENDRIN KETONE	8/4/2020		Y	N	U		U	0.0073	0.0014	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-6(1-2)-20200729	460-214636-2	ENDOSULFAN SULFATE	8/4/2020		Y	N	U		U	0.0073	0.00091	mg/kg
SB-6(1-2)-20200729	460-214636-2	ENDRIN ALDEHYDE	8/4/2020		Y	N	U		U	0.0073	0.0017	mg/kg
SB-6(1-2)-20200729	460-214636-2	ENDRIN	8/4/2020		Y	N	U		U	0.0073	0.0010	mg/kg
SB-6(1-2)-20200729	460-214636-2	ALDRIN	8/4/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-6(1-2)-20200729	460-214636-2	GAMMA BHC (LINDANE)	8/4/2020		Y	N	U		U	0.0022	0.00067	mg/kg

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	PCB-1221 (AROCLOR 1221)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1232 (AROCLOR 1232)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1248 (AROCLOR 1248)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1254 (AROCLOR 1254)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1260 (AROCLOR 1260)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1262 (AROCLOR 1262)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1268 (AROCLOR 1268)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-10(1-2)-20200729	460-214636-3	TOTAL PCBS	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1242 (AROCLOR 1242)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-10(1-2)-20200729	460-214636-3	PCB-1016 (AROCLOR 1016)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1232 (AROCLOR 1232)	8/4/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1254 (AROCLOR 1254)	8/4/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-2(2-3)-20200729	460-214636-1	TOTAL PCBS	8/4/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1268 (AROCLOR 1268)	8/4/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1262 (AROCLOR 1262)	8/4/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1260 (AROCLOR 1260)	8/4/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1242 (AROCLOR 1242)	8/4/2020		Y	N	U		U	0.074	0.0098	mg/kg

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-2(2-3)-20200729	460-214636-1	PCB-1221 (AROCLOR 1221)	8/4/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1016 (AROCLOR 1016)	8/4/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-2(2-3)-20200729	460-214636-1	PCB-1248 (AROCLOR 1248)	8/4/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1248 (AROCLOR 1248)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1232 (AROCLOR 1232)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1262 (AROCLOR 1262)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1016 (AROCLOR 1016)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-6(1-2)-20200729	460-214636-2	TOTAL PCBS	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1268 (AROCLOR 1268)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1221 (AROCLOR 1221)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1254 (AROCLOR 1254)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1260 (AROCLOR 1260)	8/4/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-6(1-2)-20200729	460-214636-2	PCB-1242 (AROCLOR 1242)	8/4/2020		Y	N	U		U	0.073	0.0097	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	TRICHLOROFLUOROMETHANE	8/3/2020		Y	N	U		U	0.00082	0.00033	mg/kg
SB-10(1-2)-20200729	460-214636-3	VINYL CHLORIDE	8/3/2020		Y	N	U		U	0.00082	0.00045	mg/kg
SB-10(1-2)-20200729	460-214636-3	TRICHLOROETHYLENE (TCE)	8/3/2020		Y	N	U		U	0.00082	0.00012	mg/kg
SB-10(1-2)-20200729	460-214636-3	METHYLENE CHLORIDE	8/3/2020	0.00042	Y	Y	J		J	0.00082	0.00038	mg/kg
SB-10(1-2)-20200729	460-214636-3	M,P-XYLENES	8/3/2020	0.00020	Y	Y	J		J	0.00082	0.00014	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/3/2020		Y	N	U		U	0.00082	0.00025	mg/kg
SB-10(1-2)-20200729	460-214636-3	BROMOMETHANE	8/3/2020		Y	N	UT	UJ	UJ	0.00082	0.00039	mg/kg
SB-10(1-2)-20200729	460-214636-3	TRANS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00082	0.00022	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00082	0.00024	mg/kg

SDG: 4602146361

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	BROMOFORM	8/3/2020		Y	N	U	UJ	UJ	0.00082	0.00035	mg/kg
SB-10(1-2)-20200729	460-214636-3	BROMODICHLOROMETHANE	8/3/2020		Y	N	U		U	0.00082	0.00021	mg/kg
SB-10(1-2)-20200729	460-214636-3	BROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00082	0.00023	mg/kg
SB-10(1-2)-20200729	460-214636-3	TRANS-1,2-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00082	0.00020	mg/kg
SB-10(1-2)-20200729	460-214636-3	ACETONE	8/3/2020		Y	N	U		U	0.0049	0.0047	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,1-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00082	0.00017	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.016	0.0076	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,4-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00082	0.00019	mg/kg
SB-10(1-2)-20200729	460-214636-3	CARBON DISULFIDE	8/3/2020		Y	N	U	UJ	UJ	0.00082	0.00022	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2-DICHLOROPROPANE	8/3/2020		Y	N	U		U	0.00082	0.00035	mg/kg
SB-10(1-2)-20200729	460-214636-3	BENZENE	8/3/2020		Y	N	U		U	0.00082	0.00021	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00082	0.00012	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/3/2020		Y	N	U		U	0.00082	0.00015	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2-DIBROMO-3-CHLOROPROPANE	8/3/2020		Y	N	U		U	0.00082	0.00038	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2,4-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00082	0.00029	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2,3-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00082	0.00015	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,1-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00082	0.00019	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,1,2-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00082	0.00015	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,1,2,2-TETRACHLOROETHANE	8/3/2020		Y	N	U		U	0.00082	0.00018	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,1,1-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00082	0.00019	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,3-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00082	0.00013	mg/kg
SB-10(1-2)-20200729	460-214636-3	METHYLCYCLOHEXANE	8/3/2020		Y	N	U		U	0.00082	0.00041	mg/kg
SB-10(1-2)-20200729	460-214636-3	TOLUENE	8/3/2020		Y	N	U		U	0.00082	0.00019	mg/kg
SB-10(1-2)-20200729	460-214636-3	TETRACHLOROETHYLENE(PCE)	8/3/2020		Y	N	U		U	0.00082	0.00012	mg/kg

SDG: 4602146361

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	TERT-BUTYL METHYL ETHER	8/3/2020		Y	N	U		U	0.00082	0.00010	mg/kg
SB-10(1-2)-20200729	460-214636-3	2-HEXANONE	8/3/2020		Y	N	U		U	0.0041	0.0014	mg/kg
SB-10(1-2)-20200729	460-214636-3	O-XYLENE (1,2-DIMETHYLBENZENE)	8/3/2020		Y	N	U		U	0.00082	0.00016	mg/kg
SB-10(1-2)-20200729	460-214636-3	CARBON TETRACHLORIDE	8/3/2020		Y	N	U		U	0.00082	0.00032	mg/kg
SB-10(1-2)-20200729	460-214636-3	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/3/2020		Y	N	U		U	0.0041	0.0013	mg/kg
SB-10(1-2)-20200729	460-214636-3	METHYL ETHYL KETONE (2-BUTANONE)	8/3/2020		Y	N	U		U	0.0041	0.0022	mg/kg
SB-10(1-2)-20200729	460-214636-3	METHYL ACETATE	8/3/2020		Y	N	U		U	0.0041	0.0035	mg/kg
SB-10(1-2)-20200729	460-214636-3	Isopropylbenzene (Cumene)	8/3/2020		Y	N	U		U	0.00082	0.00010	mg/kg
SB-10(1-2)-20200729	460-214636-3	CHLOROFORM	8/3/2020		Y	N	U		U	0.00082	0.00026	mg/kg
SB-10(1-2)-20200729	460-214636-3	STYRENE	8/3/2020		Y	N	U		U	0.00082	0.00023	mg/kg
SB-10(1-2)-20200729	460-214636-3	ETHYLBENZENE	8/3/2020		Y	N	U		U	0.00082	0.00016	mg/kg
SB-10(1-2)-20200729	460-214636-3	CHLOROETHANE	8/3/2020		Y	N	U		U	0.00082	0.00043	mg/kg
SB-10(1-2)-20200729	460-214636-3	CHLOROBENZENE	8/3/2020		Y	N	U		U	0.00082	0.00015	mg/kg
SB-10(1-2)-20200729	460-214636-3	CHLOROMETHANE	8/3/2020		Y	N	U		U	0.00082	0.00036	mg/kg
SB-10(1-2)-20200729	460-214636-3	Cis-1,2-Dichloroethylene	8/3/2020		Y	N	U		U	0.00082	0.00013	mg/kg
SB-10(1-2)-20200729	460-214636-3	CIS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00082	0.00022	mg/kg
SB-10(1-2)-20200729	460-214636-3	CYCLOHEXANE	8/3/2020		Y	N	U		U	0.00082	0.00018	mg/kg
SB-10(1-2)-20200729	460-214636-3	DIBROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00082	0.00016	mg/kg
SB-10(1-2)-20200729	460-214636-3	DICHLORODIFLUOROMETHANE	8/3/2020		Y	N	U	UJ	UJ	0.00082	0.00028	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.017	0.0078	mg/kg
SB-2(2-3)-20200729	460-214636-1	METHYLENE CHLORIDE	8/3/2020	0.00050	Y	Y	J		J	0.00085	0.00039	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,3-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00085	0.00014	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,4-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00085	0.00019	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2-DICHLOROPROPANE	8/3/2020		Y	N	U		U	0.00085	0.00036	mg/kg

SDG: 4602146361

Analytical Method	SW8260C										
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-2(2-3)-20200729	460-214636-1	2-HEXANONE	8/3/2020		Y	N	U		U	0.0043	0.0015	mg/kg
SB-2(2-3)-20200729	460-214636-1	ACETONE	8/3/2020		Y	N	U		U	0.0051	0.0049	mg/kg
SB-2(2-3)-20200729	460-214636-1	M,P-XYLENES	8/3/2020	0.00016	Y	Y	J		J	0.00085	0.00015	mg/kg
SB-2(2-3)-20200729	460-214636-1	CHLOROFORM	8/3/2020	0.00038	Y	Y	J		J	0.00085	0.00027	mg/kg
SB-2(2-3)-20200729	460-214636-1	TETRACHLOROETHYLENE(PCE)	8/3/2020		Y	N	U		U	0.00085	0.00012	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00085	0.00025	mg/kg
SB-2(2-3)-20200729	460-214636-1	BROMOMETHANE	8/3/2020		Y	N	UT	UJ	UJ	0.00085	0.00040	mg/kg
SB-2(2-3)-20200729	460-214636-1	METHYL ETHYL KETONE (2-BUTANONE)	8/3/2020		Y	N	U		U	0.0043	0.0023	mg/kg
SB-2(2-3)-20200729	460-214636-1	BROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00085	0.00024	mg/kg
SB-2(2-3)-20200729	460-214636-1	BROMODICHLOROMETHANE	8/3/2020		Y	N	U		U	0.00085	0.00022	mg/kg
SB-2(2-3)-20200729	460-214636-1	BROMOFORM	8/3/2020		Y	N	U	UJ	UJ	0.00085	0.00036	mg/kg
SB-2(2-3)-20200729	460-214636-1	CARBON DISULFIDE	8/3/2020		Y	N	U	UJ	UJ	0.00085	0.00023	mg/kg
SB-2(2-3)-20200729	460-214636-1	CARBON TETRACHLORIDE	8/3/2020		Y	N	U		U	0.00085	0.00033	mg/kg
SB-2(2-3)-20200729	460-214636-1	CHLOROBENZENE	8/3/2020		Y	N	U		U	0.00085	0.00015	mg/kg
SB-2(2-3)-20200729	460-214636-1	CHLOROETHANE	8/3/2020		Y	N	U		U	0.00085	0.00044	mg/kg
SB-2(2-3)-20200729	460-214636-1	CHLOROMETHANE	8/3/2020		Y	N	U		U	0.00085	0.00037	mg/kg
SB-2(2-3)-20200729	460-214636-1	Cis-1,2-Dichloroethylene	8/3/2020		Y	N	U		U	0.00085	0.00013	mg/kg
SB-2(2-3)-20200729	460-214636-1	CIS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00085	0.00023	mg/kg
SB-2(2-3)-20200729	460-214636-1	CYCLOHEXANE	8/3/2020		Y	N	U		U	0.00085	0.00019	mg/kg
SB-2(2-3)-20200729	460-214636-1	DIBROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00085	0.00016	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZENE	8/3/2020		Y	N	U		U	0.00085	0.00022	mg/kg
SB-2(2-3)-20200729	460-214636-1	Isopropylbenzene (Cumene)	8/3/2020		Y	N	U		U	0.00085	0.00011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ETHYLBENZENE	8/3/2020		Y	N	U		U	0.00085	0.00017	mg/kg
SB-2(2-3)-20200729	460-214636-1	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/3/2020		Y	N	U		U	0.0043	0.0013	mg/kg

SDG: 4602146361

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-2(2-3)-20200729	460-214636-1	METHYLCYCLOHEXANE	8/3/2020		Y	N	U		U	0.00085	0.00042	mg/kg
SB-2(2-3)-20200729	460-214636-1	O-XYLENE (1,2-DIMETHYLBENZENE)	8/3/2020		Y	N	U		U	0.00085	0.00016	mg/kg
SB-2(2-3)-20200729	460-214636-1	TERT-BUTYL METHYL ETHER	8/3/2020		Y	N	U		U	0.00085	0.00011	mg/kg
SB-2(2-3)-20200729	460-214636-1	TOLUENE	8/3/2020		Y	N	U		U	0.00085	0.00020	mg/kg
SB-2(2-3)-20200729	460-214636-1	TRANS-1,2-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00085	0.00021	mg/kg
SB-2(2-3)-20200729	460-214636-1	TRANS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00085	0.00023	mg/kg
SB-2(2-3)-20200729	460-214636-1	TRICHLOROETHYLENE (TCE)	8/3/2020		Y	N	U		U	0.00085	0.00012	mg/kg
SB-2(2-3)-20200729	460-214636-1	TRICHLOROFLUOROMETHANE	8/3/2020		Y	N	U		U	0.00085	0.00035	mg/kg
SB-2(2-3)-20200729	460-214636-1	VINYL CHLORIDE	8/3/2020		Y	N	U		U	0.00085	0.00046	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,1,1-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00085	0.00020	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00085	0.00012	mg/kg
SB-2(2-3)-20200729	460-214636-1	STYRENE	8/3/2020		Y	N	U		U	0.00085	0.00024	mg/kg
SB-2(2-3)-20200729	460-214636-1	DICHLORODIFLUOROMETHANE	8/3/2020		Y	N	U	UJ	UJ	0.00085	0.00029	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2,4-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00085	0.00030	mg/kg
SB-2(2-3)-20200729	460-214636-1	METHYL ACETATE	8/3/2020		Y	N	U		U	0.0043	0.0037	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2-DIBROMO-3-CHLOROPROPANE	8/3/2020		Y	N	U		U	0.00085	0.00039	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2,3-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00085	0.00015	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,1-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00085	0.00019	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,1-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00085	0.00018	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,1,2-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00085	0.00015	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/3/2020		Y	N	U		U	0.00085	0.00026	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,1,2,2-TETRACHLOROETHANE	8/3/2020		Y	N	U		U	0.00085	0.00018	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/3/2020		Y	N	U		U	0.00085	0.00015	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00090	0.00027	mg/kg

SDG: 4602146361

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-6(1-2)-20200729	460-214636-2	CARBON TETRACHLORIDE	8/3/2020		Y	N	U		U	0.00090	0.00035	mg/kg
SB-6(1-2)-20200729	460-214636-2	CARBON DISULFIDE	8/3/2020		Y	N	U	UJ	UJ	0.00090	0.00024	mg/kg
SB-6(1-2)-20200729	460-214636-2	BROMOFORM	8/3/2020		Y	N	U	UJ	UJ	0.00090	0.00038	mg/kg
SB-6(1-2)-20200729	460-214636-2	BROMODICHLOROMETHANE	8/3/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-6(1-2)-20200729	460-214636-2	BROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZENE	8/3/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-6(1-2)-20200729	460-214636-2	ACETONE	8/3/2020		Y	N	U		U	0.0054	0.0052	mg/kg
SB-6(1-2)-20200729	460-214636-2	2-HEXANONE	8/3/2020		Y	N	U		U	0.0045	0.0015	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.018	0.0083	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,4-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-6(1-2)-20200729	460-214636-2	CHLOROETHANE	8/3/2020		Y	N	U		U	0.00090	0.00047	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2-DICHLOROPROPANE	8/3/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-6(1-2)-20200729	460-214636-2	TRICHLOROFLUOROMETHANE	8/3/2020		Y	N	U		U	0.00090	0.00037	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/3/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2-DIBROMO-3-CHLOROPROPANE	8/3/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2,4-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00090	0.00032	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2,3-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,1-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,1-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,1,2-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/3/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,1,2,2-TETRACHLOROETHANE	8/3/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,1,1-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00090	0.00021	mg/kg

SDG: 4602146361

Analytical Method	SW8260C										
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-6(1-2)-20200729	460-214636-2	1,3-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-6(1-2)-20200729	460-214636-2	METHYLENE CHLORIDE	8/3/2020	0.00049	Y	Y	J		J	0.00090	0.00042	mg/kg
SB-6(1-2)-20200729	460-214636-2	METHYL ETHYL KETONE (2-BUTANONE)	8/3/2020		Y	N	U		U	0.0045	0.0024	mg/kg
SB-6(1-2)-20200729	460-214636-2	METHYL ACETATE	8/3/2020		Y	N	U		U	0.0045	0.0039	mg/kg
SB-6(1-2)-20200729	460-214636-2	Isopropylbenzene (Cumene)	8/3/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-6(1-2)-20200729	460-214636-2	ETHYLBENZENE	8/3/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-6(1-2)-20200729	460-214636-2	DICHLORODIFLUOROMETHANE	8/3/2020		Y	N	U	UJ	UJ	0.00090	0.00031	mg/kg
SB-6(1-2)-20200729	460-214636-2	DIBROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-6(1-2)-20200729	460-214636-2	CYCLOHEXANE	8/3/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-6(1-2)-20200729	460-214636-2	CIS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-6(1-2)-20200729	460-214636-2	Cis-1,2-Dichloroethylene	8/3/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-6(1-2)-20200729	460-214636-2	CHLOROBENZENE	8/3/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-6(1-2)-20200729	460-214636-2	CHLOROFORM	8/3/2020		Y	N	U		U	0.00090	0.00029	mg/kg
SB-6(1-2)-20200729	460-214636-2	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/3/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-6(1-2)-20200729	460-214636-2	TOLUENE	8/3/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-6(1-2)-20200729	460-214636-2	BROMOMETHANE	8/3/2020		Y	N	UT	UJ	UJ	0.00090	0.00043	mg/kg
SB-6(1-2)-20200729	460-214636-2	VINYL CHLORIDE	8/3/2020		Y	N	U		U	0.00090	0.00049	mg/kg
SB-6(1-2)-20200729	460-214636-2	TRICHLOROETHYLENE (TCE)	8/3/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-6(1-2)-20200729	460-214636-2	TRANS-1,2-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00090	0.00022	mg/kg
SB-6(1-2)-20200729	460-214636-2	CHLOROMETHANE	8/3/2020		Y	N	U		U	0.00090	0.00039	mg/kg
SB-6(1-2)-20200729	460-214636-2	TRANS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-6(1-2)-20200729	460-214636-2	METHYLCYCLOHEXANE	8/3/2020		Y	N	U		U	0.00090	0.00045	mg/kg
SB-6(1-2)-20200729	460-214636-2	TETRACHLOROETHYLENE(PCE)	8/3/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-6(1-2)-20200729	460-214636-2	TERT-BUTYL METHYL ETHER	8/3/2020		Y	N	U		U	0.00090	0.00011	mg/kg

Analytical Method	SW8260C										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-6(1-2)-20200729	460-214636-2	STYRENE	8/3/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-6(1-2)-20200729	460-214636-2	O-XYLENE (1,2-DIMETHYLBENZENE)	8/3/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-6(1-2)-20200729	460-214636-2	M,P-XYLENES	8/3/2020	0.00016	Y	Y	J		J	0.00090	0.00016	mg/kg

Analytical Method	SW8270D										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-10(1-2)-20200729	460-214636-3	1,4-DIOXANE (P-DIOXANE)	8/2/2020		Y	N	U		U	0.11	0.0099	mg/kg
SB-10(1-2)-20200729	460-214636-3	1,2,4,5-TETRACHLOROBENZENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-10(1-2)-20200729	460-214636-3	BENZO(B)FLUORANTHENE	8/2/2020		Y	N	U		U	0.036	0.0093	mg/kg
SB-10(1-2)-20200729	460-214636-3	ACETOPHENONE	8/2/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-10(1-2)-20200729	460-214636-3	BENZO(A)ANTHRACENE	8/2/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-10(1-2)-20200729	460-214636-3	4-CHLOROANILINE	8/2/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-10(1-2)-20200729	460-214636-3	4-CHLOROPHENYL PHENYL ETHER	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-10(1-2)-20200729	460-214636-3	4-METHYLPHENOL (P-CRESOL)	8/2/2020		Y	N	U		U	0.36	0.022	mg/kg
SB-10(1-2)-20200729	460-214636-3	4-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-10(1-2)-20200729	460-214636-3	4-NITROPHENOL	8/2/2020		Y	N	U		U	0.73	0.058	mg/kg
SB-10(1-2)-20200729	460-214636-3	4-BROMOPHENYL PHENYL ETHER	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-10(1-2)-20200729	460-214636-3	ACENAPHTHYLENE	8/2/2020		Y	N	U		U	0.36	0.0037	mg/kg
SB-10(1-2)-20200729	460-214636-3	4,6-DINITRO-2-METHYLPHENOL	8/2/2020		Y	N	U		U	0.29	0.058	mg/kg
SB-10(1-2)-20200729	460-214636-3	ANTHRACENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-10(1-2)-20200729	460-214636-3	ATRAZINE	8/2/2020		Y	N	U		U	0.14	0.0091	mg/kg
SB-10(1-2)-20200729	460-214636-3	BENZALDEHYDE	8/2/2020		Y	N	U	UJ	UJ	0.36	0.016	mg/kg
SB-10(1-2)-20200729	460-214636-3	BENZO(A)PYRENE	8/2/2020		Y	N	U		U	0.036	0.0096	mg/kg
SB-10(1-2)-20200729	460-214636-3	HEXACHLOROCYCLOPENTADIENE	8/2/2020		Y	N	U		U	0.36	0.031	mg/kg
SB-10(1-2)-20200729	460-214636-3	Aldol Condensation Product With 1st Highest Conc.	8/2/2020	640	Y	Y	JA		J	0	0	ug/kg

SDG: 4602146361

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	ACENAPHTHENE	8/2/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-10(1-2)-20200729	460-214636-3	2-CHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,4,5-TRICHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,4,6-TRICHLOROPHENOL	8/2/2020		Y	N	U		U	0.14	0.046	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,4-DICHLOROPHENOL	8/2/2020		Y	N	U		U	0.14	0.023	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,4-DIMETHYLPHENOL	8/2/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,4-DINITROPHENOL	8/2/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,4-DINITROTOLUENE	8/2/2020		Y	N	U		U	0.073	0.039	mg/kg
SB-10(1-2)-20200729	460-214636-3	4-CHLORO-3-METHYLPHENOL	8/2/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-10(1-2)-20200729	460-214636-3	2-CHLORONAPHTHALENE	8/2/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,3,4,6-TETRACHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.024	mg/kg
SB-10(1-2)-20200729	460-214636-3	2-Methylnaphthalene	8/2/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-10(1-2)-20200729	460-214636-3	2-Methylphenol (O-Cresol)	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-10(1-2)-20200729	460-214636-3	2-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-10(1-2)-20200729	460-214636-3	2-NITROPHENOL	8/2/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-10(1-2)-20200729	460-214636-3	3,3'-DICHLOROBENZIDINE	8/2/2020		Y	N	U		U	0.14	0.054	mg/kg
SB-10(1-2)-20200729	460-214636-3	3-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.040	mg/kg
SB-10(1-2)-20200729	460-214636-3	2,6-DINITROTOLUENE	8/2/2020		Y	N	U		U	0.073	0.026	mg/kg
SB-10(1-2)-20200729	460-214636-3	HEXACHLOROETHANE	8/2/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-10(1-2)-20200729	460-214636-3	BIS(2-ETHYLHEXYL) PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-10(1-2)-20200729	460-214636-3	CAPROLACTAM	8/2/2020		Y	N	U		U	0.36	0.056	mg/kg
SB-10(1-2)-20200729	460-214636-3	CARBAZOLE	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-10(1-2)-20200729	460-214636-3	CHRYSENE	8/2/2020		Y	N	U		U	0.36	0.0061	mg/kg
SB-10(1-2)-20200729	460-214636-3	DIBENZ(A,H)ANTHRACENE	8/2/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-10(1-2)-20200729	460-214636-3	DIBENZOFURAN	8/2/2020		Y	N	U		U	0.36	0.0050	mg/kg

SDG: 4602146361

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	DIETHYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.0052	mg/kg
SB-10(1-2)-20200729	460-214636-3	DIMETHYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.082	mg/kg
SB-10(1-2)-20200729	460-214636-3	DI-N-BUTYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.063	mg/kg
SB-10(1-2)-20200729	460-214636-3	DI-N-OCTYLPHTHALATE	8/2/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-10(1-2)-20200729	460-214636-3	BIS(2-CHLOROISOPROPYL) ETHER	8/2/2020		Y	N	U		U	0.36	0.0065	mg/kg
SB-10(1-2)-20200729	460-214636-3	FLUORENE	8/2/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-10(1-2)-20200729	460-214636-3	HEXACHLOROBUTADIENE	8/2/2020		Y	N	U		U	0.073	0.0076	mg/kg
SB-10(1-2)-20200729	460-214636-3	HEXACHLOROBENZENE	8/2/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-10(1-2)-20200729	460-214636-3	INDENO(1,2,3-C,D)PYRENE	8/2/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-10(1-2)-20200729	460-214636-3	ISOPHORONE	8/2/2020		Y	N	U		U	0.14	0.10	mg/kg
SB-10(1-2)-20200729	460-214636-3	NAPHTHALENE	8/2/2020		Y	N	U		U	0.36	0.0062	mg/kg
SB-10(1-2)-20200729	460-214636-3	NITROBENZENE	8/2/2020		Y	N	U		U	0.036	0.0086	mg/kg
SB-10(1-2)-20200729	460-214636-3	N-NITROSODI-N-PROPYLAMINE	8/2/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-10(1-2)-20200729	460-214636-3	N-NITROSODIPHENYLAMINE	8/2/2020		Y	N	U		U	0.36	0.0069	mg/kg
SB-10(1-2)-20200729	460-214636-3	PENTACHLOROPHENOL	8/2/2020		Y	N	U		U	0.29	0.074	mg/kg
SB-10(1-2)-20200729	460-214636-3	PHENANTHRENE	8/2/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-10(1-2)-20200729	460-214636-3	PHENOL	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-10(1-2)-20200729	460-214636-3	PYRENE	8/2/2020		Y	N	U		U	0.36	0.0089	mg/kg
SB-10(1-2)-20200729	460-214636-3	FLUORANTHENE	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-10(1-2)-20200729	460-214636-3	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/2/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-10(1-2)-20200729	460-214636-3	BIS(2-CHLOROETHOXY) METHANE	8/2/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-10(1-2)-20200729	460-214636-3	BIPHENYL (DIPHENYL)	8/2/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-10(1-2)-20200729	460-214636-3	BENZYL BUTYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-10(1-2)-20200729	460-214636-3	BENZO(K)FLUORANTHENE	8/2/2020		Y	N	U		U	0.036	0.0070	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	BENZO(G,H,I)PERYLENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ANTHRACENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ATRAZINE	8/2/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZALDEHYDE	8/2/2020		Y	N	U	UJ	UJ	0.36	0.016	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZO(A)ANTHRACENE	8/2/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZO(A)PYRENE	8/2/2020		Y	N	U		U	0.036	0.0097	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZO(B)FLUORANTHENE	8/2/2020		Y	N	U		U	0.036	0.0094	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZO(G,H,I)PERYLENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-2(2-3)-20200729	460-214636-1	ACETOPHENONE	8/2/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZYL BUTYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-2(2-3)-20200729	460-214636-1	4-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.042	mg/kg
SB-2(2-3)-20200729	460-214636-1	BIPHENYL (DIPHENYL)	8/2/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-2(2-3)-20200729	460-214636-1	BIS(2-CHLOROETHOXY) METHANE	8/2/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-2(2-3)-20200729	460-214636-1	BENZO(K)FLUORANTHENE	8/2/2020		Y	N	U		U	0.036	0.0071	mg/kg
SB-2(2-3)-20200729	460-214636-1	ACENAPHTHYLENE	8/2/2020		Y	N	U		U	0.36	0.0038	mg/kg
SB-2(2-3)-20200729	460-214636-1	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/2/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-2(2-3)-20200729	460-214636-1	4-NITROPHENOL	8/2/2020		Y	N	U		U	0.74	0.059	mg/kg
SB-2(2-3)-20200729	460-214636-1	CARBAZOLE	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-2(2-3)-20200729	460-214636-1	4-METHYLPHENOL (P-CRESOL)	8/2/2020		Y	N	U		U	0.36	0.023	mg/kg
SB-2(2-3)-20200729	460-214636-1	4-CHLOROPHENYL PHENYL ETHER	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-2(2-3)-20200729	460-214636-1	4-CHLOROANILINE	8/2/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-2(2-3)-20200729	460-214636-1	4-CHLORO-3-METHYLPHENOL	8/2/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-2(2-3)-20200729	460-214636-1	4-BROMOPHENYL PHENYL ETHER	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-2(2-3)-20200729	460-214636-1	4,6-DINITRO-2-METHYLPHENOL	8/2/2020		Y	N	U		U	0.29	0.059	mg/kg

SDG: 4602146361

Analytical Method	SW8270D										
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-2(2-3)-20200729	460-214636-1	3-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-2(2-3)-20200729	460-214636-1	3,3'-DICHLOROBENZIDINE	8/2/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-2(2-3)-20200729	460-214636-1	2-NITROPHENOL	8/2/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-2(2-3)-20200729	460-214636-1	ACENAPHTHENE	8/2/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-2(2-3)-20200729	460-214636-1	INDENO(1,2,3-C,D)PYRENE	8/2/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-2(2-3)-20200729	460-214636-1	DIBENZOFURAN	8/2/2020		Y	N	U		U	0.36	0.0051	mg/kg
SB-2(2-3)-20200729	460-214636-1	DIBENZ(A,H)ANTHRACENE	8/2/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-2(2-3)-20200729	460-214636-1	DIETHYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.0053	mg/kg
SB-2(2-3)-20200729	460-214636-1	DIMETHYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.083	mg/kg
SB-2(2-3)-20200729	460-214636-1	DI-N-BUTYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.064	mg/kg
SB-2(2-3)-20200729	460-214636-1	DI-N-OCTYLPHTHALATE	8/2/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-2(2-3)-20200729	460-214636-1	FLUORANTHENE	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-2(2-3)-20200729	460-214636-1	FLUORENE	8/2/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-2(2-3)-20200729	460-214636-1	HEXACHLOROBENZENE	8/2/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-2(2-3)-20200729	460-214636-1	HEXACHLOROBUTADIENE	8/2/2020		Y	N	U		U	0.074	0.0077	mg/kg
SB-2(2-3)-20200729	460-214636-1	2-Methylnaphthalene	8/2/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-2(2-3)-20200729	460-214636-1	BIS(2-ETHYLHEXYL) PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-2(2-3)-20200729	460-214636-1	HEXACHLOROETHANE	8/2/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-2(2-3)-20200729	460-214636-1	BIS(2-CHLOROISOPROPYL) ETHER	8/2/2020		Y	N	U		U	0.36	0.0066	mg/kg
SB-2(2-3)-20200729	460-214636-1	ISOPHORONE	8/2/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-2(2-3)-20200729	460-214636-1	NAPHTHALENE	8/2/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-2(2-3)-20200729	460-214636-1	NITROBENZENE	8/2/2020		Y	N	U		U	0.036	0.0087	mg/kg
SB-2(2-3)-20200729	460-214636-1	N-NITROSODI-N-PROPYLAMINE	8/2/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-2(2-3)-20200729	460-214636-1	N-NITROSODIPHENYLAMINE	8/2/2020		Y	N	U		U	0.36	0.0070	mg/kg
SB-2(2-3)-20200729	460-214636-1	PENTACHLOROPHENOL	8/2/2020		Y	N	U		U	0.29	0.075	mg/kg

SDG: 4602146361

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-2(2-3)-20200729	460-214636-1	PHENANTHRENE	8/2/2020		Y	N	U		U	0.36	0.0064	mg/kg
SB-2(2-3)-20200729	460-214636-1	PHENOL	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-2(2-3)-20200729	460-214636-1	PYRENE	8/2/2020		Y	N	U		U	0.36	0.0090	mg/kg
SB-2(2-3)-20200729	460-214636-1	CAPROLACTAM	8/2/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-2(2-3)-20200729	460-214636-1	CHRYSENE	8/2/2020		Y	N	U		U	0.36	0.0062	mg/kg
SB-2(2-3)-20200729	460-214636-1	HEXACHLOROCYCLOPENTADIENE	8/2/2020		Y	N	U		U	0.36	0.032	mg/kg
SB-2(2-3)-20200729	460-214636-1	2,4,5-TRICHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-2(2-3)-20200729	460-214636-1	2-Methylphenol (O-Cresol)	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-2(2-3)-20200729	460-214636-1	2-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,2,4,5-TETRACHLOROBENZENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-2(2-3)-20200729	460-214636-1	2,3,4,6-TETRACHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-2(2-3)-20200729	460-214636-1	Aldol Condensation Product With 1st Highest Conc.	8/2/2020	680	Y	Y	JA		J	0	0	ug/kg
SB-2(2-3)-20200729	460-214636-1	2,4,6-TRICHLOROPHENOL	8/2/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-2(2-3)-20200729	460-214636-1	2,4-DICHLOROPHENOL	8/2/2020		Y	N	U		U	0.15	0.023	mg/kg
SB-2(2-3)-20200729	460-214636-1	2,4-DIMETHYLPHENOL	8/2/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-2(2-3)-20200729	460-214636-1	2,4-DINITROPHENOL	8/2/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-2(2-3)-20200729	460-214636-1	2,4-DINITROTOLUENE	8/2/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-2(2-3)-20200729	460-214636-1	2,6-DINITROTOLUENE	8/2/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-2(2-3)-20200729	460-214636-1	2-CHLORONAPHTHALENE	8/2/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-2(2-3)-20200729	460-214636-1	2-CHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-2(2-3)-20200729	460-214636-1	1,4-DIOXANE (P-DIOXANE)	8/2/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-6(1-2)-20200729	460-214636-2	2,4,6-TRICHLOROPHENOL	8/2/2020		Y	N	U		U	0.14	0.046	mg/kg
SB-6(1-2)-20200729	460-214636-2	2,6-DINITROTOLUENE	8/2/2020		Y	N	U		U	0.073	0.026	mg/kg
SB-6(1-2)-20200729	460-214636-2	2,4-DINITROTOLUENE	8/2/2020		Y	N	U		U	0.073	0.039	mg/kg

SDG: 4602146361

Analytical Method	SW8270D											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-6(1-2)-20200729	460-214636-2	2,4-DINITROPHENOL	8/2/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-6(1-2)-20200729	460-214636-2	2,4-DIMETHYLPHENOL	8/2/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-6(1-2)-20200729	460-214636-2	2-CHLORONAPHTHALENE	8/2/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-6(1-2)-20200729	460-214636-2	2,4-DICHLOROPHENOL	8/2/2020		Y	N	U		U	0.14	0.023	mg/kg
SB-6(1-2)-20200729	460-214636-2	2,4,5-TRICHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-6(1-2)-20200729	460-214636-2	2,3,4,6-TETRACHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.024	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,4-DIOXANE (P-DIOXANE)	8/2/2020		Y	N	U		U	0.11	0.0099	mg/kg
SB-6(1-2)-20200729	460-214636-2	1,2,4,5-TETRACHLOROBENZENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-6(1-2)-20200729	460-214636-2	2-CHLOROPHENOL	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	Aldol Condensation Product With 1st Highest Conc.	8/2/2020	500	Y	Y	JA		J	0	0	ug/kg
SB-6(1-2)-20200729	460-214636-2	4,6-DINITRO-2-METHYLPHENOL	8/2/2020		Y	N	U		U	0.29	0.058	mg/kg
SB-6(1-2)-20200729	460-214636-2	PENTACHLOROPHENOL	8/2/2020		Y	N	U		U	0.29	0.074	mg/kg
SB-6(1-2)-20200729	460-214636-2	PHENOL	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	4-CHLORO-3-METHYLPHENOL	8/2/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-6(1-2)-20200729	460-214636-2	ANTHRACENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-6(1-2)-20200729	460-214636-2	ACETOPHENONE	8/2/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-6(1-2)-20200729	460-214636-2	ACENAPHTHYLENE	8/2/2020		Y	N	U		U	0.36	0.0037	mg/kg
SB-6(1-2)-20200729	460-214636-2	ACENAPHTHENE	8/2/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-6(1-2)-20200729	460-214636-2	4-NITROPHENOL	8/2/2020		Y	N	U		U	0.73	0.059	mg/kg
SB-6(1-2)-20200729	460-214636-2	4-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-6(1-2)-20200729	460-214636-2	4-METHYLPHENOL (P-CRESOL)	8/2/2020		Y	N	U		U	0.36	0.022	mg/kg
SB-6(1-2)-20200729	460-214636-2	3,3'-DICHLOROBENZIDINE	8/2/2020		Y	N	U		U	0.14	0.054	mg/kg
SB-6(1-2)-20200729	460-214636-2	4-CHLOROANILINE	8/2/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-6(1-2)-20200729	460-214636-2	2-Methylnaphthalene	8/2/2020		Y	N	U		U	0.36	0.010	mg/kg

SDG: 4602146361

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-6(1-2)-20200729	460-214636-2	4-BROMOPHENYL PHENYL ETHER	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-6(1-2)-20200729	460-214636-2	HEXACHLOROBUTADIENE	8/2/2020		Y	N	U		U	0.073	0.0077	mg/kg
SB-6(1-2)-20200729	460-214636-2	3-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-6(1-2)-20200729	460-214636-2	N-NITROSODIPHENYLAMINE	8/2/2020		Y	N	U		U	0.36	0.0069	mg/kg
SB-6(1-2)-20200729	460-214636-2	2-NITROPHENOL	8/2/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-6(1-2)-20200729	460-214636-2	2-NITROANILINE	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	2-Methylphenol (O-Cresol)	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	4-CHLOROPHENYL PHENYL ETHER	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZYL BUTYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-6(1-2)-20200729	460-214636-2	CHRYSENE	8/2/2020		Y	N	U		U	0.36	0.0061	mg/kg
SB-6(1-2)-20200729	460-214636-2	CARBAZOLE	8/2/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-6(1-2)-20200729	460-214636-2	CAPROLACTAM	8/2/2020		Y	N	U		U	0.36	0.056	mg/kg
SB-6(1-2)-20200729	460-214636-2	BIS(2-ETHYLHEXYL) PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-6(1-2)-20200729	460-214636-2	BIS(2-CHLOROISOPROPYL) ETHER	8/2/2020		Y	N	U		U	0.36	0.0065	mg/kg
SB-6(1-2)-20200729	460-214636-2	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/2/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	HEXACHLOROETHANE	8/2/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-6(1-2)-20200729	460-214636-2	BIPHENYL (DIPHENYL)	8/2/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-6(1-2)-20200729	460-214636-2	DIBENZOFURAN	8/2/2020		Y	N	U		U	0.36	0.0051	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZO(K)FLUORANTHENE	8/2/2020		Y	N	U		U	0.036	0.0071	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZO(G,H,I)PERYLENE	8/2/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZO(B)FLUORANTHENE	8/2/2020		Y	N	U		U	0.036	0.0093	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZO(A)PYRENE	8/2/2020		Y	N	U		U	0.036	0.0096	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZO(A)ANTHRACENE	8/2/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	BENZALDEHYDE	8/2/2020		Y	N	U	UJ	UJ	0.36	0.016	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-6(1-2)-20200729	460-214636-2	PHENANTHRENE	8/2/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-6(1-2)-20200729	460-214636-2	BIS(2-CHLOROETHOXY) METHANE	8/2/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-6(1-2)-20200729	460-214636-2	DI-N-OCTYLPHTHALATE	8/2/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-6(1-2)-20200729	460-214636-2	NITROBENZENE	8/2/2020		Y	N	U		U	0.036	0.0086	mg/kg
SB-6(1-2)-20200729	460-214636-2	NAPHTHALENE	8/2/2020		Y	N	U		U	0.36	0.0062	mg/kg
SB-6(1-2)-20200729	460-214636-2	ISOPHORONE	8/2/2020		Y	N	U		U	0.14	0.10	mg/kg
SB-6(1-2)-20200729	460-214636-2	INDENO(1,2,3-C,D)PYRENE	8/2/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-6(1-2)-20200729	460-214636-2	HEXACHLOROCYCLOPENTADIENE	8/2/2020		Y	N	U		U	0.36	0.032	mg/kg
SB-6(1-2)-20200729	460-214636-2	HEXACHLOROBENZENE	8/2/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-6(1-2)-20200729	460-214636-2	FLUORANTHENE	8/2/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-6(1-2)-20200729	460-214636-2	DIBENZ(A,H)ANTHRACENE	8/2/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-6(1-2)-20200729	460-214636-2	DI-N-BUTYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.063	mg/kg
SB-6(1-2)-20200729	460-214636-2	DIMETHYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.082	mg/kg
SB-6(1-2)-20200729	460-214636-2	DIETHYL PHTHALATE	8/2/2020		Y	N	U		U	0.36	0.0052	mg/kg
SB-6(1-2)-20200729	460-214636-2	PYRENE	8/2/2020		Y	N	U		U	0.36	0.0089	mg/kg
SB-6(1-2)-20200729	460-214636-2	ATRAZINE	8/2/2020		Y	N	U		U	0.14	0.0091	mg/kg
SB-6(1-2)-20200729	460-214636-2	N-NITROSODI-N-PROPYLAMINE	8/2/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-6(1-2)-20200729	460-214636-2	FLUORENE	8/2/2020		Y	N	U		U	0.36	0.0049	mg/kg

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-10(1-2)-20200729	460-214636-3	CYANIDE	8/4/2020		Y	N	U		U	0.24	0.12	mg/kg
SB-2(2-3)-20200729	460-214636-1	CYANIDE	8/4/2020		Y	N	U		U	0.24	0.13	mg/kg
SB-6(1-2)-20200729	460-214636-2	CYANIDE	8/4/2020		Y	N	U		U	0.26	0.13	mg/kg

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-214767-1
Reviewer: Felomina Tanguilig, Stella Cuenco, and Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 5, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-19(4-5)	460-214767-1	VOC, SVOC, Pesticide, PCB, PFAS
SB-19(7-8)	460-214767-2	VOC, SVOC, Pesticide, PCB, PFAS
SB-22(3.5-4.5)	460-214767-3	VOC, SVOC, Pesticide, PCB, PFAS
SB-23(2-3)	460-214767-4	VOC, SVOC, Pesticide, PCB, PFAS
SB-23(5-6)	460-214767-5	VOC, SVOC, Pesticide, PCB, PFAS
SB-24(2-3)	460-214767-6	VOC, SVOC, Pesticide, PCB, PFAS
SB-24(8-9)	460-214767-7	VOC, SVOC, Pesticide, PCB, PFAS
DUP-1	460-214767-8	VOC, SVOC, Pesticide, PCB, PFAS
FB	460-214767-9	VOC
SB-19(4-5)MS	460-214767-1MS	SVOC
SB-19(4-5)MSD	460-214767-1MSD	SVOC

Associated QC Samples(s):
Field/Trip Blanks: FB
Field Duplicate pair: SB-19(4-5) and DUP-1

The above-listed soil and water samples were collected on July 30, 2020 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260C, semivolatile organic compounds (SVOC) by SW-846 method 8270D, organochlorine pesticides by SW-846 method 8081B, polychlorinated biphenyls (PCB) by SW-846 method 8082A, and perfluoroalkyl and polyfluoroalkyl substances (PFAS) by method 537 modified. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C,* SOP HW-24, Revision 4 (October 2014), the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation SW-846 Method 8270D,* SOP HW-35A, Revision 0 (June 2015), the USEPA Region 2 *Standard Operating Procedure for Validating Pesticide Compounds, Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B,* SOP HW-44, Revision 1.1 (December 2010), the USEPA Region 2 *Standard Operating Procedure for Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A,* SOP HW-45, Revision 1 (October 2006), the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-2017-002 (January 2017), and the Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (January 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- GC/Electron Capture Detector (GC/ECD) Instrument Performance Checks
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards/Labeled Compounds
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

VOC and SVOC

All criteria were met.

GC/ECD Instrument Performance Checks

Pesticide

All criteria were met.

LC/MS Instrument Performance Checks

PFAS

All criteria were met.

Initial and Continuing Calibrations

VOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/07/20	CCV-MS12	Chloromethane	33.3	FB	XX	UJ nondetects
08/05/20	CCV-MS9	Chloromethane	51.0	SB-19(4-5)	XX	UJ nondetects
		Vinyl chloride	34.0	SB-19(7-8)	XX	UJ nondetects
		Chloroethane	34.8	SB-22(3.5-4.5)	XX	UJ nondetects
		2-Butanone	27.7	SB-23(2-3)	XX	UJ nondetects
				SB-23(5-6)		
				SB-24(2-3)		
				SB-24(8-9)		
				DUP-1		

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The chloromethane, vinyl chloride, chloroethane, and 2-butanone results for the samples listed above were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/03/20	CCV-12	Benzaldehyde	44.6	SB-19(4-5)	XX	UJ nondetects
		2,4-Dinitrophenol	31.5	SB-19(7-8)	XX	UJ nondetects
		4,6-Dinitro-2-methylphenol	34.6	SB-22(3.5-4.5)	XX	UJ nondetects
				SB-23(2-3)		
				SB-23(5-6)		
				SB-24(2-3)		
				SB-24(8-9)		
				DUP-1		

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzaldehyde, 2,4-dinitrophenol, and 4,6-dinitro-2-methylphenol results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Pesticide, PCB, and PFAS

All criteria were met.

Blanks

VOC

Contamination was not detected in the method blanks.

Contamination was detected in the field blank sample FB for VOC analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x reporting limits (RL) (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
FB	Toluene	0.56 ug/L	RL	SB-19(4-5)
				SB-19(7-8)
				SB-22(3.5-4.5)
				SB-23(2-3)
				SB-23(5-6)
				SB-24(2-3)
				SB-24(8-9)
				DUP-1

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

No samples were qualified since the associated sample results were nondetect.

SVOC, Pesticide, and PCB

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

PFAS

Contamination was detected in the associated pesticide method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 320-401465/1-A	Perfluorobutanoic acid	0.0351 ug/Kg	RL	SB-19(4-5) SB-19(7-8) SB-22(3.5-4.5) SB-23(2-3) SB-23(5-6) SB-24(2-3) SB-24(8-9) DUP-1

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SB-19(4-5)	Perfluorobutanoic acid	0.052 ug/Kg	0.21U ug/Kg
SB-19(7-8)	Perfluorobutanoic acid	0.046 ug/Kg	0.22U ug/Kg
SB-22(3.5-4.5)	Perfluorobutanoic acid	0.050 ug/Kg	0.22U ug/Kg
SB-23(2-3)	Perfluorobutanoic acid	0.097 ug/Kg	0.24U ug/Kg
SB-23(5-6)	Perfluorobutanoic acid	0.069 ug/Kg	0.23U ug/Kg
SB-24(2-3)	Perfluorobutanoic acid	0.048 ug/Kg	0.22U ug/Kg

Sample ID	Compound	Level Detected	Validation Action
SB-24(8-9)	Perfluorobutanoic acid	0.045 ug/Kg	0.21U ug/Kg
DUP-1	Perfluorobutanoic acid	0.041 ug/Kg	0.22U ug/Kg

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

VOC, SVOC, Pesticide, and PCB

All criteria were met.

MS/MSD Results

VOC, Pesticide, PCB, and PFAS

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

SVOC

MS/MSD analyses were performed on sample SB-19(4-5) for SVOC analysis. The following table lists the MS/MSD percent recoveries (%R) outside of control limits in the SVOC analysis and the resulting validation actions.

MS ID	Compound	MS %R (Limits)	MS/D %R (Limits)	Affected Sample	Validation Action
SB-19(4-5)MS/MSD	1,1'-Biphenyl	57 (65-110)	49 (65-110)	SB-19(4-5)	UJ nondetects
	1,2,4,5-Tetrachlorobenzene	55 (64-110)	47 (64-110)		UJ nondetects
	2,2'-Oxybis(1-chloropropane)	48 (49-109)	41 (49-109)		UJ nondetects
	2,4,5-Trichlorophenol	62 (64-112)	57 (64-112)		UJ nondetects
	2,4,6-Trichlorophenol	62 (63-113)	56 (63-113)		UJ nondetects
	2,4-Dichlorophenol	57 (66-113)	50 (66-113)		UJ nondetects
	2,4-Dimethylphenol	56 (63-107)	48 (63-107)		UJ nondetects
	2,4-Dinitrophenol	27 (37-125)	39 (37-125)		UJ nondetects
	2,6-Dinitrotoluene	66 (67-121)	63 (67-121)		UJ nondetects
	2-Chloronaphthalene	57 (65-109)	49 (65-109)		UJ nondetects
	2-Chlorophenol	52 (63-106)	44 (63-106)		UJ nondetects
	2-Methylnaphthalene	51 (64-108)	44 (64-108)		UJ nondetects
	2-Methylphenol	54 (63-108)	45 (63-108)		UJ nondetects
	2-Nitrophenol	57 (64-112)	49 (64-112)		UJ nondetects
	3-Nitroaniline	61 (31-102)	-		UJ nondetects
	4,6-Dinitro-2-methylphenol	45 (64-129)	-		UJ nondetects
	4-Bromophenyl-phenyl ether	58 (67-113)	56 (67-113)		UJ nondetects
	4-Chloro-3-methylphenol	58 (66-114)	54 (66-114)		UJ nondetects
	4-Chlorophenyl-phenyl ether	59 (66-110)	55 (66-110)		UJ nondetects
	4-Methylphenol	55 (61-108)	46 (61-108)		UJ nondetects
	Acenaphthene	-	51 (53-110)		UJ nondetects
	Acenaphthylene	58 (64-108)	52 (64-108)		UJ nondetects
	Acetophenone	49 (61-103)	43 (61-103)		UJ nondetects
	Anthracene	59 (67-114)	58 (67-114)		UJ nondetects
	Benzo(a)anthracene	57 (67-115)	56 (67-115)		UJ nondetects
	Benzo(k)fluoranthene	64 (67-115)	60 (67-115)		UJ nondetects
	Bis(2-chloroethoxy)methane	51 (62-107)	45 (62-107)		UJ nondetects
	Bis(2-chloroethyl) ether	46 (60-107)	40 (60-107)		UJ nondetects
	Bis(2-ethylhexyl)phthalate	59 (69-124)	58 (69-124)		UJ nondetects
	Butylbenzylphthalate	62 (70-123)	60 (70-123)		UJ nondetects
	Carbazole	56 (64-113)	56 (64-113)		UJ nondetects
	Chrysene	59 (71-122)	58 (71-122)		UJ nondetects
	Dibenzofuran	58 (65-108)	53 (65-108)		UJ nondetects
	Diethylphthalate	58 (63-109)	56 (63-109)		UJ nondetects
	Dimethylphthalate	59 (65-109)	57 (65-109)		UJ nondetects
	Di-n-butylphthalate	56 (66-114)	56 (66-114)		UJ nondetects
	Di-n-octylphthalate	-	63 (65-122)		UJ nondetects
	Fluoranthene	56 (64-113)	55 (64-113)		UJ nondetects
	Fluorene	59 (65-109)	55 (65-109)		UJ nondetects
	Hexachlorobenzene	58 (70-119)	56 (70-119)		UJ nondetects
	Hexachlorobutadiene	47 (62-109)	41 (62-109)		UJ nondetects
	Hexachloroethane	44 (61-102)	37 (61-102)		UJ nondetects
	Isophorone	53 (63-107)	46 (63-107)		UJ nondetects
	Naphthalene	49 (63-106)	43 (63-106)		UJ nondetects
	Nitrobenzene	50 (63-110)	44 (63-110)		UJ nondetects
	N-Nitroso-di-n-propylamine	50 (61-108)	43 (61-108)		UJ nondetects
	N-Nitrosodimethylamine	60 (67-113)	58 (67-113)		UJ nondetects
	Phenanthrene	59 (66-112)	-		UJ nondetects
	Phenol	55 (63-110)	45 (63-110)		UJ nondetects
	2,4,5-Trichlorophenol	60 (71-122)	57 (71-122)		UJ nondetects
	1,4-Dioxane	30 (31-81)	24 (31-81)		UJ nondetects

- Within control limits

The 1,1'-biphenyl, 1,2,4,5-tetrachlorobenzene, 2,2'-oxybis(1-chloropropane), 2,4,5-trichlorophenol, 2,4,6-trichlorophenol, 2,4-dichlorophenol, 2,4-dimethylphenol, 2,4-dinitrophenol, 2,6-dinitrotoluene, 2-chloronaphthalene, 2-chlorophenol, 2-methylnaphthalene, 2-methylphenol, 2-nitrophenol, 3-nitroaniline, 4,6-dinitro-2-methylphenol, 4-bromophenyl-phenyl ether, 4-chloro-3-methylphenol, 4-chlorophenyl-phenyl ether, 4-methylphenol, acenaphthene, acenaphthylene, acetophenone, anthracene, benzo(a)anthracene, benzo(k)fluoranthene, bis(2-chloroethoxy)methane, bis(2-chloroethyl) ether, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, carbazole, chrysene, dibenzofuran, diethylphthalate, dimethylphthalate, di-n-butylphthalate, di-n-octylphthalate, fluoranthene, fluorene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, isophorone, naphthalene, nitrobenzene, n-nitroso-di-n-propylamine, n-nitrosodimethylamine, phenanthrene, phenol, 2,4,5-trichlorophenol, and 1,4-dioxane results may be biased low due to low MS/MSD percent recoveries. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

The following table lists the MS/MSD relative percent differences (RPD) outside of control limits in the SVOC analysis and the resulting validation actions.

MS ID	Compound	RPD (Limits)	Affected Sample	Validation Action
SB-19(4-5)MS/MSD	4,6-Dinitro-2-methylphenol Benzaldehyde	37 (≤30) 36 (≤30)	SB-19(4-5)	None

Validation action was not required for 4,6-dinitro-2-methylphenol and benzaldehyde due to MS/MSD relative percent difference exceedances as positive results only are affected and these compounds were not detected in the associated sample.

LCS Results

VOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-714375	4-Methyl-2-pentanone	124 (80-122)	-	SB-19(4-5) SB-19(7-8) SB-22(3.5-4.5) SB-23(2-3) SB-23(5-6) SB-24(2-3) SB-24(8-9) DUP-1	None

- Within control limits

Validation action was not required for 4-methyl-2-pentanone due to high LCS/LCSD recovery as positive results only are affected and this compound was not detected in the associated samples.

The following table lists the LCS/LCSD relative percent differences (RPD) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	RPD (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-714375	Methyl acetate	31 (≤30)	SB-19(4-5) SB-19(7-8) SB-22(3.5-4.5) SB-23(2-3) SB-23(5-6) SB-24(2-3) SB-24(8-9) DUP-1	None

Validation action was not required for methyl acetate due to LCS/LCSD relative percent difference exceedance as positive results only are affected and this compound was not detected in the associated samples.

SVOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the SVOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-713637	2,4-Dinitrophenol Atrazine Benzaldehyde Caprolactam	126 (37-125) 149 (44-145) 128 (39-113) 154 (59-140)	- 159 (44-145) 122 (39-113) 161 (59-140)	SB-19(4-5) SB-19(7-8) SB-22(3.5-4.5) SB-23(2-3) SB-23(5-6) SB-24(2-3) SB-24(8-9) DUP-1	None
LCS/LCSD 460-713637	Benzo(a)pyrene	110 (63-108)	-	SB-19(4-5) SB-19(7-8) SB-23(2-3) SB-23(5-6) SB-24(2-3) SB-24(8-9) DUP-1	None
LCS/LCSD 460-713637	Benzo(a)pyrene	110 (63-108)	-	SB-22(3.5-4.5)	J detects

- Within control limits

Validation action was not required for 2,4-dinitrophenol, atrazine, benzaldehyde, caprolactam, and benzo(a)pyrene due to high LCS/LCSD recoveries as positive results only are affected and these compounds were not detected in the associated samples.

The benzo(a)pyrene result may be biased high due to high LCS/LCSD percent recovery. The result can be used for project objectives as an estimated value (J) which may have a minor impact on the data usability.

Pesticide, PCB, and PFAS

All criteria were met.

Internal Standards

VOC, SVOC, Pesticide, and PCB

All criteria were met.

Labeled Compounds

PFAS

All criteria were met.

Moisture Content

All criteria were met.

Field Duplicate Results

Samples SB-19(4-5) and DUP-1 were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations and validation actions taken.

VOC, Pesticide, and PCB

There were no detected compounds in the field duplicate pair for VOC, pesticide, and PCB.

SVOC

Compound	Concentration (mg/Kg)		RPD
	SB-19(4-5)	DUP-1	
Benzo(b)fluoranthene	0.011	0.0093U	Not calculable
Fluoranthene	0.017	0.013U	Not calculable
Pyrene	0.020	0.0089U	Not calculable

PFAS

Compound	Concentration (ug/Kg)		RPD
	SB-19(4-5)	DUP-1	
Perfluorobutanoic acid	0.052	0.041	24

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC, SVOC, and PFAS analyses. These results were qualified as estimated (J) by the laboratory.

No results were reported below the RL and above the MDL in the pesticide and PCB analyses.

Dilutions were not required for VOC, SVOC, pesticide, PCB, and PFAS analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146B1a
SDG #: 460-214767-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A / N	%RSD ≤ 20, r² ≥ 0.99 no ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	SW	FB= 9
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	MS
IX.	Laboratory control samples	SW	LCS/D
X.	Field duplicates	ND	D = 1, 8
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Result < RL > MDL = J/UJ
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1	SB-19(4-5)	D	460-214767-1	Soil	07/30/20
2	SB-19(7-8)		460-214767-2	Soil	07/30/20
3	SB-22(3.5-4.5)		460-214767-3	Soil	07/30/20
4	SB-23(2-3)		460-214767-4	Soil	07/30/20
5	SB-23(5-6)		460-214767-5	Soil	07/30/20
6	SB-24(2-3)		460-214767-6	Soil	07/30/20
7	SB-24(8-9)		460-214767-7	Soil	07/30/20
8	DUP-1	D	460-214767-8	Soil	07/30/20
9	FB		460-214767-9	Water	07/30/20
10					

Notes:

1	LB3 460-713274		4	MB 460-714768	
1	MB 460-713861				
2	MB 460-714375				

LDC #: 49146B1a

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% / 20% and relative response factors (RRF) ≥ 0.05?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	.		✓	
Were all percent differences (%D) ≤ 20% / 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) ≥ 0.05?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓	NA		
Were target compounds detected in the field blanks?	✓			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	

Validation Area				
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	8/7/20	CCV-MS12	A	33.3		All water	J/UJ/A ND
	0712	(CCV 460-714768)					
	8/4/20	CCV-MS4	B	110.7		MB 460-713861, LB3 460-713274	J/UJ/A ND
	0521	(CCV 460-713861)					
	8/5/20	CCV-MS9	A	51.0		All soils	J/UJ/A ND
	2107	(CCV 460-714375)	C	34.0		↓	
✓			D	34.8			
✓			M	27.7			

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Y N N/A Were field blanks identified in this SDG?

(Y) N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** mg/kg

Sampling date: 7/30/20

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: FB Associated Samples: All SOILS (ND)

Compound	Blank ID	Sample Identification								
	9									
CC	0.56									

Blank units: _____ **Associated sample units:** _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 49146 B1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?

Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 460-713861	B	204 (68-136)	191 (68-136)	( )	LB3 460-713274 MB 460-713861	J dw / P ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS/D 460-714375	Y QQQQ	124 (80-122)	( )	( )	All SOILS, MB 460-714375	J dw / P ND
			( )	( )	31 (30)		↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/25/2020	Z	1.5684	1.5684	1.5938	1.5938	8	8
			K	0.6068	0.6068	0.5977	0.5977	6.1	6.1
	CVOAMS4		HHHH	1.3766	1.3766	1.2666	1.2666	7.3	7.3
			EE	0.6520	0.6520	0.6523	0.6523	4.4	4.4
			JJJ	1.7070	1.7070	1.6958	1.6958	2.7	2.7

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20/100/400ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/30/2020	F	0.1528	0.1528	0.1799	0.1799	12	12
			QQQ	0.2586	0.2586	0.2459	0.2459	8.9	8.9
	CVOAMS12		HHHH	1.0044	1.0044	0.9718	0.9718	5.9	5.9
			EE	0.4249	0.4249	0.3971	0.3971	7.6	7.6
			JJJ	1.2512	1.2512	1.1751	1.1751	7.8	7.8

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/24/2020	M	0.4178	0.4178	0.3966	0.3966	19	19
			K	0.6156	0.6156	0.6113	0.6113	7.7	7.7
	CVOAMS9		HHHH	1.4787	1.4787	1.3815	1.3815	14.8	14.8
			EE	0.6255	0.6255	0.6168	0.6168	2.8	2.8
			JJJ	2.0056	2.0056	1.9193	1.9193	3.7	3.7

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV MS4 0521	8/4/20	Z (IS1)	1.5938	1.753	1.753	10.0	10.0
			K (IS2)	0.5977	0.5674	0.5674	5.1	5.1
			HHHH (IS3)	1.2666	1.403	1.403	10.8	10.8
			EE (IS4)	0.6523	0.6298	0.6298	3.4	3.4
			JJJ (IS5)	1.6958	1.732	1.732	2.1	2.1
2	CCV MS12 0610	7/30/20	F (IS1)	0.1799	0.1592	0.1592	11.5	11.5
			QQQ (IS2)	0.2459	0.2578	0.2578	4.8	4.8
			HHHH (IS3)	0.9718	1.060	1.060	9.0	9.0
			EE (IS4)	0.3971	0.4323	0.4323	8.9	8.9
			JJJ (IS5)	1.1751	1.265	1.265	7.7	7.7
3	CCV MS9 2107	8/5/20	M (IS1)	0.3966	0.2868	0.2868	27.7	27.7
			K (IS2)	0.6113	0.5648	0.5648	7.6	7.6
			HHHH (IS3)	1.3815	1.281	1.281	7.3	7.3
			EE (IS4)	0.668	0.5648	0.5648	8.4	8.4
			JJJ (IS5)	1.9193	1.667	1.667	13.1	13.1

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	49.9	100	100	0
1,2-Dichloroethane-d4	↓	49.4	99	99	↓
Toluene-d8	↓	50.2	100	100	↓
Bromofluorobenzene	↓	48.6	97	97	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49146B1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: lcs/460-714375/D

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	0.0200	0.0200	0.0210	0.0204	105	105	102	102	3	3
Trichloroethene			0.0196	0.0207	98	98	104	104	6	6
Benzene			0.0242	0.0230	121	121	115	115	5	5
Toluene			0.0207	0.0211	104	104	105	105	2	2
Chlorobenzene			0.0192	0.0199	96	96	99	99	10	10

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146 B1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #4, RRR:

Conc. = $\frac{(5746)(30)(5)(1/1000)}{(382664)(6.43)(0.829)(0.3784)}$

= 0.001861 mg/kg

w = 6.43 S = 82.9

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	4	RRR	0.0019	0.001861	

LDC #: 49146B2a
SDG #: 460-214767-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A / A	%D %RSD ≤ 20, r² NO ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	SW	
X.	Field duplicates	SW	D = 1, 8
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = J det
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-19(4-5) D	460-214767-1	Soil	07/30/20
2	SB-19(7-8)	460-214767-2	Soil	07/30/20
3	SB-22(3.5-4.5)	460-214767-3	Soil	07/30/20
4	SB-23(2-3)	460-214767-4	Soil	07/30/20
5	SB-23(5-6)	460-214767-5	Soil	07/30/20
6	SB-24(2-3)	460-214767-6	Soil	07/30/20
7	SB-24(8-9)	460-214767-7	Soil	07/30/20
8	DUP-1 D	460-214767-8	Soil	07/30/20
9	SB-19(4-5)MS	460-214767-1MS	Soil	07/30/20
10	SB-19(4-5)MSD	460-214767-1MSD	Soil	07/30/20
11				
12	~~MB 460-713561~~			
13	~~460-714375~~			
14	MB 460-713637			

LDC #: 49146B2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Semivolatiles (EPA SW 846 Method 8270D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15/30% or 20% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% or 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recoveries (%R) was less than 10%, was a reanalysis performed to confirm %R ?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?	✓			
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	CC. Dimethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	GGGG. C30-Hopane	I1. Methyl methanesulfonate
B. Bis (2-chloroethyl) ether	DD. Acenaphthylene	FFF. Di-n-octylphthalate	HHHH. 1-Methylphenanthrene	J1. Ethyl methanesulfonate
C. 2-Chlorophenol	EE. 2,6-Dinitrotoluene	GGG. Benzo(b)fluoranthene	IIII. 1,4-Dioxane	K1. o,o',o''-Triethylphosphorothioate
D. 1,3-Dichlorobenzene	FF. 3-Nitroaniline	HHH. Benzo(k)fluoranthene	JJJJ. Acetophenone	L1. n-Phenylene diamine
E. 1,4-Dichlorobenzene	GG. Acenaphthene	III. Benzo(a)pyrene	KKKK. Atrazine	M1. 1,4-Naphthoquinone
F. 1,2-Dichlorobenzene	HH. 2,4-Dinitrophenol	JJJ. Indeno(1,2,3-cd)pyrene	LLLL. Benzaldehyde	N1. N-Nitro-o-toluidine
G. 2-Methylphenol	II. 4-Nitrophenol	KKK. Dibenz(a,h)anthracene	MMMM. Caprolactam	O1. 1,3,5-Trinitrobenzene
H. 2,2'-Oxybis(1-chloropropane)	JJ. Dibenzofuran	LLL. Benzo(g,h,i)perylene	NNNN. 2,6-Dichlorophenol	P1. Pentachlorobenzene
I. 4-Methylphenol	KK. 2,4-Dinitrotoluene	MMM. Bis(2-Chloroisopropyl)ether	OOOO. 1,2-Diphenylhydrazine	Q1. 4-Aminobiphenyl
J. N-Nitroso-di-n-propylamine	LL. Diethylphthalate	NNN. Aniline	PPPP. 3-Methylphenol	R1. 2-Naphthylamine
K. Hexachloroethane	MM. 4-Chlorophenyl-phenyl ether	OOO. N-Nitrosodimethylamine	QQQQ. 3&4-Methylphenol	S1. Triphenylene
L. Nitrobenzene	NN. Fluorene	PPP. Benzoic Acid	RRRR. 4-Dimethyldibenzothiophene (4MDT)	T1. Octachlorostyrene
M. Isophorone	OO. 4-Nitroaniline	QQQ. Benzyl alcohol	SSSS. 2/3-Dimethyldibenzothiophene (4MDT)	U1. Famphur
N. 2-Nitrophenol	PP. 4,6-Dinitro-2-methylphenol	RRR. Pyridine	TTTT. 1-Methyldibenzothiophene (1MDT)	V1. 1,4-phenylenediamine
O. 2,4-Dimethylphenol	QQ. N-Nitrosodiphenylamine	SSS. Benzidine	UUUU.. 2,3,4,6-Tetrachlorophenol	W1. Methapyrilene
P. Bis(2-chloroethoxy)methane	RR. 4-Bromophenyl-phenylether	TTT. 1-Methylnaphthalene	VVVV. 1,2,4,5-Tetrachlorobenzene	X1. Pentachloroethane
Q. 2,4-Dichlorophenol	SS. Hexachlorobenzene	UUU.Benzo(b)thiophene	WWWW.. 2-Picoline	Y1. 3,3'-Dimethylbenzidine
R. 1,2,4-Trichlorobenzene	TT. Pentachlorophenol	VVV.Benzonaphthothiophene	XXXX. 3-Methylcholanthrene	Z1. o-Toluidine
S. Naphthalene	UU. Phenanthrene	WWW.Benzo(e)pyrene	YYYY. a,a-Dimethylphenethylamine	A2. 1-Naphthylamine
T. 4-Chloroaniline	VV. Anthracene	XXX. 2,6-Dimethylnaphthalene	ZZZZ. Hexachloropropene	B2. 4-Aminobiphenyl
U. Hexachlorobutadiene	WW. Carbazole	YYY. 2,3,5-Trimethylnaphthalene	A1. N-Nitrosodiethylamine	C2. 4-Nitroquinoline-1-oxide
V. 4-Chloro-3-methylphenol	XX. Di-n-butylphthalate	ZZZ. Perylene	B1. N-Nitrosodi-n-butylamine	D2. Hexachloropene
W. 2-Methylnaphthalene	YY. Fluoranthene	AAAA. Dibenzothiophene	C1. N-Nitrosomethylethylamine	E2. Bis (2-chloro-1-methylethyl) ether
X. Hexachlorocyclopentadiene	ZZ. Pyrene	BBBB. Benzo(a)fluoranthene	D1. N-Nitrosomorpholine	F2. Bifenthrin
Y. 2,4,6-Trichlorophenol	AAA. Butylbenzylphthalate	CCCC. Benzo(b)fluorene	E1. N-Nitrosopyrrolidine	G2. Cyfluthrin
Z. 2,4,5-Trichlorophenol	BBB. 3,3'-Dichlorobenzidine	DDDD. cis/trans-Decalin	F1. Phenacetin	H2. Cypermethrin
AA. 2-Chloronaphthalene	CCC. Benzo(a)anthracene	EEEE. 1,1'-Biphenyl	G1. 2-Acetylaminofluorene	I2. Permethrin (cis/trans)
BB. 2-Nitroaniline	DDD. Chrysene	FFFF. Retene	H1. Pronamide	J2. 5-Nitro-o-toluidine

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤20mid/50low level %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <20.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	8/3/20	CCV-12	LLLL	44.6		All	J/UJ/A ND
	1856	(CCV-460-713195)	HH	31.5		↓	↓
			PP	34.6			

LDC #: 41914B32a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	9 + 10	all following pages	( )	( )	( )	1	
			( )	( )	( )		
			( )	( )	( )	all %R=	J/UJ/A all MD
			( )	( )	( )	%RPD=	J all/A ↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214767-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: L32574.d

Lab ID: 460-214767-1 MS Client ID: SB-19(4-5) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl EEEE	3.62	0.0048 U	2.06	57	65-110	F1
1,2,4,5-Tetrachlorobenzene VVVV	3.62	0.011 U	2.00	55	64-110	F1
2,2'-oxybis[1-chloropropane] H	3.62	0.0065 U	1.72	48	49-109	F1
2,3,4,6-Tetrachlorophenol UUUU	3.62	0.024 U	2.22	61	58-113	
2,4,5-Trichlorophenol Z	3.62	0.037 U	2.26	62	64-112	F1
2,4,6-Trichlorophenol Y	3.62	0.046 U	2.25	62	63-113	F1
2,4-Dichlorophenol Q	3.62	0.023 U	2.07	57	66-113	F1
2,4-Dimethylphenol O	3.62	0.016 U	2.04	56	63-107	F1
2,4-Dinitrophenol HH	7.24	0.18 U	1.98	27	37-125	F1
2,4-Dinitrotoluene KK	3.62	0.039 U	2.44	67	65-124	
2,6-Dinitrotoluene EE	3.62	0.026 U	2.40	66	67-121	F1
2-Chloronaphthalene AA	3.62	0.017 U	2.07	57	65-109	F1
2-Chlorophenol C	3.62	0.013 U	1.87	52	63-106	F1
2-Methylnaphthalene W	3.62	0.010 U	1.86	51	64-108	F1
2-Methylphenol G	3.62	0.013 U	1.95	54	63-108	F1
2-Nitroaniline BB	3.62	0.013 U	2.34	65	59-119	
2-Nitrophenol N	3.62	0.036 U	2.05	57	64-112	F1
3,3'-Dichlorobenzidine BBB	3.62	0.054 U	2.00	55	4-119	
3-Nitroaniline FF	3.62	0.040 U	2.21	61	31-102	
4,6-Dinitro-2-methylphenol PP	7.24	0.058 U	3.23	45	64-129	F1
4-Bromophenyl phenyl ether RRR	3.62	0.014 U	2.11	58	67-113	F1
4-Chloro-3-methylphenol V	3.62	0.020 U	2.10	58	66-114	F1
4-Chloroaniline T	3.62	0.025 U	1.79	49	20-98	
4-Chlorophenyl phenyl ether MM	3.62	0.013 U	2.14	59	66-110	F1
4-Methylphenol I	3.62	0.022 U	1.99	55	61-108	F1
4-Nitroaniline OO	3.62	0.041 U	2.16	60	50-110	
4-Nitrophenol II	7.24	0.059 U	4.46	62	47-123	
Acenaphthene GG	3.62	0.026 U	2.00	55	53-110	
Acenaphthylene DD	3.62	0.0037 U	2.11	58	64-108	F1
Acetophenone JJJ	3.62	0.018 U	1.79	49	61-103	F1
Anthracene VV	3.62	0.011 U	2.12	59	67-114	F1
Atrazine KKKK	1.45	0.0091 U	1.52	105	44-145	
Benzaldehyde LLLL	1.45	0.016 U	1.07	74	39-113	
Benzo[a]anthracene CCC	3.62	0.013 U	2.05	57	67-115	F1
Benzo[a]pyrene III	3.62	0.0096 U	2.44	67	63-108	
Benzo[b]fluoranthene YY	3.62	0.0093 U	2.55	70	64-116	
Benzo[g,h,i]perylene LLL	3.62	0.011 U	2.41	67	61-113	
Benzo[k]fluoranthene HHH	3.62	0.0070 U	2.31	64	67-115	F1
Bis(2-chloroethoxy)methane P	3.62	0.028 U	1.83	51	62-107	F1
Bis(2-chloroethyl)ether B	3.62	0.013 U	1.68	46	60-107	F1
Bis(2-ethylhexyl) phthalate EEE	3.62	0.019 U	2.14	59	69-124	F1
Butyl benzyl phthalate AAA	3.62	0.017 U	2.24	62	70-123	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214767-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: L32574.d

Lab ID: 460-214767-1 MS Client ID: SB-19(4-5) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Caprolactam MMMM	1.45	0.056 U	1.44	100	59-140	
Carbazole WW	3.62	0.014 U	2.04	56	64-113	F1
Chrysene DDD	3.62	0.0061 U	2.12	59	71-122	F1
Dibenz(a,h)anthracene KKK	3.62	0.016 U	2.63	73	66-119	
Dibenzofuran JJ	3.62	0.0050 U	2.10	58	65-108	F1
Diethyl phthalate LL	3.62	0.0052 U	2.11	58	63-109	F1
Dimethyl phthalate CC	3.62	0.082 U	2.14	59	65-109	F1
Di-n-butyl phthalate XX	3.62	0.063 U	2.04	56	66-114	F1
Di-n-octyl phthalate FFF	3.62	0.019 U	2.48	68	65-122	
Fluoranthene YY	3.62	0.013 U	2.01	56	64-113	F1
Fluorene NN	3.62	0.0049 U	2.14	59	65-109	F1
Hexachlorobenzene SS	3.62	0.017 U	2.10	58	70-119	F1
Hexachlorobutadiene U	3.62	0.0076 U	1.70	47	62-109	F1
Hexachlorocyclopentadiene X	3.62	0.031 U	1.94	54	22-124	
Hexachloroethane K	3.62	0.012 U	1.57	44	61-102	F1
Indeno[1,2,3-cd]pyrene JJJ	3.62	0.014 U	2.61	72	62-121	
Isophorone M	3.62	0.10 U	1.93	53	63-107	F1
Naphthalene S	3.62	0.0062 U	1.78	49	63-106	F1
Nitrobenzene L	3.62	0.0086 U	1.80	50	63-110	F1
N-Nitrosodi-n-propylamine J	3.62	0.026 U	1.81	50	61-108	F1
N-Nitrosodiphenylamine OO	3.62	0.0069 U	2.19	60	67-113	F1
Pentachlorophenol TT	7.24	0.074 U	4.48	62	44-126	
Phenanthrene UU	3.62	0.0063 U	2.14	59	66-112	F1
Phenol Δ	3.62	0.013 U	1.99	55	63-110	F1
Pyrene Z	3.62	0.0089 U	2.16	60	71-122	F1
1,4-Dioxane III	3.62	0.0099 U	1.07	30	31-81	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214767-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: L32575.d

Lab ID: 460-214767-1 MSD Client ID: SB-19(4-5) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl EEEE	3.62	1.78	49	~~15~~ 2	30	65-110	F1
1,2,4,5-Tetrachlorobenzene VVVV	3.62	1.72	47	~~15~~ 2	30	64-110	F1
2,2'-oxybis[1-chloropropane] H	3.62	1.49	41	14	30	49-109	F1
2,3,4,6-Tetrachlorophenol UUUU	3.62	2.08	58	6	30	58-113	
2,4,5-Trichlorophenol Z	3.62	2.07	57	9	30	64-112	F1
2,4,6-Trichlorophenol Y	3.62	2.04	56	10	30	63-113	F1
2,4-Dichlorophenol Q	3.62	1.82	50	13	30	66-113	F1
2,4-Dimethylphenol O	3.62	1.72	48	17	30	63-107	F1
2,4-Dinitrophenol HH	7.24	2.84	39	35	30	37-125	F2
2,4-Dinitrotoluene KK	3.62	2.40	66	1	30	65-124	
2,6-Dinitrotoluene EE	3.62	2.28	63	5	30	67-121	F1
2-Chloronaphthalene AA	3.62	1.77	49	16	30	65-109	F1
2-Chlorophenol C	3.62	1.58	44	17	30	63-106	F1
2-Methylnaphthalene W	3.62	1.61	44	14	30	64-108	F1
2-Methylphenol G	3.62	1.62	45	18	30	63-108	F1
2-Nitroaniline BB	3.62	2.18	60	7	30	59-119	
2-Nitrophenol N	3.62	1.78	49	14	30	64-112	F1
3,3'-Dichlorobenzidine BBBB	3.62	2.13	59	6	30	4-119	
3-Nitroaniline FF	3.62	2.14	59	4	30	31-102	
4,6-Dinitro-2-methylphenol PP	7.24	4.68	~~64~~ 65	37	30	64-129	F2
4-Bromophenyl phenyl ether RRR	3.62	2.03	56	4	30	67-113	F1
4-Chloro-3-methylphenol V	3.62	1.96	54	7	30	66-114	F1
4-Chloroaniline T	3.62	1.63	45	9	30	20-98	
4-Chlorophenyl phenyl ether MM	3.62	1.97	55	8	30	66-110	F1
4-Methylphenol I	3.62	1.66	46	18	30	61-108	F1
4-Nitroaniline ~~OO~~	3.62	2.15	60	0	30	50-110	
4-Nitrophenol II	7.24	4.43	61	1	30	47-123	
Acenaphthene GG	3.62	1.86	51	7	30	53-110	F1
Acenaphthylene DD	3.62	1.88	52	11	30	64-108	F1
Acetophenone JJJJ	3.62	1.54	43	15	30	61-103	F1
Anthracene VV	3.62	2.08	58	2	30	67-114	F1
Atrazine KKKK	1.45	1.38	95	10	30	44-145	
Benzaldehyde LLLL	1.45	0.745	52	36	30	39-113	F2
Benzo[a]anthracene CCC	3.62	2.03	56	1	30	67-115	F1
Benzo[a]pyrene III	3.62	2.36	65	4	30	63-108	
Benzo[b]fluoranthene YY	3.62	2.44	67	5	30	64-116	
Benzo[g,h,i]perylene LLL	3.62	2.37	66	1	30	61-113	
Benzo[k]fluoranthene HHH	3.62	2.17	60	6	30	67-115	F1
Bis(2-chloroethoxy)methane P	3.62	1.62	45	12	30	62-107	F1
Bis(2-chloroethyl)ether B	3.62	1.44	40	16	30	60-107	F1
Bis(2-ethylhexyl) phthalate EEE	3.62	2.12	58	1	30	69-124	F1
Butyl benzyl phthalate AAA	3.62	2.17	60	3	30	70-123	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214767-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: L32575.d

Lab ID: 460-214767-1 MSD Client ID: SB-19(4-5) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Caprolactam MMMM	1.45	1.34	93	7	30	59-140	
Carbazole WW	3.62	2.02	56	1	30	64-113	F1
Chrysene DDD	3.62	2.09	58	2	30	71-122	F1
Dibenz(a,h)anthracene KKK	3.62	2.61	72	1	30	66-119	
Dibenzofuran JJ	3.62	1.94	53	8	30	65-108	F1
Diethyl phthalate LL	3.62	2.03	56	4	30	63-109	F1
Dimethyl phthalate CC	3.62	2.05	57	4	30	65-109	F1
Di-n-butyl phthalate XX	3.62	2.01	56	1	30	66-114	F1
Di-n-octyl phthalate FFF	3.62	2.28	63	8	30	65-122	F1
Fluoranthene YY	3.62	1.99	55	1	30	64-113	F1
Fluorene NN	3.62	1.99	55	7	30	65-109	F1
Hexachlorobenzene SS	3.62	2.03	56	3	30	70-119	F1
Hexachlorobutadiene U	3.62	1.48	41	14	30	62-109	F1
Hexachlorocyclopentadiene X	3.62	1.63	45	18	30	22-124	
Hexachloroethane K	3.62	1.34	37	16	30	61-102	F1
Indeno[1,2,3-cd]pyrene JJJ	3.62	2.57	71	2	30	62-121	
Isophorone M	3.62	1.66	46	15	30	63-107	F1
Naphthalene S	3.62	1.55	43	14	30	63-106	F1
Nitrobenzene L	3.62	1.59	44	13	30	63-110	F1
N-Nitrosodi-n-propylamine J	3.62	1.55	43	16	30	61-108	F1
N-Nitrosodiphenylamine OO	3.62	2.09	58	5	30	67-113	F1
Pentachlorophenol TT	7.24	4.50	62	0	30	44-126	
Phenanthrene UU	3.62	2.12	58	1	30	66-112	F1
Phenol Δ	3.62	1.64	45	19	30	63-110	F1
Pyrene Z	3.62	2.06	57	5	30	71-122	F1
1,4-Dioxane IIII	3.62	0.860	24	22	30	31-81	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS10 460-713637	HH	126 (37-125)	( )	( )	All	J dets/P ND
		KKKK	149 (44-145)	159 (44-145)	( )	↓	↓
		LLLL	128 (39-113)	122 (39-113)	( )		
		III	110 (63-108)	( )	( )		#3 Det
		MMMM	154 (59-140)	161 (59-140)	( )	↓	↓ ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (mg/Kg)		RPD (≤ %)	QUAL
	1	8		
GGG	0.011	0.00934	NC	
YY	0.017	0.0134	↓	
ZZ	0.020	0.00894	↓	

Compound	Concentration ( )		RPD (≤ %)	QUAL

Compound	Concentration ( )		RPD (≤ %)	QUAL

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ___FT___

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:
Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20 ug/ml std)	Recalculated (RRF 20 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS12	7/29/2020	A	1.7043	1.7043	1.7872	1.7872	3.2	3.2
			S	1.0373	1.0373	1.0185	1.0185	4.4	4.4
			GG	1.3376	1.3376	1.3186	1.3186	5.6	5.6
			UU	1.1542	1.1542	1.1505	1.1505	4.3	4.3
			DDD	1.3903	1.3903	1.3540	1.3540	5.0	5.0
			III	1.0808	1.0808	1.0402	1.0402	5.8	5.8

LDC #: 49146 B2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)
The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv 1856	8/3/20	A (1st IS)	1.7872	1.895	1.895	6.0	6.0
			S (2nd IS)	1.0185	1.022	1.022	0.3	0.3
			GG (3rd IS)	1.3186	1.269	1.269	3.8	3.8
			NN (4th IS)	1.1505	1.172	1.172	1.9	1.9
			DDD (5th IS)	1.3540	1.385	1.385	2.3	2.3
			III (6th IS)	1.0402	1.094	1.094	5.2	5.2
2			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					
3			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	50	31.7	63	63	0
2-Fluorobiphenyl	↓	31.7	63	63	↓
Terphenyl-d14		38.0	76	76	
Phenol-d5		32.8	66	66	
2-Fluorophenol		32.4	65	65	
2,4,6-Tribromophenol	↓	36.6	73	73	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 9 + 10

Compound	Spike Added (mg/kg)		Sample Concentration (mg/kg)	Spiked Sample Concentration (mg/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalc
Phenol	3.62	3.62	ND	1.99	1.64	55	55	45	45	19	19
N-Nitroso-di-n-propylamine			ND	1.81	1.55	50	50	43	43	16	16
4-Chloro-3-methylphenol			ND	2.10	1.96	58	58	54	54	7	7
Acenaphthene			ND	2.00	1.86	55	55	51	51	7	7
Pentachlorophenol	7.24	7.24	ND	4.48	4.50	62	62	62	62	0	0
Pyrene	3.62	3.62	ND	2.16	2.06	60	60	57	57	5	5

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS ID 460-713637

Compound	Spike Added (ug/Kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	3.33	3.33	3.35	3.02	101	101	91	91	10	10
N-Nitroso-di-n-propylamine	↓	↓	3.12	2.85	94	94	85	85	9	9
4-Chloro-3-methylphenol			3.21	3.15	96	96	94	94	2	2
Acenaphthene			3.17	3.11	95	95	93	93	2	2
Pentachlorophenol	6.67	6.67	7.26	7.06	109	109	106	106	3	3
Pyrene	3.33	3.33	3.29	3.18	99	99	95	95	3	3

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #3, 111:

Conc. = $\frac{(2109)(40.0)(1)}{(328469)(1.0402)(15)(0.871)}$

= 0.01889 mg/kg

1/15 %s = 87.1

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	#3	111	0.019	0.01889	

LDC #: 49146B3a
SDG #: 460-214767-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC Organochlorine Pesticides (EPA SW846 Method 8081B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A ~~A~~	
II.	GC Instrument Performance Check	A	
III.	Initial calibration/~~ICV~~	A ~~A~~	%D (RSD) ≤ 20 NO ICV
IV.	Continuing calibration	A	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes 1/5	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	A	LCS/LCSD
X.	Field duplicates	ND	D = 1, 8
XI.	Compound quantitation/RL/LOQ/LODs	A	ND Results < RL > MDL
XII.	Target compound identification	A	
XIII.	System Performance	A	
XIV	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-19(4-5) D	460-214767-1	Soil	07/30/20
2	SB-19(7-8)	460-214767-2	Soil	07/30/20
3	SB-22(3.5-4.5)	460-214767-3	Soil	07/30/20
4	SB-23(2-3)	460-214767-4	Soil	07/30/20
5	SB-23(5-6)	460-214767-5	Soil	07/30/20
6	SB-24(2-3)	460-214767-6	Soil	07/30/20
7	SB-24(8-9) ~~D~~	460-214767-7	Soil	07/30/20
8	DUP-1 D	460-214767-8	Soil	07/30/20
9				
10				

Notes:

	MB 460-714034						

LDC #: 49146B3a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Pesticides (EPA SW 846 Method 8081B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and at beginning of each 12-hour shift?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20%?			✓	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. ***Surrogate spikes/Internal Standards***				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recovery (%R) was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were internal standard area counts within ± 50% of the average area calculated during calibration?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
XI. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
Were relative percent difference (RPD) of the results between two columns ≤ 40%?	✓			
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146B3a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound		Reported 100ppb	Recalculated 100ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/15/2020	Gamma-BHC	CLP2	1.3210	1.3210	1.2646	1.2646	5.1	5.1
	GC5		Gamma-BHC	CLP1	1.4555	1.4555	1.4697	1.4697	4.9	4.9
			4,4'-DDT	CLP2	0.9935	0.9935	0.9162	0.9162	10.2	10.2
			4,4'-DDT	CLP1	1.1875	1.1875	1.1680	1.1680	1.2	1.2

LDC #: 49146B3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 0339	8/5/20	gamma BHC CVP2	10U	104	103.8	3.8	3.8
			4,4'-DDT	10U	102	102.3	2.3	2.3
			CVP1	↓	98.1	98.1	1.9	1.9
			↓	↓	94.4	94.4	5.6	5.6
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B3a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
DCB	CLP1	50.0	56.3	113	113	0
↓	2	↓	50.9	102	102	↓
TCMX	CLP1	↓	51.6	103	103	↓
↓	2	↓	54.6	109	109	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146B3a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
LCS = Laboratory Control Sample
SA = Spike added
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS ID 460-71403

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
4,4'-DDT	0.133		0.117	0.125	87	87	94	94	7	7
gamma BHC	↓		0.126	0.136	94	94	102	102	8	8

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B3a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: V **GC** __ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-71403 Compound Name 4,4'-DDT

Concentration = $\frac{(37799971)\ (100)\ (10)}{(23589924)\ (0.9162)\ (15)\ (1000)}$ =

= 0.1165 mg/kg

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	LCS	4,4'-DDT	0.117	0.1165	

Comments: _____

LDC #: 49146B3b
SDG #: 460-214767-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer: EJ
2nd Reviewer:

METHOD: GC Polychlorinated Biphenyls (EPA SW846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	Initial calibration/~~ICV~~	A / N	%D ≤ 20 ~~ICV ≤ 20~~ NO ICV
III.	Continuing calibration	A	CCV ≤ 20
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes / IS	A	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	ND	RPD = 1,8
X.	Compound quantitation/RL/LOQ/LODs	A	No Results < RL > MDL
XI.	Target compound identification	A	
XII.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-19(4-5) D	460-214767-1	Soil	07/30/20
2	SB-19(7-8)	460-214767-2	Soil	07/30/20
3	SB-22(3.5-4.5)	460-214767-3	Soil	07/30/20
4	SB-23(2-3)	460-214767-4	Soil	07/30/20
5	SB-23(5-6)	460-214767-5	Soil	07/30/20
6	SB-24(2-3)	460-214767-6	Soil	07/30/20
7	SB-24(8-9)	460-214767-7	Soil	07/30/20
8	DUP-1 D	460-214767-8	Soil	07/30/20
9				
10				
11				
12				

Notes:

	MB 460-714036						

LDC #: 49146B3b

VALIDATION FINDINGS CHECKLIST

Method: ✓ GC ___ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?			✓	
Were the RT windows properly established?	✓			
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
III. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
V. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed per analytical or extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Field duplicates				

Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

_____

_____

LDC #: 49146B36

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: _____

METHOD: GC X HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 1000ppb	Recalculated 1000ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/26/2020 GC13	PCB 1260-1 RTX CLP1	0.0235	0.0235	0.0244	0.0244	6.9	6.9
			PCB 1260-1 RTX CLP2	0.0501	0.0501	0.0517	0.0517	3.3	3.3

LDC #: 49146B36

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 545	8/5/20	1260-1 CLP1	1000	945	945.2	5.5	5.5
			-1 CLP2	1000	946	946.1	5.4	5.4
2	CCV 1602	8/5/20	↓	↓	913	912.7	8.7	8.7
					947	947	5.3	5.3
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B3b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	CVP1	50.0	61.7	123	123	0
DCB	2	↓	57.9	116	116	↓
TCMX	CVP1	↓	60.4	121	121	↓
TCMX	2	↓	59.7	119	119	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146B3b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; LCS = Laboratory Control Sample; SA = Spike added; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: lesID 460-[illegible] 714036

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Aroclor 1260	0.333	0.333	0.380	0.350	114	114	105	105	8	8

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146B3b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-714036 Compound Name Aroclor 1260

Concentration = $\frac{569.9\ (10)}{0.0244\qquad (15)\ (1000)}$ =

= 0.3799

10/15

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	LCS	Aroclor 1260	0.380	0.3799	
	1260-1 = $\frac{8285923\ (20)}{13096179\ (0.0244}$ = 519.0				
		Ave = $\frac{519.0 + 484.6 + 511.3 + 583.4 + 573.0 + 584.6 + 605.3 + 698.0}{8}$			
			= 569.9		

Comments: _____

SAMPCLC_r1.wpd

LDC #: 49146B96
SDG #: 460-214767-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer: R
2nd Reviewer: G

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	RSD ≤ 20 %Acc ≤ 50/30 ICV ≤ 30
IV.	Continuing calibration/ISC	A/A	D ≤ 30 ISC ≤ 50
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	SW	D = 1 + 6
X.	Labeled Compounds	A	
VI.	Compound quantitation RL/LOQ/LODs	SW	<RL - J and 4/A
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-19(4-5)	460-214767-1	Soil	07/30/20
2	SB-19(7-8)	460-214767-2	Soil	07/30/20
3	SB-22(3.5-4.5)	460-214767-3	Soil	07/30/20
4	SB-23(2-3)	460-214767-4	Soil	07/30/20
5	SB-23(5-6)	460-214767-5	Soil	07/30/20
6	SB-24(2-3)	460-214767-6	Soil	07/30/20
7	SB-24(8-9)	460-214767-7	Soil	07/30/20
8	DUP-1	460-214767-8	Soil	07/30/20
9				
10				

Notes:

	40146						

LDC #: 49146B96

VALIDATION FINDINGS CHECKLIST

Reviewer: JC

Method: LC/MS PFAS (EPA Method 537Mod)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Were cooler temperature criteria met?	√			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the validation criteria?	√			
III. Initial calibration and Initial Calibration Verification				
Did the laboratory perform a 5-point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 20%?	√			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?			√	
Were all analytes within 70-130% or percent differences (%D) ≤30% of their true value for each calibration standard except the lowest point (50-150%)?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
IV. Continuing calibration and Instrument Sensitivity Check				
Was a continuing calibration analyzed prior to sample analysis, after every 10 samples and at the end of the analytical sequence?	√			
Were all percent differences (%D) of the continuing calibration ≤ 30%?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were all percent differences (%D) of the Instrument Sensitivity Check ≤ 50%?	√			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?	√			
VI. Field blanks				
Were field blanks identified in this SDG?		√		
Were target compounds detected in the field blanks?			√	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?		√		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			√	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	√			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	√			
Were target compounds detected in the field duplicates?	√			
XI. Labeled compounds				
Were labeled compound percent recoveries (%R) within the QC limits?	√			
XII. Compound quantitation				
Did the laboratory reporting limits (RL) meet the QAPP RLs?			√	
Did reported results include both branched and linear isomers?	√			
Were the correct ion transition, labeled compound and relative response factor (RRF) used to quantitate the compound?	√			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	√			
XIII. Target compound identification				
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were two transitions and the ion transition ratio per analyte monitored and documented except for PFBA and PFPeA?	√			
Were ion ratios within QC limits?			√	PFBA dups only
XIV. System performance				
System performance was found to be acceptable.	√			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. Perfluorobutanoic acid (PFBA)			
B. Perfluoropentanoic acis (PFPeA)			
C. Perfluorohexanoic acid (PFHxA)			
D. Perfluoroheptanoic acid (PFHpA)			
E. Perfluorooctanoic acid (PFOA)			
F. Perfluorononanoic acid (PFNA)			
G. Perfluorodecanoic acid (PFDA)			
H. Perfluoroundecanoic acid (PFUnA)			
I. Perfluorododecanoic acid (PFDoA)			
J. Perfluorotridecanoic acid (PFTriA)			
K. Perfluorotetradecanoic acid (PFTeA)			
L. Perfluorobutanesulfonic acid (PFBS)			
M. Perfluorohexanesulfonic acid (PFHxS)			
N. Perfluoroheptanesulfonic acid (PFHpS)			
O. Perfluorooctanesulfonic acid (PFOS)			
P. Perfluorodecanesulfonic acid (PFDS)			
Q. Perfluorooctanesulfonamide (FOSA)			
R. N-Methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
S. N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			
T. 6:2 FTS			
U. 8:2 FTS			

LDC #: 49146396

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JL

METHOD: LC/MS PFAS (EPA Method 537M)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 8/5/20
Conc. units: ng/kg **Associated Samples:** All

Compound	Blank ID	Sample Identification								
MB 320-401465/1-A		1	2	3	4	5	6	7	8	
All	0.035J	0.052J/0.224U	0.046J/0.224U	0.050J/0.224U	0.097J/0.224U	0.069J/0.224U	0.048J/0.224U	0.045J/0.224U	0.041J/0.224U	

Blank extraction date:
Conc. units: **Associated Samples:**

Compound	Blank ID	Sample Identification								

LDC #: 49146B96

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

Compound	Concentration (ug/Kg)		RPD	
	1	8		
A	0.052	0.041	24	

LDC #: 49146B96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S = Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound	Reported RRF (RRF 1.0/0.928)	Recalculated RRF (RRF 1.0/0.928)	Reported Average RRF	Recalculated Average RRF	Reported %RSD	Recalculated %RSD
1	ICAL	8/5/2020	PFOA (13C4-PFOA)	1.1216	1.1216	1.0956	1.0956	11.3	11.3
	A9		PFOS (13C4-PFOS)	1.0474	1.0474	1.0258	1.0258	6.1	6.1
2			PFOA (13C4-PFOA)						
			PFOS (13C4-PFOS)						

LDC #: 49146B96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: SC
2nd Reviewer:

Method: LC/MS PFAS (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (Actual Conc - Cx)/Actual Conc
Cx = (Ax)(Cis)/(Ais)(ave. RRF)

Where:
Ax = Area of compound
Ais = Area of associated internal standard
Cx = Concentration of compound
Cis = Concentration of internal standard
ave. RRF = initial calibration average RRF

#	Standard ID	Calibration Date	Compound	Average RRF	Reported RRF	Recalculated RRF	Reported %D	Recalculated %D
1	2020.08.07_A9_PFC_B_006	8/7/2020	PFOA (13C4-PFOA)	1.0956	1.0880	1.0883	0.7	0.7
			PFOS (13C4-PFOS)	1.0258	1.1030	1.1034	7.6	7.6
2	2020.08.08_A9_PFC_A_046	8/8/2020	PFOA (13C4-PFOA)	1.0956	1.0480	1.0484	4.3	4.3
			PFOS (13C4-PFOS)	1.0258	1.1080	1.1081	8.0	8.0

LDC #: 49146B96

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS 320-401465

Compound	SA (ug/Kg)		SSC (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	2.00		2.020		101	101				
PFOS	1.86		1.898		102	102				

LDC #: 49146B96

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)\,(Vo)\,(Df)}{(RRF)\,(Wt)\,(\%S)}$$

Where:

Ax = Area or height of the peak for the compound to be measured
Ais = Area or height of the peak for the internal standard
Cis = Concentration of the internal standard
DF = Dilution factor
Vt = Volume of extract in milliters (mL)
RRF = Average relative response factor
Wt = Weight of sample in grams (g)
%S = Percent solids

Sample #	Compound	Ax	Ais	Cis	DF	RRF	Vt (mL)	Wt (g)	%S	Calculated Concentration (ug/Kg)	Reported Concentration (ug/Kg)	% Diff
1	PFBA	61666	7239165	2.5	1	0.8707	10	5.09	0.921	0.052	0.052	0

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-214767-1
Reviewer: Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 1, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-19(4-5)	460-214767-1	Metals, Cyanide
SB-19(7-8)	460-214767-2	Metals, Cyanide
SB-22(3.5-4.5)	460-214767-3	Metals, Cyanide
SB-23(2-3)	460-214767-4	Metals, Cyanide
SB-23(5-6)	460-214767-5	Metals, Cyanide
SB-24(2-3)	460-214767-6	Metals, Cyanide
SB-24(8-9)	460-214767-7	Metals, Cyanide
DUP-1	460-214767-8	Metals, Cyanide

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: SB-19(4-5) and DUP-1

The above-listed soil samples were collected on July 30, 2020 and were analyzed for metals by SW-846 methods 6010D/7471B and cyanide by SW-846 method 9012B. The data validation was performed in accordance with USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program,* SOP HW-3a/c, Revision 1 (September 2016) and the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review,* EPA 540-R-2017-001 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The inorganic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Instrument Calibration
- Contract Required Quantitation Limit (CRQL) Standard Recoveries
- Blank Analysis Results
- Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Results
- Matrix Spike (MS) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Certified Reference Material (CRM) Results
- Serial Dilution Results
- Moisture Content
- Detection Limits Results
- Sample Quantitation Results

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

Instrument Calibration

All criteria were met.

CRQL Standard Recoveries

Metals

All criteria were met.

Blank Results

Metals

Analytes were detected below the reporting limits in the laboratory blank samples. The following table summarizes the contamination and validation actions taken.

Blank ID	Analyte	Level Detected	Action Level	Associated Samples
PB (prep blank)	Lead	0.382 mg/Kg	RL	SB-19(4-5) SB-19(7-8) SB-22(3.5-4.5) SB-23(2-3) SB-23(5-6) SB-24(2-3) SB-24(8-9) DUP-1

Blank Actions for analytes detected below the reporting limit(RL).
If the sample result is < RL, report the result as nondetect (U) at the RL.
If the sample result is > RL or nondetect, no action is required.
Blank Actions for analytes detected above the reporting limit or RL.
If the sample result is < RL and <action level; report the result as nondetect (U) at the RL.
If the sample result is > RL and < action level; report the result as nondetect (U) at the reported value.
If the sample result is > action level or nondetect, no action is required.

No samples were qualified since the associated sample results were greater than the action limit.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Cyanide

Contamination was not detected in the laboratory blank samples.

A field blank was not associated with this sample set. Validation action was not required on this basis.

ICP ICS Results

Metals

Analytes were within control limits in the ICSA and ICSAB analyses.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

Field Duplicate Results

Samples SB-19(4-5) and DUP-1 were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations.

Metals

Analyte	Concentration (mg/Kg)		RPD
	SB-19(4-5)	DUP-1	
Aluminum	5870	9960	52
Antimony	1.2U	2.5	Not calculable
Barium	49.9	83.3	50
Beryllium	0.065U	0.51	Not calculable
Cadmium	0.070U	0.21	Not calculable
Calcium	856	1050	20
Chromium	15.7	30.7	65
Cobalt	6.8	12.8	61
Copper	17.9	24.6	32
Iron	15400	26900	54
Lead	4.6	8.4	58
Magnesium	1940	3670	62
Manganese	318	1140	113
Mercury	0.0039	0.0067	53
Nickel	16.4	31.0	62
Potassium	2110	4160	65
Sodium	88.3U	94.3	Not calculable
Vanadium	17.1	29.6	54
Zinc	21.2	45.3	72

Cyanide

There were no detected results in the field duplicate pair for cyanide.

CRM Results

All criteria were met.

Serial Dilution Results

Metals

A serial dilution analysis was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Detection Limits Results

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the metals analyses. These results were estimated (J) by the laboratory.

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the cyanide analysis.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	Metals Analyses Reported
SB-19(4-5) SB-19(7-8) SB-22(3.5-4.5) SB-23(2-3) SB-24(2-3) SB-24(8-9) DUP-1	2-fold dilution due to sample matrix for 6010D metals
SB-23(5-6)	2-fold dilution due to sample matrix for 6010D metals except iron 10-fold dilution due to high analyte level for iron

Dilutions were not required for cyanide analysis.

Sample Quantitation Results

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146B4b
SDG #: 460-214767-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: KK

METHOD: Metals (EPA SW 846 Method 6010D/7471B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A,A	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	SW	
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Serial Dilution	N	
IX.	Laboratory control samples	A	CRM
X.	Field Duplicates	SW	(1, 8)
XI.	Sample Result Verification	A	Results <RL: J det
XII	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-19(4-5)	460-214767-1	Soil	07/30/20
2	SB-19(7-8)	460-214767-2	Soil	07/30/20
3	SB-22(3.5-4.5)	460-214767-3	Soil	07/30/20
4	SB-23(2-3)	460-214767-4	Soil	07/30/20
5	SB-23(5-6)	460-214767-5	Soil	07/30/20
6	SB-24(2-3)	460-214767-6	Soil	07/30/20
7	SB-24(8-9)	460-214767-7	Soil	07/30/20
8	DUP-1	460-214767-8	Soil	07/30/20
9				
10				
11				
12				
13				
14				
15				

6010D: 2x (matrix)
6010D: All except Fe: 2x (matrix) Fe: 10x (high analyte)
6010D: 2x (matrix)

Notes:

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times met?	X			
Were all water samples preserved to a pH of <2.			X	
II. ICP-MS Tune				
Were mass resolutions within 0.1 amu for all isotopes in the tuning solution?			X	
Were %RSDs of isoptoes in the tuning solution ≤5%?			X	
III. Calibration				
Were all instuments calibrated daily?	X			
Were the proper standards used?	X			
Were all initial and continuing calibration verifications within the 90-110% (80-120% for mercury) QC limits?	X			
Were the low level standard checks within 70-130%?			X	
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	X			
Was there contamination in the method blanks?	X			
Was there contamination in the initial and continuing calibration blanks?		X		
V. Interference Check Sample				
Were the interference check samples performed daily?	X			
Were the AB solution recoveries within 80-120%?	X			
VI. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
VII. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
VIII. Internal Standards				
Were all percent recoveries within the 30-120% (60-125% for EPA Method 200.8) QC limits?			X	
If the recoveries were outside the limits, was a reanalysis performed?			X	
IX. Serial Dilution				
Were all percent differences <10%?			X	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			X	
X. Sample Result Verification				
Were all reporting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			
XII. Field Duplicates				
Were field duplicates identifed in this SDG?	X			
Were target analytes detected in the field duplicates?	X			
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

All elements are applicable to each sample as noted below.

Sample ID	Target Analyte List
All	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn, Hg

Analysis Method

ICP	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
ICP-MS	
CVAA	Hg

VALIDATION FINDINGS WORKSHEET
Laboratory Blank Contamination (PB/ICB/CCB)

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Soil preparation factor applied (if applicable): NA

Sample Concentration, unless otherwise noted: mg/Kg Associated Samples: All

				Sample Identification								
Analyte	**PB (mg/Kg)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	No quals (>RL)								
Pb	0.382		RL									

Method: Metals

Analyte	Concentration (mg/Kg)		RPD
	1	8	
Aluminum	5870	9960	52
Antimony	1.2U	2.5	NC
Barium	49.9	83.3	50
Beryllium	0.065U	0.51	NC
Cadmium	0.070U	0.21	NC
Calcium	856	1050	20
Chromium	15.7	30.7	65
Cobalt	6.8	12.8	61
Copper	17.9	24.6	32
Iron	15400	26900	54
Lead	4.6	8.4	58
Magnesium	1940	3670	62
Manganese	318	1140	113
Mercury	0.0039	0.0067	53
Nickel	16.4	31.0	62
Potassium	2110	4160	65
Sodium	88.3U	94.3	NC
Vanadium	17.1	29.6	54
Zinc	21.2	45.3	72

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

An intial calibration verification (ICV), continuing calibration verification (CCV), low level calibration check (LLCC), and interference check sample (ICSAB) percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis

True = concentration of each analyte in the source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalcuated %R	Reported %R	Acceptable (Y/N)
ICV	ICP	Pb	1026	1000	103	103	Y
CCV	ICP	Tl	1026	1000	103	103	Y
ICSAB	ICP	Cr	95.2	100	95	95	Y
ICV	CVAA	Hg	4.88	5	98	98	Y
CCV	CVAA	Hg	4.94	5	99	99	Y

Quality Control Sample Recalculations

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

Percent recoveries (%R) for the laboratory control sample (LCS), matrix spike (MS), and post digestion spike (PDS) were recalculated using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentration of each analyte in the source

The sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentration

D = Duplicate sample concentration

The serial dilution percent difference (%D) was recalculated using the following formula.

%D = (Absolute value (I - SDR)) x 100 / (I)

I = Initial sample result

SDR = Serial dilution result (with a 5x dilution applied)

Sample ID	Type of Analysis	Element	Found/S/I	True/D/SDR	Recalcuated %R/RPD/%D	Reported %R/RPD/%D	Acceptable (Y/N)
CRM	LCS	Ni	61.76	59.8	103.3	103.3	Y
	MS						
	Duplicate						
	PDS						
	Serial dilution						

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Analytes were recalculated and verified using the following equation:
Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids x Initial weight)

Sample ID	Analyte	Raw Data (ug/L)	Dilution	Initial Weight (g)	Final Volume (mL)	Percent solids (%)	Reported Result (mg/Kg)	Recalcuated Result (mg/Kg)	Acceptable (Y/N)
1	Hg	0.0485	1	0.67	50	92.1	0.0039	0.0039	Y
2	Pb	36.29	2	1.07	100	86.9	7.8	7.8	Y
3	Co	49.61	2	1.08	100	87.1	10.5	10.5	Y
4	Fe	94610	2	1.05	100	82.9	21700	21738	Y
5	Zn	274.2	2	1.08	100	85.7	59.2	59.3	Y
6	Mg	20150	2	1.04	100	85.5	4530	4532	Y
7	Cr	184.2	2	1.04	100	86.8	40.8	40.8	Y
8	Cd	1.002	2	1.08	100	89.9	0.21	0.21	Y

LDC #: 49146B6
SDG #: 460-214767-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: KK

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A A	
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Laboratory Blanks	A	
V	Field blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Laboratory control samples	A	(RPD)
IX.	Field duplicates	ND	(1,8)
X.	Sample result verification	A	no<RL
XI	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-19(4-5)	460-214767-1	Soil	07/30/20
2	SB-19(7-8)	460-214767-2	Soil	07/30/20
3	SB-22(3.5-4.5)	460-214767-3	Soil	07/30/20
4	SB-23(2-3)	460-214767-4	Soil	07/30/20
5	SB-23(5-6)	460-214767-5	Soil	07/30/20
6	SB-24(2-3)	460-214767-6	Soil	07/30/20
7	SB-24(8-9)	460-214767-7	Soil	07/30/20
8	DUP-1	460-214767-8	Soil	07/30/20
9				
10				
11				
12				
13				
14				
15				

Notes:

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times were met?	X			
II. Calibration				
Were all instuments calibrated at the requried frequency?	X			
Were the proper number of standards used?	X			
Were all initial and continuing calibration verifications within the QC limits?	X			
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
Were balance checks performed as required?			X	
III. Blanks				
Was a method blank assoicated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?		X		
IV. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
V. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			
X. Sample Result Verification				
Were all reproting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
XII. Field Duplicates				
Were field duplicates identifed in this SDG?	X			
Were target analytes detected in the field duplicates?		X		
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

LDC #: 49146B6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR

Method: Inorganics

The correlation coefficient (r) for the calibration of _Cr6+___ was recalculated.Calibration date:___8/7/20__

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cr6+	s1	0	0.0139	*0.99938*	0.99980	Y
		s2	0.01	0.437			
		s3	0.025	0.988			
		s4	0.05	1.95			
		s5	0.1	3.69			
		s6	0.2	7.41			
		s7	0.4	13.8			
Calibration verification	Cr6+	ICV	0.2	0.204	102	102	Y
Calibration verification	Cr6+	CCV	0.2	0.203	102	102	Y
Calibration verification	Cr6+	CCV	0.2	0.205	103	103	Y

Comments:

VALIDATION FINDINGS CHECKLIST

Quality Control Sample Recalculations

METHOD: Inorganics

Percent recoveries (%R) for the laboratory control sample (LCS) and matrix spike (MS) were recalcuated using the following formula.

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentraiton of each analyte in the source

The sample and duplciate relative percent difference (RPD) was recalcuated using the following formula.

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentraiton

D = Duplciate sample concentration

Sample ID	Type of Analysis	Element	Found/S	True/D	Recalcuated %R/RPD	Reported %R/RPD	Acceptable (Y/N)
CRM	LCS	CN	56.16	157	35.8	35.8	Y
	MS						
	Duplicate						

VALIDATION FINDINGS CHECKLIST
Sample Calculation Verification

METHOD: Inorganics
Analytes were recalcuated and verified using the following equation.
Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids (if applicable) x Initial weight or volume)

Sample ID	Analyte	Raw Data (unit)	Dilution	Initial Weight/ Volume (unit)	Final Volume (unit)	Percent solids (%)	Reported Result (unit)	Recalcuated Result (unit)	Acceptable (Y/N)
All	CN = ND								

500 Main St., New Rochelle - LDC# 49146B

SDG: 4602147671

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.22	0.094	ug/kg
DUP-1-20200730	460-214767-8	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.20	0.16	ug/kg
DUP-1-20200730	460-214767-8	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.20	0.43	ug/kg
DUP-1-20200730	460-214767-8	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.20	0.41	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.22	0.040	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
DUP-1-20200730	460-214767-8	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.043	ug/kg
DUP-1-20200730	460-214767-8	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.22	0.024	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.22	0.056	ug/kg
DUP-1-20200730	460-214767-8	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.20	0.27	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.22	0.085	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.027	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.55	0.22	ug/kg
DUP-1-20200730	460-214767-8	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.22	0.090	ug/kg
DUP-1-20200730	460-214767-8	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.22	0.040	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.22	0.046	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.034	ug/kg
DUP-1-20200730	460-214767-8	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.22	0.032	ug/kg
DUP-1-20200730	460-214767-8	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.22	0.038	ug/kg
DUP-1-20200730	460-214767-8	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.22	0.074	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.22	0.059	ug/kg
SB-19(4-5)-20200730	460-214767-1	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.087	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.042	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-19(4-5)-20200730	460-214767-1	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.030	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-19(4-5)-20200730	460-214767-1	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.13	0.39	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.53	0.21	ug/kg
SB-19(4-5)-20200730	460-214767-1	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.092	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.045	ug/kg
SB-19(4-5)-20200730	460-214767-1	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.13	0.16	ug/kg
SB-19(4-5)-20200730	460-214767-1	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.13	0.42	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.027	ug/kg
SB-19(4-5)-20200730	460-214767-1	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.13	0.27	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-19(4-5)-20200730	460-214767-1	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.058	ug/kg

SDG: 4602147671

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(4-5)-20200730	460-214767-1	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.082	ug/kg
SB-19(7-8)-20200730	460-214767-2	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.19	0.27	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.22	0.056	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-19(7-8)-20200730	460-214767-2	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.19	0.41	ug/kg
SB-19(7-8)-20200730	460-214767-2	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.19	0.43	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-19(7-8)-20200730	460-214767-2	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.19	0.16	ug/kg
SB-19(7-8)-20200730	460-214767-2	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.22	0.094	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.22	0.073	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.22	0.059	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.22	0.084	ug/kg
SB-19(7-8)-20200730	460-214767-2	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.22	0.090	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.55	0.22	ug/kg
SB-19(7-8)-20200730	460-214767-2	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.22	0.046	ug/kg
SB-19(7-8)-20200730	460-214767-2	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.22	0.039	ug/kg

SDG: 4602147671

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.54	0.22	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.22	0.088	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.22	0.045	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.033	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.042	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.22	0.030	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.16	0.42	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.22	0.031	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.16	0.16	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.16	0.27	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.22	0.055	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.16	0.40	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.22	0.058	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.22	0.083	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.22	0.093	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.22	0.072	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.24	0.043	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.24	0.037	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.24	0.050	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.24	0.042	ug/kg
SB-23(2-3)-20200730	460-214767-4	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.24	0.098	ug/kg
SB-23(2-3)-20200730	460-214767-4	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.24	0.10	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.24	0.092	ug/kg
SB-23(2-3)-20200730	460-214767-4	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.24	0.035	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.24	0.061	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.24	0.043	ug/kg
SB-23(2-3)-20200730	460-214767-4	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.40	0.44	ug/kg
SB-23(2-3)-20200730	460-214767-4	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.40	0.47	ug/kg
SB-23(2-3)-20200730	460-214767-4	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.40	0.18	ug/kg
SB-23(2-3)-20200730	460-214767-4	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.40	0.30	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.24	0.065	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.24	0.080	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.24	0.030	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.24	0.047	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.24	0.026	ug/kg
SB-23(2-3)-20200730	460-214767-4	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.60	0.24	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.24	0.034	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.23	0.088	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.23	0.040	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.23	0.041	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.23	0.077	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.23	0.058	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.23	0.062	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.57	0.23	ug/kg
SB-23(5-6)-20200730	460-214767-5	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.23	0.094	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.23	0.041	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.23	0.048	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.23	0.036	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.23	0.032	ug/kg
SB-23(5-6)-20200730	460-214767-5	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.29	0.45	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.23	0.025	ug/kg
SB-23(5-6)-20200730	460-214767-5	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.23	0.099	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.23	0.045	ug/kg
SB-23(5-6)-20200730	460-214767-5	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.23	0.029	ug/kg
SB-23(5-6)-20200730	460-214767-5	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.29	0.42	ug/kg
SB-23(5-6)-20200730	460-214767-5	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.23	0.033	ug/kg
SB-23(5-6)-20200730	460-214767-5	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.29	0.17	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.29	0.29	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.22	0.047	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.22	0.074	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.56	0.22	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.22	0.085	ug/kg
SB-24(2-3)-20200730	460-214767-6	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.22	0.41	ug/kg
SB-24(2-3)-20200730	460-214767-6	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.22	0.095	ug/kg
SB-24(2-3)-20200730	460-214767-6	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.22	0.43	ug/kg
SB-24(2-3)-20200730	460-214767-6	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.22	0.17	ug/kg
SB-24(2-3)-20200730	460-214767-6	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.22	0.28	ug/kg
SB-24(2-3)-20200730	460-214767-6	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.028	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.22	0.057	ug/kg
SB-24(2-3)-20200730	460-214767-6	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.22	0.060	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.22	0.091	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-24(8-9)-20200730	460-214767-7	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.087	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.030	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-24(8-9)-20200730	460-214767-7	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.11	0.39	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.081	ug/kg
SB-24(8-9)-20200730	460-214767-7	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.091	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-24(8-9)-20200730	460-214767-7	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.11	0.41	ug/kg
SB-24(8-9)-20200730	460-214767-7	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.11	0.26	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.044	ug/kg
SB-24(8-9)-20200730	460-214767-7	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.11	0.16	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-24(8-9)-20200730	460-214767-7	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-24(8-9)-20200730	460-214767-7	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg

Analytical Method	E537(M)										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-24(8-9)-20200730	460-214767-7	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.53	0.21	ug/kg

Analytical Method	SW6010										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
DUP-1-20200730	460-214767-8	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
DUP-1-20200730	460-214767-8	SODIUM	8/6/2020	94.3	Y	Y	J		J	1030	89.7	mg/kg
DUP-1-20200730	460-214767-8	ARSENIC	8/6/2020		Y	N	U		U	3.1	0.63	mg/kg
DUP-1-20200730	460-214767-8	CADMIUM	8/6/2020	0.21	Y	Y	J		J	0.82	0.071	mg/kg
DUP-1-20200730	460-214767-8	THALLIUM	8/6/2020		Y	N	U		U	4.1	0.64	mg/kg
DUP-1-20200730	460-214767-8	ANTIMONY	8/6/2020	2.5	Y	Y	J		J	4.1	1.2	mg/kg
DUP-1-20200730	460-214767-8	SELENIUM	8/6/2020		Y	N	U		U	4.1	0.70	mg/kg
DUP-1-20200730	460-214767-8	MAGNESIUM	8/6/2020	3670	Y	Y				1030	69.8	mg/kg
DUP-1-20200730	460-214767-8	VANADIUM	8/6/2020	29.6	Y	Y				10.3	0.96	mg/kg
DUP-1-20200730	460-214767-8	ZINC	8/6/2020	45.3	Y	Y				6.2	1.1	mg/kg
DUP-1-20200730	460-214767-8	POTASSIUM	8/6/2020	4160	Y	Y				1030	63.3	mg/kg
DUP-1-20200730	460-214767-8	MANGANESE	8/6/2020	1140	Y	Y				3.1	0.23	mg/kg
DUP-1-20200730	460-214767-8	ALUMINUM	8/6/2020	9960	Y	Y				41.2	5.8	mg/kg
DUP-1-20200730	460-214767-8	LEAD	8/6/2020	8.4	Y	Y				2.1	0.33	mg/kg
DUP-1-20200730	460-214767-8	IRON	8/6/2020	26900	Y	Y				30.9	21.2	mg/kg
DUP-1-20200730	460-214767-8	COPPER	8/6/2020	24.6	Y	Y				5.2	1.3	mg/kg
DUP-1-20200730	460-214767-8	COBALT	8/6/2020	12.8	Y	Y				10.3	0.57	mg/kg
DUP-1-20200730	460-214767-8	CHROMIUM, TOTAL	8/6/2020	30.7	Y	Y				2.1	1.5	mg/kg
DUP-1-20200730	460-214767-8	CALCIUM	8/6/2020	1050	Y	Y				1030	76.2	mg/kg
DUP-1-20200730	460-214767-8	BERYLLIUM	8/6/2020	0.51	Y	Y				0.41	0.066	mg/kg
DUP-1-20200730	460-214767-8	BARIUM	8/6/2020	83.3	Y	Y				41.2	4.0	mg/kg

SDG: 4602147671

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	NICKEL	8/6/2020	31.0	Y	Y				8.2	0.54	mg/kg
SB-19(4-5)-20200730	460-214767-1	COBALT	8/6/2020	6.8	Y	Y	J		J	10.1	0.56	mg/kg
SB-19(4-5)-20200730	460-214767-1	ALUMINUM	8/6/2020	5870	Y	Y				40.6	5.7	mg/kg
SB-19(4-5)-20200730	460-214767-1	BARIUM	8/6/2020	49.9	Y	Y				40.6	3.9	mg/kg
SB-19(4-5)-20200730	460-214767-1	CHROMIUM, TOTAL	8/6/2020	15.7	Y	Y				2.0	1.4	mg/kg
SB-19(4-5)-20200730	460-214767-1	CALCIUM	8/6/2020	856	Y	Y	J		J	1010	75.0	mg/kg
SB-19(4-5)-20200730	460-214767-1	COPPER	8/6/2020	17.9	Y	Y				5.1	1.3	mg/kg
SB-19(4-5)-20200730	460-214767-1	IRON	8/6/2020	15400	Y	Y				30.4	20.9	mg/kg
SB-19(4-5)-20200730	460-214767-1	LEAD	8/6/2020	4.6	Y	Y				2.0	0.33	mg/kg
SB-19(4-5)-20200730	460-214767-1	MAGNESIUM	8/6/2020	1940	Y	Y				1010	68.7	mg/kg
SB-19(4-5)-20200730	460-214767-1	MANGANESE	8/6/2020	318	Y	Y				3.0	0.23	mg/kg
SB-19(4-5)-20200730	460-214767-1	ZINC	8/6/2020	21.2	Y	Y				6.1	1.1	mg/kg
SB-19(4-5)-20200730	460-214767-1	NICKEL	8/6/2020	16.4	Y	Y				8.1	0.53	mg/kg
SB-19(4-5)-20200730	460-214767-1	POTASSIUM	8/6/2020	2110	Y	Y				1010	62.3	mg/kg
SB-19(4-5)-20200730	460-214767-1	ANTIMONY	8/6/2020		Y	N	U		U	4.1	1.2	mg/kg
SB-19(4-5)-20200730	460-214767-1	VANADIUM	8/6/2020	17.1	Y	Y				10.1	0.94	mg/kg
SB-19(4-5)-20200730	460-214767-1	THALLIUM	8/6/2020		Y	N	U		U	4.1	0.63	mg/kg
SB-19(4-5)-20200730	460-214767-1	SODIUM	8/6/2020		Y	N	U		U	1010	88.3	mg/kg
SB-19(4-5)-20200730	460-214767-1	SILVER	8/6/2020		Y	N	U		U	2.0	1.1	mg/kg
SB-19(4-5)-20200730	460-214767-1	SELENIUM	8/6/2020		Y	N	U		U	4.1	0.69	mg/kg
SB-19(4-5)-20200730	460-214767-1	CADMIUM	8/6/2020		Y	N	U		U	0.81	0.070	mg/kg
SB-19(4-5)-20200730	460-214767-1	BERYLLIUM	8/6/2020		Y	N	U		U	0.41	0.065	mg/kg
SB-19(4-5)-20200730	460-214767-1	ARSENIC	8/6/2020		Y	N	U		U	3.0	0.62	mg/kg
SB-19(7-8)-20200730	460-214767-2	SELENIUM	8/6/2020	1.1	Y	Y	J		J	4.3	0.73	mg/kg
SB-19(7-8)-20200730	460-214767-2	THALLIUM	8/6/2020		Y	N	U		U	4.3	0.67	mg/kg

SDG: 4602147671

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	SODIUM	8/6/2020		Y	N	U		U	1070	93.5	mg/kg
SB-19(7-8)-20200730	460-214767-2	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-19(7-8)-20200730	460-214767-2	CALCIUM	8/6/2020	592	Y	Y	J		J	1070	79.4	mg/kg
SB-19(7-8)-20200730	460-214767-2	BARIUM	8/6/2020	63.6	Y	Y				43.0	4.1	mg/kg
SB-19(7-8)-20200730	460-214767-2	NICKEL	8/6/2020	24.2	Y	Y				8.6	0.57	mg/kg
SB-19(7-8)-20200730	460-214767-2	BERYLLIUM	8/6/2020	0.49	Y	Y				0.43	0.069	mg/kg
SB-19(7-8)-20200730	460-214767-2	CHROMIUM, TOTAL	8/6/2020	20.5	Y	Y				2.1	1.5	mg/kg
SB-19(7-8)-20200730	460-214767-2	COBALT	8/6/2020	11.1	Y	Y				10.7	0.60	mg/kg
SB-19(7-8)-20200730	460-214767-2	COPPER	8/6/2020	18.6	Y	Y				5.4	1.3	mg/kg
SB-19(7-8)-20200730	460-214767-2	IRON	8/6/2020	24000	Y	Y				32.2	22.1	mg/kg
SB-19(7-8)-20200730	460-214767-2	LEAD	8/6/2020	7.8	Y	Y				2.1	0.35	mg/kg
SB-19(7-8)-20200730	460-214767-2	MAGNESIUM	8/6/2020	2670	Y	Y				1070	72.8	mg/kg
SB-19(7-8)-20200730	460-214767-2	MANGANESE	8/6/2020	815	Y	Y				3.2	0.24	mg/kg
SB-19(7-8)-20200730	460-214767-2	POTASSIUM	8/6/2020	3020	Y	Y				1070	66.0	mg/kg
SB-19(7-8)-20200730	460-214767-2	ZINC	8/6/2020	51.2	Y	Y				6.4	1.2	mg/kg
SB-19(7-8)-20200730	460-214767-2	ARSENIC	8/6/2020		Y	N	U		U	3.2	0.66	mg/kg
SB-19(7-8)-20200730	460-214767-2	ALUMINUM	8/6/2020	7330	Y	Y				43.0	6.1	mg/kg
SB-19(7-8)-20200730	460-214767-2	CADMIUM	8/6/2020	0.11	Y	Y	J		J	0.86	0.074	mg/kg
SB-19(7-8)-20200730	460-214767-2	ANTIMONY	8/6/2020	1.9	Y	Y	J		J	4.3	1.2	mg/kg
SB-19(7-8)-20200730	460-214767-2	VANADIUM	8/6/2020	26.5	Y	Y				10.7	1.0	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	MAGNESIUM	8/6/2020	3960	Y	Y				1060	71.9	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ALUMINUM	8/6/2020	8800	Y	Y				42.5	6.0	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BARIUM	8/6/2020	124	Y	Y				42.5	4.1	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CALCIUM	8/6/2020	2820	Y	Y				1060	78.5	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CHROMIUM, TOTAL	8/6/2020	31.2	Y	Y				2.1	1.5	mg/kg

SDG: 4602147671

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	COPPER	8/6/2020	59.5	Y	Y				5.3	1.3	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	THALLIUM	8/6/2020		Y	N	U		U	4.3	0.66	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	LEAD	8/6/2020	55.0	Y	Y				2.1	0.34	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	POTASSIUM	8/6/2020	4680	Y	Y				1060	65.2	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	MANGANESE	8/6/2020	511	Y	Y				3.2	0.24	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	NICKEL	8/6/2020	26.8	Y	Y				8.5	0.56	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	VANADIUM	8/6/2020	30.0	Y	Y				10.6	0.99	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	SELENIUM	8/6/2020		Y	N	U		U	4.3	0.72	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BERYLLIUM	8/6/2020		Y	N	U		U	0.43	0.068	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	IRON	8/6/2020	26800	Y	Y				31.9	21.9	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ZINC	8/6/2020	103	Y	Y				6.4	1.2	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ANTIMONY	8/6/2020	1.4	Y	Y	J		J	4.3	1.2	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	SODIUM	8/6/2020	326	Y	Y	J		J	1060	92.4	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	COBALT	8/6/2020	10.5	Y	Y	J		J	10.6	0.59	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CADMIUM	8/6/2020	0.23	Y	Y	J		J	0.85	0.073	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ARSENIC	8/6/2020	1.0	Y	Y	J		J	3.2	0.65	mg/kg
SB-23(2-3)-20200730	460-214767-4	SODIUM	8/6/2020	140	Y	Y	J		J	1150	99.9	mg/kg
SB-23(2-3)-20200730	460-214767-4	ARSENIC	8/6/2020		Y	N	U		U	3.4	0.71	mg/kg
SB-23(2-3)-20200730	460-214767-4	COBALT	8/6/2020	10.1	Y	Y	J		J	11.5	0.64	mg/kg
SB-23(2-3)-20200730	460-214767-4	CADMIUM	8/6/2020	0.099	Y	Y	J		J	0.92	0.079	mg/kg
SB-23(2-3)-20200730	460-214767-4	BERYLLIUM	8/6/2020	0.22	Y	Y	J		J	0.46	0.074	mg/kg
SB-23(2-3)-20200730	460-214767-4	ANTIMONY	8/6/2020	1.5	Y	Y	J		J	4.6	1.3	mg/kg
SB-23(2-3)-20200730	460-214767-4	THALLIUM	8/6/2020		Y	N	U		U	4.6	0.71	mg/kg
SB-23(2-3)-20200730	460-214767-4	SELENIUM	8/6/2020		Y	N	U		U	4.6	0.78	mg/kg

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	CHROMIUM, TOTAL	8/6/2020	24.2	Y	Y				2.3	1.6	mg/kg
SB-23(2-3)-20200730	460-214767-4	ALUMINUM	8/6/2020	7470	Y	Y				46.0	6.5	mg/kg
SB-23(2-3)-20200730	460-214767-4	COPPER	8/6/2020	16.5	Y	Y				5.7	1.4	mg/kg
SB-23(2-3)-20200730	460-214767-4	IRON	8/6/2020	21700	Y	Y				34.5	23.7	mg/kg
SB-23(2-3)-20200730	460-214767-4	LEAD	8/6/2020	8.7	Y	Y				2.3	0.37	mg/kg
SB-23(2-3)-20200730	460-214767-4	MAGNESIUM	8/6/2020	2910	Y	Y				1150	77.8	mg/kg
SB-23(2-3)-20200730	460-214767-4	MANGANESE	8/6/2020	587	Y	Y				3.4	0.26	mg/kg
SB-23(2-3)-20200730	460-214767-4	NICKEL	8/6/2020	22.0	Y	Y				9.2	0.60	mg/kg
SB-23(2-3)-20200730	460-214767-4	POTASSIUM	8/6/2020	3540	Y	Y				1150	70.5	mg/kg
SB-23(2-3)-20200730	460-214767-4	VANADIUM	8/6/2020	27.1	Y	Y				11.5	1.1	mg/kg
SB-23(2-3)-20200730	460-214767-4	ZINC	8/6/2020	41.1	Y	Y				6.9	1.3	mg/kg
SB-23(2-3)-20200730	460-214767-4	SILVER	8/6/2020		Y	N	U		U	2.3	1.3	mg/kg
SB-23(2-3)-20200730	460-214767-4	BARIUM	8/6/2020	72.9	Y	Y				46.0	4.4	mg/kg
SB-23(2-3)-20200730	460-214767-4	CALCIUM	8/6/2020	1160	Y	Y				1150	84.9	mg/kg
SB-23(5-6)-20200730	460-214767-5	COBALT	8/6/2020	30.8	Y	Y				10.8	0.60	mg/kg
SB-23(5-6)-20200730	460-214767-5	SILVER	8/6/2020		Y	N	U		U	2.2	1.2	mg/kg
SB-23(5-6)-20200730	460-214767-5	SELENIUM	8/6/2020		Y	N	U		U	4.3	0.73	mg/kg
SB-23(5-6)-20200730	460-214767-5	SODIUM	8/6/2020	112	Y	Y	J		J	1080	94.0	mg/kg
SB-23(5-6)-20200730	460-214767-5	CALCIUM	8/6/2020	549	Y	Y	J		J	1080	79.8	mg/kg
SB-23(5-6)-20200730	460-214767-5	CADMIUM	8/6/2020	0.63	Y	Y	J		J	0.86	0.075	mg/kg
SB-23(5-6)-20200730	460-214767-5	ALUMINUM	8/6/2020	6030	Y	Y				43.2	6.1	mg/kg
SB-23(5-6)-20200730	460-214767-5	ARSENIC	8/6/2020	39.7	Y	Y				3.2	0.66	mg/kg
SB-23(5-6)-20200730	460-214767-5	THALLIUM	8/6/2020		Y	N	U		U	4.3	0.67	mg/kg
SB-23(5-6)-20200730	460-214767-5	CHROMIUM, TOTAL	8/6/2020	98.9	Y	Y				2.2	1.5	mg/kg
SB-23(5-6)-20200730	460-214767-5	ANTIMONY	8/6/2020	6.7	Y	Y				4.3	1.2	mg/kg

SDG: 4602147671

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	COPPER	8/6/2020	29.1	Y	Y				5.4	1.3	mg/kg
SB-23(5-6)-20200730	460-214767-5	LEAD	8/6/2020	26.4	Y	Y				2.2	0.35	mg/kg
SB-23(5-6)-20200730	460-214767-5	MAGNESIUM	8/6/2020	1700	Y	Y				1080	73.1	mg/kg
SB-23(5-6)-20200730	460-214767-5	MANGANESE	8/6/2020	1570	Y	Y				3.2	0.24	mg/kg
SB-23(5-6)-20200730	460-214767-5	NICKEL	8/6/2020	61.8	Y	Y				8.6	0.57	mg/kg
SB-23(5-6)-20200730	460-214767-5	POTASSIUM	8/6/2020	1930	Y	Y				1080	66.3	mg/kg
SB-23(5-6)-20200730	460-214767-5	VANADIUM	8/6/2020	39.8	Y	Y				10.8	1.0	mg/kg
SB-23(5-6)-20200730	460-214767-5	ZINC	8/6/2020	59.2	Y	Y				6.5	1.2	mg/kg
SB-23(5-6)-20200730	460-214767-5	BERYLLIUM	8/6/2020	1.4	Y	Y				0.43	0.069	mg/kg
SB-23(5-6)-20200730	460-214767-5	BARIUM	8/6/2020	105	Y	Y				43.2	4.2	mg/kg
SB-23(5-6)-20200730	460-214767-5	IRON	8/6/2020	102000	Y	Y				162	111	mg/kg
SB-24(2-3)-20200730	460-214767-6	MAGNESIUM	8/6/2020	4530	Y	Y				1130	76.2	mg/kg
SB-24(2-3)-20200730	460-214767-6	MANGANESE	8/6/2020	528	Y	Y				3.4	0.25	mg/kg
SB-24(2-3)-20200730	460-214767-6	NICKEL	8/6/2020	35.5	Y	Y				9.0	0.59	mg/kg
SB-24(2-3)-20200730	460-214767-6	POTASSIUM	8/6/2020	5660	Y	Y				1130	69.1	mg/kg
SB-24(2-3)-20200730	460-214767-6	VANADIUM	8/6/2020	35.6	Y	Y				11.3	1.0	mg/kg
SB-24(2-3)-20200730	460-214767-6	ZINC	8/6/2020	61.8	Y	Y				6.8	1.2	mg/kg
SB-24(2-3)-20200730	460-214767-6	CALCIUM	8/6/2020	1290	Y	Y				1130	83.2	mg/kg
SB-24(2-3)-20200730	460-214767-6	IRON	8/6/2020	29700	Y	Y				33.8	23.2	mg/kg
SB-24(2-3)-20200730	460-214767-6	BARIUM	8/6/2020	103	Y	Y				45.0	4.3	mg/kg
SB-24(2-3)-20200730	460-214767-6	LEAD	8/6/2020	13.7	Y	Y				2.3	0.36	mg/kg
SB-24(2-3)-20200730	460-214767-6	SODIUM	8/6/2020	160	Y	Y	J		J	1130	97.9	mg/kg
SB-24(2-3)-20200730	460-214767-6	SELENIUM	8/6/2020		Y	N	U		U	4.5	0.76	mg/kg
SB-24(2-3)-20200730	460-214767-6	BERYLLIUM	8/6/2020		Y	N	U		U	0.45	0.072	mg/kg
SB-24(2-3)-20200730	460-214767-6	CADMIUM	8/6/2020	0.17	Y	Y	J		J	0.90	0.078	mg/kg

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	ARSENIC	8/6/2020	1.3	Y	Y	J		J	3.4	0.69	mg/kg
SB-24(2-3)-20200730	460-214767-6	ANTIMONY	8/6/2020	1.9	Y	Y	J		J	4.5	1.3	mg/kg
SB-24(2-3)-20200730	460-214767-6	COPPER	8/6/2020	27.9	Y	Y				5.6	1.4	mg/kg
SB-24(2-3)-20200730	460-214767-6	THALLIUM	8/6/2020		Y	N	U		U	4.5	0.70	mg/kg
SB-24(2-3)-20200730	460-214767-6	COBALT	8/6/2020	13.2	Y	Y				11.3	0.62	mg/kg
SB-24(2-3)-20200730	460-214767-6	CHROMIUM, TOTAL	8/6/2020	36.1	Y	Y				2.3	1.6	mg/kg
SB-24(2-3)-20200730	460-214767-6	SILVER	8/6/2020		Y	N	U		U	2.3	1.3	mg/kg
SB-24(2-3)-20200730	460-214767-6	ALUMINUM	8/6/2020	10200	Y	Y				45.0	6.4	mg/kg
SB-24(8-9)-20200730	460-214767-7	THALLIUM	8/6/2020		Y	N	U		U	4.4	0.69	mg/kg
SB-24(8-9)-20200730	460-214767-7	SILVER	8/6/2020		Y	N	U		U	2.2	1.2	mg/kg
SB-24(8-9)-20200730	460-214767-7	ANTIMONY	8/6/2020		Y	N	U		U	4.4	1.3	mg/kg
SB-24(8-9)-20200730	460-214767-7	SELENIUM	8/6/2020		Y	N	U		U	4.4	0.75	mg/kg
SB-24(8-9)-20200730	460-214767-7	SODIUM	8/6/2020	172	Y	Y	J		J	1110	96.4	mg/kg
SB-24(8-9)-20200730	460-214767-7	CALCIUM	8/6/2020	942	Y	Y	J		J	1110	81.9	mg/kg
SB-24(8-9)-20200730	460-214767-7	CADMIUM	8/6/2020	0.12	Y	Y	J		J	0.89	0.076	mg/kg
SB-24(8-9)-20200730	460-214767-7	BERYLLIUM	8/6/2020		Y	N	U		U	0.44	0.071	mg/kg
SB-24(8-9)-20200730	460-214767-7	COBALT	8/6/2020	13.6	Y	Y				11.1	0.61	mg/kg
SB-24(8-9)-20200730	460-214767-7	POTASSIUM	8/6/2020	6660	Y	Y				1110	68.0	mg/kg
SB-24(8-9)-20200730	460-214767-7	NICKEL	8/6/2020	39.1	Y	Y				8.9	0.58	mg/kg
SB-24(8-9)-20200730	460-214767-7	MANGANESE	8/6/2020	195	Y	Y				3.3	0.25	mg/kg
SB-24(8-9)-20200730	460-214767-7	MAGNESIUM	8/6/2020	5560	Y	Y				1110	75.0	mg/kg
SB-24(8-9)-20200730	460-214767-7	LEAD	8/6/2020	11.0	Y	Y				2.2	0.36	mg/kg
SB-24(8-9)-20200730	460-214767-7	COPPER	8/6/2020	33.4	Y	Y				5.5	1.4	mg/kg
SB-24(8-9)-20200730	460-214767-7	VANADIUM	8/6/2020	42.3	Y	Y				11.1	1.0	mg/kg
SB-24(8-9)-20200730	460-214767-7	CHROMIUM, TOTAL	8/6/2020	40.8	Y	Y				2.2	1.6	mg/kg

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	BARIUM	8/6/2020	108	Y	Y				44.3	4.3	mg/kg
SB-24(8-9)-20200730	460-214767-7	ARSENIC	8/6/2020		Y	N	U		U	3.3	0.68	mg/kg
SB-24(8-9)-20200730	460-214767-7	ALUMINUM	8/6/2020	11900	Y	Y				44.3	6.3	mg/kg
SB-24(8-9)-20200730	460-214767-7	ZINC	8/6/2020	64.1	Y	Y				6.6	1.2	mg/kg
SB-24(8-9)-20200730	460-214767-7	IRON	8/6/2020	23500	Y	Y				33.2	22.8	mg/kg

Analytical Method SW7471B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	MERCURY	8/6/2020	0.0067	Y	Y	J		J	0.018	0.0042	mg/kg
SB-19(4-5)-20200730	460-214767-1	MERCURY	8/6/2020	0.0039	Y	Y	J		J	0.017	0.0039	mg/kg
SB-19(7-8)-20200730	460-214767-2	MERCURY	8/6/2020	0.0085	Y	Y	J		J	0.019	0.0045	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	MERCURY	8/6/2020	0.011	Y	Y	J		J	0.018	0.0042	mg/kg
SB-23(2-3)-20200730	460-214767-4	MERCURY	8/6/2020	0.016	Y	Y	J		J	0.021	0.0048	mg/kg
SB-23(5-6)-20200730	460-214767-5	MERCURY	8/6/2020	0.0094	Y	Y	J		J	0.019	0.0044	mg/kg
SB-24(2-3)-20200730	460-214767-6	MERCURY	8/6/2020	0.013	Y	Y	J		J	0.018	0.0043	mg/kg
SB-24(8-9)-20200730	460-214767-7	MERCURY	8/6/2020	0.0089	Y	Y	J		J	0.019	0.0045	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0075	0.0017	mg/kg
DUP-1-20200730	460-214767-8	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00097	mg/kg
DUP-1-20200730	460-214767-8	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-1-20200730	460-214767-8	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0075	0.00093	mg/kg
DUP-1-20200730	460-214767-8	ENDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-1-20200730	460-214767-8	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0075	0.0018	mg/kg
DUP-1-20200730	460-214767-8	trans-Chlordane	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0075	0.0014	mg/kg
DUP-1-20200730	460-214767-8	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00069	mg/kg
DUP-1-20200730	460-214767-8	TOXAPHENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
DUP-1-20200730	460-214767-8	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-1-20200730	460-214767-8	P,P'-DDD	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
DUP-1-20200730	460-214767-8	P,P'-DDE	8/5/2020		Y	N	U		U	0.0075	0.00088	mg/kg
DUP-1-20200730	460-214767-8	P,P'-DDT	8/5/2020		Y	N	U		U	0.0075	0.0014	mg/kg
DUP-1-20200730	460-214767-8	ALDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-1-20200730	460-214767-8	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00046	mg/kg
DUP-1-20200730	460-214767-8	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0075	0.00088	mg/kg
DUP-1-20200730	460-214767-8	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
DUP-1-20200730	460-214767-8	CHLORDANE	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
DUP-1-20200730	460-214767-8	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0019	mg/kg
DUP-1-20200730	460-214767-8	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00083	mg/kg
DUP-1-20200730	460-214767-8	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-1-20200730	460-214767-8	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0075	0.0012	mg/kg
DUP-1-20200730	460-214767-8	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00076	mg/kg
SB-19(4-5)-20200730	460-214767-1	ENDRIN	8/5/2020		Y	N	U		U	0.0073	0.0010	mg/kg
SB-19(4-5)-20200730	460-214767-1	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-19(4-5)-20200730	460-214767-1	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0073	0.00091	mg/kg
SB-19(4-5)-20200730	460-214767-1	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-19(4-5)-20200730	460-214767-1	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00094	mg/kg
SB-19(4-5)-20200730	460-214767-1	P,P'-DDE	8/5/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-19(4-5)-20200730	460-214767-1	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0073	0.0017	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(4-5)-20200730	460-214767-1	TOXAPHENE	8/5/2020		Y	N	U		U	0.073	0.026	mg/kg
SB-19(4-5)-20200730	460-214767-1	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00067	mg/kg
SB-19(4-5)-20200730	460-214767-1	P,P'-DDT	8/5/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-19(4-5)-20200730	460-214767-1	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0073	0.0014	mg/kg
SB-19(4-5)-20200730	460-214767-1	CHLORDANE	8/5/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-19(4-5)-20200730	460-214767-1	trans-Chlordane	8/5/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-19(4-5)-20200730	460-214767-1	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00081	mg/kg
SB-19(4-5)-20200730	460-214767-1	ALDRIN	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-19(4-5)-20200730	460-214767-1	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-19(4-5)-20200730	460-214767-1	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-19(4-5)-20200730	460-214767-1	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-19(4-5)-20200730	460-214767-1	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0073	0.0017	mg/kg
SB-19(4-5)-20200730	460-214767-1	P,P'-DDD	8/5/2020		Y	N	U		U	0.0073	0.0012	mg/kg
SB-19(4-5)-20200730	460-214767-1	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-19(4-5)-20200730	460-214767-1	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0073	0.0019	mg/kg
SB-19(4-5)-20200730	460-214767-1	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00074	mg/kg
SB-19(4-5)-20200730	460-214767-1	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0073	0.0012	mg/kg
SB-19(7-8)-20200730	460-214767-2	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-19(7-8)-20200730	460-214767-2	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-19(7-8)-20200730	460-214767-2	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-19(7-8)-20200730	460-214767-2	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00078	mg/kg
SB-19(7-8)-20200730	460-214767-2	ALDRIN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-19(7-8)-20200730	460-214767-2	TOXAPHENE	8/5/2020		Y	N	U		U	0.077	0.028	mg/kg

SDG: 4602147671

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	P,P'-DDT	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-19(7-8)-20200730	460-214767-2	trans-Chlordane	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-19(7-8)-20200730	460-214767-2	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-19(7-8)-20200730	460-214767-2	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0020	mg/kg
SB-19(7-8)-20200730	460-214767-2	P,P'-DDE	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-19(7-8)-20200730	460-214767-2	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-19(7-8)-20200730	460-214767-2	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00086	mg/kg
SB-19(7-8)-20200730	460-214767-2	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-19(7-8)-20200730	460-214767-2	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0077	0.00097	mg/kg
SB-19(7-8)-20200730	460-214767-2	ENDRIN	8/5/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-19(7-8)-20200730	460-214767-2	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-19(7-8)-20200730	460-214767-2	P,P'-DDD	8/5/2020		Y	N	U		U	0.0077	0.0013	mg/kg
SB-19(7-8)-20200730	460-214767-2	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-19(7-8)-20200730	460-214767-2	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-19(7-8)-20200730	460-214767-2	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0077	0.0015	mg/kg
SB-19(7-8)-20200730	460-214767-2	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00071	mg/kg
SB-19(7-8)-20200730	460-214767-2	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-19(7-8)-20200730	460-214767-2	CHLORDANE	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	P,P'-DDE	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ENDRIN	8/5/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00078	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg

SDG: 4602147671

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00086	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0020	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CHLORDANE	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ALDRIN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0077	0.00096	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0077	0.0015	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00071	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	P,P'-DDD	8/5/2020		Y	N	U		U	0.0077	0.0013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	P,P'-DDT	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TOXAPHENE	8/5/2020		Y	N	U		U	0.077	0.028	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	trans-Chlordane	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-23(2-3)-20200730	460-214767-4	TOXAPHENE	8/5/2020		Y	N	U		U	0.081	0.029	mg/kg
SB-23(2-3)-20200730	460-214767-4	DIELDRIN	8/5/2020		Y	N	U		U	0.0024	0.0010	mg/kg
SB-23(2-3)-20200730	460-214767-4	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0024	0.00075	mg/kg
SB-23(2-3)-20200730	460-214767-4	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0081	0.00095	mg/kg
SB-23(2-3)-20200730	460-214767-4	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0081	0.0012	mg/kg

SDG: 4602147671

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0081	0.0018	mg/kg
SB-23(2-3)-20200730	460-214767-4	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0024	0.00049	mg/kg
SB-23(2-3)-20200730	460-214767-4	P,P'-DDT	8/5/2020		Y	N	U		U	0.0081	0.0015	mg/kg
SB-23(2-3)-20200730	460-214767-4	P,P'-DDE	8/5/2020		Y	N	U		U	0.0081	0.00095	mg/kg
SB-23(2-3)-20200730	460-214767-4	trans-Chlordane	8/5/2020		Y	N	U		U	0.0081	0.0014	mg/kg
SB-23(2-3)-20200730	460-214767-4	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-23(2-3)-20200730	460-214767-4	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0081	0.0010	mg/kg
SB-23(2-3)-20200730	460-214767-4	ENDRIN	8/5/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-23(2-3)-20200730	460-214767-4	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0081	0.0016	mg/kg
SB-23(2-3)-20200730	460-214767-4	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0081	0.0019	mg/kg
SB-23(2-3)-20200730	460-214767-4	P,P'-DDD	8/5/2020		Y	N	U		U	0.0081	0.0014	mg/kg
SB-23(2-3)-20200730	460-214767-4	CHLORDANE	8/5/2020		Y	N	U		U	0.081	0.020	mg/kg
SB-23(2-3)-20200730	460-214767-4	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0081	0.0021	mg/kg
SB-23(2-3)-20200730	460-214767-4	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0024	0.00090	mg/kg
SB-23(2-3)-20200730	460-214767-4	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-23(2-3)-20200730	460-214767-4	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0081	0.0013	mg/kg
SB-23(2-3)-20200730	460-214767-4	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0024	0.00082	mg/kg
SB-23(2-3)-20200730	460-214767-4	ALDRIN	8/5/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-23(2-3)-20200730	460-214767-4	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.081	0.020	mg/kg
SB-23(5-6)-20200730	460-214767-5	ENDRIN	8/5/2020		Y	N	U		U	0.0078	0.0011	mg/kg
SB-23(5-6)-20200730	460-214767-5	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-23(5-6)-20200730	460-214767-5	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-23(5-6)-20200730	460-214767-5	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00087	mg/kg

SDG: 4602147671

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0078	0.0020	mg/kg
SB-23(5-6)-20200730	460-214767-5	CHLORDANE	8/5/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-23(5-6)-20200730	460-214767-5	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-23(5-6)-20200730	460-214767-5	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00079	mg/kg
SB-23(5-6)-20200730	460-214767-5	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-23(5-6)-20200730	460-214767-5	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00072	mg/kg
SB-23(5-6)-20200730	460-214767-5	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0078	0.00098	mg/kg
SB-23(5-6)-20200730	460-214767-5	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00048	mg/kg
SB-23(5-6)-20200730	460-214767-5	ALDRIN	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-23(5-6)-20200730	460-214767-5	P,P'-DDD	8/5/2020		Y	N	U		U	0.0078	0.0013	mg/kg
SB-23(5-6)-20200730	460-214767-5	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-23(5-6)-20200730	460-214767-5	trans-Chlordane	8/5/2020		Y	N	U		U	0.0078	0.0014	mg/kg
SB-23(5-6)-20200730	460-214767-5	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0078	0.00092	mg/kg
SB-23(5-6)-20200730	460-214767-5	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0078	0.0015	mg/kg
SB-23(5-6)-20200730	460-214767-5	TOXAPHENE	8/5/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-23(5-6)-20200730	460-214767-5	P,P'-DDT	8/5/2020		Y	N	U		U	0.0078	0.0014	mg/kg
SB-23(5-6)-20200730	460-214767-5	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-23(5-6)-20200730	460-214767-5	P,P'-DDE	8/5/2020		Y	N	U		U	0.0078	0.00092	mg/kg
SB-23(5-6)-20200730	460-214767-5	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-23(5-6)-20200730	460-214767-5	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-24(2-3)-20200730	460-214767-6	trans-Chlordane	8/5/2020		Y	N	U		U	0.0078	0.0014	mg/kg
SB-24(2-3)-20200730	460-214767-6	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00080	mg/kg
SB-24(2-3)-20200730	460-214767-6	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg

SDG: 4602147671

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00088	mg/kg
SB-24(2-3)-20200730	460-214767-6	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0078	0.0020	mg/kg
SB-24(2-3)-20200730	460-214767-6	CHLORDANE	8/5/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-24(2-3)-20200730	460-214767-6	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-24(2-3)-20200730	460-214767-6	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00048	mg/kg
SB-24(2-3)-20200730	460-214767-6	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-24(2-3)-20200730	460-214767-6	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-24(2-3)-20200730	460-214767-6	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0078	0.00098	mg/kg
SB-24(2-3)-20200730	460-214767-6	P,P'-DDT	8/5/2020		Y	N	U		U	0.0078	0.0014	mg/kg
SB-24(2-3)-20200730	460-214767-6	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-24(2-3)-20200730	460-214767-6	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-24(2-3)-20200730	460-214767-6	ALDRIN	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-24(2-3)-20200730	460-214767-6	TOXAPHENE	8/5/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-24(2-3)-20200730	460-214767-6	P,P'-DDE	8/5/2020		Y	N	U		U	0.0078	0.00092	mg/kg
SB-24(2-3)-20200730	460-214767-6	P,P'-DDD	8/5/2020		Y	N	U		U	0.0078	0.0013	mg/kg
SB-24(2-3)-20200730	460-214767-6	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-24(2-3)-20200730	460-214767-6	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-24(2-3)-20200730	460-214767-6	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0078	0.00092	mg/kg
SB-24(2-3)-20200730	460-214767-6	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00073	mg/kg
SB-24(2-3)-20200730	460-214767-6	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0078	0.0015	mg/kg
SB-24(2-3)-20200730	460-214767-6	ENDRIN	8/5/2020		Y	N	U		U	0.0078	0.0011	mg/kg
SB-24(8-9)-20200730	460-214767-7	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-24(8-9)-20200730	460-214767-7	ENDRIN	8/5/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-24(8-9)-20200730	460-214767-7	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00078	mg/kg

SDG: 4602147671

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-24(8-9)-20200730	460-214767-7	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-24(8-9)-20200730	460-214767-7	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00086	mg/kg
SB-24(8-9)-20200730	460-214767-7	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0020	mg/kg
SB-24(8-9)-20200730	460-214767-7	CHLORDANE	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-24(8-9)-20200730	460-214767-7	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-24(8-9)-20200730	460-214767-7	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-24(8-9)-20200730	460-214767-7	ALDRIN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-24(8-9)-20200730	460-214767-7	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0077	0.00097	mg/kg
SB-24(8-9)-20200730	460-214767-7	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-24(8-9)-20200730	460-214767-7	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-24(8-9)-20200730	460-214767-7	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0077	0.0015	mg/kg
SB-24(8-9)-20200730	460-214767-7	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00071	mg/kg
SB-24(8-9)-20200730	460-214767-7	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-24(8-9)-20200730	460-214767-7	P,P'-DDD	8/5/2020		Y	N	U		U	0.0077	0.0013	mg/kg
SB-24(8-9)-20200730	460-214767-7	P,P'-DDE	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-24(8-9)-20200730	460-214767-7	P,P'-DDT	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-24(8-9)-20200730	460-214767-7	TOXAPHENE	8/5/2020		Y	N	U		U	0.077	0.028	mg/kg
SB-24(8-9)-20200730	460-214767-7	trans-Chlordane	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-24(8-9)-20200730	460-214767-7	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-24(8-9)-20200730	460-214767-7	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg

SDG: 4602147671

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
DUP-1-20200730	460-214767-8	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
DUP-1-20200730	460-214767-8	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
DUP-1-20200730	460-214767-8	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
DUP-1-20200730	460-214767-8	TOTAL PCBS	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-1-20200730	460-214767-8	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-1-20200730	460-214767-8	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-1-20200730	460-214767-8	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-1-20200730	460-214767-8	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-19(4-5)-20200730	460-214767-1	TOTAL PCBS	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-19(4-5)-20200730	460-214767-1	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.073	0.0097	mg/kg
SB-19(7-8)-20200730	460-214767-2	TOTAL PCBS	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg

SDG: 4602147671

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-19(7-8)-20200730	460-214767-2	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TOTAL PCBS	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	TOTAL PCBS	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg

SDG: 4602147671

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	TOTAL PCBS	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-24(2-3)-20200730	460-214767-6	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-24(2-3)-20200730	460-214767-6	TOTAL PCBS	8/5/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-24(8-9)-20200730	460-214767-7	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-24(8-9)-20200730	460-214767-7	TOTAL PCBS	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00086	0.00029	mg/kg
DUP-1-20200730	460-214767-8	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00086	0.00019	mg/kg
DUP-1-20200730	460-214767-8	BROMOFORM	8/6/2020		Y	N	U		U	0.00086	0.00037	mg/kg
DUP-1-20200730	460-214767-8	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00086	0.00041	mg/kg
DUP-1-20200730	460-214767-8	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00086	0.00023	mg/kg
DUP-1-20200730	460-214767-8	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00086	0.00033	mg/kg
DUP-1-20200730	460-214767-8	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00086	0.00015	mg/kg
DUP-1-20200730	460-214767-8	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00086	0.00045	mg/kg
DUP-1-20200730	460-214767-8	CHLOROFORM	8/6/2020		Y	N	U		U	0.00086	0.00027	mg/kg
DUP-1-20200730	460-214767-8	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00086	0.00037	mg/kg
DUP-1-20200730	460-214767-8	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00086	0.00011	mg/kg
DUP-1-20200730	460-214767-8	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00086	0.00024	mg/kg
DUP-1-20200730	460-214767-8	BENZENE	8/6/2020		Y	N	U		U	0.00086	0.00022	mg/kg
DUP-1-20200730	460-214767-8	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00086	0.00017	mg/kg
DUP-1-20200730	460-214767-8	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00086	0.00017	mg/kg
DUP-1-20200730	460-214767-8	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00086	0.00015	mg/kg
DUP-1-20200730	460-214767-8	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0043	0.0023	mg/kg
DUP-1-20200730	460-214767-8	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00086	0.00043	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00086	0.00040	mg/kg
DUP-1-20200730	460-214767-8	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00086	0.00017	mg/kg
DUP-1-20200730	460-214767-8	STYRENE	8/6/2020		Y	N	U		U	0.00086	0.00024	mg/kg
DUP-1-20200730	460-214767-8	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00086	0.00013	mg/kg
DUP-1-20200730	460-214767-8	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00086	0.00016	mg/kg
DUP-1-20200730	460-214767-8	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0043	0.0037	mg/kg
DUP-1-20200730	460-214767-8	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0043	0.0013	mg/kg
DUP-1-20200730	460-214767-8	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00086	0.00020	mg/kg
DUP-1-20200730	460-214767-8	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00086	0.00011	mg/kg
DUP-1-20200730	460-214767-8	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00086	0.00026	mg/kg
DUP-1-20200730	460-214767-8	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00086	0.00018	mg/kg
DUP-1-20200730	460-214767-8	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00086	0.00019	mg/kg
DUP-1-20200730	460-214767-8	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00086	0.00016	mg/kg
DUP-1-20200730	460-214767-8	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00086	0.00022	mg/kg
DUP-1-20200730	460-214767-8	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00086	0.00040	mg/kg
DUP-1-20200730	460-214767-8	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00086	0.00024	mg/kg
DUP-1-20200730	460-214767-8	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00086	0.00012	mg/kg
DUP-1-20200730	460-214767-8	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00086	0.00025	mg/kg
DUP-1-20200730	460-214767-8	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00086	0.00036	mg/kg
DUP-1-20200730	460-214767-8	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00086	0.00014	mg/kg
DUP-1-20200730	460-214767-8	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00086	0.00019	mg/kg
DUP-1-20200730	460-214767-8	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.017	0.0079	mg/kg
DUP-1-20200730	460-214767-8	2-HEXANONE	8/6/2020		Y	N	U		U	0.0043	0.0015	mg/kg
DUP-1-20200730	460-214767-8	ACETONE	8/6/2020		Y	N	U		U	0.0052	0.0049	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00086	0.00015	mg/kg
DUP-1-20200730	460-214767-8	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00086	0.00031	mg/kg
DUP-1-20200730	460-214767-8	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00086	0.00012	mg/kg
DUP-1-20200730	460-214767-8	TOLUENE	8/6/2020		Y	N	U		U	0.00086	0.00020	mg/kg
DUP-1-20200730	460-214767-8	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00086	0.00021	mg/kg
DUP-1-20200730	460-214767-8	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00086	0.00023	mg/kg
DUP-1-20200730	460-214767-8	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00086	0.00012	mg/kg
DUP-1-20200730	460-214767-8	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00086	0.00035	mg/kg
DUP-1-20200730	460-214767-8	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00086	0.00047	mg/kg
DUP-1-20200730	460-214767-8	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00086	0.00018	mg/kg
FB-20200730	460-214767-9	CHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200730	460-214767-9	CHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200730	460-214767-9	CHLOROFORM	8/7/2020		Y	N	U		U	1.0	0.33	ug/l
FB-20200730	460-214767-9	CHLOROMETHANE	8/7/2020		Y	N	U	UJ	UJ	1.0	0.40	ug/l
FB-20200730	460-214767-9	Cis-1,2-Dichloroethylene	8/7/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200730	460-214767-9	CIS-1,3-DICHLOROPROPENE	8/7/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200730	460-214767-9	CARBON TETRACHLORIDE	8/7/2020		Y	N	U		U	1.0	0.21	ug/l
FB-20200730	460-214767-9	CYCLOHEXANE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200730	460-214767-9	BROMOCHLOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.41	ug/l
FB-20200730	460-214767-9	DIBROMOCHLOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.28	ug/l
FB-20200730	460-214767-9	1,2-DICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200730	460-214767-9	M,P-XYLENES	8/7/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200730	460-214767-9	CARBON DISULFIDE	8/7/2020		Y	N	U		U	1.0	0.82	ug/l
FB-20200730	460-214767-9	BROMOMETHANE	8/7/2020		Y	N	U		U	1.0	0.55	ug/l

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200730	460-214767-9	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/7/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200730	460-214767-9	BROMODICHLOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200730	460-214767-9	BENZENE	8/7/2020		Y	N	U		U	1.0	0.20	ug/l
FB-20200730	460-214767-9	ACETONE	8/7/2020		Y	N	U		U	5.0	4.4	ug/l
FB-20200730	460-214767-9	2-HEXANONE	8/7/2020		Y	N	U		U	5.0	1.1	ug/l
FB-20200730	460-214767-9	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	50	28	ug/l
FB-20200730	460-214767-9	1,4-DICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.33	ug/l
FB-20200730	460-214767-9	1,3-DICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200730	460-214767-9	1,2-DICHLOROPROPANE	8/7/2020		Y	N	U		U	1.0	0.35	ug/l
FB-20200730	460-214767-9	1,1,2,2-TETRACHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200730	460-214767-9	BROMOFORM	8/7/2020		Y	N	U		U	1.0	0.54	ug/l
FB-20200730	460-214767-9	TRICHLOROFLUOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200730	460-214767-9	1,1,1-TRICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200730	460-214767-9	METHYL ACETATE	8/7/2020		Y	N	U		U	5.0	0.79	ug/l
FB-20200730	460-214767-9	METHYL ETHYL KETONE (2-BUTANONE)	8/7/2020		Y	N	U		U	5.0	1.9	ug/l
FB-20200730	460-214767-9	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/7/2020		Y	N	U		U	5.0	1.3	ug/l
FB-20200730	460-214767-9	METHYLCYCLOHEXANE	8/7/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200730	460-214767-9	METHYLENE CHLORIDE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200730	460-214767-9	O-XYLENE (1,2-DIMETHYLBENZENE)	8/7/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200730	460-214767-9	STYRENE	8/7/2020		Y	N	U		U	1.0	0.42	ug/l
FB-20200730	460-214767-9	TERT-BUTYL METHYL ETHER	8/7/2020		Y	N	U		U	1.0	0.47	ug/l
FB-20200730	460-214767-9	TETRACHLOROETHYLENE(PCE)	8/7/2020		Y	N	U		U	1.0	0.25	ug/l
FB-20200730	460-214767-9	TRANS-1,2-DICHLOROETHENE	8/7/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200730	460-214767-9	1,1-DICHLOROETHENE	8/7/2020		Y	N	U		U	1.0	0.26	ug/l

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200730	460-214767-9	TRICHLOROETHYLENE (TCE)	8/7/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200730	460-214767-9	1,1,2-TRICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200730	460-214767-9	VINYL CHLORIDE	8/7/2020		Y	N	U		U	1.0	0.17	ug/l
FB-20200730	460-214767-9	TOLUENE	8/7/2020	0.56	Y	Y	J		J	1.0	0.38	ug/l
FB-20200730	460-214767-9	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/7/2020		Y	N	U		U	1.0	0.50	ug/l
FB-20200730	460-214767-9	1,2-DIBROMO-3-CHLOROPROPANE	8/7/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200730	460-214767-9	Isopropylbenzene (Cumene)	8/7/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200730	460-214767-9	ETHYLBENZENE	8/7/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200730	460-214767-9	1,2,4-TRICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200730	460-214767-9	DICHLORODIFLUOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200730	460-214767-9	1,2,3-TRICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200730	460-214767-9	1,2-DICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200730	460-214767-9	1,1-DICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200730	460-214767-9	TRANS-1,3-DICHLOROPROPENE	8/7/2020		Y	N	U		U	1.0	0.49	ug/l
SB-19(4-5)-20200730	460-214767-1	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0044	0.0024	mg/kg
SB-19(4-5)-20200730	460-214767-1	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-19(4-5)-20200730	460-214767-1	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00087	0.00044	mg/kg
SB-19(4-5)-20200730	460-214767-1	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-19(4-5)-20200730	460-214767-1	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-19(4-5)-20200730	460-214767-1	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-19(4-5)-20200730	460-214767-1	TOLUENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(4-5)-20200730	460-214767-1	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00087	0.00021	mg/kg
SB-19(4-5)-20200730	460-214767-1	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00031	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(4-5)-20200730	460-214767-1	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.017	0.0080	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00014	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-19(4-5)-20200730	460-214767-1	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-19(4-5)-20200730	460-214767-1	BENZENE	8/6/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00018	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-19(4-5)-20200730	460-214767-1	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-19(4-5)-20200730	460-214767-1	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-19(4-5)-20200730	460-214767-1	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00029	mg/kg
SB-19(4-5)-20200730	460-214767-1	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-19(4-5)-20200730	460-214767-1	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-19(4-5)-20200730	460-214767-1	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-19(4-5)-20200730	460-214767-1	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00087	0.00012	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(4-5)-20200730	460-214767-1	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00038	mg/kg
SB-19(4-5)-20200730	460-214767-1	2-HEXANONE	8/6/2020		Y	N	U		U	0.0044	0.0015	mg/kg
SB-19(4-5)-20200730	460-214767-1	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00046	mg/kg
SB-19(4-5)-20200730	460-214767-1	ACETONE	8/6/2020		Y	N	U		U	0.0052	0.0050	mg/kg
SB-19(4-5)-20200730	460-214767-1	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00087	0.00034	mg/kg
SB-19(4-5)-20200730	460-214767-1	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-19(4-5)-20200730	460-214767-1	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00041	mg/kg
SB-19(4-5)-20200730	460-214767-1	BROMOFORM	8/6/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-19(4-5)-20200730	460-214767-1	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00022	mg/kg
SB-19(4-5)-20200730	460-214767-1	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00025	mg/kg
SB-19(4-5)-20200730	460-214767-1	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-19(4-5)-20200730	460-214767-1	CHLOROFORM	8/6/2020		Y	N	U		U	0.00087	0.00028	mg/kg
SB-19(4-5)-20200730	460-214767-1	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00035	mg/kg
SB-19(4-5)-20200730	460-214767-1	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00048	mg/kg
SB-19(4-5)-20200730	460-214767-1	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-19(4-5)-20200730	460-214767-1	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0044	0.0038	mg/kg
SB-19(4-5)-20200730	460-214767-1	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0044	0.0014	mg/kg
SB-19(4-5)-20200730	460-214767-1	STYRENE	8/6/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-19(7-8)-20200730	460-214767-2	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00038	mg/kg
SB-19(7-8)-20200730	460-214767-2	BENZENE	8/6/2020		Y	N	U		U	0.00087	0.00022	mg/kg
SB-19(7-8)-20200730	460-214767-2	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-19(7-8)-20200730	460-214767-2	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00022	mg/kg
SB-19(7-8)-20200730	460-214767-2	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00041	mg/kg
SB-19(7-8)-20200730	460-214767-2	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00087	0.00023	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00087	0.00034	mg/kg
SB-19(7-8)-20200730	460-214767-2	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-19(7-8)-20200730	460-214767-2	ACETONE	8/6/2020		Y	N	U		U	0.0052	0.0050	mg/kg
SB-19(7-8)-20200730	460-214767-2	CHLOROFORM	8/6/2020		Y	N	U		U	0.00087	0.00028	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00014	mg/kg
SB-19(7-8)-20200730	460-214767-2	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-19(7-8)-20200730	460-214767-2	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-19(7-8)-20200730	460-214767-2	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-19(7-8)-20200730	460-214767-2	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-19(7-8)-20200730	460-214767-2	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00045	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00018	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.017	0.0080	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00031	mg/kg
SB-19(7-8)-20200730	460-214767-2	2-HEXANONE	8/6/2020		Y	N	U		U	0.0044	0.0015	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00087	0.00037	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00029	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-19(7-8)-20200730	460-214767-2	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-19(7-8)-20200730	460-214767-2	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0044	0.0037	mg/kg
SB-19(7-8)-20200730	460-214767-2	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00087	0.00021	mg/kg
SB-19(7-8)-20200730	460-214767-2	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-19(7-8)-20200730	460-214767-2	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-19(7-8)-20200730	460-214767-2	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-19(7-8)-20200730	460-214767-2	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0044	0.0024	mg/kg
SB-19(7-8)-20200730	460-214767-2	TOLUENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-19(7-8)-20200730	460-214767-2	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-19(7-8)-20200730	460-214767-2	BROMOFORM	8/6/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-19(7-8)-20200730	460-214767-2	STYRENE	8/6/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-19(7-8)-20200730	460-214767-2	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-19(7-8)-20200730	460-214767-2	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00087	0.00012	mg/kg
SB-19(7-8)-20200730	460-214767-2	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00048	mg/kg
SB-19(7-8)-20200730	460-214767-2	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00035	mg/kg
SB-19(7-8)-20200730	460-214767-2	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-19(7-8)-20200730	460-214767-2	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-19(7-8)-20200730	460-214767-2	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00087	0.00043	mg/kg
SB-19(7-8)-20200730	460-214767-2	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0044	0.0014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0045	0.0024	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00037	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00090	0.00022	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00049	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TOLUENE	8/6/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	STYRENE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00090	0.00045	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ACETONE	8/6/2020	0.0069	Y	Y				0.0054	0.0052	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CARBON DISULFIDE	8/6/2020	0.00099	Y	Y				0.00090	0.00024	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0045	0.0014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0045	0.0039	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00030	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0015	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00047	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00090	0.00035	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00043	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BROMOFORM	8/6/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	UNKNOWN VOLATILE ORGANIC WITH 2ND HIGHEST CONC.	8/6/2020	0.0062	Y	Y	J		J	0	0	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZENE	8/6/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.018	0.0083	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	UNKNOWN VOLATILE ORGANIC WITH 3RD HIGHEST CONC.	8/6/2020	0.0046	Y	Y	J		J	0	0	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00032	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00039	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CHLOROFORM	8/6/2020		Y	N	U		U	0.00090	0.00029	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	UNKNOWN VOLATILE ORGANIC WITH HIGHEST CONC.	8/6/2020	0.0092	Y	Y	J		J	0	0	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-Methyl-Eicosane	8/6/2020	0.0056	Y	Y	JN		J	0	0	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-23(2-3)-20200730	460-214767-4	BENZENE	8/6/2020		Y	N	U		U	0.00094	0.00024	mg/kg
SB-23(2-3)-20200730	460-214767-4	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0047	0.0040	mg/kg
SB-23(2-3)-20200730	460-214767-4	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0047	0.0015	mg/kg
SB-23(2-3)-20200730	460-214767-4	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00018	mg/kg
SB-23(2-3)-20200730	460-214767-4	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-23(2-3)-20200730	460-214767-4	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00024	mg/kg
SB-23(2-3)-20200730	460-214767-4	BROMOFORM	8/6/2020		Y	N	U		U	0.00094	0.00040	mg/kg
SB-23(2-3)-20200730	460-214767-4	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00044	mg/kg
SB-23(2-3)-20200730	460-214767-4	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00094	0.00036	mg/kg
SB-23(2-3)-20200730	460-214767-4	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-23(2-3)-20200730	460-214767-4	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00049	mg/kg
SB-23(2-3)-20200730	460-214767-4	CHLOROFORM	8/6/2020		Y	N	U		U	0.00094	0.00030	mg/kg
SB-23(2-3)-20200730	460-214767-4	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00041	mg/kg
SB-23(2-3)-20200730	460-214767-4	TOLUENE	8/6/2020		Y	N	U		U	0.00094	0.00022	mg/kg
SB-23(2-3)-20200730	460-214767-4	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg
SB-23(2-3)-20200730	460-214767-4	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00019	mg/kg
SB-23(2-3)-20200730	460-214767-4	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00032	mg/kg
SB-23(2-3)-20200730	460-214767-4	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00094	0.00023	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00094	0.00014	mg/kg
SB-23(2-3)-20200730	460-214767-4	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00038	mg/kg
SB-23(2-3)-20200730	460-214767-4	Cis-1,2-Dichloroethylene	8/6/2020	0.0019	Y	Y				0.00094	0.00014	mg/kg
SB-23(2-3)-20200730	460-214767-4	CARBON DISULFIDE	8/6/2020	0.00095	Y	Y				0.00094	0.00025	mg/kg
SB-23(2-3)-20200730	460-214767-4	ACETONE	8/6/2020	0.0084	Y	Y				0.0056	0.0054	mg/kg
SB-23(2-3)-20200730	460-214767-4	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00051	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00022	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.019	0.0086	mg/kg
SB-23(2-3)-20200730	460-214767-4	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00034	mg/kg
SB-23(2-3)-20200730	460-214767-4	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00094	0.00025	mg/kg
SB-23(2-3)-20200730	460-214767-4	2-HEXANONE	8/6/2020		Y	N	U		U	0.0047	0.0016	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00028	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00019	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00020	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00094	0.00043	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00014	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00028	mg/kg
SB-23(2-3)-20200730	460-214767-4	STYRENE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-23(2-3)-20200730	460-214767-4	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00094	0.00013	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00094	0.00040	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00015	mg/kg
SB-23(2-3)-20200730	460-214767-4	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00094	0.00012	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg
SB-23(2-3)-20200730	460-214767-4	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00094	0.00018	mg/kg
SB-23(2-3)-20200730	460-214767-4	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00094	0.00044	mg/kg
SB-23(2-3)-20200730	460-214767-4	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00094	0.00047	mg/kg
SB-23(2-3)-20200730	460-214767-4	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0047	0.0025	mg/kg
SB-23(2-3)-20200730	460-214767-4	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00094	0.00016	mg/kg
SB-23(2-3)-20200730	460-214767-4	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00094	0.00012	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00090	0.00041	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00032	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-23(5-6)-20200730	460-214767-5	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00047	mg/kg
SB-23(5-6)-20200730	460-214767-5	CHLOROFORM	8/6/2020		Y	N	U		U	0.00090	0.00029	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-23(5-6)-20200730	460-214767-5	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-23(5-6)-20200730	460-214767-5	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00090	0.00017	mg/kg
SB-23(5-6)-20200730	460-214767-5	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00039	mg/kg
SB-23(5-6)-20200730	460-214767-5	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0045	0.0014	mg/kg
SB-23(5-6)-20200730	460-214767-5	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0045	0.0039	mg/kg
SB-23(5-6)-20200730	460-214767-5	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-23(5-6)-20200730	460-214767-5	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-23(5-6)-20200730	460-214767-5	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00090	0.00035	mg/kg
SB-23(5-6)-20200730	460-214767-5	BROMOFORM	8/6/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-23(5-6)-20200730	460-214767-5	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZENE	8/6/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-23(5-6)-20200730	460-214767-5	ACETONE	8/6/2020		Y	N	U		U	0.0054	0.0052	mg/kg
SB-23(5-6)-20200730	460-214767-5	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0015	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.018	0.0083	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-23(5-6)-20200730	460-214767-5	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00043	mg/kg
SB-23(5-6)-20200730	460-214767-5	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00037	mg/kg
SB-23(5-6)-20200730	460-214767-5	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00090	0.00045	mg/kg
SB-23(5-6)-20200730	460-214767-5	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-23(5-6)-20200730	460-214767-5	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00049	mg/kg
SB-23(5-6)-20200730	460-214767-5	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-23(5-6)-20200730	460-214767-5	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00090	0.00024	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00090	0.00022	mg/kg
SB-23(5-6)-20200730	460-214767-5	TOLUENE	8/6/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-23(5-6)-20200730	460-214767-5	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-23(5-6)-20200730	460-214767-5	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-23(5-6)-20200730	460-214767-5	STYRENE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-23(5-6)-20200730	460-214767-5	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00017	mg/kg
SB-23(5-6)-20200730	460-214767-5	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-23(5-6)-20200730	460-214767-5	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0045	0.0024	mg/kg
SB-23(5-6)-20200730	460-214767-5	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-23(5-6)-20200730	460-214767-5	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-23(5-6)-20200730	460-214767-5	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-23(5-6)-20200730	460-214767-5	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00030	mg/kg
SB-23(5-6)-20200730	460-214767-5	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-23(5-6)-20200730	460-214767-5	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-24(2-3)-20200730	460-214767-6	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00094	0.00014	mg/kg
SB-24(2-3)-20200730	460-214767-6	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00041	mg/kg
SB-24(2-3)-20200730	460-214767-6	CHLOROFORM	8/6/2020		Y	N	U		U	0.00094	0.00030	mg/kg
SB-24(2-3)-20200730	460-214767-6	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00049	mg/kg
SB-24(2-3)-20200730	460-214767-6	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-24(2-3)-20200730	460-214767-6	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00094	0.00025	mg/kg
SB-24(2-3)-20200730	460-214767-6	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00019	mg/kg
SB-24(2-3)-20200730	460-214767-6	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00044	mg/kg
SB-24(2-3)-20200730	460-214767-6	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00094	0.00036	mg/kg
SB-24(2-3)-20200730	460-214767-6	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-24(2-3)-20200730	460-214767-6	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg

SDG: 4602147671

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00022	mg/kg
SB-24(2-3)-20200730	460-214767-6	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00032	mg/kg
SB-24(2-3)-20200730	460-214767-6	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0047	0.0025	mg/kg
SB-24(2-3)-20200730	460-214767-6	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00094	0.00012	mg/kg
SB-24(2-3)-20200730	460-214767-6	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00094	0.00016	mg/kg
SB-24(2-3)-20200730	460-214767-6	BROMOFORM	8/6/2020		Y	N	U		U	0.00094	0.00040	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-24(2-3)-20200730	460-214767-6	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00094	0.00047	mg/kg
SB-24(2-3)-20200730	460-214767-6	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00018	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00019	mg/kg
SB-24(2-3)-20200730	460-214767-6	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00094	0.00044	mg/kg
SB-24(2-3)-20200730	460-214767-6	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00094	0.00023	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00028	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00014	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00094	0.00043	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00034	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00015	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg
SB-24(2-3)-20200730	460-214767-6	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00024	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00094	0.00040	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.019	0.0086	mg/kg
SB-24(2-3)-20200730	460-214767-6	2-HEXANONE	8/6/2020		Y	N	U		U	0.0047	0.0016	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	BENZENE	8/6/2020		Y	N	U		U	0.00094	0.00024	mg/kg
SB-24(2-3)-20200730	460-214767-6	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00028	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00020	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-24(2-3)-20200730	460-214767-6	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00051	mg/kg
SB-24(2-3)-20200730	460-214767-6	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0047	0.0040	mg/kg
SB-24(2-3)-20200730	460-214767-6	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00094	0.00013	mg/kg
SB-24(2-3)-20200730	460-214767-6	ACETONE	8/6/2020	0.010	Y	Y				0.0056	0.0054	mg/kg
SB-24(2-3)-20200730	460-214767-6	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0047	0.0015	mg/kg
SB-24(2-3)-20200730	460-214767-6	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00094	0.00018	mg/kg
SB-24(2-3)-20200730	460-214767-6	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00038	mg/kg
SB-24(2-3)-20200730	460-214767-6	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00094	0.00014	mg/kg
SB-24(2-3)-20200730	460-214767-6	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00094	0.00025	mg/kg
SB-24(2-3)-20200730	460-214767-6	TOLUENE	8/6/2020		Y	N	U		U	0.00094	0.00022	mg/kg
SB-24(2-3)-20200730	460-214767-6	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00094	0.00012	mg/kg
SB-24(2-3)-20200730	460-214767-6	STYRENE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-24(8-9)-20200730	460-214767-7	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0015	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00014	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00089	0.00038	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00026	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00089	0.00041	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-24(8-9)-20200730	460-214767-7	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00027	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00019	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00032	mg/kg
SB-24(8-9)-20200730	460-214767-7	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00089	0.00039	mg/kg
SB-24(8-9)-20200730	460-214767-7	TRICHLOROETHYLENE (TCE)	8/6/2020	0.0021	Y	Y				0.00089	0.00013	mg/kg
SB-24(8-9)-20200730	460-214767-7	TETRACHLOROETHYLENE(PCE)	8/6/2020	0.015	Y	Y				0.00089	0.00013	mg/kg
SB-24(8-9)-20200730	460-214767-7	Cis-1,2-Dichloroethylene	8/6/2020	0.0011	Y	Y				0.00089	0.00014	mg/kg
SB-24(8-9)-20200730	460-214767-7	ACETONE	8/6/2020	0.0068	Y	Y				0.0054	0.0051	mg/kg
SB-24(8-9)-20200730	460-214767-7	CARBON DISULFIDE	8/6/2020	0.00087	Y	Y	J		J	0.00089	0.00024	mg/kg
SB-24(8-9)-20200730	460-214767-7	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-24(8-9)-20200730	460-214767-7	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00042	mg/kg
SB-24(8-9)-20200730	460-214767-7	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00089	0.00024	mg/kg
SB-24(8-9)-20200730	460-214767-7	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-24(8-9)-20200730	460-214767-7	CHLOROFORM	8/6/2020		Y	N	U		U	0.00089	0.00028	mg/kg
SB-24(8-9)-20200730	460-214767-7	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00089	0.00047	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.018	0.0082	mg/kg
SB-24(8-9)-20200730	460-214767-7	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00035	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00021	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	BROMOFORM	8/6/2020		Y	N	U		U	0.00089	0.00038	mg/kg
SB-24(8-9)-20200730	460-214767-7	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00023	mg/kg
SB-24(8-9)-20200730	460-214767-7	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-24(8-9)-20200730	460-214767-7	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00041	mg/kg
SB-24(8-9)-20200730	460-214767-7	TOLUENE	8/6/2020		Y	N	U		U	0.00089	0.00021	mg/kg
SB-24(8-9)-20200730	460-214767-7	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00089	0.00022	mg/kg
SB-24(8-9)-20200730	460-214767-7	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00030	mg/kg
SB-24(8-9)-20200730	460-214767-7	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-24(8-9)-20200730	460-214767-7	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00089	0.00011	mg/kg
SB-24(8-9)-20200730	460-214767-7	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-24(8-9)-20200730	460-214767-7	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00089	0.00024	mg/kg
SB-24(8-9)-20200730	460-214767-7	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00089	0.00045	mg/kg
SB-24(8-9)-20200730	460-214767-7	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00036	mg/kg
SB-24(8-9)-20200730	460-214767-7	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT		U	0.0045	0.0014	mg/kg
SB-24(8-9)-20200730	460-214767-7	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0045	0.0038	mg/kg
SB-24(8-9)-20200730	460-214767-7	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-24(8-9)-20200730	460-214767-7	STYRENE	8/6/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-24(8-9)-20200730	460-214767-7	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00089	0.00011	mg/kg
SB-24(8-9)-20200730	460-214767-7	BENZENE	8/6/2020		Y	N	U		U	0.00089	0.00023	mg/kg
SB-24(8-9)-20200730	460-214767-7	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U	UJ	UJ	0.0045	0.0024	mg/kg
SB-24(8-9)-20200730	460-214767-7	VINYL CHLORIDE	8/6/2020		Y	N	U	UJ	UJ	0.00089	0.00049	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	3-NITROANILINE	8/4/2020		Y	N	U		U	0.37	0.041	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	2,6-DINITROTOLUENE	8/4/2020		Y	N	U		U	0.075	0.027	mg/kg
DUP-1-20200730	460-214767-8	2-CHLORONAPHTHALENE	8/4/2020		Y	N	U		U	0.37	0.017	mg/kg
DUP-1-20200730	460-214767-8	2-CHLOROPHENOL	8/4/2020		Y	N	U		U	0.37	0.013	mg/kg
DUP-1-20200730	460-214767-8	2-Methylnaphthalene	8/4/2020		Y	N	U		U	0.37	0.010	mg/kg
DUP-1-20200730	460-214767-8	2-Methylphenol (O-Cresol)	8/4/2020		Y	N	U		U	0.37	0.014	mg/kg
DUP-1-20200730	460-214767-8	2-NITROANILINE	8/4/2020		Y	N	U		U	0.37	0.014	mg/kg
DUP-1-20200730	460-214767-8	2-NITROPHENOL	8/4/2020		Y	N	U		U	0.37	0.037	mg/kg
DUP-1-20200730	460-214767-8	Aldol Condensation Product With 1st Highest Conc.	8/4/2020	670	Y	Y	JA		J	0	0	ug/kg
DUP-1-20200730	460-214767-8	BENZO(B)FLUORANTHENE	8/4/2020	0.011	Y	Y	J		J	0.037	0.0095	mg/kg
DUP-1-20200730	460-214767-8	FLUORANTHENE	8/4/2020	0.017	Y	Y	J		J	0.37	0.013	mg/kg
DUP-1-20200730	460-214767-8	ACETOPHENONE	8/4/2020		Y	N	U		U	0.37	0.018	mg/kg
DUP-1-20200730	460-214767-8	3,3'-DICHLOROBENZIDINE	8/4/2020		Y	N	U		U	0.15	0.056	mg/kg
DUP-1-20200730	460-214767-8	4-NITROANILINE	8/4/2020		Y	N	U		U	0.37	0.042	mg/kg
DUP-1-20200730	460-214767-8	4,6-DINITRO-2-METHYLPHENOL	8/4/2020		Y	N	U	UJ	UJ	0.30	0.060	mg/kg
DUP-1-20200730	460-214767-8	4-BROMOPHENYL PHENYL ETHER	8/4/2020		Y	N	U		U	0.37	0.015	mg/kg
DUP-1-20200730	460-214767-8	4-CHLORO-3-METHYLPHENOL	8/4/2020		Y	N	U		U	0.37	0.021	mg/kg
DUP-1-20200730	460-214767-8	BIS(2-ETHYLHEXYL) PHTHALATE	8/4/2020		Y	N	U		U	0.37	0.019	mg/kg
DUP-1-20200730	460-214767-8	ANTHRACENE	8/4/2020		Y	N	U		U	0.37	0.011	mg/kg
DUP-1-20200730	460-214767-8	4-CHLOROANILINE	8/4/2020		Y	N	U		U	0.37	0.026	mg/kg
DUP-1-20200730	460-214767-8	4-CHLOROPHENYL PHENYL ETHER	8/4/2020		Y	N	U		U	0.37	0.013	mg/kg
DUP-1-20200730	460-214767-8	4-METHYLPHENOL (P-CRESOL)	8/4/2020		Y	N	U		U	0.37	0.023	mg/kg
DUP-1-20200730	460-214767-8	N-NITROSODIPHENYLAMINE	8/4/2020		Y	N	U		U	0.37	0.0070	mg/kg
DUP-1-20200730	460-214767-8	ACENAPHTHYLENE	8/4/2020		Y	N	U		U	0.37	0.0038	mg/kg
DUP-1-20200730	460-214767-8	ACENAPHTHENE	8/4/2020		Y	N	U		U	0.37	0.027	mg/kg

SDG: 4602147671

Analytical Method	SW8270D										
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	4-NITROPHENOL	8/4/2020		Y	N	U		U	0.75	0.060	mg/kg
DUP-1-20200730	460-214767-8	PYRENE	8/4/2020	0.020	Y	Y	J		J	0.37	0.0092	mg/kg
DUP-1-20200730	460-214767-8	BIPHENYL (DIPHENYL)	8/4/2020		Y	N	U		U	0.37	0.0049	mg/kg
DUP-1-20200730	460-214767-8	PHENANTHRENE	8/4/2020		Y	N	U		U	0.37	0.0065	mg/kg
DUP-1-20200730	460-214767-8	2,4,5-TRICHLOROPHENOL	8/4/2020		Y	N	U		U	0.37	0.038	mg/kg
DUP-1-20200730	460-214767-8	2,4,6-TRICHLOROPHENOL	8/4/2020		Y	N	U		U	0.15	0.047	mg/kg
DUP-1-20200730	460-214767-8	2,4-DICHLOROPHENOL	8/4/2020		Y	N	U		U	0.15	0.024	mg/kg
DUP-1-20200730	460-214767-8	2,4-DIMETHYLPHENOL	8/4/2020		Y	N	U		U	0.37	0.016	mg/kg
DUP-1-20200730	460-214767-8	BENZO(A)ANTHRACENE	8/4/2020		Y	N	U		U	0.037	0.013	mg/kg
DUP-1-20200730	460-214767-8	BENZO(G,H,I)PERYLENE	8/4/2020		Y	N	U		U	0.37	0.011	mg/kg
DUP-1-20200730	460-214767-8	1,4-DIOXANE (P-DIOXANE)	8/4/2020		Y	N	U		U	0.11	0.010	mg/kg
DUP-1-20200730	460-214767-8	BENZYL BUTYL PHTHALATE	8/4/2020		Y	N	U		U	0.37	0.017	mg/kg
DUP-1-20200730	460-214767-8	1,2,4,5-TETRACHLOROBENZENE	8/4/2020		Y	N	U		U	0.37	0.011	mg/kg
DUP-1-20200730	460-214767-8	BIS(2-CHLOROETHOXY) METHANE	8/4/2020		Y	N	U		U	0.37	0.029	mg/kg
DUP-1-20200730	460-214767-8	BIS(2-CHLOROISOPROPYL) ETHER	8/4/2020		Y	N	U		U	0.37	0.0067	mg/kg
DUP-1-20200730	460-214767-8	CARBAZOLE	8/4/2020		Y	N	U		U	0.37	0.014	mg/kg
DUP-1-20200730	460-214767-8	CHRYSENE	8/4/2020		Y	N	U		U	0.37	0.0062	mg/kg
DUP-1-20200730	460-214767-8	CAPROLACTAM	8/4/2020		Y	N	UT		U	0.37	0.057	mg/kg
DUP-1-20200730	460-214767-8	BENZO(A)PYRENE	8/4/2020		Y	N	UT		U	0.037	0.0098	mg/kg
DUP-1-20200730	460-214767-8	2,4-DINITROPHENOL	8/4/2020		Y	N	UT	UJ	UJ	0.30	0.18	mg/kg
DUP-1-20200730	460-214767-8	ATRAZINE	8/4/2020		Y	N	UT		U	0.15	0.0093	mg/kg
DUP-1-20200730	460-214767-8	BENZO(K)FLUORANTHENE	8/4/2020		Y	N	U		U	0.037	0.0072	mg/kg
DUP-1-20200730	460-214767-8	HEXACHLOROBUTADIENE	8/4/2020		Y	N	U		U	0.075	0.0078	mg/kg
DUP-1-20200730	460-214767-8	PENTACHLOROPHENOL	8/4/2020		Y	N	U		U	0.30	0.075	mg/kg
DUP-1-20200730	460-214767-8	BENZALDEHYDE	8/4/2020		Y	N	UT	UJ	UJ	0.37	0.016	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	N-NITROSODI-N-PROPYLAMINE	8/4/2020		Y	N	U		U	0.037	0.027	mg/kg
DUP-1-20200730	460-214767-8	NITROBENZENE	8/4/2020		Y	N	U		U	0.037	0.0088	mg/kg
DUP-1-20200730	460-214767-8	NAPHTHALENE	8/4/2020		Y	N	U		U	0.37	0.0064	mg/kg
DUP-1-20200730	460-214767-8	ISOPHORONE	8/4/2020		Y	N	U		U	0.15	0.11	mg/kg
DUP-1-20200730	460-214767-8	INDENO(1,2,3-C,D)PYRENE	8/4/2020		Y	N	U		U	0.037	0.014	mg/kg
DUP-1-20200730	460-214767-8	2,3,4,6-TETRACHLOROPHENOL	8/4/2020		Y	N	U		U	0.37	0.025	mg/kg
DUP-1-20200730	460-214767-8	HEXACHLOROCYCLOPENTADIENE	8/4/2020		Y	N	U		U	0.37	0.032	mg/kg
DUP-1-20200730	460-214767-8	PHENOL	8/4/2020		Y	N	U		U	0.37	0.014	mg/kg
DUP-1-20200730	460-214767-8	HEXACHLOROBENZENE	8/4/2020		Y	N	U		U	0.037	0.017	mg/kg
DUP-1-20200730	460-214767-8	FLUORENE	8/4/2020		Y	N	U		U	0.37	0.0050	mg/kg
DUP-1-20200730	460-214767-8	DI-N-OCTYLPHTHALATE	8/4/2020		Y	N	U		U	0.37	0.019	mg/kg
DUP-1-20200730	460-214767-8	DI-N-BUTYL PHTHALATE	8/4/2020		Y	N	U		U	0.37	0.065	mg/kg
DUP-1-20200730	460-214767-8	DIMETHYL PHTHALATE	8/4/2020		Y	N	U		U	0.37	0.084	mg/kg
DUP-1-20200730	460-214767-8	DIETHYL PHTHALATE	8/4/2020		Y	N	U		U	0.37	0.0053	mg/kg
DUP-1-20200730	460-214767-8	DIBENZOFURAN	8/4/2020		Y	N	U		U	0.37	0.0052	mg/kg
DUP-1-20200730	460-214767-8	DIBENZ(A,H)ANTHRACENE	8/4/2020		Y	N	U		U	0.037	0.016	mg/kg
DUP-1-20200730	460-214767-8	HEXACHLOROETHANE	8/4/2020		Y	N	U		U	0.037	0.013	mg/kg
DUP-1-20200730	460-214767-8	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/4/2020		Y	N	U		U	0.037	0.013	mg/kg
DUP-1-20200730	460-214767-8	2,4-DINITROTOLUENE	8/4/2020		Y	N	U		U	0.075	0.040	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,4-DICHLOROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.14	0.023	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,4-DIMETHYLPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.016	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,4-DINITROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.29	0.18	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,6-DINITROTOLUENE	8/3/2020		Y	N	UT	UJ	UJ	0.073	0.026	mg/kg
SB-19(4-5)-20200730	460-214767-1	2-CHLORONAPHTHALENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.017	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(4-5)-20200730	460-214767-1	2-CHLOROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	Aldol Condensation Product With 1st Highest Conc.	8/3/2020	690	Y	Y	JA		J	0	0	ug/kg
SB-19(4-5)-20200730	460-214767-1	2-Methylphenol (O-Cresol)	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	UT	UJ	UJ	0.11	0.0099	mg/kg
SB-19(4-5)-20200730	460-214767-1	2-NITROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.036	mg/kg
SB-19(4-5)-20200730	460-214767-1	4,6-DINITRO-2-METHYLPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.29	0.058	mg/kg
SB-19(4-5)-20200730	460-214767-1	4-BROMOPHENYL PHENYL ETHER	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.014	mg/kg
SB-19(4-5)-20200730	460-214767-1	4-CHLORO-3-METHYLPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.020	mg/kg
SB-19(4-5)-20200730	460-214767-1	4-CHLOROPHENYL PHENYL ETHER	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	4-METHYLPHENOL (P-CRESOL)	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.022	mg/kg
SB-19(4-5)-20200730	460-214767-1	2-Methylnaphthalene	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.010	mg/kg
SB-19(4-5)-20200730	460-214767-1	BENZO(G,H,I)PERYLENE	8/3/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,3,4,6-TETRACHLOROPHENOL	8/3/2020		Y	N	U		U	0.36	0.024	mg/kg
SB-19(4-5)-20200730	460-214767-1	2-NITROANILINE	8/3/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	N-NITROSODI-N-PROPYLAMINE	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.026	mg/kg
SB-19(4-5)-20200730	460-214767-1	3-NITROANILINE	8/3/2020		Y	N	U		U	0.36	0.040	mg/kg
SB-19(4-5)-20200730	460-214767-1	4-CHLOROANILINE	8/3/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-19(4-5)-20200730	460-214767-1	4-NITROANILINE	8/3/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,4,6-TRICHLOROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.14	0.046	mg/kg
SB-19(4-5)-20200730	460-214767-1	BENZO(B)FLUORANTHENE	8/3/2020		Y	N	U		U	0.036	0.0093	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,4,5-TRICHLOROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.037	mg/kg
SB-19(4-5)-20200730	460-214767-1	DIBENZ(A,H)ANTHRACENE	8/3/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-19(4-5)-20200730	460-214767-1	HEXACHLOROCYCLOPENTADIENE	8/3/2020		Y	N	U		U	0.36	0.031	mg/kg
SB-19(4-5)-20200730	460-214767-1	INDENO(1,2,3-C,D)PYRENE	8/3/2020		Y	N	U		U	0.036	0.014	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(4-5)-20200730	460-214767-1	PENTACHLOROPHENOL	8/3/2020		Y	N	U		U	0.29	0.074	mg/kg
SB-19(4-5)-20200730	460-214767-1	1,2,4,5-TETRACHLOROBENZENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.011	mg/kg
SB-19(4-5)-20200730	460-214767-1	ACETOPHENONE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.018	mg/kg
SB-19(4-5)-20200730	460-214767-1	4-NITROPHENOL	8/3/2020		Y	N	U		U	0.73	0.059	mg/kg
SB-19(4-5)-20200730	460-214767-1	ISOPHORONE	8/3/2020		Y	N	UT	UJ	UJ	0.14	0.10	mg/kg
SB-19(4-5)-20200730	460-214767-1	DIMETHYL PHTHALATE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.082	mg/kg
SB-19(4-5)-20200730	460-214767-1	DI-N-BUTYL PHTHALATE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.063	mg/kg
SB-19(4-5)-20200730	460-214767-1	DI-N-OCTYLPHTHALATE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.019	mg/kg
SB-19(4-5)-20200730	460-214767-1	FLUORANTHENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	FLUORENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0049	mg/kg
SB-19(4-5)-20200730	460-214767-1	HEXACHLOROBENZENE	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.017	mg/kg
SB-19(4-5)-20200730	460-214767-1	ACENAPHTHENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.026	mg/kg
SB-19(4-5)-20200730	460-214767-1	HEXACHLOROETHANE	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.012	mg/kg
SB-19(4-5)-20200730	460-214767-1	CHRYSENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0061	mg/kg
SB-19(4-5)-20200730	460-214767-1	NAPHTHALENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0062	mg/kg
SB-19(4-5)-20200730	460-214767-1	NITROBENZENE	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.0086	mg/kg
SB-19(4-5)-20200730	460-214767-1	PYRENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0089	mg/kg
SB-19(4-5)-20200730	460-214767-1	PHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	PHENANTHRENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0063	mg/kg
SB-19(4-5)-20200730	460-214767-1	N-NITROSODIPHENYLAMINE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0069	mg/kg
SB-19(4-5)-20200730	460-214767-1	HEXACHLOROBUTADIENE	8/3/2020		Y	N	UT	UJ	UJ	0.073	0.0076	mg/kg
SB-19(4-5)-20200730	460-214767-1	BIPHENYL (DIPHENYL)	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0048	mg/kg
SB-19(4-5)-20200730	460-214767-1	2,4-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.073	0.039	mg/kg
SB-19(4-5)-20200730	460-214767-1	ANTHRACENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.011	mg/kg
SB-19(4-5)-20200730	460-214767-1	ATRAZINE	8/3/2020		Y	N	UT	UJ	UJ	0.14	0.0091	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(4-5)-20200730	460-214767-1	BENZALDEHYDE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.016	mg/kg
SB-19(4-5)-20200730	460-214767-1	BENZO(A)ANTHRACENE	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	BENZO(A)PYRENE	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.0096	mg/kg
SB-19(4-5)-20200730	460-214767-1	DIETHYL PHTHALATE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0052	mg/kg
SB-19(4-5)-20200730	460-214767-1	BENZYL BUTYL PHTHALATE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.017	mg/kg
SB-19(4-5)-20200730	460-214767-1	DIBENZOFURAN	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0050	mg/kg
SB-19(4-5)-20200730	460-214767-1	BIS(2-CHLOROETHOXY) METHANE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.028	mg/kg
SB-19(4-5)-20200730	460-214767-1	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.013	mg/kg
SB-19(4-5)-20200730	460-214767-1	BIS(2-CHLOROISOPROPYL) ETHER	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0065	mg/kg
SB-19(4-5)-20200730	460-214767-1	BIS(2-ETHYLHEXYL) PHTHALATE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.019	mg/kg
SB-19(4-5)-20200730	460-214767-1	CAPROLACTAM	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.056	mg/kg
SB-19(4-5)-20200730	460-214767-1	CARBAZOLE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.014	mg/kg
SB-19(4-5)-20200730	460-214767-1	ACENAPHTHYLENE	8/3/2020		Y	N	UT	UJ	UJ	0.36	0.0037	mg/kg
SB-19(4-5)-20200730	460-214767-1	BENZO(K)FLUORANTHENE	8/3/2020		Y	N	UT	UJ	UJ	0.036	0.0070	mg/kg
SB-19(4-5)-20200730	460-214767-1	3,3'-DICHLOROBENZIDINE	8/3/2020		Y	N	U		U	0.14	0.054	mg/kg
SB-19(7-8)-20200730	460-214767-2	ACETOPHENONE	8/3/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-19(7-8)-20200730	460-214767-2	CARBAZOLE	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-19(7-8)-20200730	460-214767-2	BIS(2-ETHYLHEXYL) PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-19(7-8)-20200730	460-214767-2	BIS(2-CHLOROISOPROPYL) ETHER	8/3/2020		Y	N	U		U	0.38	0.0069	mg/kg
SB-19(7-8)-20200730	460-214767-2	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-19(7-8)-20200730	460-214767-2	BIS(2-CHLOROETHOXY) METHANE	8/3/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-19(7-8)-20200730	460-214767-2	BIPHENYL (DIPHENYL)	8/3/2020		Y	N	U		U	0.38	0.0051	mg/kg
SB-19(7-8)-20200730	460-214767-2	BENZYL BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-19(7-8)-20200730	460-214767-2	BENZO(K)FLUORANTHENE	8/3/2020		Y	N	U		U	0.038	0.0075	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	BENZO(G,H,I)PERYLENE	8/3/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-19(7-8)-20200730	460-214767-2	BENZO(B)FLUORANTHENE	8/3/2020		Y	N	U		U	0.038	0.0098	mg/kg
SB-19(7-8)-20200730	460-214767-2	3,3'-DICHLOROBENZIDINE	8/3/2020		Y	N	U		U	0.15	0.057	mg/kg
SB-19(7-8)-20200730	460-214767-2	ANTHRACENE	8/3/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-19(7-8)-20200730	460-214767-2	DIBENZOFURAN	8/3/2020		Y	N	U		U	0.38	0.0053	mg/kg
SB-19(7-8)-20200730	460-214767-2	ACENAPHTHYLENE	8/3/2020		Y	N	U		U	0.38	0.0039	mg/kg
SB-19(7-8)-20200730	460-214767-2	ACENAPHTHENE	8/3/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-19(7-8)-20200730	460-214767-2	4-NITROPHENOL	8/3/2020		Y	N	U		U	0.77	0.062	mg/kg
SB-19(7-8)-20200730	460-214767-2	4-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-19(7-8)-20200730	460-214767-2	4-METHYLPHENOL (P-CRESOL)	8/3/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-19(7-8)-20200730	460-214767-2	4-CHLOROPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-19(7-8)-20200730	460-214767-2	4-CHLOROANILINE	8/3/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-19(7-8)-20200730	460-214767-2	4-CHLORO-3-METHYLPHENOL	8/3/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-19(7-8)-20200730	460-214767-2	4-BROMOPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-19(7-8)-20200730	460-214767-2	4,6-DINITRO-2-METHYLPHENOL	8/3/2020		Y	N	U	UJ	UJ	0.31	0.062	mg/kg
SB-19(7-8)-20200730	460-214767-2	3-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-19(7-8)-20200730	460-214767-2	BENZO(A)ANTHRACENE	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-19(7-8)-20200730	460-214767-2	NAPHTHALENE	8/3/2020		Y	N	U		U	0.38	0.0066	mg/kg
SB-19(7-8)-20200730	460-214767-2	2,4-DINITROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.31	0.19	mg/kg
SB-19(7-8)-20200730	460-214767-2	ATRAZINE	8/3/2020		Y	N	UT		U	0.15	0.0096	mg/kg
SB-19(7-8)-20200730	460-214767-2	BENZALDEHYDE	8/3/2020		Y	N	UT	UJ	UJ	0.38	0.017	mg/kg
SB-19(7-8)-20200730	460-214767-2	BENZO(A)PYRENE	8/3/2020		Y	N	UT		U	0.038	0.010	mg/kg
SB-19(7-8)-20200730	460-214767-2	CAPROLACTAM	8/3/2020		Y	N	UT		U	0.38	0.059	mg/kg
SB-19(7-8)-20200730	460-214767-2	PYRENE	8/3/2020		Y	N	U		U	0.38	0.0095	mg/kg
SB-19(7-8)-20200730	460-214767-2	PHENOL	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	PHENANTHRENE	8/3/2020		Y	N	U		U	0.38	0.0067	mg/kg
SB-19(7-8)-20200730	460-214767-2	PENTACHLOROPHENOL	8/3/2020		Y	N	U		U	0.31	0.078	mg/kg
SB-19(7-8)-20200730	460-214767-2	N-NITROSODIPHENYLAMINE	8/3/2020		Y	N	U		U	0.38	0.0073	mg/kg
SB-19(7-8)-20200730	460-214767-2	CHRYSENE	8/3/2020		Y	N	U		U	0.38	0.0064	mg/kg
SB-19(7-8)-20200730	460-214767-2	NITROBENZENE	8/3/2020		Y	N	U		U	0.038	0.0091	mg/kg
SB-19(7-8)-20200730	460-214767-2	DIBENZ(A,H)ANTHRACENE	8/3/2020		Y	N	U		U	0.038	0.016	mg/kg
SB-19(7-8)-20200730	460-214767-2	ISOPHORONE	8/3/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-19(7-8)-20200730	460-214767-2	INDENO(1,2,3-C,D)PYRENE	8/3/2020		Y	N	U		U	0.038	0.015	mg/kg
SB-19(7-8)-20200730	460-214767-2	HEXACHLOROETHANE	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-19(7-8)-20200730	460-214767-2	HEXACHLOROBUTADIENE	8/3/2020		Y	N	U		U	0.077	0.0081	mg/kg
SB-19(7-8)-20200730	460-214767-2	FLUORENE	8/3/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-19(7-8)-20200730	460-214767-2	FLUORANTHENE	8/3/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-19(7-8)-20200730	460-214767-2	DI-N-OCTYLPHTHALATE	8/3/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-19(7-8)-20200730	460-214767-2	DI-N-BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.067	mg/kg
SB-19(7-8)-20200730	460-214767-2	DIMETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.086	mg/kg
SB-19(7-8)-20200730	460-214767-2	DIETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.0055	mg/kg
SB-19(7-8)-20200730	460-214767-2	HEXACHLOROBENZENE	8/3/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-19(7-8)-20200730	460-214767-2	N-NITROSODI-N-PROPYLAMINE	8/3/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-19(7-8)-20200730	460-214767-2	2,4,6-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.15	0.049	mg/kg
SB-19(7-8)-20200730	460-214767-2	Aldol Condensation Product With 1st Highest Conc.	8/3/2020	910	Y	Y	JA		J	0	0	ug/kg
SB-19(7-8)-20200730	460-214767-2	2-NITROPHENOL	8/3/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-19(7-8)-20200730	460-214767-2	HEXACHLOROCYCLOPENTADIENE	8/3/2020		Y	N	U		U	0.38	0.033	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,2,4,5-TETRACHLOROBENZENE	8/3/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-19(7-8)-20200730	460-214767-2	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.12	0.010	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-19(7-8)-20200730	460-214767-2	2,4,5-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-19(7-8)-20200730	460-214767-2	2,4-DICHLOROPHENOL	8/3/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-19(7-8)-20200730	460-214767-2	2,4-DIMETHYLPHENOL	8/3/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-19(7-8)-20200730	460-214767-2	2,4-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.077	0.041	mg/kg
SB-19(7-8)-20200730	460-214767-2	2,6-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.077	0.027	mg/kg
SB-19(7-8)-20200730	460-214767-2	2-CHLORONAPHTHALENE	8/3/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-19(7-8)-20200730	460-214767-2	2-Methylnaphthalene	8/3/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-19(7-8)-20200730	460-214767-2	2-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-19(7-8)-20200730	460-214767-2	2,3,4,6-TETRACHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-19(7-8)-20200730	460-214767-2	2-Methylphenol (O-Cresol)	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-19(7-8)-20200730	460-214767-2	2-CHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DIBENZ(A,H)ANTHRACENE	8/4/2020		Y	N	U		U	0.038	0.016	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZALDEHYDE	8/4/2020		Y	N	UT	UJ	UJ	0.38	0.017	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ATRAZINE	8/4/2020		Y	N	UT		U	0.15	0.0096	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2,4-DINITROPHENOL	8/4/2020		Y	N	UT	UJ	UJ	0.31	0.19	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PHENOL	8/4/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	NITROBENZENE	8/4/2020		Y	N	U		U	0.038	0.0091	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BIS(2-CHLOROISOPROPYL) ETHER	8/4/2020		Y	N	U		U	0.38	0.0069	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DIETHYL PHTHALATE	8/4/2020		Y	N	U		U	0.38	0.0055	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CARBAZOLE	8/4/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	FLUORENE	8/4/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DIBENZOFURAN	8/4/2020		Y	N	U		U	0.38	0.0053	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2,4,5-TRICHLOROPHENOL	8/4/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2,3,4,6-TETRACHLOROPHENOL	8/4/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	1,4-DIOXANE (P-DIOXANE)	8/4/2020		Y	N	U		U	0.11	0.010	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	1,2,4,5-TETRACHLOROBENZENE	8/4/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZO(A)PYRENE	8/4/2020	0.019	Y	Y	JT	J	J	0.038	0.010	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	Aldol Condensation Product With 1st Highest Conc.	8/4/2020	4600	Y	Y	JA		J	0	0	ug/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BIS(2-ETHYLHEXYL) PHTHALATE	8/4/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4-NITROPHENOL	8/4/2020		Y	N	U		U	0.77	0.062	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	HEXACHLOROETHANE	8/4/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ISOPHORONE	8/4/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DI-N-BUTYL PHTHALATE	8/4/2020		Y	N	U		U	0.38	0.067	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZO(G,H,I)PERYLENE	8/4/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ANTHRACENE	8/4/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ACETOPHENONE	8/4/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ACENAPHTHYLENE	8/4/2020		Y	N	U		U	0.38	0.0039	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CAPROLACTAM	8/4/2020		Y	N	UT		U	0.38	0.059	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4-METHYLPHENOL (P-CRESOL)	8/4/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BIPHENYL (DIPHENYL)	8/4/2020		Y	N	U		U	0.38	0.0050	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	NAPHTHALENE	8/4/2020		Y	N	U		U	0.38	0.0066	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DIMETHYL PHTHALATE	8/4/2020		Y	N	U		U	0.38	0.086	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4-NITROANILINE	8/4/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	HEXACHLOROBUTADIENE	8/4/2020		Y	N	U		U	0.077	0.0081	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZYL BUTYL PHTHALATE	8/4/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	HEXACHLOROBENZENE	8/4/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	HEXACHLOROCYCLOPENTADIENE	8/4/2020		Y	N	U		U	0.38	0.033	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	ACENAPHTHENE	8/4/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2,4,6-TRICHLOROPHENOL	8/4/2020		Y	N	U		U	0.15	0.049	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	2,6-DINITROTOLUENE	8/4/2020		Y	N	U		U	0.077	0.027	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	INDENO(1,2,3-C,D)PYRENE	8/4/2020	0.016	Y	Y	J		J	0.038	0.015	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CHRYSENE	8/4/2020	0.019	Y	Y	J		J	0.38	0.0064	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZO(K)FLUORANTHENE	8/4/2020	0.011	Y	Y	J		J	0.038	0.0074	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	FLUORANTHENE	8/4/2020	0.029	Y	Y	J		J	0.38	0.013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZO(B)FLUORANTHENE	8/4/2020	0.026	Y	Y	J		J	0.038	0.0098	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BENZO(A)ANTHRACENE	8/4/2020	0.025	Y	Y	J		J	0.038	0.013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-CHLORONAPHTHALENE	8/4/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PYRENE	8/4/2020	0.033	Y	Y	J		J	0.38	0.0094	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	N-NITROSODI-N-PROPYLAMINE	8/4/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2,4-DINITROTOLUENE	8/4/2020		Y	N	U		U	0.077	0.041	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	N-NITROSODIPHENYLAMINE	8/4/2020		Y	N	U		U	0.38	0.0073	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PENTACHLOROPHENOL	8/4/2020		Y	N	U		U	0.31	0.078	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BIS(2-CHLOROETHOXY) METHANE	8/4/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/4/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4-BROMOPHENYL PHENYL ETHER	8/4/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4-CHLORO-3-METHYLPHENOL	8/4/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4-CHLOROANILINE	8/4/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4-CHLOROPHENYL PHENYL ETHER	8/4/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-CHLOROPHENOL	8/4/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	3,3'-DICHLOROBENZIDINE	8/4/2020		Y	N	U		U	0.15	0.057	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	PHENANTHRENE	8/4/2020	0.020	Y	Y	J		J	0.38	0.0067	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	DI-N-OCTYLPHTHALATE	8/4/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-Methylnaphthalene	8/4/2020		Y	N	U		U	0.38	0.011	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-22(3.5-4.5)-2020073	460-214767-3	2-Methylphenol (O-Cresol)	8/4/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-NITROANILINE	8/4/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2-NITROPHENOL	8/4/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	3-NITROANILINE	8/4/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	4,6-DINITRO-2-METHYLPHENOL	8/4/2020		Y	N	U	UJ	UJ	0.31	0.062	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2,4-DIMETHYLPHENOL	8/4/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	2,4-DICHLOROPHENOL	8/4/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-23(2-3)-20200730	460-214767-4	PYRENE	8/4/2020		Y	N	U		U	0.40	0.0099	mg/kg
SB-23(2-3)-20200730	460-214767-4	ATRAZINE	8/4/2020		Y	N	UT		U	0.16	0.010	mg/kg
SB-23(2-3)-20200730	460-214767-4	2-NITROPHENOL	8/4/2020		Y	N	U		U	0.40	0.040	mg/kg
SB-23(2-3)-20200730	460-214767-4	3,3'-DICHLOROBENZIDINE	8/4/2020		Y	N	U		U	0.16	0.060	mg/kg
SB-23(2-3)-20200730	460-214767-4	BENZALDEHYDE	8/4/2020		Y	N	UT	UJ	UJ	0.40	0.017	mg/kg
SB-23(2-3)-20200730	460-214767-4	BENZO(A)PYRENE	8/4/2020		Y	N	UT		U	0.040	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	3-NITROANILINE	8/4/2020		Y	N	U		U	0.40	0.045	mg/kg
SB-23(2-3)-20200730	460-214767-4	PHENOL	8/4/2020		Y	N	U		U	0.40	0.015	mg/kg
SB-23(2-3)-20200730	460-214767-4	CAPROLACTAM	8/4/2020		Y	N	UT		U	0.40	0.062	mg/kg
SB-23(2-3)-20200730	460-214767-4	4,6-DINITRO-2-METHYLPHENOL	8/4/2020		Y	N	U	UJ	UJ	0.32	0.065	mg/kg
SB-23(2-3)-20200730	460-214767-4	PENTACHLOROPHENOL	8/4/2020		Y	N	U		U	0.32	0.082	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,4-DINITROPHENOL	8/4/2020		Y	N	UT	UJ	UJ	0.32	0.20	mg/kg
SB-23(2-3)-20200730	460-214767-4	Aldol Condensation Product With 1st Highest Conc.	8/4/2020	6400	Y	Y	JA		J	0	0	ug/kg
SB-23(2-3)-20200730	460-214767-4	2-Methylphenol (O-Cresol)	8/4/2020		Y	N	U		U	0.40	0.015	mg/kg
SB-23(2-3)-20200730	460-214767-4	NAPHTHALENE	8/4/2020		Y	N	U		U	0.40	0.0069	mg/kg
SB-23(2-3)-20200730	460-214767-4	2-CHLOROPHENOL	8/4/2020		Y	N	U		U	0.40	0.014	mg/kg
SB-23(2-3)-20200730	460-214767-4	BENZO(A)ANTHRACENE	8/4/2020		Y	N	U		U	0.040	0.014	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	BENZO(B)FLUORANTHENE	8/4/2020		Y	N	U		U	0.040	0.010	mg/kg
SB-23(2-3)-20200730	460-214767-4	BENZO(G,H,I)PERYLENE	8/4/2020		Y	N	U		U	0.40	0.012	mg/kg
SB-23(2-3)-20200730	460-214767-4	BENZO(K)FLUORANTHENE	8/4/2020		Y	N	U		U	0.040	0.0078	mg/kg
SB-23(2-3)-20200730	460-214767-4	BENZYL BUTYL PHTHALATE	8/4/2020		Y	N	U		U	0.40	0.019	mg/kg
SB-23(2-3)-20200730	460-214767-4	BIPHENYL (DIPHENYL)	8/4/2020		Y	N	U		U	0.40	0.0053	mg/kg
SB-23(2-3)-20200730	460-214767-4	BIS(2-CHLOROETHOXY) METHANE	8/4/2020		Y	N	U		U	0.40	0.031	mg/kg
SB-23(2-3)-20200730	460-214767-4	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/4/2020		Y	N	U		U	0.040	0.014	mg/kg
SB-23(2-3)-20200730	460-214767-4	BIS(2-CHLOROISOPROPYL) ETHER	8/4/2020		Y	N	U		U	0.40	0.0072	mg/kg
SB-23(2-3)-20200730	460-214767-4	BIS(2-ETHYLHEXYL) PHTHALATE	8/4/2020		Y	N	U		U	0.40	0.021	mg/kg
SB-23(2-3)-20200730	460-214767-4	ACETOPHENONE	8/4/2020		Y	N	U		U	0.40	0.020	mg/kg
SB-23(2-3)-20200730	460-214767-4	ISOPHORONE	8/4/2020		Y	N	U		U	0.16	0.12	mg/kg
SB-23(2-3)-20200730	460-214767-4	ACENAPHTHYLENE	8/4/2020		Y	N	U		U	0.40	0.0041	mg/kg
SB-23(2-3)-20200730	460-214767-4	NITROBENZENE	8/4/2020		Y	N	U		U	0.040	0.0096	mg/kg
SB-23(2-3)-20200730	460-214767-4	N-NITROSODI-N-PROPYLAMINE	8/4/2020		Y	N	U		U	0.040	0.029	mg/kg
SB-23(2-3)-20200730	460-214767-4	N-NITROSODIPHENYLAMINE	8/4/2020		Y	N	U		U	0.40	0.0076	mg/kg
SB-23(2-3)-20200730	460-214767-4	FLUORANTHENE	8/4/2020		Y	N	U		U	0.40	0.014	mg/kg
SB-23(2-3)-20200730	460-214767-4	DI-N-OCTYLPHTHALATE	8/4/2020		Y	N	U		U	0.40	0.021	mg/kg
SB-23(2-3)-20200730	460-214767-4	DI-N-BUTYL PHTHALATE	8/4/2020		Y	N	U		U	0.40	0.070	mg/kg
SB-23(2-3)-20200730	460-214767-4	DIMETHYL PHTHALATE	8/4/2020		Y	N	U		U	0.40	0.091	mg/kg
SB-23(2-3)-20200730	460-214767-4	DIETHYL PHTHALATE	8/4/2020		Y	N	U		U	0.40	0.0058	mg/kg
SB-23(2-3)-20200730	460-214767-4	DIBENZOFURAN	8/4/2020		Y	N	U		U	0.40	0.0056	mg/kg
SB-23(2-3)-20200730	460-214767-4	DIBENZ(A,H)ANTHRACENE	8/4/2020		Y	N	U		U	0.040	0.017	mg/kg
SB-23(2-3)-20200730	460-214767-4	CHRYSENE	8/4/2020		Y	N	U		U	0.40	0.0067	mg/kg
SB-23(2-3)-20200730	460-214767-4	CARBAZOLE	8/4/2020		Y	N	U		U	0.40	0.015	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	INDENO(1,2,3-C,D)PYRENE	8/4/2020		Y	N	U		U	0.040	0.016	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,4-DICHLOROPHENOL	8/4/2020		Y	N	U		U	0.16	0.026	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,4-DINITROTOLUENE	8/4/2020		Y	N	U		U	0.081	0.043	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,6-DINITROTOLUENE	8/4/2020		Y	N	U		U	0.081	0.029	mg/kg
SB-23(2-3)-20200730	460-214767-4	2-CHLORONAPHTHALENE	8/4/2020		Y	N	U		U	0.40	0.018	mg/kg
SB-23(2-3)-20200730	460-214767-4	2-Methylnaphthalene	8/4/2020		Y	N	U		U	0.40	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	2-NITROANILINE	8/4/2020		Y	N	U		U	0.40	0.015	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,2,4,5-TETRACHLOROBENZENE	8/4/2020		Y	N	U		U	0.40	0.012	mg/kg
SB-23(2-3)-20200730	460-214767-4	1,4-DIOXANE (P-DIOXANE)	8/4/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-23(2-3)-20200730	460-214767-4	HEXACHLOROBENZENE	8/4/2020		Y	N	U		U	0.040	0.019	mg/kg
SB-23(2-3)-20200730	460-214767-4	FLUORENE	8/4/2020		Y	N	U		U	0.40	0.0054	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,3,4,6-TETRACHLOROPHENOL	8/4/2020		Y	N	U		U	0.40	0.027	mg/kg
SB-23(2-3)-20200730	460-214767-4	ANTHRACENE	8/4/2020		Y	N	U		U	0.40	0.012	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,4,6-TRICHLOROPHENOL	8/4/2020		Y	N	U		U	0.16	0.051	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,4-DIMETHYLPHENOL	8/4/2020		Y	N	U		U	0.40	0.018	mg/kg
SB-23(2-3)-20200730	460-214767-4	HEXACHLOROBUTADIENE	8/4/2020		Y	N	U		U	0.081	0.0085	mg/kg
SB-23(2-3)-20200730	460-214767-4	HEXACHLOROCYCLOPENTADIENE	8/4/2020		Y	N	U		U	0.40	0.035	mg/kg
SB-23(2-3)-20200730	460-214767-4	HEXACHLOROETHANE	8/4/2020		Y	N	U		U	0.040	0.014	mg/kg
SB-23(2-3)-20200730	460-214767-4	4-BROMOPHENYL PHENYL ETHER	8/4/2020		Y	N	U		U	0.40	0.016	mg/kg
SB-23(2-3)-20200730	460-214767-4	4-CHLORO-3-METHYLPHENOL	8/4/2020		Y	N	U		U	0.40	0.022	mg/kg
SB-23(2-3)-20200730	460-214767-4	4-CHLOROANILINE	8/4/2020		Y	N	U		U	0.40	0.028	mg/kg
SB-23(2-3)-20200730	460-214767-4	PHENANTHRENE	8/4/2020		Y	N	U		U	0.40	0.0070	mg/kg
SB-23(2-3)-20200730	460-214767-4	4-CHLOROPHENYL PHENYL ETHER	8/4/2020		Y	N	U		U	0.40	0.014	mg/kg
SB-23(2-3)-20200730	460-214767-4	4-METHYLPHENOL (P-CRESOL)	8/4/2020		Y	N	U		U	0.40	0.025	mg/kg
SB-23(2-3)-20200730	460-214767-4	4-NITROANILINE	8/4/2020		Y	N	U		U	0.40	0.046	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(2-3)-20200730	460-214767-4	4-NITROPHENOL	8/4/2020		Y	N	U		U	0.81	0.065	mg/kg
SB-23(2-3)-20200730	460-214767-4	ACENAPHTHENE	8/4/2020		Y	N	U		U	0.40	0.029	mg/kg
SB-23(2-3)-20200730	460-214767-4	2,4,5-TRICHLOROPHENOL	8/4/2020		Y	N	U		U	0.40	0.041	mg/kg
SB-23(5-6)-20200730	460-214767-5	Aldol Condensation Product With 1st Highest Conc.	8/3/2020	370	Y	Y	JA		J	0	0	ug/kg
SB-23(5-6)-20200730	460-214767-5	3,3'-DICHLOROBENZIDINE	8/3/2020		Y	N	U		U	0.16	0.058	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZO(B)FLUORANTHENE	8/3/2020		Y	N	U		U	0.038	0.010	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZO(A)ANTHRACENE	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-23(5-6)-20200730	460-214767-5	ANTHRACENE	8/3/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-23(5-6)-20200730	460-214767-5	ACETOPHENONE	8/3/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-23(5-6)-20200730	460-214767-5	ACENAPHTHYLENE	8/3/2020		Y	N	U		U	0.38	0.0040	mg/kg
SB-23(5-6)-20200730	460-214767-5	ACENAPHTHENE	8/3/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-23(5-6)-20200730	460-214767-5	4-NITROPHENOL	8/3/2020		Y	N	U		U	0.78	0.063	mg/kg
SB-23(5-6)-20200730	460-214767-5	4-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-23(5-6)-20200730	460-214767-5	4-METHYLPHENOL (P-CRESOL)	8/3/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-23(5-6)-20200730	460-214767-5	4-CHLOROPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-23(5-6)-20200730	460-214767-5	4-CHLOROANILINE	8/3/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-23(5-6)-20200730	460-214767-5	4-CHLORO-3-METHYLPHENOL	8/3/2020		Y	N	U		U	0.38	0.022	mg/kg
SB-23(5-6)-20200730	460-214767-5	4-BROMOPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,2,4,5-TETRACHLOROBENZENE	8/3/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-23(5-6)-20200730	460-214767-5	2,4-DINITROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.31	0.19	mg/kg
SB-23(5-6)-20200730	460-214767-5	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	2,3,4,6-TETRACHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-23(5-6)-20200730	460-214767-5	2,4,5-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-23(5-6)-20200730	460-214767-5	2,4,6-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.16	0.050	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	2,4-DICHLOROPHENOL	8/3/2020		Y	N	U		U	0.16	0.025	mg/kg
SB-23(5-6)-20200730	460-214767-5	4,6-DINITRO-2-METHYLPHENOL	8/3/2020		Y	N	U	UJ	UJ	0.31	0.063	mg/kg
SB-23(5-6)-20200730	460-214767-5	2,4-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.078	0.042	mg/kg
SB-23(5-6)-20200730	460-214767-5	3-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-23(5-6)-20200730	460-214767-5	2-CHLORONAPHTHALENE	8/3/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-23(5-6)-20200730	460-214767-5	2-Methylnaphthalene	8/3/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	2-Methylphenol (O-Cresol)	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-23(5-6)-20200730	460-214767-5	2-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-23(5-6)-20200730	460-214767-5	2-NITROPHENOL	8/3/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZYL BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-23(5-6)-20200730	460-214767-5	2,4-DIMETHYLPHENOL	8/3/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-23(5-6)-20200730	460-214767-5	N-NITROSODI-N-PROPYLAMINE	8/3/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZO(G,H,I)PERYLENE	8/3/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-23(5-6)-20200730	460-214767-5	HEXACHLOROBUTADIENE	8/3/2020		Y	N	U		U	0.078	0.0082	mg/kg
SB-23(5-6)-20200730	460-214767-5	PYRENE	8/3/2020		Y	N	U		U	0.38	0.0096	mg/kg
SB-23(5-6)-20200730	460-214767-5	PHENOL	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-23(5-6)-20200730	460-214767-5	PHENANTHRENE	8/3/2020		Y	N	U		U	0.38	0.0068	mg/kg
SB-23(5-6)-20200730	460-214767-5	FLUORENE	8/3/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-23(5-6)-20200730	460-214767-5	N-NITROSODIPHENYLAMINE	8/3/2020		Y	N	U		U	0.38	0.0074	mg/kg
SB-23(5-6)-20200730	460-214767-5	FLUORANTHENE	8/3/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-23(5-6)-20200730	460-214767-5	NITROBENZENE	8/3/2020		Y	N	U		U	0.038	0.0093	mg/kg
SB-23(5-6)-20200730	460-214767-5	NAPHTHALENE	8/3/2020		Y	N	U		U	0.38	0.0067	mg/kg
SB-23(5-6)-20200730	460-214767-5	ISOPHORONE	8/3/2020		Y	N	U		U	0.16	0.11	mg/kg
SB-23(5-6)-20200730	460-214767-5	INDENO(1,2,3-C,D)PYRENE	8/3/2020		Y	N	U		U	0.038	0.015	mg/kg
SB-23(5-6)-20200730	460-214767-5	HEXACHLOROETHANE	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-23(5-6)-20200730	460-214767-5	HEXACHLOROCYCLOPENTADIENE	8/3/2020		Y	N	U		U	0.38	0.034	mg/kg
SB-23(5-6)-20200730	460-214767-5	PENTACHLOROPHENOL	8/3/2020		Y	N	U		U	0.31	0.079	mg/kg
SB-23(5-6)-20200730	460-214767-5	CHRYSENE	8/3/2020		Y	N	U		U	0.38	0.0065	mg/kg
SB-23(5-6)-20200730	460-214767-5	2,6-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-23(5-6)-20200730	460-214767-5	BIPHENYL (DIPHENYL)	8/3/2020		Y	N	U		U	0.38	0.0051	mg/kg
SB-23(5-6)-20200730	460-214767-5	BIS(2-CHLOROETHOXY) METHANE	8/3/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-23(5-6)-20200730	460-214767-5	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-23(5-6)-20200730	460-214767-5	BIS(2-CHLOROISOPROPYL) ETHER	8/3/2020		Y	N	U		U	0.38	0.0070	mg/kg
SB-23(5-6)-20200730	460-214767-5	HEXACHLOROBENZENE	8/3/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-23(5-6)-20200730	460-214767-5	CARBAZOLE	8/3/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZO(K)FLUORANTHENE	8/3/2020		Y	N	U		U	0.038	0.0076	mg/kg
SB-23(5-6)-20200730	460-214767-5	DIBENZ(A,H)ANTHRACENE	8/3/2020		Y	N	U		U	0.038	0.017	mg/kg
SB-23(5-6)-20200730	460-214767-5	DIBENZOFURAN	8/3/2020		Y	N	U		U	0.38	0.0054	mg/kg
SB-23(5-6)-20200730	460-214767-5	DIETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.0056	mg/kg
SB-23(5-6)-20200730	460-214767-5	DIMETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.088	mg/kg
SB-23(5-6)-20200730	460-214767-5	DI-N-BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.068	mg/kg
SB-23(5-6)-20200730	460-214767-5	DI-N-OCTYLPHTHALATE	8/3/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-23(5-6)-20200730	460-214767-5	BIS(2-ETHYLHEXYL) PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-23(5-6)-20200730	460-214767-5	ATRAZINE	8/3/2020		Y	N	UT		U	0.16	0.0097	mg/kg
SB-23(5-6)-20200730	460-214767-5	CAPROLACTAM	8/3/2020		Y	N	UT		U	0.38	0.060	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZALDEHYDE	8/3/2020		Y	N	UT	UJ	UJ	0.38	0.017	mg/kg
SB-23(5-6)-20200730	460-214767-5	2-CHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-23(5-6)-20200730	460-214767-5	BENZO(A)PYRENE	8/3/2020		Y	N	UT		U	0.038	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	HEXACHLOROBUTADIENE	8/3/2020		Y	N	U		U	0.078	0.0082	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	HEXACHLOROCYCLOPENTADIENE	8/3/2020		Y	N	U		U	0.39	0.034	mg/kg
SB-24(2-3)-20200730	460-214767-6	HEXACHLOROETHANE	8/3/2020		Y	N	U		U	0.039	0.013	mg/kg
SB-24(2-3)-20200730	460-214767-6	INDENO(1,2,3-C,D)PYRENE	8/3/2020		Y	N	U		U	0.039	0.015	mg/kg
SB-24(2-3)-20200730	460-214767-6	ISOPHORONE	8/3/2020		Y	N	U		U	0.16	0.11	mg/kg
SB-24(2-3)-20200730	460-214767-6	NAPHTHALENE	8/3/2020		Y	N	U		U	0.39	0.0067	mg/kg
SB-24(2-3)-20200730	460-214767-6	NITROBENZENE	8/3/2020		Y	N	U		U	0.039	0.0093	mg/kg
SB-24(2-3)-20200730	460-214767-6	BIPHENYL (DIPHENYL)	8/3/2020		Y	N	U		U	0.39	0.0051	mg/kg
SB-24(2-3)-20200730	460-214767-6	4-NITROPHENOL	8/3/2020		Y	N	U		U	0.78	0.063	mg/kg
SB-24(2-3)-20200730	460-214767-6	N-NITROSODI-N-PROPYLAMINE	8/3/2020		Y	N	U		U	0.039	0.028	mg/kg
SB-24(2-3)-20200730	460-214767-6	ACENAPHTHENE	8/3/2020		Y	N	U		U	0.39	0.028	mg/kg
SB-24(2-3)-20200730	460-214767-6	BIS(2-CHLOROISOPROPYL) ETHER	8/3/2020		Y	N	U		U	0.39	0.0070	mg/kg
SB-24(2-3)-20200730	460-214767-6	BENZO(K)FLUORANTHENE	8/3/2020		Y	N	U		U	0.039	0.0076	mg/kg
SB-24(2-3)-20200730	460-214767-6	BENZO(G,H,I)PERYLENE	8/3/2020		Y	N	U		U	0.39	0.011	mg/kg
SB-24(2-3)-20200730	460-214767-6	BENZO(B)FLUORANTHENE	8/3/2020		Y	N	U		U	0.039	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	BENZO(A)ANTHRACENE	8/3/2020		Y	N	U		U	0.039	0.014	mg/kg
SB-24(2-3)-20200730	460-214767-6	ACETOPHENONE	8/3/2020		Y	N	U		U	0.39	0.019	mg/kg
SB-24(2-3)-20200730	460-214767-6	BENZYL BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.39	0.018	mg/kg
SB-24(2-3)-20200730	460-214767-6	Aldol Condensation Product With 1st Highest Conc.	8/3/2020	520	Y	Y	JA		J	0	0	ug/kg
SB-24(2-3)-20200730	460-214767-6	DIBENZOFURAN	8/3/2020		Y	N	U		U	0.39	0.0054	mg/kg
SB-24(2-3)-20200730	460-214767-6	DIETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.39	0.0056	mg/kg
SB-24(2-3)-20200730	460-214767-6	DIMETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.39	0.088	mg/kg
SB-24(2-3)-20200730	460-214767-6	DI-N-BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.39	0.068	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,3,4,6-TETRACHLOROPHENOL	8/3/2020		Y	N	U		U	0.39	0.026	mg/kg
SB-24(2-3)-20200730	460-214767-6	DI-N-OCTYLPHTHALATE	8/3/2020		Y	N	U		U	0.39	0.021	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	BIS(2-CHLOROETHOXY) METHANE	8/3/2020		Y	N	U		U	0.39	0.030	mg/kg
SB-24(2-3)-20200730	460-214767-6	FLUORENE	8/3/2020		Y	N	U		U	0.39	0.0053	mg/kg
SB-24(2-3)-20200730	460-214767-6	HEXACHLOROBENZENE	8/3/2020		Y	N	U		U	0.039	0.018	mg/kg
SB-24(2-3)-20200730	460-214767-6	DIBENZ(A,H)ANTHRACENE	8/3/2020		Y	N	U		U	0.039	0.017	mg/kg
SB-24(2-3)-20200730	460-214767-6	CHRYSENE	8/3/2020		Y	N	U		U	0.39	0.0065	mg/kg
SB-24(2-3)-20200730	460-214767-6	CARBAZOLE	8/3/2020		Y	N	U		U	0.39	0.015	mg/kg
SB-24(2-3)-20200730	460-214767-6	BIS(2-ETHYLHEXYL) PHTHALATE	8/3/2020		Y	N	U		U	0.39	0.020	mg/kg
SB-24(2-3)-20200730	460-214767-6	ACENAPHTHYLENE	8/3/2020		Y	N	U		U	0.39	0.0040	mg/kg
SB-24(2-3)-20200730	460-214767-6	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/3/2020		Y	N	U		U	0.039	0.013	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,4-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.078	0.042	mg/kg
SB-24(2-3)-20200730	460-214767-6	FLUORANTHENE	8/3/2020		Y	N	U		U	0.39	0.014	mg/kg
SB-24(2-3)-20200730	460-214767-6	4-CHLORO-3-METHYLPHENOL	8/3/2020		Y	N	U		U	0.39	0.022	mg/kg
SB-24(2-3)-20200730	460-214767-6	PYRENE	8/3/2020		Y	N	U		U	0.39	0.0096	mg/kg
SB-24(2-3)-20200730	460-214767-6	CAPROLACTAM	8/3/2020		Y	N	UT		U	0.39	0.060	mg/kg
SB-24(2-3)-20200730	460-214767-6	N-NITROSODIPHENYLAMINE	8/3/2020		Y	N	U		U	0.39	0.0074	mg/kg
SB-24(2-3)-20200730	460-214767-6	BENZALDEHYDE	8/3/2020		Y	N	UT	UJ	UJ	0.39	0.017	mg/kg
SB-24(2-3)-20200730	460-214767-6	ANTHRACENE	8/3/2020		Y	N	U		U	0.39	0.012	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,4-DINITROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.31	0.19	mg/kg
SB-24(2-3)-20200730	460-214767-6	PHENOL	8/3/2020		Y	N	U		U	0.39	0.014	mg/kg
SB-24(2-3)-20200730	460-214767-6	4-BROMOPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.39	0.015	mg/kg
SB-24(2-3)-20200730	460-214767-6	BENZO(A)PYRENE	8/3/2020		Y	N	UT		U	0.039	0.010	mg/kg
SB-24(2-3)-20200730	460-214767-6	4-CHLOROANILINE	8/3/2020		Y	N	U		U	0.39	0.027	mg/kg
SB-24(2-3)-20200730	460-214767-6	4-CHLOROPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.39	0.014	mg/kg
SB-24(2-3)-20200730	460-214767-6	4-METHYLPHENOL (P-CRESOL)	8/3/2020		Y	N	U		U	0.39	0.024	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(2-3)-20200730	460-214767-6	4-NITROANILINE	8/3/2020		Y	N	U		U	0.39	0.044	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,2,4,5-TETRACHLOROBENZENE	8/3/2020		Y	N	U		U	0.39	0.012	mg/kg
SB-24(2-3)-20200730	460-214767-6	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-24(2-3)-20200730	460-214767-6	4,6-DINITRO-2-METHYLPHENOL	8/3/2020		Y	N	U	UJ	UJ	0.31	0.063	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,4-DICHLOROPHENOL	8/3/2020		Y	N	U		U	0.16	0.025	mg/kg
SB-24(2-3)-20200730	460-214767-6	PENTACHLOROPHENOL	8/3/2020		Y	N	U		U	0.31	0.079	mg/kg
SB-24(2-3)-20200730	460-214767-6	PHENANTHRENE	8/3/2020		Y	N	U		U	0.39	0.0068	mg/kg
SB-24(2-3)-20200730	460-214767-6	ATRAZINE	8/3/2020		Y	N	UT		U	0.16	0.0098	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,4-DIMETHYLPHENOL	8/3/2020		Y	N	U		U	0.39	0.017	mg/kg
SB-24(2-3)-20200730	460-214767-6	3-NITROANILINE	8/3/2020		Y	N	U		U	0.39	0.044	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,4,6-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.16	0.050	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,4,5-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.39	0.039	mg/kg
SB-24(2-3)-20200730	460-214767-6	2,6-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-24(2-3)-20200730	460-214767-6	2-CHLORONAPHTHALENE	8/3/2020		Y	N	U		U	0.39	0.018	mg/kg
SB-24(2-3)-20200730	460-214767-6	2-CHLOROPHENOL	8/3/2020		Y	N	U		U	0.39	0.014	mg/kg
SB-24(2-3)-20200730	460-214767-6	2-Methylphenol (O-Cresol)	8/3/2020		Y	N	U		U	0.39	0.014	mg/kg
SB-24(2-3)-20200730	460-214767-6	2-NITROANILINE	8/3/2020		Y	N	U		U	0.39	0.014	mg/kg
SB-24(2-3)-20200730	460-214767-6	2-NITROPHENOL	8/3/2020		Y	N	U		U	0.39	0.039	mg/kg
SB-24(2-3)-20200730	460-214767-6	3,3'-DICHLOROBENZIDINE	8/3/2020		Y	N	U		U	0.16	0.058	mg/kg
SB-24(2-3)-20200730	460-214767-6	2-Methylnaphthalene	8/3/2020		Y	N	U		U	0.39	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	NAPHTHALENE	8/3/2020		Y	N	U		U	0.38	0.0066	mg/kg
SB-24(8-9)-20200730	460-214767-7	DIETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.0055	mg/kg
SB-24(8-9)-20200730	460-214767-7	DIMETHYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.087	mg/kg
SB-24(8-9)-20200730	460-214767-7	DI-N-BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.067	mg/kg
SB-24(8-9)-20200730	460-214767-7	DI-N-OCTYLPHTHALATE	8/3/2020		Y	N	U		U	0.38	0.020	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	FLUORANTHENE	8/3/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-24(8-9)-20200730	460-214767-7	FLUORENE	8/3/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-24(8-9)-20200730	460-214767-7	HEXACHLOROBENZENE	8/3/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-24(8-9)-20200730	460-214767-7	HEXACHLOROBUTADIENE	8/3/2020		Y	N	U		U	0.077	0.0081	mg/kg
SB-24(8-9)-20200730	460-214767-7	HEXACHLOROCYCLOPENTADIENE	8/3/2020		Y	N	U		U	0.38	0.033	mg/kg
SB-24(8-9)-20200730	460-214767-7	HEXACHLOROETHANE	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-24(8-9)-20200730	460-214767-7	4-CHLOROPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-24(8-9)-20200730	460-214767-7	ISOPHORONE	8/3/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-24(8-9)-20200730	460-214767-7	NITROBENZENE	8/3/2020		Y	N	U		U	0.038	0.0092	mg/kg
SB-24(8-9)-20200730	460-214767-7	CAPROLACTAM	8/3/2020		Y	N	UT		U	0.38	0.059	mg/kg
SB-24(8-9)-20200730	460-214767-7	BENZO(A)PYRENE	8/3/2020		Y	N	UT		U	0.038	0.010	mg/kg
SB-24(8-9)-20200730	460-214767-7	BENZALDEHYDE	8/3/2020		Y	N	UT	UJ	UJ	0.38	0.017	mg/kg
SB-24(8-9)-20200730	460-214767-7	ATRAZINE	8/3/2020		Y	N	UT		U	0.15	0.0096	mg/kg
SB-24(8-9)-20200730	460-214767-7	DIBENZOFURAN	8/3/2020		Y	N	U		U	0.38	0.0054	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,4-DINITROPHENOL	8/3/2020		Y	N	UT	UJ	UJ	0.31	0.19	mg/kg
SB-24(8-9)-20200730	460-214767-7	INDENO(1,2,3-C,D)PYRENE	8/3/2020		Y	N	U		U	0.038	0.015	mg/kg
SB-24(8-9)-20200730	460-214767-7	2-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-24(8-9)-20200730	460-214767-7	PHENANTHRENE	8/3/2020		Y	N	U		U	0.38	0.0067	mg/kg
SB-24(8-9)-20200730	460-214767-7	DIBENZ(A,H)ANTHRACENE	8/3/2020		Y	N	U		U	0.038	0.017	mg/kg
SB-24(8-9)-20200730	460-214767-7	N-NITROSODIPHENYLAMINE	8/3/2020		Y	N	U		U	0.38	0.0073	mg/kg
SB-24(8-9)-20200730	460-214767-7	4-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,2,4,5-TETRACHLOROBENZENE	8/3/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-24(8-9)-20200730	460-214767-7	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,3,4,6-TETRACHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-24(8-9)-20200730	460-214767-7	4-BROMOPHENYL PHENYL ETHER	8/3/2020		Y	N	U		U	0.38	0.015	mg/kg

SDG: 4602147671

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	4,6-DINITRO-2-METHYLPHENOL	8/3/2020		Y	N	U	UJ	UJ	0.31	0.062	mg/kg
SB-24(8-9)-20200730	460-214767-7	3-NITROANILINE	8/3/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-24(8-9)-20200730	460-214767-7	PHENOL	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-24(8-9)-20200730	460-214767-7	2-NITROPHENOL	8/3/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-24(8-9)-20200730	460-214767-7	PENTACHLOROPHENOL	8/3/2020		Y	N	U		U	0.31	0.078	mg/kg
SB-24(8-9)-20200730	460-214767-7	2-Methylphenol (O-Cresol)	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-24(8-9)-20200730	460-214767-7	2-Methylnaphthalene	8/3/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	2-CHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-24(8-9)-20200730	460-214767-7	2-CHLORONAPHTHALENE	8/3/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,6-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.077	0.028	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,4-DINITROTOLUENE	8/3/2020		Y	N	U		U	0.077	0.041	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,4-DIMETHYLPHENOL	8/3/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,4-DICHLOROPHENOL	8/3/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,4,6-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.15	0.049	mg/kg
SB-24(8-9)-20200730	460-214767-7	2,4,5-TRICHLOROPHENOL	8/3/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-24(8-9)-20200730	460-214767-7	3,3'-DICHLOROBENZIDINE	8/3/2020		Y	N	U		U	0.15	0.058	mg/kg
SB-24(8-9)-20200730	460-214767-7	ACETOPHENONE	8/3/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-24(8-9)-20200730	460-214767-7	CHRYSENE	8/3/2020		Y	N	U		U	0.38	0.0064	mg/kg
SB-24(8-9)-20200730	460-214767-7	CARBAZOLE	8/3/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-24(8-9)-20200730	460-214767-7	BIS(2-ETHYLHEXYL) PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-24(8-9)-20200730	460-214767-7	BIS(2-CHLOROISOPROPYL) ETHER	8/3/2020		Y	N	U		U	0.38	0.0069	mg/kg
SB-24(8-9)-20200730	460-214767-7	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-24(8-9)-20200730	460-214767-7	BIS(2-CHLOROETHOXY) METHANE	8/3/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-24(8-9)-20200730	460-214767-7	BIPHENYL (DIPHENYL)	8/3/2020		Y	N	U		U	0.38	0.0051	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	BENZYL BUTYL PHTHALATE	8/3/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-24(8-9)-20200730	460-214767-7	BENZO(K)FLUORANTHENE	8/3/2020		Y	N	U		U	0.038	0.0075	mg/kg
SB-24(8-9)-20200730	460-214767-7	BENZO(G,H,I)PERYLENE	8/3/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-24(8-9)-20200730	460-214767-7	BENZO(B)FLUORANTHENE	8/3/2020		Y	N	U		U	0.038	0.0099	mg/kg
SB-24(8-9)-20200730	460-214767-7	BENZO(A)ANTHRACENE	8/3/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-24(8-9)-20200730	460-214767-7	N-NITROSODI-N-PROPYLAMINE	8/3/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-24(8-9)-20200730	460-214767-7	ANTHRACENE	8/3/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-24(8-9)-20200730	460-214767-7	4-CHLOROANILINE	8/3/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-24(8-9)-20200730	460-214767-7	ACENAPHTHYLENE	8/3/2020		Y	N	U		U	0.38	0.0039	mg/kg
SB-24(8-9)-20200730	460-214767-7	Aldol Condensation Product With 1st Highest Conc.	8/3/2020	960	Y	Y	JA		J	0	0	ug/kg
SB-24(8-9)-20200730	460-214767-7	ACENAPHTHENE	8/3/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-24(8-9)-20200730	460-214767-7	4-NITROPHENOL	8/3/2020		Y	N	U		U	0.77	0.062	mg/kg
SB-24(8-9)-20200730	460-214767-7	4-CHLORO-3-METHYLPHENOL	8/3/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-24(8-9)-20200730	460-214767-7	4-METHYLPHENOL (P-CRESOL)	8/3/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-24(8-9)-20200730	460-214767-7	PYRENE	8/3/2020		Y	N	U		U	0.38	0.0095	mg/kg

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-1-20200730	460-214767-8	CYANIDE	8/7/2020		Y	N	U		U	0.23	0.12	mg/kg
SB-19(4-5)-20200730	460-214767-1	CYANIDE	8/7/2020		Y	N	U		U	0.22	0.12	mg/kg
SB-19(7-8)-20200730	460-214767-2	CYANIDE	8/7/2020		Y	N	U		U	0.27	0.14	mg/kg
SB-22(3.5-4.5)-2020073	460-214767-3	CYANIDE	8/7/2020		Y	N	U		U	0.28	0.14	mg/kg
SB-23(2-3)-20200730	460-214767-4	CYANIDE	8/7/2020		Y	N	U		U	0.26	0.13	mg/kg
SB-23(5-6)-20200730	460-214767-5	CYANIDE	8/7/2020		Y	N	U		U	0.23	0.12	mg/kg
SB-24(2-3)-20200730	460-214767-6	CYANIDE	8/7/2020		Y	N	U		U	0.25	0.13	mg/kg

SDG: 4602147671

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-24(8-9)-20200730	460-214767-7	CYANIDE	8/7/2020		Y	N	U		U	0.28	0.14	mg/kg

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-214780-1
Reviewer: Felomina Tanguilig, Stella Cuenco, and Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 5, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-3(1.5-2.5)	460-214780-1	VOC, SVOC, Pesticide, PCB, PFAS
SB-3(5-6)	460-214780-2	VOC, SVOC, Pesticide, PCB, PFAS
SB-4(2-3)	460-214780-3	VOC, SVOC, Pesticide, PCB, PFAS
SB-4(6-7)	460-214780-4	VOC, SVOC, Pesticide, PCB, PFAS
SB-7(2.5-3.5)	460-214780-5	VOC, SVOC, Pesticide, PCB, PFAS
SB-8(3-4)	460-214780-6	VOC, SVOC, Pesticide, PCB, PFAS
SB-8(6-7)	460-214780-7	VOC, SVOC, Pesticide, PCB, PFAS
SB-11(3-4)	460-214780-8	VOC, SVOC, Pesticide, PCB, PFAS
SB-11(8-9)	460-214780-9	VOC, SVOC, Pesticide, PCB, PFAS
SB-12(1.5-2.5)	460-214780-10	VOC, SVOC, Pesticide, PCB, PFAS
SB-15(2.5-3.5)	460-214780-11	VOC, SVOC, Pesticide, PCB, PFAS
SB-15(7-8)	460-214780-12	VOC, SVOC, Pesticide, PCB, PFAS
SB-16(2-3)	460-214780-13	VOC, SVOC, Pesticide, PCB, PFAS
SB-16(5.5-6.5)	460-214780-14	VOC, SVOC, Pesticide, PCB, PFAS
SB-20(3.5-4.5)	460-214780-15	VOC, SVOC, Pesticide, PCB, PFAS
SB-20(6-7)	460-214780-16	VOC, SVOC, Pesticide, PCB, PFAS
DUP-2	460-214780-17	VOC, SVOC, Pesticide, PCB, PFAS
FB	460-214780-18	VOC
SB-15(7-8)MS	460-214780-12MS	SVOC
SB-15(7-8)MSD	460-214780-12MSD	SVOC
DUP-2MS	460-214780-17MS	PFAS
DUP-2MSD	460-214780-17MSD	PFAS

Associated QC Samples(s):
Field/Trip Blanks: FB
Field Duplicate pair: SB-3(5-6) and DUP-2

The above-listed soil and water samples were collected on July 31, 2020 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260C, semivolatile organic compounds (SVOC) by SW-846 method 8270D, organochlorine pesticides by SW-846 method 8081B, polychlorinated biphenyls (PCB) by SW-846 method 8082A, and perfluoroalkyl and polyfluoroalkyl substances (PFAS) by method 537 modified. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C,* SOP HW-24, Revision 4 (October 2014), the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation SW-846 Method 8270D,* SOP HW-35A, Revision 0 (June 2015), the USEPA Region 2 *Standard Operating Procedure for Validating Pesticide Compounds, Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B,* SOP HW-44, Revision 1.1 (December 2010), the USEPA Region 2 *Standard Operating Procedure for Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A,* SOP HW-45, Revision 1 (October 2006), the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-2017-002 (January 2017), and the Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (January 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- GC/Electron Capture Detector (GC/ECD) Instrument Performance Checks
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards/Labeled Compounds
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

VOC and SVOC

All criteria were met.

GC/ECD Instrument Performance Checks

Pesticide

All criteria were met.

LC/MS Instrument Performance Checks

PFAS

All criteria were met.

Initial and Continuing Calibrations

VOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/07/20	CCV-MS12	Chloromethane	33.3	FB	XX	UJ nondetects

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/06/20 (06:22)	CCV-MS2	cis-1,3-Dichloropropene	21.1	SB-3(1.5-2.5)	XX	UJ nondetects
		trans-1,3-Dichloropropene	25.7	SB-3(5-6)	XX	UJ nondetects
				SB-4(2-3)		
				SB-4(6-7)		
				SB-7(2.5-3.5)		
				SB-8(3-4)		
				SB-8(6-7)		
				SB-11(3-4)		
				SB-11(8-9)		
				SB-12(1.5-2.5)		
				SB-16(2-3)		
				SB-16(5.5-6.5)		
				SB-20(3.5-4.5)		
				SB-20(6-7)		
08/06/20 (18:19)	CCV-MS2	Bromomethane	22.5	SB-15(2.5-3.5)	XX	UJ nondetects
		Dichlorodifluoromethane	25.3	SB-15(7-8)	XX	UJ nondetects
		Trichlorofluoromethane	27.4		XX	UJ nondetects
		1,4-Dioxane	29.0		XX	UJ nondetects
08/06/20	CCV-MS9	Chloromethane	35.0	DUP-2	XX	UJ nondetects
		Chloroethane	45.0		XX	UJ nondetects
		1,1-Dichloroethane	23.1		XX	UJ nondetects
		Methyl acetate	22.6		XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The chloromethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, bromomethane, dichlorodifluoromethane, trichlorofluoromethane, 1,4-dioxane, chloroethane, 1,1-dichloroethane, and methyl acetate results for the samples listed above were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/04/20	CCV-11	Benzaldehyde	53.7	SB-15(7-8)	XX	UJ nondetects
		2,2'-Oxybis(1-chloropropane)	32.2	SB-16(2-3)	XX	UJ nondetects
		Hexachlorobutadiene	20.8	SB-16(5.5-6.5)	XX	UJ nondetects
				SB-20(3.5-4.5)		
				SB-20(6-7)		
				DUP-2		
08/05/20	CCV-12	Benzaldehyde	44.5	SB-3(1.5-2.5)	XX	UJ nondetects
		2,4-Dinitrophenol	27.7	SB-3(5-6)	XX	UJ nondetects
		4,6-Dinitro-2-methylphenol	28.2	SB-4(2-3)	XX	UJ nondetects
				SB-4(6-7)		
				SB-7(2.5-3.5)		
				SB-8(3-4)		
				SB-8(6-7)		
				SB-11(3-4)		
				SB-11(8-9)		
				SB-12(1.5-2.5)		
				SB-15(2.5-3.5)		

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzaldehyde, 2,2'-oxybis(1-chloropropane), hexachlorobutadiene, 2,4-dinitrophenol, and 4,6-dinitro-2-methylphenol results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Pesticide, PCB, and PFAS

All criteria were met.

Blanks

VOC

Contamination was not detected in the method blanks.

Contamination was detected in the field blank sample FB for VOC analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x reporting limits (RL) (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
FB	Acetone	6.1 ug/L	2xRL	SB-3(1.5-2.5) SB-3(5-6) SB-4(2-3) SB-4(6-7) SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7) SB-11(3-4) SB-11(8-9) SB-12(1.5-2.5) SB-15(2.5-3.5) SB-15(7-8) SB-16(2-3) SB-16(5.5-6.5) SB-20(3.5-4.5) SB-20(6-7) DUP-2

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and $\leq$ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and $\leq$ the Action Level, qualify the result as not detected (U) at the reported concentration.

No samples were qualified since the associated sample results were nondetect or greater than the action level.

SVOC, Pesticide, and PCB

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

PFAS

Contamination was detected in the associated pesticide method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 320-401467/1-A	Perfluorobutanoic acid	0.0285 ug/Kg	RL	SB-3(1.5-2.5) SB-3(5-6) SB-4(2-3) SB-4(6-7) SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7) SB-11(3-4) SB-11(8-9) SB-12(1.5-2.5) SB-15(2.5-3.5) SB-15(7-8) SB-16(2-3) SB-16(5.5-6.5) SB-20(3.5-4.5) SB-20(6-7) DUP-2

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SB-3(1.5-2.5)	Perfluorobutanoic acid	0.044 ug/Kg	0.22U ug/Kg
SB-3(5-6)	Perfluorobutanoic acid	0.041 ug/Kg	0.21U ug/Kg
SB-4(2-3)	Perfluorobutanoic acid	0.033 ug/Kg	0.38U ug/Kg
SB-4(6-7)	Perfluorobutanoic acid	0.051 ug/Kg	0.22U ug/Kg
SB-7(2.5-3.5)	Perfluorobutanoic acid	0.042 ug/Kg	0.20U ug/Kg
SB-8(3-4)	Perfluorobutanoic acid	0.033 ug/Kg	0.21U ug/Kg
SB-8(6-7)	Perfluorobutanoic acid	0.045 ug/Kg	0.21U ug/Kg
SB-11(3-4)	Perfluorobutanoic acid	0.043 ug/Kg	0.21U ug/Kg
SB-11(8-9)	Perfluorobutanoic acid	0.047 ug/Kg	0.22U ug/Kg
SB-12(1.5-2.5)	Perfluorobutanoic acid	0.036 ug/Kg	0.22U ug/Kg
SB-15(2.5-3.5)	Perfluorobutanoic acid	0.043 ug/Kg	0.21U ug/Kg
SB-15(7-8)	Perfluorobutanoic acid	0.041 ug/Kg	0.22U ug/Kg
SB-16(2-3)	Perfluorobutanoic acid	0.040 ug/Kg	0.23U ug/Kg
SB-16(5.5-6.5)	Perfluorobutanoic acid	0.033 ug/Kg	0.21U ug/Kg
SB-20(3.5-4.5)	Perfluorobutanoic acid	0.043 ug/Kg	0.22U ug/Kg
DUP-2	Perfluorobutanoic acid	0.044 ug/Kg	0.21U ug/Kg

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

Surrogate Recoveries

VOC

The following table lists the surrogate percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

Sample ID	Surrogate	%R (Limits)	Validation Action
SB-4(2-3)	Toluene-d8	122 (80-120)	None
SB-8(6-7)	Toluene-d8	122 (80-120)	None
SB-12(1.5-2.5)	Toluene-d8	122 (80-120)	J detects
SB-15(2.5-3.5)	Toluene-d8	127 (80-120)	None

Validation action was not required for all compounds in samples SB-4(2-3), SB-8(6-7), and SB-15(2.5-3.5) due to high surrogate recoveries as positive results only are affected and these compounds were not detected in the associated samples.

The SB-12(1.5-2.5) VOC result may be biased high. The positive result can be used for project objectives as an estimated value (J) which may have a minor impact on the data usability.

SVOC, Pesticide, and PCB

All criteria were met.

MS/MSD Results

VOC, Pesticide, and PCB

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

SVOC

MS/MSD analyses were performed on sample SB-15(7-8) for SVOC analysis. The following table lists the MS/MSD percent recoveries (%R) outside of control limits in the SVOC analysis and the resulting validation actions.

MS ID	Compound	MS %R (Limits)	MS/D %R (Limits)	Affected Sample	Validation Action
SB-15(7-8)MS/MSD	1,1'-Biphenyl	41 (65-110)	47 (65-110)	SB-15(7-8)	UJ nondetects
	1,2,4,5-Tetrachlorobenzene	41 (64-110)	50 (64-110)		UJ nondetects
	2,2'-Oxybis(1-chloropropane)	22 (49-109)	29 (49-109)		UJ nondetects
	2,3,4,6-Tetrachlorophenol	46 (58-113)	48 (58-113)		UJ nondetects
	2,4,5-Trichlorophenol	48 (64-112)	51 (64-112)		UJ nondetects
	2,4,6-Trichlorophenol	46 (63-113)	50 (63-113)		UJ nondetects
	2,4-Dichlorophenol	44 (66-113)	49 (66-113)		UJ nondetects
	2,4-Dimethylphenol	40 (63-107)	45 (63-107)		UJ nondetects
	2,4-Dinitrophenol	10 (37-125)	10 (37-125)		UJ nondetects
	2,4-Dinitrotoluene	50 (65-124)	52 (65-124)		UJ nondetects
	2,6-Dinitrotoluene	49 (67-121)	53 (67-121)		UJ nondetects
	2-Chloronaphthalene	41 (65-109)	48 (65-109)		UJ nondetects
	2-Chlorophenol	38 (63-106)	44 (63-106)		UJ nondetects
	2-Methylnaphthalene	38 (64-108)	45 (64-108)		UJ nondetects
	2-Methylphenol	38 (63-108)	45 (63-108)		UJ nondetects
	2-Nitroaniline	41 (59-119)	41 (59-119)		UJ nondetects
	2-Nitrophenol	38 (64-112)	-		UJ nondetects
	4,6-Dinitro-2-methylphenol	31 (64-129)	22 (64-129)		UJ nondetects
	4-Bromophenyl-phenyl ether	51 (67-113)	56 (67-113)		UJ nondetects
	4-Chloro-3-methylphenol	47 (66-114)	47 (66-114)		UJ nondetects
	4-Chlorophenyl-phenyl ether	49 (66-110)	54 (66-110)		UJ nondetects
	4-Methylphenol	35 (61-108)	39 (61-108)		UJ nondetects
	4-Nitroaniline	44 (50-110)	44 (50-110)		UJ nondetects
	4-Nitrophenol	42 (47-123)	45 (47-123)		UJ nondetects
	Acenaphthene	37 (53-110)	42 (53-110)		UJ nondetects
	Acenaphthylene	43 (64-108)	48 (64-108)		UJ nondetects
	Acetophenone	34 (61-103)	41 (61-103)		UJ nondetects
	Anthracene	45 (67-114)	49 (67-114)		UJ nondetects
	Benzaldehyde	30 (39-133)	-		UJ nondetects
	Benzo(a)anthracene	45 (67-115)	47 (67-115)		UJ nondetects
	Benzo(a)pyrene	54 (63-108)	57 (63-108)		UJ nondetects
	Fluoranthene	53 (64-116)	58 (64-116)		UJ nondetects
	Benzo(g,h,i)perylene	51 (61-113)	53 (61-113)		UJ nondetects
	Benzo(k)fluoranthene	56 (67-115)	55 (67-115)		UJ nondetects
	Bis(2-chloroethoxy)methane	35 (62-107)	41 (62-107)		UJ nondetects
	Bis(2-chloroethyl) ether	29 (60-107)	39 (60-107)		UJ nondetects
	Bis(2-ethylhexyl)phthalate	45 (69-124)	47 (69-124)		UJ nondetects
	Butylbenzylphthalate	46 (70-123)	49 (70-123)		UJ nondetects
	Caprolactam	56 (59-140)	49 (59-140)		UJ nondetects
	Carbazole	44 (64-113)	46 (64-113)		UJ nondetects
	Chrysene	45 (71-122)	47 (71-122)		UJ nondetects
	Dibenzo(a,h)anthracene	54 (66-119)	57 (66-119)		UJ nondetects
	Dibenzofuran	45 (65-108)	49 (65-108)		UJ nondetects
	Diethylphthalate	49 (63-109)	50 (63-109)		UJ nondetects
	Dimethylphthalate	49 (65-109)	41 (65-109)		UJ nondetects
	Di-n-butylphthalate	46 (66-114)	50 (66-114)		UJ nondetects
	Di-n-octylphthalate	53 (65-122)	55 (65-122)		UJ nondetects
	Fluoranthene	45 (64-113)	50 (64-113)		UJ nondetects
	Fluorene	46 (65-109)	49 (65-109)		UJ nondetects
	Hexachlorobenzene	53 (70-119)	58 (70-119)		UJ nondetects
	Hexachlorobutadiene	36 (62-109)	48 (62-109)		UJ nondetects
	Hexachlorocyclopentadiene	-	33 (22-124)		UJ nondetects
	Hexachloroethane	26 (61-102)	36 (61-102)		UJ nondetects

MS ID	Compound	MS %R (Limits)	MS/D %R (Limits)	Affected Sample	Validation Action
SB-15(7-8)MS/MSD (cont.)	Indeno(1,2,3-cd)pyrene	57 (62-121)	56 (62-121)	SB-15(7-8)	UJ nondetects
	Isophorone	39 (63-107)	44 (63-107)		UJ nondetects
	Naphthalene	33 (63-106)	43 (63-106)		UJ nondetects
	Nitrobenzene	35 (63-110)	44 (63-110)		UJ nondetects
	N-Nitroso-di-n-propylamine	33 (61-108)	38 (61-108)		UJ nondetects
	4-Nitroaniline	45 (67-113)	49 (67-113)		UJ nondetects
	Pentachlorophenol	40 (44-126)	43 (44-126)		UJ nondetects
	Phenanthrene	44 (66-112)	48 (66-112)		UJ nondetects
	Phenol	37 (63-110)	44 (63-110)		UJ nondetects
	2,4,5-Trichlorophenol	47 (71-122)	48 (71-122)		UJ nondetects
	1,4-Dioxane	18 (31-81)	24 (31-81)		UJ nondetects

- Within control limits

The 1,1'-biphenyl, 1,2,4,5-tetrachlorobenzene, 2,2'-oxybis(1-chloropropane), 2,3,4,6-tetrachlorophenol, 2,4,5-trichlorophenol, 2,4,6-trichlorophenol, 2,4-dichlorophenol, 2,4-dimethylphenol, 2,4-dinitrophenol, 2,4-dinitrotoluene, 2,6-dinitrotoluene, 2-chloronaphthalene, 2-chlorophenol, 2-methylnaphthalene, 2-methylphenol, 2-nitroaniline, 2-nitrophenol, 4,6-dinitro-2-methylphenol, 4-bromophenyl-phenyl ether, 4-chloro-3-methylphenol, 4-chlorophenyl-phenyl ether, 4-methylphenol, 4-nitroaniline, 4-nitrophenol, acenaphthene, acenaphthylene, acetophenone, anthracene, benzaldehyde, benzo(a)anthracene, benzo(a)pyrene, fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-chloroethoxy)methane, bis(2-chloroethyl) ether, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, caprolactam, carbazole, chrysene, dibenzo(a,h)anthracene, dibenzofuran, diethylphthalate, dimethylphthalate, di-n-butylphthalate, di-n-octylphthalate, fluoranthene, fluorene, hexachlorobenzene, hexachlorobutadiene, hexachlorocyclopentadiene, hexachloroethane, indeno(1,2,3-cd)pyrene, isophorone, naphthalene, nitrobenzene, n-nitroso-di-n-propylamine, 4-nitroaniline, pentachlorophenol, phenanthrene, phenol, 2,4,5-trichlorophenol, and 1,4-dioxane results may be biased low due to low MS/MSD percent recoveries. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

The following table lists the MS/MSD relative percent differences (RPD) outside of control limits in the SVOC analysis and the resulting validation actions.

MS ID	Compound	RPD (Limits)	Affected Sample	Validation Action
SB-15(7-8)MS/MSD	Hexachlorocyclopentadiene	35 (≤30)	SB-15(7-8)	None
	Hexachloroethane	34 (≤30)		

Validation action was not required for hexachlorocyclopentadiene and hexachloroethane due to MS/MSD relative percent difference exceedances as positive results only are affected and these compounds were not detected in the associated sample.

PFAS

MS/MSD analyses were performed on sample DUP-2 for PFAS analysis. All criteria were met.

LCS Results

VOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-714432	1,4-Dioxane	139 (73-136)	-	SB-3(1.5-2.5) SB-3(5-6) SB-4(2-3) SB-4(6-7) SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7) SB-11(3-4) SB-11(8-9) SB-12(1.5-2.5) SB-16(2-3) SB-16(5.5-6.5) SB-20(3.5-4.5) SB-20(6-7)	None
LCS/LCSD 460-714620	4-Methyl-2-pentanone	-	78 (80-122)	SB-15(2.5-3.5) SB-15(7-8)	UJ nondetects
LCS/LCSD 460-714620	Trichlorofluoromethane	-	144 (67-142)	SB-15(2.5-3.5) SB-15(7-8)	None

- Within control limits

Validation action was not required for 1,4-dioxane and trichlorofluoromethane due to high LCS/LCSD recoveries as positive results only are affected and these compounds were not detected in the associated samples.

The 4-methyl-2-pentanone result may be biased low due to low LCS/LCSD percent recovery. The result can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

The following table lists the LCS/LCSD relative percent differences (RPD) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	RPD (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-714620	Methyl acetate	35 (≤30)	SB-15(2.5-3.5) SB-15(7-8)	None

Validation action was not required for methyl acetate due to LCS/LCSD relative percent difference exceedance as positive results only are affected and this compound was not detected in the associated samples.

SVOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-713907	Benzaldehyde	120 (39-113)	-	SB-3(1.5-2.5) SB-3(5-6) SB-4(2-3) SB-4(6-7) SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7) SB-11(3-4) SB-11(8-9) SB-12(1.5-2.5) SB-15(2.5-3.5)	None
LCS/LCSD 460-713908	Hexachlorobutadiene	112 (62-109)	117 (62-109)	SB-15(7-8) SB-16(2-3) SB-16(5.5-6.5) SB-20(3.5-4.5) SB-20(6-7) DUP-2	None

- Within control limits

Validation action was not required for benzaldehyde and hexachlorobutadiene due to high LCS/LCSD recoveries as positive results only are affected and these compounds were not detected in the associated samples.

Pesticide, PCB, and PFAS

All criteria were met.

Internal Standards

VOC, SVOC, Pesticide, and PCB

All criteria were met.

Labeled Compounds

PFAS

All criteria were met.

Moisture Content

All criteria were met.

Field Duplicate Results

Samples SB-3(5-6) and DUP-2 were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations and validation actions taken.

VOC, SVOC, Pesticide, and PCB

There were no detected compounds in the field duplicate pair for VOC, SVOC, pesticide, and PCB.

PFAS

Compound	Concentration (ug/Kg)		RPD
	SB-3(5-6)	DUP-2	
Perfluorobutanoic acid	0.041	0.044	7

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC, SVOC, and PFAS analyses. These results were qualified as estimated (J) by the laboratory.

No results were reported below the RL and above the MDL in the pesticide and PCB analyses.

Dilutions were not required for VOC, SVOC, pesticide, PCB, and PFAS analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146C1a
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 2
Reviewer: EJ
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A/N	%RSD ≤ 20, r2
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	SW	FB = 18
VII.	Surrogate spikes	SW	
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	SW	LCS ID
X.	Field duplicates	ND	D = 2, 17
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-3(1.5-2.5)	460-214780-1	Soil	07/31/20
2	SB-3(5-6) D	460-214780-2	Soil	07/31/20
3	SB-4(2-3)	460-214780-3	Soil	07/31/20
4	SB-4(6-7)	460-214780-4	Soil	07/31/20
5	SB-7(2.5-3.5)	460-214780-5	Soil	07/31/20
6	SB-8(3-4)	460-214780-6	Soil	07/31/20
7	SB-8(6-7)	460-214780-7	Soil	07/31/20
8	SB-11(3-4)	460-214780-8	Soil	07/31/20
9	SB-11(8-9)	460-214780-9	Soil	07/31/20
10	SB-12(1.5-2.5)	460-214780-10	Soil	07/31/20
11	SB-15(2.5-3.5)	460-214780-11	Soil	07/31/20
12	SB-15(7-8)	460-214780-12	Soil	07/31/20
13	SB-16(2-3)	460-214780-13	Soil	07/31/20
14	SB-16(5.5-6.5)	460-214780-14	Soil	07/31/20

LDC #: 49146C1a
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 2 of 2
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260C)

15	SB-20(3.5-4.5)		460-214780-15	Soil	07/31/20
16	SB-20(6-7)		460-214780-16	Soil	07/31/20
17	DUP-2	D	460-214780-17	Soil	07/31/20
18	FB		460-214780-18	Water	07/31/20
19					
20					
21					

Notes:

1	LB3 460-713425	MB 460-714676				
2	MB 460-713492	- 714768				
3	- 714432					
4	- 714620					

LDC #: 49146C1a

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% (20%) and relative response factors (RRF) ≥ 0.05?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% / 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) ≥ 0.05?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target compounds detected in the field blanks?	✓			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	•	✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓	✓	

Validation Area				
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 49146C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
W	8/7/20	CCV-MS12	A	33.3		All water	J/UJ/A ND
	0712	(CCV 460-714768)					
	8/2/20	CCV_MS2	Q	21.0 21.5		LB3 460-713425	J/UJ/A ND
	1644	(CCV 460-713497)	R	25.7		MB 460-713492	
			W	28.2		↓	↓
			BB	21.8			
3	8/6/20	CCV-MS2	R	21.1		1→10, 13→16	J/UJ/A ND
	0622	(CCV 460-714432)	W	25.7		MB 460-714432	↓
4	8/6/20	CCV-MS2	B	22.5		11, 12	J/UJ/A ND
	1819	(CCV 460-714620)	~~KK~~ JJ	25.3		MB 460-714620	
			KK	27.4		↓	↓
			HHH	29.0			
5	8/6/20	CCV-MS9	A	35.0		17,	J/UJ/A ND
	1833	(CCV 460-714626)	D	45.0		MB 460-714626	
			I	23.1		↓	↓
			QQQQ	22.6			

LDC #: 49146c1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

(Y) N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** mg/kg

Sampling date: 07/31/20

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: FB Associated Samples: All soils (ND + 7 MB + 7 RL)

Compound	Blank ID	Sample Identification								
	18									
F	6.1									

Blank units: _____ **Associated sample units:** _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 49146c1a

VALIDATION FINDINGS WORKSHEET
Surrogate Spikes

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were all surrogate %R within QC limits?

Y (N) N/A If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R out of outside of criteria?

#	Sample ID	Surrogate	%Recovery (Limits)	Qualifications
	3	Tol	122 (80-120)	Jdet/P ND
			( )	
	7	↓	122 ( )	ND
			( )	
	10	↓	122 ( )	ND + Det
			( )	
	11	↓	127 ( )	ND
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	

SMC1 (TOL) = Toluene-d8
SMC2 (BFB) = Bromofluorobenzene
SMC3 (DCE) = 1,2-Dichloroethane-d4
SMC4 (DFM) = Dibromofluoromethane

LDC #: 49146C1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS ID 460-713492	HHH	140 (73-136)	( )	( )	LB3 460-713425, MB 460-713492	J det/P all ND
		M	127 (75-120)	( )	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
	LCS ID 460-714432	HHHH	139 (73-136)	( )	( )	1→10, 13→16, MB 460-714432	J det/P all ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS ID 460-714620	Y	( )	78 (80-122)	( )	11, 12	J/UJ/P all ND
		QQQQ	( )	( )	35 (30)	MB 460-714620	J det/P
		KK	( )	144 (67-147)	( )	↓	J det/P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146C1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20/100/400ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/30/2020	F	0.1528	0.1528	0.1799	0.1799	12	12
			QQQ	0.2586	0.2586	0.2459	0.2459	8.9	8.9
	CVOAMS12		HHHH	1.0044	1.0044	0.9718	0.9718	5.9	5.9
			EE	0.4249	0.4249	0.3971	0.3971	7.6	7.6
			JJJ	1.2512	1.2512	1.1751	1.1751	7.8	7.8

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	6/13/2020	F	0.9276	0.9276	1.0518	1.0518	12	12
			K	0.6360	0.6360	0.6811	0.6811	17.0	17.0
	CVOAMS2		HHHH	1.4940	1.4940	1.4301	1.4301	12.3	12.3
			EE	0.7917	0.7917	0.7525	0.7525	3.9	3.9
			JJJ	2.1044	2.1044	2.0369	2.0369	5.3	5.3

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/24/2020	M	0.4178	0.4178	0.3966	0.3966	19	19
			K	0.6156	0.6156	0.6113	0.6113	7.7	7.7
	CVOAMS9		HHHH	1.4787	1.4787	1.3815	1.3815	14.8	14.8
			EE	0.6255	0.6255	0.6168	0.6168	2.8	2.8
			JJJ	2.0056	2.0056	1.9193	1.9193	3.7	3.7

LDC #: 49146C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV-1 0712	8/7/20	F (IS1)	0.1799	0.1592	0.1592	11.5	11.5
			QQQ (IS2)	0.2459	0.2578	0.2578	4.8	4.8
			HHHH (IS3)	0.9718	1.060	1.060	9.0	9.0
			EE (IS4)	0.3971	0.4323	0.4323	8.9	8.9
			JJJ (IS5)	1.175	1.265	1.265	7.7	7.7
3	CCV-2 0622	8/6/20	F (IS1)	1.0518	0.9881	0.9881	6.1	6.1
			K (IS2)	0.6811	0.5980	0.5980	12.2	12.2
			HHHH (IS3)	1.4301	1.494	1.494	4.4	4.4
			EE (IS4)	0.7525	0.7230	0.7230	3.9	3.9
			JJJ (IS5)	2.0369	1.757	1.757	13.7	13.7
4	CCV-2 1819	8/6/20	F (IS1)	1.0518	1.041	1.041	1.0	1.0
			K (IS2)	0.6811	0.6965	0.6965	2.3	2.3
			HHHH (IS3)	1.4301	1.844	1.844	29.0	29.0
			EE (IS4)	0.7525	0.7655	0.7655	1.7	1.7
			JJJ (IS5)	2.0369	2.028	2.028	0.5	0.5

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
5	CCV-9 1833	8/6/20	M (IS1)	0.3966	0.33603	0.33603	15.2	15.2
			K (IS2)	0.6113	0.6426	0.6426	5.1	5.1
			HHH (IS3)	1.3815	1.226	1.226	11.3	11.3
			EE (IS4)	0.6168	0.5946	0.5946	3.6	3.6
			JJJ (IS5)	1.9193	1.770	1.770	7.8	7.8
2			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					
3			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146C1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	60.1	120	120	0
1,2-Dichloroethane-d4	↓	58.8	118	118	↓
Toluene-d8	↓	51.7	103	103	↓
Bromofluorobenzene	↓	52.4	105	105	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49146c1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260 CY

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS10 460-71420

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	0.0200	0.0200	0.0218	0.0245	109	109	123	123	12	12
Trichloroethene	↓	↓	0.0264	0.0202	132	132	101	101	13	13
Benzene			0.0167	0.0178	84	84	89	89	7	7
Toluene			0.0170	0.0177	85	85	89	89	4	4
Chlorobenzene			0.0178	0.0187	89	89	94	94	5	5

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146 c/a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: V GC __ HPLC GCMS VOA (EPA SW 846 Method 826C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #15 Compound Name QQQ

Concentration = $\frac{(4122)(50.0)(5)(1/1000)}{(697916)(0.4273)(6.59)(0.865)}$ =

= 0.000619 mg/kg

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	15	QQQ	0.00061	0.000619	

Comments:

LDC #: 49146C2a
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/2/20
Page: 1 of 2
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A/N	%RSD ≤ 20, r² NO ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	SW	LCS ID
X.	Field duplicates	ND	D = 2, 17
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results ≥ RL > MDL = Jdet
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-3(1.5-2.5)	460-214780-1	Soil	07/31/20
2	SB-3(5-6) D	460-214780-2	Soil	07/31/20
3	SB-4(2-3)	460-214780-3	Soil	07/31/20
4	SB-4(6-7)	460-214780-4	Soil	07/31/20
5	SB-7(2.5-3.5)	460-214780-5	Soil	07/31/20
6	SB-8(3-4)	460-214780-6	Soil	07/31/20
7	SB-8(6-7)	460-214780-7	Soil	07/31/20
8	SB-11(3-4)	460-214780-8	Soil	07/31/20
9	SB-11(8-9)	460-214780-9	Soil	07/31/20
10	SB-12(1.5-2.5)	460-214780-10	Soil	07/31/20
11	SB-15(2.5-3.5)	460-214780-11	Soil	07/31/20
12	SB-15(7-8)	460-214780-12	Soil	07/31/20
13	SB-16(2-3)	460-214780-13	Soil	07/31/20
14	SB-16(5.5-6.5)	460-214780-14	Soil	07/31/20

LDC #: 49146C2a
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/2/20
Page: 2 of 2
Reviewer: FJ
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

15 ✓	SB-20(3.5-4.5)	460-214780-15	Soil	07/31/20
16 ✓	SB-20(6-7)	460-214780-16	Soil	07/31/20
17 ✓	DUP-2 D	460-214780-17	Soil	07/31/20
18 ✓	SB-15(7-8)MS	460-214780-12MS	Soil	07/31/20
19 ✓	SB-15(7-8)MSD	460-214780-12MSD	Soil	07/31/20
20				
21				
22				

Notes:

1	MB 460-713907						
2 ✓	460-713908						

LDC #: 49146C2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Semivolatiles (EPA SW 846 Method 8270 D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15/30% or 20% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% or 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recoveries (%R) was less than 10%, was a reanalysis performed to confirm %R ?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓	✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	CC. Dimethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	GGGG. C30-Hopane	I1. Methyl methanesulfonate
B. Bis (2-chloroethyl) ether	DD. Acenaphthylene	FFF. Di-n-octylphthalate	HHHH. 1-Methylphenanthrene	J1. Ethyl methanesulfonate
C. 2-Chlorophenol	EE. 2,6-Dinitrotoluene	GGG. Benzo(b)fluoranthene	IIII. 1,4-Dioxane	K1. o,o',o''-Triethylphosphorothioate
D. 1,3-Dichlorobenzene	FF. 3-Nitroaniline	HHH. Benzo(k)fluoranthene	JJJJ. Acetophenone	L1. n-Phenylene diamine
E. 1,4-Dichlorobenzene	GG. Acenaphthene	III. Benzo(a)pyrene	KKKK. Atrazine	M1. 1,4-Naphthoquinone
F. 1,2-Dichlorobenzene	HH. 2,4-Dinitrophenol	JJJ. Indeno(1,2,3-cd)pyrene	LLLL. Benzaldehyde	N1. N-Nitro-o-toluidine
G. 2-Methylphenol	II. 4-Nitrophenol	KKK. Dibenz(a,h)anthracene	MMMM. Caprolactam	O1. 1,3,5-Trinitrobenzene
H. 2,2'-Oxybis(1-chloropropane)	JJ. Dibenzofuran	LLL. Benzo(g,h,i)perylene	NNNN. 2,6-Dichlorophenol	P1. Pentachlorobenzene
I. 4-Methylphenol	KK. 2,4-Dinitrotoluene	MMM. Bis(2-Chloroisopropyl)ether	OOOO. 1,2-Diphenylhydrazine	Q1. 4-Aminobiphenyl
J. N-Nitroso-di-n-propylamine	LL. Diethylphthalate	NNN. Aniline	PPPP. 3-Methylphenol	R1. 2-Naphthylamine
K. Hexachloroethane	MM. 4-Chlorophenyl-phenyl ether	OOO. N-Nitrosodimethylamine	QQQQ. 3&4-Methylphenol	S1. Triphenylene
L. Nitrobenzene	NN. Fluorene	PPP. Benzoic Acid	RRRR. 4-Dimethyldibenzothiophene (4MDT)	T1. Octachlorostyrene
M. Isophorone	OO. 4-Nitroaniline	QQQ. Benzyl alcohol	SSSS. 2/3-Dimethyldibenzothiophene (4MDT)	U1. Famphur
N. 2-Nitrophenol	PP. 4,6-Dinitro-2-methylphenol	RRR. Pyridine	TTTT. 1-Methyldibenzothiophene (1MDT)	V1. 1,4-phenylenediamine
O. 2,4-Dimethylphenol	QQ. N-Nitrosodiphenylamine	SSS. Benzidine	UUUU.. 2,3,4,6-Tetrachlorophenol	W1. Methapyrilene
P. Bis(2-chloroethoxy)methane	RR. 4-Bromophenyl-phenylether	TTT. 1-Methylnaphthalene	VVVV. 1,2,4,5-Tetrachlorobenzene	X1. Pentachloroethane
Q. 2,4-Dichlorophenol	SS. Hexachlorobenzene	UUU.Benzo(b)thiophene	WWWW.. 2-Picoline	Y1. 3,3'-Dimethylbenzidine
R. 1,2,4-Trichlorobenzene	TT. Pentachlorophenol	VVV.Benzonaphthothiophene	XXXX. 3-Methylcholanthrene	Z1. o-Toluidine
S. Naphthalene	UU. Phenanthrene	WWW.Benzo(e)pyrene	YYYY. a,a-Dimethylphenethylamine	A2. 1-Naphthylamine
T. 4-Chloroaniline	VV. Anthracene	XXX. 2,6-Dimethylnaphthalene	ZZZZ. Hexachloropropene	B2. 4-Aminobiphenyl
U. Hexachlorobutadiene	WW. Carbazole	YYY. 2,3,5-Trimethylnaphthalene	A1. N-Nitrosodiethylamine	C2. 4-Nitroquinoline-1-oxide
V. 4-Chloro-3-methylphenol	XX. Di-n-butylphthalate	ZZZ. Perylene	B1. N-Nitrosodi-n-butylamine	D2. Hexachloropene
W. 2-Methylnaphthalene	YY. Fluoranthene	AAAA. Dibenzothiophene	C1. N-Nitrosomethylethylamine	E2. Bis (2-chloro-1-methylethyl) ether
X. Hexachlorocyclopentadiene	ZZ. Pyrene	BBBB. Benzo(a)fluoranthene	D1. N-Nitrosomorpholine	F2. Bifenthrin
Y. 2,4,6-Trichlorophenol	AAA. Butylbenzylphthalate	CCCC. Benzo(b)fluorene	E1. N-Nitrosopyrrolidine	G2. Cyfluthrin
Z. 2,4,5-Trichlorophenol	BBB. 3,3'-Dichlorobenzidine	DDDD. cis/trans-Decalin	F1. Phenacetin	H2. Cypermethrin
AA. 2-Chloronaphthalene	CCC. Benzo(a)anthracene	EEEE. 1,1'-Biphenyl	G1. 2-Acetylaminofluorene	I2. Permethrin (cis/trans)
BB. 2-Nitroaniline	DDD. Chrysene	FFFF. Retene	H1. Pronamide	J2. 5-Nitro-o-toluidine

LDC #: 49146C2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20mid/50low level %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
N	8/4/20	CCV-11	LLLL	53.7		12 → 19	J/UJ/A ND
	2316	(CCV 460-714040)	H	32.2		MB 460-713908	↓
			U	20.8		↓	
1	8/5/20	CCV-12	LLLL	44.5		1 → 11	J/UJ/A ND
	0006	(CCV 460-714043)	HH	27.7		MB 460-713907	↓
			PP	28.2		↓	

LDC #: 49146C2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	18 + 19	see following pages	( )	( )	( )	12	
			( )	( )	( )		
			( )	( )	( )	all %R =	J/UJ/A all ND
			( )	( )	( )	% RPD =	J/UJ/A ↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214780-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z57106.d

Lab ID: 460-214780-12 MS Client ID: SB-15(7-8) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	3.74	0.0049 U	1.54	41	65-110	F1
1,2,4,5-Tetrachlorobenzene	3.74	0.012 U	1.53	41	64-110	F1
2,2'-oxybis[1-chloropropane]	3.74	0.0067 U	0.838	22	49-109	F1
2,3,4,6-Tetrachlorophenol	3.74	0.025 U	1.73	46	58-113	F1
2,4,5-Trichlorophenol	3.74	0.038 U	1.79	48	64-112	F1
2,4,6-Trichlorophenol	3.74	0.048 U	1.73	46	63-113	F1
2,4-Dichlorophenol	3.74	0.024 U	1.65	44	66-113	F1
2,4-Dimethylphenol	3.74	0.016 U	1.51	40	63-107	F1
2,4-Dinitrophenol	7.48	0.18 U	0.732	10	37-125	F1
2,4-Dinitrotoluene	3.74	0.040 U	1.88	50	65-124	F1
2,6-Dinitrotoluene	3.74	0.027 U	1.83	49	67-121	F1
2-Chloronaphthalene	3.74	0.017 U	1.53	41	65-109	F1
2-Chlorophenol	3.74	0.013 U	1.41	38	63-106	F1
2-Methylnaphthalene	3.74	0.010 U	1.41	38	64-108	F1
2-Methylphenol	3.74	0.014 U	1.43	38	63-108	F1
2-Nitroaniline	3.74	0.014 U	1.52	41	59-119	F1
2-Nitrophenol	3.74	0.037 U	1.42	38	64-112	F1
3,3'-Dichlorobenzidine	3.74	0.056 U	1.63	44	4-119	
3-Nitroaniline	3.74	0.042 U	1.58	42	31-102	
4,6-Dinitro-2-methylphenol	7.48	0.060 U	2.28	31	64-129	F1
4-Bromophenyl phenyl ether	3.74	0.015 U	1.90	51	67-113	F1
4-Chloro-3-methylphenol	3.74	0.021 U	1.74	47	66-114	F1
4-Chloroaniline	3.74	0.026 U	1.39	37	20-98	
4-Chlorophenyl phenyl ether	3.74	0.013 U	1.84	49	66-110	F1
4-Methylphenol	3.74	0.023 U	1.30	35	61-108	F1
4-Nitroaniline	3.74	0.043 U	1.66	44	50-110	F1
4-Nitrophenol	7.48	0.061 U	3.17	42	47-123	F1
Acenaphthene	3.74	0.027 U	1.39	37	53-110	F1
Acenaphthylene	3.74	0.0038 U	1.60	43	64-108	F1
Acetophenone	3.74	0.018 U	1.27	34	61-103	F1
Anthracene	3.74	0.011 U	1.67	45	67-114	F1
Atrazine	1.50	0.0094 U	1.06	71	44-145	
Benzaldehyde	1.50	0.016 U	0.450	30	39-113	F1
Benzo[a]anthracene	3.74	0.013 U	1.68	45	67-115	F1
Benzo[a]pyrene	3.74	0.0099 U	2.00	54	63-108	F1
Benzo[b]fluoranthene	3.74	0.0096 U	1.98	53	64-116	F1
Benzo[g,h,i]perylene	3.74	0.011 U	1.92	51	61-113	F1
Benzo[k]fluoranthene	3.74	0.0073 U	2.11	56	67-115	F1
Bis(2-chloroethoxy)methane	3.74	0.029 U	1.32	35	62-107	F1
Bis(2-chloroethyl)ether	3.74	0.013 U	1.09	29	60-107	F1
Bis(2-ethylhexyl) phthalate	3.74	0.020 U	1.69	45	69-124	F1
Butyl benzyl phthalate	3.74	0.017 U	1.72	46	70-123	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III

C

GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214780-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z57106.d

Lab ID: 460-214780-12 MS Client ID: SB-15(7-8) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Caprolactam MMMM	1.50	0.058 U	0.842	56	59-140	F1
Carbazole WW	3.74	0.014 U	1.64	44	64-113	F1
Chrysene DDD	3.74	0.0063 U	1.70	45	71-122	F1
Dibenz(a,h)anthracene KKK	3.74	0.016 U	2.03	54	66-119	F1
Dibenzofuran JJ	3.74	0.0052 U	1.68	45	65-108	F1
Diethyl phthalate LL	3.74	0.0054 U	1.83	49	63-109	F1
Dimethyl phthalate CC	3.74	0.084 U	1.84	49	65-109	F1
Di-n-butyl phthalate XX	3.74	0.065 U	1.74	46	66-114	F1
Di-n-octyl phthalate FFF	3.74	0.020 U	1.99	53	65-122	F1
Fluoranthene YY	3.74	0.013 U	1.69	45	64-113	F1
Fluorene NN	3.74	0.0050 U	1.71	46	65-109	F1
Hexachlorobenzene SS	3.74	0.018 U	1.98	53	70-119	F1
Hexachlorobutadiene U	3.74	0.0079 U	1.34	36	62-109	F1
Hexachlorocyclopentadiene X	3.74	0.033 U	0.861	23	22-124	
Hexachloroethane K	3.74	0.013 U	0.957	26	61-102	F1
Indeno[1,2,3-cd]pyrene JJJ	3.74	0.014 U	2.12	57	62-121	F1
Isophorone M	3.74	0.11 U	1.46	39	63-107	F1
Naphthalene S	3.74	0.0064 U	1.24	33	63-106	F1
Nitrobenzene L	3.74	0.0089 U	1.29	35	63-110	F1
N-Nitrosodi-n-propylamine J	3.74	0.027 U	1.22	33	61-108	F1
N-Nitrosodiphenylamine OO	3.74	0.0071 U	1.68	45	67-113	F1
Pentachlorophenol TT	7.48	0.076 U	2.98	40	44-126	F1
Phenanthrene UU	3.74	0.0065 U	1.66	44	66-112	F1
Phenol A	3.74	0.014 U	1.40	37	63-110	F1
Pyrene Z	3.74	0.0092 U	1.76	47	71-122	F1
1,4-Dioxane IIIJ	3.74	0.010 U	0.690	18	31-81	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III

GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

C

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214780-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z57107.d

Lab ID: 460-214780-12 MSD Client ID: SB-15(7-8) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl EEEE	3.74	1.77	47	14	30	65-110	F1
1,2,4,5-Tetrachlorobenzene VVVV	3.74	1.87	50	20	30	64-110	F1
2,2'-oxybis[1-chloropropane] H	3.74	1.10	29	27	30	49-109	F1
2,3,4,6-Tetrachlorophenol UUUU	3.74	1.81	48	4	30	58-113	F1
2,4,5-Trichlorophenol Z	3.74	1.91	51	7	30	64-112	F1
2,4,6-Trichlorophenol Y	3.74	1.89	50	8	30	63-113	F1
2,4-Dichlorophenol Q	3.74	1.84	49	11	30	66-113	F1
2,4-Dimethylphenol O	3.74	1.67	45	10	30	63-107	F1
2,4-Dinitrophenol HH	7.48	0.718	10	2	30	37-125	F1
2,4-Dinitrotoluene KK	3.74	1.93	52	3	30	65-124	F1
2,6-Dinitrotoluene EE	3.74	1.97	53	7	30	67-121	F1
2-Chloronaphthalene AA	3.74	1.81	48	17	30	65-109	F1
2-Chlorophenol C	3.74	1.66	44	16	30	63-106	F1
2-Methylnaphthalene W	3.74	1.68	45	18	30	64-108	F1
2-Methylphenol G	3.74	1.70	45	17	30	63-108	F1
2-Nitroaniline BB	3.74	1.53	41	0	30	59-119	F1
2-Nitrophenol N	3.74	1.73	46	20	30	64-112	F1
3,3'-Dichlorobenzidine BBB	3.74	1.90	51	15	30	4-119	
3-Nitroaniline FF	3.74	1.71	46	8	30	31-102	
4,6-Dinitro-2-methylphenol PP	7.48	1.68	22	30	30	64-129	F1
4-Bromophenyl phenyl ether RR	3.74	2.11	56	10	30	67-113	F1
4-Chloro-3-methylphenol V	3.74	1.76	47	1	30	66-114	F1
4-Chloroaniline T	3.74	1.68	45	19	30	20-98	
4-Chlorophenyl phenyl ether MM	3.74	2.02	54	9	30	66-110	F1
4-Methylphenol I	3.74	1.47	39	12	30	61-108	F1
4-Nitroaniline OO	3.74	1.64	44	1	30	50-110	F1
4-Nitrophenol II	7.48	3.33	45	5	30	47-123	F1
Acenaphthene GG	3.74	1.59	42	13	30	53-110	F1
Acenaphthylene DD	3.74	1.81	48	12	30	64-108	F1
Acetophenone JJJ	3.74	1.53	41	19	30	61-103	F1
Anthracene VV	3.74	1.85	49	10	30	67-114	F1
Atrazine KKKK	1.50	0.930	62	13	30	44-145	
Benzaldehyde LLLL	1.50	0.581	39	25	30	39-113	
Benzo[a]anthracene CCC	3.74	1.77	47	5	30	67-115	F1
Benzo[a]pyrene III	3.74	2.12	57	6	30	63-108	F1
Benzo[b]fluoranthene YY	3.74	2.16	58	9	30	64-116	F1
Benzo[g,h,i]perylene LLL	3.74	2.00	53	4	30	61-113	F1
Benzo[k]fluoranthene HHH	3.74	2.07	55	2	30	67-115	F1
Bis(2-chloroethoxy)methane P	3.74	1.52	41	14	30	62-107	F1
Bis(2-chloroethyl)ether B	3.74	1.45	39	28	30	60-107	F1
Bis(2-ethylhexyl) phthalate EEE	3.74	1.77	47	4	30	69-124	F1
Butyl benzyl phthalate AAA	3.74	1.82	49	6	30	70-123	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

C

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-214780-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z57107.d

Lab ID: 460-214780-12 MSD Client ID: SB-15(7-8) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Caprolactam MMM,M	1.50	0.732	49	14	30	59-140	F1
Carbazole WW	3.74	1.73	46	6	30	64-113	F1
Chrysene DDD	3.74	1.76	47	4	30	71-122	F1
Dibenz(a,h)anthracene KKK	3.74	2.12	57	4	30	66-119	F1
Dibenzofuran JJ	3.74	1.84	49	9	30	65-108	F1
Diethyl phthalate LL	3.74	1.89	50	3	30	63-109	F1
Dimethyl phthalate CC	3.74	1.91	51	4	30	65-109	F1
Di-n-butyl phthalate XX	3.74	1.87	50	7	30	66-114	F1
Di-n-octyl phthalate FFF	3.74	2.06	55	4	30	65-122	F1
Fluoranthene YY	3.74	1.85	50	10	30	64-113	F1
Fluorene NN	3.74	1.84	49	7	30	65-109	F1
Hexachlorobenzene SS	3.74	2.15	58	8	30	70-119	F1
Hexachlorobutadiene U	3.74	1.79	48	29	30	62-109	F1
Hexachlorocyclopentadiene X	3.74	1.23	33	35	30	22-124	F2
Hexachloroethane K	3.74	1.34	36	34	30	61-102	F1 F2
Indeno[1,2,3-cd]pyrene JJJ	3.74	2.11	56	1	30	62-121	F1
Isophorone M	3.74	1.63	44	11	30	63-107	F1
Naphthalene S	3.74	1.59	43	25	30	63-106	F1
Nitrobenzene L	3.74	1.63	44	23	30	63-110	F1
N-Nitrosodi-n-propylamine J	3.74	1.42	38	15	30	61-108	F1
N-Nitrosodiphenylamine QQ	3.74	1.84	49	9	30	67-113	F1
Pentachlorophenol TT	7.48	3.21	43	7	30	44-126	F1
Phenanthrene UU	3.74	1.79	48	8	30	66-112	F1
Phenol A	3.74	1.65	44	17	30	63-110	F1
Pyrene ZZ	3.74	1.81	48	2	30	71-122	F1
1,4-Dioxane III	3.74	0.887	24	25	30	31-81	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

LDC #: 49146C2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?

Y (N) N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCSD	LLLL	120 (39-113)	( )	( )	1 → 11	Jdet/P ND
	460-713907		( )	( )	( )	MB 460-713907	
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCSD	U	112 (62-109)	117 (62-109)	( )	12 → 17	Jdet/P ND
	460-713908		( )	( )	( )	MB 460-713908	
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146C2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20 ug/ml std)	Recalculated (RRF 20 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS11	7/9/2020	A	1.6512	1.6512	1.7200	1.7200	2.6	2.6
			S	1.0127	1.0127	1.0213	1.0213	2.9	2.9
			GG	1.4695	1.4695	1.3915	1.3915	8.7	8.7
			UU	1.1348	1.1348	1.1527	1.1527	2.3	2.3
			DDD	1.4198	1.4198	1.3807	1.3807	5.4	5.4
			III	1.0258	1.0258	0.9907	0.9907	5.8	5.8

LDC #: 49146c2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20 ug/ml std)	Recalculated (RRF 20 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS12	7/29/2020	A	1.7043	1.7043	1.7872	1.7872	3.2	3.2
			S	1.0373	1.0373	1.0185	1.0185	4.4	4.4
			GG	1.3376	1.3376	1.3186	1.3186	5.6	5.6
			UU	1.1542	1.1542	1.1505	1.1505	4.3	4.3
			DDD	1.3903	1.3903	1.3540	1.3540	5.0	5.0
			III	1.0808	1.0808	1.0402	1.0402	5.8	5.8

LDC #: 49146 c2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv 006 GCMS12	8/4/20	A (1st IS)	1.7872	1.848	1.848	3.4	3.4
			S (2nd IS)	1.0185	1.012	1012	0.6	0.6
			GG (3rd IS)	1.3186	1.279	1.279	3.0	3.0
			UU (4th IS)	1.1505	1.150	1.150	0.0	0.0
			DDD (5th IS)	1.3540	1.384	1.384	2.2	2.2
			III (6th IS)	1.0402	1.088	1.088	4.6	4.6
2	ccv 23/6 GCMS11	8/4/20	A (1st IS)	1.7260	1.581	1.581	8.1	8.1
			S (2nd IS)	1.0213	1.008	1.008	1.3	1.3
			GG (3rd IS)	1.3915	1.249	1.249	10.3	10.3
			UU (4th IS)	1.1527	1.139	1.139	1.2	1.2
			DDD (5th IS)	1.3807	1.377	1.377	0.3	0.3
			III (6th IS)	0.9907	1.035	1.035	4.5	4.5
3			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146C2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	50.0	23.6	47	47	0
2-Fluorobiphenyl	↓	22.9	46	46	↓
Terphenyl-d14		30.2	60	60	
Phenol-d5		18.0	36	36	
2-Fluorophenol		12.8	26	26	
2,4,6-Tribromophenol	↓	8.99	#7 18	18	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 49146C2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 18 + 19

Compound	Spike Added (mg/kg)		Sample Concentration (mg/kg)	Spiked Sample Concentration (mg/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalc
Phenol	3.74	3.74	ND	~~1.77~~ 1.40	~~1.40~~ 1.65	~~4~~ 37	37	~~3~~ 44	44	17	17
N-Nitroso-di-n-propylamine	↓	↓	↓	1.22	1.42	33	33	38	38	15	15
4-Chloro-3-methylphenol				1.74	1.76	47	47	47	47	1	1
Acenaphthene				1.39	1.59	37	37	42	42	13	13
Pentachlorophenol	7.48	7.48		2.98	3.21	40	40	43	43	7	7
Pyrene	3.74	3.74		1.76	1.81	47	47	48	48	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146c2a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS ID 460-713907

Compound	Spike Added (mg/kg)		Spike Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	3.33	3.33	3.20	2.92	96	96	88	88	9	9
N-Nitroso-di-n-propylamine	↓	↓	2.95	2.68	89	89	80	80	10	10
4-Chloro-3-methylphenol			3.05	2.90	92	92	87	87	5	5
Acenaphthene			2.84	2.68	85	85	80	80	6	6
Pentachlorophenol	6.67	6.67	6.48	6.39	97	97	96	96	1	1
Pyrene	3.33	3.33	3.04	2.92	91	91	88	88	4	4

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146C2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #10 , UU :

Conc. = $\frac{(3424)(40.0)(1)}{(429613)(1.1505)(15)(0.903)}$

= 0.02045 mg/kg

1/15.0 %S = 90.3

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	#10	UU	0.020	0.02045	

LDC #: 49146C3a
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Organochlorine Pesticides (EPA SW846 Method 8081B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC Instrument Performance Check	A	
III.	Initial calibration/~~ICV~~	A / A	%D RSD ≤ 20 NO ICV
IV.	Continuing calibration	A	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes /15	A	
VIII.	Matrix spike/Matrix spike duplicates	N	0
IX.	Laboratory control samples	A	LCSID
X.	Field duplicates	ND	D = 2, 17
XI.	Compound quantitation/RL/LOQ/LODs	A	No Results < RL > MDL
XII.	Target compound identification	A	
XIII.	System Performance	A	
XIV	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-3(1.5-2.5)	460-214780-1	Soil	07/31/20
2	SB-3(5-6) D	460-214780-2	Soil	07/31/20
3	SB-4(2-3)	460-214780-3	Soil	07/31/20
4	SB-4(6-7)	460-214780-4	Soil	07/31/20
5	SB-7(2.5-3.5)	460-214780-5	Soil	07/31/20
6	SB-8(3-4)	460-214780-6	Soil	07/31/20
7	SB-8(6-7)	460-214780-7	Soil	07/31/20
8	SB-11(3-4)	460-214780-8	Soil	07/31/20
9	SB-11(8-9)	460-214780-9	Soil	07/31/20
10	SB-12(1.5-2.5)	460-214780-10	Soil	07/31/20
11	SB-15(2.5-3.5)	460-214780-11	Soil	07/31/20
12	SB-15(7-8)	460-214780-12	Soil	07/31/20
13	SB-16(2-3)	460-214780-13	Soil	07/31/20
14	SB-16(5.5-6.5)	460-214780-14	Soil	07/31/20
15	SB-20(3.5-4.5)	460-214780-15	Soil	07/31/20

LDC #: 49146C3a
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Organochlorine Pesticides (EPA SW846 Method 8081B)

16	SB-20(6-7)	460-214780-16	Soil	07/31/20
17	DUP-2 D	460-214780-17	Soil	07/31/20
18				
19				

Notes:

	MB 460-714032						

Method: Pesticides (EPA SW 846 Method 8081B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and at beginning of each 12-hour shift?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. ***Surrogate spikes/Internal Standards***				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recovery (%R) was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were internal standard area counts within ± 50% of the average area calculated during calibration?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
XI. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
Were relative percent difference (RPD) of the results between two columns ≤ 40%?	✓			
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146C3a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound		Reported 100ppb	Recalculated 100ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/29/2020	Gamma-BHC	CLP2	1.4340	1.4340	1.5197	1.5197	6.9	6.9
	GC12		Gamma-BHC	CLP1	1.4714	1.4714	1.5221	1.5221	2.1	2.1
			4,4'-DDT	CLP2	1.1058	1.1058	1.1546	1.1546	5.9	5.9
			4,4'-DDT	CLP1	1.0782	1.0782	1.0854	1.0854	1.4	1.4

LDC #: 49146C3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	ccv 0337	8/5/20	gamma BHC CLP2	100	94.2	94.2	5.8	5.8
			4,4'-DDT	100	93.4	93.4	6.6	6.6
			↓ CLP1	100	93	93.3	6.7	6.7
			↓	↓	94.0	94.0	6.0	6.0
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146 c3a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
DCB	CLP1	50.0	49.3	99	99	0
↓	2	↓	48.4	97	97	↓
TCMX	CLP1	↓	22.0	44	44	↓
↓	2	↓	48.5	97	97	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146C3a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ___ GC ___ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
LCS = Laboratory Control Sample
SA = Spike added
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS/D 460-714032

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
4,4'-DDT	0.133	0.133	0.113	0.117	85	85	88	88	2	2
gamma BHC	↓	↓	0.114	0.115	85	85	86	86	3	3

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146C32

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ **GC** __ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-71403Z Compound Name 4,4'-DDT

Concentration = $\frac{(331851986)(100/200)(10)}{(169089202)(1.1546)(15)(1000)}$ =

= 0.113

#	Sample ID	Compound	Reported Concentrations (mg/Kg)	Recalculated Results Concentrations (mg/Kg)	Qualifications
	LCS	4,4'-DDT	0.113	0.113	

Comments:

LDC #: 49146C3b
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	Initial calibration/~~ICV~~	A / N	%RSD ≤ 20
III.	Continuing calibration	A	CCV ≤ 20
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes 1/4	A	
VII.	Matrix spike/Matrix spike duplicates	N	CS
VIII.	Laboratory control samples	A	LCS 1D
IX.	Field duplicates	ND	D = 2, 17
X.	Compound quantitation/RL/LOQ/LODs	A	ND Results < RL > MDL
XI.	Target compound identification	A	
XII.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-3(1.5-2.5)	460-214780-1	Soil	07/31/20
2	SB-3(5-6) D	460-214780-2	Soil	07/31/20
3	SB-4(2-3)	460-214780-3	Soil	07/31/20
4	SB-4(6-7)	460-214780-4	Soil	07/31/20
5	SB-7(2.5-3.5)	460-214780-5	Soil	07/31/20
6	SB-8(3-4)	460-214780-6	Soil	07/31/20
7	SB-8(6-7)	460-214780-7	Soil	07/31/20
8	SB-11(3-4)	460-214780-8	Soil	07/31/20
9	SB-11(8-9)	460-214780-9	Soil	07/31/20
10	SB-12(1.5-2.5)	460-214780-10	Soil	07/31/20
11	SB-15(2.5-3.5)	460-214780-11	Soil	07/31/20
12	SB-15(7-8)	460-214780-12	Soil	07/31/20
13	SB-16(2-3)	460-214780-13	Soil	07/31/20
14	SB-16(5.5-6.5)	460-214780-14	Soil	07/31/20
15	SB-20(3.5-4.5)	460-214780-15	Soil	07/31/20
16	SB-20(6-7)	460-214780-16	Soil	07/31/20
17	DUP-2 D	460-214780-17	Soil	07/31/20

MB 460-714035

LDC #: 49146C36 **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: ✓ GC ___ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?			✓	
Were the RT windows properly established?		✓		
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20%?			✓	
III. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
V. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed per analytical or extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Field duplicates				

Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

_____

_____

LDC #: 49146C3b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 1000ppb	Recalculated 1000ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/26/2020 GC13	PCB 1260-1 RTX CLP1	0.0235	0.0235	0.0244	0.0244	6.9	6.9
			PCB 1260-1 RTX CLP2	0.0501	0.0501	0.0517	0.0517	3.3	3.3

LDC #: 49146e3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 0545	8/5/20	PCB 1260-1 cvp1	1000	945	945.2	5.5	5.5
			cvp2	1000	946	946.1	5.4	5.4
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146C36

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	CLP2	50.0	49.1	98	98	0
DCB	CLP1		52.6	105	105	
TCMX	CLP2		50.7	101	101	
TCMX	CLP1		51.5	103	103	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146c3b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added
LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS ID 460-714035

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Aroclor 1260	0.333	0.333	0.341	0.332	102	102	100	100	3	3

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146c3b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-714035 Compound Name Aroclor 1260

Concentration = $\frac{511.6\,(10)}{(15)\,(1000)}$ =

= 0.341 mg/kg

10/15

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	LCS	Aroclor 1260	0.341	0.341	
	1260-1 = $\frac{15595619\,(20.0)}{13045910\,(0.0517)}$ = 462.4				
		Ave = (462.4 + 400.9 + 495.7 + 499.5 + 515.9 + 499.0 + 599.7 + 619.5) / (8)			
		= 511.6			

Comments: _____

LDC #: 49146C96
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	RSD ≤ 20 %R ≤ 50/30 ICV ≤ 30
IV.	Continuing calibration/ISC	A / A	D ≤ 30 ISC ≤ 50
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates	A SW	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	SW	D = 2 + 17
X.	Labeled Compounds	A	
VI.	Compound quantitation RL/LOQ/LODs	SW	<RL - J det/A
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-3(1.5-2.5)	460-214780-1	Soil	07/31/20
2	SB-3(5-6) D	460-214780-2	Soil	07/31/20
3	SB-4(2-3)	460-214780-3	Soil	07/31/20
4	SB-4(6-7)	460-214780-4	Soil	07/31/20
5	SB-7(2.5-3.5)	460-214780-5	Soil	07/31/20
6	SB-8(3-4)	460-214780-6	Soil	07/31/20
7	SB-8(6-7)	460-214780-7	Soil	07/31/20
8	SB-11(3-4)	460-214780-8	Soil	07/31/20
9	SB-11(8-9)	460-214780-9	Soil	07/31/20
10	SB-12(1.5-2.5)	460-214780-10	Soil	07/31/20
11	SB-15(2.5-3.5)	460-214780-11	Soil	07/31/20
12	SB-15(7-8)	460-214780-12	Soil	07/31/20
13	SB-16(2-3)	460-214780-13	Soil	07/31/20
14	SB-16(5.5-6.5)	460-214780-14	Soil	07/31/20
15	SB-20(3.5-4.5)	460-214780-15	Soil	07/31/20

LDC #: 49146C96
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

16	SB-20(6-7)	460-214780-16	Soil	07/31/20
17	DUP-2	460-214780-17	Soil	07/31/20
18	DUP-2MS	460-214780-17MS	Soil	07/31/20
19	DUP-2MSD	460-214780-17MSD	Soil	07/31/20
20				
21				
22				

Notes:

	401467						

LDC #: 49146C96

VALIDATION FINDINGS CHECKLIST

Reviewer: R

Method: LC/MS PFAS (EPA Method 537Mod)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Were cooler temperature criteria met?	√			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the validation criteria?	√			
III. Initial calibration and Initial Calibration Verification				
Did the laboratory perform a 5-point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 20%?	√			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?			√	
Were all analytes within 70-130% or percent differences (%D) ≤30% of their true value for each calibration standard except the lowest point (50-150%)?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
IV. Continuing calibration and Instrument Sensitivity Check				
Was a continuing calibration analyzed prior to sample analysis, after every 10 samples and at the end of the analytical sequence?	√			
Were all percent differences (%D) of the continuing calibration ≤ 30%?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were all percent differences (%D) of the Instrument Sensitivity Check ≤ 50%?	√			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?	√			
VI. Field blanks				
Were field blanks identified in this SDG?		√		
Were target compounds detected in the field blanks?			√	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	√			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓	~~N~~		

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	√			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	√			
Were target compounds detected in the field duplicates?	√			
XI. Labeled compounds				
Were labeled compound percent recoveries (%R) within the QC limits?	√			
XII. Compound quantitation				
Did the laboratory reporting limits (RL) meet the QAPP RLs?			√	
Did reported results include both branched and linear isomers?	√			
Were the correct ion transition, labeled compound and relative response factor (RRF) used to quantitate the compound?	√			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	√			
XIII. Target compound identification				
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were two transitions and the ion transition ratio per analyte monitored and documented except for PFBA and PFPeA?	√			
Were ion ratios within QC limits?			√	PFBA dels only
XIV. System performance				
System performance was found to be acceptable.	√			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. Perfluorobutanoic acid (PFBA)			
B. Perfluoropentanoic acis (PFPeA)			
C. Perfluorohexanoic acid (PFHxA)			
D. Perfluoroheptanoic acid (PFHpA)			
E. Perfluorooctanoic acid (PFOA)			
F. Perfluorononanoic acid (PFNA)			
G. Perfluorodecanoic acid (PFDA)			
H. Perfluoroundecanoic acid (PFUnA)			
I. Perfluorododecanoic acid (PFDoA)			
J. Perfluorotridecanoic acid (PFTriA)			
K. Perfluorotetradecanoic acid (PFTeA)			
L. Perfluorobutanesulfonic acid (PFBS)			
M. Perfluorohexanesulfonic acid (PFHxS)			
N. Perfluoroheptanesulfonic acid (PFHpS)			
O. Perfluorooctanesulfonic acid (PFOS)			
P. Perfluorodecanesulfonic acid (PFDS)			
Q. Perfluorooctanesulfonamide (FOSA)			
R. N-Methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
S. N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			
T. 6:2 FTS			
U. 8:2 FTS			

LDC #: 49146C96

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: RC

METHOD: LC/MS PFAS (EPA Method 537M)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 8/5/20
Conc. units: ng/kg **Associated Samples:** All

Compound	Blank ID	Sample Identification								
MB 320-40	1467/1-A	1	2	3	4	5	6	7	8	9
A	0.0285	0.044/	0.041/	0.033/	0.051/	0.042/	0.033/	0.045/	0.043/	0.047/
		0.22U	0.21U	0.38U	0.22U	0.20U	0.21U	0.21U	0.21U	0.22U

Blank extraction date: cont'd
Conc. units: ng/kg **Associated Samples:**

Compound	Blank ID	Sample Identification								
		10	11	12	13	14	15	17		
A		0.036/	0.043/	0.041/	0.040/	0.033/	0.043/	0.044/		
		0.22U	0.21U	0.22U	0.23U	0.21U	0.22U	0.21U		

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Method: LC/MS PFAS (EPA Method 537M)

Compound	Concentration (ug/Kg)		RPD	
	2	17		
A	0.041	0.044	7	

LDC #: 49146096

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S = Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound	Reported RRF (RRF 1.0/0.928)	Recalculated RRF (RRF 1.0/0.928)	Reported Average RRF	Recalculated Average RRF	Reported %RSD	Recalculated %RSD
1	ICAL	8/6/2020	PFOA (13C4-PFOA)	1.0077	1.0077	1.0028	1.0028	9.5	9.5
	A13		PFOS (13C4-PFOS)	1.0754	1.0754	1.0500	1.0500	5.2	5.2
2			PFOA (13C4-PFOA)						
			PFOS (13C4-PFOS)						

LDC #: 49462C96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (Actual Conc - Cx)/Actual Conc
Cx = (Ax)(Cis)/(Ais)(ave. RRF)

Where:
Ax = Area of compound
Ais = Area of associated internal standard
Cx = Concentration of compound
Cis = Concentration of internal standard
ave. RRF = initial calibration average RRF

#	Standard ID	Calibration Date	Compound	Average RRF	Reported RRF	Recalculated RRF	Reported %D	Recalculated %D
1	2020.08.07_A13_PFC_A_006	8/7/2020	PFOA (13C4-PFOA)	1.0028	1.053	1.0528	5.0	5.0
			PFOS (13C4-PFOS)	1.0500	1.111	1.1110	5.8	5.8
2	2020.08.07_A13_PFC_A_018	8/7/2020	PFOA (13C4-PFOA)	1.0028	1.044	1.0439	4.1	4.1
			PFOS (13C4-PFOS)	1.0500	1.116	1.1158	6.3	6.3
3	2020.08.07_A13_PFC_A_028	8/7/2020	PFOA (13C4-PFOA)	1.0028	1.050	1.0504	4.7	4.7
			PFOS (13C4-PFOS)	1.0500	1.037	1.0367	1.3	1.3
4	2020.08.08_A13_PFC_A_006	8/8/2020	PFOA (13C4-PFOA)	1.0028	1.014	1.0141	1.1	1.1
			PFOS (13C4-PFOS)	1.0500	1.064	1.0638	1.3	1.3

LDC # 49146C96

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)

%Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked concentration, SA = Spike added, SC = Sample concentration

RPD = | MS - MSD | * 2/(MS + MSD)

MS = Matrix spike recovery, MSD = Matrix spike duplicate recovery

MS/MSD ID: 18/19

Compound	SA (ug/Kg)		SC (ug/Kg)	SSC (ug/Kg)		MS Percent Recovery		MSD Percent Recovery		MS/MSD RPD	
	MS	MSD		MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	2.03	2.13	0	2.085	2.089	103	103	98	98	0	0
PFBS	1.88	1.98	0	1.940	2.141	103	103	108	108	10	10

LDC #: 49146C96

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS 320-401467

Compound	SA (ug/Kg)		SSC (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	2.00		2.021		101	101				
PFOS	1.86		2.034		110	109				

LDC #: 49146C96

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

Method: LC/MS PFAS (EPA Method 537M)

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)\,(Vo)\,(Df)}{(RRF)\,(Wt)\,(\%S)}$$

Where:

Ax = Area or height of the peak for the compound to be measured
Ais = Area or height of the peak for the internal standard
Cis = Concentration of the internal standard
DF = Dilution factor
Vt = Volume of extract in milliters (mL)
RRF = Average relative response factor
Wt = Weight of sample in grams (g)
%S = Percent solids

Sample #	Compound	Ax	Ais	Cis	DF	RRF	Vt (mL)	Wt (g)	%S	Calculated Concentration (ug/Kg)	Reported Concentration (ug/Kg)	% Diff
1	PFBA	59801	9801691	2.5	1	0.7521	10	5.09	0.897	0.044	0.044	0

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-214780-1
Reviewer: Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 2, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-3(1.5-2.5)	460-214780-1	Metals, Cyanide
SB-3(5-6)	460-214780-2	Metals, Cyanide
SB-4(2-3)	460-214780-3	Metals, Cyanide
SB-4(6-7)	460-214780-4	Metals, Cyanide
SB-7(2.5-3.5)	460-214780-5	Metals, Cyanide
SB-8(3-4)	460-214780-6	Metals, Cyanide
SB-8(6-7)	460-214780-7	Metals, Cyanide
SB-11(3-4)	460-214780-8	Metals, Cyanide
SB-11(8-9)	460-214780-9	Metals, Cyanide
SB-12(1.5-2.5)	460-214780-10	Metals, Cyanide
SB-15(2.5-3.5)	460-214780-11	Metals, Cyanide
SB-15(7-8)	460-214780-12	Metals, Cyanide
SB-16(2-3)	460-214780-13	Metals, Cyanide
SB-16(5.5-6.5)	460-214780-14	Metals, Cyanide
SB-20(3.5-4.5)	460-214780-15	Metals, Cyanide
SB-20(6-7)	460-214780-16	Metals, Cyanide
DUP-2	460-214780-17	Metals, Cyanide
SB-7(2.5-3.5)MS	460-214780-5MS	Cyanide
SB-7(2.5-3.5)MSD	460-214780-5MSD	Cyanide
SB-8(3-4)MS	460-214780-6MS	Cyanide
SB-8(3-4)MSD	460-214780-6MSD	Cyanide

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: SB-3(5-6) and DUP-2

The above-listed soil samples were collected on July 31, 2020 and were analyzed for metals by SW-846 methods 6010D/7471B and cyanide by SW-846 method 9012B. The data validation was performed in accordance with USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program,* SOP HW-3a/c, Revision 1 (September 2016) and the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review,* EPA 540-R-2017-001 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The inorganic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Instrument Calibration
- Contract Required Quantitation Limit (CRQL) Standard Recoveries
- Blank Analysis Results
- Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Results
- Matrix Spike (MS) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Certified Reference Material (CRM) Results
- Serial Dilution Results
- Moisture Content
- Detection Limits Results
- Sample Quantitation Results

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

Instrument Calibration

All criteria were met.

CRQL Standard Recoveries

Metals

All criteria were met.

Blank Results

Metals

Analytes were detected below the reporting limits in the laboratory blank samples. The following table summarizes the contamination and validation actions taken.

Blank ID	Analyte	Level Detected	Action Level	Associated Samples
PB (prep blank)	Lead	0.382 mg/Kg	RL	SB-3(1.5-2.5) SB-3(5-6) SB-4(2-3) SB-4(6-7) SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7)

Blank Actions for analytes detected below the reporting limit(RL).
If the sample result is < RL, report the result as nondetect (U) at the RL.
If the sample result is > RL or nondetect, no action is required.
Blank Actions for analytes detected above the reporting limit or RL.
If the sample result is < RL and <action level; report the result as nondetect (U) at the RL.
If the sample result is > RL and < action level; report the result as nondetect (U) at the reported value.
If the sample result is > action level or nondetect, no action is required.

No samples were qualified since the associated sample results were greater than the action limit.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Cyanide

Contamination was not detected in the laboratory blank samples.

A field blank was not associated with this sample set. Validation action was not required on this basis.

ICP ICS Results

Metals

Analytes were within control limits in the ICSA and ICSAB analyses.

MS/MSD Results

Metals

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

Cyanide

MS/MSD analyses were performed on samples SB-7(2.5-3.5) and SB-8(3-4) for cyanide analysis. The following table lists the MS/MSD percent recoveries (%R) outside of control limits in the cyanide analysis and the resulting validation actions.

MS ID	Analyte	MS %R (Limits)	MS/D %R (Limits)	Affected Sample	Validation Action
SB-7(2.5-3.5)MS/MSD	Cyanide	118 (11-108)	124 (11-108)	SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7) SB-11(3-4) SB-11(8-9) SB-12(1.5-2.5) SB-15(2.5-3.5) SB-15(7-8) SB-16(2-3) SB-16(5.5-6.5) SB-20(3.5-4.5) SB-20(6-7) DUP-2	None
SB-8(3-4)MS/MSD	Cyanide	124 (11-108)	124 (11-108)	SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7) SB-11(3-4) SB-11(8-9) SB-12(1.5-2.5) SB-15(2.5-3.5) SB-15(7-8) SB-16(2-3) SB-16(5.5-6.5) SB-20(3.5-4.5) SB-20(6-7) DUP-2	None

- Within control limits

Validation action was not required for cyanide due to high MS/MSD recoveries as positive results only are affected and this analyte was not detected in the associated samples.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

Field Duplicate Results

Samples SB-3(5-6) and DUP-2 were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations.

Metals

Analyte	Concentration (mg/Kg)		RPD
	SB-3(5-6)	DUP-2	
Aluminum	6450	10100	44
Antimony	1.2U	1.5	Not calculable
Arsenic	0.64U	1.3	Not calculable
Barium	61.4	61.1	0
Cadmium	0.080	0.061U	Not calculable
Calcium	838	2900	110
Chromium	18.8	63.0	108
Cobalt	7.5	15.4	69
Copper	17.6	49.4	95
Iron	18100	20000	10
Lead	4.1	3.5	16
Magnesium	2670	6070	78
Manganese	318	270	16
Mercury	0.0066	0.0056	16
Nickel	16.3	23.8	37
Potassium	3520	6590	61
Sodium	276	253	9
Vanadium	21.2	32.5	42
Zinc	30.9	37.9	20

Cyanide

There were no detected results in the field duplicate pair for cyanide.

CRM Results

All criteria were met.

Serial Dilution Results

Metals

A serial dilution analysis was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Detection Limits Results

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the metals analyses. These results were estimated (J) by the laboratory.

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the cyanide analysis.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	Metals Analyses Reported
SB-3(1.5-2.5) SB-3(5-6) SB-4(2-3) SB-4(6-7) SB-7(2.5-3.5) SB-8(3-4) SB-8(6-7) SB-11(3-4) SB-12(1.5-2.5) SB-15(2.5-3.5) SB-15(7-8) SB-16(2-3) SB-16(5.5-6.5) SB-20(3.5-4.5) SB-20(6-7)	2-fold dilution due to sample matrix for 6010D metals
SB-11(8-9) DUP-2	2-fold dilution due to sample matrix for 6010D metals except beryllium 10-fold dilution due to sample matrix for beryllium

Dilutions were not required for cyanide analysis.

Sample Quantitation Results

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146C4b
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer: C
2nd Reviewer: KK

METHOD: Metals (EPA SW 846 Method 6010D/7471B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A A	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	SW	
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Serial Dilution	N	
IX.	Laboratory control samples	A	CRM
X.	Field Duplicates	SW	(2,17)
XI.	Sample Result Verification	A	Results < RL = J det
XII.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-3(1.5-2.5)	460-214780-1	Soil	07/31/20
2	SB-3(5-6)	460-214780-2	Soil	07/31/20
3	SB-4(2-3)	460-214780-3	Soil	07/31/20
4	SB-4(6-7)	460-214780-4	Soil	07/31/20
5	SB-7(2.5-3.5)	460-214780-5	Soil	07/31/20
6	SB-8(3-4)	460-214780-6	Soil	07/31/20
7	SB-8(6-7)	460-214780-7	Soil	07/31/20
8	SB-11(3-4)	460-214780-8	Soil	07/31/20
9	SB-11(8-9)	460-214780-9	Soil	07/31/20
10	SB-12(1.5-2.5)	460-214780-10	Soil	07/31/20
11	SB-15(2.5-3.5)	460-214780-11	Soil	07/31/20
12	SB-15(7-8)	460-214780-12	Soil	07/31/20
13	SB-16(2-3)	460-214780-13	Soil	07/31/20
14	SB-16(5.5-6.5)	460-214780-14	Soil	07/31/20
15	SB-20(3.5-4.5)	460-214780-15	Soil	07/31/20
16	SB-20(6-7)	460-214780-16	Soil	07/31/20
17	DUP-2	460-214780-17	Soil	07/31/20

6010D: 2x (matrix) — applies to SB-3(1.5-2.5) through SB-11(3-4)
6010D: 2x for all except Be; Be: 10x (matrix) — applies to SB-11(8-9)
6010D: 2x (matrix) — applies to SB-12(1.5-2.5) through SB-20(6-7)
6010D: 2x for all except Be; Be: 10x (matrix) — applies to DUP-2

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times met?	X			
Were all water samples preserved to a pH of <2.			X	
II. ICP-MS Tune				
Were mass resolutions within 0.1 amu for all isotopes in the tuning solution?			X	
Were %RSDs of isoptoes in the tuning solution ≤5%?			X	
III. Calibration				
Were all instuments calibrated daily?	X			
Were the proper standards used?	X			
Were all initial and continuing calibration verifications within the 90-110% (80-120% for mercury) QC limits?	X			
Were the low level standard checks within 70-130%?			X	
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	X			
Was there contamination in the method blanks?	X			
Was there contamination in the initial and continuing calibration blanks?		X		
V. Interference Check Sample				
Were the interference check samples performed daily?	X			
Were the AB solution recoveries within 80-120%?	X			
VI. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
VII. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
VIII. Internal Standards				
Were all percent recoveries within the 30-120% (60-125% for EPA Method 200.8) QC limits?			X	
If the recoveries were outside the limits, was a reanalysis performed?			X	
IX. Serial Dilution				
Were all percent differences <10%?			X	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			X	
X. Sample Result Verification				
Were all reporting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			
XII. Field Duplicates				
Were field duplicates identifed in this SDG?	X			
Were target analytes detected in the field duplicates?	X			
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

All elements are applicable to each sample as noted below.

Sample ID	Target Analyte List
All	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn, Hg

Analysis Method

ICP	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
ICP-MS	
CVAA	Hg

VALIDATION FINDINGS WORKSHEET
Laboratory Blank Contamination (PB/ICB/CCB)

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Soil preparation factor applied (if applicable): NA

Sample Concentration, unless otherwise noted: mg/Kg Associated Samples: 1-7

				Sample Identification								
Analyte	**PB (mg/Kg)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	No quals (>RL)								
Pb	0.382		RL									

Method: Metals

Analyte	Concentration (mg/Kg)		RPD
	2	17	
Aluminum	6450	10100	44
Antimony	1.2U	1.5	NC
Arsenic	0.64U	1.3	NC
Barium	61.4	61.1	0
Cadmium	0.080	0.061U	NC
Calcium	838	2900	110
Chromium	18.8	63.0	108
Cobalt	7.5	15.4	69
Copper	17.6	49.4	95
Iron	18100	20000	10
Lead	4.1	3.5	16
Magnesium	2670	6070	78
Manganese	318	270	16
Mercury	0.0066	0.0056	16
Nickel	16.3	23.8	37
Potassium	3520	6590	61
Sodium	276	253	9
Vanadium	21.2	32.5	42
Zinc	30.9	37.9	20

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

An intial calibration verification (ICV), continuing calibration verification (CCV), low level calibration check (LLCC), and interference check sample (ICSAB) percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis

True = concentration of each analyte in the source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalcuated %R	Reported %R	Acceptable (Y/N)
ICV	ICP	Cu	975.4	1000	98	98	Y
CCV	ICP	Na	50230	50000	100	100	Y
ICSAB	ICP	Ni	95.9	100	96	96	Y
ICV	CVAA	Hg	4.88	5	98	98	Y
CCV	CVAA	Hg	4.94	5	99	99	Y

Quality Control Sample Recalculations

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

Percent recoveries (%R) for the laboratory control sample (LCS), matrix spike (MS), and post digestion spike (PDS) were recalculated using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentration of each analyte in the source

The sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentration

D = Duplicate sample concentration

The serial dilution percent difference (%D) was recalculated using the following formula.

%D = (Absolute value (I - SDR)) x 100 / (I)

I = Initial sample result

SDR = Serial dilution result (with a 5x dilution applied)

Sample ID	Type of Analysis	Element	Found/S/I	True/D/SDR	Recalcuated %R/RPD/%D	Reported %R/RPD/%D	Acceptable (Y/N)
CRM	LCS	Ag	38.62	40.3	95.8	95.8	Y
	MS						
	Duplicate						
	PDS						
	Serial dilution						

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Analytes were recalculated and verified using the following equation:
Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids x Initial weight)

Sample ID	Analyte	Raw Data (ug/L)	Dilution	Initial Weight (g)	Final Volume (mL)	Percent solids (%)	Reported Result (mg/Kg)	Recalcuated Result (mg/Kg)	Acceptable (Y/N)
1	Hg	0.0734	1	0.63	50	89.7	0.0065	0.0065	Y
2	Al	30800	2	1.05	100	90.9	6450	6454	Y
3	As	4.693	2	1.07	100	88	1.0	1.0	Y
4	Ba	375	2	1.08	100	87	79.8	79.8	Y
5	Cd	0.5159	2	1.06	100	92.4	0.11	0.11	Y
6	Ca	26580	2	1.05	100	91	5560	5564	Y
7	Cr	97	2	1.08	100	88.8	20.2	20.2	Y
8	Cu	78.38	2	1.28	100	93.8	13.1	13.1	Y
9	Fe	147100	2	1.26	100	90.8	25700	25715	Y
10	Pb	33.41	2	1.23	100	90.3	6.0	6.0	Y
11	Mg	14610	2	1.28	100	90.4	2520	2525	Y
12	Mn	1858	2	1.2	100	89.1	348	348	Y
13	Ni	122	2	1.29	100	87.8	21.6	21.5	Y
14	K	6036	2	1.21	100	90	1110	1109	Y
15	Na	602.4	2	1.26	100	86.5	111	111	Y
16	V	133.7	2	1.32	100	89.3	22.7	22.7	Y
17	Zn	215.1	2	1.25	100	90.8	37.9	37.9	Y

LDC #: 49146C6
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Laboratory Blanks	A	
V	Field blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	SW	
VII.	Duplicate sample analysis	N	
VIII.	Laboratory control samples	A	CRM)
IX.	Field duplicates	ND	(2,17)
X.	Sample result verification	A	no CRL
XI	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-3(1.5-2.5)	460-214780-1	Soil	07/31/20
2	SB-3(5-6)	460-214780-2	Soil	07/31/20
3	SB-4(2-3)	460-214780-3	Soil	07/31/20
4	SB-4(6-7)	460-214780-4	Soil	07/31/20
5	SB-7(2.5-3.5)	460-214780-5	Soil	07/31/20
6	SB-8(3-4)	460-214780-6	Soil	07/31/20
7	SB-8(6-7)	460-214780-7	Soil	07/31/20
8	SB-11(3-4)	460-214780-8	Soil	07/31/20
9	SB-11(8-9)	460-214780-9	Soil	07/31/20
10	SB-12(1.5-2.5)	460-214780-10	Soil	07/31/20
11	SB-15(2.5-3.5)	460-214780-11	Soil	07/31/20
12	SB-15(7-8)	460-214780-12	Soil	07/31/20
13	SB-16(2-3)	460-214780-13	Soil	07/31/20
14	SB-16(5.5-6.5)	460-214780-14	Soil	07/31/20
15	SB-20(3.5-4.5)	460-214780-15	Soil	07/31/20
16	SB-20(6-7)	460-214780-16	Soil	07/31/20
17	DUP-2	460-214780-17	Soil	07/31/20

LDC #: 49146C6
SDG #: 460-214780-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 2 of 2
Reviewer: CK
2nd Reviewer: KK

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B)

	Client ID	Lab ID	Matrix	Date
18	SB-7(2.5-3.5)MS	460-214780-5MS	Soil	07/31/20
19	SB-7(2.5-3.5)MSD	460-214780-5MSD	Soil	07/31/20
20	SB-8(3-4)MS	460-214780-6MS	Soil	07/31/20
21	SB-8(3-4)MSD	460-214780-6MSD	Soil	07/31/20
22				
23				
24				

Notes:

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times were met?	X			
II. Calibration				
Were all instuments calibrated at the requried frequency?	X			
Were the proper number of standards used?	X			
Were all initial and continuing calibration verifications within the QC limits?	X			
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
Were balance checks performed as required?			X	
III. Blanks				
Was a method blank assoicated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?		X		
IV. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)	X			
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?		X		
V. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			
X. Sample Result Verification				
Were all reproting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
XII. Field Duplicates				
Were field duplicates identifed in this SDG?	X			
Were target analytes detected in the field duplicates?		X		
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

METHOD: Inorganics

MS/MSD analysis was performed by the laboratory. All MS/MSD percent recoveries (%R) and relative percent differences (RPDs) were within the acceptable limits with the following exceptions.

MS/MSD ID	Matrix	Analyte	MS %R	MSD %R	%R Limit	RPD	RPD Limit	Assocaited Samples	Qualification	Det/ND
18/19	s	CN	118	124	11-108			5 to 17	Jdet/A	ND
20/21	s	CN	124	124	11-108			5 to 17	Jdet/A	ND

Comments:

LDC #: 49146C6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR

Method: Inorganics

The correlation coefficient (r) for the calibration of _Cr6+___ was recalculated.Calibration date:___8/7/20__

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cr6+	s1	0	0.0139	*0.99938*	0.99980	Y
		s2	0.01	0.437			
		s3	0.025	0.988			
		s4	0.05	1.95			
		s5	0.1	3.69			
		s6	0.2	7.41			
		s7	0.4	13.8			
Calibration verification	Cr6+	ICV	0.2	0.204	102	102	Y
Calibration verification	Cr6+	CCV	0.2	0.205	103	103	Y
Calibration verification	Cr6+	CCV	0.2	0.205	103	103	Y

Comments:

METHOD: Inorganics

Percent recoveries (%R) for the laboratory control sample (LCS) and matrix spike (MS) were recalcuated using the following formula.
%R = (Found/True) x 100
Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)
True = concentraiton of each analyte in the source
The sample and duplciate relative percent difference (RPD) was recalcuated using the following formula.
RPD = (Absolute value(S-D)x 200) / (S+D)
S = Original sample concentraiton
D = Duplciate sample concentration

Sample ID	Type of Analysis	Element	Found/S	True/D	Recalcuated %R/RPD	Reported %R/RPD	Acceptable (Y/N)
CRM	LCS	CN	57.12	157	36.4	36.4	Y
18	MS	CN	5.5	4.64	119	118	Y
18/19	Duplicate	CN	5.5	5.97	8	8	Y

METHOD: Inorganics

Analytes were recalcuated and verified using the following equation.

Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids (if applicable) x Initial weight or volume)

Sample ID	Analyte	Raw Data (unit)	Dilution	Initial Weight/ Volume (unit)	Final Volume (unit)	Percent solids (%)	Reported Result (unit)	Recalcuated Result (unit)	Acceptable (Y/N)
All	CN = ND								

500 Main St., New Rochelle - LDC# 49146C

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	PERFLURONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
DUP-2-20200731	460-214780-17	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.09	0.16	ug/kg
DUP-2-20200731	460-214780-17	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.09	0.41	ug/kg
DUP-2-20200731	460-214780-17	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.09	0.39	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.026	ug/kg
DUP-2-20200731	460-214780-17	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.041	ug/kg
DUP-2-20200731	460-214780-17	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
DUP-2-20200731	460-214780-17	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.070	ug/kg
DUP-2-20200731	460-214780-17	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.09	0.26	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.032	ug/kg
DUP-2-20200731	460-214780-17	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.030	ug/kg
DUP-2-20200731	460-214780-17	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.086	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.52	0.21	ug/kg
DUP-2-20200731	460-214780-17	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.090	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.081	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.057	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.053	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.029	ug/kg
DUP-2-20200731	460-214780-17	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.044	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.53	0.21	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.082	ug/kg
SB-11(3-4)-20200731	460-214780-8	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.13	0.16	ug/kg
SB-11(3-4)-20200731	460-214780-8	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.091	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.030	ug/kg
SB-11(3-4)-20200731	460-214780-8	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.087	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.027	ug/kg
SB-11(3-4)-20200731	460-214780-8	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.13	0.41	ug/kg
SB-11(3-4)-20200731	460-214780-8	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.13	0.39	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.045	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-11(3-4)-20200731	460-214780-8	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.13	0.27	ug/kg
SB-11(3-4)-20200731	460-214780-8	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-11(3-4)-20200731	460-214780-8	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.031	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(3-4)-20200731	460-214780-8	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.22	0.030	ug/kg
SB-11(8-9)-20200731	460-214780-9	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.16	0.16	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.22	0.058	ug/kg
SB-11(8-9)-20200731	460-214780-9	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.16	0.42	ug/kg
SB-11(8-9)-20200731	460-214780-9	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.16	0.40	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.042	ug/kg
SB-11(8-9)-20200731	460-214780-9	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.16	0.27	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.22	0.045	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.22	0.055	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.22	0.072	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-11(8-9)-20200731	460-214780-9	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.22	0.031	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.033	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.22	0.083	ug/kg
SB-11(8-9)-20200731	460-214780-9	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.22	0.093	ug/kg
SB-11(8-9)-20200731	460-214780-9	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.54	0.22	ug/kg
SB-11(8-9)-20200731	460-214780-9	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.22	0.089	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.22	0.073	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.18	0.43	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.18	0.16	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.18	0.27	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.18	0.40	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.22	0.094	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.22	0.046	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.55	0.22	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.22	0.084	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.22	0.059	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.22	0.056	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.22	0.089	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.11	0.26	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.11	0.16	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.11	0.41	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.11	0.39	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.081	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.091	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.086	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.029	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.044	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.53	0.21	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.22	0.046	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-15(7-8)-20200731	460-214780-12	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.22	0.091	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.55	0.22	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.22	0.060	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.22	0.085	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.22	0.074	ug/kg
SB-15(7-8)-20200731	460-214780-12	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.22	0.095	ug/kg
SB-15(7-8)-20200731	460-214780-12	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.21	0.28	ug/kg
SB-15(7-8)-20200731	460-214780-12	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-15(7-8)-20200731	460-214780-12	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.21	0.17	ug/kg
SB-15(7-8)-20200731	460-214780-12	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.21	0.43	ug/kg
SB-15(7-8)-20200731	460-214780-12	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.21	0.41	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.028	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-15(7-8)-20200731	460-214780-12	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.22	0.024	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.22	0.056	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.23	0.041	ug/kg
SB-16(2-3)-20200731	460-214780-13	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.23	0.097	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.23	0.035	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.23	0.044	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.23	0.025	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.23	0.075	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.23	0.039	ug/kg
SB-16(2-3)-20200731	460-214780-13	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.23	0.033	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.23	0.047	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.23	0.057	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.23	0.041	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.56	0.23	ug/kg
SB-16(2-3)-20200731	460-214780-13	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.25	0.44	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.23	0.061	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.23	0.087	ug/kg
SB-16(2-3)-20200731	460-214780-13	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.23	0.092	ug/kg
SB-16(2-3)-20200731	460-214780-13	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.23	0.028	ug/kg
SB-16(2-3)-20200731	460-214780-13	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.25	0.17	ug/kg
SB-16(2-3)-20200731	460-214780-13	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.25	0.28	ug/kg
SB-16(2-3)-20200731	460-214780-13	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.25	0.42	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.23	0.032	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.21	0.081	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.21	0.091	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.53	0.21	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.21	0.086	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.21	0.044	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.10	0.39	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.21	0.029	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.10	0.41	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.10	0.16	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.10	0.26	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.22	0.095	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.22	0.074	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.20	0.27	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.55	0.22	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.22	0.090	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.22	0.046	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.20	0.41	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.20	0.16	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.22	0.085	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.22	0.059	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.22	0.056	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.22	0.040	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.20	0.43	ug/kg
SB-20(6-7)-20200731	460-214780-16	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.091	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.081	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.53	0.21	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.044	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-20(6-7)-20200731	460-214780-16	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-20(6-7)-20200731	460-214780-16	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.087	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-20(6-7)-20200731	460-214780-16	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.11	0.39	ug/kg
SB-20(6-7)-20200731	460-214780-16	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.11	0.41	ug/kg
SB-20(6-7)-20200731	460-214780-16	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.11	0.16	ug/kg
SB-20(6-7)-20200731	460-214780-16	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.11	0.26	ug/kg
SB-20(6-7)-20200731	460-214780-16	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	U		U	0.21	0.030	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.22	0.046	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.22	0.090	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.22	0.073	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.22	0.094	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.22	0.084	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.22	0.059	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.19	0.27	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.22	0.056	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.19	0.41	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.19	0.43	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.19	0.16	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.55	0.22	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.21	0.029	ug/kg
SB-3(5-6)-20200731	460-214780-2	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.10	0.26	ug/kg
SB-3(5-6)-20200731	460-214780-2	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.10	0.16	ug/kg
SB-3(5-6)-20200731	460-214780-2	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.10	0.41	ug/kg
SB-3(5-6)-20200731	460-214780-2	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.10	0.39	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.53	0.21	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-3(5-6)-20200731	460-214780-2	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.21	0.090	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-3(5-6)-20200731	460-214780-2	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.21	0.086	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-3(5-6)-20200731	460-214780-2	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.21	0.030	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.21	0.070	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-3(5-6)-20200731	460-214780-2	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.21	0.044	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.21	0.081	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.030	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.027	ug/kg
SB-4(2-3)-20200731	460-214780-3	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.12	0.39	ug/kg
SB-4(2-3)-20200731	460-214780-3	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.12	0.41	ug/kg
SB-4(2-3)-20200731	460-214780-3	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.12	0.27	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-4(2-3)-20200731	460-214780-3	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.12	0.16	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.082	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-4(2-3)-20200731	460-214780-3	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.091	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.53	0.21	ug/kg
SB-4(2-3)-20200731	460-214780-3	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.087	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.045	ug/kg
SB-4(2-3)-20200731	460-214780-3	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.033	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROBUTANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-4(6-7)-20200731	460-214780-4	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/8/2020		Y	N	U		U	2.17	0.40	ug/kg
SB-4(6-7)-20200731	460-214780-4	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/8/2020		Y	N	U		U	2.17	0.27	ug/kg
SB-4(6-7)-20200731	460-214780-4	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/8/2020		Y	N	U		U	2.17	0.42	ug/kg
SB-4(6-7)-20200731	460-214780-4	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/8/2020		Y	N	U		U	2.17	0.16	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROBUTYRIC ACID (PFBA)	8/8/2020		Y	N	BJ	U	U	0.22	0.030	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/8/2020		Y	N	U		U	0.22	0.055	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROHEXANOIC ACID (PFHxA)	8/8/2020		Y	N	U		U	0.22	0.045	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUORODECANOIC ACID (PFDA)	8/8/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUORODODECANOIC ACID (PFDoA)	8/8/2020		Y	N	U		U	0.22	0.073	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/8/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-4(6-7)-20200731	460-214780-4	Perfluoroheptanoic Acid (PFHpA)	8/8/2020		Y	N	U		U	0.22	0.031	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROHEXANESULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUORODECANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.22	0.042	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUORONONANOIC ACID	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-4(6-7)-20200731	460-214780-4	Perfluorooctane Sulfonamide (FOSA)	8/8/2020		Y	N	U		U	0.22	0.089	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROOCTANE SULFONIC ACID	8/8/2020		Y	N	U		U	0.54	0.22	ug/kg
SB-4(6-7)-20200731	460-214780-4	Perfluorooctanoic acid (PFOA)	8/8/2020		Y	N	U		U	0.22	0.093	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/8/2020		Y	N	U		U	0.22	0.058	ug/kg
SB-4(6-7)-20200731	460-214780-4	PERFLUOROUNDECANOIC ACID (PFUnA)	8/8/2020		Y	N	U		U	0.22	0.039	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(6-7)-20200731	460-214780-4	PERFLUOROPENTANOIC ACID (PFPeA)	8/8/2020		Y	N	U		U	0.22	0.083	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.20	0.028	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.20	0.054	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.20	0.082	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.20	0.035	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.20	0.031	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.20	0.036	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.20	0.067	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.20	0.042	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.20	0.022	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.20	0.039	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.20	0.029	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.20	0.036	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.50	0.20	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.20	0.086	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.20	0.077	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.01	0.37	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.20	0.051	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.01	0.39	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.01	0.15	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.01	0.25	ug/kg

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.20	0.025	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.029	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.032	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.040	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.069	ug/kg
SB-8(3-4)-20200731	460-214780-6	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.030	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.044	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-8(3-4)-20200731	460-214780-6	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.085	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.52	0.21	ug/kg
SB-8(3-4)-20200731	460-214780-6	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.07	0.38	ug/kg
SB-8(3-4)-20200731	460-214780-6	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.089	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.056	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.053	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.036	ug/kg
SB-8(3-4)-20200731	460-214780-6	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.080	ug/kg
SB-8(3-4)-20200731	460-214780-6	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.07	0.40	ug/kg
SB-8(3-4)-20200731	460-214780-6	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.07	0.16	ug/kg

SDG: 4602147801

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.07	0.26	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROBUTYRIC ACID (PFBA)	8/7/2020		Y	N	BJ	U	U	0.21	0.029	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/7/2020		Y	N	U		U	0.21	0.036	ug/kg
SB-8(6-7)-20200731	460-214780-7	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/7/2020		Y	N	U		U	2.07	0.26	ug/kg
SB-8(6-7)-20200731	460-214780-7	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/7/2020		Y	N	U		U	2.07	0.15	ug/kg
SB-8(6-7)-20200731	460-214780-7	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/7/2020		Y	N	U		U	2.07	0.40	ug/kg
SB-8(6-7)-20200731	460-214780-7	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/7/2020		Y	N	U		U	2.07	0.38	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROBUTANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUORODECANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.040	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUORODODECANOIC ACID (PFDoA)	8/7/2020		Y	N	U		U	0.21	0.069	ug/kg
SB-8(6-7)-20200731	460-214780-7	Perfluoroheptanoic Acid (PFHpA)	8/7/2020		Y	N	U		U	0.21	0.030	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/7/2020		Y	N	U		U	0.21	0.056	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUORODECANOIC ACID (PFDA)	8/7/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/7/2020		Y	N	U		U	0.21	0.053	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROHEXANESULFONIC ACID	8/7/2020		Y	N	U		U	0.21	0.032	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROPENTANOIC ACID (PFPeA)	8/7/2020		Y	N	U		U	0.21	0.080	ug/kg
SB-8(6-7)-20200731	460-214780-7	Perfluorooctanoic acid (PFOA)	8/7/2020		Y	N	U		U	0.21	0.089	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROOCTANE SULFONIC ACID	8/7/2020		Y	N	U		U	0.52	0.21	ug/kg
SB-8(6-7)-20200731	460-214780-7	Perfluorooctane Sulfonamide (FOSA)	8/7/2020		Y	N	U		U	0.21	0.085	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUORONONANOIC ACID	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-8(6-7)-20200731	460-214780-7	PERFLUOROHEXANOIC ACID (PFHxA)	8/7/2020		Y	N	U		U	0.21	0.043	ug/kg

Analytical Method	E537(M)										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-8(6-7)-20200731	460-214780-7	PERFLUOROUNDECANOIC ACID (PFUnA)	8/7/2020		Y	N	U		U	0.21	0.037	ug/kg

Analytical Method	SW6010										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
DUP-2-20200731	460-214780-17	COBALT	8/8/2020	15.4	Y	Y				8.8	0.49	mg/kg
DUP-2-20200731	460-214780-17	ALUMINUM	8/8/2020	10100	Y	Y				35.2	5.0	mg/kg
DUP-2-20200731	460-214780-17	BARIUM	8/8/2020	61.1	Y	Y				35.2	3.4	mg/kg
DUP-2-20200731	460-214780-17	ANTIMONY	8/8/2020	1.5	Y	Y	J		J	3.5	1.0	mg/kg
DUP-2-20200731	460-214780-17	THALLIUM	8/8/2020		Y	N	U		U	3.5	0.55	mg/kg
DUP-2-20200731	460-214780-17	CHROMIUM, TOTAL	8/8/2020	63.0	Y	Y				1.8	1.3	mg/kg
DUP-2-20200731	460-214780-17	COPPER	8/8/2020	49.4	Y	Y				4.4	1.1	mg/kg
DUP-2-20200731	460-214780-17	IRON	8/8/2020	20000	Y	Y				26.4	18.1	mg/kg
DUP-2-20200731	460-214780-17	MAGNESIUM	8/8/2020	6070	Y	Y				881	59.6	mg/kg
DUP-2-20200731	460-214780-17	MANGANESE	8/8/2020	270	Y	Y				2.6	0.20	mg/kg
DUP-2-20200731	460-214780-17	NICKEL	8/8/2020	23.8	Y	Y				7.0	0.46	mg/kg
DUP-2-20200731	460-214780-17	POTASSIUM	8/8/2020	6590	Y	Y				881	54.1	mg/kg
DUP-2-20200731	460-214780-17	ARSENIC	8/8/2020	1.3	Y	Y	J		J	2.6	0.54	mg/kg
DUP-2-20200731	460-214780-17	SODIUM	8/8/2020	253	Y	Y	J		J	881	76.6	mg/kg
DUP-2-20200731	460-214780-17	VANADIUM	8/8/2020	32.5	Y	Y				8.8	0.82	mg/kg
DUP-2-20200731	460-214780-17	ZINC	8/8/2020	37.9	Y	Y				5.3	0.96	mg/kg
DUP-2-20200731	460-214780-17	CALCIUM	8/8/2020	2900	Y	Y				881	65.1	mg/kg
DUP-2-20200731	460-214780-17	LEAD	8/8/2020	3.5	Y	Y				1.8	0.29	mg/kg
DUP-2-20200731	460-214780-17	SILVER	8/8/2020		Y	N	U		U	1.8	0.99	mg/kg
DUP-2-20200731	460-214780-17	CADMIUM	8/8/2020		Y	N	U		U	0.70	0.061	mg/kg
DUP-2-20200731	460-214780-17	SELENIUM	8/8/2020		Y	N	U		U	3.5	0.60	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	BERYLLIUM	8/8/2020		Y	N	U		U	1.8	0.28	mg/kg
SB-11(3-4)-20200731	460-214780-8	VANADIUM	8/8/2020	19.2	Y	Y				8.3	0.77	mg/kg
SB-11(3-4)-20200731	460-214780-8	POTASSIUM	8/8/2020	3330	Y	Y				833	51.1	mg/kg
SB-11(3-4)-20200731	460-214780-8	NICKEL	8/8/2020	15.4	Y	Y				6.7	0.44	mg/kg
SB-11(3-4)-20200731	460-214780-8	MAGNESIUM	8/8/2020	2590	Y	Y				833	56.4	mg/kg
SB-11(3-4)-20200731	460-214780-8	ARSENIC	8/8/2020	1.3	Y	Y	J		J	2.5	0.51	mg/kg
SB-11(3-4)-20200731	460-214780-8	IRON	8/8/2020	13700	Y	Y				25.0	17.2	mg/kg
SB-11(3-4)-20200731	460-214780-8	SODIUM	8/8/2020	125	Y	Y	J		J	833	72.4	mg/kg
SB-11(3-4)-20200731	460-214780-8	ZINC	8/8/2020	24.2	Y	Y				5.0	0.91	mg/kg
SB-11(3-4)-20200731	460-214780-8	BARIUM	8/8/2020	65.5	Y	Y				33.3	3.2	mg/kg
SB-11(3-4)-20200731	460-214780-8	MANGANESE	8/8/2020	230	Y	Y				2.5	0.19	mg/kg
SB-11(3-4)-20200731	460-214780-8	COBALT	8/8/2020	6.7	Y	Y	J		J	8.3	0.46	mg/kg
SB-11(3-4)-20200731	460-214780-8	CHROMIUM, TOTAL	8/8/2020	18.5	Y	Y				1.7	1.2	mg/kg
SB-11(3-4)-20200731	460-214780-8	ANTIMONY	8/8/2020	1.0	Y	Y	J		J	3.3	0.96	mg/kg
SB-11(3-4)-20200731	460-214780-8	CALCIUM	8/8/2020	934	Y	Y				833	61.5	mg/kg
SB-11(3-4)-20200731	460-214780-8	COPPER	8/8/2020	13.1	Y	Y				4.2	1.0	mg/kg
SB-11(3-4)-20200731	460-214780-8	SILVER	8/8/2020		Y	N	U		U	1.7	0.93	mg/kg
SB-11(3-4)-20200731	460-214780-8	BERYLLIUM	8/8/2020		Y	N	U		U	0.33	0.053	mg/kg
SB-11(3-4)-20200731	460-214780-8	LEAD	8/8/2020	4.3	Y	Y				1.7	0.27	mg/kg
SB-11(3-4)-20200731	460-214780-8	SELENIUM	8/8/2020		Y	N	U		U	3.3	0.57	mg/kg
SB-11(3-4)-20200731	460-214780-8	THALLIUM	8/8/2020		Y	N	U		U	3.3	0.52	mg/kg
SB-11(3-4)-20200731	460-214780-8	ALUMINUM	8/8/2020	6990	Y	Y				33.3	4.7	mg/kg
SB-11(3-4)-20200731	460-214780-8	CADMIUM	8/8/2020		Y	N	U		U	0.67	0.057	mg/kg
SB-11(8-9)-20200731	460-214780-9	CADMIUM	8/8/2020		Y	N	U		U	0.70	0.060	mg/kg
SB-11(8-9)-20200731	460-214780-9	SELENIUM	8/8/2020		Y	N	U		U	3.5	0.59	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	MANGANESE	8/8/2020	256	Y	Y				2.6	0.20	mg/kg
SB-11(8-9)-20200731	460-214780-9	COBALT	8/8/2020	10.1	Y	Y				8.7	0.48	mg/kg
SB-11(8-9)-20200731	460-214780-9	CHROMIUM, TOTAL	8/8/2020	27.2	Y	Y				1.7	1.2	mg/kg
SB-11(8-9)-20200731	460-214780-9	SILVER	8/8/2020		Y	N	U		U	1.7	0.98	mg/kg
SB-11(8-9)-20200731	460-214780-9	THALLIUM	8/8/2020		Y	N	U		U	3.5	0.54	mg/kg
SB-11(8-9)-20200731	460-214780-9	LEAD	8/8/2020	6.1	Y	Y				1.7	0.28	mg/kg
SB-11(8-9)-20200731	460-214780-9	BARIUM	8/8/2020	119	Y	Y				35.0	3.4	mg/kg
SB-11(8-9)-20200731	460-214780-9	MAGNESIUM	8/8/2020	4410	Y	Y				874	59.2	mg/kg
SB-11(8-9)-20200731	460-214780-9	ANTIMONY	8/8/2020	1.8	Y	Y	J		J	3.5	1.0	mg/kg
SB-11(8-9)-20200731	460-214780-9	ARSENIC	8/8/2020	1.5	Y	Y	J		J	2.6	0.54	mg/kg
SB-11(8-9)-20200731	460-214780-9	CALCIUM	8/8/2020	644	Y	Y	J		J	874	64.6	mg/kg
SB-11(8-9)-20200731	460-214780-9	SODIUM	8/8/2020	102	Y	Y	J		J	874	76.1	mg/kg
SB-11(8-9)-20200731	460-214780-9	ZINC	8/8/2020	47.1	Y	Y				5.2	0.95	mg/kg
SB-11(8-9)-20200731	460-214780-9	IRON	8/8/2020	25700	Y	Y				26.2	18.0	mg/kg
SB-11(8-9)-20200731	460-214780-9	ALUMINUM	8/8/2020	9470	Y	Y				35.0	4.9	mg/kg
SB-11(8-9)-20200731	460-214780-9	NICKEL	8/8/2020	24.6	Y	Y				7.0	0.46	mg/kg
SB-11(8-9)-20200731	460-214780-9	COPPER	8/8/2020	11.7	Y	Y				4.4	1.1	mg/kg
SB-11(8-9)-20200731	460-214780-9	POTASSIUM	8/8/2020	6210	Y	Y				874	53.7	mg/kg
SB-11(8-9)-20200731	460-214780-9	VANADIUM	8/8/2020	31.1	Y	Y				8.7	0.81	mg/kg
SB-11(8-9)-20200731	460-214780-9	BERYLLIUM	8/8/2020		Y	N	U		U	1.7	0.28	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ARSENIC	8/8/2020	1.4	Y	Y	J		J	2.7	0.55	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	COBALT	8/8/2020	5.7	Y	Y	J		J	9.0	0.50	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	SODIUM	8/8/2020	109	Y	Y	J		J	901	78.4	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	NICKEL	8/8/2020	16.0	Y	Y				7.2	0.47	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ANTIMONY	8/8/2020	1.5	Y	Y	J		J	3.6	1.0	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	MANGANESE	8/8/2020	355	Y	Y				2.7	0.20	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	THALLIUM	8/8/2020		Y	N	U		U	3.6	0.56	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	SILVER	8/8/2020		Y	N	U		U	1.8	1.0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CADMIUM	8/8/2020		Y	N	U		U	0.72	0.062	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BERYLLIUM	8/8/2020		Y	N	U		U	0.36	0.058	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ZINC	8/8/2020	19.5	Y	Y				5.4	0.98	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	MAGNESIUM	8/8/2020	1720	Y	Y				901	61.0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	POTASSIUM	8/8/2020	2010	Y	Y				901	55.3	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ALUMINUM	8/8/2020	5230	Y	Y				36.0	5.1	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	LEAD	8/8/2020	6.0	Y	Y				1.8	0.29	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	IRON	8/8/2020	12400	Y	Y				27.0	18.6	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	COPPER	8/8/2020	14.0	Y	Y				4.5	1.1	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CHROMIUM, TOTAL	8/8/2020	13.9	Y	Y				1.8	1.3	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CALCIUM	8/8/2020	1770	Y	Y				901	66.6	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BARIUM	8/8/2020	47.2	Y	Y				36.0	3.5	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	VANADIUM	8/8/2020	14.2	Y	Y				9.0	0.84	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	SELENIUM	8/8/2020		Y	N	U		U	3.6	0.61	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ARSENIC	8/8/2020	1.7	Y	Y	J		J	2.6	0.53	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	MAGNESIUM	8/8/2020	2520	Y	Y				864	58.5	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	LEAD	8/8/2020	6.8	Y	Y				1.7	0.28	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	IRON	8/8/2020	15300	Y	Y				25.9	17.8	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	COPPER	8/8/2020	15.3	Y	Y				4.3	1.1	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ANTIMONY	8/8/2020	1.8	Y	Y	J		J	3.5	0.99	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CALCIUM	8/8/2020	2430	Y	Y				864	63.8	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	COBALT	8/8/2020	7.4	Y	Y	J		J	8.6	0.48	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	ALUMINUM	8/8/2020	7410	Y	Y				34.6	4.9	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CHROMIUM, TOTAL	8/8/2020	20.8	Y	Y				1.7	1.2	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BERYLLIUM	8/8/2020		Y	N	U		U	0.35	0.055	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CADMIUM	8/8/2020		Y	N	U		U	0.69	0.060	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	SELENIUM	8/8/2020		Y	N	U		U	3.5	0.59	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	SILVER	8/8/2020		Y	N	U		U	1.7	0.97	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	THALLIUM	8/8/2020		Y	N	U		U	3.5	0.54	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	VANADIUM	8/8/2020	19.6	Y	Y				8.6	0.80	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ZINC	8/8/2020	25.5	Y	Y				5.2	0.94	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BARIUM	8/8/2020	64.9	Y	Y				34.6	3.3	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	SODIUM	8/8/2020	171	Y	Y	J		J	864	75.2	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	MANGANESE	8/8/2020	422	Y	Y				2.6	0.19	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	NICKEL	8/8/2020	20.4	Y	Y				6.9	0.45	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	POTASSIUM	8/8/2020	2830	Y	Y				864	53.0	mg/kg
SB-15(7-8)-20200731	460-214780-12	NICKEL	8/8/2020	23.6	Y	Y				7.5	0.49	mg/kg
SB-15(7-8)-20200731	460-214780-12	COPPER	8/8/2020	10.1	Y	Y				4.7	1.2	mg/kg
SB-15(7-8)-20200731	460-214780-12	CADMIUM	8/8/2020		Y	N	U		U	0.75	0.065	mg/kg
SB-15(7-8)-20200731	460-214780-12	LEAD	8/8/2020	6.1	Y	Y				1.9	0.30	mg/kg
SB-15(7-8)-20200731	460-214780-12	IRON	8/8/2020	23600	Y	Y				28.1	19.3	mg/kg
SB-15(7-8)-20200731	460-214780-12	SELENIUM	8/8/2020		Y	N	U		U	3.7	0.64	mg/kg
SB-15(7-8)-20200731	460-214780-12	POTASSIUM	8/8/2020	1520	Y	Y				935	57.4	mg/kg
SB-15(7-8)-20200731	460-214780-12	MAGNESIUM	8/8/2020	1430	Y	Y				935	63.3	mg/kg
SB-15(7-8)-20200731	460-214780-12	ZINC	8/8/2020	33.5	Y	Y				5.6	1.0	mg/kg
SB-15(7-8)-20200731	460-214780-12	CHROMIUM, TOTAL	8/8/2020	15.3	Y	Y				1.9	1.3	mg/kg
SB-15(7-8)-20200731	460-214780-12	COBALT	8/8/2020	6.3	Y	Y	J		J	9.4	0.52	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	THALLIUM	8/8/2020		Y	N	U		U	3.7	0.58	mg/kg
SB-15(7-8)-20200731	460-214780-12	VANADIUM	8/8/2020	14.5	Y	Y				9.4	0.87	mg/kg
SB-15(7-8)-20200731	460-214780-12	CALCIUM	8/8/2020	385	Y	Y	J		J	935	69.1	mg/kg
SB-15(7-8)-20200731	460-214780-12	SILVER	8/8/2020		Y	N	U		U	1.9	1.0	mg/kg
SB-15(7-8)-20200731	460-214780-12	SODIUM	8/8/2020		Y	N	U		U	935	81.4	mg/kg
SB-15(7-8)-20200731	460-214780-12	MANGANESE	8/8/2020	348	Y	Y				2.8	0.21	mg/kg
SB-15(7-8)-20200731	460-214780-12	ALUMINUM	8/8/2020	3670	Y	Y				37.4	5.3	mg/kg
SB-15(7-8)-20200731	460-214780-12	ANTIMONY	8/8/2020	1.9	Y	Y	J		J	3.7	1.1	mg/kg
SB-15(7-8)-20200731	460-214780-12	ARSENIC	8/8/2020	1.8	Y	Y	J		J	2.8	0.58	mg/kg
SB-15(7-8)-20200731	460-214780-12	BARIUM	8/8/2020	35.1	Y	Y	J		J	37.4	3.6	mg/kg
SB-15(7-8)-20200731	460-214780-12	BERYLLIUM	8/8/2020	0.084	Y	Y	J		J	0.37	0.060	mg/kg
SB-16(2-3)-20200731	460-214780-13	MANGANESE	8/8/2020	552	Y	Y				2.7	0.20	mg/kg
SB-16(2-3)-20200731	460-214780-13	NICKEL	8/8/2020	21.6	Y	Y				7.1	0.46	mg/kg
SB-16(2-3)-20200731	460-214780-13	IRON	8/8/2020	19800	Y	Y				26.5	18.2	mg/kg
SB-16(2-3)-20200731	460-214780-13	SILVER	8/8/2020		Y	N	U		U	1.8	0.99	mg/kg
SB-16(2-3)-20200731	460-214780-13	BARIUM	8/8/2020	65.6	Y	Y				35.3	3.4	mg/kg
SB-16(2-3)-20200731	460-214780-13	LEAD	8/8/2020	7.2	Y	Y				1.8	0.29	mg/kg
SB-16(2-3)-20200731	460-214780-13	MAGNESIUM	8/8/2020	2460	Y	Y				883	59.8	mg/kg
SB-16(2-3)-20200731	460-214780-13	COPPER	8/8/2020	14.8	Y	Y				4.4	1.1	mg/kg
SB-16(2-3)-20200731	460-214780-13	SODIUM	8/8/2020	134	Y	Y	J		J	883	76.9	mg/kg
SB-16(2-3)-20200731	460-214780-13	ALUMINUM	8/8/2020	6870	Y	Y				35.3	5.0	mg/kg
SB-16(2-3)-20200731	460-214780-13	VANADIUM	8/8/2020	19.4	Y	Y				8.8	0.82	mg/kg
SB-16(2-3)-20200731	460-214780-13	CHROMIUM, TOTAL	8/8/2020	19.3	Y	Y				1.8	1.3	mg/kg
SB-16(2-3)-20200731	460-214780-13	CALCIUM	8/8/2020	2980	Y	Y				883	65.3	mg/kg
SB-16(2-3)-20200731	460-214780-13	POTASSIUM	8/8/2020	3140	Y	Y				883	54.2	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	ZINC	8/8/2020	30.3	Y	Y				5.3	0.96	mg/kg
SB-16(2-3)-20200731	460-214780-13	COBALT	8/8/2020	8.6	Y	Y	J		J	8.8	0.49	mg/kg
SB-16(2-3)-20200731	460-214780-13	CADMIUM	8/8/2020		Y	N	U		U	0.71	0.061	mg/kg
SB-16(2-3)-20200731	460-214780-13	BERYLLIUM	8/8/2020		Y	N	U		U	0.35	0.057	mg/kg
SB-16(2-3)-20200731	460-214780-13	SELENIUM	8/8/2020		Y	N	U		U	3.5	0.60	mg/kg
SB-16(2-3)-20200731	460-214780-13	ANTIMONY	8/8/2020	2.6	Y	Y	J		J	3.5	1.0	mg/kg
SB-16(2-3)-20200731	460-214780-13	ARSENIC	8/8/2020	1.9	Y	Y	J		J	2.7	0.54	mg/kg
SB-16(2-3)-20200731	460-214780-13	THALLIUM	8/8/2020		Y	N	U		U	3.5	0.55	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	MANGANESE	8/8/2020	1060	Y	Y				2.8	0.21	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CALCIUM	8/8/2020	426	Y	Y	J		J	918	67.9	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	VANADIUM	8/8/2020	12.3	Y	Y				9.2	0.85	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	SELENIUM	8/8/2020	0.91	Y	Y	J		J	3.7	0.62	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CHROMIUM, TOTAL	8/8/2020	12.0	Y	Y				1.8	1.3	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BERYLLIUM	8/8/2020		Y	N	U		U	0.37	0.059	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CADMIUM	8/8/2020		Y	N	U		U	0.73	0.063	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	SILVER	8/8/2020		Y	N	U		U	1.8	1.0	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BARIUM	8/8/2020	51.7	Y	Y				36.7	3.5	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	NICKEL	8/8/2020	33.3	Y	Y				7.3	0.48	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ZINC	8/8/2020	24.1	Y	Y				5.5	1.0	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	SODIUM	8/8/2020		Y	N	U		U	918	79.9	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	MAGNESIUM	8/8/2020	981	Y	Y				918	62.2	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ARSENIC	8/8/2020	2.5	Y	Y	J		J	2.8	0.56	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	COPPER	8/8/2020	10.8	Y	Y				4.6	1.1	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	IRON	8/8/2020	24400	Y	Y				27.6	18.9	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	LEAD	8/8/2020	6.6	Y	Y				1.8	0.30	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	COBALT	8/8/2020	22.9	Y	Y				9.2	0.51	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ALUMINUM	8/8/2020	3320	Y	Y				36.7	5.2	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ANTIMONY	8/8/2020	5.3	Y	Y				3.7	1.1	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	THALLIUM	8/8/2020		Y	N	U		U	3.7	0.57	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	POTASSIUM	8/8/2020	1110	Y	Y				918	56.4	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	IRON	8/8/2020	27800	Y	Y				27.5	18.9	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ZINC	8/8/2020	49.7	Y	Y				5.5	1.0	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CADMIUM	8/8/2020		Y	N	U		U	0.73	0.063	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	SODIUM	8/8/2020	111	Y	Y	J		J	918	79.9	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ANTIMONY	8/8/2020	3.2	Y	Y	J		J	3.7	1.1	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	MAGNESIUM	8/8/2020	3240	Y	Y				918	62.1	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BERYLLIUM	8/8/2020		Y	N	U		U	0.37	0.059	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	VANADIUM	8/8/2020	29.2	Y	Y				9.2	0.85	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	SELENIUM	8/8/2020		Y	N	U		U	3.7	0.62	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	SILVER	8/8/2020		Y	N	U		U	1.8	1.0	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	THALLIUM	8/8/2020		Y	N	U		U	3.7	0.57	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ALUMINUM	8/8/2020	8850	Y	Y				36.7	5.2	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ARSENIC	8/8/2020	2.8	Y	Y				2.8	0.56	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BARIUM	8/8/2020	82.4	Y	Y				36.7	3.5	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CALCIUM	8/8/2020	952	Y	Y				918	67.8	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CHROMIUM, TOTAL	8/8/2020	31.2	Y	Y				1.8	1.3	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	POTASSIUM	8/8/2020	3970	Y	Y				918	56.4	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	NICKEL	8/8/2020	30.0	Y	Y				7.3	0.48	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	MANGANESE	8/8/2020	630	Y	Y				2.8	0.21	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	COBALT	8/8/2020	12.6	Y	Y				9.2	0.51	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	COPPER	8/8/2020	20.5	Y	Y				4.6	1.1	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	LEAD	8/8/2020	12.2	Y	Y				1.8	0.30	mg/kg
SB-20(6-7)-20200731	460-214780-16	NICKEL	8/8/2020	24.6	Y	Y				6.8	0.45	mg/kg
SB-20(6-7)-20200731	460-214780-16	MANGANESE	8/8/2020	485	Y	Y				2.5	0.19	mg/kg
SB-20(6-7)-20200731	460-214780-16	LEAD	8/8/2020	8.6	Y	Y				1.7	0.27	mg/kg
SB-20(6-7)-20200731	460-214780-16	ALUMINUM	8/8/2020	6680	Y	Y				33.9	4.8	mg/kg
SB-20(6-7)-20200731	460-214780-16	ARSENIC	8/8/2020	2.6	Y	Y				2.5	0.52	mg/kg
SB-20(6-7)-20200731	460-214780-16	POTASSIUM	8/8/2020	2660	Y	Y				848	52.1	mg/kg
SB-20(6-7)-20200731	460-214780-16	COPPER	8/8/2020	14.6	Y	Y				4.2	1.1	mg/kg
SB-20(6-7)-20200731	460-214780-16	MAGNESIUM	8/8/2020	2300	Y	Y				848	57.4	mg/kg
SB-20(6-7)-20200731	460-214780-16	BERYLLIUM	8/8/2020		Y	N	U		U	0.34	0.054	mg/kg
SB-20(6-7)-20200731	460-214780-16	CADMIUM	8/8/2020		Y	N	U		U	0.68	0.059	mg/kg
SB-20(6-7)-20200731	460-214780-16	SELENIUM	8/8/2020		Y	N	U		U	3.4	0.58	mg/kg
SB-20(6-7)-20200731	460-214780-16	SILVER	8/8/2020		Y	N	U		U	1.7	0.95	mg/kg
SB-20(6-7)-20200731	460-214780-16	SODIUM	8/8/2020		Y	N	U		U	848	73.8	mg/kg
SB-20(6-7)-20200731	460-214780-16	COBALT	8/8/2020	9.5	Y	Y				8.5	0.47	mg/kg
SB-20(6-7)-20200731	460-214780-16	CHROMIUM, TOTAL	8/8/2020	21.8	Y	Y				1.7	1.2	mg/kg
SB-20(6-7)-20200731	460-214780-16	CALCIUM	8/8/2020	1180	Y	Y				848	62.7	mg/kg
SB-20(6-7)-20200731	460-214780-16	ANTIMONY	8/8/2020	2.7	Y	Y	J		J	3.4	0.98	mg/kg
SB-20(6-7)-20200731	460-214780-16	VANADIUM	8/8/2020	22.7	Y	Y				8.5	0.79	mg/kg
SB-20(6-7)-20200731	460-214780-16	ZINC	8/8/2020	37.8	Y	Y				5.1	0.92	mg/kg
SB-20(6-7)-20200731	460-214780-16	THALLIUM	8/8/2020		Y	N	U		U	3.4	0.53	mg/kg
SB-20(6-7)-20200731	460-214780-16	BARIUM	8/8/2020	57.8	Y	Y				33.9	3.3	mg/kg
SB-20(6-7)-20200731	460-214780-16	IRON	8/8/2020	24500	Y	Y				25.4	17.5	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BARIUM	8/6/2020	30.9	Y	Y	J		J	41.3	4.0	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	SODIUM	8/6/2020	213	Y	Y	J		J	1030	89.8	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	LEAD	8/6/2020	3.1	Y	Y	B			2.1	0.33	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	COBALT	8/6/2020	3.4	Y	Y	J		J	10.3	0.57	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CALCIUM	8/6/2020	752	Y	Y	J		J	1030	76.3	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ZINC	8/6/2020	15.2	Y	Y				6.2	1.1	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	IRON	8/6/2020	9780	Y	Y				31.0	21.3	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	THALLIUM	8/6/2020		Y	N	U		U	4.1	0.64	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	SELENIUM	8/6/2020		Y	N	U		U	4.1	0.70	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CADMIUM	8/6/2020		Y	N	U		U	0.83	0.071	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BERYLLIUM	8/6/2020		Y	N	U		U	0.41	0.066	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ARSENIC	8/6/2020		Y	N	U		U	3.1	0.63	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ANTIMONY	8/6/2020		Y	N	U		U	4.1	1.2	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	MAGNESIUM	8/6/2020	1270	Y	Y				1030	69.9	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ALUMINUM	8/6/2020	3440	Y	Y				41.3	5.8	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CHROMIUM, TOTAL	8/6/2020	9.1	Y	Y				2.1	1.5	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	COPPER	8/6/2020	10.7	Y	Y				5.2	1.3	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	POTASSIUM	8/6/2020	1520	Y	Y				1030	63.4	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	NICKEL	8/6/2020	11.6	Y	Y				8.3	0.54	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	VANADIUM	8/6/2020	10.7	Y	Y				10.3	0.96	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	MANGANESE	8/6/2020	144	Y	Y				3.1	0.23	mg/kg
SB-3(5-6)-20200731	460-214780-2	SODIUM	8/6/2020	276	Y	Y	J		J	1050	91.1	mg/kg
SB-3(5-6)-20200731	460-214780-2	COBALT	8/6/2020	7.5	Y	Y	J		J	10.5	0.58	mg/kg
SB-3(5-6)-20200731	460-214780-2	LEAD	8/6/2020	4.1	Y	Y	B			2.1	0.34	mg/kg
SB-3(5-6)-20200731	460-214780-2	CADMIUM	8/6/2020	0.080	Y	Y	J		J	0.84	0.072	mg/kg

SDG: 4602147801

Analytical Method	SW6010											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	CALCIUM	8/6/2020	838	Y	Y	J		J	1050	77.4	mg/kg
SB-3(5-6)-20200731	460-214780-2	VANADIUM	8/6/2020	21.2	Y	Y				10.5	0.97	mg/kg
SB-3(5-6)-20200731	460-214780-2	POTASSIUM	8/6/2020	3520	Y	Y				1050	64.3	mg/kg
SB-3(5-6)-20200731	460-214780-2	MANGANESE	8/6/2020	318	Y	Y				3.1	0.24	mg/kg
SB-3(5-6)-20200731	460-214780-2	IRON	8/6/2020	18100	Y	Y				31.4	21.6	mg/kg
SB-3(5-6)-20200731	460-214780-2	COPPER	8/6/2020	17.6	Y	Y				5.2	1.3	mg/kg
SB-3(5-6)-20200731	460-214780-2	CHROMIUM, TOTAL	8/6/2020	18.8	Y	Y				2.1	1.5	mg/kg
SB-3(5-6)-20200731	460-214780-2	ZINC	8/6/2020	30.9	Y	Y				6.3	1.1	mg/kg
SB-3(5-6)-20200731	460-214780-2	BARIUM	8/6/2020	61.4	Y	Y				41.9	4.0	mg/kg
SB-3(5-6)-20200731	460-214780-2	ALUMINUM	8/6/2020	6450	Y	Y				41.9	5.9	mg/kg
SB-3(5-6)-20200731	460-214780-2	ANTIMONY	8/6/2020		Y	N	U		U	4.2	1.2	mg/kg
SB-3(5-6)-20200731	460-214780-2	ARSENIC	8/6/2020		Y	N	U		U	3.1	0.64	mg/kg
SB-3(5-6)-20200731	460-214780-2	BERYLLIUM	8/6/2020		Y	N	U		U	0.42	0.067	mg/kg
SB-3(5-6)-20200731	460-214780-2	SELENIUM	8/6/2020		Y	N	U		U	4.2	0.71	mg/kg
SB-3(5-6)-20200731	460-214780-2	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-3(5-6)-20200731	460-214780-2	NICKEL	8/6/2020	16.3	Y	Y				8.4	0.55	mg/kg
SB-3(5-6)-20200731	460-214780-2	MAGNESIUM	8/6/2020	2670	Y	Y				1050	70.9	mg/kg
SB-3(5-6)-20200731	460-214780-2	THALLIUM	8/6/2020		Y	N	U		U	4.2	0.65	mg/kg
SB-4(2-3)-20200731	460-214780-3	COBALT	8/6/2020	10.2	Y	Y	J		J	10.6	0.59	mg/kg
SB-4(2-3)-20200731	460-214780-3	CADMIUM	8/6/2020	0.12	Y	Y	J		J	0.85	0.073	mg/kg
SB-4(2-3)-20200731	460-214780-3	SODIUM	8/6/2020	506	Y	Y	J		J	1060	92.4	mg/kg
SB-4(2-3)-20200731	460-214780-3	LEAD	8/6/2020	22.5	Y	Y	B			2.1	0.34	mg/kg
SB-4(2-3)-20200731	460-214780-3	ARSENIC	8/6/2020	1.0	Y	Y	J		J	3.2	0.65	mg/kg
SB-4(2-3)-20200731	460-214780-3	BERYLLIUM	8/6/2020	0.15	Y	Y	J		J	0.42	0.068	mg/kg
SB-4(2-3)-20200731	460-214780-3	ZINC	8/6/2020	31.3	Y	Y				6.4	1.2	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	ALUMINUM	8/6/2020	8310	Y	Y				42.5	6.0	mg/kg
SB-4(2-3)-20200731	460-214780-3	CALCIUM	8/6/2020	6250	Y	Y				1060	78.5	mg/kg
SB-4(2-3)-20200731	460-214780-3	CHROMIUM, TOTAL	8/6/2020	23.3	Y	Y				2.1	1.5	mg/kg
SB-4(2-3)-20200731	460-214780-3	COPPER	8/6/2020	29.2	Y	Y				5.3	1.3	mg/kg
SB-4(2-3)-20200731	460-214780-3	IRON	8/6/2020	14700	Y	Y				31.9	21.9	mg/kg
SB-4(2-3)-20200731	460-214780-3	MAGNESIUM	8/6/2020	2650	Y	Y				1060	71.9	mg/kg
SB-4(2-3)-20200731	460-214780-3	MANGANESE	8/6/2020	454	Y	Y				3.2	0.24	mg/kg
SB-4(2-3)-20200731	460-214780-3	NICKEL	8/6/2020	14.5	Y	Y				8.5	0.56	mg/kg
SB-4(2-3)-20200731	460-214780-3	POTASSIUM	8/6/2020	2610	Y	Y				1060	65.2	mg/kg
SB-4(2-3)-20200731	460-214780-3	VANADIUM	8/6/2020	21.6	Y	Y				10.6	0.99	mg/kg
SB-4(2-3)-20200731	460-214780-3	BARIUM	8/6/2020	58.8	Y	Y				42.5	4.1	mg/kg
SB-4(2-3)-20200731	460-214780-3	THALLIUM	8/6/2020		Y	N	U		U	4.2	0.66	mg/kg
SB-4(2-3)-20200731	460-214780-3	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-4(2-3)-20200731	460-214780-3	SELENIUM	8/6/2020		Y	N	U		U	4.2	0.72	mg/kg
SB-4(2-3)-20200731	460-214780-3	ANTIMONY	8/6/2020		Y	N	U		U	4.2	1.2	mg/kg
SB-4(6-7)-20200731	460-214780-4	ANTIMONY	8/6/2020	1.6	Y	Y	J		J	4.3	1.2	mg/kg
SB-4(6-7)-20200731	460-214780-4	LEAD	8/6/2020	5.4	Y	Y	B			2.1	0.34	mg/kg
SB-4(6-7)-20200731	460-214780-4	COBALT	8/6/2020	8.3	Y	Y	J		J	10.6	0.59	mg/kg
SB-4(6-7)-20200731	460-214780-4	CALCIUM	8/6/2020	877	Y	Y	J		J	1060	78.7	mg/kg
SB-4(6-7)-20200731	460-214780-4	SODIUM	8/6/2020	242	Y	Y	J		J	1060	92.6	mg/kg
SB-4(6-7)-20200731	460-214780-4	CADMIUM	8/6/2020	0.094	Y	Y	J		J	0.85	0.073	mg/kg
SB-4(6-7)-20200731	460-214780-4	SELENIUM	8/6/2020	0.73	Y	Y	J		J	4.3	0.72	mg/kg
SB-4(6-7)-20200731	460-214780-4	CHROMIUM, TOTAL	8/6/2020	25.7	Y	Y				2.1	1.5	mg/kg
SB-4(6-7)-20200731	460-214780-4	THALLIUM	8/6/2020		Y	N	U		U	4.3	0.66	mg/kg
SB-4(6-7)-20200731	460-214780-4	VANADIUM	8/6/2020	25.6	Y	Y				10.6	0.99	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(6-7)-20200731	460-214780-4	ZINC	8/6/2020	46.3	Y	Y				6.4	1.2	mg/kg
SB-4(6-7)-20200731	460-214780-4	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-4(6-7)-20200731	460-214780-4	ALUMINUM	8/6/2020	7000	Y	Y				42.6	6.0	mg/kg
SB-4(6-7)-20200731	460-214780-4	POTASSIUM	8/6/2020	4290	Y	Y				1060	65.4	mg/kg
SB-4(6-7)-20200731	460-214780-4	BERYLLIUM	8/6/2020		Y	N	U		U	0.43	0.068	mg/kg
SB-4(6-7)-20200731	460-214780-4	BARIUM	8/6/2020	79.8	Y	Y				42.6	4.1	mg/kg
SB-4(6-7)-20200731	460-214780-4	MAGNESIUM	8/6/2020	3250	Y	Y				1060	72.1	mg/kg
SB-4(6-7)-20200731	460-214780-4	MANGANESE	8/6/2020	383	Y	Y				3.2	0.24	mg/kg
SB-4(6-7)-20200731	460-214780-4	NICKEL	8/6/2020	20.8	Y	Y				8.5	0.56	mg/kg
SB-4(6-7)-20200731	460-214780-4	COPPER	8/6/2020	15.2	Y	Y				5.3	1.3	mg/kg
SB-4(6-7)-20200731	460-214780-4	IRON	8/6/2020	22100	Y	Y				31.9	21.9	mg/kg
SB-4(6-7)-20200731	460-214780-4	ARSENIC	8/6/2020		Y	N	U		U	3.2	0.65	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CADMIUM	8/6/2020	0.11	Y	Y	J		J	0.82	0.070	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	LEAD	8/6/2020	7.9	Y	Y	B			2.0	0.33	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	SODIUM	8/6/2020	406	Y	Y	J		J	1020	88.9	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	COBALT	8/6/2020	9.6	Y	Y	J		J	10.2	0.57	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CHROMIUM, TOTAL	8/6/2020	22.4	Y	Y				2.0	1.5	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	POTASSIUM	8/6/2020	5310	Y	Y				1020	62.7	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	NICKEL	8/6/2020	20.5	Y	Y				8.2	0.54	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CALCIUM	8/6/2020	2310	Y	Y				1020	75.5	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ZINC	8/6/2020	42.3	Y	Y				6.1	1.1	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	MAGNESIUM	8/6/2020	4130	Y	Y				1020	69.2	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	IRON	8/6/2020	19500	Y	Y				30.6	21.0	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	MANGANESE	8/6/2020	484	Y	Y				3.1	0.23	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	COPPER	8/6/2020	22.1	Y	Y				5.1	1.3	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	VANADIUM	8/6/2020	28.7	Y	Y				10.2	0.95	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	THALLIUM	8/6/2020		Y	N	U		U	4.1	0.63	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BARIUM	8/6/2020	111	Y	Y				40.9	3.9	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ALUMINUM	8/6/2020	8930	Y	Y				40.9	5.8	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ANTIMONY	8/6/2020		Y	N	U		U	4.1	1.2	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ARSENIC	8/6/2020		Y	N	U		U	3.1	0.63	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BERYLLIUM	8/6/2020		Y	N	U		U	0.41	0.065	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	SELENIUM	8/6/2020		Y	N	U		U	4.1	0.69	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	SILVER	8/6/2020		Y	N	U		U	2.0	1.1	mg/kg
SB-8(3-4)-20200731	460-214780-6	ANTIMONY	8/6/2020	2.1	Y	Y	J		J	4.2	1.2	mg/kg
SB-8(3-4)-20200731	460-214780-6	COBALT	8/6/2020	10.3	Y	Y	J		J	10.5	0.58	mg/kg
SB-8(3-4)-20200731	460-214780-6	LEAD	8/6/2020	10	Y	Y	B			2.1	0.34	mg/kg
SB-8(3-4)-20200731	460-214780-6	CADMIUM	8/6/2020	0.12	Y	Y	J		J	0.84	0.072	mg/kg
SB-8(3-4)-20200731	460-214780-6	BERYLLIUM	8/6/2020	0.26	Y	Y	J		J	0.42	0.067	mg/kg
SB-8(3-4)-20200731	460-214780-6	SODIUM	8/6/2020	236	Y	Y	J		J	1050	91.1	mg/kg
SB-8(3-4)-20200731	460-214780-6	SELENIUM	8/6/2020		Y	N	U		U	4.2	0.71	mg/kg
SB-8(3-4)-20200731	460-214780-6	ZINC	8/6/2020	39.6	Y	Y				6.3	1.1	mg/kg
SB-8(3-4)-20200731	460-214780-6	THALLIUM	8/6/2020		Y	N	U		U	4.2	0.65	mg/kg
SB-8(3-4)-20200731	460-214780-6	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-8(3-4)-20200731	460-214780-6	ARSENIC	8/6/2020		Y	N	U		U	3.1	0.64	mg/kg
SB-8(3-4)-20200731	460-214780-6	NICKEL	8/6/2020	26.5	Y	Y				8.4	0.55	mg/kg
SB-8(3-4)-20200731	460-214780-6	ALUMINUM	8/6/2020	7040	Y	Y				41.9	5.9	mg/kg
SB-8(3-4)-20200731	460-214780-6	VANADIUM	8/6/2020	24.9	Y	Y				10.5	0.97	mg/kg
SB-8(3-4)-20200731	460-214780-6	POTASSIUM	8/6/2020	3270	Y	Y				1050	64.3	mg/kg
SB-8(3-4)-20200731	460-214780-6	MANGANESE	8/6/2020	711	Y	Y				3.1	0.24	mg/kg

SDG: 4602147801

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	MAGNESIUM	8/6/2020	2690	Y	Y				1050	70.9	mg/kg
SB-8(3-4)-20200731	460-214780-6	IRON	8/6/2020	24500	Y	Y				31.4	21.6	mg/kg
SB-8(3-4)-20200731	460-214780-6	COPPER	8/6/2020	17.0	Y	Y				5.2	1.3	mg/kg
SB-8(3-4)-20200731	460-214780-6	CHROMIUM, TOTAL	8/6/2020	26.7	Y	Y				2.1	1.5	mg/kg
SB-8(3-4)-20200731	460-214780-6	CALCIUM	8/6/2020	5560	Y	Y				1050	77.3	mg/kg
SB-8(3-4)-20200731	460-214780-6	BARIUM	8/6/2020	76.5	Y	Y				41.9	4.0	mg/kg
SB-8(6-7)-20200731	460-214780-7	LEAD	8/6/2020	28.3	Y	Y	B			2.1	0.34	mg/kg
SB-8(6-7)-20200731	460-214780-7	SODIUM	8/6/2020	251	Y	Y	J		J	1040	90.7	mg/kg
SB-8(6-7)-20200731	460-214780-7	COBALT	8/6/2020	9.1	Y	Y	J		J	10.4	0.58	mg/kg
SB-8(6-7)-20200731	460-214780-7	CADMIUM	8/6/2020	0.11	Y	Y	J		J	0.83	0.072	mg/kg
SB-8(6-7)-20200731	460-214780-7	BERYLLIUM	8/6/2020	0.16	Y	Y	J		J	0.42	0.067	mg/kg
SB-8(6-7)-20200731	460-214780-7	ARSENIC	8/6/2020	0.73	Y	Y	J		J	3.1	0.64	mg/kg
SB-8(6-7)-20200731	460-214780-7	POTASSIUM	8/6/2020	2490	Y	Y				1040	64.0	mg/kg
SB-8(6-7)-20200731	460-214780-7	CALCIUM	8/6/2020	3960	Y	Y				1040	77.0	mg/kg
SB-8(6-7)-20200731	460-214780-7	SELENIUM	8/6/2020		Y	N	U		U	4.2	0.71	mg/kg
SB-8(6-7)-20200731	460-214780-7	ANTIMONY	8/6/2020		Y	N	U		U	4.2	1.2	mg/kg
SB-8(6-7)-20200731	460-214780-7	IRON	8/6/2020	14800	Y	Y				31.3	21.5	mg/kg
SB-8(6-7)-20200731	460-214780-7	COPPER	8/6/2020	26.0	Y	Y				5.2	1.3	mg/kg
SB-8(6-7)-20200731	460-214780-7	CHROMIUM, TOTAL	8/6/2020	20.2	Y	Y				2.1	1.5	mg/kg
SB-8(6-7)-20200731	460-214780-7	SILVER	8/6/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-8(6-7)-20200731	460-214780-7	BARIUM	8/6/2020	74.5	Y	Y				41.7	4.0	mg/kg
SB-8(6-7)-20200731	460-214780-7	MAGNESIUM	8/6/2020	2580	Y	Y				1040	70.6	mg/kg
SB-8(6-7)-20200731	460-214780-7	MANGANESE	8/6/2020	470	Y	Y				3.1	0.23	mg/kg
SB-8(6-7)-20200731	460-214780-7	ALUMINUM	8/6/2020	7030	Y	Y				41.7	5.9	mg/kg
SB-8(6-7)-20200731	460-214780-7	ZINC	8/6/2020	45.9	Y	Y				6.3	1.1	mg/kg

SDG: 4602147801

Analytical Method	SW6010											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-8(6-7)-20200731	460-214780-7	NICKEL	8/6/2020	18.9	Y	Y				8.3	0.55	mg/kg
SB-8(6-7)-20200731	460-214780-7	THALLIUM	8/6/2020		Y	N	U		U	4.2	0.65	mg/kg
SB-8(6-7)-20200731	460-214780-7	VANADIUM	8/6/2020	19.0	Y	Y				10.4	0.97	mg/kg

Analytical Method	SW7471B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
DUP-2-20200731	460-214780-17	MERCURY	8/6/2020	0.0056	Y	Y	J		J	0.017	0.0041	mg/kg
SB-11(3-4)-20200731	460-214780-8	MERCURY	8/6/2020	0.012	Y	Y	J		J	0.018	0.0043	mg/kg
SB-11(8-9)-20200731	460-214780-9	MERCURY	8/6/2020	0.0060	Y	Y	J		J	0.017	0.0039	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	MERCURY	8/6/2020	0.012	Y	Y	J		J	0.017	0.0041	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	MERCURY	8/6/2020	0.0085	Y	Y	J		J	0.017	0.0040	mg/kg
SB-15(7-8)-20200731	460-214780-12	MERCURY	8/6/2020	0.0050	Y	Y	J		J	0.017	0.0040	mg/kg
SB-16(2-3)-20200731	460-214780-13	MERCURY	8/6/2020	0.0058	Y	Y	J		J	0.017	0.0041	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	MERCURY	8/6/2020	0.0065	Y	Y	J		J	0.018	0.0042	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	MERCURY	8/6/2020	0.021	Y	Y				0.018	0.0042	mg/kg
SB-20(6-7)-20200731	460-214780-16	MERCURY	8/6/2020	0.0062	Y	Y	J		J	0.017	0.0040	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	MERCURY	8/6/2020	0.0065	Y	Y	J		J	0.018	0.0042	mg/kg
SB-3(5-6)-20200731	460-214780-2	MERCURY	8/6/2020	0.0066	Y	Y	J		J	0.016	0.0039	mg/kg
SB-4(2-3)-20200731	460-214780-3	MERCURY	8/6/2020	0.013	Y	Y	J		J	0.018	0.0043	mg/kg
SB-4(6-7)-20200731	460-214780-4	MERCURY	8/6/2020	0.0062	Y	Y	J		J	0.018	0.0042	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	MERCURY	8/6/2020	0.0059	Y	Y	J		J	0.018	0.0041	mg/kg
SB-8(3-4)-20200731	460-214780-6	MERCURY	8/6/2020	0.027	Y	Y				0.018	0.0042	mg/kg
SB-8(6-7)-20200731	460-214780-7	MERCURY	8/6/2020	0.0065	Y	Y	J		J	0.019	0.0045	mg/kg

Analytical Method	SW8081B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00083	mg/kg
DUP-2-20200731	460-214780-17	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0074	0.0012	mg/kg
DUP-2-20200731	460-214780-17	CHLORDANE	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
DUP-2-20200731	460-214780-17	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0019	mg/kg
DUP-2-20200731	460-214780-17	ALDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
DUP-2-20200731	460-214780-17	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
DUP-2-20200731	460-214780-17	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00075	mg/kg
DUP-2-20200731	460-214780-17	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
DUP-2-20200731	460-214780-17	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
DUP-2-20200731	460-214780-17	trans-Chlordane	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
DUP-2-20200731	460-214780-17	TOXAPHENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
DUP-2-20200731	460-214780-17	P,P'-DDD	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
DUP-2-20200731	460-214780-17	P,P'-DDT	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
DUP-2-20200731	460-214780-17	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
DUP-2-20200731	460-214780-17	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
DUP-2-20200731	460-214780-17	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00068	mg/kg
DUP-2-20200731	460-214780-17	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
DUP-2-20200731	460-214780-17	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
DUP-2-20200731	460-214780-17	ENDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
DUP-2-20200731	460-214780-17	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0074	0.00092	mg/kg
DUP-2-20200731	460-214780-17	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
DUP-2-20200731	460-214780-17	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00096	mg/kg
DUP-2-20200731	460-214780-17	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00045	mg/kg
DUP-2-20200731	460-214780-17	P,P'-DDE	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(3-4)-20200731	460-214780-8	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.071	0.017	mg/kg
SB-11(3-4)-20200731	460-214780-8	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0071	0.0016	mg/kg
SB-11(3-4)-20200731	460-214780-8	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0071	0.00084	mg/kg
SB-11(3-4)-20200731	460-214780-8	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0021	0.00066	mg/kg
SB-11(3-4)-20200731	460-214780-8	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0071	0.0014	mg/kg
SB-11(3-4)-20200731	460-214780-8	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0071	0.0017	mg/kg
SB-11(3-4)-20200731	460-214780-8	ENDRIN	8/5/2020		Y	N	U		U	0.0071	0.0010	mg/kg
SB-11(3-4)-20200731	460-214780-8	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0071	0.00090	mg/kg
SB-11(3-4)-20200731	460-214780-8	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0071	0.0011	mg/kg
SB-11(3-4)-20200731	460-214780-8	P,P'-DDE	8/5/2020		Y	N	U		U	0.0071	0.00084	mg/kg
SB-11(3-4)-20200731	460-214780-8	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0021	0.00044	mg/kg
SB-11(3-4)-20200731	460-214780-8	P,P'-DDD	8/5/2020		Y	N	U		U	0.0071	0.0012	mg/kg
SB-11(3-4)-20200731	460-214780-8	CHLORDANE	8/5/2020		Y	N	U		U	0.071	0.017	mg/kg
SB-11(3-4)-20200731	460-214780-8	trans-Chlordane	8/5/2020		Y	N	U		U	0.0071	0.0013	mg/kg
SB-11(3-4)-20200731	460-214780-8	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0071	0.0018	mg/kg
SB-11(3-4)-20200731	460-214780-8	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0021	0.00080	mg/kg
SB-11(3-4)-20200731	460-214780-8	TOXAPHENE	8/5/2020		Y	N	U		U	0.071	0.026	mg/kg
SB-11(3-4)-20200731	460-214780-8	P,P'-DDT	8/5/2020		Y	N	U		U	0.0071	0.0013	mg/kg
SB-11(3-4)-20200731	460-214780-8	ALDRIN	8/5/2020		Y	N	U		U	0.0071	0.0011	mg/kg
SB-11(3-4)-20200731	460-214780-8	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0021	0.00072	mg/kg
SB-11(3-4)-20200731	460-214780-8	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0071	0.0011	mg/kg
SB-11(3-4)-20200731	460-214780-8	DIELDRIN	8/5/2020		Y	N	U		U	0.0021	0.00093	mg/kg
SB-11(3-4)-20200731	460-214780-8	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0071	0.0011	mg/kg
SB-11(3-4)-20200731	460-214780-8	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0071	0.0011	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	CHLORDANE	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-11(8-9)-20200731	460-214780-9	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-11(8-9)-20200731	460-214780-9	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00068	mg/kg
SB-11(8-9)-20200731	460-214780-9	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-11(8-9)-20200731	460-214780-9	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-11(8-9)-20200731	460-214780-9	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-11(8-9)-20200731	460-214780-9	P,P'-DDD	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-11(8-9)-20200731	460-214780-9	P,P'-DDE	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-11(8-9)-20200731	460-214780-9	ENDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-11(8-9)-20200731	460-214780-9	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0074	0.00093	mg/kg
SB-11(8-9)-20200731	460-214780-9	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-11(8-9)-20200731	460-214780-9	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00096	mg/kg
SB-11(8-9)-20200731	460-214780-9	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-11(8-9)-20200731	460-214780-9	trans-Chlordane	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-11(8-9)-20200731	460-214780-9	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-11(8-9)-20200731	460-214780-9	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-11(8-9)-20200731	460-214780-9	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-11(8-9)-20200731	460-214780-9	ALDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-11(8-9)-20200731	460-214780-9	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00083	mg/kg
SB-11(8-9)-20200731	460-214780-9	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-11(8-9)-20200731	460-214780-9	P,P'-DDT	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-11(8-9)-20200731	460-214780-9	TOXAPHENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-11(8-9)-20200731	460-214780-9	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-11(8-9)-20200731	460-214780-9	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00045	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00083	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ALDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TOXAPHENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	P,P'-DDT	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	P,P'-DDE	8/5/2020		Y	N	U		U	0.0074	0.00088	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	trans-Chlordane	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0074	0.00088	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00069	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0074	0.0018	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	P,P'-DDD	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ENDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CHLORDANE	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00096	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0074	0.00093	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	P,P'-DDE	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00069	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	P,P'-DDT	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TOXAPHENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	P,P'-DDD	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ENDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0074	0.00093	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00096	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CHLORDANE	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00083	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ALDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	trans-Chlordane	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00098	mg/kg
SB-15(7-8)-20200731	460-214780-12	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0019	mg/kg
SB-15(7-8)-20200731	460-214780-12	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00084	mg/kg
SB-15(7-8)-20200731	460-214780-12	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-15(7-8)-20200731	460-214780-12	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0075	0.0012	mg/kg
SB-15(7-8)-20200731	460-214780-12	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00076	mg/kg
SB-15(7-8)-20200731	460-214780-12	ALDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-15(7-8)-20200731	460-214780-12	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0075	0.00094	mg/kg
SB-15(7-8)-20200731	460-214780-12	CHLORDANE	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-15(7-8)-20200731	460-214780-12	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00046	mg/kg
SB-15(7-8)-20200731	460-214780-12	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-15(7-8)-20200731	460-214780-12	trans-Chlordane	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-15(7-8)-20200731	460-214780-12	P,P'-DDT	8/5/2020		Y	N	U		U	0.0075	0.0014	mg/kg
SB-15(7-8)-20200731	460-214780-12	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00070	mg/kg
SB-15(7-8)-20200731	460-214780-12	P,P'-DDE	8/5/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-15(7-8)-20200731	460-214780-12	P,P'-DDD	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-15(7-8)-20200731	460-214780-12	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0075	0.0015	mg/kg
SB-15(7-8)-20200731	460-214780-12	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0075	0.0018	mg/kg
SB-15(7-8)-20200731	460-214780-12	ENDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-15(7-8)-20200731	460-214780-12	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0075	0.0017	mg/kg
SB-15(7-8)-20200731	460-214780-12	TOXAPHENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-15(7-8)-20200731	460-214780-12	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-15(7-8)-20200731	460-214780-12	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-15(7-8)-20200731	460-214780-12	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0076	0.00096	mg/kg
SB-16(2-3)-20200731	460-214780-13	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-16(2-3)-20200731	460-214780-13	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-16(2-3)-20200731	460-214780-13	ENDRIN	8/5/2020		Y	N	U		U	0.0076	0.0011	mg/kg
SB-16(2-3)-20200731	460-214780-13	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0076	0.0018	mg/kg
SB-16(2-3)-20200731	460-214780-13	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00071	mg/kg
SB-16(2-3)-20200731	460-214780-13	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00077	mg/kg
SB-16(2-3)-20200731	460-214780-13	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.00099	mg/kg
SB-16(2-3)-20200731	460-214780-13	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.076	0.018	mg/kg
SB-16(2-3)-20200731	460-214780-13	CHLORDANE	8/5/2020		Y	N	U		U	0.076	0.018	mg/kg
SB-16(2-3)-20200731	460-214780-13	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0076	0.0020	mg/kg
SB-16(2-3)-20200731	460-214780-13	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00085	mg/kg
SB-16(2-3)-20200731	460-214780-13	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-16(2-3)-20200731	460-214780-13	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0076	0.00090	mg/kg
SB-16(2-3)-20200731	460-214780-13	ALDRIN	8/5/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-16(2-3)-20200731	460-214780-13	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-16(2-3)-20200731	460-214780-13	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0076	0.0017	mg/kg
SB-16(2-3)-20200731	460-214780-13	P,P'-DDD	8/5/2020		Y	N	U		U	0.0076	0.0013	mg/kg
SB-16(2-3)-20200731	460-214780-13	P,P'-DDE	8/5/2020		Y	N	U		U	0.0076	0.00090	mg/kg
SB-16(2-3)-20200731	460-214780-13	P,P'-DDT	8/5/2020		Y	N	U		U	0.0076	0.0014	mg/kg
SB-16(2-3)-20200731	460-214780-13	TOXAPHENE	8/5/2020		Y	N	U		U	0.076	0.028	mg/kg
SB-16(2-3)-20200731	460-214780-13	trans-Chlordane	8/5/2020		Y	N	U		U	0.0076	0.0013	mg/kg
SB-16(2-3)-20200731	460-214780-13	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0076	0.0015	mg/kg
SB-16(2-3)-20200731	460-214780-13	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0076	0.0011	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	ENDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CHLORDANE	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00046	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ALDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	P,P'-DDE	8/5/2020		Y	N	U		U	0.0074	0.00088	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0074	0.00093	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00076	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TOXAPHENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00097	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	P,P'-DDT	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	trans-Chlordane	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	P,P'-DDD	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0074	0.00088	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00069	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0074	0.0018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00083	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00072	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	trans-Chlordane	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	P,P'-DDE	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	P,P'-DDT	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TOXAPHENE	8/5/2020		Y	N	U		U	0.077	0.028	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0077	0.0015	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	P,P'-DDD	8/5/2020		Y	N	U		U	0.0077	0.0013	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00079	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ALDRIN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00087	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0020	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CHLORDANE	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0077	0.00097	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ENDRIN	8/5/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-20(6-7)-20200731	460-214780-16	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00069	mg/kg
SB-20(6-7)-20200731	460-214780-16	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0075	0.00094	mg/kg
SB-20(6-7)-20200731	460-214780-16	ENDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-20(6-7)-20200731	460-214780-16	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0075	0.0018	mg/kg
SB-20(6-7)-20200731	460-214780-16	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0075	0.0015	mg/kg
SB-20(6-7)-20200731	460-214780-16	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0075	0.00088	mg/kg
SB-20(6-7)-20200731	460-214780-16	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-20(6-7)-20200731	460-214780-16	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0075	0.0017	mg/kg
SB-20(6-7)-20200731	460-214780-16	P,P'-DDD	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-20(6-7)-20200731	460-214780-16	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00097	mg/kg
SB-20(6-7)-20200731	460-214780-16	P,P'-DDT	8/5/2020		Y	N	U		U	0.0075	0.0014	mg/kg
SB-20(6-7)-20200731	460-214780-16	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0075	0.0012	mg/kg
SB-20(6-7)-20200731	460-214780-16	TOXAPHENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-20(6-7)-20200731	460-214780-16	trans-Chlordane	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-20(6-7)-20200731	460-214780-16	P,P'-DDE	8/5/2020		Y	N	U		U	0.0075	0.00088	mg/kg
SB-20(6-7)-20200731	460-214780-16	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-20(6-7)-20200731	460-214780-16	CHLORDANE	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-20(6-7)-20200731	460-214780-16	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0019	mg/kg
SB-20(6-7)-20200731	460-214780-16	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-20(6-7)-20200731	460-214780-16	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00076	mg/kg
SB-20(6-7)-20200731	460-214780-16	ALDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-20(6-7)-20200731	460-214780-16	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00046	mg/kg
SB-20(6-7)-20200731	460-214780-16	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00084	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00069	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0075	0.0017	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	trans-Chlordane	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TOXAPHENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	P,P'-DDT	8/5/2020		Y	N	U		U	0.0075	0.0014	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	P,P'-DDE	8/5/2020		Y	N	U		U	0.0075	0.00088	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	P,P'-DDD	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0075	0.00094	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ENDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0075	0.0014	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0075	0.00088	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00084	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ALDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00076	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0075	0.0018	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0019	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CHLORDANE	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00046	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00097	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0075	0.0012	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00082	mg/kg
SB-3(5-6)-20200731	460-214780-2	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0074	0.00092	mg/kg
SB-3(5-6)-20200731	460-214780-2	ALDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-3(5-6)-20200731	460-214780-2	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-3(5-6)-20200731	460-214780-2	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-3(5-6)-20200731	460-214780-2	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-3(5-6)-20200731	460-214780-2	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-3(5-6)-20200731	460-214780-2	trans-Chlordane	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-3(5-6)-20200731	460-214780-2	TOXAPHENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-3(5-6)-20200731	460-214780-2	P,P'-DDT	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-3(5-6)-20200731	460-214780-2	P,P'-DDE	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-3(5-6)-20200731	460-214780-2	P,P'-DDD	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-3(5-6)-20200731	460-214780-2	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-3(5-6)-20200731	460-214780-2	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00096	mg/kg
SB-3(5-6)-20200731	460-214780-2	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00068	mg/kg
SB-3(5-6)-20200731	460-214780-2	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-3(5-6)-20200731	460-214780-2	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-3(5-6)-20200731	460-214780-2	ENDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-3(5-6)-20200731	460-214780-2	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-3(5-6)-20200731	460-214780-2	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-3(5-6)-20200731	460-214780-2	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-3(5-6)-20200731	460-214780-2	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-3(5-6)-20200731	460-214780-2	CHLORDANE	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-3(5-6)-20200731	460-214780-2	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0076	0.0018	mg/kg
SB-4(2-3)-20200731	460-214780-3	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00077	mg/kg
SB-4(2-3)-20200731	460-214780-3	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-4(2-3)-20200731	460-214780-3	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-4(2-3)-20200731	460-214780-3	trans-Chlordane	8/5/2020		Y	N	U		U	0.0076	0.0013	mg/kg
SB-4(2-3)-20200731	460-214780-3	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0076	0.0020	mg/kg
SB-4(2-3)-20200731	460-214780-3	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.076	0.018	mg/kg
SB-4(2-3)-20200731	460-214780-3	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-4(2-3)-20200731	460-214780-3	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.00099	mg/kg
SB-4(2-3)-20200731	460-214780-3	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-4(2-3)-20200731	460-214780-3	ALDRIN	8/5/2020		Y	N	U		U	0.0076	0.0011	mg/kg
SB-4(2-3)-20200731	460-214780-3	ENDRIN	8/5/2020		Y	N	U		U	0.0076	0.0011	mg/kg
SB-4(2-3)-20200731	460-214780-3	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00085	mg/kg
SB-4(2-3)-20200731	460-214780-3	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0076	0.0015	mg/kg
SB-4(2-3)-20200731	460-214780-3	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00070	mg/kg
SB-4(2-3)-20200731	460-214780-3	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0076	0.00090	mg/kg
SB-4(2-3)-20200731	460-214780-3	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0076	0.0011	mg/kg
SB-4(2-3)-20200731	460-214780-3	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0076	0.0017	mg/kg
SB-4(2-3)-20200731	460-214780-3	TOXAPHENE	8/5/2020		Y	N	U		U	0.076	0.028	mg/kg
SB-4(2-3)-20200731	460-214780-3	P,P'-DDT	8/5/2020		Y	N	U		U	0.0076	0.0014	mg/kg
SB-4(2-3)-20200731	460-214780-3	P,P'-DDE	8/5/2020		Y	N	U		U	0.0076	0.00090	mg/kg
SB-4(2-3)-20200731	460-214780-3	P,P'-DDD	8/5/2020		Y	N	U		U	0.0076	0.0013	mg/kg
SB-4(2-3)-20200731	460-214780-3	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0076	0.00095	mg/kg
SB-4(2-3)-20200731	460-214780-3	CHLORDANE	8/5/2020		Y	N	U		U	0.076	0.018	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(6-7)-20200731	460-214780-4	ENDRIN	8/5/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-4(6-7)-20200731	460-214780-4	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0020	mg/kg
SB-4(6-7)-20200731	460-214780-4	CHLORDANE	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-4(6-7)-20200731	460-214780-4	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-4(6-7)-20200731	460-214780-4	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-4(6-7)-20200731	460-214780-4	TOXAPHENE	8/5/2020		Y	N	U		U	0.077	0.028	mg/kg
SB-4(6-7)-20200731	460-214780-4	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00086	mg/kg
SB-4(6-7)-20200731	460-214780-4	trans-Chlordane	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-4(6-7)-20200731	460-214780-4	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-4(6-7)-20200731	460-214780-4	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-4(6-7)-20200731	460-214780-4	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00078	mg/kg
SB-4(6-7)-20200731	460-214780-4	ALDRIN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-4(6-7)-20200731	460-214780-4	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-4(6-7)-20200731	460-214780-4	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0077	0.00097	mg/kg
SB-4(6-7)-20200731	460-214780-4	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-4(6-7)-20200731	460-214780-4	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0077	0.0015	mg/kg
SB-4(6-7)-20200731	460-214780-4	P,P'-DDT	8/5/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-4(6-7)-20200731	460-214780-4	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-4(6-7)-20200731	460-214780-4	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00071	mg/kg
SB-4(6-7)-20200731	460-214780-4	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-4(6-7)-20200731	460-214780-4	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-4(6-7)-20200731	460-214780-4	P,P'-DDE	8/5/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-4(6-7)-20200731	460-214780-4	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-4(6-7)-20200731	460-214780-4	P,P'-DDD	8/5/2020		Y	N	U		U	0.0077	0.0013	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	P,P'-DDE	8/5/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0073	0.0017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ALDRIN	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	trans-Chlordane	8/5/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	P,P'-DDT	8/5/2020		Y	N	U		U	0.0073	0.0013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	P,P'-DDD	8/5/2020		Y	N	U		U	0.0073	0.0012	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00074	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00094	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TOXAPHENE	8/5/2020		Y	N	U		U	0.073	0.026	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CHLORDANE	8/5/2020		Y	N	U		U	0.073	0.018	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00044	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00081	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0073	0.00091	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ENDRIN	8/5/2020		Y	N	U		U	0.0073	0.0010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0073	0.0011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0073	0.0017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0073	0.0014	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00067	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0073	0.00086	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0073	0.0019	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-8(3-4)-20200731	460-214780-6	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-8(3-4)-20200731	460-214780-6	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-8(3-4)-20200731	460-214780-6	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-8(3-4)-20200731	460-214780-6	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00082	mg/kg
SB-8(3-4)-20200731	460-214780-6	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-8(3-4)-20200731	460-214780-6	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-8(3-4)-20200731	460-214780-6	ALDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-8(3-4)-20200731	460-214780-6	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-8(3-4)-20200731	460-214780-6	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-8(3-4)-20200731	460-214780-6	P,P'-DDE	8/5/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-8(3-4)-20200731	460-214780-6	CHLORDANE	8/5/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-8(3-4)-20200731	460-214780-6	ENDRIN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-8(3-4)-20200731	460-214780-6	P,P'-DDT	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-8(3-4)-20200731	460-214780-6	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-8(3-4)-20200731	460-214780-6	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0022	0.00068	mg/kg
SB-8(3-4)-20200731	460-214780-6	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-8(3-4)-20200731	460-214780-6	TOXAPHENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-8(3-4)-20200731	460-214780-6	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-8(3-4)-20200731	460-214780-6	trans-Chlordane	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-8(3-4)-20200731	460-214780-6	P,P'-DDD	8/5/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-8(3-4)-20200731	460-214780-6	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0074	0.00092	mg/kg
SB-8(3-4)-20200731	460-214780-6	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-8(3-4)-20200731	460-214780-6	DIELDRIN	8/5/2020		Y	N	U		U	0.0022	0.00096	mg/kg

SDG: 4602147801

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(6-7)-20200731	460-214780-7	ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-8(6-7)-20200731	460-214780-7	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00084	mg/kg
SB-8(6-7)-20200731	460-214780-7	BETA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0019	mg/kg
SB-8(6-7)-20200731	460-214780-7	CHLORDANE	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-8(6-7)-20200731	460-214780-7	Chlordane (Technical)	8/5/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-8(6-7)-20200731	460-214780-7	DIELDRIN	8/5/2020		Y	N	U		U	0.0023	0.00098	mg/kg
SB-8(6-7)-20200731	460-214780-7	ENDOSULFAN SULFATE	8/5/2020		Y	N	U		U	0.0075	0.00095	mg/kg
SB-8(6-7)-20200731	460-214780-7	ENDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-8(6-7)-20200731	460-214780-7	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00046	mg/kg
SB-8(6-7)-20200731	460-214780-7	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/5/2020		Y	N	U		U	0.0023	0.00077	mg/kg
SB-8(6-7)-20200731	460-214780-7	trans-Chlordane	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-8(6-7)-20200731	460-214780-7	TOXAPHENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-8(6-7)-20200731	460-214780-7	P,P'-DDT	8/5/2020		Y	N	U		U	0.0075	0.0014	mg/kg
SB-8(6-7)-20200731	460-214780-7	P,P'-DDE	8/5/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-8(6-7)-20200731	460-214780-7	GAMMA BHC (LINDANE)	8/5/2020		Y	N	U		U	0.0023	0.00070	mg/kg
SB-8(6-7)-20200731	460-214780-7	P,P'-DDD	8/5/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-8(6-7)-20200731	460-214780-7	METHOXYCHLOR	8/5/2020		Y	N	U		U	0.0075	0.0017	mg/kg
SB-8(6-7)-20200731	460-214780-7	HEPTACHLOR EPOXIDE	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-8(6-7)-20200731	460-214780-7	ALDRIN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-8(6-7)-20200731	460-214780-7	HEPTACHLOR	8/5/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-8(6-7)-20200731	460-214780-7	ALPHA CHLORDANE	8/5/2020		Y	N	U		U	0.0075	0.0012	mg/kg
SB-8(6-7)-20200731	460-214780-7	ALPHA ENDOSULFAN	8/5/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-8(6-7)-20200731	460-214780-7	ENDRIN ALDEHYDE	8/5/2020		Y	N	U		U	0.0075	0.0018	mg/kg
SB-8(6-7)-20200731	460-214780-7	ENDRIN KETONE	8/5/2020		Y	N	U		U	0.0075	0.0015	mg/kg

SDG: 4602147801

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
DUP-2-20200731	460-214780-17	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
DUP-2-20200731	460-214780-17	TOTAL PCBS	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
DUP-2-20200731	460-214780-17	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
DUP-2-20200731	460-214780-17	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
DUP-2-20200731	460-214780-17	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
DUP-2-20200731	460-214780-17	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
DUP-2-20200731	460-214780-17	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
DUP-2-20200731	460-214780-17	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
DUP-2-20200731	460-214780-17	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.071	0.0095	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.071	0.0098	mg/kg
SB-11(3-4)-20200731	460-214780-8	TOTAL PCBS	8/5/2020		Y	N	U		U	0.071	0.0098	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.071	0.0095	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.071	0.0095	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.071	0.0095	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.071	0.0098	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.071	0.0095	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.071	0.0098	mg/kg
SB-11(3-4)-20200731	460-214780-8	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.071	0.0098	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg

SDG: 4602147801

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-11(8-9)-20200731	460-214780-9	TOTAL PCBS	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-11(8-9)-20200731	460-214780-9	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TOTAL PCBS	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TOTAL PCBS	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg

SDG: 4602147801

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	TOTAL PCBS	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	TOTAL PCBS	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TOTAL PCBS	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg

SDG: 4602147801

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TOTAL PCBS	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	TOTAL PCBS	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg

SDG: 4602147801

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TOTAL PCBS	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.075	0.0099	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-3(5-6)-20200731	460-214780-2	TOTAL PCBS	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-3(5-6)-20200731	460-214780-2	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg

SDG: 4602147801

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	TOTAL PCBS	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	TOTAL PCBS	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-4(6-7)-20200731	460-214780-4	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.073	0.0096	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.073	0.0096	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.073	0.0096	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.073	0.0096	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.073	0.0096	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TOTAL PCBS	8/5/2020		Y	N	U		U	0.073	0.010	mg/kg

Analytical Method	SW8082A											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-8(3-4)-20200731	460-214780-6	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-8(3-4)-20200731	460-214780-6	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-8(3-4)-20200731	460-214780-6	TOTAL PCBS	8/5/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1016 (AROCLOR 1016)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	TOTAL PCBS	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1268 (AROCLOR 1268)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1262 (AROCLOR 1262)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1260 (AROCLOR 1260)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1254 (AROCLOR 1254)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1248 (AROCLOR 1248)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1242 (AROCLOR 1242)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1221 (AROCLOR 1221)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	PCB-1232 (AROCLOR 1232)	8/5/2020		Y	N	U		U	0.075	0.010	mg/kg

Analytical Method	SW8260C											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
DUP-2-20200731	460-214780-17	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00017	mg/kg
DUP-2-20200731	460-214780-17	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00026	mg/kg

SDG: 4602147801

Analytical Method	SW8260C											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00088	0.00013	mg/kg
DUP-2-20200731	460-214780-17	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00088	0.00024	mg/kg
DUP-2-20200731	460-214780-17	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00088	0.00019	mg/kg
DUP-2-20200731	460-214780-17	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00030	mg/kg
DUP-2-20200731	460-214780-17	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00088	0.00044	mg/kg
DUP-2-20200731	460-214780-17	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00017	mg/kg
DUP-2-20200731	460-214780-17	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00019	mg/kg
DUP-2-20200731	460-214780-17	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-2-20200731	460-214780-17	1,1-DICHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00088	0.00018	mg/kg
DUP-2-20200731	460-214780-17	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00088	0.00020	mg/kg
DUP-2-20200731	460-214780-17	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-2-20200731	460-214780-17	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00031	mg/kg
DUP-2-20200731	460-214780-17	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00020	mg/kg
DUP-2-20200731	460-214780-17	CHLOROFORM	8/6/2020		Y	N	U		U	0.00088	0.00028	mg/kg
DUP-2-20200731	460-214780-17	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00088	0.00040	mg/kg
DUP-2-20200731	460-214780-17	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00025	mg/kg
DUP-2-20200731	460-214780-17	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-2-20200731	460-214780-17	BROMOFORM	8/6/2020		Y	N	U		U	0.00088	0.00037	mg/kg
DUP-2-20200731	460-214780-17	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00042	mg/kg
DUP-2-20200731	460-214780-17	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-2-20200731	460-214780-17	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00088	0.00034	mg/kg
DUP-2-20200731	460-214780-17	ACETONE	8/6/2020		Y	N	U		U	0.0053	0.0050	mg/kg
DUP-2-20200731	460-214780-17	CHLOROETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00088	0.00046	mg/kg
DUP-2-20200731	460-214780-17	BENZENE	8/6/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-2-20200731	460-214780-17	CHLOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00088	0.00038	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	TOLUENE	8/6/2020		Y	N	U		U	0.00088	0.00021	mg/kg
DUP-2-20200731	460-214780-17	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00088	0.00013	mg/kg
DUP-2-20200731	460-214780-17	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00088	0.00011	mg/kg
DUP-2-20200731	460-214780-17	STYRENE	8/6/2020		Y	N	U		U	0.00088	0.00024	mg/kg
DUP-2-20200731	460-214780-17	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00088	0.00017	mg/kg
DUP-2-20200731	460-214780-17	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00088	0.00041	mg/kg
DUP-2-20200731	460-214780-17	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-2-20200731	460-214780-17	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00088	0.00013	mg/kg
DUP-2-20200731	460-214780-17	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-2-20200731	460-214780-17	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00088	0.00011	mg/kg
DUP-2-20200731	460-214780-17	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00088	0.00015	mg/kg
DUP-2-20200731	460-214780-17	METHYL ACETATE	8/6/2020		Y	N	U	UJ	UJ	0.0044	0.0038	mg/kg
DUP-2-20200731	460-214780-17	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0044	0.0024	mg/kg
DUP-2-20200731	460-214780-17	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0044	0.0014	mg/kg
DUP-2-20200731	460-214780-17	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-2-20200731	460-214780-17	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00036	mg/kg
DUP-2-20200731	460-214780-17	2-HEXANONE	8/6/2020		Y	N	U		U	0.0044	0.0015	mg/kg
DUP-2-20200731	460-214780-17	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00088	0.00022	mg/kg
DUP-2-20200731	460-214780-17	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00013	mg/kg
DUP-2-20200731	460-214780-17	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00026	mg/kg
DUP-2-20200731	460-214780-17	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00088	0.00037	mg/kg
DUP-2-20200731	460-214780-17	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00014	mg/kg
DUP-2-20200731	460-214780-17	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00020	mg/kg
DUP-2-20200731	460-214780-17	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U		U	0.018	0.0081	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00088	0.00048	mg/kg
FB-20200731	460-214780-18	1,1,2-TRICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200731	460-214780-18	O-XYLENE (1,2-DIMETHYLBENZENE)	8/7/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200731	460-214780-18	ACETONE	8/7/2020	6.1	Y	Y				5.0	4.4	ug/l
FB-20200731	460-214780-18	1,1,1-TRICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200731	460-214780-18	1,1,2,2-TETRACHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200731	460-214780-18	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/7/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200731	460-214780-18	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	50	28	ug/l
FB-20200731	460-214780-18	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/7/2020		Y	N	U		U	1.0	0.50	ug/l
FB-20200731	460-214780-18	BROMOFORM	8/7/2020		Y	N	U		U	1.0	0.54	ug/l
FB-20200731	460-214780-18	BROMODICHLOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200731	460-214780-18	STYRENE	8/7/2020		Y	N	U		U	1.0	0.42	ug/l
FB-20200731	460-214780-18	BROMOCHLOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.41	ug/l
FB-20200731	460-214780-18	BENZENE	8/7/2020		Y	N	U		U	1.0	0.20	ug/l
FB-20200731	460-214780-18	1,2-DICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200731	460-214780-18	1,2-DICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200731	460-214780-18	1,2-DICHLOROPROPANE	8/7/2020		Y	N	U		U	1.0	0.35	ug/l
FB-20200731	460-214780-18	1,2-DIBROMO-3-CHLOROPROPANE	8/7/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200731	460-214780-18	2-HEXANONE	8/7/2020		Y	N	U		U	5.0	1.1	ug/l
FB-20200731	460-214780-18	BROMOMETHANE	8/7/2020		Y	N	U		U	1.0	0.55	ug/l
FB-20200731	460-214780-18	1,4-DICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.33	ug/l
FB-20200731	460-214780-18	TERT-BUTYL METHYL ETHER	8/7/2020		Y	N	U		U	1.0	0.47	ug/l
FB-20200731	460-214780-18	TETRACHLOROETHYLENE(PCE)	8/7/2020		Y	N	U		U	1.0	0.25	ug/l
FB-20200731	460-214780-18	TOLUENE	8/7/2020		Y	N	U		U	1.0	0.38	ug/l

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200731	460-214780-18	TRANS-1,2-DICHLOROETHENE	8/7/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200731	460-214780-18	TRANS-1,3-DICHLOROPROPENE	8/7/2020		Y	N	U		U	1.0	0.49	ug/l
FB-20200731	460-214780-18	TRICHLOROETHYLENE (TCE)	8/7/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200731	460-214780-18	TRICHLOROFLUOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200731	460-214780-18	VINYL CHLORIDE	8/7/2020		Y	N	U		U	1.0	0.17	ug/l
FB-20200731	460-214780-18	1,2,3-TRICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200731	460-214780-18	1,3-DICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200731	460-214780-18	1,1-DICHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200731	460-214780-18	METHYLENE CHLORIDE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200731	460-214780-18	METHYLCYCLOHEXANE	8/7/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200731	460-214780-18	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/7/2020		Y	N	U		U	5.0	1.3	ug/l
FB-20200731	460-214780-18	METHYL ETHYL KETONE (2-BUTANONE)	8/7/2020		Y	N	U		U	5.0	1.9	ug/l
FB-20200731	460-214780-18	METHYL ACETATE	8/7/2020		Y	N	U		U	5.0	0.79	ug/l
FB-20200731	460-214780-18	M,P-XYLENES	8/7/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200731	460-214780-18	Isopropylbenzene (Cumene)	8/7/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200731	460-214780-18	ETHYLBENZENE	8/7/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200731	460-214780-18	DICHLORODIFLUOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200731	460-214780-18	CYCLOHEXANE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200731	460-214780-18	CARBON DISULFIDE	8/7/2020		Y	N	U		U	1.0	0.82	ug/l
FB-20200731	460-214780-18	CIS-1,3-DICHLOROPROPENE	8/7/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200731	460-214780-18	CHLOROMETHANE	8/7/2020		Y	N	U	UJ	UJ	1.0	0.40	ug/l
FB-20200731	460-214780-18	CHLOROFORM	8/7/2020		Y	N	U		U	1.0	0.33	ug/l
FB-20200731	460-214780-18	CHLOROETHANE	8/7/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200731	460-214780-18	CHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.38	ug/l

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200731	460-214780-18	CARBON TETRACHLORIDE	8/7/2020		Y	N	U		U	1.0	0.21	ug/l
FB-20200731	460-214780-18	Cis-1,2-Dichloroethylene	8/7/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200731	460-214780-18	DIBROMOCHLOROMETHANE	8/7/2020		Y	N	U		U	1.0	0.28	ug/l
FB-20200731	460-214780-18	1,2,4-TRICHLOROBENZENE	8/7/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200731	460-214780-18	1,1-DICHLOROETHENE	8/7/2020		Y	N	U		U	1.0	0.26	ug/l
SB-11(3-4)-20200731	460-214780-8	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00027	mg/kg
SB-11(3-4)-20200731	460-214780-8	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00037	mg/kg
SB-11(3-4)-20200731	460-214780-8	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00050	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(3-4)-20200731	460-214780-8	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00027	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00019	mg/kg
SB-11(3-4)-20200731	460-214780-8	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00043	mg/kg
SB-11(3-4)-20200731	460-214780-8	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-11(3-4)-20200731	460-214780-8	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0045	0.0039	mg/kg
SB-11(3-4)-20200731	460-214780-8	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(3-4)-20200731	460-214780-8	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00091	0.00011	mg/kg
SB-11(3-4)-20200731	460-214780-8	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-11(3-4)-20200731	460-214780-8	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00031	mg/kg
SB-11(3-4)-20200731	460-214780-8	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-11(3-4)-20200731	460-214780-8	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg
SB-11(3-4)-20200731	460-214780-8	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00040	mg/kg
SB-11(3-4)-20200731	460-214780-8	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00091	0.00024	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(3-4)-20200731	460-214780-8	CHLOROFORM	8/6/2020		Y	N	U		U	0.00091	0.00029	mg/kg
SB-11(3-4)-20200731	460-214780-8	BROMOFORM	8/6/2020		Y	N	U		U	0.00091	0.00039	mg/kg
SB-11(3-4)-20200731	460-214780-8	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00023	mg/kg
SB-11(3-4)-20200731	460-214780-8	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00026	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZENE	8/6/2020		Y	N	U		U	0.00091	0.00023	mg/kg
SB-11(3-4)-20200731	460-214780-8	ACETONE	8/6/2020		Y	N	U		U	0.0055	0.0052	mg/kg
SB-11(3-4)-20200731	460-214780-8	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0016	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00091	0.00038	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00014	mg/kg
SB-11(3-4)-20200731	460-214780-8	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00091	0.00014	mg/kg
SB-11(3-4)-20200731	460-214780-8	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00091	0.00025	mg/kg
SB-11(3-4)-20200731	460-214780-8	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00091	0.00045	mg/kg
SB-11(3-4)-20200731	460-214780-8	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00091	0.00022	mg/kg
SB-11(3-4)-20200731	460-214780-8	TOLUENE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-11(3-4)-20200731	460-214780-8	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00091	0.00011	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00019	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(3-4)-20200731	460-214780-8	STYRENE	8/6/2020		Y	N	U		U	0.00091	0.00025	mg/kg
SB-11(3-4)-20200731	460-214780-8	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00042	mg/kg
SB-11(3-4)-20200731	460-214780-8	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00091	0.00024	mg/kg
SB-11(3-4)-20200731	460-214780-8	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-11(3-4)-20200731	460-214780-8	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0025	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(3-4)-20200731	460-214780-8	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00033	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00091	0.00042	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-11(3-4)-20200731	460-214780-8	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00035	mg/kg
SB-11(3-4)-20200731	460-214780-8	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(3-4)-20200731	460-214780-8	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00047	mg/kg
SB-11(3-4)-20200731	460-214780-8	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0083	mg/kg
SB-11(8-9)-20200731	460-214780-9	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00027	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZENE	8/6/2020		Y	N	U		U	0.00091	0.00023	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00027	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00019	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00019	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00032	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00091	0.00042	mg/kg
SB-11(8-9)-20200731	460-214780-9	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-11(8-9)-20200731	460-214780-9	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00047	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00091	0.00038	mg/kg
SB-11(8-9)-20200731	460-214780-9	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00091	0.00024	mg/kg
SB-11(8-9)-20200731	460-214780-9	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00043	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00014	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg
SB-11(8-9)-20200731	460-214780-9	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0016	mg/kg
SB-11(8-9)-20200731	460-214780-9	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00042	mg/kg
SB-11(8-9)-20200731	460-214780-9	ACETONE	8/6/2020		Y	N	U		U	0.0054	0.0052	mg/kg
SB-11(8-9)-20200731	460-214780-9	BROMOFORM	8/6/2020		Y	N	U		U	0.00091	0.00039	mg/kg
SB-11(8-9)-20200731	460-214780-9	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00023	mg/kg
SB-11(8-9)-20200731	460-214780-9	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00025	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(8-9)-20200731	460-214780-9	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0025	mg/kg
SB-11(8-9)-20200731	460-214780-9	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00049	mg/kg
SB-11(8-9)-20200731	460-214780-9	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00037	mg/kg
SB-11(8-9)-20200731	460-214780-9	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-11(8-9)-20200731	460-214780-9	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00091	0.00024	mg/kg
SB-11(8-9)-20200731	460-214780-9	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00091	0.00022	mg/kg
SB-11(8-9)-20200731	460-214780-9	TOLUENE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-11(8-9)-20200731	460-214780-9	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-11(8-9)-20200731	460-214780-9	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00091	0.00011	mg/kg
SB-11(8-9)-20200731	460-214780-9	STYRENE	8/6/2020		Y	N	U		U	0.00091	0.00025	mg/kg
SB-11(8-9)-20200731	460-214780-9	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00035	mg/kg
SB-11(8-9)-20200731	460-214780-9	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00091	0.00045	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0045	0.0039	mg/kg
SB-11(8-9)-20200731	460-214780-9	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-11(8-9)-20200731	460-214780-9	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00091	0.00011	mg/kg
SB-11(8-9)-20200731	460-214780-9	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-11(8-9)-20200731	460-214780-9	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00031	mg/kg
SB-11(8-9)-20200731	460-214780-9	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-11(8-9)-20200731	460-214780-9	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg
SB-11(8-9)-20200731	460-214780-9	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00091	0.00025	mg/kg
SB-11(8-9)-20200731	460-214780-9	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00091	0.00014	mg/kg
SB-11(8-9)-20200731	460-214780-9	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00039	mg/kg
SB-11(8-9)-20200731	460-214780-9	CHLOROFORM	8/6/2020		Y	N	U		U	0.00091	0.00029	mg/kg
SB-11(8-9)-20200731	460-214780-9	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0083	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00035	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00039	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CHLOROFORM	8/6/2020		Y	N	U		U	0.00089	0.00029	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00047	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00019	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00042	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BROMOFORM	8/6/2020		Y	N	U		U	0.00089	0.00038	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00023	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZENE	8/6/2020		Y	N	U		U	0.00089	0.00023	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0015	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00089	0.00038	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00026	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00089	0.00041	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ACETONE	8/6/2020	0.0082	Y	Y		J	J	0.0054	0.0051	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00049	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00036	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00089	0.00024	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00089	0.00022	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TOLUENE	8/6/2020		Y	N	U		U	0.00089	0.00021	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	STYRENE	8/6/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00032	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00041	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00089	0.00014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00021	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CARBON DISULFIDE	8/6/2020	0.0023	Y	Y		J	J	0.00089	0.00024	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00027	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00089	0.00011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	UNKNOWN VOLATILE ORGANIC WITH 3RD HIGHEST CONC.	8/6/2020	0.027	Y	Y	J	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,6-DIMETHYL OCTANE	8/6/2020	0.075	Y	Y	JN	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,7,10-TRIMETHYL DODECANE	8/6/2020	0.090	Y	Y	JN	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	N-HEXADECANE	8/6/2020	0.055	Y	Y	JN	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	N-TETRADECANE	8/6/2020	0.034	Y	Y	JN	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00089	0.00024	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	UNKNOWN VOLATILE ORGANIC WITH 2ND HIGHEST CONC.	8/6/2020	0.029	Y	Y	J	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	UNKNOWN VOLATILE ORGANIC WITH 4TH HIGHEST CONC.	8/6/2020	0.025	Y	Y	J	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	UNKNOWN VOLATILE ORGANIC WITH 5TH HIGHEST CONC.	8/6/2020	0.024	Y	Y	J	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	UNKNOWN VOLATILE ORGANIC WITH 6TH HIGHEST CONC.	8/6/2020	0.023	Y	Y	J	J	J	0	0	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00089	0.00045	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00089	0.00011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00030	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	UNKNOWN VOLATILE ORGANIC WITH HIGHEST CONC.	8/6/2020	0.050	Y	Y	J	J	J	0	0	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0045	0.0038	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0024	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0082	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZENE	8/6/2020		Y	N	U		U	0.00092	0.00024	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00048	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00017	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00092	0.00024	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BROMOMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00092	0.00043	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00024	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00015	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U	UJ	UJ	0.018	0.0084	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00027	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ACETONE	8/6/2020		Y	N	U		U	0.0055	0.0052	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00092	0.00035	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00026	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00020	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00028	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BROMOFORM	8/6/2020		Y	N	U		U	0.00092	0.00039	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00019	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00033	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00092	0.00039	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00092	0.00042	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-HEXANONE	8/6/2020		Y	N	U		U	0.0046	0.0016	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.00092	0.00031	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	STYRENE	8/6/2020		Y	N	U		U	0.00092	0.00025	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00092	0.00042	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00092	0.00046	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0046	0.0025	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00018	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00092	0.00011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00018	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00092	0.00020	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00092	0.00025	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00092	0.00014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00040	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CHLOROFORM	8/6/2020		Y	N	U		U	0.00092	0.00029	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00092	0.00012	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.00092	0.00024	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00092	0.00050	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00092	0.00018	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00092	0.00013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00092	0.00013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00092	0.00023	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TOLUENE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	UT	UJ	UJ	0.00092	0.00037	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT	UJ	UJ	0.0046	0.0014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0046	0.0039	mg/kg
SB-15(7-8)-20200731	460-214780-12	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.0011	0.00028	mg/kg
SB-15(7-8)-20200731	460-214780-12	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.0011	0.00031	mg/kg
SB-15(7-8)-20200731	460-214780-12	BENZENE	8/6/2020		Y	N	U		U	0.0011	0.00028	mg/kg
SB-15(7-8)-20200731	460-214780-12	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.0011	0.00029	mg/kg
SB-15(7-8)-20200731	460-214780-12	BROMOMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.0011	0.00052	mg/kg
SB-15(7-8)-20200731	460-214780-12	ACETONE	8/6/2020		Y	N	U		U	0.0066	0.0062	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.0011	0.00023	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	U	UJ	UJ	0.022	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	2-HEXANONE	8/6/2020		Y	N	U		U	0.0055	0.0019	mg/kg
SB-15(7-8)-20200731	460-214780-12	BROMOFORM	8/6/2020		Y	N	U		U	0.0011	0.00046	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0011	0.00025	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0011	0.00017	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.0011	0.00046	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.0011	0.00032	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0011	0.00016	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.0011	0.00020	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.0011	0.00050	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0011	0.00039	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0011	0.00020	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.0011	0.00025	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.0011	0.00022	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.0011	0.00033	mg/kg
SB-15(7-8)-20200731	460-214780-12	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.0011	0.00042	mg/kg
SB-15(7-8)-20200731	460-214780-12	M,P-XYLENES	8/6/2020		Y	N	U		U	0.0011	0.00019	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.0011	0.00019	mg/kg
SB-15(7-8)-20200731	460-214780-12	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.0011	0.00014	mg/kg
SB-15(7-8)-20200731	460-214780-12	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.0011	0.00022	mg/kg
SB-15(7-8)-20200731	460-214780-12	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.0011	0.00060	mg/kg
SB-15(7-8)-20200731	460-214780-12	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.0011	0.00016	mg/kg
SB-15(7-8)-20200731	460-214780-12	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.0011	0.00029	mg/kg
SB-15(7-8)-20200731	460-214780-12	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.0011	0.00027	mg/kg
SB-15(7-8)-20200731	460-214780-12	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.0011	0.00019	mg/kg
SB-15(7-8)-20200731	460-214780-12	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.0011	0.00016	mg/kg
SB-15(7-8)-20200731	460-214780-12	STYRENE	8/6/2020		Y	N	U		U	0.0011	0.00030	mg/kg
SB-15(7-8)-20200731	460-214780-12	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.0011	0.00021	mg/kg
SB-15(7-8)-20200731	460-214780-12	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.0011	0.00051	mg/kg
SB-15(7-8)-20200731	460-214780-12	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.0011	0.00054	mg/kg
SB-15(7-8)-20200731	460-214780-12	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U		U	0.0011	0.00030	mg/kg
SB-15(7-8)-20200731	460-214780-12	TOLUENE	8/6/2020		Y	N	U		U	0.0011	0.00026	mg/kg
SB-15(7-8)-20200731	460-214780-12	CHLOROETHANE	8/6/2020		Y	N	U		U	0.0011	0.00057	mg/kg
SB-15(7-8)-20200731	460-214780-12	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0055	0.0030	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.0011	0.00017	mg/kg
SB-15(7-8)-20200731	460-214780-12	CHLOROFORM	8/6/2020		Y	N	U		U	0.0011	0.00035	mg/kg
SB-15(7-8)-20200731	460-214780-12	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.0011	0.00024	mg/kg
SB-15(7-8)-20200731	460-214780-12	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.0011	0.00021	mg/kg
SB-15(7-8)-20200731	460-214780-12	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U	UJ	UJ	0.0011	0.00037	mg/kg
SB-15(7-8)-20200731	460-214780-12	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.0011	0.00014	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.0011	0.00025	mg/kg
SB-15(7-8)-20200731	460-214780-12	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.0011	0.00047	mg/kg
SB-15(7-8)-20200731	460-214780-12	METHYL ACETATE	8/6/2020		Y	N	UT		U	0.0055	0.0047	mg/kg
SB-15(7-8)-20200731	460-214780-12	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	UT	UJ	UJ	0.0055	0.0017	mg/kg
SB-15(7-8)-20200731	460-214780-12	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	UT	UJ	UJ	0.0011	0.00044	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00092	0.00042	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00033	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00017	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00019	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00028	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00020	mg/kg
SB-16(2-3)-20200731	460-214780-13	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00092	0.00035	mg/kg
SB-16(2-3)-20200731	460-214780-13	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00043	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00013	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00027	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00092	0.00039	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00015	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-16(2-3)-20200731	460-214780-13	2-HEXANONE	8/6/2020		Y	N	U		U	0.0046	0.0016	mg/kg
SB-16(2-3)-20200731	460-214780-13	ACETONE	8/6/2020		Y	N	U		U	0.0055	0.0052	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZENE	8/6/2020		Y	N	U		U	0.00092	0.00024	mg/kg
SB-16(2-3)-20200731	460-214780-13	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00026	mg/kg
SB-16(2-3)-20200731	460-214780-13	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg
SB-16(2-3)-20200731	460-214780-13	BROMOFORM	8/6/2020		Y	N	U		U	0.00092	0.00039	mg/kg
SB-16(2-3)-20200731	460-214780-13	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0046	0.0014	mg/kg
SB-16(2-3)-20200731	460-214780-13	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00024	mg/kg
SB-16(2-3)-20200731	460-214780-13	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00092	0.00046	mg/kg
SB-16(2-3)-20200731	460-214780-13	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00092	0.00050	mg/kg
SB-16(2-3)-20200731	460-214780-13	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00037	mg/kg
SB-16(2-3)-20200731	460-214780-13	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00092	0.00013	mg/kg
SB-16(2-3)-20200731	460-214780-13	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00092	0.00024	mg/kg
SB-16(2-3)-20200731	460-214780-13	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00092	0.00023	mg/kg
SB-16(2-3)-20200731	460-214780-13	TOLUENE	8/6/2020		Y	N	U		U	0.00092	0.00021	mg/kg
SB-16(2-3)-20200731	460-214780-13	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00092	0.00013	mg/kg
SB-16(2-3)-20200731	460-214780-13	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00092	0.00011	mg/kg
SB-16(2-3)-20200731	460-214780-13	STYRENE	8/6/2020		Y	N	U		U	0.00092	0.00025	mg/kg
SB-16(2-3)-20200731	460-214780-13	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00092	0.00024	mg/kg
SB-16(2-3)-20200731	460-214780-13	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0046	0.0039	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00092	0.00043	mg/kg
SB-16(2-3)-20200731	460-214780-13	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00092	0.00048	mg/kg
SB-16(2-3)-20200731	460-214780-13	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0046	0.0025	mg/kg
SB-16(2-3)-20200731	460-214780-13	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00092	0.00016	mg/kg
SB-16(2-3)-20200731	460-214780-13	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00092	0.00012	mg/kg
SB-16(2-3)-20200731	460-214780-13	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00092	0.00018	mg/kg
SB-16(2-3)-20200731	460-214780-13	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00031	mg/kg
SB-16(2-3)-20200731	460-214780-13	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00018	mg/kg
SB-16(2-3)-20200731	460-214780-13	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00092	0.00020	mg/kg
SB-16(2-3)-20200731	460-214780-13	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00092	0.00025	mg/kg
SB-16(2-3)-20200731	460-214780-13	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00092	0.00014	mg/kg
SB-16(2-3)-20200731	460-214780-13	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00092	0.00040	mg/kg
SB-16(2-3)-20200731	460-214780-13	CHLOROFORM	8/6/2020		Y	N	U		U	0.00092	0.00029	mg/kg
SB-16(2-3)-20200731	460-214780-13	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00092	0.00018	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0084	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0050	0.0027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.0010	0.00055	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CHLOROFORM	8/6/2020		Y	N	U		U	0.0010	0.00032	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00044	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.0010	0.00015	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.0010	0.00027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.0010	0.00022	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00019	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00034	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00020	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.0010	0.00013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0050	0.0043	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.0010	0.00039	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0050	0.0016	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.0010	0.00047	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	STYRENE	8/6/2020		Y	N	U		U	0.0010	0.00028	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.0010	0.00013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.0010	0.00014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TOLUENE	8/6/2020		Y	N	U		U	0.0010	0.00024	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.0010	0.00025	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.0010	0.00027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.0010	0.00014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00041	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	M,P-XYLENES	8/6/2020		Y	N	U		U	0.0010	0.00017	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.0010	0.00043	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00023	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00022	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00030	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00021	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.0010	0.00023	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00036	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.0010	0.00046	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00052	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00030	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.0010	0.00019	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00016	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00023	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-HEXANONE	8/6/2020		Y	N	U		U	0.0050	0.0017	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ACETONE	8/6/2020		Y	N	U		U	0.0060	0.0057	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZENE	8/6/2020		Y	N	U		U	0.0010	0.00026	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00028	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00026	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BROMOFORM	8/6/2020		Y	N	U		U	0.0010	0.00043	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BROMOMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00048	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.0010	0.00027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.0010	0.00050	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.020	0.0092	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00088	0.00013	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00031	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00088	0.00040	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00013	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00088	0.00048	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00088	0.00011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CHLOROFORM	8/6/2020		Y	N	U		U	0.00088	0.00028	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00088	0.00022	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00020	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00088	0.00024	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00038	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00088	0.00013	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00036	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00026	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00088	0.00041	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00046	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00088	0.00015	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00088	0.00011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00017	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0044	0.0038	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0044	0.0024	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00088	0.00020	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00088	0.00044	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00018	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00030	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00017	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00088	0.00019	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	Cis-1,2-Dichloroethylene	8/6/2020	0.00061	Y	Y	J		J	0.00088	0.00013	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00019	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00088	0.00026	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00088	0.00023	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0044	0.0014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00088	0.00023	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2-HEXANONE	8/6/2020		Y	N	U		U	0.0044	0.0015	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ACETONE	8/6/2020		Y	N	U		U	0.0053	0.0050	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	TOLUENE	8/6/2020		Y	N	U		U	0.00088	0.00021	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZENE	8/6/2020		Y	N	U		U	0.00088	0.00023	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00025	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00088	0.00037	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00023	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BROMOFORM	8/6/2020		Y	N	U		U	0.00088	0.00037	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00088	0.00042	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00020	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00088	0.00034	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	STYRENE	8/6/2020		Y	N	U		U	0.00088	0.00024	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00088	0.00017	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00088	0.00016	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0081	mg/kg
SB-20(6-7)-20200731	460-214780-16	TOLUENE	8/6/2020		Y	N	U		U	0.00089	0.00021	mg/kg
SB-20(6-7)-20200731	460-214780-16	STYRENE	8/6/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-20(6-7)-20200731	460-214780-16	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00089	0.00011	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-20(6-7)-20200731	460-214780-16	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00089	0.00024	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00026	mg/kg
SB-20(6-7)-20200731	460-214780-16	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00039	mg/kg
SB-20(6-7)-20200731	460-214780-16	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00036	mg/kg
SB-20(6-7)-20200731	460-214780-16	CHLOROFORM	8/6/2020		Y	N	U		U	0.00089	0.00029	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00027	mg/kg
SB-20(6-7)-20200731	460-214780-16	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00089	0.00022	mg/kg
SB-20(6-7)-20200731	460-214780-16	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00089	0.00024	mg/kg
SB-20(6-7)-20200731	460-214780-16	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00021	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-20(6-7)-20200731	460-214780-16	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00019	mg/kg
SB-20(6-7)-20200731	460-214780-16	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00030	mg/kg
SB-20(6-7)-20200731	460-214780-16	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-20(6-7)-20200731	460-214780-16	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00023	mg/kg
SB-20(6-7)-20200731	460-214780-16	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-20(6-7)-20200731	460-214780-16	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00041	mg/kg
SB-20(6-7)-20200731	460-214780-16	ACETONE	8/6/2020		Y	N	U		U	0.0054	0.0051	mg/kg
SB-20(6-7)-20200731	460-214780-16	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-20(6-7)-20200731	460-214780-16	BROMOFORM	8/6/2020		Y	N	U		U	0.00089	0.00038	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00089	0.00038	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	BENZENE	8/6/2020		Y	N	U		U	0.00089	0.00023	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00032	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00089	0.00041	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-20(6-7)-20200731	460-214780-16	Cis-1,2-Dichloroethylene	8/6/2020	0.00015	Y	Y	J		J	0.00089	0.00014	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00014	mg/kg
SB-20(6-7)-20200731	460-214780-16	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00089	0.00011	mg/kg
SB-20(6-7)-20200731	460-214780-16	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0045	0.0038	mg/kg
SB-20(6-7)-20200731	460-214780-16	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-20(6-7)-20200731	460-214780-16	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0015	mg/kg
SB-20(6-7)-20200731	460-214780-16	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00089	0.00042	mg/kg
SB-20(6-7)-20200731	460-214780-16	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-20(6-7)-20200731	460-214780-16	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0024	mg/kg
SB-20(6-7)-20200731	460-214780-16	UNKNOWN VOLATILE ORGANIC WITH HIGHEST CONC.	8/6/2020	0.0053	Y	Y	J		J	0	0	mg/kg
SB-20(6-7)-20200731	460-214780-16	CARBON DISULFIDE	8/6/2020	0.00031	Y	Y	J		J	0.00089	0.00024	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-20(6-7)-20200731	460-214780-16	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00089	0.00047	mg/kg
SB-20(6-7)-20200731	460-214780-16	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-20(6-7)-20200731	460-214780-16	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00035	mg/kg
SB-20(6-7)-20200731	460-214780-16	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00089	0.00045	mg/kg
SB-20(6-7)-20200731	460-214780-16	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00089	0.00020	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00089	0.00049	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0082	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00094	0.00012	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.019	0.0086	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00028	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00044	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BROMOFORM	8/6/2020		Y	N	U		U	0.00094	0.00040	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00024	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00015	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0047	0.0040	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00094	0.00051	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ACETONE	8/6/2020		Y	N	U		U	0.0056	0.0054	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2-HEXANONE	8/6/2020		Y	N	U		U	0.0047	0.0016	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00094	0.00025	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00020	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00019	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00094	0.00021	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00034	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00094	0.00043	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00028	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00094	0.00040	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00022	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0047	0.0025	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00038	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00094	0.00013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00025	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00094	0.00023	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TOLUENE	8/6/2020		Y	N	U		U	0.00094	0.00022	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00094	0.00013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00094	0.00012	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	STYRENE	8/6/2020		Y	N	U		U	0.00094	0.00026	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00094	0.00018	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00094	0.00043	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00094	0.00047	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZENE	8/6/2020		Y	N	U		U	0.00094	0.00024	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0047	0.0015	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00094	0.00036	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00094	0.00014	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00017	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00094	0.00049	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CHLOROFORM	8/6/2020		Y	N	U		U	0.00094	0.00030	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00041	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00032	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00094	0.00026	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00094	0.00016	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00094	0.00018	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00094	0.00019	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZENE	8/6/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00014	mg/kg
SB-3(5-6)-20200731	460-214780-2	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00022	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-3(5-6)-20200731	460-214780-2	2-HEXANONE	8/6/2020		Y	N	U		U	0.0044	0.0015	mg/kg
SB-3(5-6)-20200731	460-214780-2	ACETONE	8/6/2020		Y	N	U		U	0.0052	0.0050	mg/kg
SB-3(5-6)-20200731	460-214780-2	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00025	mg/kg
SB-3(5-6)-20200731	460-214780-2	BROMOFORM	8/6/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-3(5-6)-20200731	460-214780-2	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00041	mg/kg
SB-3(5-6)-20200731	460-214780-2	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-3(5-6)-20200731	460-214780-2	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00087	0.00034	mg/kg
SB-3(5-6)-20200731	460-214780-2	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-3(5-6)-20200731	460-214780-2	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00046	mg/kg
SB-3(5-6)-20200731	460-214780-2	CHLOROFORM	8/6/2020		Y	N	U		U	0.00087	0.00028	mg/kg
SB-3(5-6)-20200731	460-214780-2	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00038	mg/kg
SB-3(5-6)-20200731	460-214780-2	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-3(5-6)-20200731	460-214780-2	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00024	mg/kg
SB-3(5-6)-20200731	460-214780-2	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-3(5-6)-20200731	460-214780-2	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00029	mg/kg
SB-3(5-6)-20200731	460-214780-2	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-3(5-6)-20200731	460-214780-2	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-3(5-6)-20200731	460-214780-2	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00087	0.00023	mg/kg
SB-3(5-6)-20200731	460-214780-2	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00031	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.017	0.0080	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00018	mg/kg
SB-3(5-6)-20200731	460-214780-2	TOLUENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-3(5-6)-20200731	460-214780-2	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0044	0.0038	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-3(5-6)-20200731	460-214780-2	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00087	0.00048	mg/kg
SB-3(5-6)-20200731	460-214780-2	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00087	0.00035	mg/kg
SB-3(5-6)-20200731	460-214780-2	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-3(5-6)-20200731	460-214780-2	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00087	0.00044	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-3(5-6)-20200731	460-214780-2	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0044	0.0024	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-3(5-6)-20200731	460-214780-2	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0044	0.0014	mg/kg
SB-3(5-6)-20200731	460-214780-2	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-3(5-6)-20200731	460-214780-2	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-3(5-6)-20200731	460-214780-2	STYRENE	8/6/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-3(5-6)-20200731	460-214780-2	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-3(5-6)-20200731	460-214780-2	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00087	0.00012	mg/kg
SB-3(5-6)-20200731	460-214780-2	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00087	0.00021	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-4(2-3)-20200731	460-214780-3	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00099	0.00047	mg/kg
SB-4(2-3)-20200731	460-214780-3	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00099	0.00026	mg/kg
SB-4(2-3)-20200731	460-214780-3	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00099	0.00038	mg/kg
SB-4(2-3)-20200731	460-214780-3	BROMOFORM	8/6/2020		Y	N	U		U	0.00099	0.00042	mg/kg
SB-4(2-3)-20200731	460-214780-3	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00099	0.00025	mg/kg
SB-4(2-3)-20200731	460-214780-3	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00099	0.00028	mg/kg
SB-4(2-3)-20200731	460-214780-3	BENZENE	8/6/2020		Y	N	U		U	0.00099	0.00026	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.020	0.0091	mg/kg
SB-4(2-3)-20200731	460-214780-3	ACETONE	8/6/2020		Y	N	U		U	0.0060	0.0057	mg/kg
SB-4(2-3)-20200731	460-214780-3	2-HEXANONE	8/6/2020		Y	N	U		U	0.0050	0.0017	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00099	0.00016	mg/kg
SB-4(2-3)-20200731	460-214780-3	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00099	0.00019	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00099	0.00042	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00099	0.00029	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00099	0.00014	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00099	0.00018	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00099	0.00046	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00099	0.00022	mg/kg
SB-4(2-3)-20200731	460-214780-3	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00099	0.00012	mg/kg
SB-4(2-3)-20200731	460-214780-3	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00099	0.00017	mg/kg
SB-4(2-3)-20200731	460-214780-3	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0050	0.0043	mg/kg
SB-4(2-3)-20200731	460-214780-3	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00099	0.00054	mg/kg
SB-4(2-3)-20200731	460-214780-3	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00099	0.00014	mg/kg
SB-4(2-3)-20200731	460-214780-3	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00099	0.00026	mg/kg
SB-4(2-3)-20200731	460-214780-3	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00099	0.00024	mg/kg
SB-4(2-3)-20200731	460-214780-3	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00099	0.00012	mg/kg
SB-4(2-3)-20200731	460-214780-3	TOLUENE	8/6/2020		Y	N	U		U	0.00099	0.00023	mg/kg
SB-4(2-3)-20200731	460-214780-3	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0050	0.0027	mg/kg
SB-4(2-3)-20200731	460-214780-3	STYRENE	8/6/2020		Y	N	U		U	0.00099	0.00028	mg/kg
SB-4(2-3)-20200731	460-214780-3	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00099	0.00019	mg/kg
SB-4(2-3)-20200731	460-214780-3	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0050	0.0015	mg/kg
SB-4(2-3)-20200731	460-214780-3	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00099	0.00046	mg/kg
SB-4(2-3)-20200731	460-214780-3	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00099	0.00049	mg/kg
SB-4(2-3)-20200731	460-214780-3	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00099	0.00027	mg/kg
SB-4(2-3)-20200731	460-214780-3	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00099	0.00014	mg/kg
SB-4(2-3)-20200731	460-214780-3	CHLOROFORM	8/6/2020		Y	N	U		U	0.00099	0.00032	mg/kg
SB-4(2-3)-20200731	460-214780-3	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00099	0.00052	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00099	0.00020	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00099	0.00022	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00099	0.00018	mg/kg
SB-4(2-3)-20200731	460-214780-3	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00099	0.00040	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00099	0.00018	mg/kg
SB-4(2-3)-20200731	460-214780-3	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00099	0.00020	mg/kg
SB-4(2-3)-20200731	460-214780-3	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00099	0.00018	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00099	0.00021	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00099	0.00030	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00099	0.00023	mg/kg
SB-4(2-3)-20200731	460-214780-3	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00099	0.00043	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00099	0.00036	mg/kg
SB-4(2-3)-20200731	460-214780-3	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00099	0.00015	mg/kg
SB-4(2-3)-20200731	460-214780-3	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00099	0.00022	mg/kg
SB-4(2-3)-20200731	460-214780-3	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00099	0.00034	mg/kg
SB-4(6-7)-20200731	460-214780-4	2-HEXANONE	8/6/2020		Y	N	U		U	0.0051	0.0017	mg/kg
SB-4(6-7)-20200731	460-214780-4	ACETONE	8/6/2020		Y	N	U		U	0.0061	0.0058	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZENE	8/6/2020		Y	N	U		U	0.0010	0.00026	mg/kg
SB-4(6-7)-20200731	460-214780-4	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00026	mg/kg
SB-4(6-7)-20200731	460-214780-4	BROMOFORM	8/6/2020		Y	N	U		U	0.0010	0.00043	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00023	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00022	mg/kg
SB-4(6-7)-20200731	460-214780-4	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00029	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00016	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.0010	0.00043	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00030	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(6-7)-20200731	460-214780-4	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00015	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.0010	0.00047	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00036	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.0010	0.00023	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00021	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.020	0.0093	mg/kg
SB-4(6-7)-20200731	460-214780-4	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.0010	0.00022	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00024	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00031	mg/kg
SB-4(6-7)-20200731	460-214780-4	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0051	0.0044	mg/kg
SB-4(6-7)-20200731	460-214780-4	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.0010	0.00056	mg/kg
SB-4(6-7)-20200731	460-214780-4	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00041	mg/kg
SB-4(6-7)-20200731	460-214780-4	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.0010	0.00015	mg/kg
SB-4(6-7)-20200731	460-214780-4	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.0010	0.00027	mg/kg
SB-4(6-7)-20200731	460-214780-4	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.0010	0.00025	mg/kg
SB-4(6-7)-20200731	460-214780-4	TOLUENE	8/6/2020		Y	N	U		U	0.0010	0.00024	mg/kg
SB-4(6-7)-20200731	460-214780-4	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.0010	0.00015	mg/kg
SB-4(6-7)-20200731	460-214780-4	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.0010	0.00013	mg/kg
SB-4(6-7)-20200731	460-214780-4	STYRENE	8/6/2020		Y	N	U		U	0.0010	0.00028	mg/kg
SB-4(6-7)-20200731	460-214780-4	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.0010	0.00020	mg/kg
SB-4(6-7)-20200731	460-214780-4	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.0010	0.00047	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(6-7)-20200731	460-214780-4	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.0010	0.00051	mg/kg
SB-4(6-7)-20200731	460-214780-4	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.0010	0.00015	mg/kg
SB-4(6-7)-20200731	460-214780-4	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0051	0.0028	mg/kg
SB-4(6-7)-20200731	460-214780-4	BROMOMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00048	mg/kg
SB-4(6-7)-20200731	460-214780-4	M,P-XYLENES	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-4(6-7)-20200731	460-214780-4	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.0010	0.00013	mg/kg
SB-4(6-7)-20200731	460-214780-4	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00020	mg/kg
SB-4(6-7)-20200731	460-214780-4	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00034	mg/kg
SB-4(6-7)-20200731	460-214780-4	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00020	mg/kg
SB-4(6-7)-20200731	460-214780-4	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.0010	0.00028	mg/kg
SB-4(6-7)-20200731	460-214780-4	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.0010	0.00044	mg/kg
SB-4(6-7)-20200731	460-214780-4	CHLOROFORM	8/6/2020		Y	N	U		U	0.0010	0.00032	mg/kg
SB-4(6-7)-20200731	460-214780-4	CHLOROETHANE	8/6/2020		Y	N	U		U	0.0010	0.00053	mg/kg
SB-4(6-7)-20200731	460-214780-4	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.0010	0.00018	mg/kg
SB-4(6-7)-20200731	460-214780-4	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.0010	0.00039	mg/kg
SB-4(6-7)-20200731	460-214780-4	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.0010	0.00027	mg/kg
SB-4(6-7)-20200731	460-214780-4	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0051	0.0016	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00095	0.00050	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00095	0.00017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00095	0.00032	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00095	0.00018	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00095	0.00021	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00095	0.00026	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00095	0.00014	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	ACETONE	8/6/2020		Y	N	U		U	0.0057	0.0054	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CHLOROFORM	8/6/2020		Y	N	U		U	0.00095	0.00030	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0048	0.0041	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00095	0.00025	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00095	0.00045	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BROMOFORM	8/6/2020		Y	N	U		U	0.00095	0.00040	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00095	0.00024	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00095	0.00027	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZENE	8/6/2020		Y	N	U		U	0.00095	0.00025	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00095	0.00041	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00095	0.00012	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00095	0.00037	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00095	0.00052	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00095	0.00039	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00095	0.00014	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00095	0.00025	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00095	0.00023	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00095	0.00019	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00095	0.00014	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00095	0.00012	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	STYRENE	8/6/2020		Y	N	U		U	0.00095	0.00026	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00095	0.00018	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00095	0.00044	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00095	0.00047	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0048	0.0015	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00095	0.00017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	TOLUENE	8/6/2020		Y	N	U		U	0.00095	0.00022	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00095	0.00017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.019	0.0087	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-HEXANONE	8/6/2020		Y	N	U		U	0.0048	0.0016	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0048	0.0026	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00095	0.00022	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00095	0.00029	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00095	0.00020	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00095	0.00021	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00095	0.00017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00095	0.00044	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00095	0.00017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00095	0.00021	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00095	0.00014	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00095	0.00028	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00095	0.00015	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00095	0.00034	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00095	0.00020	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00095	0.00040	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00033	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00028	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00019	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00017	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00091	0.00042	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-8(3-4)-20200731	460-214780-6	TOLUENE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-8(3-4)-20200731	460-214780-6	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0046	0.0025	mg/kg
SB-8(3-4)-20200731	460-214780-6	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0046	0.0014	mg/kg
SB-8(3-4)-20200731	460-214780-6	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00091	0.00046	mg/kg
SB-8(3-4)-20200731	460-214780-6	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00042	mg/kg
SB-8(3-4)-20200731	460-214780-6	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-8(3-4)-20200731	460-214780-6	STYRENE	8/6/2020		Y	N	U		U	0.00091	0.00025	mg/kg
SB-8(3-4)-20200731	460-214780-6	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-8(3-4)-20200731	460-214780-6	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-8(3-4)-20200731	460-214780-6	BROMOFORM	8/6/2020		Y	N	U		U	0.00091	0.00039	mg/kg
SB-8(3-4)-20200731	460-214780-6	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00091	0.00022	mg/kg
SB-8(3-4)-20200731	460-214780-6	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00048	mg/kg
SB-8(3-4)-20200731	460-214780-6	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00091	0.00024	mg/kg
SB-8(3-4)-20200731	460-214780-6	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-8(3-4)-20200731	460-214780-6	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00037	mg/kg
SB-8(3-4)-20200731	460-214780-6	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00091	0.00011	mg/kg

SDG: 4602147801

Analytical Method	SW8260C											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00091	0.00014	mg/kg
SB-8(3-4)-20200731	460-214780-6	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00043	mg/kg
SB-8(3-4)-20200731	460-214780-6	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00091	0.00024	mg/kg
SB-8(3-4)-20200731	460-214780-6	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00035	mg/kg
SB-8(3-4)-20200731	460-214780-6	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00091	0.00050	mg/kg
SB-8(3-4)-20200731	460-214780-6	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0046	0.0039	mg/kg
SB-8(3-4)-20200731	460-214780-6	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00091	0.00016	mg/kg
SB-8(3-4)-20200731	460-214780-6	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00091	0.00012	mg/kg
SB-8(3-4)-20200731	460-214780-6	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-8(3-4)-20200731	460-214780-6	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00031	mg/kg
SB-8(3-4)-20200731	460-214780-6	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00018	mg/kg
SB-8(3-4)-20200731	460-214780-6	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00026	mg/kg
SB-8(3-4)-20200731	460-214780-6	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00091	0.00025	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00013	mg/kg
SB-8(3-4)-20200731	460-214780-6	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00040	mg/kg
SB-8(3-4)-20200731	460-214780-6	CHLOROFORM	8/6/2020		Y	N	U		U	0.00091	0.00029	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0084	mg/kg
SB-8(3-4)-20200731	460-214780-6	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00091	0.00023	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZENE	8/6/2020		Y	N	U		U	0.00091	0.00024	mg/kg
SB-8(3-4)-20200731	460-214780-6	ACETONE	8/6/2020		Y	N	U		U	0.0055	0.0052	mg/kg
SB-8(3-4)-20200731	460-214780-6	2-HEXANONE	8/6/2020		Y	N	U		U	0.0046	0.0016	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00021	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00091	0.00015	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00091	0.00039	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00091	0.00027	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00091	0.00020	mg/kg
SB-8(6-7)-20200731	460-214780-7	CHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00039	mg/kg
SB-8(6-7)-20200731	460-214780-7	O-XYLENE (1,2-DIMETHYLBENZENE)	8/6/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-8(6-7)-20200731	460-214780-7	CHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00047	mg/kg
SB-8(6-7)-20200731	460-214780-7	CYCLOHEXANE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-8(6-7)-20200731	460-214780-7	DIBROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-8(6-7)-20200731	460-214780-7	DICHLORODIFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00031	mg/kg
SB-8(6-7)-20200731	460-214780-7	ETHYLBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-8(6-7)-20200731	460-214780-7	Isopropylbenzene (Cumene)	8/6/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-8(6-7)-20200731	460-214780-7	M,P-XYLENES	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-8(6-7)-20200731	460-214780-7	METHYL ACETATE	8/6/2020		Y	N	U		U	0.0045	0.0039	mg/kg
SB-8(6-7)-20200731	460-214780-7	METHYL ETHYL KETONE (2-BUTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0025	mg/kg
SB-8(6-7)-20200731	460-214780-7	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/6/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-8(6-7)-20200731	460-214780-7	Cis-1,2-Dichloroethylene	8/6/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-8(6-7)-20200731	460-214780-7	METHYLENE CHLORIDE	8/6/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-8(6-7)-20200731	460-214780-7	STYRENE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-8(6-7)-20200731	460-214780-7	TERT-BUTYL METHYL ETHER	8/6/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-8(6-7)-20200731	460-214780-7	TETRACHLOROETHYLENE(PCE)	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-8(6-7)-20200731	460-214780-7	TOLUENE	8/6/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-8(6-7)-20200731	460-214780-7	TRANS-1,2-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00090	0.00022	mg/kg
SB-8(6-7)-20200731	460-214780-7	TRANS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00024	mg/kg
SB-8(6-7)-20200731	460-214780-7	TRICHLOROETHYLENE (TCE)	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-8(6-7)-20200731	460-214780-7	TRICHLOROFLUOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00037	mg/kg

SDG: 4602147801

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(6-7)-20200731	460-214780-7	VINYL CHLORIDE	8/6/2020		Y	N	U		U	0.00090	0.00049	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,4-DIOXANE (P-DIOXANE)	8/6/2020		Y	N	UT		U	0.018	0.0083	mg/kg
SB-8(6-7)-20200731	460-214780-7	METHYLCYCLOHEXANE	8/6/2020		Y	N	U		U	0.00090	0.00045	mg/kg
SB-8(6-7)-20200731	460-214780-7	2-HEXANONE	8/6/2020		Y	N	U		U	0.0045	0.0015	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,1,2,2-TETRACHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,1,2-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,1-DICHLOROETHENE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2,3-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2,4-TRICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00032	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2-DIBROMO-3-CHLOROPROPANE	8/6/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2-DICHLOROPROPANE	8/6/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-8(6-7)-20200731	460-214780-7	CIS-1,3-DICHLOROPROPENE	8/6/2020		Y	N	U	UJ	UJ	0.00090	0.00025	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,4-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,1,1-TRICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-8(6-7)-20200731	460-214780-7	ACETONE	8/6/2020		Y	N	U		U	0.0054	0.0052	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZENE	8/6/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-8(6-7)-20200731	460-214780-7	BROMOCHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-8(6-7)-20200731	460-214780-7	BROMODICHLOROMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-8(6-7)-20200731	460-214780-7	BROMOFORM	8/6/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-8(6-7)-20200731	460-214780-7	BROMOMETHANE	8/6/2020		Y	N	U		U	0.00090	0.00043	mg/kg
SB-8(6-7)-20200731	460-214780-7	CARBON DISULFIDE	8/6/2020		Y	N	U		U	0.00090	0.00024	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(6-7)-20200731	460-214780-7	CARBON TETRACHLORIDE	8/6/2020		Y	N	U		U	0.00090	0.00035	mg/kg
SB-8(6-7)-20200731	460-214780-7	CHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-8(6-7)-20200731	460-214780-7	CHLOROFORM	8/6/2020		Y	N	U		U	0.00090	0.00029	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,3-DICHLOROBENZENE	8/6/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,1-DICHLOROETHANE	8/6/2020		Y	N	U		U	0.00090	0.00019	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.36	0.0051	mg/kg
DUP-2-20200731	460-214780-17	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.36	0.0048	mg/kg
DUP-2-20200731	460-214780-17	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.36	0.028	mg/kg
DUP-2-20200731	460-214780-17	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
DUP-2-20200731	460-214780-17	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U	UJ	UJ	0.36	0.0066	mg/kg
DUP-2-20200731	460-214780-17	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
DUP-2-20200731	460-214780-17	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
DUP-2-20200731	460-214780-17	CAPROLACTAM	8/5/2020		Y	N	U		U	0.36	0.057	mg/kg
DUP-2-20200731	460-214780-17	CARBAZOLE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
DUP-2-20200731	460-214780-17	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.016	mg/kg
DUP-2-20200731	460-214780-17	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
DUP-2-20200731	460-214780-17	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
DUP-2-20200731	460-214780-17	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
DUP-2-20200731	460-214780-17	CHRYSENE	8/5/2020		Y	N	U		U	0.36	0.0062	mg/kg
DUP-2-20200731	460-214780-17	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.026	mg/kg
DUP-2-20200731	460-214780-17	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.36	0.032	mg/kg
DUP-2-20200731	460-214780-17	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.74	0.059	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	4-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.042	mg/kg
DUP-2-20200731	460-214780-17	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.36	0.023	mg/kg
DUP-2-20200731	460-214780-17	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
DUP-2-20200731	460-214780-17	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
DUP-2-20200731	460-214780-17	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	440	Y	Y	JA		J	0	0	ug/kg
DUP-2-20200731	460-214780-17	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.037	mg/kg
DUP-2-20200731	460-214780-17	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
DUP-2-20200731	460-214780-17	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.023	mg/kg
DUP-2-20200731	460-214780-17	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.016	mg/kg
DUP-2-20200731	460-214780-17	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.36	0.0038	mg/kg
DUP-2-20200731	460-214780-17	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.039	mg/kg
DUP-2-20200731	460-214780-17	PYRENE	8/5/2020		Y	N	U		U	0.36	0.0091	mg/kg
DUP-2-20200731	460-214780-17	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
DUP-2-20200731	460-214780-17	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
DUP-2-20200731	460-214780-17	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.36	0.010	mg/kg
DUP-2-20200731	460-214780-17	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
DUP-2-20200731	460-214780-17	2-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
DUP-2-20200731	460-214780-17	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.36	0.036	mg/kg
DUP-2-20200731	460-214780-17	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.055	mg/kg
DUP-2-20200731	460-214780-17	3-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.041	mg/kg
DUP-2-20200731	460-214780-17	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U		U	0.29	0.059	mg/kg
DUP-2-20200731	460-214780-17	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
DUP-2-20200731	460-214780-17	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.020	mg/kg
DUP-2-20200731	460-214780-17	2,4-DINITROPHENOL	8/5/2020		Y	N	U		U	0.29	0.18	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.036	0.017	mg/kg
DUP-2-20200731	460-214780-17	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
DUP-2-20200731	460-214780-17	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0094	mg/kg
DUP-2-20200731	460-214780-17	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.036	0.0097	mg/kg
DUP-2-20200731	460-214780-17	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
DUP-2-20200731	460-214780-17	BENZALDEHYDE	8/5/2020		Y	N	U	UJ	UJ	0.36	0.016	mg/kg
DUP-2-20200731	460-214780-17	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0092	mg/kg
DUP-2-20200731	460-214780-17	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.083	mg/kg
DUP-2-20200731	460-214780-17	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.064	mg/kg
DUP-2-20200731	460-214780-17	ANTHRACENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
DUP-2-20200731	460-214780-17	ACETOPHENONE	8/5/2020		Y	N	U		U	0.36	0.018	mg/kg
DUP-2-20200731	460-214780-17	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
DUP-2-20200731	460-214780-17	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.36	0.027	mg/kg
DUP-2-20200731	460-214780-17	FLUORENE	8/5/2020		Y	N	U		U	0.36	0.0049	mg/kg
DUP-2-20200731	460-214780-17	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0071	mg/kg
DUP-2-20200731	460-214780-17	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.036	0.014	mg/kg
DUP-2-20200731	460-214780-17	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
DUP-2-20200731	460-214780-17	NAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.0063	mg/kg
DUP-2-20200731	460-214780-17	NITROBENZENE	8/5/2020		Y	N	U		U	0.036	0.0087	mg/kg
DUP-2-20200731	460-214780-17	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.0053	mg/kg
DUP-2-20200731	460-214780-17	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.036	0.026	mg/kg
DUP-2-20200731	460-214780-17	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.36	0.0070	mg/kg
DUP-2-20200731	460-214780-17	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.29	0.075	mg/kg
DUP-2-20200731	460-214780-17	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
DUP-2-20200731	460-214780-17	PHENANTHRENE	8/5/2020		Y	N	U		U	0.36	0.0064	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	PHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
DUP-2-20200731	460-214780-17	FLUORANTHENE	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
DUP-2-20200731	460-214780-17	HEXACHLOROBUTADIENE	8/5/2020		Y	N	UT	UJ	UJ	0.074	0.0078	mg/kg
SB-11(3-4)-20200731	460-214780-8	NITROBENZENE	8/5/2020		Y	N	U		U	0.035	0.0085	mg/kg
SB-11(3-4)-20200731	460-214780-8	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.35	0.019	mg/kg
SB-11(3-4)-20200731	460-214780-8	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.35	0.080	mg/kg
SB-11(3-4)-20200731	460-214780-8	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.35	0.0051	mg/kg
SB-11(3-4)-20200731	460-214780-8	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.35	0.0050	mg/kg
SB-11(3-4)-20200731	460-214780-8	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.035	0.015	mg/kg
SB-11(3-4)-20200731	460-214780-8	CHRYSENE	8/5/2020		Y	N	U		U	0.35	0.0060	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.35	0.010	mg/kg
SB-11(3-4)-20200731	460-214780-8	CAPROLACTAM	8/5/2020		Y	N	U		U	0.35	0.055	mg/kg
SB-11(3-4)-20200731	460-214780-8	FLUORANTHENE	8/5/2020		Y	N	U		U	0.35	0.012	mg/kg
SB-11(3-4)-20200731	460-214780-8	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.35	0.0064	mg/kg
SB-11(3-4)-20200731	460-214780-8	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.035	0.012	mg/kg
SB-11(3-4)-20200731	460-214780-8	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.35	0.027	mg/kg
SB-11(3-4)-20200731	460-214780-8	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.35	0.0047	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.35	0.017	mg/kg
SB-11(3-4)-20200731	460-214780-8	ISOPHORONE	8/5/2020		Y	N	U		U	0.14	0.10	mg/kg
SB-11(3-4)-20200731	460-214780-8	CARBAZOLE	8/5/2020		Y	N	U		U	0.35	0.013	mg/kg
SB-11(3-4)-20200731	460-214780-8	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.035	0.014	mg/kg
SB-11(3-4)-20200731	460-214780-8	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	3800	Y	Y	JA		J	0	0	ug/kg
SB-11(3-4)-20200731	460-214780-8	PYRENE	8/5/2020		Y	N	U		U	0.35	0.0088	mg/kg
SB-11(3-4)-20200731	460-214780-8	PHENOL	8/5/2020		Y	N	U		U	0.35	0.013	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(3-4)-20200731	460-214780-8	PHENANTHRENE	8/5/2020		Y	N	U		U	0.35	0.0062	mg/kg
SB-11(3-4)-20200731	460-214780-8	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.28	0.072	mg/kg
SB-11(3-4)-20200731	460-214780-8	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.35	0.0067	mg/kg
SB-11(3-4)-20200731	460-214780-8	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.35	0.062	mg/kg
SB-11(3-4)-20200731	460-214780-8	NAPHTHALENE	8/5/2020		Y	N	U		U	0.35	0.0061	mg/kg
SB-11(3-4)-20200731	460-214780-8	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.35	0.019	mg/kg
SB-11(3-4)-20200731	460-214780-8	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.035	0.012	mg/kg
SB-11(3-4)-20200731	460-214780-8	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.35	0.031	mg/kg
SB-11(3-4)-20200731	460-214780-8	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.071	0.0075	mg/kg
SB-11(3-4)-20200731	460-214780-8	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.035	0.017	mg/kg
SB-11(3-4)-20200731	460-214780-8	FLUORENE	8/5/2020		Y	N	U		U	0.35	0.0048	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.035	0.0091	mg/kg
SB-11(3-4)-20200731	460-214780-8	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.035	0.026	mg/kg
SB-11(3-4)-20200731	460-214780-8	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.28	0.17	mg/kg
SB-11(3-4)-20200731	460-214780-8	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.35	0.035	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.035	0.0069	mg/kg
SB-11(3-4)-20200731	460-214780-8	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.35	0.013	mg/kg
SB-11(3-4)-20200731	460-214780-8	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.35	0.0099	mg/kg
SB-11(3-4)-20200731	460-214780-8	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.35	0.013	mg/kg
SB-11(3-4)-20200731	460-214780-8	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.35	0.016	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.35	0.011	mg/kg
SB-11(3-4)-20200731	460-214780-8	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.071	0.038	mg/kg
SB-11(3-4)-20200731	460-214780-8	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.14	0.053	mg/kg
SB-11(3-4)-20200731	460-214780-8	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.35	0.016	mg/kg
SB-11(3-4)-20200731	460-214780-8	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.14	0.023	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(3-4)-20200731	460-214780-8	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.14	0.045	mg/kg
SB-11(3-4)-20200731	460-214780-8	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.35	0.036	mg/kg
SB-11(3-4)-20200731	460-214780-8	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.35	0.024	mg/kg
SB-11(3-4)-20200731	460-214780-8	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.0097	mg/kg
SB-11(3-4)-20200731	460-214780-8	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.071	0.025	mg/kg
SB-11(3-4)-20200731	460-214780-8	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.71	0.057	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.035	0.0094	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.035	0.012	mg/kg
SB-11(3-4)-20200731	460-214780-8	ATRAZINE	8/5/2020		Y	N	U		U	0.14	0.0089	mg/kg
SB-11(3-4)-20200731	460-214780-8	ANTHRACENE	8/5/2020		Y	N	U		U	0.35	0.011	mg/kg
SB-11(3-4)-20200731	460-214780-8	ACETOPHENONE	8/5/2020		Y	N	U		U	0.35	0.017	mg/kg
SB-11(3-4)-20200731	460-214780-8	2-NITROANILINE	8/5/2020		Y	N	U		U	0.35	0.013	mg/kg
SB-11(3-4)-20200731	460-214780-8	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.35	0.026	mg/kg
SB-11(3-4)-20200731	460-214780-8	3-NITROANILINE	8/5/2020		Y	N	U		U	0.35	0.040	mg/kg
SB-11(3-4)-20200731	460-214780-8	4-NITROANILINE	8/5/2020		Y	N	U		U	0.35	0.040	mg/kg
SB-11(3-4)-20200731	460-214780-8	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.35	0.022	mg/kg
SB-11(3-4)-20200731	460-214780-8	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.35	0.012	mg/kg
SB-11(3-4)-20200731	460-214780-8	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.35	0.025	mg/kg
SB-11(3-4)-20200731	460-214780-8	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.35	0.020	mg/kg
SB-11(3-4)-20200731	460-214780-8	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.35	0.014	mg/kg
SB-11(3-4)-20200731	460-214780-8	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.28	0.057	mg/kg
SB-11(3-4)-20200731	460-214780-8	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.35	0.0036	mg/kg
SB-11(3-4)-20200731	460-214780-8	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.35	0.015	mg/kg
SB-11(8-9)-20200731	460-214780-9	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	3500	Y	Y	JA		J	0	0	ug/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.36	0.032	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-11(8-9)-20200731	460-214780-9	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.0053	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-11(8-9)-20200731	460-214780-9	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-11(8-9)-20200731	460-214780-9	PHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.023	mg/kg
SB-11(8-9)-20200731	460-214780-9	PHENANTHRENE	8/5/2020		Y	N	U		U	0.36	0.0064	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-11(8-9)-20200731	460-214780-9	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-11(8-9)-20200731	460-214780-9	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-11(8-9)-20200731	460-214780-9	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-11(8-9)-20200731	460-214780-9	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-11(8-9)-20200731	460-214780-9	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-11(8-9)-20200731	460-214780-9	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.083	mg/kg
SB-11(8-9)-20200731	460-214780-9	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.064	mg/kg
SB-11(8-9)-20200731	460-214780-9	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-11(8-9)-20200731	460-214780-9	FLUORANTHENE	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-11(8-9)-20200731	460-214780-9	FLUORENE	8/5/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-11(8-9)-20200731	460-214780-9	PYRENE	8/5/2020		Y	N	U		U	0.36	0.0091	mg/kg
SB-11(8-9)-20200731	460-214780-9	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	3-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-11(8-9)-20200731	460-214780-9	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-11(8-9)-20200731	460-214780-9	NAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-11(8-9)-20200731	460-214780-9	NITROBENZENE	8/5/2020		Y	N	U		U	0.036	0.0088	mg/kg
SB-11(8-9)-20200731	460-214780-9	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-11(8-9)-20200731	460-214780-9	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.36	0.0070	mg/kg
SB-11(8-9)-20200731	460-214780-9	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-11(8-9)-20200731	460-214780-9	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.074	0.0078	mg/kg
SB-11(8-9)-20200731	460-214780-9	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0071	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-11(8-9)-20200731	460-214780-9	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-11(8-9)-20200731	460-214780-9	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-11(8-9)-20200731	460-214780-9	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-11(8-9)-20200731	460-214780-9	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.36	0.0066	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-11(8-9)-20200731	460-214780-9	CAPROLACTAM	8/5/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-11(8-9)-20200731	460-214780-9	CARBAZOLE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-11(8-9)-20200731	460-214780-9	CHRYSENE	8/5/2020		Y	N	U		U	0.36	0.0062	mg/kg
SB-11(8-9)-20200731	460-214780-9	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-11(8-9)-20200731	460-214780-9	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.36	0.0051	mg/kg
SB-11(8-9)-20200731	460-214780-9	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-11(8-9)-20200731	460-214780-9	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-11(8-9)-20200731	460-214780-9	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.74	0.059	mg/kg
SB-11(8-9)-20200731	460-214780-9	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-11(8-9)-20200731	460-214780-9	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.059	mg/kg
SB-11(8-9)-20200731	460-214780-9	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-11(8-9)-20200731	460-214780-9	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-11(8-9)-20200731	460-214780-9	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-11(8-9)-20200731	460-214780-9	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0094	mg/kg
SB-11(8-9)-20200731	460-214780-9	4-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.042	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.036	0.0097	mg/kg
SB-11(8-9)-20200731	460-214780-9	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.36	0.027	mg/kg
SB-11(8-9)-20200731	460-214780-9	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.36	0.0038	mg/kg
SB-11(8-9)-20200731	460-214780-9	ACETOPHENONE	8/5/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-11(8-9)-20200731	460-214780-9	ANTHRACENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-11(8-9)-20200731	460-214780-9	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-11(8-9)-20200731	460-214780-9	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-11(8-9)-20200731	460-214780-9	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.36	0.023	mg/kg
SB-11(8-9)-20200731	460-214780-9	2-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-11(8-9)-20200731	460-214780-9	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.36	0.016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.074	0.0078	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.060	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.37	0.0051	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.0053	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.083	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.065	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.37	0.019	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.037	0.017	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.37	0.023	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.37	0.032	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.037	0.014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	NITROBENZENE	8/5/2020		Y	N	U		U	0.037	0.0088	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.37	0.0070	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	3-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.041	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	FLUORENE	8/5/2020		Y	N	U		U	0.37	0.0050	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	17000	Y	Y	JA		J	0	0	ug/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PHENOL	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CHRYSENE	8/5/2020		Y	N	U		U	0.37	0.0062	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CARBAZOLE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CAPROLACTAM	8/5/2020		Y	N	U		U	0.37	0.057	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.019	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.37	0.0066	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.37	0.0049	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0072	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0095	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.037	0.0098	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ANTHRACENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ACETOPHENONE	8/5/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.37	0.0038	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.37	0.027	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.74	0.060	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	4-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	FLUORANTHENE	8/5/2020	0.018	Y	Y	J		J	0.37	0.013	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PHENANTHRENE	8/5/2020	0.020	Y	Y	J		J	0.37	0.0064	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.37	0.010	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-12(1.5-2.5)-2020073	460-214780-10	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.025	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	PYRENE	8/5/2020	0.019	Y	Y	J		J	0.37	0.0091	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	NAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.0063	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.016	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.36	0.0066	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.037	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.023	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0072	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.36	0.023	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	4-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.042	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.74	0.060	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.36	0.027	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.36	0.0038	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ACETOPHENONE	8/5/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ANTHRACENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CHRYSENE	8/5/2020	0.023	Y	Y	J		J	0.36	0.0062	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	3-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	NAPHTHALENE	8/5/2020	0.013	Y	Y	J		J	0.36	0.0063	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.083	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.36	0.0070	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.036	0.027	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.015	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PYRENE	8/5/2020	0.031	Y	Y	J		J	0.36	0.0091	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.0053	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.065	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.36	0.032	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.074	0.0078	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	NITROBENZENE	8/5/2020		Y	N	U		U	0.036	0.0088	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.021	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	FLUORENE	8/5/2020		Y	N	U		U	0.36	0.0050	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	PHENANTHRENE	8/5/2020	0.027	Y	Y	J		J	0.36	0.0064	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	FLUORANTHENE	8/5/2020	0.025	Y	Y	J		J	0.36	0.013	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZO(B)FLUORANTHENE	8/5/2020	0.015	Y	Y	J		J	0.036	0.0095	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZO(A)ANTHRACENE	8/5/2020	0.021	Y	Y	J		J	0.036	0.013	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(2.5-3.5)-2020073	460-214780-11	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.059	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CAPROLACTAM	8/5/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	3600	Y	Y	JA		J	0	0	ug/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CARBAZOLE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	2-Methylnaphthalene	8/5/2020	0.015	Y	Y	J		J	0.36	0.010	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.36	0.0051	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZO(A)PYRENE	8/5/2020	0.011	Y	Y	J		J	0.036	0.0097	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.36	0.016	mg/kg
SB-15(7-8)-20200731	460-214780-12	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	1300	Y	Y	JA		J	0	0	ug/kg
SB-15(7-8)-20200731	460-214780-12	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.056	mg/kg
SB-15(7-8)-20200731	460-214780-12	3-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-15(7-8)-20200731	460-214780-12	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0094	mg/kg
SB-15(7-8)-20200731	460-214780-12	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-15(7-8)-20200731	460-214780-12	BENZO(A)ANTHRACENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.013	mg/kg
SB-15(7-8)-20200731	460-214780-12	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.015	mg/kg
SB-15(7-8)-20200731	460-214780-12	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.013	mg/kg
SB-15(7-8)-20200731	460-214780-12	4-NITROANILINE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.043	mg/kg
SB-15(7-8)-20200731	460-214780-12	4-NITROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.75	0.061	mg/kg
SB-15(7-8)-20200731	460-214780-12	ACENAPHTHENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.027	mg/kg
SB-15(7-8)-20200731	460-214780-12	ACENAPHTHYLENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0038	mg/kg
SB-15(7-8)-20200731	460-214780-12	ACETOPHENONE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.018	mg/kg
SB-15(7-8)-20200731	460-214780-12	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.30	0.060	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.016	mg/kg
SB-15(7-8)-20200731	460-214780-12	2-Methylnaphthalene	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	BENZO(A)PYRENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.0099	mg/kg
SB-15(7-8)-20200731	460-214780-12	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.0096	mg/kg
SB-15(7-8)-20200731	460-214780-12	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.011	mg/kg
SB-15(7-8)-20200731	460-214780-12	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.0073	mg/kg
SB-15(7-8)-20200731	460-214780-12	ANTHRACENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.011	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,4-DINITROTOLUENE	8/5/2020		Y	N	UT	UJ	UJ	0.075	0.040	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.012	mg/kg
SB-15(7-8)-20200731	460-214780-12	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	UT	UJ	UJ	0.11	0.010	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.025	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.038	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.15	0.048	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,4-DICHLOROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.15	0.024	mg/kg
SB-15(7-8)-20200731	460-214780-12	2-NITROANILINE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.014	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,4-DINITROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.30	0.18	mg/kg
SB-15(7-8)-20200731	460-214780-12	2-NITROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.037	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,6-DINITROTOLUENE	8/5/2020		Y	N	UT	UJ	UJ	0.075	0.027	mg/kg
SB-15(7-8)-20200731	460-214780-12	2-CHLORONAPHTHALENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.017	mg/kg
SB-15(7-8)-20200731	460-214780-12	2-CHLOROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.013	mg/kg
SB-15(7-8)-20200731	460-214780-12	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.023	mg/kg
SB-15(7-8)-20200731	460-214780-12	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.014	mg/kg
SB-15(7-8)-20200731	460-214780-12	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.017	mg/kg
SB-15(7-8)-20200731	460-214780-12	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.016	mg/kg
SB-15(7-8)-20200731	460-214780-12	NITROBENZENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.0089	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.021	mg/kg
SB-15(7-8)-20200731	460-214780-12	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0049	mg/kg
SB-15(7-8)-20200731	460-214780-12	PYRENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0092	mg/kg
SB-15(7-8)-20200731	460-214780-12	PHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.014	mg/kg
SB-15(7-8)-20200731	460-214780-12	PHENANTHRENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0065	mg/kg
SB-15(7-8)-20200731	460-214780-12	PENTACHLOROPHENOL	8/5/2020		Y	N	UT	UJ	UJ	0.30	0.076	mg/kg
SB-15(7-8)-20200731	460-214780-12	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.027	mg/kg
SB-15(7-8)-20200731	460-214780-12	NAPHTHALENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0064	mg/kg
SB-15(7-8)-20200731	460-214780-12	ISOPHORONE	8/5/2020		Y	N	UT	UJ	UJ	0.15	0.11	mg/kg
SB-15(7-8)-20200731	460-214780-12	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.014	mg/kg
SB-15(7-8)-20200731	460-214780-12	HEXACHLOROETHANE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.013	mg/kg
SB-15(7-8)-20200731	460-214780-12	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.033	mg/kg
SB-15(7-8)-20200731	460-214780-12	HEXACHLOROBUTADIENE	8/5/2020		Y	N	UT	UJ	UJ	0.075	0.0079	mg/kg
SB-15(7-8)-20200731	460-214780-12	HEXACHLOROBENZENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.018	mg/kg
SB-15(7-8)-20200731	460-214780-12	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.016	mg/kg
SB-15(7-8)-20200731	460-214780-12	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0067	mg/kg
SB-15(7-8)-20200731	460-214780-12	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.020	mg/kg
SB-15(7-8)-20200731	460-214780-12	CAPROLACTAM	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.058	mg/kg
SB-15(7-8)-20200731	460-214780-12	CARBAZOLE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.014	mg/kg
SB-15(7-8)-20200731	460-214780-12	FLUORENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0050	mg/kg
SB-15(7-8)-20200731	460-214780-12	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0071	mg/kg
SB-15(7-8)-20200731	460-214780-12	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	UT	UJ	UJ	0.037	0.013	mg/kg
SB-15(7-8)-20200731	460-214780-12	DIBENZOFURAN	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0052	mg/kg
SB-15(7-8)-20200731	460-214780-12	DIETHYL PHTHALATE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0054	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-15(7-8)-20200731	460-214780-12	DIMETHYL PHTHALATE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.084	mg/kg
SB-15(7-8)-20200731	460-214780-12	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.065	mg/kg
SB-15(7-8)-20200731	460-214780-12	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.020	mg/kg
SB-15(7-8)-20200731	460-214780-12	FLUORANTHENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.013	mg/kg
SB-15(7-8)-20200731	460-214780-12	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.029	mg/kg
SB-15(7-8)-20200731	460-214780-12	CHRYSENE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.0063	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0098	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.038	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-16(2-3)-20200731	460-214780-13	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-16(2-3)-20200731	460-214780-13	3-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.042	mg/kg
SB-16(2-3)-20200731	460-214780-13	CHRYSENE	8/5/2020		Y	N	U		U	0.38	0.0064	mg/kg
SB-16(2-3)-20200731	460-214780-13	FLUORANTHENE	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-16(2-3)-20200731	460-214780-13	CARBAZOLE	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-16(2-3)-20200731	460-214780-13	ACETOPHENONE	8/5/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-16(2-3)-20200731	460-214780-13	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.38	0.0039	mg/kg
SB-16(2-3)-20200731	460-214780-13	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-16(2-3)-20200731	460-214780-13	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.76	0.061	mg/kg
SB-16(2-3)-20200731	460-214780-13	4-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-16(2-3)-20200731	460-214780-13	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-16(2-3)-20200731	460-214780-13	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-16(2-3)-20200731	460-214780-13	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-16(2-3)-20200731	460-214780-13	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-16(2-3)-20200731	460-214780-13	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U	UJ	UJ	0.38	0.0068	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U		U	0.30	0.061	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZALDEHYDE	8/5/2020		Y	N	U	UJ	UJ	0.38	0.016	mg/kg
SB-16(2-3)-20200731	460-214780-13	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.057	mg/kg
SB-16(2-3)-20200731	460-214780-13	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-16(2-3)-20200731	460-214780-13	2-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-16(2-3)-20200731	460-214780-13	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0074	mg/kg
SB-16(2-3)-20200731	460-214780-13	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-16(2-3)-20200731	460-214780-13	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.38	0.0050	mg/kg
SB-16(2-3)-20200731	460-214780-13	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.38	0.029	mg/kg
SB-16(2-3)-20200731	460-214780-13	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-16(2-3)-20200731	460-214780-13	ANTHRACENE	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-16(2-3)-20200731	460-214780-13	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.016	mg/kg
SB-16(2-3)-20200731	460-214780-13	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0095	mg/kg
SB-16(2-3)-20200731	460-214780-13	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-16(2-3)-20200731	460-214780-13	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.076	0.027	mg/kg
SB-16(2-3)-20200731	460-214780-13	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.048	mg/kg
SB-16(2-3)-20200731	460-214780-13	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-16(2-3)-20200731	460-214780-13	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-16(2-3)-20200731	460-214780-13	2,4-DINITROPHENOL	8/5/2020		Y	N	U		U	0.30	0.19	mg/kg
SB-16(2-3)-20200731	460-214780-13	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.038	0.027	mg/kg
SB-16(2-3)-20200731	460-214780-13	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.067	mg/kg
SB-16(2-3)-20200731	460-214780-13	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-16(2-3)-20200731	460-214780-13	PHENANTHRENE	8/5/2020		Y	N	U		U	0.38	0.0066	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.076	0.041	mg/kg
SB-16(2-3)-20200731	460-214780-13	PHENOL	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-16(2-3)-20200731	460-214780-13	PYRENE	8/5/2020		Y	N	U		U	0.38	0.0094	mg/kg
SB-16(2-3)-20200731	460-214780-13	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-16(2-3)-20200731	460-214780-13	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-16(2-3)-20200731	460-214780-13	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.38	0.0053	mg/kg
SB-16(2-3)-20200731	460-214780-13	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-16(2-3)-20200731	460-214780-13	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.30	0.077	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-16(2-3)-20200731	460-214780-13	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	3200	Y	Y	JA		J	0	0	ug/kg
SB-16(2-3)-20200731	460-214780-13	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.0055	mg/kg
SB-16(2-3)-20200731	460-214780-13	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.086	mg/kg
SB-16(2-3)-20200731	460-214780-13	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.38	0.0072	mg/kg
SB-16(2-3)-20200731	460-214780-13	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-16(2-3)-20200731	460-214780-13	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-16(2-3)-20200731	460-214780-13	CAPROLACTAM	8/5/2020		Y	N	U		U	0.38	0.059	mg/kg
SB-16(2-3)-20200731	460-214780-13	FLUORENE	8/5/2020		Y	N	U		U	0.38	0.0051	mg/kg
SB-16(2-3)-20200731	460-214780-13	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-16(2-3)-20200731	460-214780-13	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.38	0.033	mg/kg
SB-16(2-3)-20200731	460-214780-13	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-16(2-3)-20200731	460-214780-13	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-16(2-3)-20200731	460-214780-13	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.038	0.015	mg/kg
SB-16(2-3)-20200731	460-214780-13	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-16(2-3)-20200731	460-214780-13	NAPHTHALENE	8/5/2020		Y	N	U		U	0.38	0.0065	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(2-3)-20200731	460-214780-13	NITROBENZENE	8/5/2020		Y	N	U		U	0.038	0.0091	mg/kg
SB-16(2-3)-20200731	460-214780-13	HEXACHLOROBUTADIENE	8/5/2020		Y	N	UT	UJ	UJ	0.076	0.0080	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZALDEHYDE	8/5/2020		Y	N	U	UJ	UJ	0.37	0.016	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.037	0.0098	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0095	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0093	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0072	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CAPROLACTAM	8/5/2020		Y	N	U		U	0.37	0.057	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.37	0.0049	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U	UJ	UJ	0.37	0.0067	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.019	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	3-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.041	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.056	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U		U	0.30	0.060	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ANTHRACENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.37	0.023	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	4-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.74	0.060	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.37	0.027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.37	0.0038	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ACETOPHENONE	8/5/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CARBAZOLE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	NITROBENZENE	8/5/2020		Y	N	U		U	0.037	0.0088	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,4-DINITROPHENOL	8/5/2020		Y	N	U		U	0.30	0.18	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.037	0.014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	NAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.0064	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.025	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.37	0.0070	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.30	0.075	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-16(5.5-6.5)-2020073	460-214780-14	PHENANTHRENE	8/5/2020		Y	N	U		U	0.37	0.0065	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PHENOL	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	PYRENE	8/5/2020		Y	N	U		U	0.37	0.0091	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	830	Y	Y	JA		J	0	0	ug/kg
SB-16(5.5-6.5)-2020073	460-214780-14	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.37	0.0052	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.0053	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.084	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.065	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.37	0.019	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	FLUORANTHENE	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.37	0.032	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.037	0.017	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CHRYSENE	8/5/2020		Y	N	U		U	0.37	0.0062	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.040	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.37	0.010	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	FLUORENE	8/5/2020		Y	N	U		U	0.37	0.0050	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	HEXACHLOROBUTADIENE	8/5/2020		Y	N	UT	UJ	UJ	0.074	0.0078	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PYRENE	8/5/2020		Y	N	U		U	0.38	0.0095	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PHENOL	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.017	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ANTHRACENE	8/5/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.058	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	3-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U		U	0.31	0.062	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.77	0.062	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.38	0.0040	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.0055	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	790	Y	Y	JA		J	0	0	ug/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.38	0.038	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.025	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0097	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2,4-DINITROPHENOL	8/5/2020		Y	N	U		U	0.31	0.19	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.077	0.041	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.077	0.028	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.049	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.038	0.015	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ACETOPHENONE	8/5/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	FLUORANTHENE	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	FLUORENE	8/5/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.087	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.38	0.0054	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	NAPHTHALENE	8/5/2020		Y	N	U		U	0.38	0.0066	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	NITROBENZENE	8/5/2020		Y	N	U		U	0.038	0.0092	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.38	0.0073	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.31	0.078	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.38	0.034	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(3.5-4.5)-2020073	460-214780-15	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.38	0.0051	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZALDEHYDE	8/5/2020		Y	N	U	UJ	UJ	0.38	0.017	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.038	0.010	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0099	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.067	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	PHENANTHRENE	8/5/2020		Y	N	U		U	0.38	0.0067	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U	UJ	UJ	0.38	0.0069	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CAPROLACTAM	8/5/2020		Y	N	U		U	0.38	0.060	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CARBAZOLE	8/5/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CHRYSENE	8/5/2020		Y	N	U		U	0.38	0.0065	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0075	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	HEXACHLOROBUTADIENE	8/5/2020		Y	N	UT	UJ	UJ	0.077	0.0081	mg/kg
SB-20(6-7)-20200731	460-214780-16	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	510	Y	Y	JA		J	0	0	ug/kg
SB-20(6-7)-20200731	460-214780-16	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.37	0.0052	mg/kg
SB-20(6-7)-20200731	460-214780-16	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-20(6-7)-20200731	460-214780-16	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0073	mg/kg
SB-20(6-7)-20200731	460-214780-16	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-20(6-7)-20200731	460-214780-16	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.37	0.0049	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-20(6-7)-20200731	460-214780-16	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-20(6-7)-20200731	460-214780-16	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.020	mg/kg
SB-20(6-7)-20200731	460-214780-16	CARBAZOLE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-20(6-7)-20200731	460-214780-16	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0096	mg/kg
SB-20(6-7)-20200731	460-214780-16	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-20(6-7)-20200731	460-214780-16	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U	UJ	UJ	0.37	0.0067	mg/kg
SB-20(6-7)-20200731	460-214780-16	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.0054	mg/kg
SB-20(6-7)-20200731	460-214780-16	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.084	mg/kg
SB-20(6-7)-20200731	460-214780-16	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.065	mg/kg
SB-20(6-7)-20200731	460-214780-16	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.37	0.020	mg/kg
SB-20(6-7)-20200731	460-214780-16	FLUORANTHENE	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-20(6-7)-20200731	460-214780-16	FLUORENE	8/5/2020		Y	N	U		U	0.37	0.0050	mg/kg
SB-20(6-7)-20200731	460-214780-16	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.037	0.018	mg/kg
SB-20(6-7)-20200731	460-214780-16	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.37	0.032	mg/kg
SB-20(6-7)-20200731	460-214780-16	CHRYSENE	8/5/2020		Y	N	U		U	0.37	0.0063	mg/kg
SB-20(6-7)-20200731	460-214780-16	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-20(6-7)-20200731	460-214780-16	BENZALDEHYDE	8/5/2020		Y	N	U	UJ	UJ	0.37	0.016	mg/kg
SB-20(6-7)-20200731	460-214780-16	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0093	mg/kg
SB-20(6-7)-20200731	460-214780-16	ANTHRACENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-20(6-7)-20200731	460-214780-16	ACETOPHENONE	8/5/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-20(6-7)-20200731	460-214780-16	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.37	0.0038	mg/kg
SB-20(6-7)-20200731	460-214780-16	4-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.043	mg/kg
SB-20(6-7)-20200731	460-214780-16	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.37	0.027	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	CAPROLACTAM	8/5/2020		Y	N	U		U	0.37	0.058	mg/kg
SB-20(6-7)-20200731	460-214780-16	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.75	0.060	mg/kg
SB-20(6-7)-20200731	460-214780-16	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.037	0.0099	mg/kg
SB-20(6-7)-20200731	460-214780-16	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-20(6-7)-20200731	460-214780-16	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U		U	0.30	0.060	mg/kg
SB-20(6-7)-20200731	460-214780-16	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-20(6-7)-20200731	460-214780-16	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-20(6-7)-20200731	460-214780-16	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-20(6-7)-20200731	460-214780-16	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-20(6-7)-20200731	460-214780-16	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.37	0.023	mg/kg
SB-20(6-7)-20200731	460-214780-16	PHENANTHRENE	8/5/2020		Y	N	U		U	0.37	0.0065	mg/kg
SB-20(6-7)-20200731	460-214780-16	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.037	0.014	mg/kg
SB-20(6-7)-20200731	460-214780-16	3-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-20(6-7)-20200731	460-214780-16	NAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.0064	mg/kg
SB-20(6-7)-20200731	460-214780-16	NITROBENZENE	8/5/2020		Y	N	U		U	0.037	0.0089	mg/kg
SB-20(6-7)-20200731	460-214780-16	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-20(6-7)-20200731	460-214780-16	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.37	0.0071	mg/kg
SB-20(6-7)-20200731	460-214780-16	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.30	0.076	mg/kg
SB-20(6-7)-20200731	460-214780-16	PHENOL	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-20(6-7)-20200731	460-214780-16	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.075	0.040	mg/kg
SB-20(6-7)-20200731	460-214780-16	PYRENE	8/5/2020		Y	N	U		U	0.37	0.0092	mg/kg
SB-20(6-7)-20200731	460-214780-16	HEXACHLOROBUTADIENE	8/5/2020		Y	N	UT	UJ	UJ	0.075	0.0079	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.038	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.025	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-20(6-7)-20200731	460-214780-16	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.37	0.012	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.048	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,4-DINITROPHENOL	8/5/2020		Y	N	U		U	0.30	0.18	mg/kg
SB-20(6-7)-20200731	460-214780-16	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.056	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-20(6-7)-20200731	460-214780-16	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-20(6-7)-20200731	460-214780-16	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-20(6-7)-20200731	460-214780-16	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.37	0.010	mg/kg
SB-20(6-7)-20200731	460-214780-16	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-20(6-7)-20200731	460-214780-16	2-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-20(6-7)-20200731	460-214780-16	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-20(6-7)-20200731	460-214780-16	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	2300	Y	Y	JA		J	0	0	ug/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.065	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PYRENE	8/5/2020		Y	N	U		U	0.37	0.0092	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	3-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.30	0.060	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ACETOPHENONE	8/5/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.37	0.026	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.37	0.010	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.37	0.023	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.75	0.060	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.37	0.027	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.37	0.0038	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PHENANTHRENE	8/5/2020		Y	N	U		U	0.37	0.0065	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.30	0.076	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.038	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.025	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.016	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.30	0.18	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.075	0.040	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.056	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.0053	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.084	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.37	0.0071	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	NITROBENZENE	8/5/2020		Y	N	U		U	0.037	0.0089	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	NAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.0064	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.37	0.0052	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.037	0.014	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.037	0.018	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.37	0.032	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.075	0.0078	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ANTHRACENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	FLUORENE	8/5/2020		Y	N	U		U	0.37	0.0050	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.37	0.020	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	PHENOL	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0095	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	FLUORANTHENE	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.037	0.0098	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0072	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.37	0.0049	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(1.5-2.5)-20200731	460-214780-1	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.37	0.0067	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.019	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CAPROLACTAM	8/5/2020		Y	N	U		U	0.37	0.057	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0093	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CHRYSENE	8/5/2020		Y	N	U		U	0.37	0.0062	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CARBAZOLE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-3(5-6)-20200731	460-214780-2	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	3100	Y	Y	JA		J	0	0	ug/kg
SB-3(5-6)-20200731	460-214780-2	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.36	0.023	mg/kg
SB-3(5-6)-20200731	460-214780-2	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-3(5-6)-20200731	460-214780-2	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-3(5-6)-20200731	460-214780-2	3-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-3(5-6)-20200731	460-214780-2	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.059	mg/kg
SB-3(5-6)-20200731	460-214780-2	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-3(5-6)-20200731	460-214780-2	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-3(5-6)-20200731	460-214780-2	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-3(5-6)-20200731	460-214780-2	4-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.042	mg/kg
SB-3(5-6)-20200731	460-214780-2	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.74	0.059	mg/kg
SB-3(5-6)-20200731	460-214780-2	2-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-3(5-6)-20200731	460-214780-2	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.36	0.0038	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.023	mg/kg
SB-3(5-6)-20200731	460-214780-2	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-3(5-6)-20200731	460-214780-2	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-3(5-6)-20200731	460-214780-2	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-3(5-6)-20200731	460-214780-2	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-3(5-6)-20200731	460-214780-2	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.36	0.016	mg/kg
SB-3(5-6)-20200731	460-214780-2	ACETOPHENONE	8/5/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-3(5-6)-20200731	460-214780-2	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-3(5-6)-20200731	460-214780-2	NAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-3(5-6)-20200731	460-214780-2	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-3(5-6)-20200731	460-214780-2	FLUORANTHENE	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-3(5-6)-20200731	460-214780-2	FLUORENE	8/5/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-3(5-6)-20200731	460-214780-2	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-3(5-6)-20200731	460-214780-2	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.074	0.0077	mg/kg
SB-3(5-6)-20200731	460-214780-2	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.36	0.032	mg/kg
SB-3(5-6)-20200731	460-214780-2	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-3(5-6)-20200731	460-214780-2	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.064	mg/kg
SB-3(5-6)-20200731	460-214780-2	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg

SDG: 4602147801

Analytical Method	SW8270D										
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-3(5-6)-20200731	460-214780-2	NITROBENZENE	8/5/2020		Y	N	U		U	0.036	0.0087	mg/kg
SB-3(5-6)-20200731	460-214780-2	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.36	0.0070	mg/kg
SB-3(5-6)-20200731	460-214780-2	PYRENE	8/5/2020		Y	N	U		U	0.36	0.0090	mg/kg
SB-3(5-6)-20200731	460-214780-2	PHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-3(5-6)-20200731	460-214780-2	PHENANTHRENE	8/5/2020		Y	N	U		U	0.36	0.0064	mg/kg
SB-3(5-6)-20200731	460-214780-2	ANTHRACENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-3(5-6)-20200731	460-214780-2	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-3(5-6)-20200731	460-214780-2	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0094	mg/kg
SB-3(5-6)-20200731	460-214780-2	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-3(5-6)-20200731	460-214780-2	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.036	0.0097	mg/kg
SB-3(5-6)-20200731	460-214780-2	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.083	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0071	mg/kg
SB-3(5-6)-20200731	460-214780-2	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-3(5-6)-20200731	460-214780-2	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-3(5-6)-20200731	460-214780-2	CAPROLACTAM	8/5/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-3(5-6)-20200731	460-214780-2	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-3(5-6)-20200731	460-214780-2	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.36	0.0066	mg/kg
SB-3(5-6)-20200731	460-214780-2	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.0053	mg/kg
SB-3(5-6)-20200731	460-214780-2	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-3(5-6)-20200731	460-214780-2	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-3(5-6)-20200731	460-214780-2	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.36	0.0051	mg/kg
SB-3(5-6)-20200731	460-214780-2	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-3(5-6)-20200731	460-214780-2	CHRYSENE	8/5/2020		Y	N	U		U	0.36	0.0061	mg/kg
SB-3(5-6)-20200731	460-214780-2	CARBAZOLE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-4(2-3)-20200731	460-214780-3	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-4(2-3)-20200731	460-214780-3	PHENANTHRENE	8/5/2020		Y	N	U		U	0.38	0.0066	mg/kg
SB-4(2-3)-20200731	460-214780-3	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.30	0.077	mg/kg
SB-4(2-3)-20200731	460-214780-3	PHENOL	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(2-3)-20200731	460-214780-3	PYRENE	8/5/2020		Y	N	U		U	0.38	0.0093	mg/kg
SB-4(2-3)-20200731	460-214780-3	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.38	0.0072	mg/kg
SB-4(2-3)-20200731	460-214780-3	NAPHTHALENE	8/5/2020	0.024	Y	Y	J		J	0.38	0.0065	mg/kg
SB-4(2-3)-20200731	460-214780-3	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.038	0.027	mg/kg
SB-4(2-3)-20200731	460-214780-3	NITROBENZENE	8/5/2020		Y	N	U		U	0.038	0.0090	mg/kg
SB-4(2-3)-20200731	460-214780-3	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	3300	Y	Y	JA		J	0	0	ug/kg
SB-4(2-3)-20200731	460-214780-3	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-4(2-3)-20200731	460-214780-3	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0095	mg/kg
SB-4(2-3)-20200731	460-214780-3	ANTHRACENE	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-4(2-3)-20200731	460-214780-3	ACETOPHENONE	8/5/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-4(2-3)-20200731	460-214780-3	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.038	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-4(2-3)-20200731	460-214780-3	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.76	0.061	mg/kg
SB-4(2-3)-20200731	460-214780-3	4-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-4(2-3)-20200731	460-214780-3	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.38	0.023	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-4(2-3)-20200731	460-214780-3	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-4(2-3)-20200731	460-214780-3	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-4(2-3)-20200731	460-214780-3	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.38	0.0039	mg/kg
SB-4(2-3)-20200731	460-214780-3	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0097	mg/kg
SB-4(2-3)-20200731	460-214780-3	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-4(2-3)-20200731	460-214780-3	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.38	0.016	mg/kg
SB-4(2-3)-20200731	460-214780-3	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-4(2-3)-20200731	460-214780-3	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.38	0.0050	mg/kg
SB-4(2-3)-20200731	460-214780-3	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.38	0.029	mg/kg
SB-4(2-3)-20200731	460-214780-3	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-4(2-3)-20200731	460-214780-3	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.38	0.0068	mg/kg
SB-4(2-3)-20200731	460-214780-3	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-4(2-3)-20200731	460-214780-3	CHRYSENE	8/5/2020		Y	N	U		U	0.38	0.0064	mg/kg
SB-4(2-3)-20200731	460-214780-3	CAPROLACTAM	8/5/2020		Y	N	U		U	0.38	0.059	mg/kg
SB-4(2-3)-20200731	460-214780-3	CARBAZOLE	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(2-3)-20200731	460-214780-3	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-4(2-3)-20200731	460-214780-3	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0074	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-4(2-3)-20200731	460-214780-3	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.038	0.015	mg/kg
SB-4(2-3)-20200731	460-214780-3	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-4(2-3)-20200731	460-214780-3	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.38	0.033	mg/kg
SB-4(2-3)-20200731	460-214780-3	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.076	0.0080	mg/kg

SDG: 4602147801

Analytical Method	SW8270D											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-4(2-3)-20200731	460-214780-3	FLUORENE	8/5/2020		Y	N	U		U	0.38	0.0051	mg/kg
SB-4(2-3)-20200731	460-214780-3	FLUORANTHENE	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-4(2-3)-20200731	460-214780-3	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-4(2-3)-20200731	460-214780-3	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.066	mg/kg
SB-4(2-3)-20200731	460-214780-3	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.085	mg/kg
SB-4(2-3)-20200731	460-214780-3	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.0054	mg/kg
SB-4(2-3)-20200731	460-214780-3	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.38	0.0053	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.025	mg/kg
SB-4(2-3)-20200731	460-214780-3	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-4(2-3)-20200731	460-214780-3	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-4(2-3)-20200731	460-214780-3	3-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.042	mg/kg
SB-4(2-3)-20200731	460-214780-3	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.057	mg/kg
SB-4(2-3)-20200731	460-214780-3	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-4(2-3)-20200731	460-214780-3	2-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(2-3)-20200731	460-214780-3	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(2-3)-20200731	460-214780-3	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.016	mg/kg
SB-4(2-3)-20200731	460-214780-3	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-4(2-3)-20200731	460-214780-3	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.30	0.061	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.076	0.027	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.076	0.040	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.30	0.18	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-4(2-3)-20200731	460-214780-3	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.048	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(2-3)-20200731	460-214780-3	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	2200	Y	Y	JA		J	0	0	ug/kg
SB-4(6-7)-20200731	460-214780-4	2-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(6-7)-20200731	460-214780-4	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.086	mg/kg
SB-4(6-7)-20200731	460-214780-4	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.0055	mg/kg
SB-4(6-7)-20200731	460-214780-4	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.38	0.0053	mg/kg
SB-4(6-7)-20200731	460-214780-4	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.016	mg/kg
SB-4(6-7)-20200731	460-214780-4	CHRYSENE	8/5/2020		Y	N	U		U	0.38	0.0064	mg/kg
SB-4(6-7)-20200731	460-214780-4	FLUORANTHENE	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-4(6-7)-20200731	460-214780-4	CAPROLACTAM	8/5/2020		Y	N	U		U	0.38	0.059	mg/kg
SB-4(6-7)-20200731	460-214780-4	FLUORENE	8/5/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-4(6-7)-20200731	460-214780-4	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.38	0.0069	mg/kg
SB-4(6-7)-20200731	460-214780-4	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-4(6-7)-20200731	460-214780-4	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-4(6-7)-20200731	460-214780-4	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.38	0.0050	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0075	mg/kg
SB-4(6-7)-20200731	460-214780-4	CARBAZOLE	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(6-7)-20200731	460-214780-4	NAPHTHALENE	8/5/2020		Y	N	U		U	0.38	0.0066	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.38	0.017	mg/kg
SB-4(6-7)-20200731	460-214780-4	PYRENE	8/5/2020		Y	N	U		U	0.38	0.0095	mg/kg
SB-4(6-7)-20200731	460-214780-4	PHENOL	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg

SDG: 4602147801

Analytical Method	SW8270D											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(6-7)-20200731	460-214780-4	PHENANTHRENE	8/5/2020		Y	N	U		U	0.38	0.0067	mg/kg
SB-4(6-7)-20200731	460-214780-4	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.31	0.078	mg/kg
SB-4(6-7)-20200731	460-214780-4	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.38	0.0073	mg/kg
SB-4(6-7)-20200731	460-214780-4	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.38	0.067	mg/kg
SB-4(6-7)-20200731	460-214780-4	NITROBENZENE	8/5/2020		Y	N	U		U	0.038	0.0091	mg/kg
SB-4(6-7)-20200731	460-214780-4	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-4(6-7)-20200731	460-214780-4	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-4(6-7)-20200731	460-214780-4	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.038	0.015	mg/kg
SB-4(6-7)-20200731	460-214780-4	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-4(6-7)-20200731	460-214780-4	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.38	0.033	mg/kg
SB-4(6-7)-20200731	460-214780-4	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.077	0.0081	mg/kg
SB-4(6-7)-20200731	460-214780-4	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-4(6-7)-20200731	460-214780-4	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-4(6-7)-20200731	460-214780-4	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-4(6-7)-20200731	460-214780-4	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-4(6-7)-20200731	460-214780-4	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-4(6-7)-20200731	460-214780-4	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(6-7)-20200731	460-214780-4	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-4(6-7)-20200731	460-214780-4	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-4(6-7)-20200731	460-214780-4	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.077	0.027	mg/kg
SB-4(6-7)-20200731	460-214780-4	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.057	mg/kg
SB-4(6-7)-20200731	460-214780-4	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.31	0.19	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-4(6-7)-20200731	460-214780-4	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-4(6-7)-20200731	460-214780-4	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.049	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-4(6-7)-20200731	460-214780-4	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-4(6-7)-20200731	460-214780-4	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.038	0.0098	mg/kg
SB-4(6-7)-20200731	460-214780-4	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-4(6-7)-20200731	460-214780-4	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.077	0.041	mg/kg
SB-4(6-7)-20200731	460-214780-4	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0096	mg/kg
SB-4(6-7)-20200731	460-214780-4	3-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-4(6-7)-20200731	460-214780-4	ANTHRACENE	8/5/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-4(6-7)-20200731	460-214780-4	ACETOPHENONE	8/5/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-4(6-7)-20200731	460-214780-4	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.38	0.0039	mg/kg
SB-4(6-7)-20200731	460-214780-4	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-4(6-7)-20200731	460-214780-4	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.77	0.062	mg/kg
SB-4(6-7)-20200731	460-214780-4	4-NITROANILINE	8/5/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-4(6-7)-20200731	460-214780-4	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.013	mg/kg
SB-4(6-7)-20200731	460-214780-4	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-4(6-7)-20200731	460-214780-4	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-4(6-7)-20200731	460-214780-4	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-4(6-7)-20200731	460-214780-4	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.31	0.062	mg/kg
SB-4(6-7)-20200731	460-214780-4	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-4(6-7)-20200731	460-214780-4	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.038	0.010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	2600	Y	Y	JA		J	0	0	ug/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.081	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.0052	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.36	0.0050	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CHRYSENE	8/5/2020		Y	N	U		U	0.36	0.0061	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CARBAZOLE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CAPROLACTAM	8/5/2020		Y	N	U		U	0.36	0.056	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.063	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0070	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	NAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.0062	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.36	0.0065	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ISOPHORONE	8/5/2020		Y	N	U		U	0.14	0.10	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0093	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PYRENE	8/5/2020		Y	N	U		U	0.36	0.0089	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PHENANTHRENE	8/5/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.29	0.073	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.36	0.0069	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	NITROBENZENE	8/5/2020		Y	N	U		U	0.036	0.0086	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	PHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.36	0.031	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.073	0.0076	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	FLUORENE	8/5/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	FLUORANTHENE	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.14	0.046	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.073	0.026	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.36	0.016	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.14	0.023	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.073	0.039	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.024	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.0099	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.036	0.0095	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	3-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.040	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-7(2.5-3.5)-20200731	460-214780-5	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ANTHRACENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.012	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ATRAZINE	8/5/2020		Y	N	U		U	0.14	0.0090	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ACETOPHENONE	8/5/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.36	0.0037	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.73	0.058	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.36	0.022	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.058	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.14	0.054	mg/kg
SB-8(3-4)-20200731	460-214780-6	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	1600	Y	Y	JA		J	0	0	ug/kg
SB-8(3-4)-20200731	460-214780-6	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-8(3-4)-20200731	460-214780-6	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-8(3-4)-20200731	460-214780-6	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.064	mg/kg
SB-8(3-4)-20200731	460-214780-6	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.083	mg/kg
SB-8(3-4)-20200731	460-214780-6	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.0053	mg/kg
SB-8(3-4)-20200731	460-214780-6	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.36	0.0051	mg/kg

SDG: 4602147801

Analytical Method	SW8270D											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-8(3-4)-20200731	460-214780-6	CHRYSENE	8/5/2020		Y	N	U		U	0.36	0.0061	mg/kg
SB-8(3-4)-20200731	460-214780-6	CARBAZOLE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-8(3-4)-20200731	460-214780-6	CAPROLACTAM	8/5/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-8(3-4)-20200731	460-214780-6	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-8(3-4)-20200731	460-214780-6	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.36	0.0066	mg/kg
SB-8(3-4)-20200731	460-214780-6	FLUORANTHENE	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-8(3-4)-20200731	460-214780-6	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0071	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-8(3-4)-20200731	460-214780-6	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-8(3-4)-20200731	460-214780-6	NITROBENZENE	8/5/2020		Y	N	U		U	0.036	0.0087	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-8(3-4)-20200731	460-214780-6	PYRENE	8/5/2020		Y	N	U		U	0.36	0.0090	mg/kg
SB-8(3-4)-20200731	460-214780-6	PHENANTHRENE	8/5/2020		Y	N	U		U	0.36	0.0064	mg/kg
SB-8(3-4)-20200731	460-214780-6	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.36	0.016	mg/kg
SB-8(3-4)-20200731	460-214780-6	PHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-8(3-4)-20200731	460-214780-6	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-8(3-4)-20200731	460-214780-6	FLUORENE	8/5/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-8(3-4)-20200731	460-214780-6	NAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-8(3-4)-20200731	460-214780-6	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-8(3-4)-20200731	460-214780-6	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-8(3-4)-20200731	460-214780-6	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.036	0.012	mg/kg

SDG: 4602147801

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.36	0.032	mg/kg
SB-8(3-4)-20200731	460-214780-6	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.074	0.0077	mg/kg
SB-8(3-4)-20200731	460-214780-6	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-8(3-4)-20200731	460-214780-6	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.36	0.0070	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.18	mg/kg
SB-8(3-4)-20200731	460-214780-6	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-8(3-4)-20200731	460-214780-6	2-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-8(3-4)-20200731	460-214780-6	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-8(3-4)-20200731	460-214780-6	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-8(3-4)-20200731	460-214780-6	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-8(3-4)-20200731	460-214780-6	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-8(3-4)-20200731	460-214780-6	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.023	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.036	0.0094	mg/kg
SB-8(3-4)-20200731	460-214780-6	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-8(3-4)-20200731	460-214780-6	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-8(3-4)-20200731	460-214780-6	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.036	0.0097	mg/kg
SB-8(3-4)-20200731	460-214780-6	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-8(3-4)-20200731	460-214780-6	3-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.041	mg/kg

SDG: 4602147801

Analytical Method	SW8270D										
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	ANTHRACENE	8/5/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-8(3-4)-20200731	460-214780-6	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.36	0.0038	mg/kg
SB-8(3-4)-20200731	460-214780-6	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-8(3-4)-20200731	460-214780-6	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.74	0.059	mg/kg
SB-8(3-4)-20200731	460-214780-6	4-NITROANILINE	8/5/2020		Y	N	U		U	0.36	0.042	mg/kg
SB-8(3-4)-20200731	460-214780-6	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.36	0.023	mg/kg
SB-8(3-4)-20200731	460-214780-6	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-8(3-4)-20200731	460-214780-6	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-8(3-4)-20200731	460-214780-6	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-8(3-4)-20200731	460-214780-6	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-8(3-4)-20200731	460-214780-6	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.29	0.059	mg/kg
SB-8(3-4)-20200731	460-214780-6	ACETOPHENONE	8/5/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-8(6-7)-20200731	460-214780-7	Aldol Condensation Product With 1st Highest Conc.	8/5/2020	1800	Y	Y	JA		J	0	0	ug/kg
SB-8(6-7)-20200731	460-214780-7	DI-N-BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.066	mg/kg
SB-8(6-7)-20200731	460-214780-7	CHRYSENE	8/5/2020		Y	N	U		U	0.37	0.0063	mg/kg
SB-8(6-7)-20200731	460-214780-7	DIMETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.085	mg/kg
SB-8(6-7)-20200731	460-214780-7	DIETHYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.0054	mg/kg
SB-8(6-7)-20200731	460-214780-7	DIBENZOFURAN	8/5/2020		Y	N	U		U	0.37	0.0052	mg/kg
SB-8(6-7)-20200731	460-214780-7	DIBENZ(A,H)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-8(6-7)-20200731	460-214780-7	CARBAZOLE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-8(6-7)-20200731	460-214780-7	CAPROLACTAM	8/5/2020		Y	N	U		U	0.37	0.058	mg/kg
SB-8(6-7)-20200731	460-214780-7	BIS(2-ETHYLHEXYL) PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.020	mg/kg
SB-8(6-7)-20200731	460-214780-7	BIS(2-CHLOROISOPROPYL) ETHER	8/5/2020		Y	N	U		U	0.37	0.0067	mg/kg
SB-8(6-7)-20200731	460-214780-7	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg

SDG: 4602147801

Analytical Method	SW8270D											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(6-7)-20200731	460-214780-7	BIPHENYL (DIPHENYL)	8/5/2020		Y	N	U		U	0.37	0.0049	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZYL BUTYL PHTHALATE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-8(6-7)-20200731	460-214780-7	DI-N-OCTYLPHTHALATE	8/5/2020		Y	N	U		U	0.37	0.020	mg/kg
SB-8(6-7)-20200731	460-214780-7	BIS(2-CHLOROETHOXY) METHANE	8/5/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-8(6-7)-20200731	460-214780-7	NAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.0064	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZALDEHYDE	8/5/2020		Y	N	UT	UJ	UJ	0.37	0.016	mg/kg
SB-8(6-7)-20200731	460-214780-7	4-CHLORO-3-METHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-8(6-7)-20200731	460-214780-7	PYRENE	8/5/2020		Y	N	U		U	0.37	0.0093	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZO(K)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0073	mg/kg
SB-8(6-7)-20200731	460-214780-7	PHENANTHRENE	8/5/2020		Y	N	U		U	0.37	0.0065	mg/kg
SB-8(6-7)-20200731	460-214780-7	PENTACHLOROPHENOL	8/5/2020		Y	N	U		U	0.30	0.076	mg/kg
SB-8(6-7)-20200731	460-214780-7	N-NITROSODIPHENYLAMINE	8/5/2020		Y	N	U		U	0.37	0.0071	mg/kg
SB-8(6-7)-20200731	460-214780-7	PHENOL	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-8(6-7)-20200731	460-214780-7	NITROBENZENE	8/5/2020		Y	N	U		U	0.037	0.0089	mg/kg
SB-8(6-7)-20200731	460-214780-7	FLUORANTHENE	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-8(6-7)-20200731	460-214780-7	ISOPHORONE	8/5/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-8(6-7)-20200731	460-214780-7	INDENO(1,2,3-C,D)PYRENE	8/5/2020		Y	N	U		U	0.037	0.015	mg/kg
SB-8(6-7)-20200731	460-214780-7	HEXACHLOROETHANE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-8(6-7)-20200731	460-214780-7	HEXACHLOROCYCLOPENTADIENE	8/5/2020		Y	N	U		U	0.37	0.033	mg/kg
SB-8(6-7)-20200731	460-214780-7	HEXACHLOROBUTADIENE	8/5/2020		Y	N	U		U	0.075	0.0079	mg/kg
SB-8(6-7)-20200731	460-214780-7	HEXACHLOROBENZENE	8/5/2020		Y	N	U		U	0.037	0.018	mg/kg
SB-8(6-7)-20200731	460-214780-7	FLUORENE	8/5/2020		Y	N	U		U	0.37	0.0051	mg/kg
SB-8(6-7)-20200731	460-214780-7	N-NITROSODI-N-PROPYLAMINE	8/5/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,4-DIMETHYLPHENOL	8/5/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZO(G,H,I)PERYLENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg

SDG: 4602147801

Analytical Method	SW8270D											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(6-7)-20200731	460-214780-7	2-Methylphenol (O-Cresol)	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-8(6-7)-20200731	460-214780-7	4-CHLOROPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-8(6-7)-20200731	460-214780-7	2-CHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-8(6-7)-20200731	460-214780-7	2-CHLORONAPHTHALENE	8/5/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,6-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-8(6-7)-20200731	460-214780-7	2-NITROPHENOL	8/5/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,4-DINITROPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.30	0.18	mg/kg
SB-8(6-7)-20200731	460-214780-7	2-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,4-DICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,4,6-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.15	0.048	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,4,5-TRICHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.038	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,3,4,6-TETRACHLOROPHENOL	8/5/2020		Y	N	U		U	0.37	0.025	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,4-DIOXANE (P-DIOXANE)	8/5/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	1,2,4,5-TETRACHLOROBENZENE	8/5/2020		Y	N	U		U	0.37	0.012	mg/kg
SB-8(6-7)-20200731	460-214780-7	2,4-DINITROTOLUENE	8/5/2020		Y	N	U		U	0.075	0.040	mg/kg
SB-8(6-7)-20200731	460-214780-7	ANTHRACENE	8/5/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZO(B)FLUORANTHENE	8/5/2020		Y	N	U		U	0.037	0.0096	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZO(A)PYRENE	8/5/2020		Y	N	U		U	0.037	0.0099	mg/kg
SB-8(6-7)-20200731	460-214780-7	BENZO(A)ANTHRACENE	8/5/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-8(6-7)-20200731	460-214780-7	2-Methylnaphthalene	8/5/2020		Y	N	U		U	0.37	0.010	mg/kg
SB-8(6-7)-20200731	460-214780-7	ATRAZINE	8/5/2020		Y	N	U		U	0.15	0.0094	mg/kg
SB-8(6-7)-20200731	460-214780-7	3,3'-DICHLOROBENZIDINE	8/5/2020		Y	N	U		U	0.15	0.056	mg/kg
SB-8(6-7)-20200731	460-214780-7	ACETOPHENONE	8/5/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-8(6-7)-20200731	460-214780-7	ACENAPHTHYLENE	8/5/2020		Y	N	U		U	0.37	0.0038	mg/kg
SB-8(6-7)-20200731	460-214780-7	ACENAPHTHENE	8/5/2020		Y	N	U		U	0.37	0.027	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(6-7)-20200731	460-214780-7	4-NITROPHENOL	8/5/2020		Y	N	U		U	0.75	0.061	mg/kg
SB-8(6-7)-20200731	460-214780-7	4-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.043	mg/kg
SB-8(6-7)-20200731	460-214780-7	4-METHYLPHENOL (P-CRESOL)	8/5/2020		Y	N	U		U	0.37	0.023	mg/kg
SB-8(6-7)-20200731	460-214780-7	4-CHLOROANILINE	8/5/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-8(6-7)-20200731	460-214780-7	4-BROMOPHENYL PHENYL ETHER	8/5/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-8(6-7)-20200731	460-214780-7	4,6-DINITRO-2-METHYLPHENOL	8/5/2020		Y	N	U	UJ	UJ	0.30	0.060	mg/kg
SB-8(6-7)-20200731	460-214780-7	3-NITROANILINE	8/5/2020		Y	N	U		U	0.37	0.042	mg/kg

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-2-20200731	460-214780-17	CYANIDE	8/7/2020		Y	N	U		U	0.23	0.12	mg/kg
SB-11(3-4)-20200731	460-214780-8	CYANIDE	8/7/2020		Y	N	U		U	0.24	0.12	mg/kg
SB-11(8-9)-20200731	460-214780-9	CYANIDE	8/7/2020		Y	N	U		U	0.24	0.13	mg/kg
SB-12(1.5-2.5)-2020073	460-214780-10	CYANIDE	8/7/2020		Y	N	U		U	0.24	0.12	mg/kg
SB-15(2.5-3.5)-2020073	460-214780-11	CYANIDE	8/7/2020		Y	N	U		U	0.23	0.12	mg/kg
SB-15(7-8)-20200731	460-214780-12	CYANIDE	8/7/2020		Y	N	U		U	0.24	0.12	mg/kg
SB-16(2-3)-20200731	460-214780-13	CYANIDE	8/7/2020		Y	N	U		U	0.25	0.13	mg/kg
SB-16(5.5-6.5)-2020073	460-214780-14	CYANIDE	8/7/2020		Y	N	U		U	0.24	0.12	mg/kg
SB-20(3.5-4.5)-2020073	460-214780-15	CYANIDE	8/7/2020		Y	N	U		U	0.23	0.12	mg/kg
SB-20(6-7)-20200731	460-214780-16	CYANIDE	8/7/2020		Y	N	U		U	0.26	0.13	mg/kg
SB-3(1.5-2.5)-20200731	460-214780-1	CYANIDE	8/7/2020		Y	N	U		U	0.23	0.12	mg/kg
SB-3(5-6)-20200731	460-214780-2	CYANIDE	8/7/2020		Y	N	U		U	0.22	0.11	mg/kg
SB-4(2-3)-20200731	460-214780-3	CYANIDE	8/7/2020		Y	N	U		U	0.25	0.13	mg/kg
SB-4(6-7)-20200731	460-214780-4	CYANIDE	8/7/2020		Y	N	U		U	0.24	0.12	mg/kg
SB-7(2.5-3.5)-20200731	460-214780-5	CYANIDE	8/7/2020		Y	N	UT		U	0.24	0.12	mg/kg

SDG: 4602147801

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-8(3-4)-20200731	460-214780-6	CYANIDE	8/7/2020		Y	N	UT		U	0.25	0.13	mg/kg
SB-8(6-7)-20200731	460-214780-7	CYANIDE	8/7/2020		Y	N	U		U	0.23	0.12	mg/kg

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-215088-1
Reviewer: Felomina Tanguilig, Stella Cuenco, and Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 5, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-9 (1-2)	460-215088-1	VOC, SVOC, Pesticide, PCB, PFAS
SB-17 (4-5)	460-215088-2	VOC, SVOC, Pesticide, PCB, PFAS
SB-17 (7-8)	460-215088-3	VOC, SVOC, Pesticide, PCB, PFAS
SB-18 (2-3)	460-215088-4	VOC, SVOC, Pesticide, PCB, PFAS
SB-18 (8-9)	460-215088-5	VOC, SVOC, Pesticide, PCB, PFAS
DUP-3	460-215088-6	VOC, SVOC, Pesticide, PCB, PFAS
FB	460-215088-7	VOC
SB-9 (1-2)MS	460-215088-1MS	PFAS
SB-9 (1-2)MSD	460-215088-1MSD	PFAS
SB-17 (7-8)MS	460-215088-3MS	PFAS
SB-17 (7-8)MSD	460-215088-3MSD	PFAS
DUP-3MS	460-215088-6MS	PFAS
DUP-3MSD	460-215088-6MSD	PFAS

Associated QC Samples(s):
Field/Trip Blanks: FB
Field Duplicate pair: SB-17 (4-5) and DUP-3

The above-listed soil and water samples were collected on August 4, 2020 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260C, semivolatile organic compounds (SVOC) by SW-846 method 8270D, organochlorine pesticides by SW-846 method 8081B, polychlorinated biphenyls (PCB) by SW-846 method 8082A, and perfluoroalkyl and polyfluoroalkyl substances (PFAS) by method 537 modified. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C,* SOP HW-24, Revision 4 (October 2014), the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation SW-846 Method 8270D,* SOP HW-35A, Revision 0 (June 2015), the USEPA Region 2 *Standard Operating Procedure for Validating Pesticide Compounds, Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B,* SOP HW-44, Revision 1.1 (December 2010), the USEPA Region 2 *Standard Operating Procedure for Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A,* SOP HW-45, Revision 1 (October 2006), the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-2017-002 (January 2017), and the Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (January 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- GC/Electron Capture Detector (GC/ECD) Instrument Performance Checks
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards/Labeled Compounds
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

VOC and SVOC

All criteria were met.

GC/ECD Instrument Performance Checks

Pesticide

All criteria were met.

LC/MS Instrument Performance Checks

PFAS

All criteria were met.

Initial and Continuing Calibrations

VOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/09/20	CCV-MS2	Chloromethane	53.8	SB-9 (1-2)	XX	UJ nondetects
		Vinyl chloride	40.6	SB-17 (4-5)	XX	UJ nondetects
		Bromomethane	44.6	SB-17 (7-8)	XX	UJ nondetects
		Chloroethane	49.1	SB-18 (2-3)	XX	UJ nondetects
		Trichlorofluoromethane	40.9		XX	UJ nondetects
		1,4-Dioxane	25.8		XX	UJ nondetects
08/11/20	CCV-MS6	Vinyl chloride	27.4	FB	XX	UJ nondetects
		Trichlorofluoromethane	23.4		XX	UJ nondetects
		1,4-Dioxane	67.0		XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The chloromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, and 1,4-dioxane results for the samples listed above were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/07/20	CCV-11	Benzaldehyde	54.0	DUP-3	XX	UJ nondetects
		2,2'-Oxybis(1-chloropropane)	36.6		XX	UJ nondetects
		Hexachlorobutadiene	22.4		XX	UJ nondetects
		Caprolactam	24.6		XX	UJ nondetects
		2-Nitroaniline	24.3		XX	UJ nondetects
		4-Nitroaniline	20.7		XX	UJ nondetects
		Hexachlorobenzene	20.7		XX	UJ nondetects
08/07/20	CCV-5	Benzaldehyde	42.4	SB-9 (1-2) SB-17 (4-5) SB-17 (7-8) SB-18 (2-3) SB-18 (8-9)	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzaldehyde, 2,2'-oxybis(1-chloropropane), hexachlorobutadiene, caprolactam, 2-nitroaniline, 4-nitroaniline, and hexachlorobenzene results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Pesticide, PCB, and PFAS

All criteria were met.

Blanks

VOC

Contamination was not detected in the method blanks.

Contamination was detected in the field blank sample FB for VOC analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x reporting limits (RL) (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
FB	Toluene	0.48 ug/L	RL	SB-9 (1-2) SB-17 (4-5) SB-17 (7-8) SB-18 (2-3) SB-18 (8-9) DUP-3

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

No samples were qualified since the associated sample results were nondetect.

SVOC, Pesticide, and PCB

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

PFAS

Contamination was detected in the associated pesticide method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 320-402050/1-A	Perfluorobutanoic acid Perfluorooctanesulfonic acid	0.0675 ug/Kg 0.628 ug/Kg	RL RL	SB-9 (1-2) SB-17 (4-5) SB-17 (7-8) SB-18 (2-3) SB-18 (8-9) DUP-3
MB 320-402790/1-A	Perfluorooctanesulfonic acid	1.557 ug/Kg	RL	DUP-3
MB 320-402948/1-A	Perfluorooctanesulfonic acid	0.606 ug/Kg	RL	SB-17 (7-8)

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SB-9 (1-2)	Perfluorobutanoic acid Perfluorooctanesulfonic acid	0.078 ug/Kg 0.38 ug/Kg	0.21U ug/Kg 0.54U ug/Kg
SB-17 (4-5)	Perfluorobutanoic acid	0.070 ug/Kg	0.22U ug/Kg
SB-17 (7-8)	Perfluorobutanoic acid Perfluorooctanesulfonic acid	0.071 ug/Kg 0.29 ug/Kg	0.21U ug/Kg 0.53U ug/Kg
SB-18 (2-3)	Perfluorobutanoic acid	0.064 ug/Kg	0.20U ug/Kg
SB-18 (8-9)	Perfluorobutanoic acid	0.050 ug/Kg	0.22U ug/Kg
DUP-3	Perfluorobutanoic acid	0.066 ug/Kg	0.22U ug/Kg

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

VOC

The following table lists the surrogate percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

Sample ID	Surrogate	%R (Limits)	Validation Action
SB-17 (4-5)	1,2-Dichloroethane-d4	146 (77-145)	None

Validation action was not required for all compounds due to high surrogate recovery as positive results only are affected and these compounds were not detected in the associated sample.

SVOC

All criteria were met.

Pesticide

The following table lists the surrogate percent recoveries (%R) outside of control limits in the pesticide analysis and the resulting validation actions.

Sample ID	Column	Surrogate	%R (Limits)	Validation Action
SB-18 (2-3)	CLP1	Tetrachloro-m-xylene	33 (34-118)	J detects/UJ nondetects

The SB-18 (2-3) pesticide result may be biased low. The positive result can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

PCB

The following table lists the surrogate percent recoveries (%R) outside of control limits in the PCB analysis and the resulting validation actions.

Sample ID	Column	Surrogate	%R (Limits)	Validation Action
SB-9 (1-2)	CLP1	Tetrachloro-m-xylene	39 (58-145)	None
	CLP2	Tetrachloro-m-xylene	37 (58-145)	
SB-17 (4-5)	CLP1	Tetrachloro-m-xylene	38 (58-145)	None
	CLP2	Tetrachloro-m-xylene	36 (58-145)	
SB-17 (7-8)	CLP1	Tetrachloro-m-xylene	37 (58-145)	None
	CLP2	Tetrachloro-m-xylene	35 (58-145)	
SB-18 (2-3)	CLP1	Tetrachloro-m-xylene	34 (58-145)	None
	CLP2	Tetrachloro-m-xylene	32 (58-145)	
SB-18 (8-9)	CLP1	Tetrachloro-m-xylene	38 (58-145)	None
	CLP2	Tetrachloro-m-xylene	36 (58-145)	
DUP-3	CLP1	Tetrachloro-m-xylene	46 (58-145)	None
	CLP2	Tetrachloro-m-xylene	43 (58-145)	

Validation action was not required for all compounds due to high surrogate recoveries as positive results only are affected and these compounds were not detected in the associated samples.

MS/MSD Results

VOC, SVOC, Pesticide, and PCB

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

PFAS

MS/MSD analyses were performed on samples SB-9 (1-2), SB-17 (7-8), and DUP-3 for PFAS analysis. All criteria were met.

LCS Results

VOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-715301	Chloroethane Bromomethane Chloromethane	135 (65-134) - -	153 (65-134) 142 (68-136) 168 (48-150)	SB-9 (1-2) SB-17 (4-5) SB-17 (7-8) SB-18 (2-3)	None
LCS/LCSD 460-715821	1,4-Dioxane	-	150 (70-142)	FB	None

- Within control limits

Validation action was not required for chloroethane, bromomethane, chloromethane, and 1,4-dioxane due to high LCS/LCSD recoveries as positive results only are affected and these compounds were not detected in the associated samples.

SVOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-714687	Bis(2-ethylhexyl)phthalate	68 (69-124)	68 (69-124)	SB-9 (1-2) SB-17 (4-5) SB-17 (7-8) SB-18 (2-3) SB-18 (8-9)	UJ nondetects

- Within control limits

The bis(2-ethylhexyl)phthalate result may be biased low due to low LCS/LCSD percent recoveries. The result can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Pesticide and PCB

All criteria were met.

PFAS

The following table lists the LCS percent recoveries (%R) outside of control limits in the PFAS analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	Affected Sample	Validation Action
LCS 320-402050	Perfluorooctanesulfonic acid	145 (68-141)	SB-9 (1-2)	J detects
LCS 320-402050	Perfluorooctanesulfonic acid	145 (68-141)	SB-17 (4-5) SB-18 (2-3) SB-18 (8-9)	None

The perfluorooctanesulfonic acid result may be biased high due to high LCS percent recovery. The result can be used for project objectives as an estimated value (J) which may have a minor impact on the data usability.

Validation action was not required for perfluorooctanesulfonic acid due to high LCS recovery as positive results only are affected and this compound was not detected in the associated samples.

Internal Standards

VOC, SVOC, Pesticide, and PCB

All criteria were met.

Labeled Compounds

PFAS

All criteria were met.

Moisture Content

All criteria were met.

Field Duplicate Results

Samples SB-17 (4-5) and DUP-3 were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations and validation actions taken.

VOC, Pesticide, and PCB

There were no detected compounds in the field duplicate pair for VOC, pesticide, and PCB.

SVOC

Compound	Concentration (mg/Kg)		RPD
	SB-17 (4-5)	DUP-3	
Benzo(a)anthracene	0.013U	0.016	Not calculable
Benzo(a)pyrene	0.0098U	0.019	Not calculable
Benzo(b)fluoranthene	0.0095U	0.049	Not calculable
Benzo(g,h,i)perylene	0.011U	0.018	Not calculable
Benzo(k)fluoranthene	0.0072U	0.018	Not calculable
Bis(2-ethylhexyl)phthalate	0.019U	0.13	Not calculable
Chrysene	0.0062U	0.033	Not calculable
Fluoranthene	0.013U	0.032	Not calculable
Indeno(1,2,3-cd)pyrene	0.014U	0.018	Not calculable
Phenanthrene	0.0064U	0.030	Not calculable
Pyrene	0.0091U	0.021	Not calculable

PFAS

Compound	Concentration (ug/Kg)		RPD
	SB-17 (4-5)	DUP-3	
Perfluorobutanoic acid	0.070	0.066	6

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC, SVOC, and PFAS analyses. These results were qualified as estimated (J) by the laboratory.

No results were reported below the RL and above the MDL in the pesticide and PCB analyses.

Dilutions were not required for VOC, SVOC, pesticide, PCB, and PFAS analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146D1a
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A/N	%RSD ≤ 20, r² no ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	SW	FB = 7
VII.	Surrogate spikes	SW	
VIII.	Matrix spike/Matrix spike duplicates	N	cs
IX.	Laboratory control samples	SW	LCS ID
X.	Field duplicates	ND	D = 2, 6
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Result < RL > MDL = Jdet
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1	SB-9 (1-2)		460-215088-1	Soil	08/04/20
2	SB-17 (4-5)	D	460-215088-2	Soil	08/04/20
3	SB-17 (7-8)		460-215088-3	Soil	08/04/20
4	SB-18 (2-3)		460-215088-4	Soil	08/04/20
5	SB-18 (8-9)		460-215088-5	Soil	08/04/20
6	DUP-3	D	460-215088-6	Soil	08/04/20
7	FB		460-215088-7	Water	08/04/20
8					
9					

Notes:

1	LB3 460-714415		5	MB 460-715282(2)	
2	MB 460-715242				
3	-715301				
4	-715376				

LDC #: 49146D1a

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260 C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% (20%) and relative response factors (RRF) ≥ 0.05?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% / 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) ≥ 0.05?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target compounds detected in the field blanks?	✓			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	.	✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		

Validation Area				
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
3	8/9/20	CCV-MS2	A	53.8		1→4,	J/UJ/A ND
	1709	(CCV 460-715301)	C	40.6		MB 460-715301	
			B	44.6			
			D	49.1			
			KK	40.9			
			HHH	25.8			
W	8/11/20	CCV-MS6	C	27.4		All water	J/UJ/A ND
	2317	(CCV 460-715821)	KK	23.4			
			HHH	67.0			
	8/9/20	CCV-MS9					
	0507	(CCV 460-715242)					

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** mg/kg

Sampling date: 8/4/20

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: FB Associated Samples: all soils (ND)

Compound	Blank ID	Sample Identification								
	7									
cc	0.48									

Blank units: _____ **Associated sample units:** _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Surrogate Spikes

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all surrogate %R within QC limits?

Y N N/A If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R out of outside of criteria?

#	Sample ID	Surrogate	%Recovery (Limits)	Qualifications
	2	DCE	146 (77-145)	Jdet/P ND
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	

SMC1 (TOL) = Toluene-d8
SMC2 (BFB) = Bromofluorobenzene
SMC3 (DCE) = 1,2-Dichloroethane-d4
SMC4 (DFM) = Dibromofluoromethane

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 460-71530/	D	135 (65-134)	153 (65-134)	( )	1-D4,	Jdet/P ND
		B	( )	142 (68-136)	( )	MB 460-71530/	↓
		A	( )	168 (48-150)	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS/D 460-71582/	HHHH	~~150 (70-142)~~	150 (70-142)	( )	All water	Jdet/P ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS/D ~~460-~~ ~~71468~~ 7		( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC: 49146D1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	6/13/2020	F	0.9276	0.9276	1.0518	1.0518	12	12
			K	0.6360	0.6360	0.6811	0.6811	17.0	17.0
	CVOAMS2		HHHH	1.4940	1.4940	1.4301	1.4301	12.3	12.3
			EE	0.7917	0.7917	0.7525	0.7525	3.9	3.9
			JJJ	2.1044	2.1044	2.0369	2.0369	5.3	5.3

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	8/10/2020	F	0.8937	0.8937	1.0974	1.0974	13	13
			K	0.6376	0.6376	0.6886	0.6886	8.1	8.1
	CVOAMS2		HHHH	1.5465	1.5465	1.4021	1.4021	17.7	17.7
			EE	0.7330	0.7330	0.7586	0.7586	3.3	3.3
			KKK	1.3212	1.3212	1.5040	1.5040	10.8	10.8

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20/100/400ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/25/2020	F	0.6561	0.6561	0.7545	0.7545	20	20
			QQQ	0.2842	0.2842	0.3174	0.3174	11.0	11.0
	CVOAMS6		HHHH	0.9143	0.9143	0.9020	0.9020	8.7	8.7
			EE	0.5360	0.5360	0.5501	0.5501	4.5	4.5
			JJJ	1.6286	1.6286	1.6353	1.6353	7.6	7.6

LDC: 49146D1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/24/2020	M	0.4178	0.4178	0.3966	0.3966	19	19
			K	0.6156	0.6156	0.6113	0.6113	7.7	7.7
	CVOAMS9		HHHH	1.4787	1.4787	1.3815	1.3815	14.8	14.8
			EE	0.6255	0.6255	0.6168	0.6168	2.8	2.8
			JJJ	2.0056	2.0056	1.9193	1.9193	3.7	3.7

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
3	CCV-MS2 1709	8/9/20	F (IS1)	1.0518	1.030	1.030	2.1	2.1
			K (IS2)	0.6811	0.6822	0.6822	0.2	0.2
			HHHH (IS3)	1.4301	1.799	1.799	25.8	25.8
			EE (IS4)	0.7525	0.7544	0.7544	0.3	0.3
			JJ (IS5)	2.0369	1.996	1.996	2.0	2.0
12	CCV MS2 2317	8/11/20	F (IS1)	0.7545	0.7399	0.7399	1.9	1.9
			QQQ (IS2)	0.3174	0.2919	0.2919	8.0	8.0
			HHHH (IS3)	0.9020	1.506	1.506	67.0	67.0
			EE (IS4)	0.5501	0.5783	0.5783	5.1	5.1
			JJ (IS5)	1.6353	1.634	1.636	0.0	0.1
3			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID:________

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	65.4	131	131	0
1,2-Dichloroethane-d4	↓	72.9	146	146	↓
Toluene-d8	↓	55.9	112	112	↓
Bromofluorobenzene	↓	52.2	104	104	↓

Sample ID:________

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:________

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:________

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:________

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS ID 460-75171530 1

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	0.0200	0.0200	0.0188	0.0213	94	94	107	107	12	12
Trichloroethene	↓	↓	0.0191	0.0210	96	96	105	105	9	9
Benzene	↓	↓	0.0184	0.0186	92	92	93	93	1	1
Toluene	↓	↓	0.0181	0.0191	90	90	96	96	6	6
Chlorobenzene	↓	↓	0.0186	0.0182	93	93	91	91	2	2

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146D1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1 , F :

Conc. = $\frac{(20623)(250)(1/1000)}{(404831)(1.05118)(5.12)(0.89}$

= 0.01333 mg/kg

w = 5.12 %s = 0.89

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	#1	F	0.013	0.0133	

LDC #: 49146D2a
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/2/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A, N	%RSD ≤ 20 (2) NO ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	LCS ID
X.	Field duplicates	SW	D = 2, 4
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = J det
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1	SB-9 (1-2)		460-215088-1	Soil	08/04/20
2	SB-17 (4-5)	D	460-215088-2	Soil	08/04/20
3	SB-17 (7-8)		460-215088-3	Soil	08/04/20
4	SB-18 (2-3)		460-215088-4	Soil	08/04/20
5	SB-18 (8-9)		460-215088-5	Soil	08/04/20
6 (#2)	DUP-3	D	460-215088-6	Soil	08/04/20
7					
8					
9					

Notes:

1	MB 460-714687						
2	MB 460-714689						

LDC #: 49146D2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Semivolatiles (EPA SW 846 Method 8270 D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15/30% or 20% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% or 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recoveries (%R) was less than 10%, was a reanalysis performed to confirm %R ?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?	✓			
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	CC. Dimethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	GGGG. C30-Hopane	I1. Methyl methanesulfonate
B. Bis (2-chloroethyl) ether	DD. Acenaphthylene	FFF. Di-n-octylphthalate	HHHH. 1-Methylphenanthrene	J1. Ethyl methanesulfonate
C. 2-Chlorophenol	EE. 2,6-Dinitrotoluene	GGG. Benzo(b)fluoranthene	IIII. 1,4-Dioxane	K1. o,o',o"-Triethylphosphorothioate
D. 1,3-Dichlorobenzene	FF. 3-Nitroaniline	HHH. Benzo(k)fluoranthene	JJJJ. Acetophenone	L1. n-Phenylene diamine
E. 1,4-Dichlorobenzene	GG. Acenaphthene	III. Benzo(a)pyrene	KKKK. Atrazine	M1. 1,4-Naphthoquinone
F. 1,2-Dichlorobenzene	HH. 2,4-Dinitrophenol	JJJ. Indeno(1,2,3-cd)pyrene	LLLL. Benzaldehyde	N1. N-Nitro-o-toluidine
G. 2-Methylphenol	II. 4-Nitrophenol	KKK. Dibenz(a,h)anthracene	MMMM. Caprolactam	O1. 1,3,5-Trinitrobenzene
H. 2,2'-Oxybis(1-chloropropane)	JJ. Dibenzofuran	LLL. Benzo(g,h,i)perylene	NNNN. 2,6-Dichlorophenol	P1. Pentachlorobenzene
I. 4-Methylphenol	KK. 2,4-Dinitrotoluene	MMM. Bis(2-Chloroisopropyl)ether	OOOO. 1,2-Diphenylhydrazine	Q1. 4-Aminobiphenyl
J. N-Nitroso-di-n-propylamine	LL. Diethylphthalate	NNN. Aniline	PPPP. 3-Methylphenol	R1. 2-Naphthylamine
K. Hexachloroethane	MM. 4-Chlorophenyl-phenyl ether	OOO. N-Nitrosodimethylamine	QQQQ. 3&4-Methylphenol	S1. Triphenylene
L. Nitrobenzene	NN. Fluorene	PPP. Benzoic Acid	RRRR. 4-Dimethyldibenzothiophene (4MDT)	T1. Octachlorostyrene
M. Isophorone	OO. 4-Nitroaniline	QQQ. Benzyl alcohol	SSSS. 2/3-Dimethyldibenzothiophene (4MDT)	U1. Famphur
N. 2-Nitrophenol	PP. 4,6-Dinitro-2-methylphenol	RRR. Pyridine	TTTT. 1-Methyldibenzothiophene (1MDT)	V1. 1,4-phenylenediamine
O. 2,4-Dimethylphenol	QQ. N-Nitrosodiphenylamine	SSS. Benzidine	UUUU.. 2,3,4,6-Tetrachlorophenol	W1. Methapyrilene
P. Bis(2-chloroethoxy)methane	RR. 4-Bromophenyl-phenylether	TTT. 1-Methylnaphthalene	VVVV. 1,2,4,5-Tetrachlorobenzene	X1. Pentachloroethane
Q. 2,4-Dichlorophenol	SS. Hexachlorobenzene	UUU.Benzo(b)thiophene	WWWW.. 2-Picoline	Y1. 3,3'-Dimethylbenzidine
R. 1,2,4-Trichlorobenzene	TT. Pentachlorophenol	VVV.Benzonaphthothiophene	XXXX. 3-Methylcholanthrene	Z1. o-Toluidine
S. Naphthalene	UU. Phenanthrene	WWW.Benzo(e)pyrene	YYYY. a,a-Dimethylphenethylamine	A2. 1-Naphthylamine
T. 4-Chloroaniline	VV. Anthracene	XXX. 2,6-Dimethylnaphthalene	ZZZZ. Hexachloropropene	B2. 4-Aminobiphenyl
U. Hexachlorobutadiene	WW. Carbazole	YYY. 2,3,5-Trimethylnaphthalene	A1. N-Nitrosodiethylamine	C2. 4-Nitroquinoline-1-oxide
V. 4-Chloro-3-methylphenol	XX. Di-n-butylphthalate	ZZZ. Perylene	B1. N-Nitrosodi-n-butylamine	D2. Hexachloropene
W. 2-Methylnaphthalene	YY. Fluoranthene	AAAA. Dibenzothiophene	C1. N-Nitrosomethylethylamine	E2. Bis (2-chloro-1-methylethyl) ether
X. Hexachlorocyclopentadiene	ZZ. Pyrene	BBBB. Benzo(a)fluoranthene	D1. N-Nitrosomorpholine	F2. Bifenthrin
Y. 2,4,6-Trichlorophenol	AAA. Butylbenzylphthalate	CCCC. Benzo(b)fluorene	E1. N-Nitrosopyrrolidine	G2. Cyfluthrin
Z. 2,4,5-Trichlorophenol	BBB. 3,3'-Dichlorobenzidine	DDDD. cis/trans-Decalin	F1. Phenacetin	H2. Cypermethrin
AA. 2-Chloronaphthalene	CCC. Benzo(a)anthracene	EEEE. 1,1'-Biphenyl	G1. 2-Acetylaminofluorene	I2. Permethrin (cis/trans)
BB. 2-Nitroaniline	DDD. Chrysene	FFFF. Retene	H1. Pronamide	J2. 5-Nitro-o-toluidine

LDC #: 49146D2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤20mid/50low level %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	8/7/20	CCV-11	LLLL	54.0		6	J/UJ/Δ NP
	0705	(CCV-460-714772)	HH	36.6			
			II	22.4			
			MMMM	24.6			
			BB	24.3			
			~~OO~~	20.7			
			SS	20.7			
	8/7/20	CCV-5	LLLL	42.4		1→5, MB 460-714689	↓ ND
	1026	(CCV 460-714819)					

CONCAL.wpd

LDC #: 49146 D2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?
Y (N) N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 460-714687	EEE	68 (69-124)	68 (69-124)	( )	1→5 MB 460-714687	J/UJ/P ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146D2a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (mg/kg) 2	6	RPD (≤ %)	QUAL
CCC	0.013U	0.016	NC	
III	0.0098U	0.019		
GGG	0.0095U	0.049		
LLL	0.011U	0.018		
HHH	0.0072U	0.018		
EEE	0.019U	0.13		
DDD	0.0062U	0.033		
YY	0.013U	0.032		

Compound	Concentration (mg/kg) 2	6	RPD (≤ %)	QUAL
JJJ	0.014U	0.018	NC	
UU	0.0064U	0.030		
ZZ	0.0091U	0.021		

Compound	Concentration ( )		RPD (≤ %)	QUAL

LDC #: 4914D2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20 ug/ml std)	Recalculated (RRF 20 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS11	7/9/2020	A	1.6512	1.6512	1.7200	1.7200	2.6	2.6
			S	1.0127	1.0127	1.0213	1.0213	2.9	2.9
			GG	1.4695	1.4695	1.3915	1.3915	8.7	8.7
			UU	1.1348	1.1348	1.1527	1.1527	2.3	2.3
			DDD	1.4198	1.4198	1.3807	1.3807	5.4	5.4
			III	1.0258	1.0258	0.9907	0.9907	5.8	5.8

LDC #: 49146D2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20 ug/ml std)	Recalculated (RRF 20 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS5	7/13/2020	A	1.4258	1.4258	1.4793	1.4793	4.2	4.2
			S	1.0354	1.0354	1.0331	1.0331	4.1	4.1
			GG	1.3982	1.3982	1.3798	1.3798	6.5	6.5
			UU	1.2042	1.2042	1.1993	1.1993	3.9	3.9
			DDD	1.3346	1.3346	1.3132	1.3132	6.2	6.2
			III	1.0572	1.0572	1.0104	1.0104	6.1	6.1

LDC #: 49146D2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)
The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
2	CCV MS11 0705	8/7/20	Δ (1st IS)	1.7200	1.538	1.538	10.6	10.6
			S (2nd IS)	1.0213	1.001	1.001	2.0	2.0
			GG (3rd IS)	1.3915	1.241	1.241	10.8	10.8
			HH (4th IS)	1.1527	1.135	1.135	1.5	1.5
			DDD (5th IS)	1.3807	1.376	1.376	0.4	0.4
			III (6th IS)	0.9907	1.016	1.016	2.6	2.6
2	CCV MS5 1026	8/7/20	Δ (1st IS)	1.4793	1.509	1.509	2.0	2.0
			S (2nd IS)	1.0331	1.022	1.022	1.1	1.1
			GG (3rd IS)	1.3798	1.182	1.182	14.3	14.3
			HH (4th IS)	1.1993	1.168	1.168	2.6	2.6
			DDD (5th IS)	1.3132	1.372	1.372	4.5	4.5
			III (6th IS)	1.0104	1.066	1.066	5.5	5.5
3			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146D2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270 D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	50.0	32.1	64	64	0
2-Fluorobiphenyl	↓	32.1	64	64	↓
Terphenyl-d14		35.8	72	72	
Phenol-d5		32.5	65	65	
2-Fluorophenol		33.4	67	67	
2,4,6-Tribromophenol	↓	33.0	66	66	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 49146D2a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 460-714687

Compound	Spike Added (mg/kg)		Spike Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	3.33	3.33	2.48	2.44	74	74	73	73	2	2
N-Nitroso-di-n-propylamine	↓	↓	2.39	2.36	72	72	71	71	1	1
4-Chloro-3-methylphenol			2.45	2.45	74	74	74	74	0	0
Acenaphthene			2.08	2.13	63	63	64	64	2	2
Pentachlorophenol	6.67	6.67	4.03	4.03	60	60	60	60	0	0
Pyrene	3.33	3.33	2.44	2.47	73	73	74	74	1	1

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146D2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 6 , 111 :

Conc. = $\frac{(1935)(40.0)(1)}{(311855)(0.9907)(15)(0.893)}$

= 0.0187 mg/kg

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	6	111	0.019	0.0187	

LDC #: 49146D3a
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer: EJ
2nd Reviewer: [signature]

METHOD: GC Organochlorine Pesticides (EPA SW846 Method 8081B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC Instrument Performance Check	A	
III.	Initial calibration/~~ICV~~	A / N	%D RSD ≤ 20 No ICV
IV.	Continuing calibration	A	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	SW	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	A	LCS ID
X.	Field duplicates	ND	D = 2, 6
XI.	Compound quantitation/RL/LOQ/LODs	A	ND Results < RL > MDL
XII.	Target compound identification	A	
XIII.	System Performance	A	
XIV	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1	SB-9 (1-2)		460-215088-1	Soil	08/04/20
2	SB-17 (4-5)	D	460-215088-2	Soil	08/04/20
3	SB-17 (7-8)		460-215088-3	Soil	08/04/20
4	SB-18 (2-3)		460-215088-4	Soil	08/04/20
5	SB-18 (8-9)		460-215088-5	Soil	08/04/20
6	DUP-3	D	460-215088-6	Soil	08/04/20
7					
8					
9					
10					

Notes:

	MB 460-714705						

Method: Pesticides (EPA SW 846 Method 8081B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and at beginning of each 12-hour shift?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. ***Surrogate spikes/Internal Standards***				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recovery (%R) was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were internal standard area counts within ± 50% of the average area calculated during calibration?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
XI. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
Were relative percent difference (RPD) of the results between two columns ≤ 40%?	✓			
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146D3a

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

METHOD: ✓ **GC** ___ **HPLC**

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	4	clP1	Y	33 (34-118)	J/UJ/P MP+DCT
				( )	
				( )	
	MB 460-714705	CLP2	Y	124 (34-118)	J/UJ/P
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146D3a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound		Reported 100ppb	Recalculated 100ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/15/2020	Gamma-BHC	CLP2	1.3210	1.3210	1.2646	1.2646	5.1	5.1
	GC5		Gamma-BHC	CLP1	1.4555	1.4555	1.4697	1.4697	4.9	4.9
			4,4'-DDT	CLP2	0.9935	0.9935	0.9162	0.9162	10.2	10.2
			4,4'-DDT	CLP1	1.1875	1.1875	1.1680	1.1680	1.2	1.2

LDC #: 49146D32

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 0435	8/7/20	gamma BHC CVP2	100	109	109.0	9.0	9.0
			4,4'-DDT	100	102	101.6	1.6	1.6
			CVP1		91.8	91.8	8.2	8.2
			↓	↓	84.6	84.6	15.4	15.4
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146D3a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: / **GC** __ **HPLC**

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	CVP1	50.0	23.4	47	47	0
↓	CVP2		20.2	40	40	
TC MX	↓		17.8	36	36	
↓		↓	19.8	40	41	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146D3a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ **GC** ___ **HPLC**

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added
LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS/D 460-71470S

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma BHC	0.133	0.133	0.160	0.157	120	120	118	118	2	2
4,4'-DDT	↓	↓	0.149	0.147	112	112	110	110	2	2

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146D3a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ **GC** __ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-71470S Compound Name 4,4' DDT

Concentration = $\frac{(42374984)(100)(10)}{(20678163)(0.9162)(15)(1000)}$ =

= 0.149 mg/kg

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	LCS	4,4'-DDT	0.149	0.149	

Comments:

LDC #: 49146D3b
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC Polychlorinated Biphenyls (EPA SW846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	Initial calibration/ICV	A / A	%RSD ≤ 20
III.	Continuing calibration	A	CW ≤ 20
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes 1/5	SW	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	ND	D = 2, 6
X.	Compound quantitation/RL/LOQ/LODs	A	no Results < RL > MDL
XI.	Target compound identification	A	
XII	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1	SB-9 (1-2)		460-215088-1	Soil	08/04/20
2	SB-17 (4-5)	D	460-215088-2	Soil	08/04/20
3	SB-17 (7-8)		460-215088-3	Soil	08/04/20
4	SB-18 (2-3)		460-215088-4	Soil	08/04/20
5	SB-18 (8-9)		460-215088-5	Soil	08/04/20
6	DUP-3	D	460-215088-6	Soil	08/04/20
7					
8					
9					
10					
11					
12					

Notes:

	MB 460-714708						

LDC #: 49146D3b

VALIDATION FINDINGS CHECKLIST

Method: ✓ GC ___ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?			✓	
Were the RT windows properly established?		✓		
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20%?			✓	
III. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
V. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	•	✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?		✓		
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed per analytical or extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Field duplicates				

Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?		✓		
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

_____

_____

LDC #: 49146 D3b

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT

METHOD: ✓ GC __ HPLC

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	1	CLP1	Y	39 (58 - 145)	Jdet / P ND
		CLP2	Y	37 ( )	
				( )	
	2	↓	↓	38 ( )	
				36 ( )	
				( )	
	3			37 ( )	
				35 ( )	
				( )	
	4			34 ( )	
				32 ( )	
				( )	
	5			38 ( )	
				36 ( )	
				( )	
	6			46 ( )	
		↓	↓	43 (↓)	↓
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146D36

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: _____

METHOD: GC X HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 1000ppb	Recalculated 1000ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/28/2020 GC14	PCB 1260-1 RTX CLP1	0.0228	0.0228	0.0224	0.0224	2.0	2.0
			PCB 1260-1 RTX CLP2	0.0450	0.0450	0.0431	0.0431	3.6	3.6

LDC #: 49146 D36

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 0348	8/7/20	Aroclor 1260-1 CVP1	1000	1010	1014.5	1.5 ~~0.7~~	1.5
			CVP2	1000	993	992.7	0.7	0.7
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146P3b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	cvp1	50.0	20.8	42	42	0
↓	2	↓	18.5	37	37	↓
TCMX	cvp1	↓	19.7	39	39	
↓	2	↓	18.7	37	37	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146836

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; LCS = Laboratory Control Sample; SA = Spike added; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS ID 460-71470B

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Aroclor 1260	0.333	0.333	0.355	0.353	106	106	106	106	0	0

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146D3b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. les 460 - 714708 Compound Name Aroclor 1260

Concentration = $\frac{532.1\ (10)}{(15)(1000)}$ =

= 0.3547 mg/kg

10/15

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	les	Aroclor 1260	0.35	0.3547	
	1260-1 = 9014677 (20.0) / 15493685 (0.0224) = 519.49				
		Ave = 519.49 + 517.0 + 497.5 + 521.0 + 510.3 + 539.6 + 508.5 + 643.7 / 8			
		Ave = 532.1			

Comments:

LDC #: 49146D96
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 2
Reviewer: JL
2nd Reviewer:

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	RSD ≤ 20 TV ≤ 50/30 ICV ≤ 30
IV.	Continuing calibration/ISC	A/A	D ≤ 30 ISC ≤ 50
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS
IX.	Field duplicates	SW	D = 2+6
X.	Labeled Compounds	A	
VI.	Compound quantitation RL/LOQ/LODs	SW	< RL - J lab/A
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-9 (1-2)	460-215088-1	Soil	08/04/20
2	SB-17 (4-5) D	460-215088-2	Soil	08/04/20
3 1,3	SB-17 (7-8)	460-215088-3	Soil	08/04/20
4	SB-18 (2-3)	460-215088-4	Soil	08/04/20
5	SB-18 (8-9)	460-215088-5	Soil	08/04/20
6 1,2	DUP-3	460-215088-6	Soil	08/04/20
7 1	SB-9 (1-2)MS	460-215088-1MS	Soil	08/04/20
8 1	SB-9 (1-2)MSD	460-215088-1MSD	Soil	08/04/20
9 3	SB-17 (7-8)MS	460-215088-3MS	Soil	08/04/20
10 3	SB-17 (7-8)MSD	460-215088-3MSD	Soil	08/04/20
11 2	DUP-3MS	460-215088-6MS	Soil	08/04/20
12 2	DUP-3MSD	460-215088-6MSD	Soil	08/04/20
13				
14				
15				

LDC #: 49146D96
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/30

Reviewer: JL
2nd Reviewer:

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

Notes:

1	402050						
2	402790	-	PFOS only				
3	402948	-	↓				

LDC #: 49146D96 **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: JC

Method: LC/MS PFAS (EPA Method 537Mod)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Were cooler temperature criteria met?	√			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the validation criteria?	√			
III. Initial calibration and Initial Calibration Verification				
Did the laboratory perform a 5-point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 20%?	√			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?			√	
Were all analytes within 70-130% or percent differences (%D) ≤30% of their true value for each calibration standard except the lowest point (50-150%)?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
IV. Continuing calibration and Instrument Sensitivity Check				
Was a continuing calibration analyzed prior to sample analysis, after every 10 samples and at the end of the analytical sequence?	√			
Were all percent differences (%D) of the continuing calibration ≤ 30%?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were all percent differences (%D) of the Instrument Sensitivity Check ≤ 50%?	√			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?	√			
VI. Field blanks				
Were field blanks identified in this SDG?		√		
Were target compounds detected in the field blanks?			√	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	√			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	√			

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		√		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	√			
Were target compounds detected in the field duplicates?	√			
XI. Labeled compounds				
Were labeled compound percent recoveries (%R) within the QC limits?	√			
XII. Compound quantitation				
Did the laboratory reporting limits (RL) meet the QAPP RLs?			√	
Did reported results include both branched and linear isomers?	√			
Were the correct ion transition, labeled compound and relative response factor (RRF) used to quantitate the compound?	√			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	√			
XIII. Target compound identification				
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were two transitions and the ion transition ratio per analyte monitored and documented except for PFBA and PFPeA?	√			
Were ion ratios within QC limits?	√			
XIV. System performance				
System performance was found to be acceptable.	√			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. Perfluorobutanoic acid (PFBA)			
B. Perfluoropentanoic acis (PFPeA)			
C. Perfluorohexanoic acid (PFHxA)			
D. Perfluoroheptanoic acid (PFHpA)			
E. Perfluorooctanoic acid (PFOA)			
F. Perfluorononanoic acid (PFNA)			
G. Perfluorodecanoic acid (PFDA)			
H. Perfluoroundecanoic acid (PFUnA)			
I. Perfluorododecanoic acid (PFDoA)			
J. Perfluorotridecanoic acid (PFTriA)			
K. Perfluorotetradecanoic acid (PFTeA)			
L. Perfluorobutanesulfonic acid (PFBS)			
M. Perfluorohexanesulfonic acid (PFHxS)			
N. Perfluoroheptanesulfonic acid (PFHpS)			
O. Perfluorooctanesulfonic acid (PFOS)			
P. Perfluorodecanesulfonic acid (PFDS)			
Q. Perfluorooctanesulfonamide (FOSA)			
R. N-Methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
S. N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			
T. 6:2 FTS			
U. 8:2 FTS			

LDC #: 49146D96

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JC

METHOD: LC/MS PFAS (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 8/8/20
Conc. units: ng/kg **Associated Samples:** All (A); 1,2,4-5(O)

Compound	Blank ID	Sample Identification								
MB 320-40205/1-A		1	2	3	4	5	6			
A	0.0675	0.078/0.21U	0.070/	0.071/	0.064/	0.050/	0.066/			
O	0.628	0.38/0.54U	0.22U	0.21U	0.20U	0.22U	0.22U			

Blank extraction date: 8/11/20
Conc. units: ng/kg **Associated Samples:** 6

Compound	Blank ID	Sample Identification								
MB 320-40290/1-A										
O	1.551									

LDC #: 49146D96

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: YC

METHOD: LC/MS PFAS (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 8/12/20
Conc. units: ug/kg **Associated Samples:** 3

Compound	Blank ID	Sample Identification								
MB 320-402948/1-A		3								
0	0.606	0.29/0.534								

Blank extraction date:
Conc. units: **Associated Samples:**

Compound	Blank ID	Sample Identification								

LDC #: 49146D96

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: R

METHOD: LC/MS PFAS (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?

Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS 320-402050	O	145 (68-141)			1, 2, 4-5, MB (1-dets)	J dets/P

LDC #: 49146D96

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

Compound	Concentration (ug/Kg)		RPD	
	2	6		
A	0.070	0.066	6	

LDC #: 49146096

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S = Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound	Reported RRF (RRF 1.0/0.928)	Recalculated RRF (RRF 1.0/0.928)	Reported Average RRF	Recalculated Average RRF	Reported %RSD	Recalculated %RSD
1	ICAL	8/5/2020	PFOA (13C4-PFOA)	1.1216	1.1216	1.0956	1.0956	11.3	11.3
	A9		PFOS (13C4-PFOS)	1.0474	1.0474	1.0258	1.0258	6.1	6.1
2	ICAL	8/12/2020	PFOA (13C4-PFOA)						
	A13		PFOS (13C4-PFOS)	1.0779	1.0779	1.1075	1.1075	9.8	9.8
3	ICAL	8/13/2020	PFOA (13C4-PFOA)						
	A9		PFOS (13C4-PFOS)	1.0727	1.0727	1.0494	1.0494	5.1	5.1

LDC #: 49146D96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (Actual Conc - Cx)/Actual Conc
Cx = (Ax)(Cis)/(Ais)(ave. RRF)

Where:
Ax = Area of compound Ais = Area of associated internal standard
Cx = Concentration of compound Cis = Concentration of internal standard
ave. RRF = initial calibration average RRF

#	Standard ID	Calibration Date	Compound	Average RRF	Reported RRF	Recalculated RRF	Reported %D	Recalculated %D
1	2020.08.10_A9_PFC_E_030	8/11/2020	PFOA (13C4-PFOA)	1.0956	1.091	1.0906	0.5	0.5
			PFOS (13C4-PFOS)	1.0258	1.061	1.0606	3.4	3.4
2	2020.08.12_A13_PFC_AZ_028	8/12/2020	PFOA (13C4-PFOA)					
			PFOS (13C4-PFOS)	1.1075	1.086	1.0855	2.0	2.0
3	2020.08.13_A9_PFC_C_022	8/13/2020	PFOA (13C4-PFOA)					
			PFOS (13C4-PFOS)	1.0494	1.116	1.1155	6.3	6.3
4			PFOA (13C4-PFOA)					
			PFOS (13C4-PFOS)					

LDC # 49146D96

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)

%Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked concentration, SA = Spike added, SC = Sample concentration

RPD = | MS - MSD | * 2/(MS + MSD)

MS = Matrix spike recovery, MSD = Matrix spike duplicate recovery

MS/MSD ID: 7/8

Compound	SA (ug/Kg)		SC (ug/Kg)	SSC (ug/Kg)		MS Percent Recovery		MSD Percent Recovery		MS/MSD RPD	
	MS	MSD		MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	2.12	2.23	0	2.191	2.285	103	103	103	102	4	4
PFBS	1.97	2.06	0.38	2.551	2.872	111	110	121	121	12	12

LDC #: 49146B96

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS 320-402050

Compound	SA (ug/Kg)		SSC (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	2.00		1.967		98	98				
PFOS	1.86		2.694		145	145				

LDC #: 49146D96

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)\ (Vo)\ (Df)}{(RRF)\ (Wt)\ (\%S)}$$

Where:

Ax = Area or height of the peak for the compound to be measured
Ais = Area or height of the peak for the internal standard
Cis = Concentration of the internal standard
DF = Dilution factor
Vt = Volume of extract in milliters (mL)
RRF = Average relative response factor
Wt = Weight of sample in grams (g)
%S = Percent solids

Sample #	Compound	Ax	Ais	Cis	DF	RRF	Vt (mL)	Wt (g)	%S	Calculated Concentration (ug/Kg)	Reported Concentration (ug/Kg)	% Diff
1	PFOS	380100	5072970	2.39	1	1.0258	10	5.23	0.89	0.38	0.38	0

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-215088-1
Reviewer: Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 1, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-9 (1-2)	460-215088-1	Metals, Cyanide
SB-17 (4-5)	460-215088-2	Metals, Cyanide
SB-17 (7-8)	460-215088-3	Metals, Cyanide
SB-18 (2-3)	460-215088-4	Metals, Cyanide
SB-18 (8-9)	460-215088-5	Metals, Cyanide
DUP-3	460-215088-6	Metals, Cyanide
SB-9 (1-2)MS	460-215088-1MS	Metals, Cyanide
SB-9 (1-2)MSD	460-215088-1MSD	Cyanide
SB-9 (1-2)DUP	460-215088-1DUP	Metals

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: SB-17 (4-5) and DUP-3

The above-listed soil samples were collected on August 4, 2020 and were analyzed for metals by SW-846 methods 6010D/7471B and cyanide by SW-846 method 9012B. The data validation was performed in accordance with USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program,* SOP HW-3a/c, Revision 1 (September 2016) and the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review,* EPA 540-R-2017-001 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The inorganic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Instrument Calibration
- Contract Required Quantitation Limit (CRQL) Standard Recoveries
- Blank Analysis Results
- Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Results
- Matrix Spike (MS) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Certified Reference Material (CRM) Results
- Serial Dilution Results
- Moisture Content
- Detection Limits Results
- Sample Quantitation Results

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

Instrument Calibration

All criteria were met.

CRQL Standard Recoveries

Metals

All criteria were met.

Blank Results

Metals

Analytes were detected below the reporting limits in the laboratory blank samples. The following table summarizes the contamination and validation actions taken.

Blank ID	Analyte	Level Detected	Action Level	Associated Samples
ICB/CCB	Potassium	172.3 ug/L	RL	SB-9 (1-2)

Blank Actions for analytes detected below the reporting limit(RL).
If the sample result is < RL, report the result as nondetect (U) at the RL.
If the sample result is > RL or nondetect, no action is required.
Blank Actions for analytes detected above the reporting limit or RL.
If the sample result is < RL and <action level; report the result as nondetect (U) at the RL.
If the sample result is > RL and < action level; report the result as nondetect (U) at the reported value.
If the sample result is > action level or nondetect, no action is required.

No samples were qualified since the associated sample results were greater than the action limit.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Cyanide

Contamination was not detected in the laboratory blank samples.

A field blank was not associated with this sample set. Validation action was not required on this basis.

ICP ICS Results

Metals

Analytes were within control limits in the ICSA and ICSAB analyses.

MS/MSD Results

Metals

MS analyses were performed on sample SB-9 (1-2) for mercury analysis. All criteria were met.

Cyanide

MS/MSD analyses were performed on sample SB-9 (1-2) for cyanide analysis. All criteria were met.

Laboratory Duplicate Results

Metals

Laboratory duplicates were performed on sample SB-9 (1-2) for mercury analysis. All criteria were met.

Cyanide

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

Field Duplicate Results

Samples SB-17 (4-5) and DUP-3 were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations.

Metals

Analyte	Concentration (mg/Kg)		RPD
	SB-17 (4-5)	DUP-3	
Aluminum	5740	6280	9
Antimony	1.2	1.9	45
Arsenic	0.90	1.3	36
Barium	46.7	54.7	16
Calcium	1690	1000	51
Chromium	14.1	16.5	16
Cobalt	7.4	6.0	21
Copper	20.0	13.0	42
Iron	12600	13900	10
Lead	3.8	4.4	15
Magnesium	2220	2240	1
Manganese	356	407	13
Nickel	14.0	13.7	2
Potassium	2000	2230	11
Sodium	133	131	2
Vanadium	16.5	16.9	2
Zinc	19.5	21.7	11

Cyanide

There were no detected results in the field duplicate pair for cyanide.

CRM Results

All criteria were met.

Serial Dilution Results

Metals

A serial dilution analysis was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Detection Limits Results

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the metals analyses. These results were estimated (J) by the laboratory.

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the cyanide analysis.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	Metals Analyses Reported
SB-9 (1-2) SB-17 (4-5) SB-17 (7-8) SB-18 (2-3) SB-18 (8-9) DUP-3	2-fold dilution due to sample matrix for 6010D metals

Dilutions were not required for cyanide analysis.

Sample Quantitation Results

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146D4b
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: KLC

METHOD: Metals (EPA SW 846 Method 6010D/7471B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A rA	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	SW	
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	A	Hg only
VII.	Duplicate sample analysis	A	
VIII.	Serial Dilution	N	
IX.	Laboratory control samples	A	QRM
X.	Field Duplicates	SW	(2,6)
XI.	Sample Result Verification	A	<RL: J det
XII.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-9 (1-2) 6010D: 2x (matrix)	460-215088-1	Soil	08/04/20
2	SB-17 (4-5)	460-215088-2	Soil	08/04/20
3	SB-17 (7-8)	460-215088-3	Soil	08/04/20
4	SB-18 (2-3)	460-215088-4	Soil	08/04/20
5	SB-18 (8-9)	460-215088-5	Soil	08/04/20
6	DUP-3	460-215088-6	Soil	08/04/20
7	SB-9 (1-2)MS	460-215088-1MS	Soil	08/04/20
8	SB-9 (1-2)DUP	460-215088-1DUP	Soil	08/04/20
9				
10				
11				
12				
13				
14				
15				

Notes:

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times met?	X			
Were all water samples preserved to a pH of <2.			X	
II. ICP-MS Tune				
Were mass resolutions within 0.1 amu for all isotopes in the tuning solution?			X	
Were %RSDs of isoptoes in the tuning solution ≤5%?			X	
III. Calibration				
Were all instuments calibrated daily?	X			
Were the proper standards used?	X			
Were all initial and continuing calibration verifications within the 90-110% (80-120% for mercury) QC limits?	X			
Were the low level standard checks within 70-130%?			X	
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?	X			
V. Interference Check Sample				
Were the interference check samples performed daily?	X			
Were the AB solution recoveries within 80-120%?	X			
VI. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)	X			
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?	X			
VII. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
VIII. Internal Standards				
Were all percent recoveries within the 30-120% (60-125% for EPA Method 200.8) QC limits?			X	
If the recoveries were outside the limits, was a reanalysis performed?			X	
IX. Serial Dilution				
Were all percent differences <10%?			X	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			X	
X. Sample Result Verification				
Were all reporting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			
XII. Field Duplicates				
Were field duplicates identifed in this SDG?	X			
Were target analytes detected in the field duplicates?	X			
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

All elements are applicable to each sample as noted below.

Sample ID	Target Analyte List
All	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn, Hg
QC: 7, 8	Hg

Analysis Method

ICP	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
ICP-MS	
CVAA	Hg

VALIDATION FINDINGS WORKSHEET
Laboratory Blank Contamination (PB/ICB/CCB)

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Soil preparation factor applied (if applicable): NA

Sample Concentration, unless otherwise noted: mg/Kg Associated Samples: 1

				Sample Identification								
Analyte	**PB (mg/Kg)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	No quals (>RL)								
K		172.3	RL									

Method: Metals

Analyte	Concentration (mg/Kg)		RPD
	2	6	
Aluminum	5740	6280	9
Antimony	1.2	1.9	45
Arsenic	0.90	1.3	36
Barium	46.7	54.7	16
Calcium	1690	1000	51
Chromium	14.1	16.5	16
Cobalt	7.4	6.0	21
Copper	20.0	13.0	42
Iron	12600	13900	10
Lead	3.8	4.4	15
Magnesium	2220	2240	1
Manganese	356	407	13
Nickel	14.0	13.7	2
Potassium	2000	2230	11
Sodium	133	131	2
Vanadium	16.5	16.9	2
Zinc	19.5	21.7	11

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

An intial calibration verification (ICV), continuing calibration verification (CCV), low level calibration check (LLCC), and interference check sample (ICSAB) percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis

True = concentration of each analyte in the source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalcuated %R	Reported %R	Acceptable (Y/N)
ICV	ICP	Tl	1004	1000	100	100	Y
CCV	ICP	Al	48550	50000	97	97	Y
ICSAB	ICP	Se	97.2	100	97	97	Y
ICV	CVAA	Hg	4.92	5	98	98	Y
CCV	CVAA	Hg	5.12	5	102	102	Y

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

Percent recoveries (%R) for the laboratory control sample (LCS), matrix spike (MS), and post digestion spike (PDS) were recalculated using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentration of each analyte in the source

The sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentration

D = Duplicate sample concentration

The serial dilution percent difference (%D) was recalculated using the following formula.

%D = (Absolute value (I - SDR)) x 100 / (I)

I = Initial sample result

SDR = Serial dilution result (with a 5x dilution applied)

Sample ID	Type of Analysis	Element	Found/S/I	True/D/SDR	Recalcuated %R/RPD/%D	Reported %R/RPD/%D	Acceptable (Y/N)
CRM	LCS	V	93.22	96.9	96.2	96.2	Y
7	MS	Hg	0.0908	0.0878	103	103	Y
8	Duplicate	Hg	ND	ND	NC	NC	Y
	PDS						
	Serial dilution						

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Analytes were recalculated and verified using the following equation:
Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids x Initial weight)

Sample ID	Analyte	Raw Data (ug/L)	Dilution	Initial Weight (g)	Final Volume (mL)	Percent solids (%)	Reported Result (mg/Kg)	Recalcuated Result (mg/Kg)	Acceptable (Y/N)
1	Ni	61.48	2	1.06	100	89	13.0	13.0	Y
2	Mn	1718	2	1.07	100	90.3	356	356	Y
3	V	93.64	2	1.04	100	88.6	20.3	20.3	Y
4	Hg	0.0581	1	0.67	50	90.5	0.0048	0.0048	Y
5	Sb	7.576	2	1.07	100	82.9	1.7	1.7	Y
6	Co	27.43	2	1.03	100	89.3	6.0	6.0	Y

LDC #: 49146D6
SDG #: 460-215088-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Laboratory Blanks	A	
V	Field blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	A	
VII.	Duplicate sample analysis	N	
VIII.	Laboratory control samples	A	CRM
IX.	Field duplicates	MD	(2,6)
X.	Sample result verification	A	ND<RL
XI	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-9 (1-2)	460-215088-1	Soil	08/04/20
2	SB-17 (4-5)	460-215088-2	Soil	08/04/20
3	SB-17 (7-8)	460-215088-3	Soil	08/04/20
4	SB-18 (2-3)	460-215088-4	Soil	08/04/20
5	SB-18 (8-9)	460-215088-5	Soil	08/04/20
6	DUP-3	460-215088-6	Soil	08/04/20
7	SB-9 (1-2)MS	460-215088-1MS	Soil	08/04/20
8	SB-9 (1-2)MSD	460-215088-1MSD	Soil	08/04/20
9				
10				
11				
12				
13				
14				
15				

Notes:

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times were met?	X			
II. Calibration				
Were all instuments calibrated at the requried frequency?	X			
Were the proper number of standards used?	X			
Were all initial and continuing calibration verifications within the QC limits?	X			
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
Were balance checks performed as required?			X	
III. Blanks				
Was a method blank assoicated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?		X		
IV. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)	X			
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?		X		
V. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			
X. Sample Result Verification				
Were all reproting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
XII. Field Duplicates				
Were field duplicates identifed in this SDG?	X			
Were target analytes detected in the field duplicates?		X		
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

METHOD: Inorganics

MS/MSD analysis was performed by the laboratory. All MS/MSD percent recoveries (%R) and relative percent differences (RPDs) were within the acceptable limits with the following exceptions.

MS/MSD ID	Matrix	Analyte	MS %R	MSD %R	%R Limit	RPD	RPD Limit	Assocaited Samples	Qualification	Det/ND
7, 8	s	CN	123	131	11-108			All	Jdet/A	ND

Comments:

LDC #: 49146D6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR

Method: Inorganics

The correlation coefficient (r) for the calibration of _Cr6+___ was recalculated.Calibration date:___8/7/20__

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cr6+	s1	0	0.0158	*0.99966*	0.99984	Y
		s2	0.01	0.44			
		s3	0.025	1.01			
		s4	0.05	1.97			
		s5	0.1	3.69			
		s6	0.2	7.38			
		s7	0.4	14			
Calibration verification	Cr6+	ICV	0.2	0.204	102	102	Y
Calibration verification	Cr6+	CCV	0.2	0.206	103	103	Y
Calibration verification	Cr6+	CCV	0.2	0.206	103	103	Y

Comments:

METHOD: Inorganics

Percent recoveries (%R) for the laboratory control sample (LCS) and matrix spike (MS) were recalcuated using the following formula.
%R = (Found/True) x 100
Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)
True = concentraiton of each analyte in the source
The sample and duplciate relative percent difference (RPD) was recalcuated using the following formula.
RPD = (Absolute value(S-D)x 200) / (S+D)
S = Original sample concentraiton
D = Duplciate sample concentration

Sample ID	Type of Analysis	Element	Found/S	True/D	Recalcuated %R/RPD	Reported %R/RPD	Acceptable (Y/N)
CRM	LCS	CN	65.76	157	41.9	41.9	Y
7	MS	CN	6.61	5.39	123	123	Y
7, 8	Duplicate	CN	6.61	7.04	6	6	Y

METHOD: Inorganics

Analytes were recalcuated and verified using the following equation.

Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids (if applicable) x Initial weight or volume)

Sample ID	Analyte	Raw Data (unit)	Dilution	Initial Weight/ Volume (unit)	Final Volume (unit)	Percent solids (%)	Reported Result (unit)	Recalcuated Result (unit)	Acceptable (Y/N)
All	CN = ND								

500 Main St., New Rochelle - LDC# 49146D

SDG: 4602150881

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/11/2020		Y	N	U		U	2.17	0.42	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/11/2020		Y	N	U		U	0.22	0.059	ug/kg
DUP-3-20200804	460-215088-6	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/11/2020		Y	N	U		U	2.17	0.40	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROPENTANOIC ACID (PFPeA)	8/11/2020		Y	N	U		U	0.22	0.083	ug/kg
DUP-3-20200804	460-215088-6	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/11/2020		Y	N	U		U	2.17	0.27	ug/kg
DUP-3-20200804	460-215088-6	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/11/2020		Y	N	U		U	2.17	0.16	ug/kg
DUP-3-20200804	460-215088-6	Perfluorooctanoic acid (PFOA)	8/11/2020		Y	N	U		U	0.22	0.093	ug/kg
DUP-3-20200804	460-215088-6	Perfluorooctane Sulfonamide (FOSA)	8/11/2020		Y	N	U		U	0.22	0.089	ug/kg
DUP-3-20200804	460-215088-6	PERFLUORONONANOIC ACID	8/11/2020		Y	N	U		U	0.22	0.039	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROHEXANOIC ACID (PFHxA)	8/11/2020		Y	N	U		U	0.22	0.046	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROHEXANESULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.034	ug/kg
DUP-3-20200804	460-215088-6	Perfluoroheptanoic Acid (PFHpA)	8/11/2020		Y	N	U		U	0.22	0.031	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROUNDECANOIC ACID (PFUnA)	8/11/2020		Y	N	U		U	0.22	0.039	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/11/2020		Y	N	U		U	0.22	0.038	ug/kg
DUP-3-20200804	460-215088-6	PERFLUORODODECANOIC ACID (PFDoA)	8/11/2020		Y	N	U		U	0.22	0.073	ug/kg
DUP-3-20200804	460-215088-6	PERFLUORODECANOIC ACID (PFDA)	8/11/2020		Y	N	U		U	0.22	0.024	ug/kg
DUP-3-20200804	460-215088-6	PERFLUORODECANE SULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.042	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROBUTYRIC ACID (PFBA)	8/11/2020		Y	N	BJ	U	U	0.22	0.030	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROBUTANESULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.027	ug/kg
DUP-3-20200804	460-215088-6	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/11/2020		Y	N	U		U	0.22	0.055	ug/kg

SDG: 4602150881

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	PERFLUOROOCTANE SULFONIC ACID	8/12/2020		Y	N	U		U	0.55	0.22	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROHEXANOIC ACID (PFHxA)	8/11/2020		Y	N	U		U	0.22	0.046	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROHEXANESULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUORODODECANOIC ACID (PFDoA)	8/11/2020		Y	N	U		U	0.22	0.074	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/11/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-17 (4-5)-20200804	460-215088-2	Perfluoroheptanoic Acid (PFHpA)	8/11/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/11/2020		Y	N	U		U	0.22	0.056	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUORONONANOIC ACID	8/11/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-17 (4-5)-20200804	460-215088-2	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/11/2020		Y	N	U		U	2.21	0.28	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROPENTANOIC ACID (PFPeA)	8/11/2020		Y	N	U		U	0.22	0.085	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROUNDECANOIC ACID (PFUnA)	8/11/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUORODECANE SULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-17 (4-5)-20200804	460-215088-2	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/11/2020		Y	N	U		U	2.21	0.17	ug/kg
SB-17 (4-5)-20200804	460-215088-2	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/11/2020		Y	N	U		U	2.21	0.43	ug/kg
SB-17 (4-5)-20200804	460-215088-2	Perfluorooctane Sulfonamide (FOSA)	8/11/2020		Y	N	U		U	0.22	0.091	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROBUTANESULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.028	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROOCTANE SULFONIC ACID	8/11/2020		Y	N	UT		U	0.55	0.22	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUORODECANOIC ACID (PFDA)	8/11/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROBUTYRIC ACID (PFBA)	8/11/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-17 (4-5)-20200804	460-215088-2	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/11/2020		Y	N	U		U	0.22	0.060	ug/kg
SB-17 (4-5)-20200804	460-215088-2	Perfluorooctanoic acid (PFOA)	8/11/2020		Y	N	U		U	0.22	0.095	ug/kg

SDG: 4602150881

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (4-5)-20200804	460-215088-2	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/11/2020		Y	N	U		U	2.21	0.41	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROPENTANOIC ACID (PFPeA)	8/11/2020		Y	N	U		U	0.21	0.081	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUORONONANOIC ACID	8/11/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROUNDECANOIC ACID (PFUnA)	8/11/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/11/2020		Y	N	U		U	0.21	0.054	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/11/2020		Y	N	U		U	0.21	0.057	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUORODODECANOIC ACID (PFDoA)	8/11/2020		Y	N	U		U	0.21	0.071	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUORODECANOIC ACID (PFDA)	8/11/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-17 (7-8)-20200804	460-215088-3	Perfluorooctanoic acid (PFOA)	8/11/2020		Y	N	U		U	0.21	0.091	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUORODECANE SULFONIC ACID	8/11/2020		Y	N	U		U	0.21	0.041	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/11/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROBUTANESULFONIC ACID	8/11/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-17 (7-8)-20200804	460-215088-3	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/11/2020		Y	N	U		U	2.11	0.39	ug/kg
SB-17 (7-8)-20200804	460-215088-3	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/11/2020		Y	N	U		U	2.11	0.41	ug/kg
SB-17 (7-8)-20200804	460-215088-3	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/11/2020		Y	N	U		U	2.11	0.16	ug/kg
SB-17 (7-8)-20200804	460-215088-3	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/11/2020		Y	N	U		U	2.11	0.26	ug/kg
SB-17 (7-8)-20200804	460-215088-3	Perfluoroheptanoic Acid (PFHpA)	8/11/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROHEXANESULFONIC ACID	8/11/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROHEXANOIC ACID (PFHxA)	8/11/2020		Y	N	U		U	0.21	0.044	ug/kg
SB-17 (7-8)-20200804	460-215088-3	Perfluorooctane Sulfonamide (FOSA)	8/11/2020		Y	N	U		U	0.21	0.087	ug/kg
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROBUTYRIC ACID (PFBA)	8/11/2020		Y	N	BJ	U	U	0.21	0.030	ug/kg

SDG: 4602150881

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	PERFLUOROOCTANE SULFONIC ACID	8/13/2020		Y	N	BJ	U	U	0.53	0.21	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROHEXANOIC ACID (PFHxA)	8/11/2020		Y	N	U		U	0.20	0.042	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUORODECANOIC ACID (PFDA)	8/11/2020		Y	N	U		U	0.20	0.022	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROBUTYRIC ACID (PFBA)	8/11/2020		Y	N	BJ	U	U	0.20	0.028	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUORODODECANOIC ACID (PFDoA)	8/11/2020		Y	N	U		U	0.20	0.068	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/11/2020		Y	N	U		U	0.20	0.035	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROHEXANESULFONIC ACID	8/11/2020		Y	N	U		U	0.20	0.031	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUORONONANOIC ACID	8/11/2020		Y	N	U		U	0.20	0.036	ug/kg
SB-18 (2-3-20200804	460-215088-4	Perfluorooctane Sulfonamide (FOSA)	8/11/2020		Y	N	U		U	0.20	0.083	ug/kg
SB-18 (2-3-20200804	460-215088-4	Perfluorooctanoic acid (PFOA)	8/11/2020		Y	N	U		U	0.20	0.087	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROPENTANOIC ACID (PFPeA)	8/11/2020		Y	N	U		U	0.20	0.078	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/11/2020		Y	N	U		U	0.20	0.052	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROUNDECANOIC ACID (PFUnA)	8/11/2020		Y	N	U		U	0.20	0.036	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/11/2020		Y	N	U		U	0.20	0.055	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROOCTANE SULFONIC ACID	8/11/2020		Y	N	UT		U	0.51	0.20	ug/kg
SB-18 (2-3-20200804	460-215088-4	Perfluoroheptanoic Acid (PFHpA)	8/11/2020		Y	N	U		U	0.20	0.029	ug/kg
SB-18 (2-3-20200804	460-215088-4	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/11/2020		Y	N	U		U	2.02	0.25	ug/kg
SB-18 (2-3-20200804	460-215088-4	PERFLUOROBUTANESULFONIC ACID	8/11/2020		Y	N	U		U	0.20	0.025	ug/kg
SB-18 (2-3-20200804	460-215088-4	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/11/2020		Y	N	U		U	2.02	0.37	ug/kg
SB-18 (2-3-20200804	460-215088-4	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/11/2020		Y	N	U		U	2.02	0.39	ug/kg
SB-18 (2-3-20200804	460-215088-4	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/11/2020		Y	N	U		U	2.02	0.15	ug/kg

SDG: 4602150881

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	PERFLUORODECANE SULFONIC ACID	8/11/2020		Y	N	U		U	0.20	0.039	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROHEXANOIC ACID (PFHxA)	8/11/2020		Y	N	U		U	0.22	0.047	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROHEXANESULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.035	ug/kg
SB-18 (8-9)-20200804	460-215088-5	Perfluoroheptanoic Acid (PFHpA)	8/11/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/11/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-18 (8-9)-20200804	460-215088-5	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/11/2020		Y	N	U		U	2.23	0.17	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROBUTANESULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.028	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUORODECANOIC ACID (PFDA)	8/11/2020		Y	N	U		U	0.22	0.025	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUORODECANE SULFONIC ACID	8/11/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-18 (8-9)-20200804	460-215088-5	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/11/2020		Y	N	U		U	2.23	0.28	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUORODODECANOIC ACID (PFDoA)	8/11/2020		Y	N	U		U	0.22	0.075	ug/kg
SB-18 (8-9)-20200804	460-215088-5	Perfluorooctane Sulfonamide (FOSA)	8/11/2020		Y	N	U		U	0.22	0.091	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROBUTYRIC ACID (PFBA)	8/11/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUORONONANOIC ACID	8/11/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROUNDECANOIC ACID (PFUnA)	8/11/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-18 (8-9)-20200804	460-215088-5	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/11/2020		Y	N	U		U	2.23	0.41	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROOCTANE SULFONIC ACID	8/11/2020		Y	N	UT		U	0.56	0.22	ug/kg
SB-18 (8-9)-20200804	460-215088-5	Perfluorooctanoic acid (PFOA)	8/11/2020		Y	N	U		U	0.22	0.096	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROPENTANOIC ACID (PFPeA)	8/11/2020		Y	N	U		U	0.22	0.086	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/11/2020		Y	N	U		U	0.22	0.060	ug/kg
SB-18 (8-9)-20200804	460-215088-5	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/11/2020		Y	N	U		U	0.22	0.057	ug/kg

SDG: 4602150881

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/11/2020		Y	N	U		U	2.23	0.43	ug/kg
SB-9 (1-2)-20200804	460-215088-1	Perfluorooctane Sulfonamide (FOSA)	8/11/2020		Y	N	U		U	0.21	0.088	ug/kg
SB-9 (1-2)-20200804	460-215088-1	Perfluorooctanoic acid (PFOA)	8/11/2020		Y	N	U		U	0.21	0.092	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROHEXANOIC ACID (PFHxA)	8/11/2020	0.047	Y	Y	J		J	0.21	0.045	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROUNDECANOIC ACID (PFUnA)	8/11/2020		Y	N	U		U	0.21	0.039	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/11/2020		Y	N	U		U	0.21	0.055	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/11/2020		Y	N	U		U	0.21	0.058	ug/kg
SB-9 (1-2)-20200804	460-215088-1	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/11/2020		Y	N	U		U	2.15	0.42	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROOCTANE SULFONIC ACID	8/11/2020		Y	N	JBT	UJ	UJ	0.54	0.21	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROBUTYRIC ACID (PFBA)	8/11/2020		Y	N	BJ	U	U	0.21	0.030	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROPENTANOIC ACID (PFPeA)	8/11/2020		Y	N	U		U	0.21	0.083	ug/kg
SB-9 (1-2)-20200804	460-215088-1	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/11/2020		Y	N	U		U	2.15	0.16	ug/kg
SB-9 (1-2)-20200804	460-215088-1	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/11/2020		Y	N	U		U	2.15	0.40	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROBUTANESULFONIC ACID	8/11/2020		Y	N	U		U	0.21	0.027	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUORODECANE SULFONIC ACID	8/11/2020		Y	N	U		U	0.21	0.042	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUORODECANOIC ACID (PFDA)	8/11/2020		Y	N	U		U	0.21	0.024	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUORODODECANOIC ACID (PFDoA)	8/11/2020		Y	N	U		U	0.21	0.072	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/11/2020		Y	N	U		U	0.21	0.038	ug/kg
SB-9 (1-2)-20200804	460-215088-1	Perfluoroheptanoic Acid (PFHpA)	8/11/2020		Y	N	U		U	0.21	0.031	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUOROHEXANESULFONIC ACID	8/11/2020		Y	N	U		U	0.21	0.033	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PERFLUORONONANOIC ACID	8/11/2020		Y	N	U		U	0.21	0.039	ug/kg

Analytical Method	E537(M)											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-9 (1-2)-20200804	460-215088-1	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/11/2020		Y	N	U		U	2.15	0.27	ug/kg

Analytical Method	SW6010											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
DUP-3-20200804	460-215088-6	LEAD	8/11/2020	4.4	Y	Y				2.2	0.35	mg/kg
DUP-3-20200804	460-215088-6	BERYLLIUM	8/11/2020		Y	N	U		U	0.44	0.070	mg/kg
DUP-3-20200804	460-215088-6	SODIUM	8/11/2020	131	Y	Y	J		J	1090	94.6	mg/kg
DUP-3-20200804	460-215088-6	COBALT	8/11/2020	6.0	Y	Y	J		J	10.9	0.60	mg/kg
DUP-3-20200804	460-215088-6	CALCIUM	8/11/2020	1000	Y	Y	J		J	1090	80.4	mg/kg
DUP-3-20200804	460-215088-6	NICKEL	8/11/2020	13.7	Y	Y				8.7	0.57	mg/kg
DUP-3-20200804	460-215088-6	MANGANESE	8/11/2020	407	Y	Y				3.3	0.24	mg/kg
DUP-3-20200804	460-215088-6	ARSENIC	8/11/2020	1.3	Y	Y	J		J	3.3	0.67	mg/kg
DUP-3-20200804	460-215088-6	ANTIMONY	8/11/2020	1.9	Y	Y	J		J	4.4	1.3	mg/kg
DUP-3-20200804	460-215088-6	CADMIUM	8/11/2020		Y	N	U		U	0.87	0.075	mg/kg
DUP-3-20200804	460-215088-6	POTASSIUM	8/11/2020	2230	Y	Y				1090	66.8	mg/kg
DUP-3-20200804	460-215088-6	THALLIUM	8/11/2020		Y	N	U		U	4.4	0.67	mg/kg
DUP-3-20200804	460-215088-6	COPPER	8/11/2020	13.0	Y	Y				5.4	1.4	mg/kg
DUP-3-20200804	460-215088-6	MAGNESIUM	8/11/2020	2240	Y	Y				1090	73.6	mg/kg
DUP-3-20200804	460-215088-6	ALUMINUM	8/11/2020	6280	Y	Y				43.5	6.2	mg/kg
DUP-3-20200804	460-215088-6	BARIUM	8/11/2020	54.7	Y	Y				43.5	4.2	mg/kg
DUP-3-20200804	460-215088-6	CHROMIUM, TOTAL	8/11/2020	16.5	Y	Y				2.2	1.5	mg/kg
DUP-3-20200804	460-215088-6	SILVER	8/11/2020		Y	N	U		U	2.2	1.2	mg/kg
DUP-3-20200804	460-215088-6	SELENIUM	8/11/2020		Y	N	U		U	4.4	0.74	mg/kg
DUP-3-20200804	460-215088-6	IRON	8/11/2020	13900	Y	Y				32.6	22.4	mg/kg
DUP-3-20200804	460-215088-6	VANADIUM	8/11/2020	16.9	Y	Y				10.9	1.0	mg/kg

SDG: 4602150881

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	ZINC	8/11/2020	21.7	Y	Y				6.5	1.2	mg/kg
SB-17 (4-5)-20200804	460-215088-2	MANGANESE	8/11/2020	356	Y	Y				3.1	0.23	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CALCIUM	8/11/2020	1690	Y	Y				1040	76.5	mg/kg
SB-17 (4-5)-20200804	460-215088-2	COPPER	8/11/2020	20.0	Y	Y				5.2	1.3	mg/kg
SB-17 (4-5)-20200804	460-215088-2	IRON	8/11/2020	12600	Y	Y				31.1	21.3	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ANTIMONY	8/11/2020	1.2	Y	Y	J		J	4.1	1.2	mg/kg
SB-17 (4-5)-20200804	460-215088-2	LEAD	8/11/2020	3.8	Y	Y				2.1	0.34	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BARIUM	8/11/2020	46.7	Y	Y				41.4	4.0	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CHROMIUM, TOTAL	8/11/2020	14.1	Y	Y				2.1	1.5	mg/kg
SB-17 (4-5)-20200804	460-215088-2	MAGNESIUM	8/11/2020	2220	Y	Y				1040	70.1	mg/kg
SB-17 (4-5)-20200804	460-215088-2	NICKEL	8/11/2020	14.0	Y	Y				8.3	0.54	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ALUMINUM	8/11/2020	5740	Y	Y				41.4	5.9	mg/kg
SB-17 (4-5)-20200804	460-215088-2	POTASSIUM	8/11/2020	2000	Y	Y				1040	63.6	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CADMIUM	8/11/2020		Y	N	U		U	0.83	0.071	mg/kg
SB-17 (4-5)-20200804	460-215088-2	VANADIUM	8/11/2020	16.5	Y	Y				10.4	0.96	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BERYLLIUM	8/11/2020		Y	N	U		U	0.41	0.066	mg/kg
SB-17 (4-5)-20200804	460-215088-2	SODIUM	8/11/2020	133	Y	Y	J		J	1040	90.1	mg/kg
SB-17 (4-5)-20200804	460-215088-2	THALLIUM	8/11/2020		Y	N	U		U	4.1	0.64	mg/kg
SB-17 (4-5)-20200804	460-215088-2	COBALT	8/11/2020	7.4	Y	Y	J		J	10.4	0.57	mg/kg
SB-17 (4-5)-20200804	460-215088-2	SILVER	8/11/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-17 (4-5)-20200804	460-215088-2	SELENIUM	8/11/2020		Y	N	U		U	4.1	0.70	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ARSENIC	8/11/2020	0.90	Y	Y	J		J	3.1	0.64	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ZINC	8/11/2020	19.5	Y	Y				6.2	1.1	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CHROMIUM, TOTAL	8/11/2020	17.9	Y	Y				2.2	1.5	mg/kg
SB-17 (7-8)-20200804	460-215088-3	THALLIUM	8/11/2020		Y	N	U		U	4.3	0.67	mg/kg

SDG: 4602150881

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	ARSENIC	8/11/2020	1.2	Y	Y	J		J	3.3	0.67	mg/kg
SB-17 (7-8)-20200804	460-215088-3	NICKEL	8/11/2020	12.1	Y	Y				8.7	0.57	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CALCIUM	8/11/2020	877	Y	Y	J		J	1090	80.2	mg/kg
SB-17 (7-8)-20200804	460-215088-3	MANGANESE	8/11/2020	241	Y	Y				3.3	0.24	mg/kg
SB-17 (7-8)-20200804	460-215088-3	MAGNESIUM	8/11/2020	2430	Y	Y				1090	73.5	mg/kg
SB-17 (7-8)-20200804	460-215088-3	LEAD	8/11/2020	4.4	Y	Y				2.2	0.35	mg/kg
SB-17 (7-8)-20200804	460-215088-3	IRON	8/11/2020	17500	Y	Y				32.6	22.4	mg/kg
SB-17 (7-8)-20200804	460-215088-3	COPPER	8/11/2020	14.0	Y	Y				5.4	1.4	mg/kg
SB-17 (7-8)-20200804	460-215088-3	POTASSIUM	8/11/2020	3200	Y	Y				1090	66.6	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CADMIUM	8/11/2020		Y	N	U		U	0.87	0.075	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BERYLLIUM	8/11/2020		Y	N	U		U	0.43	0.069	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ALUMINUM	8/11/2020	5720	Y	Y				43.4	6.1	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ANTIMONY	8/11/2020		Y	N	U		U	4.3	1.2	mg/kg
SB-17 (7-8)-20200804	460-215088-3	SODIUM	8/11/2020		Y	N	U		U	1090	94.4	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ZINC	8/11/2020	26.1	Y	Y				6.5	1.2	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BARIUM	8/11/2020	65.1	Y	Y				43.4	4.2	mg/kg
SB-17 (7-8)-20200804	460-215088-3	COBALT	8/11/2020	5.8	Y	Y	J		J	10.9	0.60	mg/kg
SB-17 (7-8)-20200804	460-215088-3	SELENIUM	8/11/2020		Y	N	U		U	4.3	0.74	mg/kg
SB-17 (7-8)-20200804	460-215088-3	SILVER	8/11/2020		Y	N	U		U	2.2	1.2	mg/kg
SB-17 (7-8)-20200804	460-215088-3	VANADIUM	8/11/2020	20.3	Y	Y				10.9	1.0	mg/kg
SB-18 (2-3-20200804	460-215088-4	ALUMINUM	8/11/2020	5760	Y	Y				40.9	5.8	mg/kg
SB-18 (2-3-20200804	460-215088-4	BARIUM	8/11/2020	49.9	Y	Y				40.9	4.0	mg/kg
SB-18 (2-3-20200804	460-215088-4	THALLIUM	8/11/2020		Y	N	U		U	4.1	0.63	mg/kg
SB-18 (2-3-20200804	460-215088-4	SODIUM	8/11/2020		Y	N	U		U	1020	89.0	mg/kg
SB-18 (2-3-20200804	460-215088-4	NICKEL	8/11/2020	13.9	Y	Y				8.2	0.54	mg/kg

SDG: 4602150881

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	SELENIUM	8/11/2020		Y	N	U		U	4.1	0.69	mg/kg
SB-18 (2-3-20200804	460-215088-4	VANADIUM	8/11/2020	14.6	Y	Y				10.2	0.95	mg/kg
SB-18 (2-3-20200804	460-215088-4	ANTIMONY	8/11/2020	1.9	Y	Y	J		J	4.1	1.2	mg/kg
SB-18 (2-3-20200804	460-215088-4	ARSENIC	8/11/2020	1.1	Y	Y	J		J	3.1	0.63	mg/kg
SB-18 (2-3-20200804	460-215088-4	CALCIUM	8/11/2020	883	Y	Y	J		J	1020	75.6	mg/kg
SB-18 (2-3-20200804	460-215088-4	COBALT	8/11/2020	5.5	Y	Y	J		J	10.2	0.57	mg/kg
SB-18 (2-3-20200804	460-215088-4	MAGNESIUM	8/11/2020	1820	Y	Y				1020	69.3	mg/kg
SB-18 (2-3-20200804	460-215088-4	SILVER	8/11/2020		Y	N	U		U	2.0	1.1	mg/kg
SB-18 (2-3-20200804	460-215088-4	CHROMIUM, TOTAL	8/11/2020	12.7	Y	Y				2.0	1.5	mg/kg
SB-18 (2-3-20200804	460-215088-4	CADMIUM	8/11/2020		Y	N	U		U	0.82	0.071	mg/kg
SB-18 (2-3-20200804	460-215088-4	BERYLLIUM	8/11/2020		Y	N	U		U	0.41	0.065	mg/kg
SB-18 (2-3-20200804	460-215088-4	ZINC	8/11/2020	18.5	Y	Y				6.1	1.1	mg/kg
SB-18 (2-3-20200804	460-215088-4	POTASSIUM	8/11/2020	1980	Y	Y				1020	62.8	mg/kg
SB-18 (2-3-20200804	460-215088-4	MANGANESE	8/11/2020	486	Y	Y				3.1	0.23	mg/kg
SB-18 (2-3-20200804	460-215088-4	LEAD	8/11/2020	4.1	Y	Y				2.0	0.33	mg/kg
SB-18 (2-3-20200804	460-215088-4	IRON	8/11/2020	12200	Y	Y				30.7	21.1	mg/kg
SB-18 (2-3-20200804	460-215088-4	COPPER	8/11/2020	11.3	Y	Y				5.1	1.3	mg/kg
SB-18 (8-9)-20200804	460-215088-5	SELENIUM	8/11/2020		Y	N	U		U	4.5	0.77	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CALCIUM	8/11/2020	761	Y	Y	J		J	1130	83.3	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BARIUM	8/11/2020	38.8	Y	Y	J		J	45.1	4.3	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ARSENIC	8/11/2020	1.1	Y	Y	J		J	3.4	0.69	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ANTIMONY	8/11/2020	1.7	Y	Y	J		J	4.5	1.3	mg/kg
SB-18 (8-9)-20200804	460-215088-5	COBALT	8/11/2020	5.9	Y	Y	J		J	11.3	0.62	mg/kg
SB-18 (8-9)-20200804	460-215088-5	MAGNESIUM	8/11/2020	1510	Y	Y				1130	76.3	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CADMIUM	8/11/2020		Y	N	U		U	0.90	0.078	mg/kg

SDG: 4602150881

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	ALUMINUM	8/11/2020	4080	Y	Y				45.1	6.4	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ZINC	8/11/2020	19.2	Y	Y				6.8	1.2	mg/kg
SB-18 (8-9)-20200804	460-215088-5	VANADIUM	8/11/2020	13.8	Y	Y				11.3	1.0	mg/kg
SB-18 (8-9)-20200804	460-215088-5	POTASSIUM	8/11/2020	1580	Y	Y				1130	69.2	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CHROMIUM, TOTAL	8/11/2020	13.3	Y	Y				2.3	1.6	mg/kg
SB-18 (8-9)-20200804	460-215088-5	MANGANESE	8/11/2020	356	Y	Y				3.4	0.25	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BERYLLIUM	8/11/2020		Y	N	U		U	0.45	0.072	mg/kg
SB-18 (8-9)-20200804	460-215088-5	LEAD	8/11/2020	3.9	Y	Y				2.3	0.37	mg/kg
SB-18 (8-9)-20200804	460-215088-5	IRON	8/11/2020	13100	Y	Y				33.8	23.2	mg/kg
SB-18 (8-9)-20200804	460-215088-5	COPPER	8/11/2020	10	Y	Y				5.6	1.4	mg/kg
SB-18 (8-9)-20200804	460-215088-5	SILVER	8/11/2020		Y	N	U		U	2.3	1.3	mg/kg
SB-18 (8-9)-20200804	460-215088-5	SODIUM	8/11/2020		Y	N	U		U	1130	98.0	mg/kg
SB-18 (8-9)-20200804	460-215088-5	THALLIUM	8/11/2020		Y	N	U		U	4.5	0.70	mg/kg
SB-18 (8-9)-20200804	460-215088-5	NICKEL	8/11/2020	13.5	Y	Y				9.0	0.59	mg/kg
SB-9 (1-2)-20200804	460-215088-1	COBALT	8/11/2020	5.9	Y	Y	J		J	10.6	0.59	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CALCIUM	8/11/2020	770	Y	Y	J		J	1060	78.3	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ARSENIC	8/11/2020	1.6	Y	Y	J		J	3.2	0.65	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ANTIMONY	8/11/2020	2.0	Y	Y	J		J	4.2	1.2	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CADMIUM	8/11/2020		Y	N	U		U	0.85	0.073	mg/kg
SB-9 (1-2)-20200804	460-215088-1	SELENIUM	8/11/2020		Y	N	U		U	4.2	0.72	mg/kg
SB-9 (1-2)-20200804	460-215088-1	SILVER	8/11/2020		Y	N	U		U	2.1	1.2	mg/kg
SB-9 (1-2)-20200804	460-215088-1	THALLIUM	8/11/2020		Y	N	U		U	4.2	0.66	mg/kg
SB-9 (1-2)-20200804	460-215088-1	POTASSIUM	8/11/2020	1560	Y	Y				1060	65.1	mg/kg
SB-9 (1-2)-20200804	460-215088-1	SODIUM	8/11/2020	140	Y	Y	J		J	1060	92.2	mg/kg
SB-9 (1-2)-20200804	460-215088-1	MANGANESE	8/11/2020	440	Y	Y				3.2	0.24	mg/kg

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-9 (1-2)-20200804	460-215088-1	LEAD	8/11/2020	5.4	Y	Y				2.1	0.34	mg/kg
SB-9 (1-2)-20200804	460-215088-1	NICKEL	8/11/2020	13.0	Y	Y				8.5	0.56	mg/kg
SB-9 (1-2)-20200804	460-215088-1	MAGNESIUM	8/11/2020	1550	Y	Y				1060	71.8	mg/kg
SB-9 (1-2)-20200804	460-215088-1	VANADIUM	8/11/2020	13.4	Y	Y				10.6	0.99	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BERYLLIUM	8/11/2020		Y	N	U		U	0.42	0.068	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ALUMINUM	8/11/2020	5320	Y	Y				42.4	6.0	mg/kg
SB-9 (1-2)-20200804	460-215088-1	IRON	8/11/2020	11800	Y	Y				31.8	21.8	mg/kg
SB-9 (1-2)-20200804	460-215088-1	COPPER	8/11/2020	11.3	Y	Y				5.3	1.3	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CHROMIUM, TOTAL	8/11/2020	11.5	Y	Y				2.1	1.5	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BARIUM	8/11/2020	44.0	Y	Y				42.4	4.1	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ZINC	8/11/2020	17.3	Y	Y				6.4	1.2	mg/kg

Analytical Method SW7471B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	MERCURY	8/10/2020		Y	N	U		U	0.017	0.0041	mg/kg
SB-17 (4-5)-20200804	460-215088-2	MERCURY	8/10/2020		Y	N	U		U	0.018	0.0042	mg/kg
SB-17 (7-8)-20200804	460-215088-3	MERCURY	8/10/2020		Y	N	U		U	0.017	0.0041	mg/kg
SB-18 (2-3-20200804	460-215088-4	MERCURY	8/10/2020	0.0048	Y	Y	J		J	0.017	0.0040	mg/kg
SB-18 (8-9)-20200804	460-215088-5	MERCURY	8/10/2020		Y	N	U		U	0.019	0.0045	mg/kg
SB-9 (1-2)-20200804	460-215088-1	MERCURY	8/10/2020		Y	N	U		U	0.018	0.0042	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	ENDOSULFAN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-3-20200804	460-215088-6	TOXAPHENE	8/7/2020		Y	N	U		U	0.075	0.027	mg/kg
DUP-3-20200804	460-215088-6	P,P'-DDE	8/7/2020		Y	N	U		U	0.0075	0.00089	mg/kg

SDG: 4602150881

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	P,P'-DDD	8/7/2020		Y	N	U		U	0.0075	0.0013	mg/kg
DUP-3-20200804	460-215088-6	METHOXYCHLOR	8/7/2020		Y	N	U		U	0.0075	0.0017	mg/kg
DUP-3-20200804	460-215088-6	HEPTACHLOR EPOXIDE	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-3-20200804	460-215088-6	HEPTACHLOR	8/7/2020		Y	N	U		U	0.0075	0.00089	mg/kg
DUP-3-20200804	460-215088-6	GAMMA BHC (LINDANE)	8/7/2020		Y	N	U		U	0.0022	0.00069	mg/kg
DUP-3-20200804	460-215088-6	ENDRIN KETONE	8/7/2020		Y	N	U		U	0.0075	0.0015	mg/kg
DUP-3-20200804	460-215088-6	ENDRIN ALDEHYDE	8/7/2020		Y	N	U		U	0.0075	0.0018	mg/kg
DUP-3-20200804	460-215088-6	Chlordane (Technical)	8/7/2020		Y	N	U		U	0.075	0.018	mg/kg
DUP-3-20200804	460-215088-6	ENDOSULFAN SULFATE	8/7/2020		Y	N	U		U	0.0075	0.00094	mg/kg
DUP-3-20200804	460-215088-6	ALDRIN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-3-20200804	460-215088-6	DIELDRIN	8/7/2020		Y	N	U		U	0.0022	0.00097	mg/kg
DUP-3-20200804	460-215088-6	P,P'-DDT	8/7/2020		Y	N	U		U	0.0075	0.0014	mg/kg
DUP-3-20200804	460-215088-6	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00046	mg/kg
DUP-3-20200804	460-215088-6	CHLORDANE	8/7/2020		Y	N	U		U	0.075	0.018	mg/kg
DUP-3-20200804	460-215088-6	BETA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0075	0.0019	mg/kg
DUP-3-20200804	460-215088-6	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00084	mg/kg
DUP-3-20200804	460-215088-6	ALPHA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-3-20200804	460-215088-6	ALPHA CHLORDANE	8/7/2020		Y	N	U		U	0.0075	0.0012	mg/kg
DUP-3-20200804	460-215088-6	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00076	mg/kg
DUP-3-20200804	460-215088-6	ENDRIN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
DUP-3-20200804	460-215088-6	trans-Chlordane	8/7/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	HEPTACHLOR EPOXIDE	8/7/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	P,P'-DDE	8/7/2020		Y	N	U		U	0.0074	0.00088	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CHLORDANE	8/7/2020		Y	N	U		U	0.074	0.018	mg/kg

SDG: 4602150881

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (4-5)-20200804	460-215088-2	Chlordane (Technical)	8/7/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DIELDRIN	8/7/2020		Y	N	U		U	0.0022	0.00096	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ENDOSULFAN	8/7/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ENDOSULFAN SULFATE	8/7/2020		Y	N	U		U	0.0074	0.00093	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ENDRIN	8/7/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ENDRIN ALDEHYDE	8/7/2020		Y	N	U		U	0.0074	0.0018	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ENDRIN KETONE	8/7/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-17 (4-5)-20200804	460-215088-2	HEPTACHLOR	8/7/2020		Y	N	U		U	0.0074	0.00088	mg/kg
SB-17 (4-5)-20200804	460-215088-2	METHOXYCHLOR	8/7/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-17 (4-5)-20200804	460-215088-2	P,P'-DDD	8/7/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	trans-Chlordane	8/7/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TOXAPHENE	8/7/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-17 (4-5)-20200804	460-215088-2	P,P'-DDT	8/7/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BETA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00083	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ALPHA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ALPHA CHLORDANE	8/7/2020		Y	N	U		U	0.0074	0.0012	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ALDRIN	8/7/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	GAMMA BHC (LINDANE)	8/7/2020		Y	N	U		U	0.0022	0.00069	mg/kg
SB-17 (7-8)-20200804	460-215088-3	Chlordane (Technical)	8/7/2020		Y	N	U		U	0.076	0.018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0023	0.00077	mg/kg

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	ALDRIN	8/7/2020		Y	N	U		U	0.0076	0.0011	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ENDRIN	8/7/2020		Y	N	U		U	0.0076	0.0011	mg/kg
SB-17 (7-8)-20200804	460-215088-3	trans-Chlordane	8/7/2020		Y	N	U		U	0.0076	0.0013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	P,P'-DDT	8/7/2020		Y	N	U		U	0.0076	0.0014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	P,P'-DDE	8/7/2020		Y	N	U		U	0.0076	0.00089	mg/kg
SB-17 (7-8)-20200804	460-215088-3	P,P'-DDD	8/7/2020		Y	N	U		U	0.0076	0.0013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	METHOXYCHLOR	8/7/2020		Y	N	U		U	0.0076	0.0017	mg/kg
SB-17 (7-8)-20200804	460-215088-3	HEPTACHLOR EPOXIDE	8/7/2020		Y	N	U		U	0.0076	0.0011	mg/kg
SB-17 (7-8)-20200804	460-215088-3	HEPTACHLOR	8/7/2020		Y	N	U		U	0.0076	0.00089	mg/kg
SB-17 (7-8)-20200804	460-215088-3	GAMMA BHC (LINDANE)	8/7/2020		Y	N	U		U	0.0023	0.00070	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BETA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0076	0.0019	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ENDRIN ALDEHYDE	8/7/2020		Y	N	U		U	0.0076	0.0018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ALPHA CHLORDANE	8/7/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ENDOSULFAN SULFATE	8/7/2020		Y	N	U		U	0.0076	0.00095	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ENDOSULFAN	8/7/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DIELDRIN	8/7/2020		Y	N	U		U	0.0023	0.00098	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0023	0.00046	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TOXAPHENE	8/7/2020		Y	N	U		U	0.076	0.027	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CHLORDANE	8/7/2020		Y	N	U		U	0.076	0.018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0023	0.00085	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ALPHA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0076	0.0012	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ENDRIN KETONE	8/7/2020		Y	N	U		U	0.0076	0.0015	mg/kg
SB-18 (2-3-20200804	460-215088-4	DIELDRIN	8/7/2020		Y	N	U	UJ	UJ	0.0022	0.00096	mg/kg
SB-18 (2-3-20200804	460-215088-4	P,P'-DDE	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.00087	mg/kg

SDG: 4602150881

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	P,P'-DDD	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0013	mg/kg
SB-18 (2-3-20200804	460-215088-4	METHOXYCHLOR	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0017	mg/kg
SB-18 (2-3-20200804	460-215088-4	HEPTACHLOR EPOXIDE	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0011	mg/kg
SB-18 (2-3-20200804	460-215088-4	HEPTACHLOR	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.00087	mg/kg
SB-18 (2-3-20200804	460-215088-4	GAMMA BHC (LINDANE)	8/7/2020		Y	N	U	UJ	UJ	0.0022	0.00069	mg/kg
SB-18 (2-3-20200804	460-215088-4	ENDRIN KETONE	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0014	mg/kg
SB-18 (2-3-20200804	460-215088-4	ENDRIN ALDEHYDE	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0017	mg/kg
SB-18 (2-3-20200804	460-215088-4	ENDRIN	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0011	mg/kg
SB-18 (2-3-20200804	460-215088-4	trans-Chlordane	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0013	mg/kg
SB-18 (2-3-20200804	460-215088-4	ENDOSULFAN	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0011	mg/kg
SB-18 (2-3-20200804	460-215088-4	P,P'-DDT	8/7/2020	0.34	Y	Y		J	J	0.0074	0.0014	mg/kg
SB-18 (2-3-20200804	460-215088-4	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U	UJ	UJ	0.0022	0.00045	mg/kg
SB-18 (2-3-20200804	460-215088-4	Chlordane (Technical)	8/7/2020		Y	N	U	UJ	UJ	0.074	0.018	mg/kg
SB-18 (2-3-20200804	460-215088-4	ALDRIN	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0011	mg/kg
SB-18 (2-3-20200804	460-215088-4	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U	UJ	UJ	0.0022	0.00075	mg/kg
SB-18 (2-3-20200804	460-215088-4	ALPHA CHLORDANE	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0012	mg/kg
SB-18 (2-3-20200804	460-215088-4	ALPHA ENDOSULFAN	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0011	mg/kg
SB-18 (2-3-20200804	460-215088-4	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U	UJ	UJ	0.0022	0.00083	mg/kg
SB-18 (2-3-20200804	460-215088-4	BETA ENDOSULFAN	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.0019	mg/kg
SB-18 (2-3-20200804	460-215088-4	CHLORDANE	8/7/2020		Y	N	U	UJ	UJ	0.074	0.018	mg/kg
SB-18 (2-3-20200804	460-215088-4	ENDOSULFAN SULFATE	8/7/2020		Y	N	U	UJ	UJ	0.0074	0.00093	mg/kg
SB-18 (2-3-20200804	460-215088-4	TOXAPHENE	8/7/2020		Y	N	U	UJ	UJ	0.074	0.027	mg/kg
SB-18 (8-9)-20200804	460-215088-5	P,P'-DDT	8/7/2020		Y	N	U		U	0.0081	0.0015	mg/kg

SDG: 4602150881

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0024	0.00082	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ALPHA CHLORDANE	8/7/2020		Y	N	U		U	0.0081	0.0013	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ALPHA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	HEPTACHLOR EPOXIDE	8/7/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	HEPTACHLOR	8/7/2020		Y	N	U		U	0.0081	0.00095	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TOXAPHENE	8/7/2020		Y	N	U		U	0.081	0.029	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0024	0.00090	mg/kg
SB-18 (8-9)-20200804	460-215088-5	GAMMA BHC (LINDANE)	8/7/2020		Y	N	U		U	0.0024	0.00075	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ENDRIN KETONE	8/7/2020		Y	N	U		U	0.0081	0.0016	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ENDRIN ALDEHYDE	8/7/2020		Y	N	U		U	0.0081	0.0019	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ENDRIN	8/7/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	P,P'-DDE	8/7/2020		Y	N	U		U	0.0081	0.00095	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ENDOSULFAN	8/7/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DIELDRIN	8/7/2020		Y	N	U		U	0.0024	0.0010	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0024	0.00049	mg/kg
SB-18 (8-9)-20200804	460-215088-5	Chlordane (Technical)	8/7/2020		Y	N	U		U	0.081	0.020	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CHLORDANE	8/7/2020		Y	N	U		U	0.081	0.020	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BETA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0081	0.0021	mg/kg
SB-18 (8-9)-20200804	460-215088-5	METHOXYCHLOR	8/7/2020		Y	N	U		U	0.0081	0.0018	mg/kg
SB-18 (8-9)-20200804	460-215088-5	P,P'-DDD	8/7/2020		Y	N	U		U	0.0081	0.0014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ALDRIN	8/7/2020		Y	N	U		U	0.0081	0.0012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ENDOSULFAN SULFATE	8/7/2020		Y	N	U		U	0.0081	0.0010	mg/kg
SB-18 (8-9)-20200804	460-215088-5	trans-Chlordane	8/7/2020		Y	N	U		U	0.0081	0.0014	mg/kg

SDG: 4602150881

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-9 (1-2)-20200804	460-215088-1	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00084	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ALPHA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00076	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DIELDRIN	8/7/2020		Y	N	U		U	0.0022	0.00098	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ALDRIN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ALPHA CHLORDANE	8/7/2020		Y	N	U		U	0.0075	0.0012	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BETA ENDOSULFAN	8/7/2020		Y	N	U		U	0.0075	0.0019	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CHLORDANE	8/7/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/7/2020		Y	N	U		U	0.0022	0.00046	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ENDOSULFAN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ENDRIN	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ENDOSULFAN SULFATE	8/7/2020		Y	N	U		U	0.0075	0.00094	mg/kg
SB-9 (1-2)-20200804	460-215088-1	Chlordane (Technical)	8/7/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ENDRIN KETONE	8/7/2020		Y	N	U		U	0.0075	0.0015	mg/kg
SB-9 (1-2)-20200804	460-215088-1	GAMMA BHC (LINDANE)	8/7/2020		Y	N	U		U	0.0022	0.00070	mg/kg
SB-9 (1-2)-20200804	460-215088-1	HEPTACHLOR	8/7/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-9 (1-2)-20200804	460-215088-1	HEPTACHLOR EPOXIDE	8/7/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-9 (1-2)-20200804	460-215088-1	METHOXYCHLOR	8/7/2020		Y	N	U		U	0.0075	0.0017	mg/kg
SB-9 (1-2)-20200804	460-215088-1	P,P'-DDD	8/7/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-9 (1-2)-20200804	460-215088-1	P,P'-DDE	8/7/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ENDRIN ALDEHYDE	8/7/2020		Y	N	U		U	0.0075	0.0018	mg/kg
SB-9 (1-2)-20200804	460-215088-1	P,P'-DDT	8/7/2020		Y	N	U		U	0.0075	0.0014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TOXAPHENE	8/7/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-9 (1-2)-20200804	460-215088-1	trans-Chlordane	8/7/2020		Y	N	U		U	0.0075	0.0013	mg/kg

SDG: 4602150881

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	PCB-1242 (AROCLOR 1242)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1268 (AROCLOR 1268)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	TOTAL PCBS	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1262 (AROCLOR 1262)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1248 (AROCLOR 1248)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1232 (AROCLOR 1232)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1221 (AROCLOR 1221)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1016 (AROCLOR 1016)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1260 (AROCLOR 1260)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
DUP-3-20200804	460-215088-6	PCB-1254 (AROCLOR 1254)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1016 (AROCLOR 1016)	8/7/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1221 (AROCLOR 1221)	8/7/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1232 (AROCLOR 1232)	8/7/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1242 (AROCLOR 1242)	8/7/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1248 (AROCLOR 1248)	8/7/2020		Y	N	U		U	0.074	0.0099	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1254 (AROCLOR 1254)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1260 (AROCLOR 1260)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1268 (AROCLOR 1268)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PCB-1262 (AROCLOR 1262)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TOTAL PCBS	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1260 (AROCLOR 1260)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1016 (AROCLOR 1016)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TOTAL PCBS	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1262 (AROCLOR 1262)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1254 (AROCLOR 1254)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg

SDG: 4602150881

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	PCB-1248 (AROCLOR 1248)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1242 (AROCLOR 1242)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1232 (AROCLOR 1232)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1221 (AROCLOR 1221)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PCB-1268 (AROCLOR 1268)	8/7/2020		Y	N	U		U	0.076	0.010	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1260 (AROCLOR 1260)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1016 (AROCLOR 1016)	8/7/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1232 (AROCLOR 1232)	8/7/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-18 (2-3-20200804	460-215088-4	TOTAL PCBS	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1262 (AROCLOR 1262)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1221 (AROCLOR 1221)	8/7/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1254 (AROCLOR 1254)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1248 (AROCLOR 1248)	8/7/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1242 (AROCLOR 1242)	8/7/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-18 (2-3-20200804	460-215088-4	PCB-1268 (AROCLOR 1268)	8/7/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1248 (AROCLOR 1248)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1016 (AROCLOR 1016)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1221 (AROCLOR 1221)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1232 (AROCLOR 1232)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1242 (AROCLOR 1242)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1260 (AROCLOR 1260)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1262 (AROCLOR 1262)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1268 (AROCLOR 1268)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PCB-1254 (AROCLOR 1254)	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TOTAL PCBS	8/7/2020		Y	N	U		U	0.081	0.011	mg/kg

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-9 (1-2)-20200804	460-215088-1	PCB-1262 (AROCLOR 1262)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1221 (AROCLOR 1221)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1232 (AROCLOR 1232)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1242 (AROCLOR 1242)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1248 (AROCLOR 1248)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1260 (AROCLOR 1260)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1268 (AROCLOR 1268)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1016 (AROCLOR 1016)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TOTAL PCBS	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PCB-1254 (AROCLOR 1254)	8/7/2020		Y	N	U		U	0.075	0.010	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	BROMODICHLOROMETHANE	8/10/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-3-20200804	460-215088-6	CARBON TETRACHLORIDE	8/10/2020		Y	N	U		U	0.00088	0.00034	mg/kg
DUP-3-20200804	460-215088-6	CHLOROETHANE	8/10/2020		Y	N	U		U	0.00088	0.00046	mg/kg
DUP-3-20200804	460-215088-6	METHYL ETHYL KETONE (2-BUTANONE)	8/10/2020		Y	N	U		U	0.0044	0.0024	mg/kg
DUP-3-20200804	460-215088-6	CHLOROFORM	8/10/2020		Y	N	U		U	0.00088	0.00028	mg/kg
DUP-3-20200804	460-215088-6	CHLOROBENZENE	8/10/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-3-20200804	460-215088-6	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/10/2020		Y	N	U		U	0.0044	0.0014	mg/kg
DUP-3-20200804	460-215088-6	1,1-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00088	0.00018	mg/kg
DUP-3-20200804	460-215088-6	METHYLENE CHLORIDE	8/10/2020		Y	N	U		U	0.00088	0.00041	mg/kg
DUP-3-20200804	460-215088-6	O-XYLENE (1,2-DIMETHYLBENZENE)	8/10/2020		Y	N	U		U	0.00088	0.00017	mg/kg
DUP-3-20200804	460-215088-6	METHYLCYCLOHEXANE	8/10/2020		Y	N	U		U	0.00088	0.00044	mg/kg
DUP-3-20200804	460-215088-6	CHLOROMETHANE	8/10/2020		Y	N	U		U	0.00088	0.00038	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	TERT-BUTYL METHYL ETHER	8/10/2020		Y	N	U		U	0.00088	0.00011	mg/kg
DUP-3-20200804	460-215088-6	BROMOMETHANE	8/10/2020		Y	N	U		U	0.00088	0.00042	mg/kg
DUP-3-20200804	460-215088-6	TOLUENE	8/10/2020		Y	N	U		U	0.00088	0.00021	mg/kg
DUP-3-20200804	460-215088-6	CARBON DISULFIDE	8/10/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-3-20200804	460-215088-6	1,1,2-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-3-20200804	460-215088-6	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/10/2020		Y	N	U		U	0.00088	0.00027	mg/kg
DUP-3-20200804	460-215088-6	1,1,2,2-TETRACHLOROETHANE	8/10/2020		Y	N	U		U	0.00088	0.00019	mg/kg
DUP-3-20200804	460-215088-6	1,1,1-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00088	0.00021	mg/kg
DUP-3-20200804	460-215088-6	BROMOFORM	8/10/2020		Y	N	U		U	0.00088	0.00037	mg/kg
DUP-3-20200804	460-215088-6	STYRENE	8/10/2020		Y	N	U		U	0.00088	0.00024	mg/kg
DUP-3-20200804	460-215088-6	TETRACHLOROETHYLENE(PCE)	8/10/2020		Y	N	U		U	0.00088	0.00013	mg/kg
DUP-3-20200804	460-215088-6	2-HEXANONE	8/10/2020		Y	N	U		U	0.0044	0.0015	mg/kg
DUP-3-20200804	460-215088-6	Cis-1,2-Dichloroethylene	8/10/2020		Y	N	U		U	0.00088	0.00013	mg/kg
DUP-3-20200804	460-215088-6	1,4-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00088	0.00020	mg/kg
DUP-3-20200804	460-215088-6	1,4-DIOXANE (P-DIOXANE)	8/10/2020		Y	N	U		U	0.018	0.0081	mg/kg
DUP-3-20200804	460-215088-6	TRICHLOROFLUOROMETHANE	8/10/2020		Y	N	U		U	0.00088	0.00036	mg/kg
DUP-3-20200804	460-215088-6	VINYL CHLORIDE	8/10/2020		Y	N	U		U	0.00088	0.00048	mg/kg
DUP-3-20200804	460-215088-6	1,2-DICHLOROPROPANE	8/10/2020		Y	N	U		U	0.00088	0.00037	mg/kg
DUP-3-20200804	460-215088-6	M,P-XYLENES	8/10/2020		Y	N	U		U	0.00088	0.00015	mg/kg
DUP-3-20200804	460-215088-6	1,2-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00088	0.00026	mg/kg
DUP-3-20200804	460-215088-6	Isopropylbenzene (Cumene)	8/10/2020		Y	N	U		U	0.00088	0.00011	mg/kg
DUP-3-20200804	460-215088-6	ETHYLBENZENE	8/10/2020		Y	N	U		U	0.00088	0.00018	mg/kg
DUP-3-20200804	460-215088-6	DICHLORODIFLUOROMETHANE	8/10/2020		Y	N	U		U	0.00088	0.00030	mg/kg
DUP-3-20200804	460-215088-6	BROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00088	0.00025	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	ACETONE	8/10/2020		Y	N	U		U	0.0053	0.0050	mg/kg
DUP-3-20200804	460-215088-6	BENZENE	8/10/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-3-20200804	460-215088-6	METHYL ACETATE	8/10/2020		Y	N	U		U	0.0044	0.0038	mg/kg
DUP-3-20200804	460-215088-6	1,1-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00088	0.00020	mg/kg
DUP-3-20200804	460-215088-6	1,2-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00088	0.00013	mg/kg
DUP-3-20200804	460-215088-6	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/10/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-3-20200804	460-215088-6	1,2-DIBROMO-3-CHLOROPROPANE	8/10/2020		Y	N	U		U	0.00088	0.00041	mg/kg
DUP-3-20200804	460-215088-6	1,2,4-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00088	0.00032	mg/kg
DUP-3-20200804	460-215088-6	1,2,3-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00088	0.00016	mg/kg
DUP-3-20200804	460-215088-6	TRANS-1,2-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00088	0.00022	mg/kg
DUP-3-20200804	460-215088-6	TRANS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00088	0.00023	mg/kg
DUP-3-20200804	460-215088-6	1,3-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00088	0.00014	mg/kg
DUP-3-20200804	460-215088-6	DIBROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00088	0.00017	mg/kg
DUP-3-20200804	460-215088-6	CYCLOHEXANE	8/10/2020		Y	N	U		U	0.00088	0.00019	mg/kg
DUP-3-20200804	460-215088-6	CIS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00088	0.00024	mg/kg
DUP-3-20200804	460-215088-6	TRICHLOROETHYLENE (TCE)	8/10/2020		Y	N	U		U	0.00088	0.00013	mg/kg
FB-20200804	460-215088-7	CHLOROETHANE	8/12/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200804	460-215088-7	TRANS-1,2-DICHLOROETHENE	8/12/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200804	460-215088-7	TRICHLOROFLUOROMETHANE	8/12/2020		Y	N	U	UJ	UJ	1.0	0.32	ug/l
FB-20200804	460-215088-7	TRICHLOROETHYLENE (TCE)	8/12/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200804	460-215088-7	M,P-XYLENES	8/12/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200804	460-215088-7	STYRENE	8/12/2020		Y	N	U		U	1.0	0.42	ug/l
FB-20200804	460-215088-7	O-XYLENE (1,2-DIMETHYLBENZENE)	8/12/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200804	460-215088-7	METHYLENE CHLORIDE	8/12/2020		Y	N	U		U	1.0	0.32	ug/l

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200804	460-215088-7	METHYLCYCLOHEXANE	8/12/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200804	460-215088-7	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/12/2020		Y	N	U		U	5.0	1.3	ug/l
FB-20200804	460-215088-7	CARBON TETRACHLORIDE	8/12/2020		Y	N	U		U	1.0	0.21	ug/l
FB-20200804	460-215088-7	METHYL ACETATE	8/12/2020		Y	N	U		U	5.0	0.79	ug/l
FB-20200804	460-215088-7	TERT-BUTYL METHYL ETHER	8/12/2020		Y	N	U		U	1.0	0.47	ug/l
FB-20200804	460-215088-7	Isopropylbenzene (Cumene)	8/12/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200804	460-215088-7	ETHYLBENZENE	8/12/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200804	460-215088-7	DICHLORODIFLUOROMETHANE	8/12/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200804	460-215088-7	DIBROMOCHLOROMETHANE	8/12/2020		Y	N	U		U	1.0	0.28	ug/l
FB-20200804	460-215088-7	CYCLOHEXANE	8/12/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200804	460-215088-7	1,4-DIOXANE (P-DIOXANE)	8/12/2020		Y	N	UT	UJ	UJ	50	28	ug/l
FB-20200804	460-215088-7	METHYL ETHYL KETONE (2-BUTANONE)	8/12/2020		Y	N	U		U	5.0	1.9	ug/l
FB-20200804	460-215088-7	CARBON DISULFIDE	8/12/2020		Y	N	U		U	1.0	0.82	ug/l
FB-20200804	460-215088-7	1,4-DICHLOROBENZENE	8/12/2020		Y	N	U		U	1.0	0.33	ug/l
FB-20200804	460-215088-7	2-HEXANONE	8/12/2020		Y	N	U		U	5.0	1.1	ug/l
FB-20200804	460-215088-7	ACETONE	8/12/2020		Y	N	U		U	5.0	4.4	ug/l
FB-20200804	460-215088-7	BENZENE	8/12/2020		Y	N	U		U	1.0	0.20	ug/l
FB-20200804	460-215088-7	BROMOCHLOROMETHANE	8/12/2020		Y	N	U		U	1.0	0.41	ug/l
FB-20200804	460-215088-7	BROMODICHLOROMETHANE	8/12/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200804	460-215088-7	TRANS-1,3-DICHLOROPROPENE	8/12/2020		Y	N	U		U	1.0	0.49	ug/l
FB-20200804	460-215088-7	BROMOMETHANE	8/12/2020		Y	N	U		U	1.0	0.55	ug/l
FB-20200804	460-215088-7	VINYL CHLORIDE	8/12/2020		Y	N	U	UJ	UJ	1.0	0.17	ug/l
FB-20200804	460-215088-7	CHLOROBENZENE	8/12/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200804	460-215088-7	CHLOROFORM	8/12/2020		Y	N	U		U	1.0	0.33	ug/l

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200804	460-215088-7	CHLOROMETHANE	8/12/2020		Y	N	U		U	1.0	0.40	ug/l
FB-20200804	460-215088-7	Cis-1,2-Dichloroethylene	8/12/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200804	460-215088-7	CIS-1,3-DICHLOROPROPENE	8/12/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200804	460-215088-7	1,3-DICHLOROBENZENE	8/12/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200804	460-215088-7	BROMOFORM	8/12/2020		Y	N	U		U	1.0	0.54	ug/l
FB-20200804	460-215088-7	TETRACHLOROETHYLENE(PCE)	8/12/2020		Y	N	U		U	1.0	0.25	ug/l
FB-20200804	460-215088-7	1,2,4-TRICHLOROBENZENE	8/12/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200804	460-215088-7	1,2-DICHLOROPROPANE	8/12/2020		Y	N	U		U	1.0	0.35	ug/l
FB-20200804	460-215088-7	1,2-DIBROMO-3-CHLOROPROPANE	8/12/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200804	460-215088-7	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/12/2020		Y	N	U		U	1.0	0.50	ug/l
FB-20200804	460-215088-7	1,2-DICHLOROBENZENE	8/12/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200804	460-215088-7	1,1,1-TRICHLOROETHANE	8/12/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200804	460-215088-7	TOLUENE	8/12/2020	0.48	Y	Y	J		J	1.0	0.38	ug/l
FB-20200804	460-215088-7	1,2-DICHLOROETHANE	8/12/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200804	460-215088-7	1,1,2,2-TETRACHLOROETHANE	8/12/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200804	460-215088-7	1,2,3-TRICHLOROBENZENE	8/12/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200804	460-215088-7	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/12/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200804	460-215088-7	1,1,2-TRICHLOROETHANE	8/12/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200804	460-215088-7	1,1-DICHLOROETHANE	8/12/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200804	460-215088-7	1,1-DICHLOROETHENE	8/12/2020		Y	N	U		U	1.0	0.26	ug/l
SB-17 (4-5)-20200804	460-215088-2	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/10/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,1-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00018	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,1,2-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BROMOMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00087	0.00041	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (4-5)-20200804	460-215088-2	BENZENE	8/10/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,1-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,2,3-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,2-DIBROMO-3-CHLOROPROPANE	8/10/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CHLOROETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00087	0.00046	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,2-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,2-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,2-DICHLOROPROPANE	8/10/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,3-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00014	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ACETONE	8/10/2020		Y	N	U		U	0.0052	0.0050	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2-HEXANONE	8/10/2020		Y	N	U		U	0.0044	0.0015	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,4-DIOXANE (P-DIOXANE)	8/10/2020		Y	N	U	UJ	UJ	0.017	0.0080	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,4-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,2,4-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00031	mg/kg
SB-17 (4-5)-20200804	460-215088-2	METHYL ETHYL KETONE (2-BUTANONE)	8/10/2020		Y	N	U		U	0.0044	0.0024	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TETRACHLOROETHYLENE(PCE)	8/10/2020		Y	N	U		U	0.00087	0.00012	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TERT-BUTYL METHYL ETHER	8/10/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	STYRENE	8/10/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-17 (4-5)-20200804	460-215088-2	O-XYLENE (1,2-DIMETHYLBENZENE)	8/10/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-17 (4-5)-20200804	460-215088-2	METHYLENE CHLORIDE	8/10/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-17 (4-5)-20200804	460-215088-2	METHYLCYCLOHEXANE	8/10/2020		Y	N	U		U	0.00087	0.00044	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TRANS-1,2-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00087	0.00021	mg/kg
SB-17 (4-5)-20200804	460-215088-2	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/10/2020		Y	N	U		U	0.0044	0.0014	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (4-5)-20200804	460-215088-2	TRANS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-17 (4-5)-20200804	460-215088-2	METHYL ACETATE	8/10/2020		Y	N	U		U	0.0044	0.0038	mg/kg
SB-17 (4-5)-20200804	460-215088-2	M,P-XYLENES	8/10/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-17 (4-5)-20200804	460-215088-2	Isopropylbenzene (Cumene)	8/10/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ETHYLBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DICHLORODIFLUOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00029	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DIBROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CYCLOHEXANE	8/10/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CIS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CARBON TETRACHLORIDE	8/10/2020		Y	N	U		U	0.00087	0.00034	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,1,1-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,1,2,2-TETRACHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00025	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BROMODICHLOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00022	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BROMOFORM	8/10/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TOLUENE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CARBON DISULFIDE	8/10/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CHLOROMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00087	0.00038	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CHLOROFORM	8/10/2020		Y	N	U		U	0.00087	0.00028	mg/kg
SB-17 (4-5)-20200804	460-215088-2	Cis-1,2-Dichloroethylene	8/10/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	VINYL CHLORIDE	8/10/2020		Y	N	U	UJ	UJ	0.00087	0.00048	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TRICHLOROFLUOROMETHANE	8/10/2020		Y	N	U	UJ	UJ	0.00087	0.00035	mg/kg
SB-17 (4-5)-20200804	460-215088-2	TRICHLOROETHYLENE (TCE)	8/10/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00098	0.00027	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	2-HEXANONE	8/10/2020		Y	N	U		U	0.0049	0.0017	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,4-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00098	0.00022	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZENE	8/10/2020		Y	N	U		U	0.00098	0.00025	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BROMODICHLOROMETHANE	8/10/2020		Y	N	U		U	0.00098	0.00025	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BROMOFORM	8/10/2020		Y	N	U		U	0.00098	0.00042	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CARBON DISULFIDE	8/10/2020		Y	N	U		U	0.00098	0.00026	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CARBON TETRACHLORIDE	8/10/2020		Y	N	U		U	0.00098	0.00038	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CHLOROBENZENE	8/10/2020		Y	N	U		U	0.00098	0.00017	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,3-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00098	0.00016	mg/kg
SB-17 (7-8)-20200804	460-215088-3	Cis-1,2-Dichloroethylene	8/10/2020		Y	N	U		U	0.00098	0.00015	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CIS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00098	0.00027	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CYCLOHEXANE	8/10/2020		Y	N	U		U	0.00098	0.00022	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CHLOROFORM	8/10/2020		Y	N	U		U	0.00098	0.00031	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,1-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00098	0.00022	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BROMOMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00098	0.00046	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00098	0.00014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/10/2020		Y	N	U		U	0.00098	0.00018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2-DIBROMO-3-CHLOROPROPANE	8/10/2020		Y	N	U		U	0.00098	0.00045	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2,4-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00098	0.00035	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,1-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00098	0.00020	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ACETONE	8/10/2020		Y	N	U		U	0.0059	0.0056	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2-DICHLOROPROPANE	8/10/2020		Y	N	U		U	0.00098	0.00041	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DIBROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00098	0.00019	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,1,1-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00098	0.00023	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	1,1,2,2-TETRACHLOROETHANE	8/10/2020		Y	N	U		U	0.00098	0.00021	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/10/2020		Y	N	U		U	0.00098	0.00029	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,1,2-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00098	0.00017	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00098	0.00029	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2,3-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00098	0.00018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TRANS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00098	0.00026	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DICHLORODIFLUOROMETHANE	8/10/2020		Y	N	U		U	0.00098	0.00033	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,4-DIOXANE (P-DIOXANE)	8/10/2020		Y	N	U	UJ	UJ	0.020	0.0090	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CHLOROETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00098	0.00051	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CHLOROMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00098	0.00042	mg/kg
SB-17 (7-8)-20200804	460-215088-3	VINYL CHLORIDE	8/10/2020		Y	N	U	UJ	UJ	0.00098	0.00053	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TRICHLOROETHYLENE (TCE)	8/10/2020		Y	N	U		U	0.00098	0.00014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TRANS-1,2-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00098	0.00024	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TOLUENE	8/10/2020		Y	N	U		U	0.00098	0.00023	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TETRACHLOROETHYLENE(PCE)	8/10/2020		Y	N	U		U	0.00098	0.00014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TERT-BUTYL METHYL ETHER	8/10/2020		Y	N	U		U	0.00098	0.00012	mg/kg
SB-17 (7-8)-20200804	460-215088-3	METHYL ACETATE	8/10/2020		Y	N	U		U	0.0049	0.0042	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ETHYLBENZENE	8/10/2020		Y	N	U		U	0.00098	0.00019	mg/kg
SB-17 (7-8)-20200804	460-215088-3	Isopropylbenzene (Cumene)	8/10/2020		Y	N	U		U	0.00098	0.00012	mg/kg
SB-17 (7-8)-20200804	460-215088-3	TRICHLOROFLUOROMETHANE	8/10/2020		Y	N	U	UJ	UJ	0.00098	0.00040	mg/kg
SB-17 (7-8)-20200804	460-215088-3	M,P-XYLENES	8/10/2020		Y	N	U		U	0.00098	0.00017	mg/kg
SB-17 (7-8)-20200804	460-215088-3	STYRENE	8/10/2020		Y	N	U		U	0.00098	0.00027	mg/kg
SB-17 (7-8)-20200804	460-215088-3	METHYL ETHYL KETONE (2-BUTANONE)	8/10/2020		Y	N	U		U	0.0049	0.0026	mg/kg
SB-17 (7-8)-20200804	460-215088-3	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/10/2020		Y	N	U		U	0.0049	0.0015	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	O-XYLENE (1,2-DIMETHYLBENZENE)	8/10/2020		Y	N	U		U	0.00098	0.00019	mg/kg
SB-17 (7-8)-20200804	460-215088-3	METHYLCYCLOHEXANE	8/10/2020		Y	N	U		U	0.00098	0.00049	mg/kg
SB-17 (7-8)-20200804	460-215088-3	METHYLENE CHLORIDE	8/10/2020		Y	N	U		U	0.00098	0.00045	mg/kg
SB-18 (2-3-20200804	460-215088-4	BROMOFORM	8/10/2020		Y	N	U		U	0.00087	0.00037	mg/kg
SB-18 (2-3-20200804	460-215088-4	2-HEXANONE	8/10/2020		Y	N	U		U	0.0044	0.0015	mg/kg
SB-18 (2-3-20200804	460-215088-4	ACETONE	8/10/2020		Y	N	U		U	0.0052	0.0050	mg/kg
SB-18 (2-3-20200804	460-215088-4	BENZENE	8/10/2020		Y	N	U		U	0.00087	0.00022	mg/kg
SB-18 (2-3-20200804	460-215088-4	CARBON TETRACHLORIDE	8/10/2020		Y	N	U		U	0.00087	0.00034	mg/kg
SB-18 (2-3-20200804	460-215088-4	BROMODICHLOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00022	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,4-DIOXANE (P-DIOXANE)	8/10/2020		Y	N	U	UJ	UJ	0.017	0.0080	mg/kg
SB-18 (2-3-20200804	460-215088-4	CARBON DISULFIDE	8/10/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-18 (2-3-20200804	460-215088-4	CHLOROFORM	8/10/2020		Y	N	U		U	0.00087	0.00028	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,1-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00018	mg/kg
SB-18 (2-3-20200804	460-215088-4	CHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-18 (2-3-20200804	460-215088-4	BROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,4-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,3-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00014	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/10/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2-DIBROMO-3-CHLOROPROPANE	8/10/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2,4-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00031	mg/kg
SB-18 (2-3-20200804	460-215088-4	Cis-1,2-Dichloroethylene	8/10/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,1-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2-DICHLOROPROPANE	8/10/2020		Y	N	U		U	0.00087	0.00037	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	1,1,2-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00026	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,1,2,2-TETRACHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00019	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,1,1-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2,3-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00016	mg/kg
SB-18 (2-3-20200804	460-215088-4	M,P-XYLENES	8/10/2020		Y	N	U		U	0.00087	0.00015	mg/kg
SB-18 (2-3-20200804	460-215088-4	CIS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-18 (2-3-20200804	460-215088-4	METHYL ETHYL KETONE (2-BUTANONE)	8/10/2020		Y	N	U		U	0.0044	0.0024	mg/kg
SB-18 (2-3-20200804	460-215088-4	METHYL ACETATE	8/10/2020		Y	N	U		U	0.0044	0.0037	mg/kg
SB-18 (2-3-20200804	460-215088-4	Isopropylbenzene (Cumene)	8/10/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-18 (2-3-20200804	460-215088-4	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/10/2020		Y	N	U		U	0.0044	0.0014	mg/kg
SB-18 (2-3-20200804	460-215088-4	METHYLCYCLOHEXANE	8/10/2020		Y	N	U		U	0.00087	0.00043	mg/kg
SB-18 (2-3-20200804	460-215088-4	METHYLENE CHLORIDE	8/10/2020		Y	N	U		U	0.00087	0.00040	mg/kg
SB-18 (2-3-20200804	460-215088-4	O-XYLENE (1,2-DIMETHYLBENZENE)	8/10/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-18 (2-3-20200804	460-215088-4	STYRENE	8/10/2020		Y	N	U		U	0.00087	0.00024	mg/kg
SB-18 (2-3-20200804	460-215088-4	TERT-BUTYL METHYL ETHER	8/10/2020		Y	N	U		U	0.00087	0.00011	mg/kg
SB-18 (2-3-20200804	460-215088-4	TETRACHLOROETHYLENE(PCE)	8/10/2020		Y	N	U		U	0.00087	0.00012	mg/kg
SB-18 (2-3-20200804	460-215088-4	TOLUENE	8/10/2020		Y	N	U		U	0.00087	0.00020	mg/kg
SB-18 (2-3-20200804	460-215088-4	DIBROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-18 (2-3-20200804	460-215088-4	CHLOROMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00087	0.00038	mg/kg
SB-18 (2-3-20200804	460-215088-4	CHLOROETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00087	0.00046	mg/kg
SB-18 (2-3-20200804	460-215088-4	BROMOMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.00087	0.00041	mg/kg
SB-18 (2-3-20200804	460-215088-4	CYCLOHEXANE	8/10/2020		Y	N	U		U	0.00087	0.00019	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	TRANS-1,2-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00087	0.00021	mg/kg
SB-18 (2-3-20200804	460-215088-4	DICHLORODIFLUOROMETHANE	8/10/2020		Y	N	U		U	0.00087	0.00029	mg/kg
SB-18 (2-3-20200804	460-215088-4	ETHYLBENZENE	8/10/2020		Y	N	U		U	0.00087	0.00017	mg/kg
SB-18 (2-3-20200804	460-215088-4	VINYL CHLORIDE	8/10/2020		Y	N	U	UJ	UJ	0.00087	0.00048	mg/kg
SB-18 (2-3-20200804	460-215088-4	TRICHLOROFLUOROMETHANE	8/10/2020		Y	N	U	UJ	UJ	0.00087	0.00035	mg/kg
SB-18 (2-3-20200804	460-215088-4	TRICHLOROETHYLENE (TCE)	8/10/2020		Y	N	U		U	0.00087	0.00013	mg/kg
SB-18 (2-3-20200804	460-215088-4	TRANS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00087	0.00023	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ACETONE	8/10/2020		Y	N	U		U	0.0056	0.0053	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CHLOROBENZENE	8/10/2020		Y	N	U		U	0.00093	0.00016	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZENE	8/10/2020		Y	N	U		U	0.00093	0.00024	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,1,2,2-TETRACHLOROETHANE	8/10/2020		Y	N	U		U	0.00093	0.00020	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BROMODICHLOROMETHANE	8/10/2020		Y	N	U		U	0.00093	0.00024	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BROMOFORM	8/10/2020		Y	N	U		U	0.00093	0.00039	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BROMOMETHANE	8/10/2020		Y	N	U		U	0.00093	0.00044	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CARBON DISULFIDE	8/10/2020		Y	N	U		U	0.00093	0.00025	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CARBON TETRACHLORIDE	8/10/2020		Y	N	U		U	0.00093	0.00036	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00093	0.00026	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CHLOROETHANE	8/10/2020		Y	N	U		U	0.00093	0.00048	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CHLOROFORM	8/10/2020		Y	N	U		U	0.00093	0.00030	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CHLOROMETHANE	8/10/2020		Y	N	U		U	0.00093	0.00040	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TOLUENE	8/10/2020		Y	N	U		U	0.00093	0.00022	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TETRACHLOROETHYLENE(PCE)	8/10/2020		Y	N	U		U	0.00093	0.00013	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TERT-BUTYL METHYL ETHER	8/10/2020		Y	N	U		U	0.00093	0.00012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	STYRENE	8/10/2020		Y	N	U		U	0.00093	0.00026	mg/kg
SB-18 (8-9)-20200804	460-215088-5	O-XYLENE (1,2-DIMETHYLBENZENE)	8/10/2020		Y	N	U		U	0.00093	0.00018	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	METHYLENE CHLORIDE	8/10/2020		Y	N	U		U	0.00093	0.00043	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,1,1-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00093	0.00022	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2,3-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00093	0.00017	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/10/2020		Y	N	U		U	0.00093	0.00028	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,1,2-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.00093	0.00017	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,1-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00093	0.00019	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,1-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00093	0.00021	mg/kg
SB-18 (8-9)-20200804	460-215088-5	Cis-1,2-Dichloroethylene	8/10/2020		Y	N	U		U	0.00093	0.00014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	METHYLCYCLOHEXANE	8/10/2020		Y	N	U		U	0.00093	0.00046	mg/kg
SB-18 (8-9)-20200804	460-215088-5	VINYL CHLORIDE	8/10/2020		Y	N	U		U	0.00093	0.00051	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TRICHLOROFLUOROMETHANE	8/10/2020		Y	N	U		U	0.00093	0.00038	mg/kg
SB-18 (8-9)-20200804	460-215088-5	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/10/2020		Y	N	U		U	0.0046	0.0014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	METHYL ETHYL KETONE (2-BUTANONE)	8/10/2020		Y	N	U		U	0.0046	0.0025	mg/kg
SB-18 (8-9)-20200804	460-215088-5	METHYL ACETATE	8/10/2020		Y	N	U		U	0.0046	0.0040	mg/kg
SB-18 (8-9)-20200804	460-215088-5	M,P-XYLENES	8/10/2020		Y	N	U		U	0.00093	0.00016	mg/kg
SB-18 (8-9)-20200804	460-215088-5	Isopropylbenzene (Cumene)	8/10/2020		Y	N	U		U	0.00093	0.00012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ETHYLBENZENE	8/10/2020		Y	N	U		U	0.00093	0.00018	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DICHLORODIFLUOROMETHANE	8/10/2020		Y	N	U		U	0.00093	0.00031	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DIBROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.00093	0.00018	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2-DIBROMO-3-CHLOROPROPANE	8/10/2020		Y	N	U		U	0.00093	0.00043	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CIS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00093	0.00025	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2-HEXANONE	8/10/2020		Y	N	U		U	0.0046	0.0016	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TRICHLOROETHYLENE (TCE)	8/10/2020		Y	N	U		U	0.00093	0.00013	mg/kg
SB-18 (8-9)-20200804	460-215088-5	TRANS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.00093	0.00025	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	TRANS-1,2-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.00093	0.00023	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2,4-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00093	0.00033	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/10/2020		Y	N	U		U	0.00093	0.00017	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00093	0.00013	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.00093	0.00027	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2-DICHLOROPROPANE	8/10/2020		Y	N	U		U	0.00093	0.00039	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,3-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00093	0.00015	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,4-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.00093	0.00021	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,4-DIOXANE (P-DIOXANE)	8/10/2020		Y	N	U		U	0.019	0.0085	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CYCLOHEXANE	8/10/2020		Y	N	U		U	0.00093	0.00020	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,1-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.0011	0.00025	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CHLOROETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.0011	0.00057	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ETHYLBENZENE	8/10/2020		Y	N	U		U	0.0011	0.00022	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DICHLORODIFLUOROMETHANE	8/10/2020		Y	N	U		U	0.0011	0.00037	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DIBROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.0011	0.00021	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CYCLOHEXANE	8/10/2020		Y	N	U		U	0.0011	0.00024	mg/kg
SB-9 (1-2)-20200804	460-215088-1	M,P-XYLENES	8/10/2020		Y	N	U		U	0.0011	0.00019	mg/kg
SB-9 (1-2)-20200804	460-215088-1	Cis-1,2-Dichloroethylene	8/10/2020		Y	N	U		U	0.0011	0.00017	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ACETONE	8/10/2020	0.013	Y	Y				0.0066	0.0063	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,1-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.0011	0.00023	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,1,2-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.0011	0.00020	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/10/2020		Y	N	U		U	0.0011	0.00033	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,1,2,2-TETRACHLOROETHANE	8/10/2020		Y	N	U		U	0.0011	0.00023	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,1,1-TRICHLOROETHANE	8/10/2020		Y	N	U		U	0.0011	0.00026	mg/kg

SDG: 4602150881

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-9 (1-2)-20200804	460-215088-1	1,2-DIBROMO-3-CHLOROPROPANE	8/10/2020		Y	N	U		U	0.0011	0.00050	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CIS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.0011	0.00030	mg/kg
SB-9 (1-2)-20200804	460-215088-1	STYRENE	8/10/2020		Y	N	U		U	0.0011	0.00031	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TRANS-1,3-DICHLOROPROPENE	8/10/2020		Y	N	U		U	0.0011	0.00029	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TRICHLOROETHYLENE (TCE)	8/10/2020		Y	N	U		U	0.0011	0.00016	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TRICHLOROFLUOROMETHANE	8/10/2020		Y	N	U	UJ	UJ	0.0011	0.00045	mg/kg
SB-9 (1-2)-20200804	460-215088-1	VINYL CHLORIDE	8/10/2020		Y	N	U	UJ	UJ	0.0011	0.00060	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TOLUENE	8/10/2020		Y	N	U		U	0.0011	0.00026	mg/kg
SB-9 (1-2)-20200804	460-215088-1	Isopropylbenzene (Cumene)	8/10/2020		Y	N	U		U	0.0011	0.00014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TERT-BUTYL METHYL ETHER	8/10/2020		Y	N	U		U	0.0011	0.00014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BROMOMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.0011	0.00052	mg/kg
SB-9 (1-2)-20200804	460-215088-1	O-XYLENE (1,2-DIMETHYLBENZENE)	8/10/2020		Y	N	U		U	0.0011	0.00021	mg/kg
SB-9 (1-2)-20200804	460-215088-1	METHYLENE CHLORIDE	8/10/2020		Y	N	U		U	0.0011	0.00051	mg/kg
SB-9 (1-2)-20200804	460-215088-1	METHYLCYCLOHEXANE	8/10/2020		Y	N	U		U	0.0011	0.00055	mg/kg
SB-9 (1-2)-20200804	460-215088-1	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/10/2020		Y	N	U		U	0.0055	0.0017	mg/kg
SB-9 (1-2)-20200804	460-215088-1	METHYL ETHYL KETONE (2-BUTANONE)	8/10/2020		Y	N	U		U	0.0055	0.0030	mg/kg
SB-9 (1-2)-20200804	460-215088-1	METHYL ACETATE	8/10/2020		Y	N	U		U	0.0055	0.0047	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TETRACHLOROETHYLENE(PCE)	8/10/2020		Y	N	U		U	0.0011	0.00016	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BENZENE	8/10/2020		Y	N	U		U	0.0011	0.00028	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CHLOROBENZENE	8/10/2020		Y	N	U		U	0.0011	0.00019	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CHLOROMETHANE	8/10/2020		Y	N	UT	UJ	UJ	0.0011	0.00048	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CARBON TETRACHLORIDE	8/10/2020		Y	N	U		U	0.0011	0.00042	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CARBON DISULFIDE	8/10/2020		Y	N	U		U	0.0011	0.00029	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BROMOFORM	8/10/2020		Y	N	U		U	0.0011	0.00047	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-9 (1-2)-20200804	460-215088-1	1,2-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.0011	0.00016	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BROMOCHLOROMETHANE	8/10/2020		Y	N	U		U	0.0011	0.00031	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CHLOROFORM	8/10/2020		Y	N	U		U	0.0011	0.00035	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2-HEXANONE	8/10/2020		Y	N	U		U	0.0055	0.0019	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,4-DIOXANE (P-DIOXANE)	8/10/2020		Y	N	U	UJ	UJ	0.022	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,4-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.0011	0.00025	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,3-DICHLOROBENZENE	8/10/2020		Y	N	U		U	0.0011	0.00017	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,2-DICHLOROPROPANE	8/10/2020		Y	N	U		U	0.0011	0.00046	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,2-DICHLOROETHANE	8/10/2020		Y	N	U		U	0.0011	0.00032	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BROMODICHLOROMETHANE	8/10/2020		Y	N	U		U	0.0011	0.00028	mg/kg
SB-9 (1-2)-20200804	460-215088-1	TRANS-1,2-DICHLOROETHENE	8/10/2020		Y	N	U		U	0.0011	0.00027	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/10/2020		Y	N	U		U	0.0011	0.00020	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,2,4-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.0011	0.00039	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,2,3-TRICHLOROBENZENE	8/10/2020		Y	N	U		U	0.0011	0.00020	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	N-NITROSODIPHENYLAMINE	8/7/2020		Y	N	U		U	0.37	0.0071	mg/kg
DUP-3-20200804	460-215088-6	CARBAZOLE	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
DUP-3-20200804	460-215088-6	PHENOL	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
DUP-3-20200804	460-215088-6	HEXACHLOROBUTADIENE	8/7/2020		Y	N	U	UJ	UJ	0.075	0.0079	mg/kg
DUP-3-20200804	460-215088-6	ACENAPHTHYLENE	8/7/2020		Y	N	U		U	0.37	0.0038	mg/kg
DUP-3-20200804	460-215088-6	HEXACHLOROCYCLOPENTADIENE	8/7/2020		Y	N	U		U	0.37	0.033	mg/kg
DUP-3-20200804	460-215088-6	N-NITROSODI-N-PROPYLAMINE	8/7/2020		Y	N	U		U	0.037	0.027	mg/kg
DUP-3-20200804	460-215088-6	BIS(2-CHLOROISOPROPYL) ETHER	8/7/2020		Y	N	U	UJ	UJ	0.37	0.0067	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	NITROBENZENE	8/7/2020		Y	N	U		U	0.037	0.0089	mg/kg
DUP-3-20200804	460-215088-6	NAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.0064	mg/kg
DUP-3-20200804	460-215088-6	ISOPHORONE	8/7/2020		Y	N	U		U	0.15	0.11	mg/kg
DUP-3-20200804	460-215088-6	HEXACHLOROETHANE	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
DUP-3-20200804	460-215088-6	CAPROLACTAM	8/7/2020		Y	N	U	UJ	UJ	0.37	0.058	mg/kg
DUP-3-20200804	460-215088-6	PENTACHLOROPHENOL	8/7/2020		Y	N	U		U	0.30	0.076	mg/kg
DUP-3-20200804	460-215088-6	2-NITROPHENOL	8/7/2020		Y	N	U		U	0.37	0.037	mg/kg
DUP-3-20200804	460-215088-6	DIBENZOFURAN	8/7/2020		Y	N	U		U	0.37	0.0052	mg/kg
DUP-3-20200804	460-215088-6	BENZO(B)FLUORANTHENE	8/7/2020	0.049	Y	Y				0.037	0.0096	mg/kg
DUP-3-20200804	460-215088-6	BENZYL BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.017	mg/kg
DUP-3-20200804	460-215088-6	4-BROMOPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.015	mg/kg
DUP-3-20200804	460-215088-6	4,6-DINITRO-2-METHYLPHENOL	8/7/2020		Y	N	U		U	0.30	0.060	mg/kg
DUP-3-20200804	460-215088-6	2,4-DINITROPHENOL	8/7/2020		Y	N	U		U	0.30	0.18	mg/kg
DUP-3-20200804	460-215088-6	3,3'-DICHLOROBENZIDINE	8/7/2020		Y	N	U		U	0.15	0.056	mg/kg
DUP-3-20200804	460-215088-6	DI-N-BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.065	mg/kg
DUP-3-20200804	460-215088-6	2-NITROANILINE	8/7/2020		Y	N	U	UJ	UJ	0.37	0.014	mg/kg
DUP-3-20200804	460-215088-6	2-Methylphenol (O-Cresol)	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
DUP-3-20200804	460-215088-6	2-Methylnaphthalene	8/7/2020		Y	N	U		U	0.37	0.010	mg/kg
DUP-3-20200804	460-215088-6	2-CHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
DUP-3-20200804	460-215088-6	2-CHLORONAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.017	mg/kg
DUP-3-20200804	460-215088-6	2,4-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.075	0.040	mg/kg
DUP-3-20200804	460-215088-6	3-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.042	mg/kg
DUP-3-20200804	460-215088-6	4-CHLOROPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
DUP-3-20200804	460-215088-6	ANTHRACENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
DUP-3-20200804	460-215088-6	BENZALDEHYDE	8/7/2020		Y	N	U	UJ	UJ	0.37	0.016	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	ATRAZINE	8/7/2020		Y	N	U		U	0.15	0.0094	mg/kg
DUP-3-20200804	460-215088-6	ACETOPHENONE	8/7/2020		Y	N	U		U	0.37	0.018	mg/kg
DUP-3-20200804	460-215088-6	ACENAPHTHENE	8/7/2020		Y	N	U		U	0.37	0.027	mg/kg
DUP-3-20200804	460-215088-6	4-NITROPHENOL	8/7/2020		Y	N	U		U	0.75	0.060	mg/kg
DUP-3-20200804	460-215088-6	DIETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.0054	mg/kg
DUP-3-20200804	460-215088-6	4-METHYLPHENOL (P-CRESOL)	8/7/2020		Y	N	U		U	0.37	0.023	mg/kg
DUP-3-20200804	460-215088-6	DIMETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.084	mg/kg
DUP-3-20200804	460-215088-6	4-CHLOROANILINE	8/7/2020		Y	N	U		U	0.37	0.026	mg/kg
DUP-3-20200804	460-215088-6	HEXACHLOROBENZENE	8/7/2020		Y	N	U	UJ	UJ	0.037	0.018	mg/kg
DUP-3-20200804	460-215088-6	4-CHLORO-3-METHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.021	mg/kg
DUP-3-20200804	460-215088-6	FLUORENE	8/7/2020		Y	N	U		U	0.37	0.0050	mg/kg
DUP-3-20200804	460-215088-6	DI-N-OCTYLPHTHALATE	8/7/2020		Y	N	U		U	0.37	0.020	mg/kg
DUP-3-20200804	460-215088-6	BIPHENYL (DIPHENYL)	8/7/2020		Y	N	U		U	0.37	0.0049	mg/kg
DUP-3-20200804	460-215088-6	4-NITROANILINE	8/7/2020		Y	N	U	UJ	UJ	0.37	0.043	mg/kg
DUP-3-20200804	460-215088-6	STIGMAST-4-EN-3-ONE	8/7/2020	340	Y	Y	JN		J	0	0	ug/kg
DUP-3-20200804	460-215088-6	2,4-DIMETHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.016	mg/kg
DUP-3-20200804	460-215088-6	CHRYSENE	8/7/2020	0.033	Y	Y	J		J	0.37	0.0063	mg/kg
DUP-3-20200804	460-215088-6	2,6-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.075	0.027	mg/kg
DUP-3-20200804	460-215088-6	FLUORANTHENE	8/7/2020	0.032	Y	Y	J		J	0.37	0.013	mg/kg
DUP-3-20200804	460-215088-6	INDENO(1,2,3-C,D)PYRENE	8/7/2020	0.018	Y	Y	J		J	0.037	0.014	mg/kg
DUP-3-20200804	460-215088-6	BENZO(K)FLUORANTHENE	8/7/2020	0.018	Y	Y	J		J	0.037	0.0073	mg/kg
DUP-3-20200804	460-215088-6	PYRENE	8/7/2020	0.021	Y	Y	J		J	0.37	0.0092	mg/kg
DUP-3-20200804	460-215088-6	BIS(2-ETHYLHEXYL) PHTHALATE	8/7/2020	0.13	Y	Y	J		J	0.37	0.020	mg/kg
DUP-3-20200804	460-215088-6	N-HEXADECANE	8/7/2020	1100	Y	Y	JN		J	0	0	ug/kg
DUP-3-20200804	460-215088-6	BICYCLO[10.8.0]EICOSANE, CIS-	8/7/2020	650	Y	Y	JN		J	0	0	ug/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	UNKNOWN SEMIVOLATILE WITH HIGHEST CONC.	8/7/2020	1200	Y	Y	J		J	0	0	ug/kg
DUP-3-20200804	460-215088-6	UNKNOWN SEMIVOLATILE WITH 2ND HIGHEST CONC.	8/7/2020	1200	Y	Y	J		J	0	0	ug/kg
DUP-3-20200804	460-215088-6	UNKNOWN SEMIVOLATILE WITH 3RD HIGHEST CONC.	8/7/2020	750	Y	Y	J		J	0	0	ug/kg
DUP-3-20200804	460-215088-6	UNKNOWN SEMIVOLATILE WITH 4TH HIGHEST CONC.	8/7/2020	360	Y	Y	J		J	0	0	ug/kg
DUP-3-20200804	460-215088-6	PHENANTHRENE	8/7/2020	0.030	Y	Y	J		J	0.37	0.0065	mg/kg
DUP-3-20200804	460-215088-6	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	0.11	0.010	mg/kg
DUP-3-20200804	460-215088-6	2,4-DICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.024	mg/kg
DUP-3-20200804	460-215088-6	2,4,6-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.048	mg/kg
DUP-3-20200804	460-215088-6	2,3,4,6-TETRACHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.025	mg/kg
DUP-3-20200804	460-215088-6	BENZO(G,H,I)PERYLENE	8/7/2020	0.018	Y	Y	J		J	0.37	0.011	mg/kg
DUP-3-20200804	460-215088-6	1,2,4,5-TETRACHLOROBENZENE	8/7/2020		Y	N	U		U	0.37	0.012	mg/kg
DUP-3-20200804	460-215088-6	DIBENZ(A,H)ANTHRACENE	8/7/2020		Y	N	U		U	0.037	0.016	mg/kg
DUP-3-20200804	460-215088-6	BENZO(A)ANTHRACENE	8/7/2020	0.016	Y	Y	J		J	0.037	0.013	mg/kg
DUP-3-20200804	460-215088-6	BENZO(A)PYRENE	8/7/2020	0.019	Y	Y	J		J	0.037	0.0099	mg/kg
DUP-3-20200804	460-215088-6	BIS(2-CHLOROETHOXY) METHANE	8/7/2020		Y	N	U		U	0.37	0.029	mg/kg
DUP-3-20200804	460-215088-6	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
DUP-3-20200804	460-215088-6	2,4,5-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.038	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CAPROLACTAM	8/7/2020		Y	N	U		U	0.37	0.057	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BENZALDEHYDE	8/7/2020		Y	N	U	UJ	UJ	0.37	0.016	mg/kg
SB-17 (4-5)-20200804	460-215088-2	HEXACHLOROBENZENE	8/7/2020		Y	N	U		U	0.037	0.017	mg/kg
SB-17 (4-5)-20200804	460-215088-2	Aldol Condensation Product With 1st Highest Conc.	8/7/2020	3100	Y	Y	JA		J	0	0	ug/kg
SB-17 (4-5)-20200804	460-215088-2	2-NITROPHENOL	8/7/2020		Y	N	U		U	0.37	0.037	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (4-5)-20200804	460-215088-2	BIS(2-CHLOROISOPROPYL) ETHER	8/7/2020		Y	N	U		U	0.37	0.0066	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2-Methylnaphthalene	8/7/2020		Y	N	U		U	0.37	0.010	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4-CHLOROPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2-Methylphenol (O-Cresol)	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BENZO(B)FLUORANTHENE	8/7/2020		Y	N	U		U	0.037	0.0095	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4-CHLORO-3-METHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DIMETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.083	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DIETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.0053	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DIBENZOFURAN	8/7/2020		Y	N	U		U	0.37	0.0051	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DIBENZ(A,H)ANTHRACENE	8/7/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BIS(2-ETHYLHEXYL) PHTHALATE	8/7/2020		Y	N	UT	UJ	UJ	0.37	0.019	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CHRYSENE	8/7/2020		Y	N	U		U	0.37	0.0062	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CARBAZOLE	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BIS(2-CHLOROETHOXY) METHANE	8/7/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BIPHENYL (DIPHENYL)	8/7/2020		Y	N	U		U	0.37	0.0049	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BENZYL BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DI-N-OCTYLPHTHALATE	8/7/2020		Y	N	U		U	0.37	0.019	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BENZO(G,H,I)PERYLENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	FLUORANTHENE	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BENZO(A)PYRENE	8/7/2020		Y	N	U		U	0.037	0.0098	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2-CHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2-CHLORONAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.017	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (4-5)-20200804	460-215088-2	2,6-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2,4-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2,4-DINITROPHENOL	8/7/2020		Y	N	U		U	0.29	0.18	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2,4-DIMETHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2,4-DICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2,4,6-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2,4,5-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-17 (4-5)-20200804	460-215088-2	2,3,4,6-TETRACHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.025	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BENZO(K)FLUORANTHENE	8/7/2020		Y	N	U		U	0.037	0.0072	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PYRENE	8/7/2020		Y	N	U		U	0.37	0.0091	mg/kg
SB-17 (4-5)-20200804	460-215088-2	3-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.041	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4,6-DINITRO-2-METHYLPHENOL	8/7/2020		Y	N	U		U	0.29	0.059	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4-BROMOPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4-CHLOROANILINE	8/7/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-17 (4-5)-20200804	460-215088-2	1,2,4,5-TETRACHLOROBENZENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4-METHYLPHENOL (P-CRESOL)	8/7/2020		Y	N	U		U	0.37	0.023	mg/kg
SB-17 (4-5)-20200804	460-215088-2	HEXACHLOROBUTADIENE	8/7/2020		Y	N	U		U	0.074	0.0078	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4-NITROPHENOL	8/7/2020		Y	N	U		U	0.74	0.060	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ACENAPHTHENE	8/7/2020		Y	N	U		U	0.37	0.027	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ACENAPHTHYLENE	8/7/2020		Y	N	U		U	0.37	0.0038	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ACETOPHENONE	8/7/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ANTHRACENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-17 (4-5)-20200804	460-215088-2	DI-N-BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.065	mg/kg
SB-17 (4-5)-20200804	460-215088-2	BENZO(A)ANTHRACENE	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (4-5)-20200804	460-215088-2	NAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.0063	mg/kg
SB-17 (4-5)-20200804	460-215088-2	FLUORENE	8/7/2020		Y	N	U		U	0.37	0.0050	mg/kg
SB-17 (4-5)-20200804	460-215088-2	4-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-17 (4-5)-20200804	460-215088-2	HEXACHLOROCYCLOPENTADIENE	8/7/2020		Y	N	U		U	0.37	0.032	mg/kg
SB-17 (4-5)-20200804	460-215088-2	HEXACHLOROETHANE	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-17 (4-5)-20200804	460-215088-2	INDENO(1,2,3-C,D)PYRENE	8/7/2020		Y	N	U		U	0.037	0.014	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ATRAZINE	8/7/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-17 (4-5)-20200804	460-215088-2	ISOPHORONE	8/7/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-17 (4-5)-20200804	460-215088-2	3,3'-DICHLOROBENZIDINE	8/7/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-17 (4-5)-20200804	460-215088-2	NITROBENZENE	8/7/2020		Y	N	U		U	0.037	0.0088	mg/kg
SB-17 (4-5)-20200804	460-215088-2	N-NITROSODI-N-PROPYLAMINE	8/7/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-17 (4-5)-20200804	460-215088-2	N-NITROSODIPHENYLAMINE	8/7/2020		Y	N	U		U	0.37	0.0070	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PENTACHLOROPHENOL	8/7/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PHENANTHRENE	8/7/2020		Y	N	U		U	0.37	0.0064	mg/kg
SB-17 (4-5)-20200804	460-215088-2	PHENOL	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	Aldol Condensation Product With 1st Highest Conc.	8/7/2020	1600	Y	Y	JA		J	0	0	ug/kg
SB-17 (7-8)-20200804	460-215088-3	2,4-DINITROPHENOL	8/7/2020		Y	N	U		U	0.30	0.18	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZYL BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DIMETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.085	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DIBENZOFURAN	8/7/2020		Y	N	U		U	0.37	0.0052	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CHRYSENE	8/7/2020		Y	N	U		U	0.37	0.0063	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CARBAZOLE	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZALDEHYDE	8/7/2020		Y	N	U	UJ	UJ	0.37	0.016	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	ATRAZINE	8/7/2020		Y	N	U		U	0.15	0.0094	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BIPHENYL (DIPHENYL)	8/7/2020		Y	N	U		U	0.37	0.0050	mg/kg
SB-17 (7-8)-20200804	460-215088-3	FLUORANTHENE	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZO(K)FLUORANTHENE	8/7/2020		Y	N	U		U	0.037	0.0073	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZO(G,H,I)PERYLENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZO(B)FLUORANTHENE	8/7/2020		Y	N	U		U	0.037	0.0097	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZO(A)PYRENE	8/7/2020		Y	N	U		U	0.037	0.0099	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BENZO(A)ANTHRACENE	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CAPROLACTAM	8/7/2020		Y	N	U		U	0.37	0.058	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BIS(2-CHLOROETHOXY) METHANE	8/7/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-17 (7-8)-20200804	460-215088-3	NAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.0065	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BIS(2-CHLOROISOPROPYL) ETHER	8/7/2020		Y	N	U		U	0.37	0.0068	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PYRENE	8/7/2020		Y	N	U		U	0.37	0.0093	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PHENOL	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PHENANTHRENE	8/7/2020		Y	N	U		U	0.37	0.0066	mg/kg
SB-17 (7-8)-20200804	460-215088-3	PENTACHLOROPHENOL	8/7/2020		Y	N	U		U	0.30	0.077	mg/kg
SB-17 (7-8)-20200804	460-215088-3	N-NITROSODIPHENYLAMINE	8/7/2020		Y	N	U		U	0.37	0.0071	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DI-N-BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.066	mg/kg
SB-17 (7-8)-20200804	460-215088-3	NITROBENZENE	8/7/2020		Y	N	U		U	0.037	0.0090	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DI-N-OCTYLPHTHALATE	8/7/2020		Y	N	U		U	0.37	0.020	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ISOPHORONE	8/7/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-17 (7-8)-20200804	460-215088-3	INDENO(1,2,3-C,D)PYRENE	8/7/2020		Y	N	U		U	0.037	0.015	mg/kg
SB-17 (7-8)-20200804	460-215088-3	HEXACHLOROETHANE	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	HEXACHLOROCYCLOPENTADIENE	8/7/2020		Y	N	U		U	0.37	0.033	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2,4-DICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.024	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	FLUORENE	8/7/2020		Y	N	U		U	0.37	0.0051	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DIBENZ(A,H)ANTHRACENE	8/7/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-17 (7-8)-20200804	460-215088-3	N-NITROSODI-N-PROPYLAMINE	8/7/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2,3,4,6-TETRACHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.025	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2-Methylnaphthalene	8/7/2020		Y	N	U		U	0.37	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2-CHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2-CHLORONAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2,6-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.076	0.027	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2,4-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.076	0.040	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2,4-DIMETHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2-Methylphenol (O-Cresol)	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2,4,5-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.038	mg/kg
SB-17 (7-8)-20200804	460-215088-3	4-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.043	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-17 (7-8)-20200804	460-215088-3	1,2,4,5-TETRACHLOROBENZENE	8/7/2020		Y	N	U		U	0.37	0.012	mg/kg
SB-17 (7-8)-20200804	460-215088-3	HEXACHLOROBUTADIENE	8/7/2020		Y	N	U		U	0.076	0.0079	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ANTHRACENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-17 (7-8)-20200804	460-215088-3	BIS(2-ETHYLHEXYL) PHTHALATE	8/7/2020		Y	N	UT	UJ	UJ	0.37	0.020	mg/kg
SB-17 (7-8)-20200804	460-215088-3	DIETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.0054	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2,4,6-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.048	mg/kg
SB-17 (7-8)-20200804	460-215088-3	4-NITROPHENOL	8/7/2020		Y	N	U		U	0.76	0.061	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ACETOPHENONE	8/7/2020		Y	N	U		U	0.37	0.018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ACENAPHTHENE	8/7/2020		Y	N	U		U	0.37	0.027	mg/kg
SB-17 (7-8)-20200804	460-215088-3	4-METHYLPHENOL (P-CRESOL)	8/7/2020		Y	N	U		U	0.37	0.023	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-17 (7-8)-20200804	460-215088-3	4-CHLOROPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-17 (7-8)-20200804	460-215088-3	4-CHLOROANILINE	8/7/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-17 (7-8)-20200804	460-215088-3	4-CHLORO-3-METHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-17 (7-8)-20200804	460-215088-3	4-BROMOPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-17 (7-8)-20200804	460-215088-3	HEXACHLOROBENZENE	8/7/2020		Y	N	U		U	0.037	0.018	mg/kg
SB-17 (7-8)-20200804	460-215088-3	3-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-17 (7-8)-20200804	460-215088-3	3,3'-DICHLOROBENZIDINE	8/7/2020		Y	N	U		U	0.15	0.056	mg/kg
SB-17 (7-8)-20200804	460-215088-3	2-NITROPHENOL	8/7/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-17 (7-8)-20200804	460-215088-3	4,6-DINITRO-2-METHYLPHENOL	8/7/2020		Y	N	U		U	0.30	0.061	mg/kg
SB-17 (7-8)-20200804	460-215088-3	ACENAPHTHYLENE	8/7/2020		Y	N	U		U	0.37	0.0039	mg/kg
SB-18 (2-3-20200804	460-215088-4	3-NITROANILINE	8/7/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-18 (2-3-20200804	460-215088-4	ACETOPHENONE	8/7/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-18 (2-3-20200804	460-215088-4	ACENAPHTHYLENE	8/7/2020		Y	N	U		U	0.36	0.0038	mg/kg
SB-18 (2-3-20200804	460-215088-4	ACENAPHTHENE	8/7/2020		Y	N	U		U	0.36	0.027	mg/kg
SB-18 (2-3-20200804	460-215088-4	4-NITROPHENOL	8/7/2020		Y	N	U		U	0.74	0.060	mg/kg
SB-18 (2-3-20200804	460-215088-4	4-METHYLPHENOL (P-CRESOL)	8/7/2020		Y	N	U		U	0.36	0.023	mg/kg
SB-18 (2-3-20200804	460-215088-4	4-CHLOROPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-18 (2-3-20200804	460-215088-4	4-CHLOROANILINE	8/7/2020		Y	N	U		U	0.36	0.026	mg/kg
SB-18 (2-3-20200804	460-215088-4	4-CHLORO-3-METHYLPHENOL	8/7/2020		Y	N	U		U	0.36	0.021	mg/kg
SB-18 (2-3-20200804	460-215088-4	4,6-DINITRO-2-METHYLPHENOL	8/7/2020		Y	N	U		U	0.29	0.059	mg/kg
SB-18 (2-3-20200804	460-215088-4	3,3'-DICHLOROBENZIDINE	8/7/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-18 (2-3-20200804	460-215088-4	ANTHRACENE	8/7/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-18 (2-3-20200804	460-215088-4	2-CHLOROPHENOL	8/7/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-18 (2-3-20200804	460-215088-4	NITROBENZENE	8/7/2020		Y	N	U		U	0.036	0.0088	mg/kg
SB-18 (2-3-20200804	460-215088-4	2-NITROPHENOL	8/7/2020		Y	N	U		U	0.36	0.037	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	2-Methylnaphthalene	8/7/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-18 (2-3-20200804	460-215088-4	2-Methylphenol (O-Cresol)	8/7/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-18 (2-3-20200804	460-215088-4	4-BROMOPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.36	0.015	mg/kg
SB-18 (2-3-20200804	460-215088-4	N-NITROSODIPHENYLAMINE	8/7/2020		Y	N	U		U	0.36	0.0070	mg/kg
SB-18 (2-3-20200804	460-215088-4	PHENOL	8/7/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-18 (2-3-20200804	460-215088-4	PYRENE	8/7/2020		Y	N	U		U	0.36	0.0091	mg/kg
SB-18 (2-3-20200804	460-215088-4	HEXACHLOROBENZENE	8/7/2020		Y	N	U		U	0.036	0.017	mg/kg
SB-18 (2-3-20200804	460-215088-4	CAPROLACTAM	8/7/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-18 (2-3-20200804	460-215088-4	BIS(2-ETHYLHEXYL) PHTHALATE	8/7/2020		Y	N	UT	UJ	UJ	0.36	0.019	mg/kg
SB-18 (2-3-20200804	460-215088-4	PHENANTHRENE	8/7/2020		Y	N	U		U	0.36	0.0064	mg/kg
SB-18 (2-3-20200804	460-215088-4	ISOPHORONE	8/7/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-18 (2-3-20200804	460-215088-4	PENTACHLOROPHENOL	8/7/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-18 (2-3-20200804	460-215088-4	ATRAZINE	8/7/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-18 (2-3-20200804	460-215088-4	N-NITROSODI-N-PROPYLAMINE	8/7/2020		Y	N	U		U	0.036	0.027	mg/kg
SB-18 (2-3-20200804	460-215088-4	2-CHLORONAPHTHALENE	8/7/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-18 (2-3-20200804	460-215088-4	NAPHTHALENE	8/7/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-18 (2-3-20200804	460-215088-4	HEXACHLOROBUTADIENE	8/7/2020		Y	N	U		U	0.074	0.0078	mg/kg
SB-18 (2-3-20200804	460-215088-4	INDENO(1,2,3-C,D)PYRENE	8/7/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-18 (2-3-20200804	460-215088-4	HEXACHLOROETHANE	8/7/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-18 (2-3-20200804	460-215088-4	HEXACHLOROCYCLOPENTADIENE	8/7/2020		Y	N	U		U	0.36	0.032	mg/kg
SB-18 (2-3-20200804	460-215088-4	Aldol Condensation Product With 1st Highest Conc.	8/7/2020	1500	Y	Y	JA		J	0	0	ug/kg
SB-18 (2-3-20200804	460-215088-4	BENZO(K)FLUORANTHENE	8/7/2020		Y	N	U		U	0.036	0.0072	mg/kg
SB-18 (2-3-20200804	460-215088-4	DIBENZ(A,H)ANTHRACENE	8/7/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-18 (2-3-20200804	460-215088-4	CHRYSENE	8/7/2020		Y	N	U		U	0.36	0.0062	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	CARBAZOLE	8/7/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-18 (2-3-20200804	460-215088-4	2-NITROANILINE	8/7/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-18 (2-3-20200804	460-215088-4	BIS(2-CHLOROISOPROPYL) ETHER	8/7/2020		Y	N	U		U	0.36	0.0066	mg/kg
SB-18 (2-3-20200804	460-215088-4	BENZO(A)ANTHRACENE	8/7/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-18 (2-3-20200804	460-215088-4	DIBENZOFURAN	8/7/2020		Y	N	U		U	0.36	0.0051	mg/kg
SB-18 (2-3-20200804	460-215088-4	BENZYL BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-18 (2-3-20200804	460-215088-4	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/7/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-18 (2-3-20200804	460-215088-4	BENZO(G,H,I)PERYLENE	8/7/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-18 (2-3-20200804	460-215088-4	BENZO(B)FLUORANTHENE	8/7/2020		Y	N	U		U	0.036	0.0095	mg/kg
SB-18 (2-3-20200804	460-215088-4	BENZO(A)PYRENE	8/7/2020		Y	N	U		U	0.036	0.0097	mg/kg
SB-18 (2-3-20200804	460-215088-4	BENZALDEHYDE	8/7/2020		Y	N	U	UJ	UJ	0.36	0.016	mg/kg
SB-18 (2-3-20200804	460-215088-4	2,6-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-18 (2-3-20200804	460-215088-4	4-NITROANILINE	8/7/2020		Y	N	U		U	0.36	0.042	mg/kg
SB-18 (2-3-20200804	460-215088-4	BIS(2-CHLOROETHOXY) METHANE	8/7/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-18 (2-3-20200804	460-215088-4	2,3,4,6-TETRACHLOROPHENOL	8/7/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-18 (2-3-20200804	460-215088-4	2,4-DIMETHYLPHENOL	8/7/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-18 (2-3-20200804	460-215088-4	BIPHENYL (DIPHENYL)	8/7/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-18 (2-3-20200804	460-215088-4	DIETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.36	0.0053	mg/kg
SB-18 (2-3-20200804	460-215088-4	2,4-DICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.023	mg/kg
SB-18 (2-3-20200804	460-215088-4	2,4,5-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-18 (2-3-20200804	460-215088-4	2,4-DINITROPHENOL	8/7/2020		Y	N	U		U	0.29	0.18	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-18 (2-3-20200804	460-215088-4	1,2,4,5-TETRACHLOROBENZENE	8/7/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-18 (2-3-20200804	460-215088-4	FLUORENE	8/7/2020		Y	N	U		U	0.36	0.0050	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (2-3-20200804	460-215088-4	2,4-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-18 (2-3-20200804	460-215088-4	FLUORANTHENE	8/7/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-18 (2-3-20200804	460-215088-4	DI-N-OCTYLPHTHALATE	8/7/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-18 (2-3-20200804	460-215088-4	DI-N-BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.36	0.065	mg/kg
SB-18 (2-3-20200804	460-215088-4	DIMETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.36	0.083	mg/kg
SB-18 (2-3-20200804	460-215088-4	2,4,6-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZO(A)PYRENE	8/7/2020		Y	N	U		U	0.040	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CARBAZOLE	8/7/2020		Y	N	U		U	0.40	0.015	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DIMETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.40	0.091	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DIETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.40	0.0058	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DIBENZOFURAN	8/7/2020		Y	N	U		U	0.40	0.0056	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DIBENZ(A,H)ANTHRACENE	8/7/2020		Y	N	U		U	0.040	0.017	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CHRYSENE	8/7/2020		Y	N	U		U	0.40	0.0067	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/7/2020		Y	N	U		U	0.040	0.014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BIS(2-CHLOROETHOXY) METHANE	8/7/2020		Y	N	U		U	0.40	0.031	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BIPHENYL (DIPHENYL)	8/7/2020		Y	N	U		U	0.40	0.0053	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZYL BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.40	0.019	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZO(K)FLUORANTHENE	8/7/2020		Y	N	U		U	0.040	0.0078	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZO(B)FLUORANTHENE	8/7/2020		Y	N	U		U	0.040	0.010	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CAPROLACTAM	8/7/2020		Y	N	U		U	0.40	0.062	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DI-N-OCTYLPHTHALATE	8/7/2020		Y	N	U		U	0.40	0.021	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZO(A)ANTHRACENE	8/7/2020		Y	N	U		U	0.040	0.014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZO(G,H,I)PERYLENE	8/7/2020		Y	N	U		U	0.40	0.012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	N-NITROSODIPHENYLAMINE	8/7/2020		Y	N	U		U	0.40	0.0076	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	BIS(2-ETHYLHEXYL) PHTHALATE	8/7/2020		Y	N	UT	UJ	UJ	0.40	0.021	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2-NITROANILINE	8/7/2020		Y	N	U		U	0.40	0.015	mg/kg
SB-18 (8-9)-20200804	460-215088-5	HEXACHLOROBUTADIENE	8/7/2020		Y	N	U		U	0.081	0.0085	mg/kg
SB-18 (8-9)-20200804	460-215088-5	DI-N-BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.40	0.070	mg/kg
SB-18 (8-9)-20200804	460-215088-5	HEXACHLOROBENZENE	8/7/2020		Y	N	U		U	0.040	0.019	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ATRAZINE	8/7/2020		Y	N	U		U	0.16	0.010	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PHENOL	8/7/2020		Y	N	U		U	0.40	0.015	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PYRENE	8/7/2020		Y	N	U		U	0.40	0.0099	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PENTACHLOROPHENOL	8/7/2020		Y	N	U		U	0.32	0.082	mg/kg
SB-18 (8-9)-20200804	460-215088-5	FLUORENE	8/7/2020		Y	N	U		U	0.40	0.0054	mg/kg
SB-18 (8-9)-20200804	460-215088-5	N-NITROSODI-N-PROPYLAMINE	8/7/2020		Y	N	U		U	0.040	0.029	mg/kg
SB-18 (8-9)-20200804	460-215088-5	NITROBENZENE	8/7/2020		Y	N	U		U	0.040	0.0096	mg/kg
SB-18 (8-9)-20200804	460-215088-5	NAPHTHALENE	8/7/2020		Y	N	U		U	0.40	0.0069	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ISOPHORONE	8/7/2020		Y	N	U		U	0.16	0.12	mg/kg
SB-18 (8-9)-20200804	460-215088-5	INDENO(1,2,3-C,D)PYRENE	8/7/2020		Y	N	U		U	0.040	0.016	mg/kg
SB-18 (8-9)-20200804	460-215088-5	HEXACHLOROETHANE	8/7/2020		Y	N	U		U	0.040	0.014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	HEXACHLOROCYCLOPENTADIENE	8/7/2020		Y	N	U		U	0.40	0.035	mg/kg
SB-18 (8-9)-20200804	460-215088-5	PHENANTHRENE	8/7/2020		Y	N	U		U	0.40	0.0070	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2,4,6-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.16	0.051	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2-CHLOROPHENOL	8/7/2020		Y	N	U		U	0.40	0.014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BIS(2-CHLOROISOPROPYL) ETHER	8/7/2020		Y	N	U		U	0.40	0.0072	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2-CHLORONAPHTHALENE	8/7/2020		Y	N	U		U	0.40	0.018	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2,6-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.081	0.029	mg/kg
SB-18 (8-9)-20200804	460-215088-5	BENZALDEHYDE	8/7/2020		Y	N	U	UJ	UJ	0.40	0.017	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2,4-DINITROPHENOL	8/7/2020		Y	N	U		U	0.32	0.20	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	2-Methylnaphthalene	8/7/2020		Y	N	U		U	0.40	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2,4-DICHLOROPHENOL	8/7/2020		Y	N	U		U	0.16	0.026	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2,4-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.081	0.043	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2,4,5-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.40	0.041	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2,3,4,6-TETRACHLOROPHENOL	8/7/2020		Y	N	U		U	0.40	0.027	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-18 (8-9)-20200804	460-215088-5	1,2,4,5-TETRACHLOROBENZENE	8/7/2020		Y	N	U		U	0.40	0.012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	FLUORANTHENE	8/7/2020		Y	N	U		U	0.40	0.014	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ANTHRACENE	8/7/2020		Y	N	U		U	0.40	0.012	mg/kg
SB-18 (8-9)-20200804	460-215088-5	Aldol Condensation Product With 1st Highest Conc.	8/7/2020	900	Y	Y	JA		J	0	0	ug/kg
SB-18 (8-9)-20200804	460-215088-5	2,4-DIMETHYLPHENOL	8/7/2020		Y	N	U		U	0.40	0.018	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4-CHLORO-3-METHYLPHENOL	8/7/2020		Y	N	U		U	0.40	0.022	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ACENAPHTHENE	8/7/2020		Y	N	U		U	0.40	0.029	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ACENAPHTHYLENE	8/7/2020		Y	N	U		U	0.40	0.0041	mg/kg
SB-18 (8-9)-20200804	460-215088-5	2-Methylphenol (O-Cresol)	8/7/2020		Y	N	U		U	0.40	0.015	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4-NITROANILINE	8/7/2020		Y	N	U		U	0.40	0.046	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4-METHYLPHENOL (P-CRESOL)	8/7/2020		Y	N	U		U	0.40	0.025	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4-CHLOROANILINE	8/7/2020		Y	N	U		U	0.40	0.028	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4-NITROPHENOL	8/7/2020		Y	N	U		U	0.81	0.065	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4-BROMOPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.40	0.016	mg/kg
SB-18 (8-9)-20200804	460-215088-5	ACETOPHENONE	8/7/2020		Y	N	U		U	0.40	0.020	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4,6-DINITRO-2-METHYLPHENOL	8/7/2020		Y	N	U		U	0.32	0.065	mg/kg
SB-18 (8-9)-20200804	460-215088-5	3-NITROANILINE	8/7/2020		Y	N	U		U	0.40	0.045	mg/kg
SB-18 (8-9)-20200804	460-215088-5	3,3'-DICHLOROBENZIDINE	8/7/2020		Y	N	U		U	0.16	0.060	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-18 (8-9)-20200804	460-215088-5	2-NITROPHENOL	8/7/2020		Y	N	U		U	0.40	0.040	mg/kg
SB-18 (8-9)-20200804	460-215088-5	4-CHLOROPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.40	0.014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DI-N-BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.066	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DIBENZ(A,H)ANTHRACENE	8/7/2020		Y	N	U		U	0.037	0.016	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DIMETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.084	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DI-N-OCTYLPHTHALATE	8/7/2020		Y	N	U		U	0.37	0.020	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DIETHYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.0054	mg/kg
SB-9 (1-2)-20200804	460-215088-1	DIBENZOFURAN	8/7/2020		Y	N	U		U	0.37	0.0052	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CHRYSENE	8/7/2020		Y	N	U		U	0.37	0.0063	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CARBAZOLE	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BENZYL BUTYL PHTHALATE	8/7/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BIPHENYL (DIPHENYL)	8/7/2020		Y	N	U		U	0.37	0.0049	mg/kg
SB-9 (1-2)-20200804	460-215088-1	FLUORANTHENE	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BENZO(G,H,I)PERYLENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BENZO(K)FLUORANTHENE	8/7/2020		Y	N	U		U	0.037	0.0073	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BIS(2-CHLOROETHOXY) METHANE	8/7/2020		Y	N	U		U	0.37	0.029	mg/kg
SB-9 (1-2)-20200804	460-215088-1	N-NITROSODI-N-PROPYLAMINE	8/7/2020		Y	N	U		U	0.037	0.027	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BIS(2-ETHYLHEXYL) PHTHALATE	8/7/2020		Y	N	UT	UJ	UJ	0.37	0.020	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BENZALDEHYDE	8/7/2020		Y	N	U	UJ	UJ	0.37	0.016	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BIS(2-CHLOROISOPROPYL) ETHER	8/7/2020		Y	N	U		U	0.37	0.0067	mg/kg
SB-9 (1-2)-20200804	460-215088-1	3,3'-DICHLOROBENZIDINE	8/7/2020		Y	N	U		U	0.15	0.056	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PYRENE	8/7/2020		Y	N	U		U	0.37	0.0092	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-9 (1-2)-20200804	460-215088-1	BENZO(B)FLUORANTHENE	8/7/2020		Y	N	U		U	0.037	0.0096	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PHENANTHRENE	8/7/2020		Y	N	U		U	0.37	0.0065	mg/kg
SB-9 (1-2)-20200804	460-215088-1	PHENOL	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	N-NITROSODIPHENYLAMINE	8/7/2020		Y	N	U		U	0.37	0.0071	mg/kg
SB-9 (1-2)-20200804	460-215088-1	FLUORENE	8/7/2020		Y	N	U		U	0.37	0.0050	mg/kg
SB-9 (1-2)-20200804	460-215088-1	NITROBENZENE	8/7/2020		Y	N	U		U	0.037	0.0089	mg/kg
SB-9 (1-2)-20200804	460-215088-1	NAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.0064	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ISOPHORONE	8/7/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-9 (1-2)-20200804	460-215088-1	INDENO(1,2,3-C,D)PYRENE	8/7/2020		Y	N	U		U	0.037	0.015	mg/kg
SB-9 (1-2)-20200804	460-215088-1	HEXACHLOROETHANE	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-9 (1-2)-20200804	460-215088-1	HEXACHLOROCYCLOPENTADIENE	8/7/2020		Y	N	U		U	0.37	0.033	mg/kg
SB-9 (1-2)-20200804	460-215088-1	HEXACHLOROBUTADIENE	8/7/2020		Y	N	U		U	0.075	0.0079	mg/kg
SB-9 (1-2)-20200804	460-215088-1	Aldol Condensation Product With 1st Highest Conc.	8/7/2020	1400	Y	Y	JA		J	0	0	ug/kg
SB-9 (1-2)-20200804	460-215088-1	PENTACHLOROPHENOL	8/7/2020		Y	N	U		U	0.30	0.076	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2,4,6-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.048	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BENZO(A)PYRENE	8/7/2020		Y	N	U		U	0.037	0.0099	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2-CHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4,6-DINITRO-2-METHYLPHENOL	8/7/2020		Y	N	U		U	0.30	0.060	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2,6-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.075	0.027	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2,4-DINITROTOLUENE	8/7/2020		Y	N	U		U	0.075	0.040	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2,4-DINITROPHENOL	8/7/2020		Y	N	U		U	0.30	0.18	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2-Methylphenol (O-Cresol)	8/7/2020		Y	N	U		U	0.37	0.014	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2,4-DICHLOROPHENOL	8/7/2020		Y	N	U		U	0.15	0.024	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2-Methylnaphthalene	8/7/2020		Y	N	U		U	0.37	0.010	mg/kg

SDG: 4602150881

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-9 (1-2)-20200804	460-215088-1	2,4,5-TRICHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.038	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2,3,4,6-TETRACHLOROPHENOL	8/7/2020		Y	N	U		U	0.37	0.025	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,4-DIOXANE (P-DIOXANE)	8/7/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-9 (1-2)-20200804	460-215088-1	1,2,4,5-TETRACHLOROBENZENE	8/7/2020		Y	N	U		U	0.37	0.012	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.043	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CAPROLACTAM	8/7/2020		Y	N	U		U	0.37	0.058	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2,4-DIMETHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.016	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ACENAPHTHENE	8/7/2020		Y	N	U		U	0.37	0.027	mg/kg
SB-9 (1-2)-20200804	460-215088-1	BENZO(A)ANTHRACENE	8/7/2020		Y	N	U		U	0.037	0.013	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ATRAZINE	8/7/2020		Y	N	U		U	0.15	0.0094	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ANTHRACENE	8/7/2020		Y	N	U		U	0.37	0.011	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2-CHLORONAPHTHALENE	8/7/2020		Y	N	U		U	0.37	0.017	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ACENAPHTHYLENE	8/7/2020		Y	N	U		U	0.37	0.0038	mg/kg
SB-9 (1-2)-20200804	460-215088-1	2-NITROPHENOL	8/7/2020		Y	N	U		U	0.37	0.037	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4-NITROPHENOL	8/7/2020		Y	N	U		U	0.75	0.061	mg/kg
SB-9 (1-2)-20200804	460-215088-1	HEXACHLOROBENZENE	8/7/2020		Y	N	U		U	0.037	0.018	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4-METHYLPHENOL (P-CRESOL)	8/7/2020		Y	N	U		U	0.37	0.023	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4-CHLOROPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.013	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4-CHLOROANILINE	8/7/2020		Y	N	U		U	0.37	0.026	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4-CHLORO-3-METHYLPHENOL	8/7/2020		Y	N	U		U	0.37	0.021	mg/kg
SB-9 (1-2)-20200804	460-215088-1	4-BROMOPHENYL PHENYL ETHER	8/7/2020		Y	N	U		U	0.37	0.015	mg/kg
SB-9 (1-2)-20200804	460-215088-1	3-NITROANILINE	8/7/2020		Y	N	U		U	0.37	0.042	mg/kg
SB-9 (1-2)-20200804	460-215088-1	ACETOPHENONE	8/7/2020		Y	N	U		U	0.37	0.018	mg/kg

SDG: 4602150881

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
DUP-3-20200804	460-215088-6	CYANIDE	8/10/2020		Y	N	U		U	0.27	0.14	mg/kg
SB-17 (4-5)-20200804	460-215088-2	CYANIDE	8/10/2020		Y	N	U		U	0.27	0.14	mg/kg
SB-17 (7-8)-20200804	460-215088-3	CYANIDE	8/10/2020		Y	N	U		U	0.27	0.14	mg/kg
SB-18 (2-3-20200804	460-215088-4	CYANIDE	8/10/2020		Y	N	U		U	0.27	0.14	mg/kg
SB-18 (8-9)-20200804	460-215088-5	CYANIDE	8/10/2020		Y	N	U		U	0.29	0.15	mg/kg
SB-9 (1-2)-20200804	460-215088-1	CYANIDE	8/10/2020		Y	N	UT		U	0.27	0.14	mg/kg

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-216046-1
Reviewer: Felomina Tanguilig, Stella Cuenco, and Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 5, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW-3	460-216046-1	VOC, SVOC, SVOC-SIM, Pesticide, PCB, PFAS
MW-4	460-216046-2	VOC, SVOC, SVOC-SIM, Pesticide, PCB, PFAS
FB	460-216046-3	VOC, SVOC, SVOC-SIM, Pesticide, PCB, PFAS
TB	460-216046-4	VOC

Associated QC Samples(s):
Field/Trip Blanks: TB, FB
Field Duplicate pair: None Associated

The above-listed water samples were collected on August 10, 2020 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260C, semivolatile organic compounds (SVOC) by SW-846 methods 8270D and 8270D in selected ion monitoring (SIM) mode, organochlorine pesticides by SW-846 method 8081B, polychlorinated biphenyls (PCB) by SW-846 method 8082A, and perfluoroalkyl and polyfluoroalkyl substances (PFAS) by method 537 modified. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C,* SOP HW-24, Revision 4 (October 2014), the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation SW-846 Method 8270D,* SOP HW-35A, Revision 0 (June 2015), the USEPA Region 2 *Standard Operating Procedure for Validating Pesticide Compounds, Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B,* SOP HW-44, Revision 1.1 (December 2010), the USEPA Region 2 *Standard Operating Procedure for Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A,* SOP HW-45, Revision 1 (October 2006), the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-2017-002 (January 2017), and the Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (January 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- GC/Electron Capture Detector (GC/ECD) Instrument Performance Checks
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards/Labeled Compounds
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

VOC, SVOC, SVOC-SIM, Pesticide, and PCB

All criteria were met.

PFAS

For samples MW-3 and MW-4, the laboratory indicated that the samples contain non-settleable particulate matter which clogged the solid-phase extraction column. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

GC/MS Tunes

VOC, SVOC, and SVOC-SIM

All criteria were met.

GC/ECD Instrument Performance Checks

Pesticide

All criteria were met.

LC/MS Instrument Performance Checks

PFAS

All criteria were met.

Initial and Continuing Calibrations

VOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/16/20	CCV-MS15	Methyl acetate	24.8	MW-3	XX	UJ nondetects
		Bromomethane	30.8	MW-4	XX	UJ nondetects
				FB		
				TB		

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The methyl acetate and bromomethane results for the samples listed above were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/16/20	CCV-16	Benzaldehyde	47.7	MW-3	XX	UJ nondetects
		Pyrene	22.8	MW-4	XX	UJ nondetects
		Benzo(g,h,i)perylene	26.3	FB	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzaldehyde, pyrene, and benzo(g,h,i)perylene results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC-SIM

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
08/16/20	CCV-MS4	Pentachlorophenol	21.6	MW-3 MW-4 FB	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The pentachlorophenol result was estimated due to continuing calibration exceedances. The bias cannot be determined. The result can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Pesticide, PCB, and PFAS

All criteria were met.

Blanks

VOC

Contamination was not detected in the method blanks.

No positive results were found in the trip blank sample TB for VOC analysis.

Contamination was detected in the field blank sample FB for VOC analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x reporting limits (RL) (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
FB	Methylene chloride	0.36 ug/L	2xRL	MW-3 MW-4

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
MW-4	Methylene chloride	0.87 ug/L	1.0U ug/L

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

SVOC

Contamination was detected in the associated SVOC method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at <2x RL (for common contaminants) and <RL (for other contaminants) of the concentrations detected. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 460-717134	Butylbenzylphthalate	1.40 ug/L	RL	MW-3 MW-4 FB

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

No samples were qualified since the associated sample results were nondetect.

No positive results were found in the field blank sample FB for SVOC analysis.

SVOC-SIM, Pesticide, and PCB

Contamination was not detected in the method blanks.

No positive results were found in the field blank sample FB for SVOC-SIM, pesticide, and PCB analyses.

PFAS

Contamination was detected in the associated pesticide method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 320-404813/1-A	Perfluorobutanoic acid Perfluorohexanesulfonic acid	0.460 ng/L 0.348 ng/L	RL RL	MW-3 MW-4 FB

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

No samples were qualified since the associated sample results were nondetect.

Contamination was detected in the field blank sample FB for PFAS analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
FB	Perfluorobutanoic acid	0.61 ng/L	RL	MW-3
	Perfluorohexanesulfonic acid	0.24 ng/L	RL	MW-4
	Perfluorooctanesulfonamide	0.39 ng/L	RL	

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
MW-3	Perfluorooctanesulfonamide	0.46 ng/L	1.95U ng/L

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

Surrogate Recoveries

VOC, SVOC, SVOC-SIM, Pesticide, and PCB

All criteria were met.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

VOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-717110	Methyl acetate	128 (70-127)	130 (70-127)	MW-3 MW-4 FB TB	None

- Within control limits

Validation action was not required for methyl acetate due to high LCS/LCSD recoveries as positive results only are affected and this compound was not detected in the associated samples.

SVOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the SVOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-717134	Carbazole	66 (68-113)	66 (68-113)	MW-3	UJ nondetects
	Chrysene	65 (74-122)	67 (74-122)	MW-4	UJ nondetects
	Fluoranthene	-	64 (66-116)	FB	UJ nondetects

- Within control limits

The carbazole, chrysene, and fluoranthene results may be biased low due to low LCS/LCSD percent recoveries. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC-SIM and PCB

All criteria were met.

Pesticide

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the pesticide analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-717179	Endosulfan sulfate	-	161 (50-150)	MW-3 MW-4 FB	None

- Within control limits

Validation action was not required for endosulfan sulfate due to high LCS/LCSD recovery as positive results only are affected and this compound was not detected in the associated samples.

The following table lists the LCS/LCSD relative percent differences (RPD) outside of control limits in the pesticide analysis and the resulting validation actions.

LCS ID	Compound	RPD (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-717179	Endrin aldehyde	38 (≤30)	MW-3 MW-4 FB	None

Validation action was not required for endrin aldehyde due to LCS/LCSD relative percent difference exceedance as positive results only are affected and this compound was not detected in the associated samples.

PFAS

The following table lists the LCS/LCSD relative percent differences (RPD) outside of control limits in the PFAS analysis and the resulting validation actions.

LCS ID	Compound	RPD (Limits)	Affected Sample	Validation Action
LCS/LCSD 320-404813	Perfluorododecanoic acid	39 (≤30)	MW-3 MW-4 FB	None

Validation action was not required for perfluorododecanoic acid due to LCS/LCSD relative percent difference exceedance as positive results only are affected and this compound was not detected in the associated samples.

Internal Standards

VOC, SVOC, SVOC-SIM, Pesticide, and PCB

All criteria were met.

Labeled Compounds

PFAS

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC, SVOC-SIM, and PFAS analyses. These results were qualified as estimated (J) by the laboratory.

No results were reported below the RL and above the MDL in the SVOC, pesticide, and PCB analyses.
Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	PFAS Analysis Reported
MW-4	10-fold dilution due to nature of sample matrix for perfluorooctanesulfonic acid

Dilutions were not required for VOC, SVOC, SVOC-SIM, pesticide, and PCB analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146E1a
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration~~/ICV~~	A / N	% RSD ≤ 20 ~~ICV~~ NO ICV
IV.	Continuing calibration	SW	
V.	Laboratory Blanks	A	
VI.	Field blanks	SW	FB = 3 *TB = 4
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	LCS 1D
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = Jdu
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; *ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3	460-216046-1	Water	08/10/20
2	MW-4	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4	TB	460-216046-4	Water	08/10/20
5				
6				
7				
8				
9				

Notes:

	MB 460-717110						

LDC #: 49146E1a

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260 C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30%/15% / 20% and relative response factors (RRF) ≥ 0.05?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	•		✓	
Were all percent differences (%D) ≤ 20% / 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) ≥ 0.05?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓	•		
Were target compounds detected in the field blanks?	✓			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	

Validation Area				
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data	✓			
Overall assessment of data was found to be acceptable.				

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 49146E1q

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <20.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	8/16/20	ccv - MS15	QQQQ	24.8		all	J/UJ/A NO
	0635	(ccv 460-71710)	B	30.8		↓	↓

LDC #: 49146E1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

(Y) N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/L
Sampling date: 8/10/20
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: FB Associated Samples: 1, 2

Compound	Blank ID	Sample Identification								
	3		2							
E	0.36		0.87 | 1.01							

Blank units: _____ **Associated sample units:** _____
Sampling date: _____
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 49146E1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/LCSD	QQQQ	128 (70-127)	130 (70-127)	( )	All	Jdets / P ND
	460-717110		( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146E1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20/100/400ppb std)	Recalculated (RRF 20/100/400ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	8/3/2020	F	0.6653	0.6653	0.6473	0.6473	18.7	18.7
			E	0.2883	0.2883	0.2817	0.2817	6.1	6.1
	CVOAMS15		HHHH	0.9838	0.9838	0.9339	0.9339	11.8	11.8
			EE	0.5548	0.5548	0.5271	0.5271	5.3	5.3
			JJJ	1.2220	1.2220	1.2641	1.2641	5.6	5.6

LDC #: 49146 E1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 15 0635	8/16/20	F (IS1)	0.6473	0.5428	0.5428	16.1	16.1
			F (IS2)	0.2817	0.3039	0.3039	7.9	7.9
			HHHH (IS3)	0.9359	1.056	1.056	13.1	13.1
			EE (IS4)	0.5271	0.536X	0.536X	1.X	1.X
			JJJ (IS5)	1.2641	1.331	1.331	5.3	5.3
2			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					
3			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	50.5	101	101	0
1,2-Dichloroethane-d4	↓	53.6	107	107	↓
Toluene-d8		49.5	99	99	
Bromofluorobenzene		49.7	99	99	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49146E1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

METHOD: GC/MS VOA (EPA Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/LCSD 460-71710

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	20.0	20.0	20.5	20.4	102	102	102	102	0	0
Trichloroethene	↓	↓	20.5	20.5	103	103	102	102	0	0
Benzene			20.5	20.1	103	103	100	100	2	2
Toluene			20.2	20.2	101	101	101	101	0	0
Chlorobenzene			20.5	20.2	102	102	101	101	1	1

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #2, E:

Conc. = $\frac{(2271)(50.0)}{(461989)(0.2817)}$

= 0.8725 ug/L

#	Sample ID	Compound	Reported Concentration (ug/L)	Calculated Concentration (ug/L)	Qualification
	#2	E	0.87	0.8725	

LDC #: 49146E2a
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/2/20
Page: 1 of 1
Reviewer: EJ
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A / N	% RSD ≤ 20, r² ≥ 0.99 CCV ≤ 20
IV.	Continuing calibration	SW	
V.	Laboratory Blanks	SW	
VI.	Field blanks	ND	FB = 3
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	
X.	Field duplicates	N	
XI.	Internal standards	A	ND
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = ~~J~~ J
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3	460-216046-1	Water	08/10/20
2	MW-4	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4				
5				
6				
7				
8				
9				

Notes:

	MB 460-717134						

LDC #: 49146E2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Semivolatiles (EPA SW 846 Method 8270 D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15/30% or 20% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% or 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the blanks validation findings worksheet.	✓			
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target compounds detected in the field blanks?		✓		
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recoveries (%R) was less than 10%, was a reanalysis performed to confirm %R ?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	CC. Dimethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	GGGG. C30-Hopane	I1. Methyl methanesulfonate
B. Bis (2-chloroethyl) ether	DD. Acenaphthylene	FFF. Di-n-octylphthalate	HHHH. 1-Methylphenanthrene	J1. Ethyl methanesulfonate
C. 2-Chlorophenol	EE. 2,6-Dinitrotoluene	GGG. Benzo(b)fluoranthene	IIII. 1,4-Dioxane	K1. o,o',o"-Triethylphosphorothioate
D. 1,3-Dichlorobenzene	FF. 3-Nitroaniline	HHH. Benzo(k)fluoranthene	JJJJ. Acetophenone	L1. n-Phenylene diamine
E. 1,4-Dichlorobenzene	GG. Acenaphthene	III. Benzo(a)pyrene	KKKK. Atrazine	M1. 1,4-Naphthoquinone
F. 1,2-Dichlorobenzene	HH. 2,4-Dinitrophenol	JJJ. Indeno(1,2,3-cd)pyrene	LLLL. Benzaldehyde	N1. N-Nitro-o-toluidine
G. 2-Methylphenol	II. 4-Nitrophenol	KKK. Dibenz(a,h)anthracene	MMMM. Caprolactam	O1. 1,3,5-Trinitrobenzene
H. 2,2'-Oxybis(1-chloropropane)	JJ. Dibenzofuran	LLL. Benzo(g,h,i)perylene	NNNN. 2,6-Dichlorophenol	P1. Pentachlorobenzene
I. 4-Methylphenol	KK. 2,4-Dinitrotoluene	MMM. Bis(2-Chloroisopropyl)ether	OOOO. 1,2-Diphenylhydrazine	Q1. 4-Aminobiphenyl
J. N-Nitroso-di-n-propylamine	LL. Diethylphthalate	NNN. Aniline	PPPP. 3-Methylphenol	R1. 2-Naphthylamine
K. Hexachloroethane	MM. 4-Chlorophenyl-phenyl ether	OOO. N-Nitrosodimethylamine	QQQQ. 3&4-Methylphenol	S1. Triphenylene
L. Nitrobenzene	NN. Fluorene	PPP. Benzoic Acid	RRRR. 4-Dimethyldibenzothiophene (4MDT)	T1. Octachlorostyrene
M. Isophorone	OO. 4-Nitroaniline	QQQ. Benzyl alcohol	SSSS. 2/3-Dimethyldibenzothiophene (4MDT)	U1. Famphur
N. 2-Nitrophenol	PP. 4,6-Dinitro-2-methylphenol	RRR. Pyridine	TTTT. 1-Methyldibenzothiophene (1MDT)	V1. 1,4-phenylenediamine
O. 2,4-Dimethylphenol	QQ. N-Nitrosodiphenylamine	SSS. Benzidine	UUUU.. 2,3,4,6-Tetrachlorophenol	W1. Methapyrilene
P. Bis(2-chloroethoxy)methane	RR. 4-Bromophenyl-phenylether	TTT. 1-Methylnaphthalene	VVVV. 1,2,4,5-Tetrachlorobenzene	X1. Pentachloroethane
Q. 2,4-Dichlorophenol	SS. Hexachlorobenzene	UUU.Benzo(b)thiophene	WWWW.. 2-Picoline	Y1. 3,3'-Dimethylbenzidine
R. 1,2,4-Trichlorobenzene	TT. Pentachlorophenol	VVV.Benzonaphthothiophene	XXXX. 3-Methylcholanthrene	Z1. o-Toluidine
S. Naphthalene	UU. Phenanthrene	WWW.Benzo(e)pyrene	YYYY. a,a-Dimethylphenethylamine	A2. 1-Naphthylamine
T. 4-Chloroaniline	VV. Anthracene	XXX. 2,6-Dimethylnaphthalene	ZZZZ. Hexachloropropene	B2. 4-Aminobiphenyl
U. Hexachlorobutadiene	WW. Carbazole	YYY. 2,3,5-Trimethylnaphthalene	A1. N-Nitrosodiethylamine	C2. 4-Nitroquinoline-1-oxide
V. 4-Chloro-3-methylphenol	XX. Di-n-butylphthalate	ZZZ. Perylene	B1. N-Nitrosodi-n-butylamine	D2. Hexachloropene
W. 2-Methylnaphthalene	YY. Fluoranthene	AAAA. Dibenzothiophene	C1. N-Nitrosomethylethylamine	E2. Bis (2-chloro-1-methylethyl) ether
X. Hexachlorocyclopentadiene	ZZ. Pyrene	BBBB. Benzo(a)fluoranthene	D1. N-Nitrosomorpholine	F2. Bifenthrin
Y. 2,4,6-Trichlorophenol	AAA. Butylbenzylphthalate	CCCC. Benzo(b)fluorene	E1. N-Nitrosopyrrolidine	G2. Cyfluthrin
Z. 2,4,5-Trichlorophenol	BBB. 3,3'-Dichlorobenzidine	DDDD. cis/trans-Decalin	F1. Phenacetin	H2. Cypermethrin
AA. 2-Chloronaphthalene	CCC. Benzo(a)anthracene	EEEE. 1,1'-Biphenyl	G1. 2-Acetylaminofluorene	I2. Permethrin (cis/trans)
BB. 2-Nitroaniline	DDD. Chrysene	FFFF. Retene	H1. Pronamide	J2. 5-Nitro-o-toluidine

LDC #: 49146 E2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤20mid/50low level %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	8/16/20 2044	CCV-16 (CCV 460-717222)	LLLL	47.7		All	J/UJ/A ND
			ZZ	22.8			
			JJJ	33.3			
			KKK	31.3			
			LLL	26.3			

LDC #: 49146E2a

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 8/16/20 **Blank analysis date:** 8/16/20
Conc. units: ug/L Associated Samples: All (ND)

Compound	Blank ID							
	MB 460-71734							
AAA	1.40							

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ Associated Samples: _____

Compound	Blank ID							

LDC #: 49146E2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?

Y (N) N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS ID 460-717134	WW	66 (68-113)	66 (68-113)	( )	All	J/UJ/P ND
		DDD	65 (74-122)	67 (74-122)	( )	↓	↓
		~~PP~~	~~( )~~	~~68 (69-119)~~	( )		
		YY	( )	64 (66-116)	( )		
		non-req	( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146E2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT____
2nd Reviewer: _____

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 4 ug/ml std)	Recalculated (RRF 4 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS16	7/31/2020	A	1.8490	1.8490	1.8076	1.8076	5.3	5.3
			S	1.0576	1.0576	1.0759	1.0759	6.0	6.0
			GG	1.2515	1.2515	1.2465	1.2465	6.3	6.3
			UU	1.1317	1.1317	1.1570	1.1570	1.6	1.6
			DDD	1.3847	1.3847	1.4875	1.4875	7.6	7.6
			III	1.0377	1.0377	1.0269	1.0269	7.2	7.2

LDC #: 49146 E2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)
The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 2044	8/16/20	A (1st IS)	1.8076	1.944	1.944	7.5	7.5
			S (2nd IS)	1.0759	1.101	1.101	2.4	2.4
			GG (3rd IS)	1.2465	1.263	1.263	1.3	1.3
			UU (4th IS)	1.1570	1.196	1.196	3.4	3.4
			DDD (5th IS)	1.4875	1.509	1.509	1.4	1.4
			III (6th IS)	1.0269	1.078	1.078	5.0	5.0
2			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					
3			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270 D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	7.13	71	71	0
2-Fluorobiphenyl	↓	6.20	62	62	↓
Terphenyl-d14		8.93	89	89	
Phenol-d5		2.62	26	26	
2-Fluorophenol		3.97	40	40	
2,4,6-Tribromophenol	↓	5.87	59	59	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 49146E2a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS ID 460-717134

Compound	Spike Added (ug/L)		Spike Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	80.0	80.0	24.7	26.2	31	31	33	33	6	6
N-Nitroso-di-n-propylamine	↓	↓	60.8	60.7	76	76	76	76	0	0
4-Chloro-3-methylphenol			49.0	51.5	61	61	64	64	5	5
Acenaphthene			60.1	58.1	75	75	73	73	3	3
Pentachlorophenol	160	160	113	110	70	70	69	69	2	2
Pyrene	80.0	80.0	66.4	67.9	83	83	85	85	2	2

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

8270D

METHOD: GC/MS SVOA (EPA Method ~~Method TO-13A~~)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. LCS 460-71713/4 111

Conc. = $\frac{(1292922)(8)(2)(1000)}{(1323941)(1.0269)(250)}$

=

60.9 ug/L

#	Sample ID	Compound	Reported Concentration (ug/L)	Calculated Concentration (ug/L)	Qualification
	LCS	111	60.9	60.9	

LDC #: 49146E2b
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS P~~olynuclear Aromatic Hydrocarbons~~ SVOA (EPA SW 846 Method 8270D-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A / A	%RSD ≤ 20, r²
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	FB = 3
VII.	Surrogate spikes	A	see full scan
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	A	LCS/D
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = Jdet
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3	460-216046-1	Water	08/10/20
2	MW-4	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4				
5				
6				
7				
8				
9				

Notes:

-	MB 460-717134						

LDC #: 49146E2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Semivolatiles (EPA SW 846 Method 8270 D) SIM

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15/30% or 20% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% or 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target compounds detected in the field blanks?		✓		
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recoveries (%R) was less than 10%, was a reanalysis performed to confirm %R ?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	CC. Dimethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	GGGG. C30-Hopane	I1. Methyl methanesulfonate
B. Bis (2-chloroethyl) ether	DD. Acenaphthylene	FFF. Di-n-octylphthalate	HHHH. 1-Methylphenanthrene	J1. Ethyl methanesulfonate
C. 2-Chlorophenol	EE. 2,6-Dinitrotoluene	GGG. Benzo(b)fluoranthene	IIII. 1,4-Dioxane	K1. o,o',o"-Triethylphosphorothioate
D. 1,3-Dichlorobenzene	FF. 3-Nitroaniline	HHH. Benzo(k)fluoranthene	JJJJ. Acetophenone	L1. n-Phenylene diamine
E. 1,4-Dichlorobenzene	GG. Acenaphthene	III. Benzo(a)pyrene	KKKK. Atrazine	M1. 1,4-Naphthoquinone
F. 1,2-Dichlorobenzene	HH. 2,4-Dinitrophenol	JJJ. Indeno(1,2,3-cd)pyrene	LLLL. Benzaldehyde	N1. N-Nitro-o-toluidine
G. 2-Methylphenol	II. 4-Nitrophenol	KKK. Dibenz(a,h)anthracene	MMMM. Caprolactam	O1. 1,3,5-Trinitrobenzene
H. 2,2'-Oxybis(1-chloropropane)	JJ. Dibenzofuran	LLL. Benzo(g,h,i)perylene	NNNN. 2,6-Dichlorophenol	P1. Pentachlorobenzene
I. 4-Methylphenol	KK. 2,4-Dinitrotoluene	MMM. Bis(2-Chloroisopropyl)ether	OOOO. 1,2-Diphenylhydrazine	Q1. 4-Aminobiphenyl
J. N-Nitroso-di-n-propylamine	LL. Diethylphthalate	NNN. Aniline	PPPP. 3-Methylphenol	R1. 2-Naphthylamine
K. Hexachloroethane	MM. 4-Chlorophenyl-phenyl ether	OOO. N-Nitrosodimethylamine	QQQQ. 3&4-Methylphenol	S1. Triphenylene
L. Nitrobenzene	NN. Fluorene	PPP. Benzoic Acid	RRRR. 4-Dimethyldibenzothiophene (4MDT)	T1. Octachlorostyrene
M. Isophorone	OO. 4-Nitroaniline	QQQ. Benzyl alcohol	SSSS. 2/3-Dimethyldibenzothiophene (4MDT)	U1. Famphur
N. 2-Nitrophenol	PP. 4,6-Dinitro-2-methylphenol	RRR. Pyridine	TTTT. 1-Methyldibenzothiophene (1MDT)	V1. 1,4-phenylenediamine
O. 2,4-Dimethylphenol	QQ. N-Nitrosodiphenylamine	SSS. Benzidine	UUUU.. 2,3,4,6-Tetrachlorophenol	W1. Methapyrilene
P. Bis(2-chloroethoxy)methane	RR. 4-Bromophenyl-phenylether	TTT. 1-Methylnaphthalene	VVVV. 1,2,4,5-Tetrachlorobenzene	X1. Pentachloroethane
Q. 2,4-Dichlorophenol	SS. Hexachlorobenzene	UUU.Benzo(b)thiophene	WWWW.. 2-Picoline	Y1. 3,3'-Dimethylbenzidine
R. 1,2,4-Trichlorobenzene	TT. Pentachlorophenol	VVV.Benzonaphthothiophene	XXXX. 3-Methylcholanthrene	Z1. o-Toluidine
S. Naphthalene	UU. Phenanthrene	WWW.Benzo(e)pyrene	YYYY. a,a-Dimethylphenethylamine	A2. 1-Naphthylamine
T. 4-Chloroaniline	VV. Anthracene	XXX. 2,6-Dimethylnaphthalene	ZZZZ. Hexachloropropene	B2. 4-Aminobiphenyl
U. Hexachlorobutadiene	WW. Carbazole	YYY. 2,3,5-Trimethylnaphthalene	A1. N-Nitrosodiethylamine	C2. 4-Nitroquinoline-1-oxide
V. 4-Chloro-3-methylphenol	XX. Di-n-butylphthalate	ZZZ. Perylene	B1. N-Nitrosodi-n-butylamine	D2. Hexachloropene
W. 2-Methylnaphthalene	YY. Fluoranthene	AAAA. Dibenzothiophene	C1. N-Nitrosomethylethylamine	E2. Bis (2-chloro-1-methylethyl) ether
X. Hexachlorocyclopentadiene	ZZ. Pyrene	BBBB. Benzo(a)fluoranthene	D1. N-Nitrosomorpholine	F2. Bifenthrin
Y. 2,4,6-Trichlorophenol	AAA. Butylbenzylphthalate	CCCC. Benzo(b)fluorene	E1. N-Nitrosopyrrolidine	G2. Cyfluthrin
Z. 2,4,5-Trichlorophenol	BBB. 3,3'-Dichlorobenzidine	DDDD. cis/trans-Decalin	F1. Phenacetin	H2. Cypermethrin
AA. 2-Chloronaphthalene	CCC. Benzo(a)anthracene	EEEE. 1,1'-Biphenyl	G1. 2-Acetylaminofluorene	I2. Permethrin (cis/trans)
BB. 2-Nitroaniline	DDD. Chrysene	FFFF. Retene	H1. Pronamide	J2. 5-Nitro-o-toluidine

LDC #: 49146E2b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤20mid/50low level %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	8/16/20 2225	CCV-MS4	TT	21.6		all	J/UJ/A ND

CONCAL.wpd

LDC #: 49146E2b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)
The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Internal Standard)	Reported RRF (0.4|0.1|0.2 ug|m|std)	Recalculated RRF (0.4|0.1|0.2 ug|m|std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL MS4	8/15/20	1111 (1st IS)	0.3904	0.3904	0.4230	0.4230	13.3	13.3
			S (2nd IS)	0.9765	0.9765	1.0559	1.0559	8.5	8.5
			GG (3rd IS)	1.0288	1.0288	1.1855	1.1855	13.5	13.5
			TT (4th IS)	0.1049	0.1049	0.1024	0.1024	13.8	13.8
			CCC (5th IS)	1.1095	1.1095	1.2547	1.2547	12.9	12.9
			GGG (6th IS)	1.0746	1.0746	1.0666	1.0666	7.0	7.0
2			(1st IS)						
			(2nd IS)						
			(3rd IS)						
			(4th IS)						
			(5th IS)						
			(6th IS)						
3			(1st IS)						
			(2nd IS)						
			(3rd IS)						
			(4th IS)						
			(5th IS)						
			(6th IS)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E2b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)
The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV MS4	8/16/20	111 (1st IS)	0.4230	0.4229	0.4229	0	0
			S (2nd IS)	1.0559	1.119	1.119	6.0	6.0
			GG (3rd IS)	1.1855	1.202	1.202	1.4	1.4
			TT (4th IS)	0.1024	0.1246	0.1246	21.6	21.6
			CCC (5th IS)	1.2547	1.272	1.272	1.4	1.4
			GGG (6th IS)	1.0666	1.019	1.019	4.5	4.5
2			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					
3			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E26

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS/D 460-717134

Compound	Spike Added (ug/L)		Spike Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol	1.60	1.60	1.09	1.06	68	68	66	66	3	3
~~Pyrene~~ GGG	0.800	0.800	0.551	0.583	69	69	73	73	6	6

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146 E2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #2, IV: GGG

Conc. = $\frac{(11225)\ (0.200)\ (2)\ (1000)}{(225105)\ (1.0666)(250)}$

= 0.0748 ug/L

2/250

#	Sample ID	Compound	Reported Concentration (ug/L)	Calculated Concentration (ug/L)	Qualification
	2	GGG	0.075	0.0748	

LDC #: 49146E3a
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC Organochlorine Pesticides (EPA SW846 Method 8081B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A ~~A~~	
II.	GC Instrument Performance Check	A	
III.	Initial calibration/~~ICV~~	A ~~A~~	%RSD ≤ 20 NO ICV
IV.	Continuing calibration	A	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	FB = 3
VII.	Surrogate spikes 1/4	A	
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	SW	LCSID
X.	Field duplicates	N	
XI.	Compound quantitation/RL/LOQ/LODs	A	No Results < RL 7 MDL
XII.	Target compound identification	A	
XIII.	System Performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3	460-216046-1	Water	08/10/20
2	MW-4	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4				
5				
6				
7				
8				
9				
10				

Notes:

	MB 460-717179						

LDC #: 49146E3a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Pesticides (EPA SW 846 Method 8081B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and at beginning of each 12-hour shift?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20%?			✓	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks identified in this SDG?	✓			
Were target compounds detected in the field blanks?		✓		

Validation Area	Yes	No	NA	Findings/Comments
VII. ***Surrogate spikes/Internal Standards***				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recovery (%R) was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were internal standard area counts within ± 50% of the average area calculated during calibration?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
Were relative percent difference (RPD) of the results between two columns ≤ 40%?	✓			
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146E3a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT

METHOD: ✓ **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A (Y circled) Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A (N circled) Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A (Y circled) Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 460-717179	N (CLP2)	( )	161 (50-150)	( )	All	J dets/P ND
			( )	( )	( )	↓	
		R (CLP1)	( )	( )	38 (30)	↓	J dets/P ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146E3a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound		Reported 100ppb	Recalculated 100ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/2/2020	Gamma-BHC	CLP2	1.4874	1.4874	1.5775	1.5775	14.2	14.2
	GC4		Gamma-BHC	CLP1	1.5478	1.5478	1.5261	1.5261	5.2	5.2
			4,4'-DDT	CLP2	1.2522	1.2522	1.3670	1.3670	20.0	20.0
			4,4'-DDT	CLP1	1.3577	1.3577	1.3116	1.3116	5.0	5.0

LDC #: 49146E3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	CCV 0700	8/17/20	gamma BHC (LP2	100	89.4	89.4	10.6	10.6
			4,4'-DDT	100	88.2	88.2	11.8	11.8
			↓ (VP)	↓	93.1	93.1	6.9	6.9
					86.9	86.9	13.1	13.1
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E3a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	CLP1	100	35.4	35	35	0
↓	CLP2		34.8	35	35	
TCMX	CLP1		48.4	48	48	
↓	CLP2	↓	43.3	43	43	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146E3a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; LCS = Laboratory Control Sample; SA = Spike added; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: lcs ID 460-717179

Compound	Spike Added (ug/L)		Spike Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
4,4'-DDT	0.800		0.778	0.864	97	97	108	108	11	11
gamma BHC	↓		0.768	0.855	96	96	107	107	11	11

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E3a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: V **GC** __ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #2 Compound Name 4,4'-DDT

Concentration = 99304379 (100.0) (1) / 1769604888 (1.3670) (250) = 0.164 ug/L

1/250

#	Sample ID	Compound	Reported Concentrations (ug/L)	Recalculated Results Concentrations (ug/L)	Qualifications
	#2	4,4'-DDT	0.16	0.164	

Comments:

LDC #: 49146E3b
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	Initial calibration/~~ICV~~	A / N	0/0 RSD ≤ 20
III.	Continuing calibration	A	ICV ≤ 20
IV.	Laboratory Blanks	A	
V.	Field blanks	ND	FB = 3
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	OS
VIII.	Laboratory control samples	A	LCS/LCSD
IX.	Field duplicates	N	
X.	Compound quantitation/RL/LOQ/LODs	A	ND Results < RL > MDL
XI.	Target compound identification	A	
XII.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3	460-216046-1	Water	08/10/20
2	MW-4	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4				
5				
6				
7				
8				
9				
10				
11				
12				

Notes:

	MB 480-71718						

LDC #: 49146E3b

VALIDATION FINDINGS CHECKLIST

Method: ✓ GC ___ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?			✓	
Were the RT windows properly established?	✓			
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20%?			✓	
III. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
V. Field Blanks				
Were field blanks identified in this SDG?	✓			
Were target compounds detected in the field blanks?		✓		
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed per analytical or extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Field duplicates				

Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

_____

_____

LDC #: 49146E3b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: _____

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 1000ppb	Recalculated 1000ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/28/2020 GC8	PCB 1260-1 RTX CLP2	0.0339	0.0339	0.0329	0.0329	4.0	4.0
			PCB 1260-1 RTX CLP1	0.0613	0.0613	0.0606	0.0606	8.6	8.6

LDC #: 49146E3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	ccv 0734	8/17/20	PCB 1260 - 1 CVP2	1000	1130	1126.4	12.6	12.6
			CVP1	1000	1060	1056.5	5.6	5.6
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E3b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	cvp1	100	73.1	73	73	0
↓	2		81.9	82	82	
TCMX	cvp1		103.5	104	104	
↓	2	↓	109.7	110	110	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146E3b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; LCS = Laboratory Control Sample; SA = Spike added; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: lcs ID 460-71718

Compound	Spike Added (ug/L)		Spike Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Aroclor 1260	4.0	4.0	4.45	4.32	111	111	108	108	3	3

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146E36

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-71718 Compound Name Aroclor 1260

Concentration = $\frac{1111.9\ (1)}{(250)}$ = 4.4476 ug/L

2f. 1/250

#	Sample ID	Compound	Reported Concentrations (ug/L)	Recalculated Results Concentrations (ug/L)	Qualifications
	LCS	Aroclor 1260	4.45	4.4476	
	1260-1 = 24465521 (20) / 1419664 (0.0329) =		1048.0		
		Ave = 1048 + 1046.8 +	1031.6 + 1164.0 + 1136.3 + 1138.2 + 1087.4 + 1243.2		
			8		
		Ave = 1111.9			

Comments: _____

LDC #: 49146E96
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A SW	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	RSD ≤ 20 IV ≤ 50/30 ICV ≤ 30
IV.	Continuing calibration/ISC	A/A	D ≤ 30 ISC ≤ 50
V.	Laboratory Blanks	SW	
VI.	Field blanks	SW D N	FB = 3
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Field duplicates	N	
X.	Labeled Compounds	A	
VI.	Compound quantitation RL/LOQ/LODs	SW	< RL - J and A
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3	460-216046-1	Water	08/10/20
2	MW-4 (PFOS -10x)	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4				
5				
6				
7				
8				
9				
10				

Notes:

	404813						

LDC #: 49146E96 **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: M

Method: LC/MS PFAS (EPA Method 537Mod)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Were cooler temperature criteria met?	√			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the validation criteria?	√			
III. Initial calibration and Initial Calibration Verification				
Did the laboratory perform a 5-point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 20%?	√			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?			√	
Were all analytes within 70-130% or percent differences (%D) ≤30% of their true value for each calibration standard except the lowest point (50-150%)?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
IV. Continuing calibration and Instrument Sensitivity Check				
Was a continuing calibration analyzed prior to sample analysis, after every 10 samples and at the end of the analytical sequence?	√			
Were all percent differences (%D) of the continuing calibration ≤ 30%?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were all percent differences (%D) of the Instrument Sensitivity Check ≤ 50%?	√			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?	√			
VI. Field blanks				
Were field blanks identified in this SDG?	√			
Were target compounds detected in the field blanks?	√			
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?		√		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			√	

LDC #: 49146E96

VALIDATION FINDINGS CHECKLIST

Reviewer: K

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		√		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		√		
Were target compounds detected in the field duplicates?			√	
XI. Labeled compounds				
Were labeled compound percent recoveries (%R) within the QC limits?	√			
XII. Compound quantitation				
Did the laboratory reporting limits (RL) meet the QAPP RLs?			√	
Did reported results include both branched and linear isomers?	√			
Were the correct ion transition, labeled compound and relative response factor (RRF) used to quantitate the compound?	√			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	√			
XIII. Target compound identification				
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were two transitions and the ion transition ratio per analyte monitored and documented except for PFBA and PFPeA?	√			
Were ion ratios within QC limits?	√			
XIV. System performance				
System performance was found to be acceptable.	√			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. Perfluorobutanoic acid (PFBA)			
B. Perfluoropentanoic acis (PFPeA)			
C. Perfluorohexanoic acid (PFHxA)			
D. Perfluoroheptanoic acid (PFHpA)			
E. Perfluorooctanoic acid (PFOA)			
F. Perfluorononanoic acid (PFNA)			
G. Perfluorodecanoic acid (PFDA)			
H. Perfluoroundecanoic acid (PFUnA)			
I. Perfluorododecanoic acid (PFDoA)			
J. Perfluorotridecanoic acid (PFTriA)			
K. Perfluorotetradecanoic acid (PFTeA)			
L. Perfluorobutanesulfonic acid (PFBS)			
M. Perfluorohexanesulfonic acid (PFHxS)			
N. Perfluoroheptanesulfonic acid (PFHpS)			
O. Perfluorooctanesulfonic acid (PFOS)			
P. Perfluorodecanesulfonic acid (PFDS)			
Q. Perfluorooctanesulfonamide (FOSA)			
R. N-Methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
S. N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			
T. 6:2 FTS			
U. 8:2 FTS			

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: ____

Method: LC/MS PFAS (EPA Method 537M)

All circled dates have exceeded the technical holding times.
(Y) N N/A Were all cooler temperatures within validation criteria?

Sample ID	Matrix	Preserved	Sampling Date	Extraction date	Analysis date	Total # of Days	Qualifier
1,2 (dets/NDs)	The laboratory indicated that the samples contain non-settleable particulate matter						J/UJ/A
	which clogged the solid-phase extraction column.						

TECHNICAL HOLDING TIME CRITERIA

Water: Extracted within 14 days, analyzed within 28 days.
Soil: Extracted within 14 days, analyzed within 28 days.

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JC

METHOD: LC/MS PFAS (EPA Method 537M)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 8/16/20
Conc. units: ng/L **Associated Samples:** All

Compound	Blank ID	Sample Identification								
MB 320-40481/1-A										
A	0.460									
M	0.348									

Blank extraction date:
Conc. units: **Associated Samples:**

Compound	Blank ID	Sample Identification								

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: JC

METHOD: LC/MS PFAS (EPA Method 537M)

(Y) N N/A Were field blanks identified in this SDG?

(Y) N N/A Were target compounds detected in the field blanks?

Blank units: ~~8/10/20~~ ng/L **Associated sample units:** ng/L

Sampling date: 8/10/20

Field blank type: (circle one) Trip Blank/Field Blank / Rinsate / Other: Associated Samples: 1, 2

Compound	Blank ID	Sample Identification								
	3	1								
A	0.61									
M	0.24									
Q	0.39	0.46 / 1.954								

Blank units: _____ **Associated sample units:** _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: JC

METHOD: LC/MS PFAS (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?

Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 320-40413	±			39 (≤30)	All (ND)	J (all det.) / P

LCSLCSD-LCMS

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S = Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound	Reported RRF (RRF 1.0/0.928)	Recalculated RRF (RRF 1.0/0.928)	Reported Average RRF	Recalculated Average RRF	Reported %RSD	Recalculated %RSD
1	ICAL	8/18/2020	PFOA (13C4-PFOA)	1.0523	1.0523	1.0266	1.0266	6.7	6.7
	A15		PFOS (13C4-PFOS)	1.0921	1.0921	1.0230	1.0230	4.6	4.6
2			PFOA (13C4-PFOA)						
			PFOS (13C4-PFOS)						

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (Actual Conc - Cx)/Actual Conc
Cx = (Ax)(Cis)/(Ais)(ave. RRF)

Where:
Ax = Area of compound
Ais = Area of associated internal standard
Cx = Concentration of compound
Cis = Concentration of internal standard
ave. RRF = initial calibration average RRF

#	Standard ID	Calibration Date	Compound	Average RRF	Reported RRF	Recalculated RRF	Reported %D	Recalculated %D
1	2020.08.19_A15_PFC_A_018	8/19/2020	PFOA (13C4-PFOA)	1.0266	1.041	1.0412	1.4	1.4
			PFOS (13C4-PFOS)	1.0230	1.073	1.0730	4.9	4.9
2	2020.08.19_A15_PFC_A_079	8/19/2020	PFOA (13C4-PFOA)					
			PFOS (13C4-PFOS)	1.0230	1.092	1.0917	6.7	6.7

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS/D 320-404813

Compound	SA (ng/L)		SSC (ng/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	40.0	40.0	38.80	41.00	97	97	103	103	6	6
PFOS	37.1	37.1	36.90	36.12	99	99	97	97	2	2

LDC #: 49146E96

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

Method: LC/MS PFAS (EPA Method 537M)

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)\,(Vo)\,(Df)}{(RRF)\,(Wt)\,(\%S)}$$

Where:

Ax = Area or height of the peak for the compound to be measured
Ais = Area or height of the peak for the internal standard
Cis = Concentration of the internal standard
DF = Dilution factor
Vt = Volume of extract in milliters (mL)
RRF = Average relative response factor
Vo = Volume of sample in liters (L)

Sample #	Compound	Ax	Ais	Cis	DF	RRF	Vt (mL)	Vo (L)	%S	Calculated Concentration (ng/L)	Reported Concentration (ng/L)	% Diff
1	PFOA	4194792	7467138	2.5	1	1.0266	10	0.2559		53.5	53.5	0

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-216046-1
Reviewer: Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 1, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW-3	460-216046-1	Metals, Cyanide
MW-4	460-216046-2	Metals, Cyanide
FB	460-216046-3	Metals, Cyanide

Associated QC Samples(s):
Field/Trip Blanks: FB
Field Duplicate pair: None Associated

The above-listed water samples were collected on August 10, 2020 and were analyzed for metals by SW-846 methods 6020B/7470A and cyanide by SW-846 method 9012B. The data validation was performed in accordance with USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program,* SOP HW-3b/c, Revision 1 (September 2016) and the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review,* EPA 540-R-2017-001 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The inorganic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Instrument Calibration
- Contract Required Quantitation Limit (CRQL) Standard Recoveries
- Blank Analysis Results
- Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Results
- Matrix Spike (MS) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Laboratory Control Sample (LCS)
- Serial Dilution Results
- Detection Limits Results
- Sample Quantitation Results

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

Instrument Calibration

All criteria were met.

CRQL Standard Recoveries

Metals

All criteria were met.

Blank Results

Metals

Analytes were detected below the reporting limits in the laboratory blank samples. The following table summarizes the contamination and validation actions taken.

Blank ID	Analyte	Level Detected	Action Level	Associated Samples
ICB/CCB	Aluminum	17.9 ug/L	RL	MW-3
	Iron	27.29 ug/L	RL	MW-4
	Lead	0.117 ug/L	RL	FB
ICB/CCB	Sodium	66.94 ug/L	RL	MW-3
				MW-4

Blank Actions for analytes detected below the reporting limit(RL).
If the sample result is < RL, report the result as nondetect (U) at the RL.
If the sample result is > RL or nondetect, no action is required.
Blank Actions for analytes detected above the reporting limit or RL.
If the sample result is < RL and <action level; report the result as nondetect (U) at the RL.
If the sample result is > RL and < action level; report the result as nondetect (U) at the reported value.
If the sample result is > action level or nondetect, no action is required.

No samples were qualified since the associated sample results were greater than the action limit.

Contamination was detected in the field blank sample FB for the metals analyses. The following table summarizes the contamination greater than the reporting limit and validation actions taken.

Blank ID	Analyte	Level Detected	Action Level	Associated Samples
FB	Calcium	26.3 ug/L	RL	MW-3 MW-4

Blank Actions for analytes detected above the reporting limit(RL).
If the sample result is < RL and < action level; report the result as nondetect (U) at the RL.
If the sample result is > RL and < action level; report the result as nondetect (U) at the reported value.
If the sample result is > action level or nondetect, no action is required.

No samples were qualified since the associated sample results were greater than the action limit.

Cyanide

Contamination was not detected in the laboratory blank samples.

No positive results greater than the reporting limit were found in the field blank sample FB for cyanide analysis.

ICP ICS Results

Metals

Analytes were within control limits in the ICSA and ICSAB analyses.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Serial Dilution Results

Metals

A serial dilution analysis was not associated with this sample set. Validation action was not required on this basis.

Detection Limits Results

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the metals and cyanide analyses. These results were estimated (J) by the laboratory.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	Metals Analyses Reported
MW-3	10-fold dilution due to high analyte level for sodium

Dilutions were not required for cyanide analysis.

Sample Quantitation Results

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146E4a
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6020B/7470A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	
VI.	Field Blanks	SW	FB=3
VII.	Matrix Spike/Matrix Spike Duplicates	N	
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	N	
X.	Laboratory control samples	A	LCS
XI.	Field Duplicates	N	
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	results<RL: Jdet
XIV.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3 Na@10x (high analyte)	460-216046-1	Water	08/10/20
2	MW-4	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Notes:

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times met?	X			
Were all water samples preserved to a pH of <2.	X			
II. ICP-MS Tune				
Were mass resolutions within 0.1 amu for all isotopes in the tuning solution?	X			
Were %RSDs of isoptoes in the tuning solution ≤5%?	X			
III. Calibration				
Were all instuments calibrated daily?	X			
Were the proper standards used?	X			
Were all initial and continuing calibration verifications within the 90-110% (80-120% for mercury) QC limits?	X			
Were the low level standard checks within 70-130%?			X	
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?	X			
V. Interference Check Sample				
Were the interference check samples performed daily?	X			
Were the AB solution recoveries within 80-120%?	X			
VI. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
VII. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
VIII. Internal Standards				
Were all percent recoveries within the 30-120% (60-125% for EPA Method 200.8) QC limits?	X			
If the recoveries were outside the limits, was a reanalysis performed?			X	
IX. Serial Dilution				
Were all percent differences <10%?			X	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			X	
X. Sample Result Verification				
Were all reporting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			
XII. Field Duplicates				
Were field duplicates identifed in this SDG?		X		
Were target analytes detected in the field duplicates?			X	
XIII. Field Blanks				
Were field blanks identified in this SDG?	X			
Were target analytes detected in the field blanks?	X			

All elements are applicable to each sample as noted below.

Sample ID	Target Analyte List
All	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn, Hg

Analysis Method

ICP	
ICP-MS	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
CVAA	Hg

VALIDATION FINDINGS WORKSHEET
Laboratory Blank Contamination (PB/ICB/CCB)

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Soil preparation factor applied (if applicable): NA

Sample Concentration, unless otherwise noted: ug/L Associated Samples: All

				Sample Identification								
Analyte	**PB (mg/Kg)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	No quals (>RL)								
Al		17.9	RL									
Fe		27.29	RL									
Pb		0.117	RL									

Sample Concentration, unless otherwise noted: ug/L Associated Samples: 1, 2

				Sample Identification								
Analyte	**PB (mg/Kg)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	No quals (>RL)								
Na		66.94	RL									

VALIDATION FINDINGS WORKSHEET
Field Blanks

METHOD: Trace Metals (EPA SW 846 Methods 6010/6020/7000)

Blank units: ug/L Associated sample units: ug/L
Sampling Date: 8/10/20
Associated Samples: 1, 2

			Sample Identification									
Analyte	Blank ID: 3	Action Level	No qual (>RL)									
Ca	26.3	RL										

Comments: The action level, when applicable, is estabilised at 5X the highest concentration.

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

An intial calibration verification (ICV), continuing calibration verification (CCV), low level calibration check (LLCC), and interference check sample (ICSAB) percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis

True = concentration of each analyte in the source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalcuated %R	Reported %R	Acceptable (Y/N)
ICV	ICP-MS	Mn	79.19	80	99	99	Y
CCV	ICP-MS	Cr	102.1	100	102	102	Y
ICSAB	ICP-MS	Se	204	200	102	102	Y
ICV	CVAA	Hg	4.99	5	100	100	Y
CCV	CVAA	Hg	5.05	5	101	101	Y

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

Percent recoveries (%R) for the laboratory control sample (LCS), matrix spike (MS), and post digestion spike (PDS) were recalculated using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentration of each analyte in the source

The sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentration

D = Duplicate sample concentration

The serial dilution percent difference (%D) was recalculated using the following formula.

%D = (Absolute value (I - SDR)) x 100 / (I)

I = Initial sample result

SDR = Serial dilution result (with a 5x dilution applied)

Sample ID	Type of Analysis	Element	Found/S/I	True/D/SDR	Recalcuated %R/RPD/%D	Reported %R/RPD/%D	Acceptable (Y/N)
LCS	LCS	Tl	19.83	20	99	99	Y
	MS						
	Duplicate						
	PDS						
	Serial dilution						

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Analytes were recalculated and verified using the following equation:
Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids x Initial weight)

Sample ID	Analyte	Raw Data (ug/L)	Dilution	Initial Volumne (mL)	Final Volume (mL)	Reported Result (ug/L)	Recalcuated Result (ug/L)	Acceptable (Y/N)
1	Cr	13.88	1	50	50	13.9	13.9	Y
2	Na	194295.064	1	50	50	194000	194295	Y
3	Ca	26.258	1	50	50	26.3	26.3	Y

LDC #: 49146E6
SDG #: 460-216046-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Laboratory Blanks	A	
V	Field blanks	ND	FB=3
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	
X.	Sample result verification	A	Results<RL: J det
XI	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-3	460-216046-1	Water	08/10/20
2	MW-4	460-216046-2	Water	08/10/20
3	FB	460-216046-3	Water	08/10/20
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes:

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times were met?	X			
II. Calibration				
Were all instuments calibrated at the requried frequency?	X			
Were the proper number of standards used?	X			
Were all initial and continuing calibration verifications within the QC limits?	X			
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
Were balance checks performed as required?			X	
III. Blanks				
Was a method blank assoicated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?		X		
IV. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
V. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			
X. Sample Result Verification				
Were all reproting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
XII. Field Duplicates				
Were field duplicates identifed in this SDG?		X		
Were target analytes detected in the field duplicates?			X	
XIII. Field Blanks				
Were field blanks identified in this SDG?	X			
Were target analytes detected in the field blanks?		X		

LDC #: 49146E6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR

Method: Inorganics

The correlation coefficient (r) for the calibration of _Cr6+___ was recalculated.Calibration date:___8/18/20__

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cr6+	s1	0	0.0117	*0.99946*	0.99977	Y
		s2	0.01	0.319			
		s3	0.025	0.958			
		s4	0.05	1.87			
		s5	0.1	3.53			
		s6	0.2	7.08			
		s7	0.4	13.3			
Calibration verification	Cr6+	ICV	0.1	0.107	107	107	Y
Calibration verification	Cr6+	CCV	0.2	0.212	106	106	Y
Calibration verification	Cr6+	CCV	0.2	0.212	106	106	Y

Comments:

METHOD: Inorganics

Percent recoveries (%R) for the laboratory control sample (LCS) and matrix spike (MS) were recalcuated using the following formula.
%R = (Found/True) x 100
Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)
True = concentraiton of each analyte in the source
The sample and duplciate relative percent difference (RPD) was recalcuated using the following formula.
RPD = (Absolute value(S-D)x 200) / (S+D)
S = Original sample concentraiton
D = Duplciate sample concentration

Sample ID	Type of Analysis	Element	Found/S	True/D	Recalcuated %R/RPD	Reported %R/RPD	Acceptable (Y/N)
LCS	LCS	CN	0.105	0.1	105	105	Y
	MS						
	Duplicate						

METHOD: Inorganics

Analytes were recalcuated and verified using the following equation.

Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids (if applicable) x Initial weight or volume)

Sample ID	Analyte	Raw Data (unit)	Dilution	Slope	Intercept	Reported Result (mg/L)	Recalcuated Result (mg/L)	Acceptable (Y/N)
1	CN	0.178	1	0.0291	-0.000704	0.0045	0.0045	Y
2	CN	0.182	1	0.0291	-0.000704	0.0046	0.0046	Y

500 Main St., New Rochelle - LDC# 49146E

SDG: 4602160461

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	PERFLUOROHEXANESULFONIC ACID	8/19/2020	0.24	Y	Y	BJ		J	1.73	0.15	ng/l
FB-20200810	460-216046-3	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/19/2020		Y	N	U		U	17.3	1.73	ng/l
FB-20200810	460-216046-3	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/19/2020		Y	N	U		U	17.3	1.73	ng/l
FB-20200810	460-216046-3	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/19/2020		Y	N	U		U	17.3	2.69	ng/l
FB-20200810	460-216046-3	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/19/2020		Y	N	U		U	17.3	1.65	ng/l
FB-20200810	460-216046-3	PERFLUOROBUTANESULFONIC ACID	8/19/2020		Y	N	U		U	1.73	0.17	ng/l
FB-20200810	460-216046-3	PERFLUORODECANE SULFONIC ACID	8/19/2020		Y	N	U		U	1.73	0.28	ng/l
FB-20200810	460-216046-3	PERFLUORODECANOIC ACID (PFDA)	8/19/2020		Y	N	U		U	1.73	0.27	ng/l
FB-20200810	460-216046-3	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/19/2020		Y	N	U		U	1.73	0.16	ng/l
FB-20200810	460-216046-3	PERFLUOROBUTYRIC ACID (PFBA)	8/19/2020	0.61	Y	Y	BJ		J	1.73	0.30	ng/l
FB-20200810	460-216046-3	Perfluorooctane Sulfonamide (FOSA)	8/19/2020	0.39	Y	Y	J		J	1.73	0.30	ng/l
FB-20200810	460-216046-3	PERFLUORODODECANOIC ACID (PFDoA)	8/19/2020		Y	N	UT		U	1.73	0.48	ng/l
FB-20200810	460-216046-3	PERFLUOROOCTANE SULFONIC ACID	8/19/2020		Y	N	U		U	1.73	0.47	ng/l
FB-20200810	460-216046-3	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/19/2020		Y	N	U		U	1.73	0.25	ng/l
FB-20200810	460-216046-3	PERFLUOROPENTANOIC ACID (PFPeA)	8/19/2020		Y	N	U		U	1.73	0.43	ng/l
FB-20200810	460-216046-3	PERFLUOROUNDECANOIC ACID (PFUnA)	8/19/2020		Y	N	U		U	1.73	0.95	ng/l
FB-20200810	460-216046-3	Perfluorooctanoic acid (PFOA)	8/19/2020		Y	N	U		U	1.73	0.74	ng/l
FB-20200810	460-216046-3	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/19/2020		Y	N	U		U	1.73	1.13	ng/l
FB-20200810	460-216046-3	PERFLUORONONANOIC ACID	8/19/2020		Y	N	U		U	1.73	0.23	ng/l
FB-20200810	460-216046-3	PERFLUOROHEXANOIC ACID (PFHxA)	8/19/2020		Y	N	U		U	1.73	0.50	ng/l

SDG: 4602160461

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	Perfluoroheptanoic Acid (PFHpA)	8/19/2020		Y	N	U		U	1.73	0.22	ng/l
MW-3-20200810	460-216046-1	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/19/2020		Y	N	U		U	1.95	1.27	ng/l
MW-3-20200810	460-216046-1	PERFLUOROPENTANOIC ACID (PFPeA)	8/19/2020	25.5	Y	Y				1.95	0.48	ng/l
MW-3-20200810	460-216046-1	Perfluorooctanoic acid (PFOA)	8/19/2020	53.5	Y	Y				1.95	0.83	ng/l
MW-3-20200810	460-216046-1	PERFLUOROBUTYRIC ACID (PFBA)	8/19/2020	18.1	Y	Y	B			1.95	0.34	ng/l
MW-3-20200810	460-216046-1	PERFLUOROHEXANESULFONIC ACID	8/19/2020	7.02	Y	Y	B			1.95	0.17	ng/l
MW-3-20200810	460-216046-1	PERFLUOROOCTANE SULFONIC ACID	8/19/2020	18.7	Y	Y				1.95	0.53	ng/l
MW-3-20200810	460-216046-1	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/19/2020		Y	N	U		U	1.95	0.28	ng/l
MW-3-20200810	460-216046-1	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/19/2020		Y	N	U		U	19.5	1.86	ng/l
MW-3-20200810	460-216046-1	Perfluoroheptanoic Acid (PFHpA)	8/19/2020	18.4	Y	Y				1.95	0.24	ng/l
MW-3-20200810	460-216046-1	PERFLUORODECANOIC ACID (PFDA)	8/19/2020	2.09	Y	Y				1.95	0.30	ng/l
MW-3-20200810	460-216046-1	PERFLUOROBUTANESULFONIC ACID	8/19/2020	15.9	Y	Y				1.95	0.20	ng/l
MW-3-20200810	460-216046-1	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/19/2020		Y	N	U		U	1.95	0.19	ng/l
MW-3-20200810	460-216046-1	PERFLUOROUNDECANOIC ACID (PFUnA)	8/19/2020		Y	N	U		U	1.95	1.07	ng/l
MW-3-20200810	460-216046-1	PERFLUOROHEXANOIC ACID (PFHxA)	8/19/2020	30.1	Y	Y				1.95	0.57	ng/l
MW-3-20200810	460-216046-1	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/19/2020		Y	N	U		U	19.5	3.03	ng/l
MW-3-20200810	460-216046-1	PERFLUORODECANE SULFONIC ACID	8/19/2020		Y	N	U		U	1.95	0.31	ng/l
MW-3-20200810	460-216046-1	PERFLUORONONANOIC ACID	8/19/2020	2.65	Y	Y				1.95	0.26	ng/l
MW-3-20200810	460-216046-1	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/19/2020		Y	N	U		U	19.5	1.95	ng/l
MW-3-20200810	460-216046-1	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/19/2020	16.8	Y	Y	J		J	19.5	1.95	ng/l
MW-3-20200810	460-216046-1	Perfluorooctane Sulfonamide (FOSA)	8/19/2020		Y	N	J	U	U	1.95	0.34	ng/l

SDG: 4602160461

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-3-20200810	460-216046-1	PERFLUORODODECANOIC ACID (PFDoA)	8/19/2020		Y	N	UT		U	1.95	0.54	ng/l
MW-4-20200810	460-216046-2	PERFLUOROBUTYRIC ACID (PFBA)	8/19/2020	74.2	Y	Y	B			2.22	0.39	ng/l
MW-4-20200810	460-216046-2	PERFLUOROHEXANESULFONIC ACID	8/19/2020	28.7	Y	Y	B			2.22	0.19	ng/l
MW-4-20200810	460-216046-2	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/19/2020		Y	N	U		U	2.22	0.32	ng/l
MW-4-20200810	460-216046-2	Perfluoroheptanoic Acid (PFHpA)	8/19/2020	24.6	Y	Y				2.22	0.28	ng/l
MW-4-20200810	460-216046-2	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/19/2020	5.15	Y	Y				2.22	0.21	ng/l
MW-4-20200810	460-216046-2	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/19/2020		Y	N	U		U	2.22	1.44	ng/l
MW-4-20200810	460-216046-2	PERFLUORODECANOIC ACID (PFDA)	8/19/2020	1.73	Y	Y	J		J	2.22	0.34	ng/l
MW-4-20200810	460-216046-2	Perfluorooctane Sulfonamide (FOSA)	8/19/2020		Y	N	U		U	2.22	0.39	ng/l
MW-4-20200810	460-216046-2	PERFLUOROBUTANESULFONIC ACID	8/19/2020	25.2	Y	Y				2.22	0.22	ng/l
MW-4-20200810	460-216046-2	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/19/2020		Y	N	U		U	22.2	2.11	ng/l
MW-4-20200810	460-216046-2	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/19/2020		Y	N	U		U	22.2	3.44	ng/l
MW-4-20200810	460-216046-2	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/19/2020		Y	N	U		U	22.2	2.22	ng/l
MW-4-20200810	460-216046-2	PERFLUOROUNDECANOIC ACID (PFUnA)	8/19/2020		Y	N	U		U	2.22	1.22	ng/l
MW-4-20200810	460-216046-2	PERFLUORODODECANOIC ACID (PFDoA)	8/19/2020		Y	N	UT		U	2.22	0.61	ng/l
MW-4-20200810	460-216046-2	PERFLUOROHEXANOIC ACID (PFHxA)	8/19/2020	27.4	Y	Y				2.22	0.64	ng/l
MW-4-20200810	460-216046-2	PERFLUORODECANE SULFONIC ACID	8/19/2020	0.87	Y	Y	J		J	2.22	0.35	ng/l
MW-4-20200810	460-216046-2	PERFLUORONONANOIC ACID	8/19/2020	13.9	Y	Y				2.22	0.30	ng/l
MW-4-20200810	460-216046-2	Perfluorooctanoic acid (PFOA)	8/19/2020	66.3	Y	Y				2.22	0.94	ng/l
MW-4-20200810	460-216046-2	PERFLUOROPENTANOIC ACID (PFPeA)	8/19/2020	26.2	Y	Y				2.22	0.54	ng/l
MW-4-20200810	460-216046-2	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/19/2020	2.24	Y	Y	J		J	22.2	2.22	ng/l

SDG: 4602160461

Analytical Method	E537(M)											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
MW-4-20200810	460-216046-2	PERFLUOROOCTANE SULFONIC ACID	8/19/2020	601	Y	Y	D			22.2	5.98	ng/l

Analytical Method	SW6020											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
FB-20200810	460-216046-3	SODIUM	8/18/2020		Y	N	U		U	200	58.2	ug/l
FB-20200810	460-216046-3	ALUMINUM	8/20/2020		Y	N	U		U	40.0	8.0	ug/l
FB-20200810	460-216046-3	COBALT	8/20/2020		Y	N	U		U	4.0	0.26	ug/l
FB-20200810	460-216046-3	CHROMIUM, TOTAL	8/20/2020		Y	N	U		U	4.0	0.69	ug/l
FB-20200810	460-216046-3	CADMIUM	8/20/2020		Y	N	U		U	2.0	0.16	ug/l
FB-20200810	460-216046-3	BERYLLIUM	8/20/2020		Y	N	U		U	0.80	0.098	ug/l
FB-20200810	460-216046-3	BARIUM	8/20/2020		Y	N	U		U	4.0	0.91	ug/l
FB-20200810	460-216046-3	ANTIMONY	8/20/2020		Y	N	U		U	2.0	0.76	ug/l
FB-20200810	460-216046-3	LEAD	8/20/2020		Y	N	U		U	1.2	0.11	ug/l
FB-20200810	460-216046-3	ARSENIC	8/20/2020		Y	N	U		U	2.0	0.89	ug/l
FB-20200810	460-216046-3	POTASSIUM	8/20/2020		Y	N	U		U	200	112	ug/l
FB-20200810	460-216046-3	MAGNESIUM	8/20/2020		Y	N	U		U	200	15.4	ug/l
FB-20200810	460-216046-3	CALCIUM	8/20/2020	26.3	Y	Y	J		J	200	22.7	ug/l
FB-20200810	460-216046-3	ZINC	8/20/2020		Y	N	U		U	16.0	5.1	ug/l
FB-20200810	460-216046-3	VANADIUM	8/20/2020		Y	N	U		U	4.0	0.37	ug/l
FB-20200810	460-216046-3	MANGANESE	8/20/2020		Y	N	U		U	8.0	1.1	ug/l
FB-20200810	460-216046-3	NICKEL	8/20/2020		Y	N	U		U	4.0	0.45	ug/l
FB-20200810	460-216046-3	IRON	8/20/2020		Y	N	U		U	120	8.5	ug/l
FB-20200810	460-216046-3	THALLIUM	8/20/2020		Y	N	U		U	0.80	0.17	ug/l
FB-20200810	460-216046-3	COPPER	8/20/2020		Y	N	U		U	4.0	2.5	ug/l
FB-20200810	460-216046-3	SELENIUM	8/20/2020		Y	N	U		U	2.5	0.46	ug/l

SDG: 4602160461

Analytical Method SW6020

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	SILVER	8/20/2020		Y	N	U		U	2.0	0.19	ug/l
MW-3-20200810	460-216046-1	ARSENIC	8/20/2020		Y	N	U		U	2.0	0.89	ug/l
MW-3-20200810	460-216046-1	BERYLLIUM	8/20/2020		Y	N	U		U	0.80	0.098	ug/l
MW-3-20200810	460-216046-1	SILVER	8/20/2020		Y	N	U		U	2.0	0.19	ug/l
MW-3-20200810	460-216046-1	THALLIUM	8/20/2020		Y	N	U		U	0.80	0.17	ug/l
MW-3-20200810	460-216046-1	ANTIMONY	8/20/2020		Y	N	U		U	2.0	0.76	ug/l
MW-3-20200810	460-216046-1	CALCIUM	8/20/2020	104000	Y	Y				200	22.7	ug/l
MW-3-20200810	460-216046-1	BARIUM	8/20/2020	113	Y	Y				4.0	0.91	ug/l
MW-3-20200810	460-216046-1	CADMIUM	8/20/2020	0.16	Y	Y	J		J	2.0	0.16	ug/l
MW-3-20200810	460-216046-1	ALUMINUM	8/20/2020	3630	Y	Y				40.0	8.0	ug/l
MW-3-20200810	460-216046-1	CHROMIUM, TOTAL	8/20/2020	13.9	Y	Y				4.0	0.69	ug/l
MW-3-20200810	460-216046-1	COBALT	8/20/2020	4.3	Y	Y				4.0	0.26	ug/l
MW-3-20200810	460-216046-1	COPPER	8/20/2020	12.9	Y	Y				4.0	2.5	ug/l
MW-3-20200810	460-216046-1	IRON	8/20/2020	6870	Y	Y				120	8.5	ug/l
MW-3-20200810	460-216046-1	VANADIUM	8/20/2020	10.1	Y	Y				4.0	0.37	ug/l
MW-3-20200810	460-216046-1	MAGNESIUM	8/20/2020	27000	Y	Y				200	15.4	ug/l
MW-3-20200810	460-216046-1	MANGANESE	8/20/2020	692	Y	Y				8.0	1.1	ug/l
MW-3-20200810	460-216046-1	NICKEL	8/20/2020	10.9	Y	Y				4.0	0.45	ug/l
MW-3-20200810	460-216046-1	POTASSIUM	8/20/2020	11300	Y	Y				200	112	ug/l
MW-3-20200810	460-216046-1	ZINC	8/20/2020	19.3	Y	Y				16.0	5.1	ug/l
MW-3-20200810	460-216046-1	SELENIUM	8/20/2020	3.4	Y	Y				2.5	0.46	ug/l
MW-3-20200810	460-216046-1	LEAD	8/20/2020	1.7	Y	Y				1.2	0.11	ug/l
MW-3-20200810	460-216046-1	SODIUM	8/20/2020	895000	Y	Y				2000	582	ug/l
MW-4-20200810	460-216046-2	POTASSIUM	8/20/2020	8850	Y	Y				200	112	ug/l
MW-4-20200810	460-216046-2	CALCIUM	8/20/2020	72200	Y	Y				200	22.7	ug/l

Analytical Method	SW6020											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
MW-4-20200810	460-216046-2	SODIUM	8/20/2020	194000	Y	Y				200	58.2	ug/l
MW-4-20200810	460-216046-2	COBALT	8/20/2020	1.6	Y	Y	J		J	4.0	0.26	ug/l
MW-4-20200810	460-216046-2	MANGANESE	8/20/2020	207	Y	Y				8.0	1.1	ug/l
MW-4-20200810	460-216046-2	MAGNESIUM	8/20/2020	9540	Y	Y				200	15.4	ug/l
MW-4-20200810	460-216046-2	LEAD	8/20/2020	7.5	Y	Y				1.2	0.11	ug/l
MW-4-20200810	460-216046-2	IRON	8/20/2020	2830	Y	Y				120	8.5	ug/l
MW-4-20200810	460-216046-2	COPPER	8/20/2020	5.1	Y	Y				4.0	2.5	ug/l
MW-4-20200810	460-216046-2	CHROMIUM, TOTAL	8/20/2020	4.7	Y	Y				4.0	0.69	ug/l
MW-4-20200810	460-216046-2	NICKEL	8/20/2020	6.0	Y	Y				4.0	0.45	ug/l
MW-4-20200810	460-216046-2	BARIUM	8/20/2020	47.6	Y	Y				4.0	0.91	ug/l
MW-4-20200810	460-216046-2	ARSENIC	8/20/2020	4.9	Y	Y				2.0	0.89	ug/l
MW-4-20200810	460-216046-2	ALUMINUM	8/20/2020	2100	Y	Y				40.0	8.0	ug/l
MW-4-20200810	460-216046-2	THALLIUM	8/20/2020		Y	N	U		U	0.80	0.17	ug/l
MW-4-20200810	460-216046-2	SILVER	8/20/2020		Y	N	U		U	2.0	0.19	ug/l
MW-4-20200810	460-216046-2	CADMIUM	8/20/2020		Y	N	U		U	2.0	0.16	ug/l
MW-4-20200810	460-216046-2	ZINC	8/20/2020	10.5	Y	Y	J		J	16.0	5.1	ug/l
MW-4-20200810	460-216046-2	BERYLLIUM	8/20/2020		Y	N	U		U	0.80	0.098	ug/l
MW-4-20200810	460-216046-2	ANTIMONY	8/20/2020		Y	N	U		U	2.0	0.76	ug/l
MW-4-20200810	460-216046-2	VANADIUM	8/20/2020	5.7	Y	Y				4.0	0.37	ug/l
MW-4-20200810	460-216046-2	SELENIUM	8/20/2020	1.5	Y	Y	J		J	2.5	0.46	ug/l

Analytical Method	SW7470A											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
FB-20200810	460-216046-3	MERCURY	8/17/2020		Y	N	U		U	0.20	0.091	ug/l
MW-3-20200810	460-216046-1	MERCURY	8/17/2020		Y	N	U		U	0.20	0.091	ug/l

Analytical Method	SW7470A											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
MW-4-20200810	460-216046-2	MERCURY	8/17/2020		Y	N	U		U	0.20	0.091	ug/l

Analytical Method	SW8081B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
FB-20200810	460-216046-3	trans-Chlordane	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
FB-20200810	460-216046-3	ENDOSULFAN SULFATE	8/17/2020		Y	N	UT		U	0.020	0.0060	ug/l
FB-20200810	460-216046-3	TOXAPHENE	8/17/2020		Y	N	U		U	0.50	0.11	ug/l
FB-20200810	460-216046-3	P,P'-DDT	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
FB-20200810	460-216046-3	P,P'-DDE	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
FB-20200810	460-216046-3	P,P'-DDD	8/17/2020		Y	N	U		U	0.020	0.0060	ug/l
FB-20200810	460-216046-3	METHOXYCHLOR	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
FB-20200810	460-216046-3	HEPTACHLOR EPOXIDE	8/17/2020		Y	N	U		U	0.020	0.0050	ug/l
FB-20200810	460-216046-3	HEPTACHLOR	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
FB-20200810	460-216046-3	GAMMA BHC (LINDANE)	8/17/2020		Y	N	U		U	0.020	0.012	ug/l
FB-20200810	460-216046-3	ENDRIN KETONE	8/17/2020		Y	N	U		U	0.020	0.0080	ug/l
FB-20200810	460-216046-3	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
FB-20200810	460-216046-3	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0070	ug/l
FB-20200810	460-216046-3	ENDRIN ALDEHYDE	8/17/2020		Y	N	U		U	0.020	0.0080	ug/l
FB-20200810	460-216046-3	ALPHA ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
FB-20200810	460-216046-3	ALPHA CHLORDANE	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
FB-20200810	460-216046-3	BETA ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
FB-20200810	460-216046-3	CHLORDANE	8/17/2020		Y	N	U		U	0.50	0.055	ug/l
FB-20200810	460-216046-3	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0050	ug/l
FB-20200810	460-216046-3	DIELDRIN	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l

SDG: 4602160461

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
FB-20200810	460-216046-3	ENDRIN	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
FB-20200810	460-216046-3	ALDRIN	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
MW-3-20200810	460-216046-1	ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-3-20200810	460-216046-1	ENDRIN	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-3-20200810	460-216046-1	ENDRIN ALDEHYDE	8/17/2020		Y	N	U		U	0.020	0.0080	ug/l
MW-3-20200810	460-216046-1	HEPTACHLOR EPOXIDE	8/17/2020		Y	N	U		U	0.020	0.0050	ug/l
MW-3-20200810	460-216046-1	METHOXYCHLOR	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-3-20200810	460-216046-1	P,P'-DDD	8/17/2020		Y	N	U		U	0.020	0.0060	ug/l
MW-3-20200810	460-216046-1	P,P'-DDE	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-3-20200810	460-216046-1	DIELDRIN	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
MW-3-20200810	460-216046-1	TOXAPHENE	8/17/2020		Y	N	U		U	0.50	0.11	ug/l
MW-3-20200810	460-216046-1	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0070	ug/l
MW-3-20200810	460-216046-1	P,P'-DDT	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-3-20200810	460-216046-1	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0050	ug/l
MW-3-20200810	460-216046-1	CHLORDANE	8/17/2020		Y	N	U		U	0.50	0.055	ug/l
MW-3-20200810	460-216046-1	BETA ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-3-20200810	460-216046-1	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-3-20200810	460-216046-1	ENDOSULFAN SULFATE	8/17/2020		Y	N	UT		U	0.020	0.0060	ug/l
MW-3-20200810	460-216046-1	ALPHA CHLORDANE	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-3-20200810	460-216046-1	ALDRIN	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
MW-3-20200810	460-216046-1	GAMMA BHC (LINDANE)	8/17/2020		Y	N	U		U	0.020	0.012	ug/l
MW-3-20200810	460-216046-1	ENDRIN KETONE	8/17/2020		Y	N	U		U	0.020	0.0080	ug/l
MW-3-20200810	460-216046-1	trans-Chlordane	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l

SDG: 4602160461

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-3-20200810	460-216046-1	HEPTACHLOR	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
MW-3-20200810	460-216046-1	ALPHA ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-4-20200810	460-216046-2	BETA ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-4-20200810	460-216046-2	ENDRIN KETONE	8/17/2020		Y	N	U		U	0.020	0.0080	ug/l
MW-4-20200810	460-216046-2	ENDRIN ALDEHYDE	8/17/2020		Y	N	U		U	0.020	0.0080	ug/l
MW-4-20200810	460-216046-2	ENDRIN	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-4-20200810	460-216046-2	ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-4-20200810	460-216046-2	DIELDRIN	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
MW-4-20200810	460-216046-2	GAMMA BHC (LINDANE)	8/17/2020		Y	N	U		U	0.020	0.012	ug/l
MW-4-20200810	460-216046-2	CHLORDANE	8/17/2020		Y	N	U		U	0.50	0.055	ug/l
MW-4-20200810	460-216046-2	ALPHA CHLORDANE	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-4-20200810	460-216046-2	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-4-20200810	460-216046-2	ALPHA ENDOSULFAN	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-4-20200810	460-216046-2	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0070	ug/l
MW-4-20200810	460-216046-2	ALDRIN	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l
MW-4-20200810	460-216046-2	P,P'-DDT	8/17/2020	0.16	Y	Y				0.020	0.0040	ug/l
MW-4-20200810	460-216046-2	ENDOSULFAN SULFATE	8/17/2020		Y	N	UT		U	0.020	0.0060	ug/l
MW-4-20200810	460-216046-2	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	8/17/2020		Y	N	U		U	0.020	0.0050	ug/l
MW-4-20200810	460-216046-2	HEPTACHLOR EPOXIDE	8/17/2020		Y	N	U		U	0.020	0.0050	ug/l
MW-4-20200810	460-216046-2	METHOXYCHLOR	8/17/2020		Y	N	U		U	0.020	0.0040	ug/l
MW-4-20200810	460-216046-2	P,P'-DDD	8/17/2020		Y	N	U		U	0.020	0.0060	ug/l
MW-4-20200810	460-216046-2	P,P'-DDE	8/17/2020		Y	N	U		U	0.020	0.0020	ug/l
MW-4-20200810	460-216046-2	TOXAPHENE	8/17/2020		Y	N	U		U	0.50	0.11	ug/l
MW-4-20200810	460-216046-2	trans-Chlordane	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l

Analytical Method	SW8081B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
MW-4-20200810	460-216046-2	HEPTACHLOR	8/17/2020		Y	N	U		U	0.020	0.0030	ug/l

Analytical Method	SW8082A											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
FB-20200810	460-216046-3	PCB-1248 (AROCLOR 1248)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
FB-20200810	460-216046-3	TOTAL PCBS	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
FB-20200810	460-216046-3	PCB-1268 (AROCLOR 1268)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
FB-20200810	460-216046-3	PCB-1262 (AROCLOR 1262)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
FB-20200810	460-216046-3	PCB-1254 (AROCLOR 1254)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
FB-20200810	460-216046-3	PCB-1242 (AROCLOR 1242)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
FB-20200810	460-216046-3	PCB-1260 (AROCLOR 1260)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
FB-20200810	460-216046-3	PCB-1232 (AROCLOR 1232)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
FB-20200810	460-216046-3	PCB-1221 (AROCLOR 1221)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
FB-20200810	460-216046-3	PCB-1016 (AROCLOR 1016)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-3-20200810	460-216046-1	PCB-1016 (AROCLOR 1016)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-3-20200810	460-216046-1	PCB-1232 (AROCLOR 1232)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-3-20200810	460-216046-1	PCB-1221 (AROCLOR 1221)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-3-20200810	460-216046-1	PCB-1242 (AROCLOR 1242)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-3-20200810	460-216046-1	PCB-1248 (AROCLOR 1248)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-3-20200810	460-216046-1	PCB-1254 (AROCLOR 1254)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
MW-3-20200810	460-216046-1	PCB-1260 (AROCLOR 1260)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
MW-3-20200810	460-216046-1	PCB-1262 (AROCLOR 1262)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
MW-3-20200810	460-216046-1	PCB-1268 (AROCLOR 1268)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
MW-3-20200810	460-216046-1	TOTAL PCBS	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-4-20200810	460-216046-2	PCB-1262 (AROCLOR 1262)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-4-20200810	460-216046-2	PCB-1232 (AROCLOR 1232)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-4-20200810	460-216046-2	PCB-1268 (AROCLOR 1268)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
MW-4-20200810	460-216046-2	PCB-1016 (AROCLOR 1016)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-4-20200810	460-216046-2	PCB-1242 (AROCLOR 1242)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-4-20200810	460-216046-2	PCB-1260 (AROCLOR 1260)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
MW-4-20200810	460-216046-2	TOTAL PCBS	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-4-20200810	460-216046-2	PCB-1254 (AROCLOR 1254)	8/17/2020		Y	N	U		U	0.40	0.11	ug/l
MW-4-20200810	460-216046-2	PCB-1248 (AROCLOR 1248)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l
MW-4-20200810	460-216046-2	PCB-1221 (AROCLOR 1221)	8/17/2020		Y	N	U		U	0.40	0.12	ug/l

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/16/2020		Y	N	U		U	5.0	1.3	ug/l
FB-20200810	460-216046-3	METHYL ETHYL KETONE (2-BUTANONE)	8/16/2020		Y	N	U		U	5.0	1.9	ug/l
FB-20200810	460-216046-3	M,P-XYLENES	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200810	460-216046-3	Isopropylbenzene (Cumene)	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200810	460-216046-3	ETHYLBENZENE	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
FB-20200810	460-216046-3	DICHLORODIFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200810	460-216046-3	DIBROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.28	ug/l
FB-20200810	460-216046-3	CHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.40	ug/l
FB-20200810	460-216046-3	METHYLENE CHLORIDE	8/16/2020	0.36	Y	Y	J		J	1.0	0.32	ug/l
FB-20200810	460-216046-3	CIS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200810	460-216046-3	Cis-1,2-Dichloroethylene	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
FB-20200810	460-216046-3	METHYLCYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200810	460-216046-3	CYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l

SDG: 4602160461

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	O-XYLENE (1,2-DIMETHYLBENZENE)	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200810	460-216046-3	STYRENE	8/16/2020		Y	N	U		U	1.0	0.42	ug/l
FB-20200810	460-216046-3	TERT-BUTYL METHYL ETHER	8/16/2020		Y	N	U		U	1.0	0.47	ug/l
FB-20200810	460-216046-3	TETRACHLOROETHYLENE(PCE)	8/16/2020		Y	N	U		U	1.0	0.25	ug/l
FB-20200810	460-216046-3	TOLUENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200810	460-216046-3	TRANS-1,2-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200810	460-216046-3	TRANS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.49	ug/l
FB-20200810	460-216046-3	TRICHLOROETHYLENE (TCE)	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200810	460-216046-3	TRICHLOROFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
FB-20200810	460-216046-3	METHYL ACETATE	8/16/2020		Y	N	UT	UJ	UJ	5.0	0.79	ug/l
FB-20200810	460-216046-3	CHLOROFORM	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
FB-20200810	460-216046-3	1,1,2-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200810	460-216046-3	VINYL CHLORIDE	8/16/2020		Y	N	U		U	1.0	0.17	ug/l
FB-20200810	460-216046-3	1,2-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200810	460-216046-3	1,1,1-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
FB-20200810	460-216046-3	1,1,2,2-TETRACHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200810	460-216046-3	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
FB-20200810	460-216046-3	1,1-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200810	460-216046-3	1,2,3-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
FB-20200810	460-216046-3	1,2,4-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
FB-20200810	460-216046-3	1,2-DIBROMO-3-CHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200810	460-216046-3	1,1-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
FB-20200810	460-216046-3	1,2-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200810	460-216046-3	CHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l

SDG: 4602160461

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	1,2-DICHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.35	ug/l
FB-20200810	460-216046-3	1,3-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200810	460-216046-3	CARBON DISULFIDE	8/16/2020		Y	N	U		U	1.0	0.82	ug/l
FB-20200810	460-216046-3	CHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
FB-20200810	460-216046-3	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/16/2020		Y	N	U		U	1.0	0.50	ug/l
FB-20200810	460-216046-3	CARBON TETRACHLORIDE	8/16/2020		Y	N	U		U	1.0	0.21	ug/l
FB-20200810	460-216046-3	1,4-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
FB-20200810	460-216046-3	BROMOMETHANE	8/16/2020		Y	N	U	UJ	UJ	1.0	0.55	ug/l
FB-20200810	460-216046-3	BROMOFORM	8/16/2020		Y	N	U		U	1.0	0.54	ug/l
FB-20200810	460-216046-3	BROMODICHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
FB-20200810	460-216046-3	BROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.41	ug/l
FB-20200810	460-216046-3	BENZENE	8/16/2020		Y	N	U		U	1.0	0.20	ug/l
FB-20200810	460-216046-3	ACETONE	8/16/2020		Y	N	U		U	5.0	4.4	ug/l
FB-20200810	460-216046-3	2-HEXANONE	8/16/2020		Y	N	U		U	5.0	1.1	ug/l
FB-20200810	460-216046-3	1,4-DIOXANE (P-DIOXANE)	8/16/2020		Y	N	U		U	50	28	ug/l
MW-3-20200810	460-216046-1	METHYL ACETATE	8/16/2020		Y	N	UT	UJ	UJ	5.0	0.79	ug/l
MW-3-20200810	460-216046-1	VINYL CHLORIDE	8/16/2020		Y	N	U		U	1.0	0.17	ug/l
MW-3-20200810	460-216046-1	TRICHLOROFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
MW-3-20200810	460-216046-1	TRANS-1,2-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
MW-3-20200810	460-216046-1	TRICHLOROETHYLENE (TCE)	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
MW-3-20200810	460-216046-1	1,1,1-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
MW-3-20200810	460-216046-1	TRANS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.49	ug/l
MW-3-20200810	460-216046-1	Isopropylbenzene (Cumene)	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
MW-3-20200810	460-216046-1	TOLUENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l

SDG: 4602160461

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-3-20200810	460-216046-1	CARBON TETRACHLORIDE	8/16/2020		Y	N	U		U	1.0	0.21	ug/l
MW-3-20200810	460-216046-1	CHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
MW-3-20200810	460-216046-1	CHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
MW-3-20200810	460-216046-1	CHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.40	ug/l
MW-3-20200810	460-216046-1	CIS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
MW-3-20200810	460-216046-1	CYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
MW-3-20200810	460-216046-1	DIBROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.28	ug/l
MW-3-20200810	460-216046-1	BROMOMETHANE	8/16/2020		Y	N	U	UJ	UJ	1.0	0.55	ug/l
MW-3-20200810	460-216046-1	ETHYLBENZENE	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
MW-3-20200810	460-216046-1	BROMOFORM	8/16/2020		Y	N	U		U	1.0	0.54	ug/l
MW-3-20200810	460-216046-1	M,P-XYLENES	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
MW-3-20200810	460-216046-1	METHYL ETHYL KETONE (2-BUTANONE)	8/16/2020		Y	N	U		U	5.0	1.9	ug/l
MW-3-20200810	460-216046-1	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/16/2020		Y	N	U		U	5.0	1.3	ug/l
MW-3-20200810	460-216046-1	METHYLCYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
MW-3-20200810	460-216046-1	METHYLENE CHLORIDE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
MW-3-20200810	460-216046-1	O-XYLENE (1,2-DIMETHYLBENZENE)	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
MW-3-20200810	460-216046-1	STYRENE	8/16/2020		Y	N	U		U	1.0	0.42	ug/l
MW-3-20200810	460-216046-1	TERT-BUTYL METHYL ETHER	8/16/2020		Y	N	U		U	1.0	0.47	ug/l
MW-3-20200810	460-216046-1	TETRACHLOROETHYLENE(PCE)	8/16/2020		Y	N	U		U	1.0	0.25	ug/l
MW-3-20200810	460-216046-1	DICHLORODIFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
MW-3-20200810	460-216046-1	1,2-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
MW-3-20200810	460-216046-1	1,1,2,2-TETRACHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
MW-3-20200810	460-216046-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
MW-3-20200810	460-216046-1	1,1,2-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l

SDG: 4602160461

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-3-20200810	460-216046-1	1,1-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
MW-3-20200810	460-216046-1	1,1-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
MW-3-20200810	460-216046-1	1,2,3-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
MW-3-20200810	460-216046-1	1,2,4-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
MW-3-20200810	460-216046-1	1,2-DIBROMO-3-CHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
MW-3-20200810	460-216046-1	CARBON DISULFIDE	8/16/2020		Y	N	U		U	1.0	0.82	ug/l
MW-3-20200810	460-216046-1	1,2-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
MW-3-20200810	460-216046-1	Cis-1,2-Dichloroethylene	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
MW-3-20200810	460-216046-1	1,2-DICHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.35	ug/l
MW-3-20200810	460-216046-1	1,3-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
MW-3-20200810	460-216046-1	1,4-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
MW-3-20200810	460-216046-1	1,4-DIOXANE (P-DIOXANE)	8/16/2020		Y	N	U		U	50	28	ug/l
MW-3-20200810	460-216046-1	2-HEXANONE	8/16/2020		Y	N	U		U	5.0	1.1	ug/l
MW-3-20200810	460-216046-1	ACETONE	8/16/2020		Y	N	U		U	5.0	4.4	ug/l
MW-3-20200810	460-216046-1	BENZENE	8/16/2020		Y	N	U		U	1.0	0.20	ug/l
MW-3-20200810	460-216046-1	BROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.41	ug/l
MW-3-20200810	460-216046-1	BROMODICHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
MW-3-20200810	460-216046-1	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/16/2020		Y	N	U		U	1.0	0.50	ug/l
MW-3-20200810	460-216046-1	CHLOROFORM	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
MW-4-20200810	460-216046-2	1,1-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
MW-4-20200810	460-216046-2	CARBON TETRACHLORIDE	8/16/2020		Y	N	U		U	1.0	0.21	ug/l
MW-4-20200810	460-216046-2	CARBON DISULFIDE	8/16/2020		Y	N	U		U	1.0	0.82	ug/l
MW-4-20200810	460-216046-2	TRICHLOROETHYLENE (TCE)	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
MW-4-20200810	460-216046-2	TRICHLOROFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l

SDG: 4602160461

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-4-20200810	460-216046-2	VINYL CHLORIDE	8/16/2020		Y	N	U		U	1.0	0.17	ug/l
MW-4-20200810	460-216046-2	1,1,1-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
MW-4-20200810	460-216046-2	1,1,2,2-TETRACHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
MW-4-20200810	460-216046-2	BROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.41	ug/l
MW-4-20200810	460-216046-2	1,1,2-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
MW-4-20200810	460-216046-2	CHLOROFORM	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
MW-4-20200810	460-216046-2	1,1-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
MW-4-20200810	460-216046-2	1,2,3-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
MW-4-20200810	460-216046-2	1,2,4-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
MW-4-20200810	460-216046-2	1,2-DIBROMO-3-CHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
MW-4-20200810	460-216046-2	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/16/2020		Y	N	U		U	1.0	0.50	ug/l
MW-4-20200810	460-216046-2	BROMODICHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
MW-4-20200810	460-216046-2	METHYL ACETATE	8/16/2020		Y	N	UT	UJ	UJ	5.0	0.79	ug/l
MW-4-20200810	460-216046-2	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
MW-4-20200810	460-216046-2	Isopropylbenzene (Cumene)	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
MW-4-20200810	460-216046-2	TRANS-1,2-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
MW-4-20200810	460-216046-2	TOLUENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
MW-4-20200810	460-216046-2	TETRACHLOROETHYLENE(PCE)	8/16/2020		Y	N	U		U	1.0	0.25	ug/l
MW-4-20200810	460-216046-2	TERT-BUTYL METHYL ETHER	8/16/2020		Y	N	U		U	1.0	0.47	ug/l
MW-4-20200810	460-216046-2	STYRENE	8/16/2020		Y	N	U		U	1.0	0.42	ug/l
MW-4-20200810	460-216046-2	O-XYLENE (1,2-DIMETHYLBENZENE)	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
MW-4-20200810	460-216046-2	METHYLCYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
MW-4-20200810	460-216046-2	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/16/2020		Y	N	U		U	5.0	1.3	ug/l
MW-4-20200810	460-216046-2	CHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l

SDG: 4602160461

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-4-20200810	460-216046-2	M,P-XYLENES	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
MW-4-20200810	460-216046-2	CHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
MW-4-20200810	460-216046-2	ETHYLBENZENE	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
MW-4-20200810	460-216046-2	DICHLORODIFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
MW-4-20200810	460-216046-2	DIBROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.28	ug/l
MW-4-20200810	460-216046-2	CYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
MW-4-20200810	460-216046-2	CIS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
MW-4-20200810	460-216046-2	Cis-1,2-Dichloroethylene	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
MW-4-20200810	460-216046-2	CHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.40	ug/l
MW-4-20200810	460-216046-2	TRANS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.49	ug/l
MW-4-20200810	460-216046-2	METHYL ETHYL KETONE (2-BUTANONE)	8/16/2020		Y	N	U		U	5.0	1.9	ug/l
MW-4-20200810	460-216046-2	BROMOMETHANE	8/16/2020		Y	N	U	UJ	UJ	1.0	0.55	ug/l
MW-4-20200810	460-216046-2	1,4-DIOXANE (P-DIOXANE)	8/16/2020		Y	N	U		U	50	28	ug/l
MW-4-20200810	460-216046-2	2-HEXANONE	8/16/2020		Y	N	U		U	5.0	1.1	ug/l
MW-4-20200810	460-216046-2	ACETONE	8/16/2020		Y	N	U		U	5.0	4.4	ug/l
MW-4-20200810	460-216046-2	1,2-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
MW-4-20200810	460-216046-2	BROMOFORM	8/16/2020		Y	N	U		U	1.0	0.54	ug/l
MW-4-20200810	460-216046-2	1,3-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
MW-4-20200810	460-216046-2	METHYLENE CHLORIDE	8/16/2020		Y	N	J	U	U	1.0	0.32	ug/l
MW-4-20200810	460-216046-2	1,4-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
MW-4-20200810	460-216046-2	BENZENE	8/16/2020		Y	N	U		U	1.0	0.20	ug/l
MW-4-20200810	460-216046-2	1,2-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
MW-4-20200810	460-216046-2	1,2-DICHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.35	ug/l
TB-20200810	460-216046-4	CIS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
TB-20200810	460-216046-4	CYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l

SDG: 4602160461

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
TB-20200810	460-216046-4	DIBROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.28	ug/l
TB-20200810	460-216046-4	DICHLORODIFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
TB-20200810	460-216046-4	CHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.40	ug/l
TB-20200810	460-216046-4	ETHYLBENZENE	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
TB-20200810	460-216046-4	Isopropylbenzene (Cumene)	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
TB-20200810	460-216046-4	CHLOROFORM	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
TB-20200810	460-216046-4	CHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
TB-20200810	460-216046-4	Cis-1,2-Dichloroethylene	8/16/2020		Y	N	U		U	1.0	0.22	ug/l
TB-20200810	460-216046-4	METHYLENE CHLORIDE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
TB-20200810	460-216046-4	TRICHLOROFLUOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.32	ug/l
TB-20200810	460-216046-4	TRICHLOROETHYLENE (TCE)	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
TB-20200810	460-216046-4	TRANS-1,3-DICHLOROPROPENE	8/16/2020		Y	N	U		U	1.0	0.49	ug/l
TB-20200810	460-216046-4	TRANS-1,2-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
TB-20200810	460-216046-4	TOLUENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
TB-20200810	460-216046-4	TETRACHLOROETHYLENE(PCE)	8/16/2020		Y	N	U		U	1.0	0.25	ug/l
TB-20200810	460-216046-4	TERT-BUTYL METHYL ETHER	8/16/2020		Y	N	U		U	1.0	0.47	ug/l
TB-20200810	460-216046-4	CARBON TETRACHLORIDE	8/16/2020		Y	N	U		U	1.0	0.21	ug/l
TB-20200810	460-216046-4	O-XYLENE (1,2-DIMETHYLBENZENE)	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
TB-20200810	460-216046-4	CHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
TB-20200810	460-216046-4	METHYLCYCLOHEXANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
TB-20200810	460-216046-4	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/16/2020		Y	N	U		U	5.0	1.3	ug/l
TB-20200810	460-216046-4	METHYL ETHYL KETONE (2-BUTANONE)	8/16/2020		Y	N	U		U	5.0	1.9	ug/l
TB-20200810	460-216046-4	M,P-XYLENES	8/16/2020		Y	N	U		U	1.0	0.30	ug/l
TB-20200810	460-216046-4	ACETONE	8/16/2020		Y	N	U		U	5.0	4.4	ug/l

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
TB-20200810	460-216046-4	CARBON DISULFIDE	8/16/2020		Y	N	U		U	1.0	0.82	ug/l
TB-20200810	460-216046-4	BROMOFORM	8/16/2020		Y	N	U		U	1.0	0.54	ug/l
TB-20200810	460-216046-4	STYRENE	8/16/2020		Y	N	U		U	1.0	0.42	ug/l
TB-20200810	460-216046-4	1,2-DICHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.35	ug/l
TB-20200810	460-216046-4	1,1,1-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.24	ug/l
TB-20200810	460-216046-4	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/16/2020		Y	N	U		U	1.0	0.31	ug/l
TB-20200810	460-216046-4	1,1,2-TRICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
TB-20200810	460-216046-4	1,1-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
TB-20200810	460-216046-4	BROMOCHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.41	ug/l
TB-20200810	460-216046-4	1,1-DICHLOROETHENE	8/16/2020		Y	N	U		U	1.0	0.26	ug/l
TB-20200810	460-216046-4	BROMODICHLOROMETHANE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
TB-20200810	460-216046-4	1,2-DICHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
TB-20200810	460-216046-4	1,2,3-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.36	ug/l
TB-20200810	460-216046-4	1,1,2,2-TETRACHLOROETHANE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
TB-20200810	460-216046-4	1,2,4-TRICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.37	ug/l
TB-20200810	460-216046-4	BROMOMETHANE	8/16/2020		Y	N	U	UJ	UJ	1.0	0.55	ug/l
TB-20200810	460-216046-4	1,3-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.34	ug/l
TB-20200810	460-216046-4	1,4-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.33	ug/l
TB-20200810	460-216046-4	METHYL ACETATE	8/16/2020		Y	N	UT	UJ	UJ	5.0	0.79	ug/l
TB-20200810	460-216046-4	1,2-DIBROMO-3-CHLOROPROPANE	8/16/2020		Y	N	U		U	1.0	0.38	ug/l
TB-20200810	460-216046-4	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/16/2020		Y	N	U		U	1.0	0.50	ug/l
TB-20200810	460-216046-4	1,4-DIOXANE (P-DIOXANE)	8/16/2020		Y	N	U		U	50	28	ug/l
TB-20200810	460-216046-4	2-HEXANONE	8/16/2020		Y	N	U		U	5.0	1.1	ug/l
TB-20200810	460-216046-4	BENZENE	8/16/2020		Y	N	U		U	1.0	0.20	ug/l

Analytical Method	SW8260C											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
TB-20200810	460-216046-4	1,2-DICHLOROBENZENE	8/16/2020		Y	N	U		U	1.0	0.43	ug/l
TB-20200810	460-216046-4	VINYL CHLORIDE	8/16/2020		Y	N	U		U	1.0	0.17	ug/l

Analytical Method	SW8270D											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
FB-20200810	460-216046-3	BENZYL BUTYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.85	ug/l
FB-20200810	460-216046-3	PYRENE	8/17/2020		Y	N	U	UJ	UJ	10	1.6	ug/l
FB-20200810	460-216046-3	HEXACHLOROCYCLOPENTADIENE	8/17/2020		Y	N	U		U	10	3.6	ug/l
FB-20200810	460-216046-3	ACETOPHENONE	8/17/2020		Y	N	U		U	10	2.3	ug/l
FB-20200810	460-216046-3	ACENAPHTHYLENE	8/17/2020		Y	N	U		U	10	0.82	ug/l
FB-20200810	460-216046-3	BIPHENYL (DIPHENYL)	8/17/2020		Y	N	U		U	10	1.2	ug/l
FB-20200810	460-216046-3	BIS(2-CHLOROETHOXY) METHANE	8/17/2020		Y	N	U		U	10	0.59	ug/l
FB-20200810	460-216046-3	BIS(2-CHLOROISOPROPYL) ETHER	8/17/2020		Y	N	U		U	10	0.63	ug/l
FB-20200810	460-216046-3	ATRAZINE	8/17/2020		Y	N	U		U	2.0	1.3	ug/l
FB-20200810	460-216046-3	ANTHRACENE	8/17/2020		Y	N	U		U	10	0.63	ug/l
FB-20200810	460-216046-3	DI-N-BUTYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.84	ug/l
FB-20200810	460-216046-3	PHENANTHRENE	8/17/2020		Y	N	U		U	10	0.58	ug/l
FB-20200810	460-216046-3	PHENOL	8/17/2020		Y	N	U		U	10	0.29	ug/l
FB-20200810	460-216046-3	NAPHTHALENE	8/17/2020		Y	N	U		U	2.0	1.1	ug/l
FB-20200810	460-216046-3	ISOPHORONE	8/17/2020		Y	N	U		U	10	0.80	ug/l
FB-20200810	460-216046-3	HEXACHLOROETHANE	8/17/2020		Y	N	U		U	2.0	0.80	ug/l
FB-20200810	460-216046-3	FLUORENE	8/17/2020		Y	N	U		U	10	0.91	ug/l
FB-20200810	460-216046-3	DI-N-OCTYLPHTHALATE	8/17/2020		Y	N	U		U	10	4.8	ug/l
FB-20200810	460-216046-3	BENZO(G,H,I)PERYLENE	8/17/2020		Y	N	U	UJ	UJ	10	1.4	ug/l
FB-20200810	460-216046-3	DIMETHYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.77	ug/l

SDG: 4602160461

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	DIETHYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.98	ug/l
FB-20200810	460-216046-3	DIBENZOFURAN	8/17/2020		Y	N	U		U	10	1.1	ug/l
FB-20200810	460-216046-3	CAPROLACTAM	8/17/2020		Y	N	U		U	10	0.68	ug/l
FB-20200810	460-216046-3	BIS(2-ETHYLHEXYL) PHTHALATE	8/17/2020		Y	N	U		U	2.0	1.7	ug/l
FB-20200810	460-216046-3	BENZALDEHYDE	8/17/2020		Y	N	U	UJ	UJ	10	2.1	ug/l
FB-20200810	460-216046-3	HEXACHLOROBUTADIENE	8/17/2020		Y	N	U		U	1.0	0.78	ug/l
FB-20200810	460-216046-3	4-NITROANILINE	8/17/2020		Y	N	U		U	10	1.2	ug/l
FB-20200810	460-216046-3	FLUORANTHENE	8/17/2020		Y	N	UT	UJ	UJ	10	0.84	ug/l
FB-20200810	460-216046-3	3-NITROANILINE	8/17/2020		Y	N	U		U	10	1.9	ug/l
FB-20200810	460-216046-3	4-BROMOPHENYL PHENYL ETHER	8/17/2020		Y	N	U		U	10	0.75	ug/l
FB-20200810	460-216046-3	4-CHLORO-3-METHYLPHENOL	8/17/2020		Y	N	U		U	10	0.58	ug/l
FB-20200810	460-216046-3	4-CHLOROANILINE	8/17/2020		Y	N	U		U	10	1.9	ug/l
FB-20200810	460-216046-3	3,3'-DICHLOROBENZIDINE	8/17/2020		Y	N	U		U	10	1.4	ug/l
FB-20200810	460-216046-3	4-METHYLPHENOL (P-CRESOL)	8/17/2020		Y	N	U		U	10	0.65	ug/l
FB-20200810	460-216046-3	ACENAPHTHENE	8/17/2020		Y	N	U		U	10	1.1	ug/l
FB-20200810	460-216046-3	4-NITROPHENOL	8/17/2020		Y	N	U		U	20	4.0	ug/l
FB-20200810	460-216046-3	NITROBENZENE	8/17/2020		Y	N	U		U	1.0	0.57	ug/l
FB-20200810	460-216046-3	N-NITROSODIPHENYLAMINE	8/17/2020		Y	N	U		U	10	0.89	ug/l
FB-20200810	460-216046-3	CARBAZOLE	8/17/2020		Y	N	UT	UJ	UJ	10	0.68	ug/l
FB-20200810	460-216046-3	N-NITROSODI-N-PROPYLAMINE	8/17/2020		Y	N	U		U	1.0	0.43	ug/l
FB-20200810	460-216046-3	1,2,4,5-TETRACHLOROBENZENE	8/17/2020		Y	N	U		U	10	1.2	ug/l
FB-20200810	460-216046-3	4-CHLOROPHENYL PHENYL ETHER	8/17/2020		Y	N	U		U	10	1.3	ug/l
FB-20200810	460-216046-3	2,4-DINITROTOLUENE	8/17/2020		Y	N	U		U	2.0	1.0	ug/l
FB-20200810	460-216046-3	2-NITROPHENOL	8/17/2020		Y	N	U		U	10	0.75	ug/l
FB-20200810	460-216046-3	2,4,6-TRICHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.86	ug/l

SDG: 4602160461

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	CHRYSENE	8/17/2020		Y	N	UT	UJ	UJ	2.0	0.91	ug/l
FB-20200810	460-216046-3	2,3,4,6-TETRACHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.75	ug/l
FB-20200810	460-216046-3	2,4,5-TRICHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.88	ug/l
FB-20200810	460-216046-3	2,4-DIMETHYLPHENOL	8/17/2020		Y	N	U		U	10	0.62	ug/l
FB-20200810	460-216046-3	2,4-DINITROPHENOL	8/17/2020		Y	N	U		U	20	14	ug/l
FB-20200810	460-216046-3	2,4-DICHLOROPHENOL	8/17/2020		Y	N	U		U	10	1.1	ug/l
FB-20200810	460-216046-3	2,6-DINITROTOLUENE	8/17/2020		Y	N	U		U	2.0	0.83	ug/l
FB-20200810	460-216046-3	2-CHLORONAPHTHALENE	8/17/2020		Y	N	U		U	10	1.2	ug/l
FB-20200810	460-216046-3	2-CHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.38	ug/l
FB-20200810	460-216046-3	2-Methylnaphthalene	8/17/2020		Y	N	U		U	10	1.1	ug/l
FB-20200810	460-216046-3	2-Methylphenol (O-Cresol)	8/17/2020		Y	N	U		U	10	0.67	ug/l
FB-20200810	460-216046-3	2-NITROANILINE	8/17/2020		Y	N	U		U	10	0.47	ug/l
MW-3-20200810	460-216046-1	DIBENZOFURAN	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-3-20200810	460-216046-1	BIS(2-CHLOROISOPROPYL) ETHER	8/17/2020		Y	N	U		U	10	0.63	ug/l
MW-3-20200810	460-216046-1	BIS(2-ETHYLHEXYL) PHTHALATE	8/17/2020		Y	N	U		U	2.0	1.7	ug/l
MW-3-20200810	460-216046-1	DIETHYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.98	ug/l
MW-3-20200810	460-216046-1	CAPROLACTAM	8/17/2020		Y	N	U		U	10	0.68	ug/l
MW-3-20200810	460-216046-1	BIS(2-CHLOROETHOXY) METHANE	8/17/2020		Y	N	U		U	10	0.59	ug/l
MW-3-20200810	460-216046-1	BIPHENYL (DIPHENYL)	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-3-20200810	460-216046-1	BENZYL BUTYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.85	ug/l
MW-3-20200810	460-216046-1	DIMETHYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.77	ug/l
MW-3-20200810	460-216046-1	BENZO(G,H,I)PERYLENE	8/17/2020		Y	N	U	UJ	UJ	10	1.4	ug/l
MW-3-20200810	460-216046-1	ATRAZINE	8/17/2020		Y	N	U		U	2.0	1.3	ug/l
MW-3-20200810	460-216046-1	ANTHRACENE	8/17/2020		Y	N	U		U	10	0.63	ug/l
MW-3-20200810	460-216046-1	ACETOPHENONE	8/17/2020		Y	N	U		U	10	2.3	ug/l

SDG: 4602160461

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-3-20200810	460-216046-1	PYRENE	8/17/2020		Y	N	U	UJ	UJ	10	1.6	ug/l
MW-3-20200810	460-216046-1	N-NITROSODIPHENYLAMINE	8/17/2020		Y	N	U		U	10	0.89	ug/l
MW-3-20200810	460-216046-1	CARBAZOLE	8/17/2020		Y	N	UT	UJ	UJ	10	0.68	ug/l
MW-3-20200810	460-216046-1	CHRYSENE	8/17/2020		Y	N	UT	UJ	UJ	2.0	0.91	ug/l
MW-3-20200810	460-216046-1	FLUORANTHENE	8/17/2020		Y	N	UT	UJ	UJ	10	0.84	ug/l
MW-3-20200810	460-216046-1	HEXACHLOROETHANE	8/17/2020		Y	N	U		U	2.0	0.80	ug/l
MW-3-20200810	460-216046-1	ACENAPHTHYLENE	8/17/2020		Y	N	U		U	10	0.82	ug/l
MW-3-20200810	460-216046-1	ISOPHORONE	8/17/2020		Y	N	U		U	10	0.80	ug/l
MW-3-20200810	460-216046-1	PHENANTHRENE	8/17/2020		Y	N	U		U	10	0.58	ug/l
MW-3-20200810	460-216046-1	DI-N-BUTYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.84	ug/l
MW-3-20200810	460-216046-1	N-NITROSODI-N-PROPYLAMINE	8/17/2020		Y	N	U		U	1.0	0.43	ug/l
MW-3-20200810	460-216046-1	NITROBENZENE	8/17/2020		Y	N	U		U	1.0	0.57	ug/l
MW-3-20200810	460-216046-1	HEXACHLOROCYCLOPENTADIENE	8/17/2020		Y	N	U		U	10	3.6	ug/l
MW-3-20200810	460-216046-1	HEXACHLOROBUTADIENE	8/17/2020		Y	N	U		U	1.0	0.78	ug/l
MW-3-20200810	460-216046-1	FLUORENE	8/17/2020		Y	N	U		U	10	0.91	ug/l
MW-3-20200810	460-216046-1	DI-N-OCTYLPHTHALATE	8/17/2020		Y	N	U		U	10	4.8	ug/l
MW-3-20200810	460-216046-1	PHENOL	8/17/2020		Y	N	U		U	10	0.29	ug/l
MW-3-20200810	460-216046-1	3-NITROANILINE	8/17/2020		Y	N	U		U	10	1.9	ug/l
MW-3-20200810	460-216046-1	2,4-DINITROTOLUENE	8/17/2020		Y	N	U		U	2.0	1.0	ug/l
MW-3-20200810	460-216046-1	2,6-DINITROTOLUENE	8/17/2020		Y	N	U		U	2.0	0.83	ug/l
MW-3-20200810	460-216046-1	2-CHLORONAPHTHALENE	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-3-20200810	460-216046-1	2-CHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.38	ug/l
MW-3-20200810	460-216046-1	2-Methylnaphthalene	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-3-20200810	460-216046-1	2-Methylphenol (O-Cresol)	8/17/2020		Y	N	U		U	10	0.67	ug/l
MW-3-20200810	460-216046-1	2-NITROANILINE	8/17/2020		Y	N	U		U	10	0.47	ug/l

SDG: 4602160461

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-3-20200810	460-216046-1	2,4-DINITROPHENOL	8/17/2020		Y	N	U		U	20	14	ug/l
MW-3-20200810	460-216046-1	3,3'-DICHLOROBENZIDINE	8/17/2020		Y	N	U		U	10	1.4	ug/l
MW-3-20200810	460-216046-1	4-BROMOPHENYL PHENYL ETHER	8/17/2020		Y	N	U		U	10	0.75	ug/l
MW-3-20200810	460-216046-1	4-CHLORO-3-METHYLPHENOL	8/17/2020		Y	N	U		U	10	0.58	ug/l
MW-3-20200810	460-216046-1	NAPHTHALENE	8/17/2020		Y	N	U		U	2.0	1.1	ug/l
MW-3-20200810	460-216046-1	4-CHLOROPHENYL PHENYL ETHER	8/17/2020		Y	N	U		U	10	1.3	ug/l
MW-3-20200810	460-216046-1	4-METHYLPHENOL (P-CRESOL)	8/17/2020		Y	N	U		U	10	0.65	ug/l
MW-3-20200810	460-216046-1	4-NITROANILINE	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-3-20200810	460-216046-1	4-NITROPHENOL	8/17/2020		Y	N	U		U	20	4.0	ug/l
MW-3-20200810	460-216046-1	ACENAPHTHENE	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-3-20200810	460-216046-1	2-NITROPHENOL	8/17/2020		Y	N	U		U	10	0.75	ug/l
MW-3-20200810	460-216046-1	4-CHLOROANILINE	8/17/2020		Y	N	U		U	10	1.9	ug/l
MW-3-20200810	460-216046-1	2,4-DICHLOROPHENOL	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-3-20200810	460-216046-1	2,4,6-TRICHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.86	ug/l
MW-3-20200810	460-216046-1	2,4,5-TRICHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.88	ug/l
MW-3-20200810	460-216046-1	2,3,4,6-TETRACHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.75	ug/l
MW-3-20200810	460-216046-1	1,2,4,5-TETRACHLOROBENZENE	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-3-20200810	460-216046-1	BENZALDEHYDE	8/17/2020		Y	N	U	UJ	UJ	10	2.1	ug/l
MW-3-20200810	460-216046-1	2,4-DIMETHYLPHENOL	8/17/2020		Y	N	U		U	10	0.62	ug/l
MW-4-20200810	460-216046-2	ACETOPHENONE	8/17/2020		Y	N	U		U	10	2.3	ug/l
MW-4-20200810	460-216046-2	ANTHRACENE	8/17/2020		Y	N	U		U	10	0.63	ug/l
MW-4-20200810	460-216046-2	ATRAZINE	8/17/2020		Y	N	U		U	2.0	1.3	ug/l
MW-4-20200810	460-216046-2	BENZALDEHYDE	8/17/2020		Y	N	U	UJ	UJ	10	2.1	ug/l
MW-4-20200810	460-216046-2	ACENAPHTHYLENE	8/17/2020		Y	N	U		U	10	0.82	ug/l
MW-4-20200810	460-216046-2	BENZYL BUTYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.85	ug/l

SDG: 4602160461

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-4-20200810	460-216046-2	4-METHYLPHENOL (P-CRESOL)	8/17/2020		Y	N	U		U	10	0.65	ug/l
MW-4-20200810	460-216046-2	BENZO(G,H,I)PERYLENE	8/17/2020		Y	N	U	UJ	UJ	10	1.4	ug/l
MW-4-20200810	460-216046-2	ACENAPHTHENE	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-4-20200810	460-216046-2	BIPHENYL (DIPHENYL)	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-4-20200810	460-216046-2	4-NITROANILINE	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-4-20200810	460-216046-2	DIBENZOFURAN	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-4-20200810	460-216046-2	4-CHLOROPHENYL PHENYL ETHER	8/17/2020		Y	N	U		U	10	1.3	ug/l
MW-4-20200810	460-216046-2	4-CHLOROANILINE	8/17/2020		Y	N	U		U	10	1.9	ug/l
MW-4-20200810	460-216046-2	4-CHLORO-3-METHYLPHENOL	8/17/2020		Y	N	U		U	10	0.58	ug/l
MW-4-20200810	460-216046-2	4-BROMOPHENYL PHENYL ETHER	8/17/2020		Y	N	U		U	10	0.75	ug/l
MW-4-20200810	460-216046-2	3-NITROANILINE	8/17/2020		Y	N	U		U	10	1.9	ug/l
MW-4-20200810	460-216046-2	4-NITROPHENOL	8/17/2020		Y	N	U		U	20	4.0	ug/l
MW-4-20200810	460-216046-2	NAPHTHALENE	8/17/2020		Y	N	U		U	2.0	1.1	ug/l
MW-4-20200810	460-216046-2	DI-N-BUTYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.84	ug/l
MW-4-20200810	460-216046-2	DI-N-OCTYLPHTHALATE	8/17/2020		Y	N	U		U	10	4.8	ug/l
MW-4-20200810	460-216046-2	FLUORENE	8/17/2020		Y	N	U		U	10	0.91	ug/l
MW-4-20200810	460-216046-2	HEXACHLOROBUTADIENE	8/17/2020		Y	N	U		U	1.0	0.78	ug/l
MW-4-20200810	460-216046-2	2-Methylphenol (O-Cresol)	8/17/2020		Y	N	U		U	10	0.67	ug/l
MW-4-20200810	460-216046-2	HEXACHLOROCYCLOPENTADIENE	8/17/2020		Y	N	U		U	10	3.6	ug/l
MW-4-20200810	460-216046-2	BIS(2-ETHYLHEXYL) PHTHALATE	8/17/2020		Y	N	U		U	2.0	1.7	ug/l
MW-4-20200810	460-216046-2	ISOPHORONE	8/17/2020		Y	N	U		U	10	0.80	ug/l
MW-4-20200810	460-216046-2	BIS(2-CHLOROETHOXY) METHANE	8/17/2020		Y	N	U		U	10	0.59	ug/l
MW-4-20200810	460-216046-2	CARBAZOLE	8/17/2020		Y	N	UT	UJ	UJ	10	0.68	ug/l
MW-4-20200810	460-216046-2	CHRYSENE	8/17/2020		Y	N	UT	UJ	UJ	2.0	0.91	ug/l
MW-4-20200810	460-216046-2	FLUORANTHENE	8/17/2020		Y	N	UT	UJ	UJ	10	0.84	ug/l

SDG: 4602160461

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-4-20200810	460-216046-2	DIMETHYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.77	ug/l
MW-4-20200810	460-216046-2	DIETHYL PHTHALATE	8/17/2020		Y	N	U		U	10	0.98	ug/l
MW-4-20200810	460-216046-2	CAPROLACTAM	8/17/2020		Y	N	U		U	10	0.68	ug/l
MW-4-20200810	460-216046-2	BIS(2-CHLOROISOPROPYL) ETHER	8/17/2020		Y	N	U		U	10	0.63	ug/l
MW-4-20200810	460-216046-2	HEXACHLOROETHANE	8/17/2020		Y	N	U		U	2.0	0.80	ug/l
MW-4-20200810	460-216046-2	2,4,6-TRICHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.86	ug/l
MW-4-20200810	460-216046-2	3,3'-DICHLOROBENZIDINE	8/17/2020		Y	N	U		U	10	1.4	ug/l
MW-4-20200810	460-216046-2	N-NITROSODIPHENYLAMINE	8/17/2020		Y	N	U		U	10	0.89	ug/l
MW-4-20200810	460-216046-2	PYRENE	8/17/2020		Y	N	U	UJ	UJ	10	1.6	ug/l
MW-4-20200810	460-216046-2	2-NITROPHENOL	8/17/2020		Y	N	U		U	10	0.75	ug/l
MW-4-20200810	460-216046-2	PHENANTHRENE	8/17/2020		Y	N	U		U	10	0.58	ug/l
MW-4-20200810	460-216046-2	PHENOL	8/17/2020		Y	N	U		U	10	0.29	ug/l
MW-4-20200810	460-216046-2	NITROBENZENE	8/17/2020		Y	N	U		U	1.0	0.57	ug/l
MW-4-20200810	460-216046-2	1,2,4,5-TETRACHLOROBENZENE	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-4-20200810	460-216046-2	2,4,5-TRICHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.88	ug/l
MW-4-20200810	460-216046-2	N-NITROSODI-N-PROPYLAMINE	8/17/2020		Y	N	U		U	1.0	0.43	ug/l
MW-4-20200810	460-216046-2	2,4-DICHLOROPHENOL	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-4-20200810	460-216046-2	2,4-DIMETHYLPHENOL	8/17/2020		Y	N	U		U	10	0.62	ug/l
MW-4-20200810	460-216046-2	2,4-DINITROPHENOL	8/17/2020		Y	N	U		U	20	14	ug/l
MW-4-20200810	460-216046-2	2,4-DINITROTOLUENE	8/17/2020		Y	N	U		U	2.0	1.0	ug/l
MW-4-20200810	460-216046-2	2,6-DINITROTOLUENE	8/17/2020		Y	N	U		U	2.0	0.83	ug/l
MW-4-20200810	460-216046-2	2-CHLORONAPHTHALENE	8/17/2020		Y	N	U		U	10	1.2	ug/l
MW-4-20200810	460-216046-2	2-CHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.38	ug/l
MW-4-20200810	460-216046-2	2-Methylnaphthalene	8/17/2020		Y	N	U		U	10	1.1	ug/l
MW-4-20200810	460-216046-2	2-NITROANILINE	8/17/2020		Y	N	U		U	10	0.47	ug/l

Analytical Method	SW8270D											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
MW-4-20200810	460-216046-2	2,3,4,6-TETRACHLOROPHENOL	8/17/2020		Y	N	U		U	10	0.75	ug/l

Analytical Method	SW8270DSIM											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
FB-20200810	460-216046-3	PENTACHLOROPHENOL	8/17/2020		Y	N	U	UJ	UJ	0.20	0.15	ug/l
FB-20200810	460-216046-3	4,6-DINITRO-2-METHYLPHENOL	8/17/2020		Y	N	U		U	0.80	0.77	ug/l
FB-20200810	460-216046-3	BENZO(K)FLUORANTHENE	8/17/2020		Y	N	U		U	0.050	0.028	ug/l
FB-20200810	460-216046-3	BENZO(A)PYRENE	8/17/2020		Y	N	U		U	0.050	0.022	ug/l
FB-20200810	460-216046-3	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/17/2020		Y	N	U		U	0.030	0.026	ug/l
FB-20200810	460-216046-3	BENZO(B)FLUORANTHENE	8/17/2020		Y	N	U		U	0.050	0.024	ug/l
FB-20200810	460-216046-3	DIBENZ(A,H)ANTHRACENE	8/17/2020		Y	N	U		U	0.050	0.020	ug/l
FB-20200810	460-216046-3	1,4-DIOXANE (P-DIOXANE)	8/17/2020		Y	N	U		U	0.40	0.17	ug/l
FB-20200810	460-216046-3	HEXACHLOROBENZENE	8/17/2020		Y	N	U		U	0.020	0.013	ug/l
FB-20200810	460-216046-3	BENZO(A)ANTHRACENE	8/17/2020		Y	N	U		U	0.050	0.016	ug/l
FB-20200810	460-216046-3	INDENO(1,2,3-C,D)PYRENE	8/17/2020		Y	N	U		U	0.050	0.036	ug/l
FB-20200810	460-216046-3	N-NITROSODIMETHYLAMINE	8/17/2020		Y	N	U		U	0.20	0.12	ug/l
MW-3-20200810	460-216046-1	PENTACHLOROPHENOL	8/17/2020		Y	N	U	UJ	UJ	0.20	0.15	ug/l
MW-3-20200810	460-216046-1	BENZO(B)FLUORANTHENE	8/17/2020		Y	N	U		U	0.050	0.024	ug/l
MW-3-20200810	460-216046-1	1,4-DIOXANE (P-DIOXANE)	8/17/2020		Y	N	U		U	0.40	0.17	ug/l
MW-3-20200810	460-216046-1	INDENO(1,2,3-C,D)PYRENE	8/17/2020		Y	N	U		U	0.050	0.036	ug/l
MW-3-20200810	460-216046-1	4,6-DINITRO-2-METHYLPHENOL	8/17/2020		Y	N	U		U	0.80	0.77	ug/l
MW-3-20200810	460-216046-1	BENZO(A)ANTHRACENE	8/17/2020	0.022	Y	Y	J		J	0.050	0.016	ug/l
MW-3-20200810	460-216046-1	BENZO(A)PYRENE	8/17/2020		Y	N	U		U	0.050	0.022	ug/l
MW-3-20200810	460-216046-1	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/17/2020		Y	N	U		U	0.030	0.026	ug/l
MW-3-20200810	460-216046-1	HEXACHLOROBENZENE	8/17/2020	0.044	Y	Y				0.020	0.013	ug/l

SDG: 4602160461

Analytical Method SW8270DSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
MW-3-20200810	460-216046-1	DIBENZ(A,H)ANTHRACENE	8/17/2020	0.029	Y	Y	J		J	0.050	0.020	ug/l
MW-3-20200810	460-216046-1	N-NITROSODIMETHYLAMINE	8/17/2020		Y	N	U		U	0.20	0.12	ug/l
MW-3-20200810	460-216046-1	BENZO(K)FLUORANTHENE	8/17/2020		Y	N	U		U	0.050	0.028	ug/l
MW-4-20200810	460-216046-2	HEXACHLOROBENZENE	8/17/2020	0.034	Y	Y				0.020	0.013	ug/l
MW-4-20200810	460-216046-2	DIBENZ(A,H)ANTHRACENE	8/17/2020	0.033	Y	Y	J		J	0.050	0.020	ug/l
MW-4-20200810	460-216046-2	1,4-DIOXANE (P-DIOXANE)	8/17/2020		Y	N	U		U	0.40	0.17	ug/l
MW-4-20200810	460-216046-2	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	8/17/2020		Y	N	U		U	0.030	0.026	ug/l
MW-4-20200810	460-216046-2	INDENO(1,2,3-C,D)PYRENE	8/17/2020	0.052	Y	Y				0.050	0.036	ug/l
MW-4-20200810	460-216046-2	BENZO(B)FLUORANTHENE	8/17/2020	0.075	Y	Y				0.050	0.024	ug/l
MW-4-20200810	460-216046-2	BENZO(A)PYRENE	8/17/2020	0.062	Y	Y				0.050	0.022	ug/l
MW-4-20200810	460-216046-2	BENZO(A)ANTHRACENE	8/17/2020	0.067	Y	Y				0.050	0.016	ug/l
MW-4-20200810	460-216046-2	PENTACHLOROPHENOL	8/17/2020		Y	N	U	UJ	UJ	0.20	0.15	ug/l
MW-4-20200810	460-216046-2	4,6-DINITRO-2-METHYLPHENOL	8/17/2020		Y	N	U		U	0.80	0.77	ug/l
MW-4-20200810	460-216046-2	N-NITROSODIMETHYLAMINE	8/17/2020		Y	N	U		U	0.20	0.12	ug/l
MW-4-20200810	460-216046-2	BENZO(K)FLUORANTHENE	8/17/2020	0.032	Y	Y	J		J	0.050	0.028	ug/l

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
FB-20200810	460-216046-3	CYANIDE	8/18/2020		Y	N	U		U	0.010	0.0040	mg/l
MW-3-20200810	460-216046-1	CYANIDE	8/18/2020	0.0045	Y	Y	J		J	0.010	0.0040	mg/l
MW-4-20200810	460-216046-2	CYANIDE	8/18/2020	0.0046	Y	Y	J		J	0.010	0.0040	mg/l

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-214419-1
Reviewer: Felomina Tanguilig, Stella Cuenco, and Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 5, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-14(2-3)	460-214419-1	VOC, SVOC, Pesticide, PCB, PFAS
SB-13(3-4)	460-214419-2	VOC, SVOC, Pesticide, PCB, PFAS
SB-21(1-2)	460-214419-3	VOC, SVOC, Pesticide, PCB, PFAS
SB-21(5-6)	460-214419-4	VOC, SVOC, Pesticide, PCB, PFAS
SB-14(5-6)	460-214419-5	VOC, SVOC, Pesticide, PCB, PFAS
SB-14(2-3)MS	460-214419-1MS	SVOC
SB-14(2-3)MSD	460-214419-1MSD	SVOC

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed soil samples were collected on July 27, 2020 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260C, semivolatile organic compounds (SVOC) by SW-846 method 8270D, organochlorine pesticides by SW-846 method 8081B, polychlorinated biphenyls (PCB) by SW-846 method 8082A, and perfluoroalkyl and polyfluoroalkyl substances (PFAS) by method 537 modified. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C,* SOP HW-24, Revision 4 (October 2014), the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation SW-846 Method 8270D,* SOP HW-35A, Revision 0 (June 2015), the USEPA Region 2 *Standard Operating Procedure for Validating Pesticide Compounds, Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B,* SOP HW-44, Revision 1.1 (December 2010), the USEPA Region 2 *Standard Operating Procedure for Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A,* SOP HW-45, Revision 1 (October 2006), the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* EPA 540-R-2017-002 (January 2017), and the Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (January 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- GC/Electron Capture Detector (GC/ECD) Instrument Performance Checks
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards/Labeled Compounds
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

VOC and SVOC

All criteria were met.

GC/ECD Instrument Performance Checks

Pesticide

All criteria were met.

LC/MS Instrument Performance Checks

PFAS

All criteria were met.

Initial and Continuing Calibrations

VOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
07/31/20	CCV-MS9	Dichlorodifluoromethane	20.8	SB-13(3-4)	XX	UJ nondetects
		Chloromethane	20.2	SB-21(1-2)	XX	UJ nondetects
		Bromomethane	26.7	SB-21(5-6)	XX	UJ nondetects
		Chloroethane	36.4	SB-14(5-6)	XX	UJ nondetects
		1,2,4-Trichlorobenzene	27.4		XX	UJ nondetects
		1,2,3-Trichlorobenzene	24.9		XX	UJ nondetects
08/03/20	CCV-MS9	Vinyl chloride	25.1	SB-14(2-3)	XX	UJ nondetects
		Chloroethane	22.2		XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The dichlorodifluoromethane, chloromethane, bromomethane, chloroethane, 1,2,4-trichlorobenzene, 1,2,3-trichlorobenzene, vinyl chloride, and chloroethane results for the samples listed above were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
07/30/20	CCV-MS5	Benzaldehyde	45.9	SB-14(2-3) SB-13(3-4) SB-21(1-2) SB-21(5-6) SB-14(5-6)	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The benzaldehyde result was estimated due to continuing calibration exceedance. The bias cannot be determined. The result can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Pesticide, PCB, and PFAS

All criteria were met.

Blanks

VOC, SVOC, Pesticide, and PCB

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

PFAS

Contamination was detected in the associated pesticide method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 320-399773/1-A	Perfluorobutanoic acid	0.0366 ug/Kg	RL	SB-14(2-3) SB-13(3-4) SB-21(1-2) SB-21(5-6) SB-14(5-6)

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SB-14(2-3)	Perfluorobutanoic acid	0.16 ug/Kg	0.22U ug/Kg
SB-13(3-4)	Perfluorobutanoic acid	0.12 ug/Kg	0.22U ug/Kg
SB-21(1-2)	Perfluorobutanoic acid	0.047 ug/Kg	0.22U ug/Kg
SB-14(5-6)	Perfluorobutanoic acid	0.084 ug/Kg	0.22U ug/Kg

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.
A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

VOC and SVOC

All criteria were met.

Pesticide

The following table lists the surrogate percent recoveries (%R) outside of control limits in the pesticide analysis and the resulting validation actions.

Sample ID	Column	Surrogate	%R (Limits)	Validation Action
SB-14(2-3)	CLP1	Decachlorobiphenyl	150 (28-148)	None
SB-14(5-6)	CLP1	Decachlorobiphenyl	221 (28-148)	J detects

Validation action was not required for all compounds in sample SB-14(2-3) due to high surrogate recoveries as positive results only are affected and these compounds were not detected in the associated sample.

The SB-14(5-6) pesticide result may be biased high. The positive result can be used for project objectives as an estimated value (J) which may have a minor impact on the data usability.

PCB

The following table lists the surrogate percent recoveries (%R) outside of control limits in the PCB analysis and the resulting validation actions.

Sample ID	Column	Surrogate	%R (Limits)	Validation Action
SB-14(2-3)	CLP1	Decachlorobiphenyl	169 (10-150)	None
SB-14(5-6)	CLP1	Decachlorobiphenyl	238 (10-150)	None

Validation action was not required for all compounds due to high surrogate recoveries as positive results only are affected and these compounds were not detected in the associated samples.

MS/MSD Results

VOC, Pesticide, PCB, and PFAS

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

SVOC

MS/MSD analyses were performed on sample SB-14(2-3) for SVOC analysis. Several percent recoveries (%R) and relative percent differences (RPD) were not within the QC limits for SB-14(2-3)MS/MSD. No data were qualified for MS/MSD samples analyzed greater than or equal to a 5X dilution.

LCS Results

VOC

The following table lists the LCS/LCSD percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	LCS/D %R (Limits)	Affected Sample	Validation Action
LCS/LCSD 460-713160	2-Hexanone	74 (78-120)	-	SB-13(3-4) SB-21(1-2) SB-21(5-6) SB-14(5-6)	UJ nondetects

- Within control limits

The 2-hexanone result may be biased low due to low LCS/LCSD percent recovery. The result can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

SVOC, Pesticide, PCB, and PFAS

All criteria were met.

Internal Standards

VOC, SVOC, Pesticide, and PCB

All criteria were met.

Labeled Compounds

PFAS

The following table lists the internal standard percent recoveries (%R) outside of control limits in the PFAS analysis and the resulting validation actions.

Sample	Labeled Compound	%R (Limits)	Affected Compounds	Validation Action
SB-13(3-4)	13C2-PFHxA	48 (50-150)	Perfluorohexanoic acid	J detects/UJ nondetects
	13C4-PFHpA	48 (50-150)	Perfluoroheptanoic acid	J detects/UJ nondetects
	13C4-PFOA	48 (50-150)	Perfluorooctanoic acid	J detects/UJ nondetects
	13C5-PFNA	46 (50-150)	Perfluorononanoic acid	J detects/UJ nondetects
	13C2-PFDA	45 (50-150)	Perfluorodecanoic acid	J detects/UJ nondetects
	13C2-PFUnA	48 (50-150)	Perfluoroundecanoic acid	J detects/UJ nondetects
	13C2-PFDoA	47 (50-150)	Perfluorododecanoic acid	J detects/UJ nondetects
	13C2-PFTeDA	46 (50-150)	Perfluorotridecanoic acid	J detects/UJ nondetects
	13C3-PFBS	39 (50-150)	Perfluorotetradecanoic acid	J detects/UJ nondetects
	1802-PFHxS	42 (50-150)	Perfluorobutanesulfonic acid	J detects/UJ nondetects
	13C4-PFOS	39 (50-150)	Perfluorohexanesulfonic acid	J detects/UJ nondetects
	13C8-FOSA	44 (50-150)	Perfluoroheptanesulfonic acid	J detects/UJ nondetects
			Perfluorooctanesulfonic acid	
			Perfluorodecanesulfonic acid	
			Perfluorooctanesulfonamide	
SB-21(5-6)	13C3-PFBS	48 (50-150)	Perfluorobutanesulfonic acid	UJ nondetects
	13C8-FOSA	46 (50-150)	Perfluorooctanesulfonamide	UJ nondetects
SB-14(5-6)	M2-8:2FTS	176 (50-150)	8:2 FTS	UJ nondetects

The perfluorohexanoic acid, perfluoroheptanoic acid, perfluorooctanoic acid, perfluorononanoic acid, perfluorodecanoic acid, perfluoroundecanoic acid, perfluorododecanoic acid, perfluorotridecanoic acid, perfluorotetradecanoic acid, perfluorobutanesulfonic acid, perfluorohexanesulfonic acid, perfluoroheptanesulfonic acid, perfluorooctanesulfonic acid, perfluorodecanesulfonic acid, perfluorooctanesulfonamide, and 8:2 FTS results for the samples listed above were estimated due to labeled compound percent recovery exceedances. The bias cannot be determined. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Moisture Content

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC, SVOC, pesticide, and PFAS analyses. These results were qualified as estimated (J) by the laboratory.

No results were reported below the RL and above the MDL in the PCB analysis.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	SVOC Analysis Reported
SB-14(2-3) SB-14(5-6)	10-fold dilution due to nature of sample matrix

Dilutions were not required for VOC, pesticide, PCB, and PFAS analyses.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146F1a
SDG #: 460-214419-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A / N	%D/PSD ≤ 20, r² no ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	SW	LCS/D
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = J/UJ
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-14(2-3)	460-214419-1	Soil	07/27/20
2	SB-13(3-4)	460-214419-2	Soil	07/27/20
3	SB-21(1-2)	460-214419-3	Soil	07/27/20
4	SB-21(5-6)	460-214419-4	Soil	07/27/20
5	SB-14(5-6)	460-214419-5	Soil	07/27/20
6				
7				
8				
9				

Notes:

1	MB 460-712206						
2	-713160						
3	-713568						
1	LB3 460-712190						

LDC #: 49146F1a

VALIDATION FINDINGS CHECKLIST

Method: Volatiles (EPA SW 846 Method 8260C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% (20%) and relative response factors (RRF) ≥ 0.05?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% / 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) ≥ 0.05?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	

Validation Area				
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO.1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 49146F1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <20.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	7/29/20	CCV - MS2	Q	20.1		MB 460-712206,	J/UJ/A
	0440	(CCV 460-712206)	R	20.4		LB3 460-712190	↓
			W	23.8		↓	↓
	7/31/20	CCV- MS9	JJ	20.8		2-05,	J/UJ/A ND
	1759	(CCV 460-713160)	A	20.2		MB 460-713160	
			B	26.7			
			D	36.4			
			KKK	27.4			
			NNN	24.9			
	8/3/20	CCV - MS9	C	25.1		1,	J/UJ/A ND
	0448	(CCV 460-713568)	D	22.2		MB 460-713568	↓

LDC #: 49146F1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS ID 460-712206	LL	( )	79 (80-125)	( )	MB 460-712206, LB3 460-712190	J/UJ/P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS ID 460-713160	Z	74 (78-120)	( )	( )	2 → 5, MB 460-713160	J/UJ/P ND
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC: 49146F1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	6/13/2020	F	0.9276	0.9276	1.0518	1.0518	12	12
			K	0.6360	0.6360	0.6811	0.6811	17.0	17.0
	CVOAMS2		HHHH	1.4940	1.4940	1.4301	1.4301	12.3	12.3
			EE	0.7917	0.7917	0.7525	0.7525	3.9	3.9
			JJJ	2.1044	2.1044	2.0369	2.0369	5.3	5.3

LDC #: 49146F1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:

Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 50/250/1000ppb std)	Recalculated (RRF 50/250/1000ppb std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/24/2020	M	0.4178	0.4178	0.3966	0.3966	19	19
			K	0.6156	0.6156	0.6113	0.6113	7.7	7.7
	CVOAMS9		HHHH	1.4787	1.4787	1.3815	1.3815	14.8	14.8
			EE	0.6255	0.6255	0.6168	0.6168	2.8	2.8
			JJJ	2.0056	2.0056	1.9193	1.9193	3.7	3.7

LDC #: 49146F1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV MS2 4:40	7/29/20	F (IS1)	1.0518	0.9724	0.9724	7.5	7.5
			K (IS2)	0.6811	0.5615	0.5615	17.6	17.6
			HHHH (IS3)	1.4301	1.514	1.514	5.9	5.9
			EE (IS4)	0.7525	0.7123	0.7123	5.3	5.3
			JJ (IS5)	2.0369	1.850	1.850	9.1	9.1
2	CCV MS9 1759	7/31/20	M (IS1)	0.3966	0.3837	0.3837	3.3	3.3
			K (IS2)	0.6113	0.6097	0.6097	0.3	0.3
			HHHH (IS3)	1.3815	1.240	1.240	10.2	10.2
			EE (IS4)	0.6168	0.5628	0.5628	8.8	8.8
			JJ (IS5)	1.9193	1.603	1.603	16.5	16.5
3	CCV MS9 0448	8/3/20	(IS1)		0.3473	0.3473	12.4	12.4
			(IS2)		0.6063	0.6063	0.8	0.8
			(IS3)		1.235	1.235	10.6	10.6
			(IS4)		0.5855	0.5855	5.1	5.1
			(IS5)		1.734	1.734	9.6	9.6

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146F1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	56.2	112	112	0
1,2-Dichloroethane-d4	↓	58.4	117	117	↓
Toluene-d8	↓	51.0	102	102	↓
Bromofluorobenzene	↓	46.8	94	94	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49146F 1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260 C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: lcs ID 460-71356 ✓

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	0.0200	0.0200	0.0235	0.0206	118	118	103	103	13	13
Trichloroethene	↓	↓	0.0184	0.0190	92	92	95	95	3	3
Benzene			0.0204	0.0210	102	102	105	105	3	3
Toluene			0.0197	0.0203	98	98	102	102	3	3
Chlorobenzene			0.0194	0.0199	97	97	100	100	3	3

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146F1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 (1))

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, E:

Conc. = $\frac{(1555)(50.0)(5)(1/1000)}{(358505)(0.3914)(6.28)(0.891)}$

$= 0.000495$ mg/kg

w = 6.28 %s = 89.1

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	1	E	0.00050	0.000495	

LDC #: 49146F2a
SDG #: 460-214419-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/2/20
Page: 1 of 1
Reviewer: FM
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/D	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A/N	%RSD ≤ 20, r² NO ICV
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	A	Lab ID
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	Results < RL > MDL = Jdet
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID		Lab ID	Matrix	Date
1	SB-14(2-3)	10X	460-214419-1	Soil	07/27/20
2	SB-13(3-4)		460-214419-2	Soil	07/27/20
3	SB-21(1-2)		460-214419-3	Soil	07/27/20
4	SB-21(5-6)		460-214419-4	Soil	07/27/20
5	SB-14(5-6)	10X	460-214419-5	Soil	07/27/20
6	SB-14(2-3)MS	10X	460-214419-1MS	Soil	07/27/20
7	SB-14(2-3)MSD	10X	460-214419-1MSD	Soil	07/27/20
8					
9					

Notes:

	MB 460-712771						

LDC #: 49146 F2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Semivolatiles (EPA SW 846 Method 8270 D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15/30% or 20% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?			✓	
Were all percent differences (%D) ≤ 20% or 30%?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recoveries (%R) was less than 10%, was a reanalysis performed to confirm %R ?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	CC. Dimethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	GGGG. C30-Hopane	I1. Methyl methanesulfonate
B. Bis (2-chloroethyl) ether	DD. Acenaphthylene	FFF. Di-n-octylphthalate	HHHH. 1-Methylphenanthrene	J1. Ethyl methanesulfonate
C. 2-Chlorophenol	EE. 2,6-Dinitrotoluene	GGG. Benzo(b)fluoranthene	IIII. 1,4-Dioxane	K1. o,o',o"-Triethylphosphorothioate
D. 1,3-Dichlorobenzene	FF. 3-Nitroaniline	HHH. Benzo(k)fluoranthene	JJJJ. Acetophenone	L1. n-Phenylene diamine
E. 1,4-Dichlorobenzene	GG. Acenaphthene	III. Benzo(a)pyrene	KKKK. Atrazine	M1. 1,4-Naphthoquinone
F. 1,2-Dichlorobenzene	HH. 2,4-Dinitrophenol	JJJ. Indeno(1,2,3-cd)pyrene	LLLL. Benzaldehyde	N1. N-Nitro-o-toluidine
G. 2-Methylphenol	II. 4-Nitrophenol	KKK. Dibenz(a,h)anthracene	MMMM. Caprolactam	O1. 1,3,5-Trinitrobenzene
H. 2,2'-Oxybis(1-chloropropane)	JJ. Dibenzofuran	LLL. Benzo(g,h,i)perylene	NNNN. 2,6-Dichlorophenol	P1. Pentachlorobenzene
I. 4-Methylphenol	KK. 2,4-Dinitrotoluene	MMM. Bis(2-Chloroisopropyl)ether	OOOO. 1,2-Diphenylhydrazine	Q1. 4-Aminobiphenyl
J. N-Nitroso-di-n-propylamine	LL. Diethylphthalate	NNN. Aniline	PPPP. 3-Methylphenol	R1. 2-Naphthylamine
K. Hexachloroethane	MM. 4-Chlorophenyl-phenyl ether	OOO. N-Nitrosodimethylamine	QQQQ. 3&4-Methylphenol	S1. Triphenylene
L. Nitrobenzene	NN. Fluorene	PPP. Benzoic Acid	RRRR. 4-Dimethyldibenzothiophene (4MDT)	T1. Octachlorostyrene
M. Isophorone	OO. 4-Nitroaniline	QQQ. Benzyl alcohol	SSSS. 2/3-Dimethyldibenzothiophene (4MDT)	U1. Famphur
N. 2-Nitrophenol	PP. 4,6-Dinitro-2-methylphenol	RRR. Pyridine	TTTT. 1-Methyldibenzothiophene (1MDT)	V1. 1,4-phenylenediamine
O. 2,4-Dimethylphenol	QQ. N-Nitrosodiphenylamine	SSS. Benzidine	UUUU.. 2,3,4,6-Tetrachlorophenol	W1. Methapyrilene
P. Bis(2-chloroethoxy)methane	RR. 4-Bromophenyl-phenylether	TTT. 1-Methylnaphthalene	VVVV. 1,2,4,5-Tetrachlorobenzene	X1. Pentachloroethane
Q. 2,4-Dichlorophenol	SS. Hexachlorobenzene	UUU.Benzo(b)thiophene	WWWW.. 2-Picoline	Y1. 3,3'-Dimethylbenzidine
R. 1,2,4-Trichlorobenzene	TT. Pentachlorophenol	VVV.Benzonaphthothiophene	XXXX. 3-Methylcholanthrene	Z1. o-Toluidine
S. Naphthalene	UU. Phenanthrene	WWW.Benzo(e)pyrene	YYYY. a,a-Dimethylphenethylamine	A2. 1-Naphthylamine
T. 4-Chloroaniline	VV. Anthracene	XXX. 2,6-Dimethylnaphthalene	ZZZZ. Hexachloropropene	B2. 4-Aminobiphenyl
U. Hexachlorobutadiene	WW. Carbazole	YYY. 2,3,5-Trimethylnaphthalene	A1. N-Nitrosodiethylamine	C2. 4-Nitroquinoline-1-oxide
V. 4-Chloro-3-methylphenol	XX. Di-n-butylphthalate	ZZZ. Perylene	B1. N-Nitrosodi-n-butylamine	D2. Hexachloropene
W. 2-Methylnaphthalene	YY. Fluoranthene	AAAA. Dibenzothiophene	C1. N-Nitrosomethylethylamine	E2. Bis (2-chloro-1-methylethyl) ether
X. Hexachlorocyclopentadiene	ZZ. Pyrene	BBBB. Benzo(a)fluoranthene	D1. N-Nitrosomorpholine	F2. Bifenthrin
Y. 2,4,6-Trichlorophenol	AAA. Butylbenzylphthalate	CCCC. Benzo(b)fluorene	E1. N-Nitrosopyrrolidine	G2. Cyfluthrin
Z. 2,4,5-Trichlorophenol	BBB. 3,3'-Dichlorobenzidine	DDDD. cis/trans-Decalin	F1. Phenacetin	H2. Cypermethrin
AA. 2-Chloronaphthalene	CCC. Benzo(a)anthracene	EEEE. 1,1'-Biphenyl	G1. 2-Acetylaminofluorene	I2. Permethrin (cis/trans)
BB. 2-Nitroaniline	DDD. Chrysene	FFFF. Retene	H1. Pronamide	J2. 5-Nitro-o-toluidine

LDC #: 49146F2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤20mid/50low level %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	7/30/20 2329	CCV-MS5	LLLL	45.9		All	J/UJ/A ND

CONCAL.wpd

LDC #: 49146F2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A — Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

(Y) N N/A — Was a MS/MSD analyzed every 20 samples of each matrix?

Y (N) N/A — Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	6 + 7	several	%R + %	RPD outside	limit	1	no qual 10X PL
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 49146F2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GCMS 8270D

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Where:
Ax = Area of compound
Cx = Concentration of compound
S = Standard deviation of the RRFs
X = Mean of the RRFs
Ais = Area of associated internal standard
Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 20 ug/ml std)	Recalculated (RRF 20 ug/ml std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL CBNAMS5	7/13/2020	A	1.4258	1.4258	1.4793	1.4793	4.2	4.2
			S	1.0354	1.0354	1.0331	1.0331	4.1	4.1
			GG	1.3982	1.3982	1.3798	1.3798	6.5	6.5
			UU	1.2042	1.2042	1.1993	1.1993	3.9	3.9
			DDD	1.3346	1.3346	1.3132	1.3132	6.2	6.2
			III	1.0572	1.0572	1.0104	1.0104	6.1	6.1

LDC #: 49146 F 2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)
The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV-M35 2329	7/30/20	A (1st IS)	1.4793	1.493	1.493	0.9	0.9
			S (2nd IS)	1.0321	1.015	1.015	1.7	1.7
			GG (3rd IS)	1.3798	1.166	1.166	15.5	15.5
			UU (4th IS)	1.1993	1.190	1.190	0.8	0.8
			DDD (5th IS)	1.3132	1.368	1.368	4.1	4.1
			III (6th IS)	1.0104	1.055	1.055	4.4	4.4
2			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					
3			(1st IS)					
			(2nd IS)					
			(3rd IS)					
			(4th IS)					
			(5th IS)					
			(6th IS)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146F2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	50.0	31.2	62	62	0
2-Fluorobiphenyl	↓	31.5	63	63	↓
Terphenyl-d14		39.5	~~63~~ 79	79	
Phenol-d5		29.9	60	60	
2-Fluorophenol		31.1	62	62	
2,4,6-Tribromophenol	↓	31.6	63	63	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 49146F2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 6 + 7

10X

Compound	Spike Added (mg/kg)		Sample Concentration (mg/kg)	Spiked Sample Concentration (mg/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalc
Phenol	3.74	3.74	NO	2.13	1.94	57	57	52	52	10	10
N-Nitroso-di-n-propylamine	↓	↓	NO	2.21	1.83	59	59	49	49	19	19
4-Chloro-3-methylphenol			NO	2.01	1.79	54	54	48	48	12	12
Acenaphthene			2.6	3.66	8.39	29	29	156	156	78	78
Pentachlorophenol	7.49	7.49	NO	1.78	1.37	24	24	18	18	26	26
Pyrene	3.74	3.74	15	13.7	35.9	-46	-46	549	549	90	90

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146 F2a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS ID 460-712771

Compound	Spike Added (mg/Kg)		Spike Concentration (mg/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	3.33	3.33	~~3.01~~ 2.71	2.71	~~90~~ 81	81	81	81	0	0
N-Nitroso-di-n-propylamine	↓	↓	2.59	2.58	78	78	77	77	0	0
4-Chloro-3-methylphenol			2.666	2.66	80	80	80	80	0	0
Acenaphthene			2.37	2.37	71	71	71	71	0	0
Pentachlorophenol	6.67	6.67	5.10	4.93	77	77	74	74	3	3
Pyrene	3.33	3.33	3.01	2.96	90	90	89	89	2	2

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146, F2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270 D)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, GG

Conc. = $\frac{(8240)(40.0)(1)(10x)}{(69696)(1.3798)(15)(0.891)}$

= 2.56 mg/kg

1/15 10X 89.1

#	Sample ID	Compound	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Qualification
	#1	GG	2.6	2.56	

LDC #: 49146F3a (6F)
SDG #: 460-214419-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Organochlorine Pesticides (EPA SW846 Method 8081B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC Instrument Performance Check	A	
III.	Initial calibration/~~ICV~~	A/A	%D RSD ≤ 20 no ICV
IV.	Continuing calibration	A	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	SW	
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	A	LCS/D
X.	Field duplicates	N	
XI.	Compound quantitation/RL/LOQ/LODs	A	Results < RL > MDL = J det
XII.	Target compound identification	A	
XIII.	System Performance	A	
XIV	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-14(2-3)	460-214419-1	Soil	07/27/20
2	SB-13(3-4)	460-214419-2	Soil	07/27/20
3	SB-21(1-2)	460-214419-3	Soil	07/27/20
4	SB-21(5-6)	460-214419-4	Soil	07/27/20
5	SB-14(5-6)	460-214419-5	Soil	07/27/20
6				
7				
8				
9				
10				

Notes:

	MB 460-712480						

LDC #: 49146F3a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

Method: Pesticides (EPA SW 846 Method 8081 B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and at beginning of each 12-hour shift?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?		✓		
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	.		✓	
Were all percent differences (%D) ≤ 20%?			✓	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. ***Surrogate spikes/Internal Standards***				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any percent recovery (%R) was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were internal standard area counts within ± 50% of the average area calculated during calibration?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
Were relative percent difference (RPD) of the results between two columns ≤ 40%?	✓			
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146F3a

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

METHOD: ✓ **GC** ___ **HPLC**

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	1	dr81	o	150 (28-148)	lab /p MD
				( )	
				( )	
	5	↓	o	221 (28-148)	lab /p MD+Det
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146F3a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: ____FT___

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound		Reported 100ppb	Recalculated 100ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/15/2020	Gamma-BHC	CLP2	1.3210	1.3210	1.2646	1.2646	5.1	5.1
	GC5		Gamma-BHC	CLP1	1.4555	1.4555	1.4697	1.4697	4.9	4.9
			4,4'-DDT	CLP2	0.9935	0.9935	0.9162	0.9162	10.2	10.2
			4,4'-DDT	CLP1	1.1875	1.1875	1.1680	1.1680	1.2	1.2

LDC #: 49146F3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	ccv 1531	7/30/20	gamma BHC (Lin)	100	95.4	95.4	4.6	4.6
			4,4'-DDT	100	88.6	88.6	11.4	11.4
			(Lin)	↓	97.9	97.9	2.1	2.1
				↓	90.4	90.4	9.6	9.6
2	ccv 0403	7/31/20	↓	100	94.8	94.8	5.2	5.2
			↓	↓	87.5	87.5	12.5	12.5
			↓	100	97.0	97.0	3.0	3.0
			↓	↓	88.5	88.5	11.5	11.5
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146F3a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
DCB	CVP1	50	~~74.8~~ 74.8	~~169~~ 150	150	0
↓	2	↓	~~52.9~~ 52.9	106	106	↓
TCMX	CVP1	↓	~~57.3~~ 49.9	~~110~~ 100	100	↓
↓	2	↓	~~49.9~~ 57.3	~~95~~ 115	115	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146F3a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added
LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS ID 460-71248

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
4,4'-DDT	0.133	0.133	0.115	0.124	86	86	93	93	✓	8
gamma BHC	↓	↓	0.127	0.135	95	95	101	101	7	7

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146F3a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: V **GC** __ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #5 Compound Name 4,4'-DDT

Concentration = $\frac{3311219\ (100)\ (10)}{16787519\ (1.1680)\ (15)\ (1000)\ (0.868}$ =

10/15 %S = 86.8

= 0.013 mg/kg

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	#5	4,4'-DDT	0.013	0.013	

Comments:

LDC #: 49146F3b
SDG #: 460-214419-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/30/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC Polychlorinated Biphenyls (EPA SW846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / Δ	
II.	Initial calibration/ICV	A / Δ	%RSD ≤ 20
III.	Continuing calibration	Δ	CCV ≤ 20
IV.	Laboratory Blanks	Δ	
V.	Field blanks	N	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS ID
IX.	Field duplicates	N	
X.	Compound quantitation/RL/LOQ/LODs	Δ	
XI.	Target compound identification	Δ	
XII.	Overall assessment of data	Δ	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-14(2-3)	460-214419-1	Soil	07/27/20
2	SB-13(3-4)	460-214419-2	Soil	07/27/20
3	SB-21(1-2)	460-214419-3	Soil	07/27/20
4	SB-21(5-6)	460-214419-4	Soil	07/27/20
5	SB-14(5-6)	460-214419-5	Soil	07/27/20
6				
7				
8				
9				
10				
11				
12				

Notes:

	MB 460-712487						

LDC #: 49146F36 **VALIDATION FINDINGS CHECKLIST** Page: 1 of 2
Reviewer: FT

Method: ✓ GC ___ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?			✓	
Were the RT windows properly established?	✓			
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓		✓	
Were all percent differences (%D) ≤ 20%?	✓		✓	
III. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%?	✓			
Were all the retention times within the acceptance windows?	✓			
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
V. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	•	✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?		✓		
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed per analytical or extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Field duplicates				

Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 49146F3b

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	1	ClP1	O	169 (10-150)	Jdt /P ND
				( )	
				( )	
	5	↓	O	238 (10-150)	Jdt /P ND
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146F3b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: _____

METHOD: GC X HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 1000ppb	Recalculated 1000ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/28/2020 GC11	PCB 1260-1 RTX CLP1	0.0480	0.0480	0.0444	0.0444	5.2	5.2
			PCB 1260-1 RTX CLP2	0.0269	0.0269	0.0246	0.0246	6.7	6.7

LDC #: 49146F3b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: _____

METHOD: GC __X_____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported 1000ppb	Recalculated 1000ppb	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/28/2020 GC14	PCB 1260-1 RTX CLP1	0.0228	0.0228	0.0224	0.0224	2.0	2.0
			PCB 1260-1 RTX CLP2	0.0450	0.0450	0.0431	0.0431	3.6	3.6

LDC #: 49146F3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF -CF)/ave.CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ICAL)/ CCV Conc.	Reported CF/ Conc. CCV	Recalculated CF/ Conc. CCV	Reported %D	Recalculated %D
1	ccv 11	7/30/20	Aroclor 1260-1 cpz	1000	882	882.3	11.8	11.8
	0447		-1 cpl	↓	863	863.1	13.7	13.7
2	ccv 14	7/30/20	↓	↓	1000	1002.2	0.2	0.2
	0446				974	974.0	2.6	2.6
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146F3b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #2

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	CLP2	50.0	48.9	98	98	0
↓	CLP1	↓	47.5	95	95	↓
TCMX	CLP2	↓	49.1	98	98	
↓	CLP1		49.4	99	99	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	2-Bromonaphthalene
C`	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin	AA	Chloro-octadecane
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin	BB	2,4-Dichlorophenylacetic acid
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate	CC	2,5-Dibromotoluene
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 49146 F3b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC/SA)
RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; LCS = Laboratory Control Sample; SA = Spike added; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS ID 460-712482

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Aroclor 1260	0.333	0.333	0.328	0.317	98	98	95	95	3	3

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49146F36

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. LCS 460-712482 Compound Name Aroclor 1260

Concentration = $\frac{429.1 \quad (10)}{(15)(1000)}$ = 10/15

= 0.328 mg/kg

#	Sample ID	Compound	Reported Concentrations (mg/kg)	Recalculated Results Concentrations (mg/kg)	Qualifications
	LCS	Aroclor 1260	0.328	0.328	
	1260-1 = 97674 91 (20.0) / 1849467 (0.0224) =		471.6		
		Ave = 471.6 + 428.0 + 453.4 + 507.4 + 498.3 + 496.5 + 501.8 + 579.3 / 8			
		Ave = 492.1			

Comments: _____

LDC #: 49146F96
SDG #: 460-214419-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 10/1/20
Page: 1 of 1
Reviewer: TL
2nd Reviewer: CV

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	RSD≤20 Tr≤50/30 ICV≤30
IV.	Continuing calibration/ISC	A/A	D≤30 ISC≤50
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	
X.	Labeled Compounds	SW	
VI.	Compound quantitation RL/LOQ/LODs	SW	<RL - J, UJ, A
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-14(2-3)	460-214419-1	Soil	07/27/20
2	SB-13(3-4)	460-214419-2	Soil	07/27/20
3	SB-21(1-2)	460-214419-3	Soil	07/27/20
4	SB-21(5-6)	460-214419-4	Soil	07/27/20
5	SB-14(5-6)	460-214419-5	Soil	07/27/20
6				
7				
8				
9				
10				

Notes:

	399773						

LDC #: 49146F96

VALIDATION FINDINGS CHECKLIST

Reviewer: MC

Method: LC/MS PFAS (EPA Method 537Mod)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Were cooler temperature criteria met?	√			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the validation criteria?	√			
III. Initial calibration and Initial Calibration Verification				
Did the laboratory perform a 5-point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 20%?	√			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?			√	
Were all analytes within 70-130% or percent differences (%D) ≤30% of their true value for each calibration standard except the lowest point (50-150%)?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	√			
Were all percent differences (%D) ≤ 30%?	√			
IV. Continuing calibration and Instrument Sensitivity Check				
Was a continuing calibration analyzed prior to sample analysis, after every 10 samples and at the end of the analytical sequence?	√			
Were all percent differences (%D) of the continuing calibration ≤ 30%?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were all percent differences (%D) of the Instrument Sensitivity Check ≤ 50%?	√			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?	√			
VI. Field blanks				
Were field blanks identified in this SDG?		√		
Were target compounds detected in the field blanks?			√	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?		√		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			√	

LDC #: 49146F96

VALIDATION FINDINGS CHECKLIST

Reviewer: M

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per extraction batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	√			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		√		
Were target compounds detected in the field duplicates?			√	
XI. Labeled compounds				
Were labeled compound percent recoveries (%R) within the QC limits?		√		
XII. Compound quantitation				
Did the laboratory reporting limits (RL) meet the QAPP RLs?			√	
Did reported results include both branched and linear isomers?	√			
Were the correct ion transition, labeled compound and relative response factor (RRF) used to quantitate the compound?	√			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	√			
XIII. Target compound identification				
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were two transitions and the ion transition ratio per analyte monitored and documented except for PFBA and PFPeA?	√			
Were ion ratios within QC limits?	√			
XIV. System performance				
System performance was found to be acceptable.	√			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. Perfluorobutanoic acid (PFBA)			
B. Perfluoropentanoic acis (PFPeA)			
C. Perfluorohexanoic acid (PFHxA)			
D. Perfluoroheptanoic acid (PFHpA)			
E. Perfluorooctanoic acid (PFOA)			
F. Perfluorononanoic acid (PFNA)			
G. Perfluorodecanoic acid (PFDA)			
H. Perfluoroundecanoic acid (PFUnA)			
I. Perfluorododecanoic acid (PFDoA)			
J. Perfluorotridecanoic acid (PFTriA)			
K. Perfluorotetradecanoic acid (PFTeA)			
L. Perfluorobutanesulfonic acid (PFBS)			
M. Perfluorohexanesulfonic acid (PFHxS)			
N. Perfluoroheptanesulfonic acid (PFHpS)			
O. Perfluorooctanesulfonic acid (PFOS)			
P. Perfluorodecanesulfonic acid (PFDS)			
Q. Perfluorooctanesulfonamide (FOSA)			
R. N-Methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
S. N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			
T. 6:2 FTS			
U. 8:2 FTS			

LDC #: 49146F96

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JL

METHOD: LC/MS PFAS (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 7/30/20
Conc. units: ug/kg **Associated Samples:** All

Compound	Blank ID	Sample Identification								
MB 320-399773/1-A		1	2	3	5					
A	0.0366	0.16/	0.12/	0.047/	0.084/					
		0.224	0.224	0.224	0.224					

Blank extraction date:
Conc. units: **Associated Samples:**

Compound	Blank ID	Sample Identification								

LDC #: 49146F96

VALIDATION FINDINGS WORKSHEET
Labeled Compounds

Reviewer: JC

METHOD: LC/MS PFAS (EPA Method 537M)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y (N) N/A Were all labeled compound recoveries within the QC criteria?

#	Date	Lab ID/Reference	Labeled Compound	% Recovery (Limit) (50-150)	Qualifications
		2 (2dbs/ND)	13C2 PFHxA	48 ( )	J/UJ/P (C-K)
			13C4 PFHpA	48 ( )	
			PFOA	48 ( )	
			13C5 PFNA	46 ( )	
			13C2 PFDA	45	
			PFUnA	48 ( )	
			PFDoA	47 ( )	
			PFTeDA	46 ( )	
			13C3 PFBS	39 ( )	(L-Q)
			1802 PFHxS	42 ( )	
			13C4 PFOS	39	
			13C8 FOSA	44 ( )	
				( )	
		4 (ND)	13C3 PFBS	48 ( )	
			13C8 FOSA	46 ( )	
				( )	
		5 (ND)	M2-8:2 FTS	176 ( )	(U)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

LDC #: 49146F96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S = Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound	Reported RRF (RRF 1.0/0.928)	Recalculated RRF (RRF 1.0/0.928)	Reported Average RRF	Recalculated Average RRF	Reported %RSD	Recalculated %RSD
1	ICAL	7/31/2020	PFOA (13C4-PFOA)	1.0607	1.0607	1.0496	1.0496	12.3	12.3
	A13		PFOS (13C4-PFOS)	1.0315	1.0315	1.0427	1.0427	2.9	2.9
2			PFOA (13C4-PFOA)						
			PFOS (13C4-PFOS)						

LDC #: 49146F96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Method: LC/MS PFAS (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (Actual Conc - Cx)/Actual Conc
Cx = (Ax)(Cis)/(Ais)(ave. RRF)

Where:
Ax = Area of compound
Ais = Area of associated internal standard
Cx = Concentration of compound
Cis = Concentration of internal standard
ave. RRF = initial calibration average RRF

#	Standard ID	Calibration Date	Compound	Average RRF	Reported RRF	Recalculated RRF	Reported %D	Recalculated %D
1	2020.08.01_A13_PFC_A_013	8/1/2020	PFOA (13C4-PFOA)	1.0496	1.029	1.0291	2.0	2.0
			PFOS (13C4-PFOS)	1.0427	1.049	1.0487	0.6	0.6
2	2020.08.01_A13_PFC_A_025	8/1/2020	PFOA (13C4-PFOA)	1.0496	1.031	1.0310	1.8	1.8
			PFOS (13C4-PFOS)	1.0427	1.127	1.1271	8.1	8.1
3	2020.08.02_A13_PFC_ATE_006	8/2/2020	PFOA (13C4-PFOA)	1.0496	1.000	1.0002	4.7	4.7
			PFOS (13C4-PFOS)	1.0427	1.067	1.0671	2.3	2.3
4	2020.08.02_A13_PFC_ARK_016	8/2/2020	PFOA (13C4-PFOA)	1.0496	1.035	1.0346	1.4	1.4
			PFOS (13C4-PFOS)	1.0427	1.104	1.1043	5.9	5.9

LDC #: 49146F96

VALIDATION FINDINGS WORKSHEET
LCS Results Verification

Method: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

SSC = (Area spike) (Conc IS) / (Area IS) (average RRF spike)
%Recovery = 100 * SSC/SA

Where:
SSC = Spiked concentration
SA = Spike added
LCS = Laboratory control spike recovery
LCSD = Laboratory control spike duplicate recovery

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS/LCSD ID: LCS 320-399773

Compound	SA (ug/Kg)		SSC (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	2.00		1.880		94	94				
PFOS	1.86		2.020		109	109				

LDC #: 49146F9b

VALIDATION FINDINGS WORKSHEET
Sample Results Verification

Reviewer: SC

Method: LC/MS PFAS (EPA Method 537M)

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax)\,(Vo)\,(Df)}{(RRF)\,(Wt)\,(\%S)}$$

Where:

Ax = Area or height of the peak for the compound to be measured
Ais = Area or height of the peak for the internal standard
Cis = Concentration of the internal standard
DF = Dilution factor
Vt = Volume of extract in milliters (mL)
RRF = Average relative response factor
Wt = Weight of sample in grams (g)
%S = Percent solids

Sample #	Compound	Ax	Ais	Cis	DF	RRF	Vt (mL)	Wt (g)	%S	Calculated Concentration (ug/Kg)	Reported Concentration (ug/Kg)	% Diff
2	PFOA	192629	7300646	2.5	1	1.0427	10	5.4	0.859	0.14	0.14	0

Site: 500 Main Street, New Rochelle, NY
Laboratory: Eurofins
Report No.: 460-214419-1
Reviewer: Christina Rink/Laboratory Data Consultants for SESI Consulting Engineers – Pine Brook, NJ
Date: October 1, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SB-14(2-3)	460-214419-1	Metals, Cyanide
SB-13(3-4)	460-214419-2	Metals, Cyanide
SB-21(1-2)	460-214419-3	Metals, Cyanide
SB-21(5-6)	460-214419-4	Metals, Cyanide
SB-14(5-6)	460-214419-5	Metals, Cyanide

Associated QC Samples(s):
Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed soil samples were collected on July 27, 2020 and were analyzed for metals by SW-846 methods 6010D/7471B and cyanide by SW-846 method 9012B. The data validation was performed in accordance with USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program,* SOP HW-3a/c, Revision 1 (September 2016) and the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review,* EPA 540-R-2017-001 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The inorganic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Instrument Calibration
- Contract Required Quantitation Limit (CRQL) Standard Recoveries
- Blank Analysis Results
- Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Results
- Matrix Spike (MS) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Certified Reference Material (CRM) Results
- Serial Dilution Results
- Moisture Content
- Detection Limits Results
- Sample Quantitation Results

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

Instrument Calibration

All criteria were met.

CRQL Standard Recoveries

Metals

All criteria were met.

Blank Results

Metals

Analytes were detected below the reporting limits in the laboratory blank samples. The following table summarizes the contamination and validation actions taken.

Blank ID	Analyte	Level Detected	Action Level	Associated Samples
ICB/CCB	Cobalt	2.07 ug/L	RL	SB-14(2-3) SB-13(3-4) SB-21(1-2) SB-21(5-6)
ICB/CCB	Zinc	1.23 ug/L	RL	SB-14(5-6)

Blank Actions for analytes detected below the reporting limit(RL).
If the sample result is < RL, report the result as nondetect (U) at the RL.
If the sample result is > RL or nondetect, no action is required.
Blank Actions for analytes detected above the reporting limit or RL.
If the sample result is < RL and <action level; report the result as nondetect (U) at the RL.
If the sample result is > RL and < action level; report the result as nondetect (U) at the reported value.
If the sample result is > action level or nondetect, no action is required.

Qualified sample results are listed in the table below.

Sample	Analyte	Reported Level	Validation Action
SB-13(3-4)	Cobalt	7.0 mg/Kg	8.7U mg/Kg
SB-21(1-2)	Cobalt	6.0 mg/Kg	9.2U mg/Kg
SB-21(5-6)	Cobalt	6.8 mg/Kg	8.5U mg/Kg

These results can be used for project objectives as nondetect (U) which may have a minor impact on the data usability.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Cyanide

Contamination was not detected in the laboratory blank samples.

A field blank was not associated with this sample set. Validation action was not required on this basis.

ICP ICS Results

Metals

Analytes were within control limits in the ICSA and ICSAB analyses.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were not associated with this sample set. Validation action was not required on this basis.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

CRM Results

All criteria were met.

Serial Dilution Results

Metals

A serial dilution analysis was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Detection Limits Results

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the metals analyses. These results were estimated (J) by the laboratory.

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the cyanide analysis.

Due to high target analyte levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	Metals Analyses Reported
SB-14(2-3) SB-21(1-2) SB-21(5-6)	2-fold dilution due to sample matrix for 6010D metals
SB-13(3-4)	2-fold dilution due to sample matrix for 6010D metals 5-fold dilution due to high analyte level for mercury
SB-14(5-6)	5-fold dilution due to sample matrix for 6010D metals

Dilutions were not required for cyanide analysis.

Sample Quantitation Results

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 49146F4b
SDG #: 460-214419-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010D/7471B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	~~A~~ SW	
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Serial Dilution	N	
IX.	Laboratory control samples	A	CRM
X.	Field Duplicates	N	
XI.	Sample Result Verification	A	Results<RL J det
XII	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-14(2-3)	460-214419-1	Soil	07/27/20
2	SB-13(3-4)	460-214419-2	Soil	07/27/20
3	SB-21(1-2)	460-214419-3	Soil	07/27/20
4	SB-21(5-6)	460-214419-4	Soil	07/27/20
5	SB-14(5-6)	460-214419-5	Soil	07/27/20
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

6010D: 2x (matrix)
Hg: 5x (analyte)
6010D: 5x (matrix)

Notes:

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times met?	X			
Were all water samples preserved to a pH of <2.			X	
II. ICP-MS Tune				
Were mass resolutions within 0.1 amu for all isotopes in the tuning solution?			X	
Were %RSDs of isoptoes in the tuning solution ≤5%?			X	
III. Calibration				
Were all instuments calibrated daily?	X			
Were the proper standards used?	X			
Were all initial and continuing calibration verifications within the 90-110% (80-120% for mercury) QC limits?	X			
Were the low level standard checks within 70-130%?			X	
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?	X			
V. Interference Check Sample				
Were the interference check samples performed daily?	X			
Were the AB solution recoveries within 80-120%?	X			
VI. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
VII. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)				
Validation Area	**Yes**	**No**	**NA**	**Comments**
VIII. Internal Standards				
Were all percent recoveries within the 30-120% (60-125% for EPA Method 200.8) QC limits?			X	
If the recoveries were outside the limits, was a reanalysis performed?			X	
IX. Serial Dilution				
Were all percent differences <10%?			X	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			X	
X. Sample Result Verification				
Were all reporting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			
XII. Field Duplicates				
Were field duplicates identifed in this SDG?		X		
Were target analytes detected in the field duplicates?			X	
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

All elements are applicable to each sample as noted below.

Sample ID	Target Analyte List
All	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn, Hg

Analysis Method

ICP	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
ICP-MS	
CVAA	Hg

VALIDATION FINDINGS WORKSHEET
Laboratory Blank Contamination (PB/ICB/CCB)

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Soil preparation factor applied (if applicable): NA

Sample Concentration, unless otherwise noted: mg/Kg Associated Samples: 1-4

				Sample Identification								
Analyte	**PB (mg/Kg)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	2	3	4						
Co		2.07	RL	7.0 / 8.7	6.0 / 9.2	6.8 / 8.5						

Sample Concentration, unless otherwise noted: mg/Kg Associated Samples: 5

				Sample Identification								
Analyte	**PB (mg/Kg)**	**Maximum ICB/CCB (ug/L)**	**Action Level**	No quals (>RL)								
Zn		1.23	RL									

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

An intial calibration verification (ICV), continuing calibration verification (CCV), low level calibration check (LLCC), and interference check sample (ICSAB) percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis
True = concentration of each analyte in the source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalcuated %R	Reported %R	Acceptable (Y/N)
ICV	ICP	Mn	1006	1000	101	101	Y
CCV	ICP	Cd	978.3	1000	98	98	Y
ICSAB	ICP	Sb	90.1	100	90	90	Y
ICV	CVAA	Hg	4.97	5	99	99	Y
CCV	CVAA	Hg	4.62	5	92	92	Y

Quality Control Sample Recalculations

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)

Percent recoveries (%R) for the laboratory control sample (LCS), matrix spike (MS), and post digestion spike (PDS) were recalculated using the following formula:

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentration of each analyte in the source

The sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentration

D = Duplicate sample concentration

The serial dilution percent difference (%D) was recalculated using the following formula.

%D = (Absolute value (I - SDR)) x 100 / (I)

I = Initial sample result

SDR = Serial dilution result (with a 5x dilution applied)

Sample ID	Type of Analysis	Element	Found/S/I	True/D/SDR	Recalcuated %R/RPD/%D	Reported %R/RPD/%D	Acceptable (Y/N)
CRM	LCS	K	1720	2030	84.7	84.7	Y
	MS						
	Duplicate						
	PDS						
	Serial dilution						

METHOD: Trace Metals (EPA SW 846 Methods 6010/7000)
Analytes were recalculated and verified using the following equation:
Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids x Initial weight)

Sample ID	Analyte	Raw Data (ug/L)	Dilution	Initial Weight (g)	Final Volume (mL)	Percent solids (%)	Reported Result (mg/Kg)	Recalcuated Result (mg/Kg)	Acceptable (Y/N)
1	Hg	0.7574	1	0.63	50	89.1	0.068	0.067	Y
2	Na	1063	2	1.34	100	85.9	185	185	Y
3	Fe	78260	2	1.26	100	86.4	14400	14378	Y
4	Cu	71.14	2	1.29	100	90.8	12.1	12.1	Y
5	Ni	45.37	5	1.05	100	86.8	24.9	24.9	Y

LDC #: 49146F6
SDG #: 460-214419-1
Laboratory: Eurofins

VALIDATION COMPLETENESS WORKSHEET
Category B

Date: 9/29/20
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Laboratory Blanks	A	
V	Field blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Laboratory control samples	A	CRM
IX.	Field duplicates	N	
X.	Sample result verification	A	no CRL
XI	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank
SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	SB-14(2-3)	460-214419-1	Soil	07/27/20
2	SB-13(3-4)	460-214419-2	Soil	07/27/20
3	SB-21(1-2)	460-214419-3	Soil	07/27/20
4	SB-21(5-6)	460-214419-4	Soil	07/27/20
5	SB-14(5-6)	460-214419-5	Soil	07/27/20
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes:

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
I. Technical holding times				
Were all technical holding times were met?	X			
II. Calibration				
Were all instuments calibrated at the requried frequency?	X			
Were the proper number of standards used?	X			
Were all initial and continuing calibration verifications within the QC limits?	X			
Were all initial calibration correlation coefficients within limits as specifed by the method?	X			
Were balance checks performed as required?			X	
III. Blanks				
Was a method blank assoicated with every sample in this SDG?	X			
Was there contamination in the method blanks?		X		
Was there contamination in the initial and continuing calibration blanks?		X		
IV. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)			X	
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			X	
V. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	X			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	X			
X. Sample Result Verification				
Were all reproting limits adjusted to reflect sample dilutions?	X			
Were all soil samples dry weight corrected?	X			
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	X			

METHOD: Inorganics				
Validation Area	**Yes**	**No**	**NA**	**Comments**
XII. Field Duplicates				
Were field duplicates identifed in this SDG?		X		
Were target analytes detected in the field duplicates?			X	
XIII. Field Blanks				
Were field blanks identified in this SDG?		X		
Were target analytes detected in the field blanks?			X	

LDC #: 49146F6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR

Method: Inorganics

The correlation coefficient (r) for the calibration of _Cr6+___ was recalculated.Calibration date:___8/3/20___

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found} \times 100}{\text{True}}$$

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cr6+	s1	0	0.0272	*0.99991*	0.99996	Y
		s2	0.01	0.461			
		s3	0.025	1.05			
		s4	0.05	2.07			
		s5	0.1	4.15			
		s6	0.2	8.01			
		s7	0.4	15.7			
Calibration verification	Cr6+	ICV	0.2	0.21	105	105	Y
Calibration verification	Cr6+	CCV	0.2	0.215	108	108	Y
Calibration verification	Cr6+	CCV	0.2	0.215	108	108	Y

Comments:

VALIDATION FINDINGS CHECKLIST

Quality Control Sample Recalculations

METHOD: Inorganics

Percent recoveries (%R) for the laboratory control sample (LCS) and matrix spike (MS) were recalcuated using the following formula.

%R = (Found/True) x 100

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentraiton of each analyte in the source

The sample and duplciate relative percent difference (RPD) was recalcuated using the following formula.

RPD = (Absolute value(S-D)x 200) / (S+D)

S = Original sample concentraiton

D = Duplciate sample concentration

Sample ID	Type of Analysis	Element	Found/S	True/D	Recalcuated %R/RPD	Reported %R/RPD	Acceptable (Y/N)
CRM	LCS	CN	84	86.4	97.2	97.2	Y
	MS						
	Duplicate						

METHOD: Inorganics

Analytes were recalcuated and verified using the following equation.

Concentration = (Result from raw data x Final volume x Dilution factor) / (Percent solids (if applicable) x Initial weight or volume)

Sample ID	Analyte	Raw Data (unit)	Dilution	Initial Weight/ Volume (unit)	Final Volume (unit)	Percent solids (%)	Reported Result (unit)	Recalcuated Result (unit)	Acceptable (Y/N)
All	CN = ND								

500 Main St., New Rochelle - LDC# 49146F

SDG: 4602144191

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	Perfluorooctane Sulfonamide (FOSA)	8/1/2020		Y	N	U	UJ	UJ	0.22	0.088	ug/kg
SB-13(3-4)-20200727	460-214419-2	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/1/2020		Y	N	U		U	2.16	0.16	ug/kg
SB-13(3-4)-20200727	460-214419-2	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/1/2020		Y	N	U		U	2.16	0.42	ug/kg
SB-13(3-4)-20200727	460-214419-2	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/1/2020		Y	N	U		U	2.16	0.40	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROBUTANESULFONIC ACID	8/1/2020		Y	N	U	UJ	UJ	0.22	0.027	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROBUTYRIC ACID (PFBA)	8/1/2020		Y	N	BJ	U	U	0.22	0.030	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUORODECANE SULFONIC ACID	8/1/2020		Y	N	U	UJ	UJ	0.22	0.042	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUORODECANOIC ACID (PFDA)	8/1/2020		Y	N	U	UJ	UJ	0.22	0.024	ug/kg
SB-13(3-4)-20200727	460-214419-2	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/1/2020		Y	N	U		U	2.16	0.27	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/1/2020		Y	N	U	UJ	UJ	0.22	0.038	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUORONONANOIC ACID	8/1/2020		Y	N	U	UJ	UJ	0.22	0.039	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/1/2020		Y	N	U	UJ	UJ	0.22	0.055	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROUNDECANOIC ACID (PFUnA)	8/1/2020		Y	N	U	UJ	UJ	0.22	0.039	ug/kg
SB-13(3-4)-20200727	460-214419-2	Perfluoroheptanoic Acid (PFHpA)	8/1/2020	0.066	Y	Y	J	J	J	0.22	0.031	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROHEXANESULFONIC ACID	8/1/2020	0.036	Y	Y	J	J	J	0.22	0.033	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROPENTANOIC ACID (PFPeA)	8/1/2020	0.27	Y	Y				0.22	0.083	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROOCTANE SULFONIC ACID	8/1/2020	0.25	Y	Y	J	J	J	0.54	0.22	ug/kg
SB-13(3-4)-20200727	460-214419-2	Perfluorooctanoic acid (PFOA)	8/1/2020	0.14	Y	Y	J	J	J	0.22	0.093	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUOROHEXANOIC ACID (PFHxA)	8/1/2020	0.22	Y	Y		J	J	0.22	0.045	ug/kg
SB-13(3-4)-20200727	460-214419-2	PERFLUORODODECANOIC ACID (PFDoA)	8/1/2020		Y	N	U	UJ	UJ	0.22	0.072	ug/kg

SDG: 4602144191

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/1/2020		Y	N	U	UJ	UJ	0.22	0.058	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROBUTANESULFONIC ACID	8/1/2020		Y	N	U		U	0.22	0.028	ug/kg
SB-14(2-3)-20200727	460-214419-1	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/1/2020		Y	N	U		U	2.23	0.28	ug/kg
SB-14(2-3)-20200727	460-214419-1	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/1/2020		Y	N	U		U	2.23	0.17	ug/kg
SB-14(2-3)-20200727	460-214419-1	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/1/2020		Y	N	U		U	2.23	0.43	ug/kg
SB-14(2-3)-20200727	460-214419-1	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/1/2020		Y	N	U		U	2.23	0.41	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROBUTYRIC ACID (PFBA)	8/1/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUORODECANE SULFONIC ACID	8/1/2020		Y	N	U		U	0.22	0.043	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUORODECANOIC ACID (PFDA)	8/1/2020	0.034	Y	Y	J		J	0.22	0.025	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUORODODECANOIC ACID (PFDoA)	8/1/2020		Y	N	U		U	0.22	0.075	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/1/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-14(2-3)-20200727	460-214419-1	Perfluoroheptanoic Acid (PFHpA)	8/1/2020	0.057	Y	Y	J		J	0.22	0.032	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROHEXANESULFONIC ACID	8/1/2020	0.038	Y	Y	J		J	0.22	0.035	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/1/2020		Y	N	U		U	0.22	0.057	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROHEXANOIC ACID (PFHxA)	8/1/2020	0.25	Y	Y				0.22	0.047	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROUNDECANOIC ACID (PFUnA)	8/1/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/1/2020		Y	N	U		U	0.22	0.060	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROPENTANOIC ACID (PFPeA)	8/1/2020	0.25	Y	Y				0.22	0.086	ug/kg
SB-14(2-3)-20200727	460-214419-1	Perfluorooctanoic acid (PFOA)	8/1/2020		Y	N	U		U	0.22	0.096	ug/kg
SB-14(2-3)-20200727	460-214419-1	PERFLUOROOCTANE SULFONIC ACID	8/1/2020	0.39	Y	Y	J		J	0.56	0.22	ug/kg
SB-14(2-3)-20200727	460-214419-1	Perfluorooctane Sulfonamide (FOSA)	8/1/2020		Y	N	U		U	0.22	0.091	ug/kg

SDG: 4602144191

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	PERFLUORONONANOIC ACID	8/1/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-14(5-6)-20200727	460-214419-5	Perfluorooctanoic acid (PFOA)	8/2/2020		Y	N	U		U	0.22	0.097	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROHEXANESULFONIC ACID	8/2/2020		Y	N	U		U	0.22	0.035	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROBUTANESULFONIC ACID	8/2/2020		Y	N	U		U	0.22	0.028	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUORODECANOIC ACID (PFDA)	8/2/2020	0.034	Y	Y	J		J	0.22	0.025	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/2/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-14(5-6)-20200727	460-214419-5	Perfluoroheptanoic Acid (PFHpA)	8/2/2020		Y	N	U		U	0.22	0.033	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROBUTYRIC ACID (PFBA)	8/2/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROHEXANOIC ACID (PFHxA)	8/2/2020	0.065	Y	Y	J		J	0.22	0.047	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUORONONANOIC ACID	8/2/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-14(5-6)-20200727	460-214419-5	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/2/2020		Y	N	U		U	2.25	0.42	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROOCTANE SULFONIC ACID	8/2/2020		Y	N	U		U	0.56	0.22	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUORODECANE SULFONIC ACID	8/2/2020		Y	N	U		U	0.22	0.044	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROPENTANOIC ACID (PFPeA)	8/2/2020		Y	N	U		U	0.22	0.086	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/2/2020		Y	N	U		U	0.22	0.061	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/2/2020		Y	N	U		U	0.22	0.057	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUOROUNDECANOIC ACID (PFUnA)	8/2/2020		Y	N	U		U	0.22	0.040	ug/kg
SB-14(5-6)-20200727	460-214419-5	Perfluorooctane Sulfonamide (FOSA)	8/2/2020		Y	N	U		U	0.22	0.092	ug/kg
SB-14(5-6)-20200727	460-214419-5	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/2/2020		Y	N	U		U	2.25	0.17	ug/kg
SB-14(5-6)-20200727	460-214419-5	PERFLUORODODECANOIC ACID (PFDoA)	8/2/2020		Y	N	U		U	0.22	0.075	ug/kg
SB-14(5-6)-20200727	460-214419-5	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/2/2020		Y	N	U		U	2.25	0.44	ug/kg

SDG: 4602144191

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/2/2020		Y	N	U	UJ	UJ	2.25	0.28	ug/kg
SB-21(1-2)-20200727	460-214419-3	Perfluorooctane Sulfonamide (FOSA)	8/2/2020		Y	N	U		U	0.22	0.090	ug/kg
SB-21(1-2)-20200727	460-214419-3	Perfluorooctanoic acid (PFOA)	8/2/2020	0.11	Y	Y	J		J	0.22	0.094	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/2/2020		Y	N	U		U	0.22	0.056	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROUNDECANOIC ACID (PFUnA)	8/2/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/2/2020		Y	N	U		U	0.22	0.059	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROHEXANOIC ACID (PFHxA)	8/2/2020		Y	N	U		U	0.22	0.046	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUORONONANOIC ACID	8/2/2020		Y	N	U		U	0.22	0.039	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROHEXANESULFONIC ACID	8/2/2020		Y	N	U		U	0.22	0.034	ug/kg
SB-21(1-2)-20200727	460-214419-3	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/2/2020		Y	N	U		U	2.18	0.27	ug/kg
SB-21(1-2)-20200727	460-214419-3	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/2/2020		Y	N	U		U	2.18	0.16	ug/kg
SB-21(1-2)-20200727	460-214419-3	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/2/2020		Y	N	U		U	2.18	0.43	ug/kg
SB-21(1-2)-20200727	460-214419-3	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/2/2020		Y	N	U		U	2.18	0.40	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/2/2020		Y	N	U		U	0.22	0.038	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROBUTANESULFONIC ACID	8/2/2020		Y	N	U		U	0.22	0.027	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROPENTANOIC ACID (PFPeA)	8/2/2020		Y	N	U		U	0.22	0.084	ug/kg
SB-21(1-2)-20200727	460-214419-3	Perfluoroheptanoic Acid (PFHpA)	8/2/2020		Y	N	U		U	0.22	0.032	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUORODODECANOIC ACID (PFDoA)	8/2/2020		Y	N	U		U	0.22	0.073	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUOROOCTANE SULFONIC ACID	8/2/2020	0.22	Y	Y	J		J	0.55	0.22	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUORODECANOIC ACID (PFDA)	8/2/2020		Y	N	U		U	0.22	0.024	ug/kg
SB-21(1-2)-20200727	460-214419-3	PERFLUORODECANE SULFONIC ACID	8/2/2020		Y	N	U		U	0.22	0.043	ug/kg

SDG: 4602144191

Analytical Method E537(M)

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(1-2)-20200727	460-214419-3	PERFLUOROBUTYRIC ACID (PFBA)	8/2/2020		Y	N	BJ	U	U	0.22	0.031	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROTETRADECANOIC ACID (PFTeA)	8/1/2020		Y	N	U		U	0.21	0.056	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROBUTANESULFONIC ACID	8/1/2020		Y	N	U		U	0.21	0.026	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROTRIDECANOIC ACID (PFTriA)	8/1/2020		Y	N	U		U	0.21	0.053	ug/kg
SB-21(5-6)-20200727	460-214419-4	Perfluorooctanoic acid (PFOA)	8/1/2020		Y	N	U		U	0.21	0.089	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROOCTANE SULFONIC ACID	8/1/2020		Y	N	U		U	0.52	0.21	ug/kg
SB-21(5-6)-20200727	460-214419-4	Perfluorooctane Sulfonamide (FOSA)	8/1/2020		Y	N	U	UJ	UJ	0.21	0.085	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUORONONANOIC ACID	8/1/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROHEXANESULFONIC ACID	8/1/2020		Y	N	U		U	0.21	0.032	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROPENTANOIC ACID (PFPeA)	8/1/2020		Y	N	U		U	0.21	0.080	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROHEPTANE SULFONATE (PFHpS)	8/1/2020		Y	N	U		U	0.21	0.036	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUORODODECANOIC ACID (PFDoA)	8/1/2020		Y	N	U		U	0.21	0.070	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUORODECANOIC ACID (PFDA)	8/1/2020		Y	N	U		U	0.21	0.023	ug/kg
SB-21(5-6)-20200727	460-214419-4	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	8/1/2020		Y	N	U		U	2.08	0.26	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROBUTYRIC ACID (PFBA)	8/1/2020		Y	N	U		U	0.21	0.029	ug/kg
SB-21(5-6)-20200727	460-214419-4	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	8/1/2020		Y	N	U		U	2.08	0.38	ug/kg
SB-21(5-6)-20200727	460-214419-4	2-(N-methyl perfluorooctanesulfonamido) acetic acid	8/1/2020		Y	N	U		U	2.08	0.41	ug/kg
SB-21(5-6)-20200727	460-214419-4	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	8/1/2020		Y	N	U		U	2.08	0.16	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROUNDECANOIC ACID (PFUnA)	8/1/2020		Y	N	U		U	0.21	0.037	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUOROHEXANOIC ACID (PFHxA)	8/1/2020		Y	N	U		U	0.21	0.044	ug/kg
SB-21(5-6)-20200727	460-214419-4	PERFLUORODECANE SULFONIC ACID	8/1/2020		Y	N	U	UJ	UJ	0.21	0.041	ug/kg

Analytical Method	E537(M)										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-21(5-6)-20200727	460-214419-4	Perfluoroheptanoic Acid (PFHpA)	8/1/2020		Y	N	U		U	0.21	0.030	ug/kg

Analytical Method	SW6010										
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-13(3-4)-20200727	460-214419-2	MAGNESIUM	7/30/2020	2440	Y	Y				869	58.8	mg/kg
SB-13(3-4)-20200727	460-214419-2	ANTIMONY	7/30/2020	2.4	Y	Y	J		J	3.5	1.0	mg/kg
SB-13(3-4)-20200727	460-214419-2	ARSENIC	7/30/2020	5.8	Y	Y				2.6	0.53	mg/kg
SB-13(3-4)-20200727	460-214419-2	BARIUM	7/30/2020	102	Y	Y				34.7	3.4	mg/kg
SB-13(3-4)-20200727	460-214419-2	BERYLLIUM	7/30/2020	0.081	Y	Y	J		J	0.35	0.056	mg/kg
SB-13(3-4)-20200727	460-214419-2	CADMIUM	7/30/2020	0.55	Y	Y	J		J	0.69	0.060	mg/kg
SB-13(3-4)-20200727	460-214419-2	CALCIUM	7/30/2020	2000	Y	Y				869	64.2	mg/kg
SB-13(3-4)-20200727	460-214419-2	CHROMIUM, TOTAL	7/30/2020	24.6	Y	Y				1.7	1.2	mg/kg
SB-13(3-4)-20200727	460-214419-2	COBALT	7/30/2020		Y	N	J	U	U	8.7	0.48	mg/kg
SB-13(3-4)-20200727	460-214419-2	ALUMINUM	7/30/2020	10500	Y	Y				34.7	4.9	mg/kg
SB-13(3-4)-20200727	460-214419-2	ZINC	7/30/2020	686	Y	Y				5.2	0.95	mg/kg
SB-13(3-4)-20200727	460-214419-2	COPPER	7/30/2020	34.4	Y	Y				4.3	1.1	mg/kg
SB-13(3-4)-20200727	460-214419-2	MANGANESE	7/30/2020	404	Y	Y				2.6	0.20	mg/kg
SB-13(3-4)-20200727	460-214419-2	NICKEL	7/30/2020	17.1	Y	Y				6.9	0.46	mg/kg
SB-13(3-4)-20200727	460-214419-2	POTASSIUM	7/30/2020	1220	Y	Y				869	53.3	mg/kg
SB-13(3-4)-20200727	460-214419-2	SELENIUM	7/30/2020		Y	N	U		U	3.5	0.59	mg/kg
SB-13(3-4)-20200727	460-214419-2	SILVER	7/30/2020		Y	N	U		U	1.7	0.97	mg/kg
SB-13(3-4)-20200727	460-214419-2	SODIUM	7/30/2020	185	Y	Y	J		J	869	75.6	mg/kg
SB-13(3-4)-20200727	460-214419-2	THALLIUM	7/30/2020		Y	N	U		U	3.5	0.54	mg/kg
SB-13(3-4)-20200727	460-214419-2	VANADIUM	7/30/2020	25.8	Y	Y				8.7	0.81	mg/kg
SB-13(3-4)-20200727	460-214419-2	IRON	7/30/2020	17700	Y	Y				26.1	17.9	mg/kg

SDG: 4602144191

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	LEAD	7/30/2020	194	Y	Y				1.7	0.28	mg/kg
SB-14(2-3)-20200727	460-214419-1	COPPER	7/30/2020	26.5	Y	Y				4.5	1.1	mg/kg
SB-14(2-3)-20200727	460-214419-1	BARIUM	7/30/2020	79.7	Y	Y				35.6	3.4	mg/kg
SB-14(2-3)-20200727	460-214419-1	ALUMINUM	7/30/2020	9700	Y	Y				35.6	5.0	mg/kg
SB-14(2-3)-20200727	460-214419-1	BERYLLIUM	7/30/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-14(2-3)-20200727	460-214419-1	CADMIUM	7/30/2020	0.18	Y	Y	J		J	0.71	0.061	mg/kg
SB-14(2-3)-20200727	460-214419-1	CALCIUM	7/30/2020	18700	Y	Y				891	65.9	mg/kg
SB-14(2-3)-20200727	460-214419-1	COBALT	7/30/2020	10.6	Y	Y				8.9	0.49	mg/kg
SB-14(2-3)-20200727	460-214419-1	IRON	7/30/2020	18300	Y	Y				26.7	18.4	mg/kg
SB-14(2-3)-20200727	460-214419-1	LEAD	7/30/2020	37.7	Y	Y				1.8	0.29	mg/kg
SB-14(2-3)-20200727	460-214419-1	MAGNESIUM	7/30/2020	6660	Y	Y				891	60.3	mg/kg
SB-14(2-3)-20200727	460-214419-1	THALLIUM	7/30/2020		Y	N	U		U	3.6	0.55	mg/kg
SB-14(2-3)-20200727	460-214419-1	ANTIMONY	7/30/2020	1.7	Y	Y	J		J	3.6	1.0	mg/kg
SB-14(2-3)-20200727	460-214419-1	ZINC	7/30/2020	57.1	Y	Y				5.3	0.97	mg/kg
SB-14(2-3)-20200727	460-214419-1	CHROMIUM, TOTAL	7/30/2020	35.5	Y	Y				1.8	1.3	mg/kg
SB-14(2-3)-20200727	460-214419-1	VANADIUM	7/30/2020	38.5	Y	Y				8.9	0.83	mg/kg
SB-14(2-3)-20200727	460-214419-1	MANGANESE	7/30/2020	384	Y	Y				2.7	0.20	mg/kg
SB-14(2-3)-20200727	460-214419-1	SODIUM	7/30/2020	351	Y	Y	J		J	891	77.5	mg/kg
SB-14(2-3)-20200727	460-214419-1	SILVER	7/30/2020		Y	N	U		U	1.8	1.0	mg/kg
SB-14(2-3)-20200727	460-214419-1	SELENIUM	7/30/2020		Y	N	U		U	3.6	0.61	mg/kg
SB-14(2-3)-20200727	460-214419-1	POTASSIUM	7/30/2020	1960	Y	Y				891	54.7	mg/kg
SB-14(2-3)-20200727	460-214419-1	NICKEL	7/30/2020	20.6	Y	Y				7.1	0.47	mg/kg
SB-14(2-3)-20200727	460-214419-1	ARSENIC	7/30/2020	4.2	Y	Y				2.7	0.55	mg/kg
SB-14(5-6)-20200727	460-214419-5	MAGNESIUM	8/5/2020	8580	Y	Y				2740	186	mg/kg
SB-14(5-6)-20200727	460-214419-5	ALUMINUM	8/5/2020	11400	Y	Y				110	15.5	mg/kg

SDG: 4602144191

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	VANADIUM	8/5/2020	42.7	Y	Y				27.4	2.6	mg/kg
SB-14(5-6)-20200727	460-214419-5	THALLIUM	8/5/2020		Y	N	U		U	11.0	1.7	mg/kg
SB-14(5-6)-20200727	460-214419-5	SODIUM	8/5/2020	323	Y	Y	J		J	2740	239	mg/kg
SB-14(5-6)-20200727	460-214419-5	SILVER	8/5/2020		Y	N	U		U	5.5	3.1	mg/kg
SB-14(5-6)-20200727	460-214419-5	SELENIUM	8/5/2020	2.1	Y	Y	J		J	11.0	1.9	mg/kg
SB-14(5-6)-20200727	460-214419-5	NICKEL	8/5/2020	24.9	Y	Y				21.9	1.4	mg/kg
SB-14(5-6)-20200727	460-214419-5	ZINC	8/5/2020	75.3	Y	Y				16.5	3.0	mg/kg
SB-14(5-6)-20200727	460-214419-5	LEAD	8/5/2020	48.1	Y	Y				5.5	0.89	mg/kg
SB-14(5-6)-20200727	460-214419-5	IRON	8/5/2020	20900	Y	Y				82.3	56.5	mg/kg
SB-14(5-6)-20200727	460-214419-5	COPPER	8/5/2020	37.2	Y	Y				13.7	3.4	mg/kg
SB-14(5-6)-20200727	460-214419-5	COBALT	8/5/2020	9.8	Y	Y	J		J	27.4	1.5	mg/kg
SB-14(5-6)-20200727	460-214419-5	CHROMIUM, TOTAL	8/5/2020	30.6	Y	Y				5.5	3.9	mg/kg
SB-14(5-6)-20200727	460-214419-5	CALCIUM	8/5/2020	19100	Y	Y				2740	203	mg/kg
SB-14(5-6)-20200727	460-214419-5	CADMIUM	8/5/2020		Y	N	U		U	2.2	0.19	mg/kg
SB-14(5-6)-20200727	460-214419-5	BERYLLIUM	8/5/2020		Y	N	U		U	1.1	0.18	mg/kg
SB-14(5-6)-20200727	460-214419-5	BARIUM	8/5/2020	90.5	Y	Y	J		J	110	10.6	mg/kg
SB-14(5-6)-20200727	460-214419-5	ANTIMONY	8/5/2020		Y	N	U		U	11.0	3.2	mg/kg
SB-14(5-6)-20200727	460-214419-5	POTASSIUM	8/5/2020	2530	Y	Y	J		J	2740	168	mg/kg
SB-14(5-6)-20200727	460-214419-5	ARSENIC	8/5/2020	4.4	Y	Y	J		J	8.2	1.7	mg/kg
SB-14(5-6)-20200727	460-214419-5	MANGANESE	8/5/2020	310	Y	Y				8.2	0.62	mg/kg
SB-21(1-2)-20200727	460-214419-3	THALLIUM	7/30/2020		Y	N	U		U	3.7	0.57	mg/kg
SB-21(1-2)-20200727	460-214419-3	BERYLLIUM	7/30/2020	0.10	Y	Y	J		J	0.37	0.059	mg/kg
SB-21(1-2)-20200727	460-214419-3	SELENIUM	7/30/2020	0.80	Y	Y	J		J	3.7	0.62	mg/kg
SB-21(1-2)-20200727	460-214419-3	SILVER	7/30/2020		Y	N	U		U	1.8	1.0	mg/kg
SB-21(1-2)-20200727	460-214419-3	VANADIUM	7/30/2020	24.6	Y	Y				9.2	0.85	mg/kg

SDG: 4602144191

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(1-2)-20200727	460-214419-3	POTASSIUM	7/30/2020	1190	Y	Y				919	56.4	mg/kg
SB-21(1-2)-20200727	460-214419-3	MANGANESE	7/30/2020	232	Y	Y				2.8	0.21	mg/kg
SB-21(1-2)-20200727	460-214419-3	SODIUM	7/30/2020	119	Y	Y	J		J	919	79.9	mg/kg
SB-21(1-2)-20200727	460-214419-3	MAGNESIUM	7/30/2020	2250	Y	Y				919	62.2	mg/kg
SB-21(1-2)-20200727	460-214419-3	LEAD	7/30/2020	153	Y	Y				1.8	0.30	mg/kg
SB-21(1-2)-20200727	460-214419-3	IRON	7/30/2020	14400	Y	Y				27.6	18.9	mg/kg
SB-21(1-2)-20200727	460-214419-3	NICKEL	7/30/2020	12.8	Y	Y				7.4	0.48	mg/kg
SB-21(1-2)-20200727	460-214419-3	COBALT	7/30/2020		Y	N	J	U	U	9.2	0.51	mg/kg
SB-21(1-2)-20200727	460-214419-3	CHROMIUM, TOTAL	7/30/2020	19.3	Y	Y				1.8	1.3	mg/kg
SB-21(1-2)-20200727	460-214419-3	BARIUM	7/30/2020	79.4	Y	Y				36.8	3.5	mg/kg
SB-21(1-2)-20200727	460-214419-3	CALCIUM	7/30/2020	1350	Y	Y				919	67.9	mg/kg
SB-21(1-2)-20200727	460-214419-3	ARSENIC	7/30/2020	5.5	Y	Y				2.8	0.57	mg/kg
SB-21(1-2)-20200727	460-214419-3	ANTIMONY	7/30/2020	1.3	Y	Y	J		J	3.7	1.1	mg/kg
SB-21(1-2)-20200727	460-214419-3	ZINC	7/30/2020	98.1	Y	Y				5.5	1.0	mg/kg
SB-21(1-2)-20200727	460-214419-3	COPPER	7/30/2020	22.7	Y	Y				4.6	1.1	mg/kg
SB-21(1-2)-20200727	460-214419-3	CADMIUM	7/30/2020	0.15	Y	Y	J		J	0.74	0.063	mg/kg
SB-21(1-2)-20200727	460-214419-3	ALUMINUM	7/30/2020	10100	Y	Y				36.8	5.2	mg/kg
SB-21(5-6)-20200727	460-214419-4	COBALT	7/30/2020		Y	N	J	U	U	8.5	0.47	mg/kg
SB-21(5-6)-20200727	460-214419-4	CHROMIUM, TOTAL	7/30/2020	18.6	Y	Y				1.7	1.2	mg/kg
SB-21(5-6)-20200727	460-214419-4	CALCIUM	7/30/2020	666	Y	Y	J		J	854	63.1	mg/kg
SB-21(5-6)-20200727	460-214419-4	CADMIUM	7/30/2020		Y	N	U		U	0.68	0.059	mg/kg
SB-21(5-6)-20200727	460-214419-4	COPPER	7/30/2020	12.1	Y	Y				4.3	1.1	mg/kg
SB-21(5-6)-20200727	460-214419-4	BARIUM	7/30/2020	61.3	Y	Y				34.1	3.3	mg/kg
SB-21(5-6)-20200727	460-214419-4	MAGNESIUM	7/30/2020	1970	Y	Y				854	57.8	mg/kg
SB-21(5-6)-20200727	460-214419-4	ARSENIC	7/30/2020	1.7	Y	Y	J		J	2.6	0.52	mg/kg

SDG: 4602144191

Analytical Method	SW6010											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-21(5-6)-20200727	460-214419-4	ANTIMONY	7/30/2020	2.5	Y	Y	J		J	3.4	0.98	mg/kg
SB-21(5-6)-20200727	460-214419-4	ALUMINUM	7/30/2020	9490	Y	Y				34.1	4.8	mg/kg
SB-21(5-6)-20200727	460-214419-4	BERYLLIUM	7/30/2020		Y	N	U		U	0.34	0.055	mg/kg
SB-21(5-6)-20200727	460-214419-4	SILVER	7/30/2020		Y	N	U		U	1.7	0.96	mg/kg
SB-21(5-6)-20200727	460-214419-4	ZINC	7/30/2020	23.3	Y	Y				5.1	0.93	mg/kg
SB-21(5-6)-20200727	460-214419-4	VANADIUM	7/30/2020	20.5	Y	Y				8.5	0.79	mg/kg
SB-21(5-6)-20200727	460-214419-4	SODIUM	7/30/2020	119	Y	Y	J		J	854	74.3	mg/kg
SB-21(5-6)-20200727	460-214419-4	POTASSIUM	7/30/2020	1910	Y	Y				854	52.4	mg/kg
SB-21(5-6)-20200727	460-214419-4	SELENIUM	7/30/2020		Y	N	U		U	3.4	0.58	mg/kg
SB-21(5-6)-20200727	460-214419-4	IRON	7/30/2020	15200	Y	Y				25.6	17.6	mg/kg
SB-21(5-6)-20200727	460-214419-4	LEAD	7/30/2020	7.4	Y	Y				1.7	0.28	mg/kg
SB-21(5-6)-20200727	460-214419-4	MANGANESE	7/30/2020	509	Y	Y				2.6	0.19	mg/kg
SB-21(5-6)-20200727	460-214419-4	NICKEL	7/30/2020	14.3	Y	Y				6.8	0.45	mg/kg
SB-21(5-6)-20200727	460-214419-4	THALLIUM	7/30/2020		Y	N	U		U	3.4	0.53	mg/kg

Analytical Method	SW7471B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-13(3-4)-20200727	460-214419-2	MERCURY	8/3/2020	1.9	Y	Y				0.097	0.023	mg/kg
SB-14(2-3)-20200727	460-214419-1	MERCURY	8/3/2020	0.068	Y	Y				0.018	0.0043	mg/kg
SB-14(5-6)-20200727	460-214419-5	MERCURY	8/3/2020	0.079	Y	Y				0.019	0.0044	mg/kg
SB-21(1-2)-20200727	460-214419-3	MERCURY	8/3/2020	0.80	Y	Y				0.018	0.0043	mg/kg
SB-21(5-6)-20200727	460-214419-4	MERCURY	8/3/2020		Y	N	U		U	0.018	0.0041	mg/kg

Analytical Method	SW8081B											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Validated**	**Detect**	**Lab Qual**	**Val Qual**	**Final qual**	**RL**	**MDL**	**Units**
SB-13(3-4)-20200727	460-214419-2	ALPHA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg

SDG: 4602144191

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	ENDRIN KETONE	7/31/2020		Y	N	U		U	0.0078	0.0015	mg/kg
SB-13(3-4)-20200727	460-214419-2	ENDOSULFAN SULFATE	7/31/2020		Y	N	U		U	0.0078	0.00098	mg/kg
SB-13(3-4)-20200727	460-214419-2	ENDOSULFAN	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-13(3-4)-20200727	460-214419-2	DIELDRIN	7/31/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-13(3-4)-20200727	460-214419-2	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00048	mg/kg
SB-13(3-4)-20200727	460-214419-2	ENDRIN	7/31/2020		Y	N	U		U	0.0078	0.0011	mg/kg
SB-13(3-4)-20200727	460-214419-2	ENDRIN ALDEHYDE	7/31/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-13(3-4)-20200727	460-214419-2	Chlordane (Technical)	7/31/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-13(3-4)-20200727	460-214419-2	CHLORDANE	7/31/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-13(3-4)-20200727	460-214419-2	GAMMA BHC (LINDANE)	7/31/2020		Y	N	U		U	0.0023	0.00072	mg/kg
SB-13(3-4)-20200727	460-214419-2	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00087	mg/kg
SB-13(3-4)-20200727	460-214419-2	ALPHA CHLORDANE	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-13(3-4)-20200727	460-214419-2	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00079	mg/kg
SB-13(3-4)-20200727	460-214419-2	ALDRIN	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-13(3-4)-20200727	460-214419-2	HEPTACHLOR	7/31/2020		Y	N	U		U	0.0078	0.00092	mg/kg
SB-13(3-4)-20200727	460-214419-2	HEPTACHLOR EPOXIDE	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-13(3-4)-20200727	460-214419-2	METHOXYCHLOR	7/31/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-13(3-4)-20200727	460-214419-2	P,P'-DDD	7/31/2020		Y	N	U		U	0.0078	0.0013	mg/kg
SB-13(3-4)-20200727	460-214419-2	P,P'-DDE	7/31/2020		Y	N	U		U	0.0078	0.00092	mg/kg
SB-13(3-4)-20200727	460-214419-2	P,P'-DDT	7/31/2020		Y	N	U		U	0.0078	0.0014	mg/kg
SB-13(3-4)-20200727	460-214419-2	TOXAPHENE	7/31/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-13(3-4)-20200727	460-214419-2	trans-Chlordane	7/31/2020		Y	N	U		U	0.0078	0.0014	mg/kg
SB-13(3-4)-20200727	460-214419-2	BETA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0078	0.0020	mg/kg
SB-14(2-3)-20200727	460-214419-1	TOXAPHENE	7/31/2020		Y	N	U		U	0.075	0.027	mg/kg

SDG: 4602144191

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	ALDRIN	7/31/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-14(2-3)-20200727	460-214419-1	Chlordane (Technical)	7/31/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-14(2-3)-20200727	460-214419-1	METHOXYCHLOR	7/31/2020		Y	N	U		U	0.0075	0.0017	mg/kg
SB-14(2-3)-20200727	460-214419-1	HEPTACHLOR EPOXIDE	7/31/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-14(2-3)-20200727	460-214419-1	HEPTACHLOR	7/31/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-14(2-3)-20200727	460-214419-1	GAMMA BHC (LINDANE)	7/31/2020		Y	N	U		U	0.0022	0.00070	mg/kg
SB-14(2-3)-20200727	460-214419-1	ENDRIN KETONE	7/31/2020		Y	N	U		U	0.0075	0.0015	mg/kg
SB-14(2-3)-20200727	460-214419-1	ENDRIN ALDEHYDE	7/31/2020		Y	N	U		U	0.0075	0.0018	mg/kg
SB-14(2-3)-20200727	460-214419-1	ENDRIN	7/31/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-14(2-3)-20200727	460-214419-1	ENDOSULFAN SULFATE	7/31/2020		Y	N	U		U	0.0075	0.00094	mg/kg
SB-14(2-3)-20200727	460-214419-1	ENDOSULFAN	7/31/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-14(2-3)-20200727	460-214419-1	P,P'-DDD	7/31/2020	0.0033	Y	Y	J		J	0.0075	0.0013	mg/kg
SB-14(2-3)-20200727	460-214419-1	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0022	0.00046	mg/kg
SB-14(2-3)-20200727	460-214419-1	trans-Chlordane	7/31/2020		Y	N	U		U	0.0075	0.0013	mg/kg
SB-14(2-3)-20200727	460-214419-1	CHLORDANE	7/31/2020		Y	N	U		U	0.075	0.018	mg/kg
SB-14(2-3)-20200727	460-214419-1	BETA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0075	0.0019	mg/kg
SB-14(2-3)-20200727	460-214419-1	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0022	0.00084	mg/kg
SB-14(2-3)-20200727	460-214419-1	ALPHA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0075	0.0011	mg/kg
SB-14(2-3)-20200727	460-214419-1	ALPHA CHLORDANE	7/31/2020		Y	N	U		U	0.0075	0.0012	mg/kg
SB-14(2-3)-20200727	460-214419-1	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0022	0.00076	mg/kg
SB-14(2-3)-20200727	460-214419-1	P,P'-DDE	7/31/2020		Y	N	U		U	0.0075	0.00089	mg/kg
SB-14(2-3)-20200727	460-214419-1	P,P'-DDT	7/31/2020	0.027	Y	Y				0.0075	0.0014	mg/kg
SB-14(2-3)-20200727	460-214419-1	DIELDRIN	7/31/2020		Y	N	U		U	0.0022	0.00098	mg/kg
SB-14(5-6)-20200727	460-214419-5	ALPHA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0077	0.0012	mg/kg

SDG: 4602144191

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	TOXAPHENE	7/31/2020		Y	N	U		U	0.077	0.028	mg/kg
SB-14(5-6)-20200727	460-214419-5	P,P'-DDD	7/31/2020		Y	N	U		U	0.0077	0.0013	mg/kg
SB-14(5-6)-20200727	460-214419-5	ENDRIN KETONE	7/31/2020		Y	N	U		U	0.0077	0.0015	mg/kg
SB-14(5-6)-20200727	460-214419-5	METHOXYCHLOR	7/31/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-14(5-6)-20200727	460-214419-5	HEPTACHLOR EPOXIDE	7/31/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-14(5-6)-20200727	460-214419-5	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00078	mg/kg
SB-14(5-6)-20200727	460-214419-5	HEPTACHLOR	7/31/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-14(5-6)-20200727	460-214419-5	P,P'-DDT	7/31/2020	0.013	Y	Y		J	J	0.0077	0.0014	mg/kg
SB-14(5-6)-20200727	460-214419-5	ENDRIN ALDEHYDE	7/31/2020		Y	N	U		U	0.0077	0.0018	mg/kg
SB-14(5-6)-20200727	460-214419-5	ENDRIN	7/31/2020		Y	N	U		U	0.0077	0.0011	mg/kg
SB-14(5-6)-20200727	460-214419-5	ENDOSULFAN SULFATE	7/31/2020		Y	N	U		U	0.0077	0.00097	mg/kg
SB-14(5-6)-20200727	460-214419-5	BETA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0077	0.0020	mg/kg
SB-14(5-6)-20200727	460-214419-5	GAMMA BHC (LINDANE)	7/31/2020		Y	N	U		U	0.0023	0.00071	mg/kg
SB-14(5-6)-20200727	460-214419-5	ALDRIN	7/31/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-14(5-6)-20200727	460-214419-5	ALPHA CHLORDANE	7/31/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-14(5-6)-20200727	460-214419-5	P,P'-DDE	7/31/2020		Y	N	U		U	0.0077	0.00091	mg/kg
SB-14(5-6)-20200727	460-214419-5	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00086	mg/kg
SB-14(5-6)-20200727	460-214419-5	ENDOSULFAN	7/31/2020		Y	N	U		U	0.0077	0.0012	mg/kg
SB-14(5-6)-20200727	460-214419-5	CHLORDANE	7/31/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-14(5-6)-20200727	460-214419-5	Chlordane (Technical)	7/31/2020		Y	N	U		U	0.077	0.019	mg/kg
SB-14(5-6)-20200727	460-214419-5	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-14(5-6)-20200727	460-214419-5	DIELDRIN	7/31/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-14(5-6)-20200727	460-214419-5	trans-Chlordane	7/31/2020		Y	N	U		U	0.0077	0.0014	mg/kg
SB-21(1-2)-20200727	460-214419-3	P,P'-DDT	7/31/2020		Y	N	U		U	0.0078	0.0014	mg/kg

SDG: 4602144191

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(1-2)-20200727	460-214419-3	ALDRIN	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-21(1-2)-20200727	460-214419-3	HEPTACHLOR EPOXIDE	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-21(1-2)-20200727	460-214419-3	Chlordane (Technical)	7/31/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-21(1-2)-20200727	460-214419-3	trans-Chlordane	7/31/2020		Y	N	U		U	0.0078	0.0014	mg/kg
SB-21(1-2)-20200727	460-214419-3	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00079	mg/kg
SB-21(1-2)-20200727	460-214419-3	P,P'-DDE	7/31/2020		Y	N	U		U	0.0078	0.00091	mg/kg
SB-21(1-2)-20200727	460-214419-3	P,P'-DDD	7/31/2020		Y	N	U		U	0.0078	0.0013	mg/kg
SB-21(1-2)-20200727	460-214419-3	METHOXYCHLOR	7/31/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-21(1-2)-20200727	460-214419-3	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00047	mg/kg
SB-21(1-2)-20200727	460-214419-3	TOXAPHENE	7/31/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-21(1-2)-20200727	460-214419-3	ALPHA CHLORDANE	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-21(1-2)-20200727	460-214419-3	ALPHA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-21(1-2)-20200727	460-214419-3	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0023	0.00087	mg/kg
SB-21(1-2)-20200727	460-214419-3	BETA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0078	0.0020	mg/kg
SB-21(1-2)-20200727	460-214419-3	DIELDRIN	7/31/2020		Y	N	U		U	0.0023	0.0010	mg/kg
SB-21(1-2)-20200727	460-214419-3	CHLORDANE	7/31/2020		Y	N	U		U	0.078	0.019	mg/kg
SB-21(1-2)-20200727	460-214419-3	HEPTACHLOR	7/31/2020		Y	N	U		U	0.0078	0.00091	mg/kg
SB-21(1-2)-20200727	460-214419-3	ENDOSULFAN	7/31/2020		Y	N	U		U	0.0078	0.0012	mg/kg
SB-21(1-2)-20200727	460-214419-3	ENDOSULFAN SULFATE	7/31/2020		Y	N	U		U	0.0078	0.00097	mg/kg
SB-21(1-2)-20200727	460-214419-3	ENDRIN	7/31/2020		Y	N	U		U	0.0078	0.0011	mg/kg
SB-21(1-2)-20200727	460-214419-3	ENDRIN ALDEHYDE	7/31/2020		Y	N	U		U	0.0078	0.0018	mg/kg
SB-21(1-2)-20200727	460-214419-3	ENDRIN KETONE	7/31/2020		Y	N	U		U	0.0078	0.0015	mg/kg
SB-21(1-2)-20200727	460-214419-3	GAMMA BHC (LINDANE)	7/31/2020		Y	N	U		U	0.0023	0.00072	mg/kg
SB-21(5-6)-20200727	460-214419-4	ALPHA CHLORDANE	7/31/2020		Y	N	U		U	0.0074	0.0012	mg/kg

SDG: 4602144191

Analytical Method SW8081B

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(5-6)-20200727	460-214419-4	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0022	0.00045	mg/kg
SB-21(5-6)-20200727	460-214419-4	P,P'-DDD	7/31/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-21(5-6)-20200727	460-214419-4	METHOXYCHLOR	7/31/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-21(5-6)-20200727	460-214419-4	HEPTACHLOR EPOXIDE	7/31/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-21(5-6)-20200727	460-214419-4	HEPTACHLOR	7/31/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-21(5-6)-20200727	460-214419-4	GAMMA BHC (LINDANE)	7/31/2020		Y	N	U		U	0.0022	0.00068	mg/kg
SB-21(5-6)-20200727	460-214419-4	ENDRIN KETONE	7/31/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-21(5-6)-20200727	460-214419-4	ENDRIN ALDEHYDE	7/31/2020		Y	N	U		U	0.0074	0.0017	mg/kg
SB-21(5-6)-20200727	460-214419-4	ENDRIN	7/31/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-21(5-6)-20200727	460-214419-4	ENDOSULFAN SULFATE	7/31/2020		Y	N	U		U	0.0074	0.00092	mg/kg
SB-21(5-6)-20200727	460-214419-4	ALDRIN	7/31/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-21(5-6)-20200727	460-214419-4	DIELDRIN	7/31/2020		Y	N	U		U	0.0022	0.00096	mg/kg
SB-21(5-6)-20200727	460-214419-4	trans-Chlordane	7/31/2020		Y	N	U		U	0.0074	0.0013	mg/kg
SB-21(5-6)-20200727	460-214419-4	Chlordane (Technical)	7/31/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-21(5-6)-20200727	460-214419-4	CHLORDANE	7/31/2020		Y	N	U		U	0.074	0.018	mg/kg
SB-21(5-6)-20200727	460-214419-4	BETA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0074	0.0019	mg/kg
SB-21(5-6)-20200727	460-214419-4	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0022	0.00083	mg/kg
SB-21(5-6)-20200727	460-214419-4	ALPHA ENDOSULFAN	7/31/2020		Y	N	U		U	0.0074	0.0011	mg/kg
SB-21(5-6)-20200727	460-214419-4	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	7/31/2020		Y	N	U		U	0.0022	0.00075	mg/kg
SB-21(5-6)-20200727	460-214419-4	P,P'-DDE	7/31/2020		Y	N	U		U	0.0074	0.00087	mg/kg
SB-21(5-6)-20200727	460-214419-4	P,P'-DDT	7/31/2020		Y	N	U		U	0.0074	0.0014	mg/kg
SB-21(5-6)-20200727	460-214419-4	TOXAPHENE	7/31/2020		Y	N	U		U	0.074	0.027	mg/kg
SB-21(5-6)-20200727	460-214419-4	ENDOSULFAN	7/31/2020		Y	N	U		U	0.0074	0.0011	mg/kg

SDG: 4602144191

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	PCB-1248 (AROCLOR 1248)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1016 (AROCLOR 1016)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1221 (AROCLOR 1221)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1242 (AROCLOR 1242)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1254 (AROCLOR 1254)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1260 (AROCLOR 1260)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1262 (AROCLOR 1262)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1268 (AROCLOR 1268)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-13(3-4)-20200727	460-214419-2	TOTAL PCBS	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-13(3-4)-20200727	460-214419-2	PCB-1232 (AROCLOR 1232)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1260 (AROCLOR 1260)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1262 (AROCLOR 1262)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1268 (AROCLOR 1268)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1016 (AROCLOR 1016)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1221 (AROCLOR 1221)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1232 (AROCLOR 1232)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1242 (AROCLOR 1242)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1248 (AROCLOR 1248)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PCB-1254 (AROCLOR 1254)	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	TOTAL PCBS	7/30/2020		Y	N	U		U	0.075	0.010	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1254 (AROCLOR 1254)	7/30/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1016 (AROCLOR 1016)	7/30/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1221 (AROCLOR 1221)	7/30/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1232 (AROCLOR 1232)	7/30/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1248 (AROCLOR 1248)	7/30/2020		Y	N	U		U	0.077	0.010	mg/kg

SDG: 4602144191

Analytical Method SW8082A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	PCB-1260 (AROCLOR 1260)	7/30/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1262 (AROCLOR 1262)	7/30/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1268 (AROCLOR 1268)	7/30/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-14(5-6)-20200727	460-214419-5	TOTAL PCBS	7/30/2020		Y	N	U		U	0.077	0.011	mg/kg
SB-14(5-6)-20200727	460-214419-5	PCB-1242 (AROCLOR 1242)	7/30/2020		Y	N	U		U	0.077	0.010	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1262 (AROCLOR 1262)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1221 (AROCLOR 1221)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1232 (AROCLOR 1232)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1016 (AROCLOR 1016)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1242 (AROCLOR 1242)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1248 (AROCLOR 1248)	7/30/2020		Y	N	U		U	0.078	0.010	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1260 (AROCLOR 1260)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1268 (AROCLOR 1268)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-21(1-2)-20200727	460-214419-3	TOTAL PCBS	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-21(1-2)-20200727	460-214419-3	PCB-1254 (AROCLOR 1254)	7/30/2020		Y	N	U		U	0.078	0.011	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1232 (AROCLOR 1232)	7/30/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1254 (AROCLOR 1254)	7/30/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-21(5-6)-20200727	460-214419-4	TOTAL PCBS	7/30/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1268 (AROCLOR 1268)	7/30/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1016 (AROCLOR 1016)	7/30/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1260 (AROCLOR 1260)	7/30/2020		Y	N	U		U	0.074	0.010	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1248 (AROCLOR 1248)	7/30/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1221 (AROCLOR 1221)	7/30/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1242 (AROCLOR 1242)	7/30/2020		Y	N	U		U	0.074	0.0098	mg/kg
SB-21(5-6)-20200727	460-214419-4	PCB-1262 (AROCLOR 1262)	7/30/2020		Y	N	U		U	0.074	0.010	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/1/2020		Y	N	U		U	0.0048	0.0015	mg/kg
SB-13(3-4)-20200727	460-214419-2	CHLOROETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00097	0.00050	mg/kg
SB-13(3-4)-20200727	460-214419-2	CHLOROFORM	8/1/2020		Y	N	U		U	0.00097	0.00031	mg/kg
SB-13(3-4)-20200727	460-214419-2	CHLOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00097	0.00042	mg/kg
SB-13(3-4)-20200727	460-214419-2	Cis-1,2-Dichloroethylene	8/1/2020		Y	N	U		U	0.00097	0.00015	mg/kg
SB-13(3-4)-20200727	460-214419-2	CIS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00097	0.00026	mg/kg
SB-13(3-4)-20200727	460-214419-2	CYCLOHEXANE	8/1/2020		Y	N	U		U	0.00097	0.00021	mg/kg
SB-13(3-4)-20200727	460-214419-2	DIBROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00097	0.00019	mg/kg
SB-13(3-4)-20200727	460-214419-2	CHLOROBENZENE	8/1/2020		Y	N	U		U	0.00097	0.00017	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,2-DIBROMO-3-CHLOROPROPANE	8/1/2020		Y	N	U		U	0.00097	0.00044	mg/kg
SB-13(3-4)-20200727	460-214419-2	METHYLCYCLOHEXANE	8/1/2020		Y	N	U		U	0.00097	0.00048	mg/kg
SB-13(3-4)-20200727	460-214419-2	METHYL ETHYL KETONE (2-BUTANONE)	8/1/2020		Y	N	U		U	0.0048	0.0026	mg/kg
SB-13(3-4)-20200727	460-214419-2	ETHYLBENZENE	8/1/2020		Y	N	U		U	0.00097	0.00019	mg/kg
SB-13(3-4)-20200727	460-214419-2	Isopropylbenzene (Cumene)	8/1/2020		Y	N	U		U	0.00097	0.00012	mg/kg
SB-13(3-4)-20200727	460-214419-2	M,P-XYLENES	8/1/2020		Y	N	U		U	0.00097	0.00017	mg/kg
SB-13(3-4)-20200727	460-214419-2	METHYL ACETATE	8/1/2020		Y	N	U		U	0.0048	0.0042	mg/kg
SB-13(3-4)-20200727	460-214419-2	DICHLORODIFLUOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00097	0.00033	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,2-DICHLOROPROPANE	8/1/2020		Y	N	U		U	0.00097	0.00041	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,1,1-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00097	0.00023	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,1,2,2-TETRACHLOROETHANE	8/1/2020		Y	N	U		U	0.00097	0.00021	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/1/2020		Y	N	U		U	0.00097	0.00029	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,1,2-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00097	0.00017	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,1-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00097	0.00020	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,1-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00097	0.00022	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	1,2,3-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00097	0.00017	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,2,4-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00097	0.00035	mg/kg
SB-13(3-4)-20200727	460-214419-2	TRANS-1,2-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00097	0.00024	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/1/2020		Y	N	U		U	0.00097	0.00017	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,2-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00097	0.00014	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,2-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00097	0.00029	mg/kg
SB-13(3-4)-20200727	460-214419-2	CARBON TETRACHLORIDE	8/1/2020		Y	N	U		U	0.00097	0.00037	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,3-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00097	0.00015	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,4-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00097	0.00022	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,4-DIOXANE (P-DIOXANE)	8/1/2020		Y	N	U		U	0.019	0.0089	mg/kg
SB-13(3-4)-20200727	460-214419-2	2-HEXANONE	8/1/2020		Y	N	UT	UJ	UJ	0.0048	0.0017	mg/kg
SB-13(3-4)-20200727	460-214419-2	ACETONE	8/1/2020		Y	N	U		U	0.0058	0.0055	mg/kg
SB-13(3-4)-20200727	460-214419-2	BENZENE	8/1/2020		Y	N	U		U	0.00097	0.00025	mg/kg
SB-13(3-4)-20200727	460-214419-2	BROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00097	0.00027	mg/kg
SB-13(3-4)-20200727	460-214419-2	BROMODICHLOROMETHANE	8/1/2020		Y	N	U		U	0.00097	0.00025	mg/kg
SB-13(3-4)-20200727	460-214419-2	BROMOFORM	8/1/2020		Y	N	U		U	0.00097	0.00041	mg/kg
SB-13(3-4)-20200727	460-214419-2	BROMOMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00097	0.00046	mg/kg
SB-13(3-4)-20200727	460-214419-2	CARBON DISULFIDE	8/1/2020		Y	N	U		U	0.00097	0.00026	mg/kg
SB-13(3-4)-20200727	460-214419-2	METHYLENE CHLORIDE	8/1/2020		Y	N	U		U	0.00097	0.00045	mg/kg
SB-13(3-4)-20200727	460-214419-2	TETRACHLOROETHYLENE(PCE)	8/1/2020		Y	N	U		U	0.00097	0.00014	mg/kg
SB-13(3-4)-20200727	460-214419-2	STYRENE	8/1/2020		Y	N	U		U	0.00097	0.00027	mg/kg
SB-13(3-4)-20200727	460-214419-2	TERT-BUTYL METHYL ETHER	8/1/2020		Y	N	U		U	0.00097	0.00012	mg/kg
SB-13(3-4)-20200727	460-214419-2	TOLUENE	8/1/2020		Y	N	U		U	0.00097	0.00023	mg/kg
SB-13(3-4)-20200727	460-214419-2	TRANS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00097	0.00026	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	TRICHLOROETHYLENE (TCE)	8/1/2020		Y	N	U		U	0.00097	0.00014	mg/kg
SB-13(3-4)-20200727	460-214419-2	TRICHLOROFLUOROMETHANE	8/1/2020		Y	N	U		U	0.00097	0.00039	mg/kg
SB-13(3-4)-20200727	460-214419-2	VINYL CHLORIDE	8/1/2020		Y	N	U		U	0.00097	0.00053	mg/kg
SB-13(3-4)-20200727	460-214419-2	O-XYLENE (1,2-DIMETHYLBENZENE)	8/1/2020		Y	N	U		U	0.00097	0.00019	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2,3-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,1-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,1-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,1,2-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/3/2020		Y	N	U		U	0.00089	0.00027	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,1,2,2-TETRACHLOROETHANE	8/3/2020		Y	N	U		U	0.00089	0.00019	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,1,1-TRICHLOROETHANE	8/3/2020		Y	N	U		U	0.00089	0.00021	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2,4-TRICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00089	0.00032	mg/kg
SB-14(2-3)-20200727	460-214419-1	CARBON DISULFIDE	8/3/2020		Y	N	U		U	0.00089	0.00024	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2-DICHLOROPROPANE	8/3/2020		Y	N	U		U	0.00089	0.00038	mg/kg
SB-14(2-3)-20200727	460-214419-1	BROMOFORM	8/3/2020		Y	N	U		U	0.00089	0.00038	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2-DIBROMO-3-CHLOROPROPANE	8/3/2020		Y	N	U		U	0.00089	0.00041	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/3/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-14(2-3)-20200727	460-214419-1	CHLOROBENZENE	8/3/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2-DICHLOROETHANE	8/3/2020		Y	N	U		U	0.00089	0.00026	mg/kg
SB-14(2-3)-20200727	460-214419-1	CARBON TETRACHLORIDE	8/3/2020		Y	N	U		U	0.00089	0.00035	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,3-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00089	0.00014	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,4-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,4-DIOXANE (P-DIOXANE)	8/3/2020		Y	N	U		U	0.018	0.0082	mg/kg
SB-14(2-3)-20200727	460-214419-1	2-HEXANONE	8/3/2020		Y	N	U		U	0.0045	0.0015	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	ACETONE	8/3/2020		Y	N	U		U	0.0054	0.0051	mg/kg
SB-14(2-3)-20200727	460-214419-1	BENZENE	8/3/2020	0.00074	Y	Y	J		J	0.00089	0.00023	mg/kg
SB-14(2-3)-20200727	460-214419-1	BROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-14(2-3)-20200727	460-214419-1	BROMODICHLOROMETHANE	8/3/2020		Y	N	U		U	0.00089	0.00023	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2-DICHLOROBENZENE	8/3/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-14(2-3)-20200727	460-214419-1	O-XYLENE (1,2-DIMETHYLBENZENE)	8/3/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-14(2-3)-20200727	460-214419-1	VINYL CHLORIDE	8/3/2020		Y	N	U	UJ	UJ	0.00089	0.00049	mg/kg
SB-14(2-3)-20200727	460-214419-1	TRICHLOROFLUOROMETHANE	8/3/2020		Y	N	U		U	0.00089	0.00036	mg/kg
SB-14(2-3)-20200727	460-214419-1	TRICHLOROETHYLENE (TCE)	8/3/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-14(2-3)-20200727	460-214419-1	TRANS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00089	0.00024	mg/kg
SB-14(2-3)-20200727	460-214419-1	TRANS-1,2-DICHLOROETHENE	8/3/2020		Y	N	U		U	0.00089	0.00022	mg/kg
SB-14(2-3)-20200727	460-214419-1	TOLUENE	8/3/2020	0.00037	Y	Y	J		J	0.00089	0.00021	mg/kg
SB-14(2-3)-20200727	460-214419-1	TETRACHLOROETHYLENE(PCE)	8/3/2020		Y	N	U		U	0.00089	0.00013	mg/kg
SB-14(2-3)-20200727	460-214419-1	BROMOMETHANE	8/3/2020		Y	N	U		U	0.00089	0.00042	mg/kg
SB-14(2-3)-20200727	460-214419-1	STYRENE	8/3/2020		Y	N	U		U	0.00089	0.00025	mg/kg
SB-14(2-3)-20200727	460-214419-1	CHLOROETHANE	8/3/2020		Y	N	U	UJ	UJ	0.00089	0.00047	mg/kg
SB-14(2-3)-20200727	460-214419-1	METHYLENE CHLORIDE	8/3/2020	0.00050	Y	Y	J		J	0.00089	0.00041	mg/kg
SB-14(2-3)-20200727	460-214419-1	METHYLCYCLOHEXANE	8/3/2020		Y	N	U		U	0.00089	0.00045	mg/kg
SB-14(2-3)-20200727	460-214419-1	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/3/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-14(2-3)-20200727	460-214419-1	Cis-1,2-Dichloroethylene	8/3/2020		Y	N	U		U	0.00089	0.00014	mg/kg
SB-14(2-3)-20200727	460-214419-1	TERT-BUTYL METHYL ETHER	8/3/2020		Y	N	U		U	0.00089	0.00011	mg/kg
SB-14(2-3)-20200727	460-214419-1	CHLOROMETHANE	8/3/2020		Y	N	U		U	0.00089	0.00039	mg/kg
SB-14(2-3)-20200727	460-214419-1	METHYL ETHYL KETONE (2-BUTANONE)	8/3/2020		Y	N	U		U	0.0045	0.0024	mg/kg
SB-14(2-3)-20200727	460-214419-1	CIS-1,3-DICHLOROPROPENE	8/3/2020		Y	N	U		U	0.00089	0.00024	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	CYCLOHEXANE	8/3/2020		Y	N	U		U	0.00089	0.00020	mg/kg
SB-14(2-3)-20200727	460-214419-1	DICHLORODIFLUOROMETHANE	8/3/2020		Y	N	U		U	0.00089	0.00030	mg/kg
SB-14(2-3)-20200727	460-214419-1	ETHYLBENZENE	8/3/2020		Y	N	U		U	0.00089	0.00018	mg/kg
SB-14(2-3)-20200727	460-214419-1	Isopropylbenzene (Cumene)	8/3/2020		Y	N	U		U	0.00089	0.00011	mg/kg
SB-14(2-3)-20200727	460-214419-1	M,P-XYLENES	8/3/2020		Y	N	U		U	0.00089	0.00016	mg/kg
SB-14(2-3)-20200727	460-214419-1	METHYL ACETATE	8/3/2020		Y	N	U		U	0.0045	0.0038	mg/kg
SB-14(2-3)-20200727	460-214419-1	DIBROMOCHLOROMETHANE	8/3/2020		Y	N	U		U	0.00089	0.00017	mg/kg
SB-14(2-3)-20200727	460-214419-1	CHLOROFORM	8/3/2020		Y	N	U		U	0.00089	0.00029	mg/kg
SB-14(5-6)-20200727	460-214419-5	UNKNOWN VOLATILE ORGANIC WITH HIGHEST CONC.	8/1/2020	0.0080	Y	Y	J		J	0	0	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2-DIBROMO-3-CHLOROPROPANE	8/1/2020		Y	N	U		U	0.00090	0.00041	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2,3-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00016	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,1-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,1-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,1,2-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,1,1-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,1,2,2-TETRACHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-14(5-6)-20200727	460-214419-5	STYRENE	8/1/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-14(5-6)-20200727	460-214419-5	DICHLORODIFLUOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00030	mg/kg
SB-14(5-6)-20200727	460-214419-5	ETHYLBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-14(5-6)-20200727	460-214419-5	Isopropylbenzene (Cumene)	8/1/2020		Y	N	U		U	0.00090	0.00011	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	M,P-XYLENES	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-14(5-6)-20200727	460-214419-5	METHYL ACETATE	8/1/2020		Y	N	U		U	0.0045	0.0039	mg/kg
SB-14(5-6)-20200727	460-214419-5	METHYL ETHYL KETONE (2-BUTANONE)	8/1/2020		Y	N	U		U	0.0045	0.0024	mg/kg
SB-14(5-6)-20200727	460-214419-5	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/1/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-14(5-6)-20200727	460-214419-5	METHYLCYCLOHEXANE	8/1/2020		Y	N	U		U	0.00090	0.00045	mg/kg
SB-14(5-6)-20200727	460-214419-5	DIBROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00017	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2,4-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00032	mg/kg
SB-14(5-6)-20200727	460-214419-5	O-XYLENE (1,2-DIMETHYLBENZENE)	8/1/2020		Y	N	U		U	0.00090	0.00017	mg/kg
SB-14(5-6)-20200727	460-214419-5	TETRACHLOROETHYLENE(PCE)	8/1/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-14(5-6)-20200727	460-214419-5	TOLUENE	8/1/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-14(5-6)-20200727	460-214419-5	TRANS-1,2-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00090	0.00022	mg/kg
SB-14(5-6)-20200727	460-214419-5	TRANS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-14(5-6)-20200727	460-214419-5	TRICHLOROETHYLENE (TCE)	8/1/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-14(5-6)-20200727	460-214419-5	TRICHLOROFLUOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00037	mg/kg
SB-14(5-6)-20200727	460-214419-5	VINYL CHLORIDE	8/1/2020		Y	N	U		U	0.00090	0.00049	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2-DICHLOROPROPANE	8/1/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-14(5-6)-20200727	460-214419-5	METHYLENE CHLORIDE	8/1/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-14(5-6)-20200727	460-214419-5	ACETONE	8/1/2020		Y	N	U		U	0.0054	0.0052	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,3-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-14(5-6)-20200727	460-214419-5	TERT-BUTYL METHYL ETHER	8/1/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-14(5-6)-20200727	460-214419-5	CYCLOHEXANE	8/1/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,4-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,4-DIOXANE (P-DIOXANE)	8/1/2020		Y	N	U		U	0.018	0.0083	mg/kg
SB-14(5-6)-20200727	460-214419-5	2-HEXANONE	8/1/2020		Y	N	UT	UJ	UJ	0.0045	0.0015	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	BENZENE	8/1/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-14(5-6)-20200727	460-214419-5	BROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-14(5-6)-20200727	460-214419-5	BROMODICHLOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-14(5-6)-20200727	460-214419-5	CHLOROFORM	8/1/2020		Y	N	U		U	0.00090	0.00029	mg/kg
SB-14(5-6)-20200727	460-214419-5	CIS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-14(5-6)-20200727	460-214419-5	Cis-1,2-Dichloroethylene	8/1/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-14(5-6)-20200727	460-214419-5	CHLOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00039	mg/kg
SB-14(5-6)-20200727	460-214419-5	BROMOFORM	8/1/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-14(5-6)-20200727	460-214419-5	CHLOROETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00047	mg/kg
SB-14(5-6)-20200727	460-214419-5	CARBON DISULFIDE	8/1/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-14(5-6)-20200727	460-214419-5	CARBON TETRACHLORIDE	8/1/2020		Y	N	U		U	0.00090	0.00035	mg/kg
SB-14(5-6)-20200727	460-214419-5	BROMOMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00043	mg/kg
SB-14(5-6)-20200727	460-214419-5	CHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,4-DIOXANE (P-DIOXANE)	8/1/2020		Y	N	U		U	0.020	0.0090	mg/kg
SB-21(1-2)-20200727	460-214419-3	2-HEXANONE	8/1/2020		Y	N	UT	UJ	UJ	0.0049	0.0017	mg/kg
SB-21(1-2)-20200727	460-214419-3	ACETONE	8/1/2020		Y	N	U		U	0.0059	0.0056	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZENE	8/1/2020		Y	N	U		U	0.00098	0.00025	mg/kg
SB-21(1-2)-20200727	460-214419-3	BROMOFORM	8/1/2020		Y	N	U		U	0.00098	0.00042	mg/kg
SB-21(1-2)-20200727	460-214419-3	BROMODICHLOROMETHANE	8/1/2020		Y	N	U		U	0.00098	0.00025	mg/kg
SB-21(1-2)-20200727	460-214419-3	CARBON DISULFIDE	8/1/2020		Y	N	U		U	0.00098	0.00026	mg/kg
SB-21(1-2)-20200727	460-214419-3	CARBON TETRACHLORIDE	8/1/2020		Y	N	U		U	0.00098	0.00038	mg/kg
SB-21(1-2)-20200727	460-214419-3	BROMOMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00098	0.00047	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,1,2-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00098	0.00018	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,4-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00098	0.00022	mg/kg
SB-21(1-2)-20200727	460-214419-3	BROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00098	0.00028	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(1-2)-20200727	460-214419-3	1,3-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00098	0.00016	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2-DICHLOROPROPANE	8/1/2020		Y	N	U		U	0.00098	0.00042	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00098	0.00029	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00098	0.00014	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/1/2020		Y	N	U		U	0.00098	0.00018	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2-DIBROMO-3-CHLOROPROPANE	8/1/2020		Y	N	U		U	0.00098	0.00045	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2,4-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00098	0.00035	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2,3-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00098	0.00018	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,1-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00098	0.00020	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,1,2,2-TETRACHLOROETHANE	8/1/2020		Y	N	U		U	0.00098	0.00021	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/1/2020		Y	N	U		U	0.00098	0.00030	mg/kg
SB-21(1-2)-20200727	460-214419-3	CHLOROBENZENE	8/1/2020		Y	N	U		U	0.00098	0.00017	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,1-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00098	0.00022	mg/kg
SB-21(1-2)-20200727	460-214419-3	METHYL ETHYL KETONE (2-BUTANONE)	8/1/2020		Y	N	U		U	0.0049	0.0027	mg/kg
SB-21(1-2)-20200727	460-214419-3	VINYL CHLORIDE	8/1/2020		Y	N	U		U	0.00098	0.00054	mg/kg
SB-21(1-2)-20200727	460-214419-3	TRICHLOROFLUOROMETHANE	8/1/2020		Y	N	U		U	0.00098	0.00040	mg/kg
SB-21(1-2)-20200727	460-214419-3	TRICHLOROETHYLENE (TCE)	8/1/2020		Y	N	U		U	0.00098	0.00014	mg/kg
SB-21(1-2)-20200727	460-214419-3	TRANS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00098	0.00026	mg/kg
SB-21(1-2)-20200727	460-214419-3	TRANS-1,2-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00098	0.00024	mg/kg
SB-21(1-2)-20200727	460-214419-3	STYRENE	8/1/2020		Y	N	U		U	0.00098	0.00027	mg/kg
SB-21(1-2)-20200727	460-214419-3	TOLUENE	8/1/2020		Y	N	U		U	0.00098	0.00023	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,1,1-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00098	0.00023	mg/kg
SB-21(1-2)-20200727	460-214419-3	O-XYLENE (1,2-DIMETHYLBENZENE)	8/1/2020		Y	N	U		U	0.00098	0.00019	mg/kg
SB-21(1-2)-20200727	460-214419-3	METHYLENE CHLORIDE	8/1/2020		Y	N	U		U	0.00098	0.00046	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(1-2)-20200727	460-214419-3	TERT-BUTYL METHYL ETHER	8/1/2020		Y	N	U		U	0.00098	0.00012	mg/kg
SB-21(1-2)-20200727	460-214419-3	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/1/2020		Y	N	U		U	0.0049	0.0015	mg/kg
SB-21(1-2)-20200727	460-214419-3	CHLOROETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00098	0.00051	mg/kg
SB-21(1-2)-20200727	460-214419-3	METHYL ACETATE	8/1/2020		Y	N	U		U	0.0049	0.0042	mg/kg
SB-21(1-2)-20200727	460-214419-3	M,P-XYLENES	8/1/2020		Y	N	U		U	0.00098	0.00017	mg/kg
SB-21(1-2)-20200727	460-214419-3	Isopropylbenzene (Cumene)	8/1/2020		Y	N	U		U	0.00098	0.00012	mg/kg
SB-21(1-2)-20200727	460-214419-3	ETHYLBENZENE	8/1/2020		Y	N	U		U	0.00098	0.00020	mg/kg
SB-21(1-2)-20200727	460-214419-3	DICHLORODIFLUOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00098	0.00033	mg/kg
SB-21(1-2)-20200727	460-214419-3	DIBROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00098	0.00019	mg/kg
SB-21(1-2)-20200727	460-214419-3	CYCLOHEXANE	8/1/2020		Y	N	U		U	0.00098	0.00022	mg/kg
SB-21(1-2)-20200727	460-214419-3	CIS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00098	0.00027	mg/kg
SB-21(1-2)-20200727	460-214419-3	Cis-1,2-Dichloroethylene	8/1/2020		Y	N	U		U	0.00098	0.00015	mg/kg
SB-21(1-2)-20200727	460-214419-3	CHLOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00098	0.00043	mg/kg
SB-21(1-2)-20200727	460-214419-3	CHLOROFORM	8/1/2020		Y	N	U		U	0.00098	0.00031	mg/kg
SB-21(1-2)-20200727	460-214419-3	METHYLCYCLOHEXANE	8/1/2020		Y	N	U		U	0.00098	0.00049	mg/kg
SB-21(1-2)-20200727	460-214419-3	TETRACHLOROETHYLENE(PCE)	8/1/2020		Y	N	U		U	0.00098	0.00014	mg/kg
SB-21(5-6)-20200727	460-214419-4	CYCLOHEXANE	8/1/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-21(5-6)-20200727	460-214419-4	BROMODICHLOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-21(5-6)-20200727	460-214419-4	BROMOMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00043	mg/kg
SB-21(5-6)-20200727	460-214419-4	CARBON TETRACHLORIDE	8/1/2020		Y	N	U		U	0.00090	0.00035	mg/kg
SB-21(5-6)-20200727	460-214419-4	CHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-21(5-6)-20200727	460-214419-4	CHLOROETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00047	mg/kg
SB-21(5-6)-20200727	460-214419-4	CHLOROFORM	8/1/2020		Y	N	U		U	0.00090	0.00029	mg/kg
SB-21(5-6)-20200727	460-214419-4	CHLOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00039	mg/kg

SDG: 4602144191

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(5-6)-20200727	460-214419-4	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	8/1/2020		Y	N	U		U	0.0045	0.0014	mg/kg
SB-21(5-6)-20200727	460-214419-4	CIS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-21(5-6)-20200727	460-214419-4	ACETONE	8/1/2020		Y	N	U		U	0.0054	0.0051	mg/kg
SB-21(5-6)-20200727	460-214419-4	DIBROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00017	mg/kg
SB-21(5-6)-20200727	460-214419-4	DICHLORODIFLUOROMETHANE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00030	mg/kg
SB-21(5-6)-20200727	460-214419-4	ETHYLBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-21(5-6)-20200727	460-214419-4	Isopropylbenzene (Cumene)	8/1/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-21(5-6)-20200727	460-214419-4	M,P-XYLENES	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-21(5-6)-20200727	460-214419-4	METHYL ACETATE	8/1/2020		Y	N	U		U	0.0045	0.0039	mg/kg
SB-21(5-6)-20200727	460-214419-4	METHYL ETHYL KETONE (2-BUTANONE)	8/1/2020		Y	N	U		U	0.0045	0.0024	mg/kg
SB-21(5-6)-20200727	460-214419-4	Cis-1,2-Dichloroethylene	8/1/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,1,1-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,1,2,2-TETRACHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00019	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00027	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,1,2-TRICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00016	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,1-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00018	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,1-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,2,3-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00016	mg/kg
SB-21(5-6)-20200727	460-214419-4	BROMOCHLOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,2-DIBROMO-3-CHLOROPROPANE	8/1/2020		Y	N	U		U	0.00090	0.00041	mg/kg
SB-21(5-6)-20200727	460-214419-4	BENZENE	8/1/2020		Y	N	U		U	0.00090	0.00023	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,2-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,2-DICHLOROETHANE	8/1/2020		Y	N	U		U	0.00090	0.00027	mg/kg

Analytical Method SW8260C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(5-6)-20200727	460-214419-4	1,2-DICHLOROPROPANE	8/1/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,3-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00014	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,4-DICHLOROBENZENE	8/1/2020		Y	N	U		U	0.00090	0.00020	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,4-DIOXANE (P-DIOXANE)	8/1/2020		Y	N	U		U	0.018	0.0082	mg/kg
SB-21(5-6)-20200727	460-214419-4	2-HEXANONE	8/1/2020		Y	N	UT	UJ	UJ	0.0045	0.0015	mg/kg
SB-21(5-6)-20200727	460-214419-4	CARBON DISULFIDE	8/1/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,2,4-TRICHLOROBENZENE	8/1/2020		Y	N	U	UJ	UJ	0.00090	0.00032	mg/kg
SB-21(5-6)-20200727	460-214419-4	VINYL CHLORIDE	8/1/2020		Y	N	U		U	0.00090	0.00049	mg/kg
SB-21(5-6)-20200727	460-214419-4	BROMOFORM	8/1/2020		Y	N	U		U	0.00090	0.00038	mg/kg
SB-21(5-6)-20200727	460-214419-4	TRANS-1,2-DICHLOROETHENE	8/1/2020		Y	N	U		U	0.00090	0.00022	mg/kg
SB-21(5-6)-20200727	460-214419-4	TRANS-1,3-DICHLOROPROPENE	8/1/2020		Y	N	U		U	0.00090	0.00024	mg/kg
SB-21(5-6)-20200727	460-214419-4	TRICHLOROFLUOROMETHANE	8/1/2020		Y	N	U		U	0.00090	0.00036	mg/kg
SB-21(5-6)-20200727	460-214419-4	METHYLCYCLOHEXANE	8/1/2020		Y	N	U		U	0.00090	0.00045	mg/kg
SB-21(5-6)-20200727	460-214419-4	STYRENE	8/1/2020		Y	N	U		U	0.00090	0.00025	mg/kg
SB-21(5-6)-20200727	460-214419-4	METHYLENE CHLORIDE	8/1/2020		Y	N	U		U	0.00090	0.00042	mg/kg
SB-21(5-6)-20200727	460-214419-4	TRICHLOROETHYLENE (TCE)	8/1/2020		Y	N	U		U	0.00090	0.00013	mg/kg
SB-21(5-6)-20200727	460-214419-4	O-XYLENE (1,2-DIMETHYLBENZENE)	8/1/2020		Y	N	U		U	0.00090	0.00017	mg/kg
SB-21(5-6)-20200727	460-214419-4	TOLUENE	8/1/2020		Y	N	U		U	0.00090	0.00021	mg/kg
SB-21(5-6)-20200727	460-214419-4	TERT-BUTYL METHYL ETHER	8/1/2020		Y	N	U		U	0.00090	0.00011	mg/kg
SB-21(5-6)-20200727	460-214419-4	TETRACHLOROETHYLENE(PCE)	8/1/2020		Y	N	U		U	0.00090	0.00013	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	4-CHLOROANILINE	7/31/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-13(3-4)-20200727	460-214419-2	2-Methylnaphthalene	7/31/2020		Y	N	U		U	0.38	0.011	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	4-CHLOROPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-13(3-4)-20200727	460-214419-2	4-METHYLPHENOL (P-CRESOL)	7/31/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-13(3-4)-20200727	460-214419-2	4-NITROANILINE	7/31/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-13(3-4)-20200727	460-214419-2	4-BROMOPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-13(3-4)-20200727	460-214419-2	4,6-DINITRO-2-METHYLPHENOL	7/31/2020		Y	N	U		U	0.31	0.063	mg/kg
SB-13(3-4)-20200727	460-214419-2	3-NITROANILINE	7/31/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-13(3-4)-20200727	460-214419-2	INDENO(1,2,3-C,D)PYRENE	7/31/2020	0.10	Y	Y				0.038	0.015	mg/kg
SB-13(3-4)-20200727	460-214419-2	3,3'-DICHLOROBENZIDINE	7/31/2020		Y	N	U		U	0.15	0.058	mg/kg
SB-13(3-4)-20200727	460-214419-2	2-NITROPHENOL	7/31/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-13(3-4)-20200727	460-214419-2	2-NITROANILINE	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-13(3-4)-20200727	460-214419-2	2-Methylphenol (O-Cresol)	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-13(3-4)-20200727	460-214419-2	4-CHLORO-3-METHYLPHENOL	7/31/2020		Y	N	U		U	0.38	0.022	mg/kg
SB-13(3-4)-20200727	460-214419-2	2,4,5-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-13(3-4)-20200727	460-214419-2	Aldol Condensation Product With 1st Highest Conc.	7/31/2020	600	Y	Y	JA		J	0	0	ug/kg
SB-13(3-4)-20200727	460-214419-2	BENZO(G,H,I)PERYLENE	7/31/2020	0.087	Y	Y	J		J	0.38	0.011	mg/kg
SB-13(3-4)-20200727	460-214419-2	CHRYSENE	7/31/2020	0.098	Y	Y	J		J	0.38	0.0065	mg/kg
SB-13(3-4)-20200727	460-214419-2	DIBENZ(A,H)ANTHRACENE	7/31/2020	0.029	Y	Y	J		J	0.038	0.017	mg/kg
SB-13(3-4)-20200727	460-214419-2	FLUORANTHENE	7/31/2020	0.14	Y	Y	J		J	0.38	0.013	mg/kg
SB-13(3-4)-20200727	460-214419-2	PHENANTHRENE	7/31/2020	0.047	Y	Y	J		J	0.38	0.0068	mg/kg
SB-13(3-4)-20200727	460-214419-2	PYRENE	7/31/2020	0.14	Y	Y	J		J	0.38	0.0096	mg/kg
SB-13(3-4)-20200727	460-214419-2	2,6-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-13(3-4)-20200727	460-214419-2	2,3,4,6-TETRACHLOROPHENOL	7/31/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-13(3-4)-20200727	460-214419-2	2-CHLOROPHENOL	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-13(3-4)-20200727	460-214419-2	2,4,6-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	0.15	0.049	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	2,4-DICHLOROPHENOL	7/31/2020		Y	N	U		U	0.15	0.025	mg/kg
SB-13(3-4)-20200727	460-214419-2	2,4-DIMETHYLPHENOL	7/31/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-13(3-4)-20200727	460-214419-2	2,4-DINITROPHENOL	7/31/2020		Y	N	U		U	0.31	0.19	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,2,4,5-TETRACHLOROBENZENE	7/31/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-13(3-4)-20200727	460-214419-2	2,4-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.078	0.041	mg/kg
SB-13(3-4)-20200727	460-214419-2	BENZO(K)FLUORANTHENE	7/31/2020	0.057	Y	Y				0.038	0.0076	mg/kg
SB-13(3-4)-20200727	460-214419-2	2-CHLORONAPHTHALENE	7/31/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-13(3-4)-20200727	460-214419-2	1,4-DIOXANE (P-DIOXANE)	7/31/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-13(3-4)-20200727	460-214419-2	HEXACHLOROETHANE	7/31/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-13(3-4)-20200727	460-214419-2	DIBENZOFURAN	7/31/2020		Y	N	U		U	0.38	0.0054	mg/kg
SB-13(3-4)-20200727	460-214419-2	DIETHYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.0056	mg/kg
SB-13(3-4)-20200727	460-214419-2	DIMETHYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.087	mg/kg
SB-13(3-4)-20200727	460-214419-2	DI-N-BUTYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.068	mg/kg
SB-13(3-4)-20200727	460-214419-2	FLUORENE	7/31/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-13(3-4)-20200727	460-214419-2	ACENAPHTHYLENE	7/31/2020		Y	N	U		U	0.38	0.0040	mg/kg
SB-13(3-4)-20200727	460-214419-2	CARBAZOLE	7/31/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-13(3-4)-20200727	460-214419-2	HEXACHLOROCYCLOPENTADIENE	7/31/2020		Y	N	U		U	0.38	0.034	mg/kg
SB-13(3-4)-20200727	460-214419-2	DI-N-OCTYLPHTHALATE	7/31/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-13(3-4)-20200727	460-214419-2	ISOPHORONE	7/31/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-13(3-4)-20200727	460-214419-2	NAPHTHALENE	7/31/2020		Y	N	U		U	0.38	0.0067	mg/kg
SB-13(3-4)-20200727	460-214419-2	NITROBENZENE	7/31/2020		Y	N	U		U	0.038	0.0092	mg/kg
SB-13(3-4)-20200727	460-214419-2	N-NITROSODI-N-PROPYLAMINE	7/31/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-13(3-4)-20200727	460-214419-2	N-NITROSODIPHENYLAMINE	7/31/2020		Y	N	U		U	0.38	0.0074	mg/kg
SB-13(3-4)-20200727	460-214419-2	PENTACHLOROPHENOL	7/31/2020		Y	N	U		U	0.31	0.079	mg/kg
SB-13(3-4)-20200727	460-214419-2	PHENOL	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	HEXACHLOROBUTADIENE	7/31/2020		Y	N	U		U	0.078	0.0082	mg/kg
SB-13(3-4)-20200727	460-214419-2	BENZO(A)ANTHRACENE	7/31/2020	0.099	Y	Y				0.038	0.013	mg/kg
SB-13(3-4)-20200727	460-214419-2	HEXACHLOROBENZENE	7/31/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-13(3-4)-20200727	460-214419-2	BENZO(A)PYRENE	7/31/2020	0.12	Y	Y				0.038	0.010	mg/kg
SB-13(3-4)-20200727	460-214419-2	CAPROLACTAM	7/31/2020		Y	N	U		U	0.38	0.060	mg/kg
SB-13(3-4)-20200727	460-214419-2	4-NITROPHENOL	7/31/2020		Y	N	U		U	0.78	0.063	mg/kg
SB-13(3-4)-20200727	460-214419-2	ACENAPHTHENE	7/31/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-13(3-4)-20200727	460-214419-2	ACETOPHENONE	7/31/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-13(3-4)-20200727	460-214419-2	ANTHRACENE	7/31/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-13(3-4)-20200727	460-214419-2	ATRAZINE	7/31/2020		Y	N	U		U	0.15	0.0097	mg/kg
SB-13(3-4)-20200727	460-214419-2	BENZYL BUTYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-13(3-4)-20200727	460-214419-2	BIPHENYL (DIPHENYL)	7/31/2020		Y	N	U		U	0.38	0.0051	mg/kg
SB-13(3-4)-20200727	460-214419-2	BIS(2-CHLOROETHOXY) METHANE	7/31/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-13(3-4)-20200727	460-214419-2	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	7/31/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-13(3-4)-20200727	460-214419-2	BIS(2-CHLOROISOPROPYL) ETHER	7/31/2020		Y	N	U		U	0.38	0.0070	mg/kg
SB-13(3-4)-20200727	460-214419-2	BIS(2-ETHYLHEXYL) PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-13(3-4)-20200727	460-214419-2	BENZALDEHYDE	7/31/2020		Y	N	U	UJ	UJ	0.38	0.017	mg/kg
SB-13(3-4)-20200727	460-214419-2	BENZO(B)FLUORANTHENE	7/31/2020	0.15	Y	Y				0.038	0.010	mg/kg
SB-14(2-3)-20200727	460-214419-1	PHENOL	7/31/2020		Y	N	UT		U	3.7	0.14	mg/kg
SB-14(2-3)-20200727	460-214419-1	DI-N-OCTYLPHTHALATE	7/31/2020		Y	N	UT		U	3.7	0.20	mg/kg
SB-14(2-3)-20200727	460-214419-1	HEXACHLOROBENZENE	7/31/2020		Y	N	UT		U	0.37	0.18	mg/kg
SB-14(2-3)-20200727	460-214419-1	HEXACHLOROBUTADIENE	7/31/2020		Y	N	UT		U	0.75	0.079	mg/kg
SB-14(2-3)-20200727	460-214419-1	HEXACHLOROCYCLOPENTADIENE	7/31/2020		Y	N	UT		U	3.7	0.33	mg/kg
SB-14(2-3)-20200727	460-214419-1	HEXACHLOROETHANE	7/31/2020		Y	N	UT		U	0.37	0.13	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	ISOPHORONE	7/31/2020		Y	N	UT		U	1.5	1.1	mg/kg
SB-14(2-3)-20200727	460-214419-1	NITROBENZENE	7/31/2020		Y	N	UT		U	0.37	0.089	mg/kg
SB-14(2-3)-20200727	460-214419-1	N-NITROSODI-N-PROPYLAMINE	7/31/2020		Y	N	UT		U	0.37	0.27	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,3,4,6-TETRACHLOROPHENOL	7/31/2020		Y	N	UT		U	3.7	0.25	mg/kg
SB-14(2-3)-20200727	460-214419-1	DI-N-BUTYL PHTHALATE	7/31/2020		Y	N	UT		U	3.7	0.66	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,4-DIMETHYLPHENOL	7/31/2020		Y	N	UT		U	3.7	0.16	mg/kg
SB-14(2-3)-20200727	460-214419-1	N-NITROSODIPHENYLAMINE	7/31/2020		Y	N	UT		U	3.7	0.071	mg/kg
SB-14(2-3)-20200727	460-214419-1	4-CHLORO-3-METHYLPHENOL	7/31/2020		Y	N	UT		U	3.7	0.21	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,4-DINITROTOLUENE	7/31/2020		Y	N	UT		U	0.75	0.40	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,6-DINITROTOLUENE	7/31/2020		Y	N	UT		U	0.75	0.27	mg/kg
SB-14(2-3)-20200727	460-214419-1	2-CHLORONAPHTHALENE	7/31/2020		Y	N	UT		U	3.7	0.17	mg/kg
SB-14(2-3)-20200727	460-214419-1	2-CHLOROPHENOL	7/31/2020		Y	N	UT		U	3.7	0.13	mg/kg
SB-14(2-3)-20200727	460-214419-1	2-Methylphenol (O-Cresol)	7/31/2020		Y	N	UT		U	3.7	0.14	mg/kg
SB-14(2-3)-20200727	460-214419-1	2-NITROANILINE	7/31/2020		Y	N	UT		U	3.7	0.14	mg/kg
SB-14(2-3)-20200727	460-214419-1	2-NITROPHENOL	7/31/2020		Y	N	UT		U	3.7	0.37	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,4,6-TRICHLOROPHENOL	7/31/2020		Y	N	UT		U	1.5	0.48	mg/kg
SB-14(2-3)-20200727	460-214419-1	4-BROMOPHENYL PHENYL ETHER	7/31/2020		Y	N	UT		U	3.7	0.15	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,4,5-TRICHLOROPHENOL	7/31/2020		Y	N	UT		U	3.7	0.38	mg/kg
SB-14(2-3)-20200727	460-214419-1	4-CHLOROPHENYL PHENYL ETHER	7/31/2020		Y	N	UT		U	3.7	0.13	mg/kg
SB-14(2-3)-20200727	460-214419-1	4-METHYLPHENOL (P-CRESOL)	7/31/2020		Y	N	UT		U	3.7	0.23	mg/kg
SB-14(2-3)-20200727	460-214419-1	4-NITROPHENOL	7/31/2020		Y	N	UT		U	7.5	0.61	mg/kg
SB-14(2-3)-20200727	460-214419-1	ACETOPHENONE	7/31/2020		Y	N	UT		U	3.7	0.18	mg/kg
SB-14(2-3)-20200727	460-214419-1	BISPHENOL A	7/31/2020	0.73	Y	Y				0	0	mg/kg
SB-14(2-3)-20200727	460-214419-1	1-METHYL-PHENANTHRENE	7/31/2020	3000	Y	Y	JN		J	0	0	ug/kg
SB-14(2-3)-20200727	460-214419-1	11H-BENZO[B]FLUORINE	7/31/2020	3300	Y	Y	JN		J	0	0	ug/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	4,6-DINITRO-2-METHYLPHENOL	7/31/2020		Y	N	UT		U	3.0	0.60	mg/kg
SB-14(2-3)-20200727	460-214419-1	BENZO(A)PYRENE	7/31/2020	8.2	Y	Y	T			0.37	0.099	mg/kg
SB-14(2-3)-20200727	460-214419-1	DIETHYL PHTHALATE	7/31/2020		Y	N	UT		U	3.7	0.054	mg/kg
SB-14(2-3)-20200727	460-214419-1	CAPROLACTAM	7/31/2020		Y	N	UT		U	3.7	0.58	mg/kg
SB-14(2-3)-20200727	460-214419-1	BIS(2-ETHYLHEXYL) PHTHALATE	7/31/2020		Y	N	UT		U	3.7	0.20	mg/kg
SB-14(2-3)-20200727	460-214419-1	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	7/31/2020		Y	N	UT		U	0.37	0.13	mg/kg
SB-14(2-3)-20200727	460-214419-1	BIS(2-CHLOROETHOXY) METHANE	7/31/2020		Y	N	UT		U	3.7	0.29	mg/kg
SB-14(2-3)-20200727	460-214419-1	BENZYL BUTYL PHTHALATE	7/31/2020		Y	N	UT		U	3.7	0.17	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,2,4,5-TETRACHLOROBENZENE	7/31/2020		Y	N	UT		U	3.7	0.12	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,4-DINITROPHENOL	7/31/2020		Y	N	UT		U	3.0	1.8	mg/kg
SB-14(2-3)-20200727	460-214419-1	BENZO(A)ANTHRACENE	7/31/2020	9.2	Y	Y	T			0.37	0.13	mg/kg
SB-14(2-3)-20200727	460-214419-1	2,4-DICHLOROPHENOL	7/31/2020		Y	N	UT		U	1.5	0.24	mg/kg
SB-14(2-3)-20200727	460-214419-1	PERYLENE	7/31/2020	4300	Y	Y	JN		J	0	0	ug/kg
SB-14(2-3)-20200727	460-214419-1	UNKNOWN SEMIVOLATILE WITH HIGHEST CONC.	7/31/2020	6200	Y	Y	J		J	0	0	ug/kg
SB-14(2-3)-20200727	460-214419-1	BENZO(G,H,I)PERYLENE	7/31/2020	2.9	Y	Y	JT		J	3.7	0.11	mg/kg
SB-14(2-3)-20200727	460-214419-1	BIPHENYL (DIPHENYL)	7/31/2020	0.37	Y	Y	JT		J	3.7	0.049	mg/kg
SB-14(2-3)-20200727	460-214419-1	CARBAZOLE	7/31/2020	2.2	Y	Y	JT		J	3.7	0.14	mg/kg
SB-14(2-3)-20200727	460-214419-1	DIBENZOFURAN	7/31/2020	2.6	Y	Y	JT		J	3.7	0.052	mg/kg
SB-14(2-3)-20200727	460-214419-1	NAPHTHALENE	7/31/2020	1.8	Y	Y	JT		J	3.7	0.064	mg/kg
SB-14(2-3)-20200727	460-214419-1	DIMETHYL PHTHALATE	7/31/2020		Y	N	UT		U	3.7	0.84	mg/kg
SB-14(2-3)-20200727	460-214419-1	ANTHRACENE	7/31/2020	8.8	Y	Y	T			3.7	0.11	mg/kg
SB-14(2-3)-20200727	460-214419-1	FLUORENE	7/31/2020	4.9	Y	Y	T			3.7	0.050	mg/kg
SB-14(2-3)-20200727	460-214419-1	ACENAPHTHYLENE	7/31/2020	0.26	Y	Y	JT		J	3.7	0.038	mg/kg
SB-14(2-3)-20200727	460-214419-1	ACENAPHTHENE	7/31/2020	2.6	Y	Y	JT		J	3.7	0.27	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	2-Methylnaphthalene	7/31/2020	1.1	Y	Y	JT		J	3.7	0.10	mg/kg
SB-14(2-3)-20200727	460-214419-1	1-METHYLNAPHTHALENE	7/31/2020	0.82	Y	Y	JT		J	0	0	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,3-DIMETHYLNAPHTHALENE	7/31/2020	0.71	Y	Y	JT		J	0	0	mg/kg
SB-14(2-3)-20200727	460-214419-1	PYRENE	7/31/2020	15	Y	Y	T			3.7	0.092	mg/kg
SB-14(2-3)-20200727	460-214419-1	INDENO(1,2,3-C,D)PYRENE	7/31/2020	3.7	Y	Y	T			0.37	0.15	mg/kg
SB-14(2-3)-20200727	460-214419-1	FLUORANTHENE	7/31/2020	21	Y	Y	T			3.7	0.13	mg/kg
SB-14(2-3)-20200727	460-214419-1	DIBENZ(A,H)ANTHRACENE	7/31/2020	1.0	Y	Y	T			0.37	0.16	mg/kg
SB-14(2-3)-20200727	460-214419-1	CHRYSENE	7/31/2020	8.3	Y	Y	T			3.7	0.063	mg/kg
SB-14(2-3)-20200727	460-214419-1	BENZO(K)FLUORANTHENE	7/31/2020	4.3	Y	Y	T			0.37	0.073	mg/kg
SB-14(2-3)-20200727	460-214419-1	BENZO(B)FLUORANTHENE	7/31/2020	9.4	Y	Y	T			0.37	0.096	mg/kg
SB-14(2-3)-20200727	460-214419-1	3,3'-DICHLOROBENZIDINE	7/31/2020		Y	N	U		U	1.5	0.56	mg/kg
SB-14(2-3)-20200727	460-214419-1	PHENANTHRENE	7/31/2020	22	Y	Y	T			3.7	0.065	mg/kg
SB-14(2-3)-20200727	460-214419-1	PENTACHLOROPHENOL	7/31/2020		Y	N	UT		U	3.0	0.76	mg/kg
SB-14(2-3)-20200727	460-214419-1	3-NITROANILINE	7/31/2020		Y	N	U		U	3.7	0.42	mg/kg
SB-14(2-3)-20200727	460-214419-1	4-CHLOROANILINE	7/31/2020		Y	N	U		U	3.7	0.26	mg/kg
SB-14(2-3)-20200727	460-214419-1	4-NITROANILINE	7/31/2020		Y	N	U		U	3.7	0.43	mg/kg
SB-14(2-3)-20200727	460-214419-1	ATRAZINE	7/31/2020		Y	N	U		U	1.5	0.094	mg/kg
SB-14(2-3)-20200727	460-214419-1	BENZALDEHYDE	7/31/2020		Y	N	U	UJ	UJ	3.7	0.16	mg/kg
SB-14(2-3)-20200727	460-214419-1	BIS(2-CHLOROISOPROPYL) ETHER	7/31/2020		Y	N	U		U	3.7	0.067	mg/kg
SB-14(2-3)-20200727	460-214419-1	1,4-DIOXANE (P-DIOXANE)	7/31/2020		Y	N	UT		U	1.1	0.10	mg/kg
SB-14(5-6)-20200727	460-214419-5	3,3'-DICHLOROBENZIDINE	7/31/2020		Y	N	U		U	1.5	0.58	mg/kg
SB-14(5-6)-20200727	460-214419-5	2-Methylnaphthalene	7/31/2020	3.1	Y	Y	J		J	3.8	0.11	mg/kg
SB-14(5-6)-20200727	460-214419-5	ACENAPHTHYLENE	7/31/2020	0.38	Y	Y	J		J	3.8	0.039	mg/kg
SB-14(5-6)-20200727	460-214419-5	BIPHENYL (DIPHENYL)	7/31/2020	0.95	Y	Y	J		J	3.8	0.051	mg/kg
SB-14(5-6)-20200727	460-214419-5	N-NITROSODIPHENYLAMINE	7/31/2020	0.10	Y	Y	J		J	3.8	0.073	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	UNKNOWN SEMIVOLATILE WITH 2ND HIGHEST CONC.	7/31/2020	5900	Y	Y	J		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	UNKNOWN SEMIVOLATILE WITH HIGHEST CONC.	7/31/2020	6400	Y	Y	J		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	UNKNOWN SEMIVOLATILE WITH 3RD HIGHEST CONC.	7/31/2020	4000	Y	Y	J		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	UNKNOWN SEMIVOLATILE WITH 4TH HIGHEST CONC.	7/31/2020	3700	Y	Y	J		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	2-CHLOROPHENOL	7/31/2020		Y	N	U		U	3.8	0.14	mg/kg
SB-14(5-6)-20200727	460-214419-5	2-NITROPHENOL	7/31/2020		Y	N	U		U	3.8	0.38	mg/kg
SB-14(5-6)-20200727	460-214419-5	2-CHLORONAPHTHALENE	7/31/2020		Y	N	U		U	3.8	0.18	mg/kg
SB-14(5-6)-20200727	460-214419-5	3-NITROANILINE	7/31/2020		Y	N	U		U	3.8	0.43	mg/kg
SB-14(5-6)-20200727	460-214419-5	4,6-DINITRO-2-METHYLPHENOL	7/31/2020		Y	N	U		U	3.1	0.62	mg/kg
SB-14(5-6)-20200727	460-214419-5	4-BROMOPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	3.8	0.15	mg/kg
SB-14(5-6)-20200727	460-214419-5	ACENAPHTHENE	7/31/2020	6.0	Y	Y				3.8	0.28	mg/kg
SB-14(5-6)-20200727	460-214419-5	ANTHRACENE	7/31/2020	16	Y	Y				3.8	0.12	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZO(A)ANTHRACENE	7/31/2020	18	Y	Y				0.38	0.13	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZO(A)PYRENE	7/31/2020	16	Y	Y				0.38	0.10	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZO(B)FLUORANTHENE	7/31/2020	18	Y	Y				0.38	0.099	mg/kg
SB-14(5-6)-20200727	460-214419-5	2-NITROANILINE	7/31/2020		Y	N	U		U	3.8	0.14	mg/kg
SB-14(5-6)-20200727	460-214419-5	3,4-DIHYDROCYCLOPENTA(CD)PYRENE (ACEPY	7/31/2020	4500	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	2,4-DICHLOROPHENOL	7/31/2020		Y	N	U		U	1.5	0.24	mg/kg
SB-14(5-6)-20200727	460-214419-5	2,4-DIMETHYLPHENOL	7/31/2020		Y	N	U		U	3.8	0.17	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,4-DIOXANE (P-DIOXANE)	7/31/2020		Y	N	U		U	1.2	0.11	mg/kg
SB-14(5-6)-20200727	460-214419-5	2,4,5-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	3.8	0.39	mg/kg
SB-14(5-6)-20200727	460-214419-5	1,2,4,5-TETRACHLOROBENZENE	7/31/2020		Y	N	U		U	3.8	0.12	mg/kg
SB-14(5-6)-20200727	460-214419-5	2,3,4,6-TETRACHLOROPHENOL	7/31/2020		Y	N	U		U	3.8	0.26	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	11H-BENZO[B]FLUORINE	7/31/2020	5800	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	CARBAZOLE	7/31/2020	4.1	Y	Y				3.8	0.15	mg/kg
SB-14(5-6)-20200727	460-214419-5	2-Methylphenol (O-Cresol)	7/31/2020		Y	N	U		U	3.8	0.14	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZO(K)FLUORANTHENE	7/31/2020	7.0	Y	Y				0.38	0.075	mg/kg
SB-14(5-6)-20200727	460-214419-5	2,4,6-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	1.5	0.49	mg/kg
SB-14(5-6)-20200727	460-214419-5	4H-CYCLOPENTA[DEF]PHENANTHRENE	7/31/2020	13000	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	2,4-DINITROPHENOL	7/31/2020		Y	N	U		U	3.1	1.9	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZO[E]PYRENE	7/31/2020	7700	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	PHENYLNAPHTHALENE	7/31/2020	4000	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	Fluorene, 1,4-Dihydro-	7/31/2020	3100	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	METHYL PYRENE	7/31/2020	4700	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	2,4-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.77	0.41	mg/kg
SB-14(5-6)-20200727	460-214419-5	2,6-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.77	0.28	mg/kg
SB-14(5-6)-20200727	460-214419-5	1-METHYL-PHENANTHRENE	7/31/2020	4900	Y	Y	JN		J	0	0	ug/kg
SB-14(5-6)-20200727	460-214419-5	HEXACHLOROCYCLOPENTADIENE	7/31/2020		Y	N	U		U	3.8	0.33	mg/kg
SB-14(5-6)-20200727	460-214419-5	4-CHLOROPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	3.8	0.13	mg/kg
SB-14(5-6)-20200727	460-214419-5	4-METHYLPHENOL (P-CRESOL)	7/31/2020		Y	N	U		U	3.8	0.24	mg/kg
SB-14(5-6)-20200727	460-214419-5	4-NITROANILINE	7/31/2020		Y	N	U		U	3.8	0.44	mg/kg
SB-14(5-6)-20200727	460-214419-5	ACETOPHENONE	7/31/2020		Y	N	U		U	3.8	0.19	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZO(G,H,I)PERYLENE	7/31/2020	5.2	Y	Y				3.8	0.11	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZALDEHYDE	7/31/2020		Y	N	U	UJ	UJ	3.8	0.17	mg/kg
SB-14(5-6)-20200727	460-214419-5	BENZYL BUTYL PHTHALATE	7/31/2020		Y	N	U		U	3.8	0.18	mg/kg
SB-14(5-6)-20200727	460-214419-5	PHENOL	7/31/2020		Y	N	U		U	3.8	0.14	mg/kg
SB-14(5-6)-20200727	460-214419-5	PENTACHLOROPHENOL	7/31/2020		Y	N	U		U	3.1	0.78	mg/kg
SB-14(5-6)-20200727	460-214419-5	N-NITROSODI-N-PROPYLAMINE	7/31/2020		Y	N	U		U	0.38	0.28	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	NITROBENZENE	7/31/2020		Y	N	U		U	0.38	0.092	mg/kg
SB-14(5-6)-20200727	460-214419-5	4-CHLOROANILINE	7/31/2020		Y	N	U		U	3.8	0.27	mg/kg
SB-14(5-6)-20200727	460-214419-5	HEXACHLOROETHANE	7/31/2020		Y	N	U		U	0.38	0.13	mg/kg
SB-14(5-6)-20200727	460-214419-5	4-NITROPHENOL	7/31/2020		Y	N	U		U	7.7	0.62	mg/kg
SB-14(5-6)-20200727	460-214419-5	HEXACHLOROBUTADIENE	7/31/2020		Y	N	U		U	0.77	0.081	mg/kg
SB-14(5-6)-20200727	460-214419-5	BIS(2-CHLOROETHOXY) METHANE	7/31/2020		Y	N	U		U	3.8	0.30	mg/kg
SB-14(5-6)-20200727	460-214419-5	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	7/31/2020		Y	N	U		U	0.38	0.13	mg/kg
SB-14(5-6)-20200727	460-214419-5	BIS(2-CHLOROISOPROPYL) ETHER	7/31/2020		Y	N	U		U	3.8	0.069	mg/kg
SB-14(5-6)-20200727	460-214419-5	BIS(2-ETHYLHEXYL) PHTHALATE	7/31/2020		Y	N	U		U	3.8	0.20	mg/kg
SB-14(5-6)-20200727	460-214419-5	CAPROLACTAM	7/31/2020		Y	N	U		U	3.8	0.59	mg/kg
SB-14(5-6)-20200727	460-214419-5	DIETHYL PHTHALATE	7/31/2020		Y	N	U		U	3.8	0.055	mg/kg
SB-14(5-6)-20200727	460-214419-5	DIMETHYL PHTHALATE	7/31/2020		Y	N	U		U	3.8	0.87	mg/kg
SB-14(5-6)-20200727	460-214419-5	DI-N-BUTYL PHTHALATE	7/31/2020		Y	N	U		U	3.8	0.67	mg/kg
SB-14(5-6)-20200727	460-214419-5	DI-N-OCTYLPHTHALATE	7/31/2020		Y	N	U		U	3.8	0.20	mg/kg
SB-14(5-6)-20200727	460-214419-5	HEXACHLOROBENZENE	7/31/2020		Y	N	U		U	0.38	0.18	mg/kg
SB-14(5-6)-20200727	460-214419-5	ISOPHORONE	7/31/2020		Y	N	U		U	1.5	1.1	mg/kg
SB-14(5-6)-20200727	460-214419-5	PYRENE	7/31/2020	31	Y	Y				3.8	0.095	mg/kg
SB-14(5-6)-20200727	460-214419-5	CHRYSENE	7/31/2020	16	Y	Y				3.8	0.064	mg/kg
SB-14(5-6)-20200727	460-214419-5	DIBENZ(A,H)ANTHRACENE	7/31/2020	1.8	Y	Y				0.38	0.17	mg/kg
SB-14(5-6)-20200727	460-214419-5	DIBENZOFURAN	7/31/2020	6.5	Y	Y				3.8	0.054	mg/kg
SB-14(5-6)-20200727	460-214419-5	FLUORANTHENE	7/31/2020	42	Y	Y				3.8	0.13	mg/kg
SB-14(5-6)-20200727	460-214419-5	FLUORENE	7/31/2020	12	Y	Y				3.8	0.052	mg/kg
SB-14(5-6)-20200727	460-214419-5	INDENO(1,2,3-C,D)PYRENE	7/31/2020	6.7	Y	Y				0.38	0.15	mg/kg
SB-14(5-6)-20200727	460-214419-5	ATRAZINE	7/31/2020		Y	N	U		U	1.5	0.096	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(5-6)-20200727	460-214419-5	PHENANTHRENE	7/31/2020	48	Y	Y				3.8	0.067	mg/kg
SB-14(5-6)-20200727	460-214419-5	4-CHLORO-3-METHYLPHENOL	7/31/2020		Y	N	U		U	3.8	0.21	mg/kg
SB-14(5-6)-20200727	460-214419-5	NAPHTHALENE	7/31/2020	4.7	Y	Y				3.8	0.066	mg/kg
SB-21(1-2)-20200727	460-214419-3	FLUORANTHENE	7/31/2020	1.2	Y	Y				0.38	0.013	mg/kg
SB-21(1-2)-20200727	460-214419-3	PENTACHLOROPHENOL	7/31/2020		Y	N	U		U	0.31	0.078	mg/kg
SB-21(1-2)-20200727	460-214419-3	N-NITROSODIPHENYLAMINE	7/31/2020		Y	N	U		U	0.38	0.0073	mg/kg
SB-21(1-2)-20200727	460-214419-3	N-NITROSODI-N-PROPYLAMINE	7/31/2020		Y	N	U		U	0.038	0.028	mg/kg
SB-21(1-2)-20200727	460-214419-3	NITROBENZENE	7/31/2020		Y	N	U		U	0.038	0.0092	mg/kg
SB-21(1-2)-20200727	460-214419-3	PHENOL	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-21(1-2)-20200727	460-214419-3	NAPHTHALENE	7/31/2020		Y	N	U		U	0.38	0.0066	mg/kg
SB-21(1-2)-20200727	460-214419-3	ISOPHORONE	7/31/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-21(1-2)-20200727	460-214419-3	HEXACHLOROETHANE	7/31/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-21(1-2)-20200727	460-214419-3	HEXACHLOROCYCLOPENTADIENE	7/31/2020		Y	N	U		U	0.38	0.034	mg/kg
SB-21(1-2)-20200727	460-214419-3	PYRENE	7/31/2020	1.0	Y	Y				0.38	0.0095	mg/kg
SB-21(1-2)-20200727	460-214419-3	HEXACHLOROBUTADIENE	7/31/2020		Y	N	U		U	0.078	0.0082	mg/kg
SB-21(1-2)-20200727	460-214419-3	HEXACHLOROBENZENE	7/31/2020		Y	N	U		U	0.038	0.018	mg/kg
SB-21(1-2)-20200727	460-214419-3	INDENO(1,2,3-C,D)PYRENE	7/31/2020	0.58	Y	Y				0.038	0.015	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZO(B)FLUORANTHENE	7/31/2020	1.1	Y	Y				0.038	0.0099	mg/kg
SB-21(1-2)-20200727	460-214419-3	CAPROLACTAM	7/31/2020		Y	N	U		U	0.38	0.060	mg/kg
SB-21(1-2)-20200727	460-214419-3	DIBENZ(A,H)ANTHRACENE	7/31/2020	0.14	Y	Y				0.038	0.017	mg/kg
SB-21(1-2)-20200727	460-214419-3	CHRYSENE	7/31/2020	0.76	Y	Y				0.38	0.0065	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZO(K)FLUORANTHENE	7/31/2020	0.48	Y	Y				0.038	0.0075	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZO(G,H,I)PERYLENE	7/31/2020	0.48	Y	Y				0.38	0.011	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZO(A)ANTHRACENE	7/31/2020	0.78	Y	Y				0.038	0.013	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZO(A)PYRENE	7/31/2020	0.92	Y	Y				0.038	0.010	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(1-2)-20200727	460-214419-3	UNKNOWN SEMIVOLATILE WITH HIGHEST CONC.	7/31/2020	470	Y	Y	J		J	0	0	ug/kg
SB-21(1-2)-20200727	460-214419-3	DIBENZOFURAN	7/31/2020	0.014	Y	Y	J		J	0.38	0.0054	mg/kg
SB-21(1-2)-20200727	460-214419-3	CARBAZOLE	7/31/2020	0.042	Y	Y	J		J	0.38	0.015	mg/kg
SB-21(1-2)-20200727	460-214419-3	ANTHRACENE	7/31/2020	0.12	Y	Y	J		J	0.38	0.012	mg/kg
SB-21(1-2)-20200727	460-214419-3	ACENAPHTHYLENE	7/31/2020	0.11	Y	Y	J		J	0.38	0.0040	mg/kg
SB-21(1-2)-20200727	460-214419-3	PHENANTHRENE	7/31/2020	0.44	Y	Y				0.38	0.0067	mg/kg
SB-21(1-2)-20200727	460-214419-3	4-METHYLPHENOL (P-CRESOL)	7/31/2020		Y	N	U		U	0.38	0.024	mg/kg
SB-21(1-2)-20200727	460-214419-3	BIS(2-CHLOROISOPROPYL) ETHER	7/31/2020		Y	N	U		U	0.38	0.0069	mg/kg
SB-21(1-2)-20200727	460-214419-3	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	7/31/2020		Y	N	U		U	0.038	0.013	mg/kg
SB-21(1-2)-20200727	460-214419-3	BIS(2-CHLOROETHOXY) METHANE	7/31/2020		Y	N	U		U	0.38	0.030	mg/kg
SB-21(1-2)-20200727	460-214419-3	BIPHENYL (DIPHENYL)	7/31/2020		Y	N	U		U	0.38	0.0051	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZYL BUTYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-21(1-2)-20200727	460-214419-3	ATRAZINE	7/31/2020		Y	N	U		U	0.15	0.0097	mg/kg
SB-21(1-2)-20200727	460-214419-3	2-Methylphenol (O-Cresol)	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-21(1-2)-20200727	460-214419-3	Aldol Condensation Product With 1st Highest Conc.	7/31/2020	580	Y	Y	JA		J	0	0	ug/kg
SB-21(1-2)-20200727	460-214419-3	ACENAPHTHENE	7/31/2020		Y	N	U		U	0.38	0.028	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZO[E]PYRENE	7/31/2020	680	Y	Y	JN		J	0	0	ug/kg
SB-21(1-2)-20200727	460-214419-3	BIS(2-ETHYLHEXYL) PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-21(1-2)-20200727	460-214419-3	4-NITROANILINE	7/31/2020		Y	N	U		U	0.38	0.044	mg/kg
SB-21(1-2)-20200727	460-214419-3	BENZALDEHYDE	7/31/2020		Y	N	U	UJ	UJ	0.38	0.017	mg/kg
SB-21(1-2)-20200727	460-214419-3	4-CHLOROPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-21(1-2)-20200727	460-214419-3	2-NITROANILINE	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-21(1-2)-20200727	460-214419-3	2-NITROPHENOL	7/31/2020		Y	N	U		U	0.38	0.038	mg/kg
SB-21(1-2)-20200727	460-214419-3	3,3'-DICHLOROBENZIDINE	7/31/2020		Y	N	U		U	0.15	0.058	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(1-2)-20200727	460-214419-3	3-NITROANILINE	7/31/2020		Y	N	U		U	0.38	0.043	mg/kg
SB-21(1-2)-20200727	460-214419-3	4,6-DINITRO-2-METHYLPHENOL	7/31/2020		Y	N	U		U	0.31	0.062	mg/kg
SB-21(1-2)-20200727	460-214419-3	4-BROMOPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	0.38	0.015	mg/kg
SB-21(1-2)-20200727	460-214419-3	4-CHLORO-3-METHYLPHENOL	7/31/2020		Y	N	U		U	0.38	0.021	mg/kg
SB-21(1-2)-20200727	460-214419-3	4-CHLOROANILINE	7/31/2020		Y	N	U		U	0.38	0.027	mg/kg
SB-21(1-2)-20200727	460-214419-3	DIMETHYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.087	mg/kg
SB-21(1-2)-20200727	460-214419-3	4-NITROPHENOL	7/31/2020		Y	N	U		U	0.78	0.062	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,4,6-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	0.15	0.049	mg/kg
SB-21(1-2)-20200727	460-214419-3	ACETOPHENONE	7/31/2020		Y	N	U		U	0.38	0.019	mg/kg
SB-21(1-2)-20200727	460-214419-3	2-Methylnaphthalene	7/31/2020		Y	N	U		U	0.38	0.011	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,2,4,5-TETRACHLOROBENZENE	7/31/2020		Y	N	U		U	0.38	0.012	mg/kg
SB-21(1-2)-20200727	460-214419-3	1,4-DIOXANE (P-DIOXANE)	7/31/2020		Y	N	U		U	0.12	0.011	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,4,5-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	0.38	0.039	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,4-DICHLOROPHENOL	7/31/2020		Y	N	U		U	0.15	0.025	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,4-DIMETHYLPHENOL	7/31/2020		Y	N	U		U	0.38	0.017	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,4-DINITROPHENOL	7/31/2020		Y	N	U		U	0.31	0.19	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,4-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.078	0.041	mg/kg
SB-21(1-2)-20200727	460-214419-3	2-CHLOROPHENOL	7/31/2020		Y	N	U		U	0.38	0.014	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,6-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.078	0.028	mg/kg
SB-21(1-2)-20200727	460-214419-3	2-CHLORONAPHTHALENE	7/31/2020		Y	N	U		U	0.38	0.018	mg/kg
SB-21(1-2)-20200727	460-214419-3	FLUORENE	7/31/2020		Y	N	U		U	0.38	0.0052	mg/kg
SB-21(1-2)-20200727	460-214419-3	DI-N-OCTYLPHTHALATE	7/31/2020		Y	N	U		U	0.38	0.020	mg/kg
SB-21(1-2)-20200727	460-214419-3	DI-N-BUTYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.068	mg/kg
SB-21(1-2)-20200727	460-214419-3	2,3,4,6-TETRACHLOROPHENOL	7/31/2020		Y	N	U		U	0.38	0.026	mg/kg
SB-21(1-2)-20200727	460-214419-3	DIETHYL PHTHALATE	7/31/2020		Y	N	U		U	0.38	0.0056	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(5-6)-20200727	460-214419-4	BENZO(A)PYRENE	7/31/2020		Y	N	U		U	0.036	0.0097	mg/kg
SB-21(5-6)-20200727	460-214419-4	BENZO(B)FLUORANTHENE	7/31/2020		Y	N	U		U	0.036	0.0094	mg/kg
SB-21(5-6)-20200727	460-214419-4	BENZO(G,H,I)PERYLENE	7/31/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-21(5-6)-20200727	460-214419-4	4-CHLOROANILINE	7/31/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-21(5-6)-20200727	460-214419-4	BENZO(K)FLUORANTHENE	7/31/2020		Y	N	U		U	0.036	0.0071	mg/kg
SB-21(5-6)-20200727	460-214419-4	BENZYL BUTYL PHTHALATE	7/31/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-21(5-6)-20200727	460-214419-4	BIS(2-CHLOROETHOXY) METHANE	7/31/2020		Y	N	U		U	0.36	0.028	mg/kg
SB-21(5-6)-20200727	460-214419-4	BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	7/31/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-21(5-6)-20200727	460-214419-4	BENZO(A)ANTHRACENE	7/31/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-21(5-6)-20200727	460-214419-4	ACENAPHTHYLENE	7/31/2020		Y	N	U		U	0.36	0.0038	mg/kg
SB-21(5-6)-20200727	460-214419-4	BIS(2-CHLOROISOPROPYL) ETHER	7/31/2020		Y	N	U		U	0.36	0.0066	mg/kg
SB-21(5-6)-20200727	460-214419-4	BIPHENYL (DIPHENYL)	7/31/2020		Y	N	U		U	0.36	0.0048	mg/kg
SB-21(5-6)-20200727	460-214419-4	BENZALDEHYDE	7/31/2020		Y	N	U	UJ	UJ	0.36	0.016	mg/kg
SB-21(5-6)-20200727	460-214419-4	ATRAZINE	7/31/2020		Y	N	U		U	0.15	0.0092	mg/kg
SB-21(5-6)-20200727	460-214419-4	ANTHRACENE	7/31/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-21(5-6)-20200727	460-214419-4	ACETOPHENONE	7/31/2020		Y	N	U		U	0.36	0.018	mg/kg
SB-21(5-6)-20200727	460-214419-4	4-CHLOROPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-21(5-6)-20200727	460-214419-4	4-METHYLPHENOL (P-CRESOL)	7/31/2020		Y	N	U		U	0.36	0.023	mg/kg
SB-21(5-6)-20200727	460-214419-4	4-NITROANILINE	7/31/2020		Y	N	U		U	0.36	0.042	mg/kg
SB-21(5-6)-20200727	460-214419-4	ACENAPHTHENE	7/31/2020		Y	N	U		U	0.36	0.027	mg/kg
SB-21(5-6)-20200727	460-214419-4	4-BROMOPHENYL PHENYL ETHER	7/31/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-21(5-6)-20200727	460-214419-4	BIS(2-ETHYLHEXYL) PHTHALATE	7/31/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-21(5-6)-20200727	460-214419-4	FLUORENE	7/31/2020		Y	N	U		U	0.36	0.0049	mg/kg
SB-21(5-6)-20200727	460-214419-4	4-NITROPHENOL	7/31/2020		Y	N	U		U	0.74	0.059	mg/kg

SDG: 4602144191

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(5-6)-20200727	460-214419-4	2,4-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.074	0.039	mg/kg
SB-21(5-6)-20200727	460-214419-4	CAPROLACTAM	7/31/2020		Y	N	U		U	0.36	0.057	mg/kg
SB-21(5-6)-20200727	460-214419-4	4-CHLORO-3-METHYLPHENOL	7/31/2020		Y	N	U		U	0.36	0.020	mg/kg
SB-21(5-6)-20200727	460-214419-4	DI-N-OCTYLPHTHALATE	7/31/2020		Y	N	U		U	0.36	0.019	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,2,4,5-TETRACHLOROBENZENE	7/31/2020		Y	N	U		U	0.36	0.011	mg/kg
SB-21(5-6)-20200727	460-214419-4	1,4-DIOXANE (P-DIOXANE)	7/31/2020		Y	N	U		U	0.11	0.010	mg/kg
SB-21(5-6)-20200727	460-214419-4	2,3,4,6-TETRACHLOROPHENOL	7/31/2020		Y	N	U		U	0.36	0.025	mg/kg
SB-21(5-6)-20200727	460-214419-4	2,4,5-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	0.36	0.037	mg/kg
SB-21(5-6)-20200727	460-214419-4	2,4,6-TRICHLOROPHENOL	7/31/2020		Y	N	U		U	0.15	0.047	mg/kg
SB-21(5-6)-20200727	460-214419-4	2,4-DICHLOROPHENOL	7/31/2020		Y	N	U		U	0.15	0.023	mg/kg
SB-21(5-6)-20200727	460-214419-4	PYRENE	7/31/2020		Y	N	U		U	0.36	0.0091	mg/kg
SB-21(5-6)-20200727	460-214419-4	2,4-DINITROPHENOL	7/31/2020		Y	N	U		U	0.29	0.18	mg/kg
SB-21(5-6)-20200727	460-214419-4	Aldol Condensation Product With 1st Highest Conc.	7/31/2020	560	Y	Y	JA		J	0	0	ug/kg
SB-21(5-6)-20200727	460-214419-4	2,6-DINITROTOLUENE	7/31/2020		Y	N	U		U	0.074	0.026	mg/kg
SB-21(5-6)-20200727	460-214419-4	2-CHLORONAPHTHALENE	7/31/2020		Y	N	U		U	0.36	0.017	mg/kg
SB-21(5-6)-20200727	460-214419-4	2-CHLOROPHENOL	7/31/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-21(5-6)-20200727	460-214419-4	2-Methylnaphthalene	7/31/2020		Y	N	U		U	0.36	0.010	mg/kg
SB-21(5-6)-20200727	460-214419-4	2-Methylphenol (O-Cresol)	7/31/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-21(5-6)-20200727	460-214419-4	2-NITROANILINE	7/31/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-21(5-6)-20200727	460-214419-4	2-NITROPHENOL	7/31/2020		Y	N	U		U	0.36	0.036	mg/kg
SB-21(5-6)-20200727	460-214419-4	3,3'-DICHLOROBENZIDINE	7/31/2020		Y	N	U		U	0.15	0.055	mg/kg
SB-21(5-6)-20200727	460-214419-4	3-NITROANILINE	7/31/2020		Y	N	U		U	0.36	0.041	mg/kg
SB-21(5-6)-20200727	460-214419-4	2,4-DIMETHYLPHENOL	7/31/2020		Y	N	U		U	0.36	0.016	mg/kg
SB-21(5-6)-20200727	460-214419-4	HEXACHLOROCYCLOPENTADIENE	7/31/2020		Y	N	U		U	0.36	0.032	mg/kg

Analytical Method SW8270D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-21(5-6)-20200727	460-214419-4	CARBAZOLE	7/31/2020		Y	N	U		U	0.36	0.014	mg/kg
SB-21(5-6)-20200727	460-214419-4	CHRYSENE	7/31/2020		Y	N	U		U	0.36	0.0062	mg/kg
SB-21(5-6)-20200727	460-214419-4	DIBENZ(A,H)ANTHRACENE	7/31/2020		Y	N	U		U	0.036	0.016	mg/kg
SB-21(5-6)-20200727	460-214419-4	DIBENZOFURAN	7/31/2020		Y	N	U		U	0.36	0.0051	mg/kg
SB-21(5-6)-20200727	460-214419-4	DIETHYL PHTHALATE	7/31/2020		Y	N	U		U	0.36	0.0053	mg/kg
SB-21(5-6)-20200727	460-214419-4	DIMETHYL PHTHALATE	7/31/2020		Y	N	U		U	0.36	0.083	mg/kg
SB-21(5-6)-20200727	460-214419-4	DI-N-BUTYL PHTHALATE	7/31/2020		Y	N	U		U	0.36	0.064	mg/kg
SB-21(5-6)-20200727	460-214419-4	FLUORANTHENE	7/31/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-21(5-6)-20200727	460-214419-4	4,6-DINITRO-2-METHYLPHENOL	7/31/2020		Y	N	U		U	0.29	0.059	mg/kg
SB-21(5-6)-20200727	460-214419-4	HEXACHLOROBUTADIENE	7/31/2020		Y	N	U		U	0.074	0.0078	mg/kg
SB-21(5-6)-20200727	460-214419-4	PHENOL	7/31/2020		Y	N	U		U	0.36	0.013	mg/kg
SB-21(5-6)-20200727	460-214419-4	HEXACHLOROETHANE	7/31/2020		Y	N	U		U	0.036	0.013	mg/kg
SB-21(5-6)-20200727	460-214419-4	INDENO(1,2,3-C,D)PYRENE	7/31/2020		Y	N	U		U	0.036	0.014	mg/kg
SB-21(5-6)-20200727	460-214419-4	ISOPHORONE	7/31/2020		Y	N	U		U	0.15	0.11	mg/kg
SB-21(5-6)-20200727	460-214419-4	NAPHTHALENE	7/31/2020		Y	N	U		U	0.36	0.0063	mg/kg
SB-21(5-6)-20200727	460-214419-4	NITROBENZENE	7/31/2020		Y	N	U		U	0.036	0.0087	mg/kg
SB-21(5-6)-20200727	460-214419-4	N-NITROSODI-N-PROPYLAMINE	7/31/2020		Y	N	U		U	0.036	0.026	mg/kg
SB-21(5-6)-20200727	460-214419-4	N-NITROSODIPHENYLAMINE	7/31/2020		Y	N	U		U	0.36	0.0070	mg/kg
SB-21(5-6)-20200727	460-214419-4	PENTACHLOROPHENOL	7/31/2020		Y	N	U		U	0.29	0.075	mg/kg
SB-21(5-6)-20200727	460-214419-4	PHENANTHRENE	7/31/2020		Y	N	U		U	0.36	0.0064	mg/kg
SB-21(5-6)-20200727	460-214419-4	HEXACHLOROBENZENE	7/31/2020		Y	N	U		U	0.036	0.017	mg/kg

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-13(3-4)-20200727	460-214419-2	CYANIDE	8/3/2020		Y	N	U		U	0.26	0.13	mg/kg

SDG: 4602144191

Analytical Method SW9012

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Validated	Detect	Lab Qual	Val Qual	Final qual	RL	MDL	Units
SB-14(2-3)-20200727	460-214419-1	CYANIDE	8/3/2020		Y	N	U		U	0.26	0.13	mg/kg
SB-14(5-6)-20200727	460-214419-5	CYANIDE	8/3/2020		Y	N	U		U	0.28	0.14	mg/kg
SB-21(1-2)-20200727	460-214419-3	CYANIDE	8/3/2020		Y	N	U		U	0.25	0.13	mg/kg
SB-21(5-6)-20200727	460-214419-4	CYANIDE	8/3/2020		Y	N	U		U	0.26	0.14	mg/kg