High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry
PCB Congeners (EPA Method 1668C)
Stage 2A Review
Data Quality Control (QC)

Site: PHSS-Swan Island Basin	SDG #: 21638
Laboratory: CFA	Project #: DT2002.03.03.04.01
HydroGeoLogic, Inc. Validator: John Tracy	Validation Date: 10.26.2023
HGL QC Reviewer: Ken Rapuano	Peer Review Date: 08.22.23

Client Sample ID	Laboratory Sample ID	Matrix
SIB-078-TOB-0-1-10122022	21638001	Riverbank Soil
SIB-049-OHW-1-2-10202022	21638002	Riverbank Soil
SIB-064-MLW-1-2-10182022	21638003	Riverbank Soil
SIB-066-OHW-1-2-10182022	21638004	Riverbank Soil
SIB-066-TOB-1-2-10182022	21638005	Riverbank Soil
SIB-067-OHW-2-3-10142022	21638006	Riverbank Soil
SIB-068-OHW-1-2-10142022	21638007	Riverbank Soil
SIB-072-TOB-1-2-10132022	21638008	Riverbank Soil
SIB-074-OHW-1-2-10132022	21638009	Riverbank Soil
SIB-078-OHW-1-2-10122022	21638010	Riverbank Soil
SIB-076-MLW-1-2-10122022	21638011	Riverbank Soil
SIB-080-MLW-1-2-10122022	21638012	Riverbank Soil
SIB-084-TOB-1-2-10112022	21638013	Riverbank Soil
SIB-085-TOB-2-3-10112022	21638014	Riverbank Soil
SIB-087-OHW-2-3-10102022	21638015	Riverbank Soil
SIB-088-OHW-1-2-10102022	21638016	Riverbank Soil
SIB-090-OHW-1-2-10102022	21638017	Riverbank Soil
SIB-093-TOB-1-2-10072022	21638018	Riverbank Soil
SIB-092-MLW-1-2-10102022	21638019	Riverbank Soil
SIB-095-TOB-1-2-10072022	21638020	Riverbank Soil

The following Stage 2A review was performed on the requested analyses. No results were rejected, and analytical completeness is 100%.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No completeness issues were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory in acceptable condition and temperature and were properly preserved.

Qualification: None required.

Holding Times – All samples were prepared and analyzed within their required holding times.

Qualification: None required.

Method Blanks – The method 1668C method blank associated with all samples in this SDG was contaminated with the following PCBs; associated detections below the qualification threshold should be qualified U.

PCB Congener	Concentration (pg/g)	Qualification Threshold (pg/g)
PCB-11	43.5	217.5
PCB-20/28	5.14	25.7
PCB-61/70/74/76	7.22	36.1

The following results are qualified U-MBL:

- **SIB-078-TOB-0-1-10122022: PCB-11**
- **SIB-049-OHW-1-2-10202022: PCB-11, PCB-20/28, PCB-61/70/74/76**
- **SIB-064-MLW-1-2-10182022: PCB-11**
- **SIB-066-OHW-1-2-10182022: PCB-11, PCB-61/70/74/76**
- **SIB-066-TOB-1-2-10182022: PCB-11, PCB-20/28, PCB-61/70/74/76**
- **SIB-067-OHW-2-3-10142022: PCB-11, PCB-20/28, PCB-61/70/74/76**
- **SIB-068-OHW-1-2-10142022: PCB-11, PCB-20/28**
- **SIB-072-TOB-1-2-10132022: PCB-11, PCB-20/28**
- **SIB-074-OHW-1-2-10132022: PCB-20/28**
- **SIB-078-OHW-1-2-10122022: PCB-20/28, PCB-61/70/74/76**
- **SIB-076-MLW-1-2-10122022: PCB-11, PCB-20/28**
- **SIB-080-MLW-1-2-10122022: PCB-11**
- **SIB-084-TOB-1-2-10112022: PCB-20/28**
- **SIB-085-TOB-2-3-10112022: PCB-20/28**
- **SIB-087-OHW-2-3-10102022: PCB-20/28**
- **SIB-093-TOB-1-2-10072022: PCB-11, PCB-20/28**
- **SIB-092-MLW-1-2-10102022 PCB-20/28**
- **SIB-095-TOB-1-2-10072022: PCB-11, PCB-20/28**

- ***Qualification:* Detections of contaminated compounds detected below the qualification threshold are qualified U, reason code MBL. Affected results are listed above.**

Equipment Blanks – Rinse blank EB01-10052022 (results reported with SDG 21924) is associated with all riverbank soil samples collected on 10.7.22. Rinse blank EB02-10102022 (results reported with SDG 20575) is associated with all riverbank soil samples collected from 10.10.2022 through 10.14.2022; Equipment blank EB03-10192022 (results reported with SDG 21924) is associated with all riverbank soil samples collected from 10.18.22 through 10.20.22. Due to the differences in mass extracted, the concentrations reported as pg/L in EBs correspond to the same concentration in pg/g in sediment samples. The following PCB congeners were detected in the EBs (does not include PCB congeners considered to be analytical artifacts based on corresponding detections in the associated aqueous MBs). Note that EB contamination is not adjusted for dilution when comparing to sample results.

EB01-10052022

PCB Congener	Concentration (pg/L)	Soil-equivalent Concentration (pg/g)	Qualification Threshold (pg/g)
PCB-1	4.33	4.33	21.65
PCB-2	3.32	3.32	16.6

PCB-8	6.21	6.21	31.05
PCB-12/13	3.12	3.12	15.6
PCB-15	3.84	3.84	19.2
PCB-16	3.37	3.37	16.85
PCB-17	3.81	3.81	19.05
PCB-26/29	2.33	2.33	11.65
PCB-32	2.62	2.62	13.1
PCB-35	2.45	2.45	12.25
PCB-37	2.48	2.48	12.4
PCB-40/71	3.42	3.42	17.1
PCB-46	1.16	1.16	5.8
PCB-50/53	2.03	2.03	10.15
PCB-56	2.75	2.75	13.75
PCB-60	1.83	1.83	9.15
PCB-64	3.05	3.05	15.25
PCB-84	2.8	2.8	14
PCB-132	3.19	3.19	15.95
PCB-141	2.33	2.33	11.65
PCB-167	1.09	1.09	5.45
PCB-177	1.91	1.91	9.55
PCB-178	1.34	1.34	6.7
PCB-183/185	2.43	2.43	12.15
PCB-196	1.21	1.21	6.05
PCB-197/200	0.891	0.891	4.455
PCB-203	2.05	2.05	10.25

The following results were qualified U-EBL due to contamination in EB01-10052022

- **SIB-093-TOB-1-2-10072022: PCB-17, PCB-26/29, PCB-37, PCB-40/71, PCB-50/53, PCB-60**
- **SIB-095-TOB-1-2-10072022: PCB-50/53, PCB-56, PCB-64**

EB02-10102022

PCB Congener	Concentration (pg/L)	Soil-equivalent Concentration (pg/g)	Qualification Threshold (pg/g)
PCB-1	2.94	2.94	14.7
PCB-2	3.21	3.21	16.05
PCB-8	5.59	5.59	27.95
PCB-16	4.29	4.29	21.45
PCB-17	3.19	3.19	15.95
PCB-32	2.48	2.48	12.4
PCB-40/71	3.73	3.73	18.65
PCB-42	2.28	2.28	11.4
PCB-50/53	1.55	1.55	7.75

PCB-56	2.62	2.62	13.1
PCB-84	2.01	2.01	10.05
PCB-85/116/117	1.47	1.47	7.35

The following results were qualified U-EBL due to contamination in EB02-10102022

- **SIB-078-TOB-0-1-10122022: PCB-1, PCB-2, PCB-17, PCB-32**
- **SIB-068-OHW-1-2-10142022: PCB-50/53**
- **SIB-072-TOB-1-2-10132022: PCB-1, PCB-2, PCB-8, PCB-16, PCB-17, PCB-32**
- **SIB-076-MLW-1-2-10122022: PCB-2, PCB-40/71, PCB-50/53**
- **SIB-080-MLW-1-2-10122022: PCB-50/53**
- **SIB-085-TOB-2-3-10112022: PCB-50/53**
- **SIB-090-OHW-1-2-10102022: PCB-16**

EB03-10192022

PCB Congener	Concentration (pg/L)	Soil-equivalent Concentration (pg/g)	Qualification Threshold (pg/g)
PCB-1	7.68	7.68	38.4
PCB-2	3.01	3.01	15.05
PCB-4	14.9	14.9	74.5
PCB-8	9.43	9.43	47.15
PCB-16	4.93	4.93	24.65
PCB-17	4.2	4.2	21
PCB-19	2.57	2.57	12.85
PCB-26/29	1.74	1.74	8.7
PCB-32	2.97	2.97	14.85
PCB-46	0.707	0.707	3.535
PCB-50/53	1.72	1.72	8.6
PCB-56	2.89	2.89	14.45
PCB-60	1.43	1.43	7.15
PCB-64	3.11	3.11	15.55
PCB-132	2.2	2.2	11
PCB-170	1.31	1.31	6.55
PCB-177	1.43	1.43	7.15
PCB-183/185	1.7	1.7	8.5
PCB-203	0.828	0.828	4.14

The following results were qualified U-EBL due to contamination in EB03-10192022

- **SIB-049-OHW-1-2-10202022: PCB-132**
- **SIB-064-MLW-1-2-10182022: PCB-1**

<u>Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD)</u> – All LCS/LCSD %Rs and RPDs were within QAPP control limits.

Qualification: None required.

Surrogates – All surrogates (EISs) were within QAPP control limits.

Qualification: None required.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) –MS/MSD analyses were performed on sample SIB-078-TOB-0-1-10122022 and are associated with all samples in this SDG. All %Rs and RPDs were within QAPP control limits.

Qualification: None required.

Field Duplicate – No field duplicates were submitted with this SDG.

Qualification: None required.

Laboratory Duplicate – A laboratory duplicate was not performed in this SDG.

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as ND with the associated DL, LOD, and LOQ included on the result summary pages. This reporting format is equivalent to reporting non-detected data in the DoD "LOD U" format. Analytes detected between the DL and LOQ were reported as J-qualified results by the laboratory. These J qualifiers were retained unless superseded by a more severe qualifier.

If a detected analyte has an ion ration outside the characteristic ion ratio window, the result is reported as an estimated maximum potential concentration. All results reported as an EMPC are qualified J-EMPC unless superseded by a higher priority qualifier.

Qualification: None required.

Qualification Summary Table (results in pg/g):

Sample	Analyte	Lab Value	Lab Qualifier	Validated Value	Validated Qualifier	Reason Code
SIB-078-TOB-0-1-10122022	2-CHLOROBIPHENYL (1)	6.03	JK	6.03	UJ	EBL,EMPC
SIB-078-TOB-0-1-10122022	3-CHLOROBIPHENYL (2)	8.5	JK	8.5	UJ	EBL,EMPC
SIB-078-TOB-0-1-10122022	3,3'-DICHLOROBIPHENYL (11)	177	BJ	177	U	MBL
SIB-078-TOB-0-1-10122022	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (182)	17.3	JK	17.3	J	EMPC
SIB-078-TOB-0-1-10122022	2,2',3,4',5,6,6'-HEPTACHLOROBIPHENYL (188)	8.8	JK	8.8	J	EMPC
SIB-078-TOB-0-1-10122022	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (162)	16.4	JK	16.4	J	EMPC
SIB-078-TOB-0-1-10122022	2,2',3,3',4-PENTACHLOROBIPHENYL (82)	71.6	JK	71.6	J	EMPC
SIB-078-TOB-0-1-10122022	2,2',3,6,6'-PENTACHLOROBIPHENYL (96)	5.04	JK	5.04	J	EMPC
SIB-078-TOB-0-1-10122022	PCB-40/71	31.6	CJK	31.6	J	EMPC
SIB-078-TOB-0-1-10122022	2,2',3,6'-TETRACHLOROBIPHENYL (46)	4.72	JK	4.72	J	EMPC
SIB-078-TOB-0-1-10122022	PCB-50/53	7.79	CJK	7.79	J	EMPC
SIB-078-TOB-0-1-10122022	2,3,4,4'-TETRACHLOROBIPHENYL (60)	25.2	JK	25.2	J	EMPC
SIB-078-TOB-0-1-10122022	2,2',4-TRICHLOROBIPHENYL (17)	5.65	JK	5.65	UJ	EBL,EMPC
SIB-078-TOB-0-1-10122022	2,3,4'-TRICHLOROBIPHENYL (22)	12.1	JK	12.1	J	EMPC
SIB-078-TOB-0-1-10122022	2,4',6-TRICHLOROBIPHENYL (32)	4.09	JK	4.09	UJ	EBL,EMPC
SIB-049-OHW-1-2-10202022	3,3'-DICHLOROBIPHENYL (11)	27.3	BJ	27.3	U	MBL
SIB-049-OHW-1-2-10202022	2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (170)	28.8	JK	28.8	J	EMPC
SIB-049-OHW-1-2-10202022	2,2',3,3',5,5',6-HEPTACHLOROBIPHENYL (178)	7.68	JK	7.68	J	EMPC
SIB-049-OHW-1-2-10202022	2,2',3,3',5,6,6'-HEPTACHLOROBIPHENYL (179)	5.12	JK	5.12	J	EMPC
SIB-049-OHW-1-2-10202022	2,2',3,3',4,6'-HEXACHLOROBIPHENYL (132)	7.8	J	7.8	U	EBL
SIB-049-OHW-1-2-10202022	PCB-135/151	6.08	CJK	6.08	J	EMPC
SIB-049-OHW-1-2-10202022	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (136)	3.37	JK	3.37	J	EMPC
SIB-049-OHW-1-2-10202022	PCB-147/149	14.6	CJK	14.6	J	EMPC
SIB-049-OHW-1-2-10202022	2,3,3',4,4',6-HEXACHLOROBIPHENYL (158)	3.98	JK	3.98	J	EMPC
SIB-049-OHW-1-2-10202022	2,2',3,3',4,5,5',6,6'-NONACHLOROBIPHENYL (208)	21.8	JK	21.8	J	EMPC
SIB-049-OHW-1-2-10202022	PCB-86/87/97/109/119/125	7.17	CJK	7.17	J	EMPC
SIB-049-OHW-1-2-10202022	PCB-90/101/113	8.9	CJK	8.9	J	EMPC
SIB-049-OHW-1-2-10202022	PCB-61/70/74/76	8.62	BCJ	8.62	U	MBL
SIB-049-OHW-1-2-10202022	PCB-44/47/65	6.5	CJK	6.5	J	EMPC

SIB-049-OHW-1-2-10202022	PCB-20/28	4.27	BCJK	4.27	UJ	MBL,EMPC
SIB-064-MLW-1-2-10182022	2-CHLOROBIPHENYL (1)	12.7	J	12.7	U	EBL
SIB-064-MLW-1-2-10182022	4,4'-DICHLOROBIPHENYL (15)	59.3	JK	59.3	J	EMPC
SIB-064-MLW-1-2-10182022	4-CHLOROBIPHENYL (3)	22.9	JK	22.9	J	EMPC
SIB-064-MLW-1-2-10182022	2,4'-DICHLOROBIPHENYL (8)	56.6	JK	56.6	J	EMPC
SIB-064-MLW-1-2-10182022	3,3'-DICHLOROBIPHENYL (11)	198	BJK	198	UJ	MBL,EMPC
SIB-064-MLW-1-2-10182022	2,2',3,3',5,6-HEXACHLOROBIPHENYL (134)	147	K	147	J	EMPC
SIB-064-MLW-1-2-10182022	2,2',3,4',5,6'-HEXACHLOROBIPHENYL (148)	9.08	JK	9.08	J	EMPC
SIB-064-MLW-1-2-10182022	2,2',3,4',6,6'-HEXACHLOROBIPHENYL (150)	6.41	JK	6.41	J	EMPC
SIB-064-MLW-1-2-10182022	2,2',3,3',4,5,5',6,6'-NONACHLOROBIPHENYL (208)	114	JK	114	J	EMPC
SIB-064-MLW-1-2-10182022	PCB-98/102	49.2	CJK	49.2	J	EMPC
SIB-064-MLW-1-2-10182022	2,2',3,4-TETRACHLOROBIPHENYL (41)	34.5	JK	34.5	J	EMPC
SIB-064-MLW-1-2-10182022	2,2',3,5-TETRACHLOROBIPHENYL (43)	16.4	JK	16.4	J	EMPC
SIB-064-MLW-1-2-10182022	2,3,4,4'-TETRACHLOROBIPHENYL (60)	70.6	JK	70.6	J	EMPC
SIB-064-MLW-1-2-10182022	2,2',3-TRICHLOROBIPHENYL (16)	49.1	JK	49.1	J	EMPC
SIB-064-MLW-1-2-10182022	2,3',6-TRICHLOROBIPHENYL (27)	11.8	JK	11.8	J	EMPC
SIB-064-MLW-1-2-10182022	3,3',4-TRICHLOROBIPHENYL (35)	16.2	JK	16.2	J	EMPC
SIB-066-OHW-1-2-10182022	3,3'-DICHLOROBIPHENYL (11)	50.6	BJK	50.6	UJ	MBL,EMPC
SIB-066-OHW-1-2-10182022	2,2',3,3',4,6,6'-HEPTACHLOROBIPHENYL (176)	5.5	JK	5.5	J	EMPC
SIB-066-OHW-1-2-10182022	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (190)	21.2	JK	21.2	J	EMPC
SIB-066-OHW-1-2-10182022	2,2',3,3',4,6'-HEXACHLOROBIPHENYL (132)	24.4	JK	24.4	J	EMPC
SIB-066-OHW-1-2-10182022	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (136)	7.69	JK	7.69	J	EMPC
SIB-066-OHW-1-2-10182022	2,3,3',4,4',6-HEXACHLOROBIPHENYL (158)	16	JK	16	J	EMPC
SIB-066-OHW-1-2-10182022	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (196)	27.9	JK	27.9	J	EMPC
SIB-066-OHW-1-2-10182022	PCB-197/200	7.27	CJK	7.27	J	EMPC
SIB-066-OHW-1-2-10182022	2,2',3,3',4,5',6,6'-OCTACHLOROBIPHENYL (201)	6.18	JK	6.18	J	EMPC
SIB-066-OHW-1-2-10182022	2,2',3,3',5,5',6,6'-OCTACHLOROBIPHENYL (202)	18.3	JK	18.3	J	EMPC
SIB-066-OHW-1-2-10182022	2,2',3,4,4',5,5',6-OCTACHLOROBIPHENYL (203)	56.7	JK	56.7	J	EMPC
SIB-066-OHW-1-2-10182022	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	13	JK	13	J	EMPC
SIB-066-OHW-1-2-10182022	PCB-85/116/117	9.28	CJK	9.28	J	EMPC
SIB-066-OHW-1-2-10182022	PCB-86/87/97/109/119/125	15	CJK	15	J	EMPC
SIB-066-OHW-1-2-10182022	2,2',3,5',6-PENTACHLOROBIPHENYL (95)	24.4	JK	24.4	J	EMPC
SIB-066-OHW-1-2-10182022	2,3,3',4,4'-PENTACHLOROBIPHENYL (105)	6.85	JK	6.85	J	EMPC
SIB-066-OHW-1-2-10182022	PCB-110/115	40.1	CJK	40.1	J	EMPC

SIB-066-OHW-1-2-10182022	PCB-61/70/74/76	15.7	BCJK	15.7	UJ	MBL,EMPC
SIB-066-OHW-1-2-10182022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	6.6	JK	6.6	J	EMPC
SIB-066-OHW-1-2-10182022	PCB-18/30	4.45	CJK	4.45	J	EMPC
SIB-066-OHW-1-2-10182022	PCB-20/28	7.79	BCJK	7.79	UJ	MBL,EMPC
SIB-066-OHW-1-2-10182022	PCB-21/33	3.5	CJK	3.5	J	EMPC
SIB-066-TOB-1-2-10182022	4-CHLOROBIPHENYL (3)	6.5	JK	6.5	J	EMPC
SIB-066-TOB-1-2-10182022	3,3'-DICHLOROBIPHENYL (11)	44.1	BJK	44.1	UJ	MBL,EMPC
SIB-066-TOB-1-2-10182022	2,2',3,3',4,6,6'-HEPTACHLOROBIPHENYL (176)	4.61	JK	4.61	J	EMPC
SIB-066-TOB-1-2-10182022	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (190)	13.9	JK	13.9	J	EMPC
SIB-066-TOB-1-2-10182022	PCB-156/157	14	CJK	14	J	EMPC
SIB-066-TOB-1-2-10182022	2,3,3',4,4',6-HEXACHLOROBIPHENYL (158)	12.1	JK	12.1	J	EMPC
SIB-066-TOB-1-2-10182022	2,2',3,3',4,5,5',6,6'-NONACHLOROBIPHENYL (208)	11.5	JK	11.5	J	EMPC
SIB-066-TOB-1-2-10182022	2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL (194)	36.3	JK	36.3	J	EMPC
SIB-066-TOB-1-2-10182022	PCB-197/200	7.04	CJK	7.04	J	EMPC
SIB-066-TOB-1-2-10182022	2,2',3,3',4,5',6,6'-OCTACHLOROBIPHENYL (201)	4.97	JK	4.97	J	EMPC
SIB-066-TOB-1-2-10182022	PCB-85/116/117	6.72	CJK	6.72	J	EMPC
SIB-066-TOB-1-2-10182022	2,2',4,4',5-PENTACHLOROBIPHENYL (99)	12.9	JK	12.9	J	EMPC
SIB-066-TOB-1-2-10182022	2,3,3',4,4'-PENTACHLOROBIPHENYL (105)	8.49	JK	8.49	J	EMPC
SIB-066-TOB-1-2-10182022	PCB-61/70/74/76	17.7	BCJ	17.7	U	MBL
SIB-066-TOB-1-2-10182022	PCB-44/47/65	9.98	CJK	9.98	J	EMPC
SIB-066-TOB-1-2-10182022	2,2',5,5'-TETRACHLOROBIPHENYL (52)	10.2	JK	10.2	J	EMPC
SIB-066-TOB-1-2-10182022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	8.31	JK	8.31	J	EMPC
SIB-066-TOB-1-2-10182022	PCB-20/28	7.57	BCJK	7.57	UJ	MBL,EMPC
SIB-066-TOB-1-2-10182022	PCB-21/33	3.6	CJK	3.6	J	EMPC
SIB-066-TOB-1-2-10182022	2,4',5-TRICHLOROBIPHENYL (31)	5.09	JK	5.09	J	EMPC
SIB-066-TOB-1-2-10182022	3,4,4'-TRICHLOROBIPHENYL (37)	6.78	JK	6.78	J	EMPC
SIB-067-OHW-2-3-10142022	3,3'-DICHLOROBIPHENYL (11)	30.1	BJK	30.1	UJ	MBL,EMPC
SIB-067-OHW-2-3-10142022	PCB-171/173	8.55	CJK	8.55	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',3,3',4,5,5'-HEPTACHLOROBIPHENYL (172)	5.65	JK	5.65	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (136)	1.88	JK	1.88	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',3,4',5,5'-HEXACHLOROBIPHENYL (146)	13.5	JK	13.5	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (196)	7.76	JK	7.76	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',3,3',4,4',5,6-OCTACHLOROBIPHENYL (195)	8.96	JK	8.96	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',3,3',5,5',6,6'-OCTACHLOROBIPHENYL (202)	5.17	JK	5.17	J	EMPC

SIB-067-OHW-2-3-10142022	PCB-90/101/113	9.03	CJK	9.03	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',3,5',6-PENTACHLOROBIPHENYL (95)	7.43	JK	7.43	J	EMPC
SIB-067-OHW-2-3-10142022	2,2',4,4',5-PENTACHLOROBIPHENYL (99)	5.13	JK	5.13	J	EMPC
SIB-067-OHW-2-3-10142022	2,3',4,4',5-PENTACHLOROBIPHENYL (118)	8.72	JK	8.72	J	EMPC
SIB-067-OHW-2-3-10142022	PCB-61/70/74/76	9.21	BCJ	9.21	U	MBL
SIB-067-OHW-2-3-10142022	PCB-45/51	1.31	CJK	1.31	J	EMPC
SIB-067-OHW-2-3-10142022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	4.32	JK	4.32	J	EMPC
SIB-067-OHW-2-3-10142022	PCB-18/30	2.89	CJK	2.89	J	EMPC
SIB-067-OHW-2-3-10142022	PCB-20/28	4.01	BCJK	4.01	UJ	MBL,EMPC
SIB-067-OHW-2-3-10142022	2,4',5-TRICHLOROBIPHENYL (31)	3.64	JK	3.64	J	EMPC
SIB-068-OHW-1-2-10142022	3,3'-DICHLOROBIPHENYL (11)	43.7	BJ	43.7	U	MBL
SIB-068-OHW-1-2-10142022	2,2',3,3',4-PENTACHLOROBIPHENYL (82)	12.3	JK	12.3	J	EMPC
SIB-068-OHW-1-2-10142022	2,2',3,3',5-PENTACHLOROBIPHENYL (83)	11.8	JK	11.8	J	EMPC
SIB-068-OHW-1-2-10142022	2,2',3,5,5'-PENTACHLOROBIPHENYL (92)	95.5	JK	95.5	J	EMPC
SIB-068-OHW-1-2-10142022	2,3,3',5,5'-PENTACHLOROBIPHENYL (111)	5.58	JK	5.58	J	EMPC
SIB-068-OHW-1-2-10142022	PCB-61/70/74/76	44.1	BCJK	44.1	J	EMPC
SIB-068-OHW-1-2-10142022	PCB-44/47/65	25.9	CJK	25.9	J	EMPC
SIB-068-OHW-1-2-10142022	PCB-49/69	18.3	CJK	18.3	J	EMPC
SIB-068-OHW-1-2-10142022	PCB-50/53	4.46	CJ	4.46	U	EBL
SIB-068-OHW-1-2-10142022	2,3,3',4'-TETRACHLOROBIPHENYL (56)	8.97	J	8.97	U	EBL
SIB-068-OHW-1-2-10142022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	23.7	JK	23.7	J	EMPC
SIB-068-OHW-1-2-10142022	2,3,4',6-TETRACHLOROBIPHENYL (64)	6.5	JK	6.5	J	EMPC
SIB-068-OHW-1-2-10142022	PCB-20/28	15.6	BCJ	15.6	U	MBL
SIB-068-OHW-1-2-10142022	3,4,4'-TRICHLOROBIPHENYL (37)	8.31	JK	8.31	J	EMPC
SIB-072-TOB-1-2-10132022	2-CHLOROBIPHENYL (1)	6.35	JK	6.35	UJ	EBL,EMPC
SIB-072-TOB-1-2-10132022	4,4'-DICHLOROBIPHENYL (15)	34.3	JK	34.3	J	EMPC
SIB-072-TOB-1-2-10132022	3-CHLOROBIPHENYL (2)	14.6	J	14.6	U	EBL
SIB-072-TOB-1-2-10132022	4-CHLOROBIPHENYL (3)	11.4	JK	11.4	J	EMPC
SIB-072-TOB-1-2-10132022	2,4'-DICHLOROBIPHENYL (8)	14	J	14	U	EBL
SIB-072-TOB-1-2-10132022	3,3'-DICHLOROBIPHENYL (11)	45.3	BJ	45.3	U	MBL
SIB-072-TOB-1-2-10132022	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL (181)	19.7	JK	19.7	J	EMPC
SIB-072-TOB-1-2-10132022	2,2',3,4',5,6,6'-HEPTACHLOROBIPHENYL (188)	9.73	JK	9.73	J	EMPC
SIB-072-TOB-1-2-10132022	2,2',3,4',5,6'-HEXACHLOROBIPHENYL (148)	6.15	JK	6.15	J	EMPC
SIB-072-TOB-1-2-10132022	2,2',3,4'-TETRACHLOROBIPHENYL (42)	34.2	JK	34.2	J	EMPC
SIB-072-TOB-1-2-10132022	2,2',3-TRICHLOROBIPHENYL (16)	13.4	JK	13.4	UJ	EBL,EMPC

SIB-072-TOB-1-2-10132022	2,2',4-TRICHLOROBIPHENYL (17)	14	J	14	U	EBL
SIB-072-TOB-1-2-10132022	2,4',6-TRICHLOROBIPHENYL (32)	10.8	J	10.8	U	EBL
SIB-074-OHW-1-2-10132022	2,2',3,3',4,5,5'-HEPTACHLOROBIPHENYL (172)	69.1	JK	69.1	J	EMPC
SIB-074-OHW-1-2-10132022	2,2',3,3',5,5',6-HEPTACHLOROBIPHENYL (178)	78.6	JK	78.6	J	EMPC
SIB-074-OHW-1-2-10132022	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (189)	23.6	JK	23.6	J	EMPC
SIB-074-OHW-1-2-10132022	2,2',4,4',5,6'-HEXACHLOROBIPHENYL (154)	29.2	JK	29.2	J	EMPC
SIB-074-OHW-1-2-10132022	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (196)	37.7	JK	37.7	J	EMPC
SIB-074-OHW-1-2-10132022	2,2',3,3',4,4',5,6-OCTACHLOROBIPHENYL (195)	45.9	JK	45.9	J	EMPC
SIB-074-OHW-1-2-10132022	PCB-197/200	14.4	CJK	14.4	J	EMPC
SIB-074-OHW-1-2-10132022	2,2',3,3',5,5',6,6'-OCTACHLOROBIPHENYL (202)	22.4	JK	22.4	J	EMPC
SIB-074-OHW-1-2-10132022	2,2',3,3',4-PENTACHLOROBIPHENYL (82)	156	K	156	J	EMPC
SIB-074-OHW-1-2-10132022	2',3,3',4,5-PENTACHLOROBIPHENYL (122)	42.2	JK	42.2	J	EMPC
SIB-074-OHW-1-2-10132022	2,3,4,4',5-PENTACHLOROBIPHENYL (114)	36.4	JK	36.4	J	EMPC
SIB-074-OHW-1-2-10132022	PCB-44/47/65	44.9	CJK	44.9	J	EMPC
SIB-074-OHW-1-2-10132022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	44.6	JK	44.6	J	EMPC
SIB-074-OHW-1-2-10132022	PCB-20/28	7.2	BCJK	7.2	UJ	MBL,EMPC
SIB-078-OHW-1-2-10122022	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (136)	11.2	JK	11.2	J	EMPC
SIB-078-OHW-1-2-10122022	PCB-85/116/117	18.1	CJK	18.1	J	EMPC
SIB-078-OHW-1-2-10122022	PCB-86/87/97/109/119/125	27.1	CJK	27.1	J	EMPC
SIB-078-OHW-1-2-10122022	2,3,3',4,4'-PENTACHLOROBIPHENYL (105)	13	JK	13	J	EMPC
SIB-078-OHW-1-2-10122022	PCB-61/70/74/76	21.2	BCJ	21.2	U	MBL
SIB-078-OHW-1-2-10122022	PCB-44/47/65	8.86	CJK	8.86	J	EMPC
SIB-078-OHW-1-2-10122022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	11.2	JK	11.2	J	EMPC
SIB-078-OHW-1-2-10122022	PCB-20/28	6.69	BCJ	6.69	U	MBL
SIB-076-MLW-1-2-10122022	3-CHLOROBIPHENYL (2)	9.79	JK	9.79	UJ	EBL,EMPC
SIB-076-MLW-1-2-10122022	3,3'-DICHLOROBIPHENYL (11)	42.9	BJ	42.9	U	MBL
SIB-076-MLW-1-2-10122022	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (182)	4.25	JK	4.25	J	EMPC
SIB-076-MLW-1-2-10122022	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (189)	19.7	JK	19.7	J	EMPC
SIB-076-MLW-1-2-10122022	2,2',3,4,4',5-HEXACHLOROBIPHENYL (137)	27.8	JK	27.8	J	EMPC
SIB-076-MLW-1-2-10122022	2,2',3,3',4-PENTACHLOROBIPHENYL (82)	30.7	JK	30.7	J	EMPC
SIB-076-MLW-1-2-10122022	2,2',3,3',5-PENTACHLOROBIPHENYL (83)	22.8	JK	22.8	J	EMPC
SIB-076-MLW-1-2-10122022	2,2',4,5',6-PENTACHLOROBIPHENYL (103)	14.9	JK	14.9	J	EMPC
SIB-076-MLW-1-2-10122022	2,3,3',4',5-PENTACHLOROBIPHENYL (107)	41.9	JK	41.9	J	EMPC
SIB-076-MLW-1-2-10122022	PCB-40/71	15.1	CJ	15.1	U	EBL
SIB-076-MLW-1-2-10122022	PCB-45/51	4.74	CJK	4.74	J	EMPC

SIB-076-MLW-1-2-10122022	PCB-50/53	4.97	CJK	4.97	UJ	EBL,EMPC
SIB-076-MLW-1-2-10122022	PCB-20/28	18.8	BCJ	18.8	U	MBL
SIB-076-MLW-1-2-10122022	3,4,4'-TRICHLOROBIPHENYL (37)	8.52	JK	8.52	J	EMPC
SIB-080-MLW-1-2-10122022	3,3'-DICHLOROBIPHENYL (11)	44.5	BJK	44.5	UJ	MBL,EMPC
SIB-080-MLW-1-2-10122022	2,2',3,3',4,5,5'-HEPTACHLOROBIPHENYL (172)	61.3	JK	61.3	J	EMPC
SIB-080-MLW-1-2-10122022	2,2',3,3',4,5',6-HEPTACHLOROBIPHENYL (175)	17.2	JK	17.2	J	EMPC
SIB-080-MLW-1-2-10122022	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (182)	4.17	JK	4.17	J	EMPC
SIB-080-MLW-1-2-10122022	PCB-128/166	127	CJK	127	J	EMPC
SIB-080-MLW-1-2-10122022	2,2',3,3',5,6-HEXACHLOROBIPHENYL (134)	61.5	JK	61.5	J	EMPC
SIB-080-MLW-1-2-10122022	2,2',3,4,4',5-HEXACHLOROBIPHENYL (137)	27.7	JK	27.7	J	EMPC
SIB-080-MLW-1-2-10122022	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (205)	10	JK	10	J	EMPC
SIB-080-MLW-1-2-10122022	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	38.9	JK	38.9	J	EMPC
SIB-080-MLW-1-2-10122022	2,2',3,3',4-PENTACHLOROBIPHENYL (82)	37	JK	37	J	EMPC
SIB-080-MLW-1-2-10122022	PCB-85/116/117	51.3	CJK	51.3	J	EMPC
SIB-080-MLW-1-2-10122022	2,2',4,5',6-PENTACHLOROBIPHENYL (103)	12.7	JK	12.7	J	EMPC
SIB-080-MLW-1-2-10122022	PCB-50/53	7.63	CJK	7.63	UJ	EBL,EMPC
SIB-080-MLW-1-2-10122022	PCB-21/33	31.2	CJK	31.2	J	EMPC
SIB-084-TOB-1-2-10112022	2,2',3,3',4,5,6'-HEPTACHLOROBIPHENYL (174)	53.4	JK	53.4	J	EMPC
SIB-084-TOB-1-2-10112022	2,2',3,3',5,5',6-HEPTACHLOROBIPHENYL (178)	21.1	JK	21.1	J	EMPC
SIB-084-TOB-1-2-10112022	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (190)	19.4	JK	19.4	J	EMPC
SIB-084-TOB-1-2-10112022	PCB-128/166	35.5	CJK	35.5	J	EMPC
SIB-084-TOB-1-2-10112022	2,2',3,4',5,5'-HEXACHLOROBIPHENYL (146)	39.4	JK	39.4	J	EMPC
SIB-084-TOB-1-2-10112022	2,2',3,4,5',6-HEXACHLOROBIPHENYL (144)	7.26	JK	7.26	J	EMPC
SIB-084-TOB-1-2-10112022	PCB-197/200	6.03	CJK	6.03	J	EMPC
SIB-084-TOB-1-2-10112022	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	15.4	JK	15.4	J	EMPC
SIB-084-TOB-1-2-10112022	2,2',3,3',6-PENTACHLOROBIPHENYL (84)	22.2	JK	22.2	J	EMPC
SIB-084-TOB-1-2-10112022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	14.6	JK	14.6	J	EMPC
SIB-084-TOB-1-2-10112022	PCB-20/28	7.35	BCJ	7.35	U	MBL
SIB-084-TOB-1-2-10112022	2,4',5-TRICHLOROBIPHENYL (31)	7.39	JK	7.39	J	EMPC
SIB-085-TOB-2-3-10112022	2,2',3,4,4',5-HEXACHLOROBIPHENYL (137)	30.6	JK	30.6	J	EMPC
SIB-085-TOB-2-3-10112022	2,2',4,4',5,6'-HEXACHLOROBIPHENYL (154)	32.7	JK	32.7	J	EMPC
SIB-085-TOB-2-3-10112022	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (162)	12.2	JK	12.2	J	EMPC
SIB-085-TOB-2-3-10112022	2,2',3,3',6-PENTACHLOROBIPHENYL (84)	14.3	JK	14.3	J	EMPC
SIB-085-TOB-2-3-10112022	PCB-44/47/65	24.8	CJK	24.8	J	EMPC
SIB-085-TOB-2-3-10112022	PCB-50/53	2.83	CJK	2.83	UJ	EBL,EMPC

SIB-085-TOB-2-3-10112022	2,3,3',4'-TETRACHLOROBIPHENYL (56)	9.87	J	9.87	U	EBL
SIB-085-TOB-2-3-10112022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	19.8	JK	19.8	J	EMPC
SIB-085-TOB-2-3-10112022	PCB-20/28	6.63	BCJ	6.63	U	MBL
SIB-085-TOB-2-3-10112022	PCB-21/33	4.37	CJK	4.37	J	EMPC
SIB-087-OHW-2-3-10102022	2,2',3,3',5,6,6'-HEPTACHLOROBIPHENYL (179)	8.01	JK	8.01	J	EMPC
SIB-087-OHW-2-3-10102022	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL (206)	25.5	JK	25.5	J	EMPC
SIB-087-OHW-2-3-10102022	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (196)	9.99	JK	9.99	J	EMPC
SIB-087-OHW-2-3-10102022	2,3',4,4',5-PENTACHLOROBIPHENYL (118)	6.03	JK	6.03	J	EMPC
SIB-087-OHW-2-3-10102022	PCB-20/28	4.05	BCJ	4.05	U	MBL
SIB-088-OHW-1-2-10102022	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (189)	27.6	JK	27.6	J	EMPC
SIB-088-OHW-1-2-10102022	2,2',3,3',5,6-HEXACHLOROBIPHENYL (134)	89.9	JK	89.9	J	EMPC
SIB-088-OHW-1-2-10102022	2,2',3,4,4',5-HEXACHLOROBIPHENYL (137)	82.8	JK	82.8	J	EMPC
SIB-088-OHW-1-2-10102022	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (205)	21.6	JK	21.6	J	EMPC
SIB-088-OHW-1-2-10102022	2',3,3',4,5-PENTACHLOROBIPHENYL (122)	18.2	JK	18.2	J	EMPC
SIB-088-OHW-1-2-10102022	2,3',5',6-TETRACHLOROBIPHENYL (73)	10.6	JK	10.6	J	EMPC
SIB-088-OHW-1-2-10102022	2,3',6-TRICHLOROBIPHENYL (27)	15.5	JK	15.5	J	EMPC
SIB-090-OHW-1-2-10102022	4-CHLOROBIPHENYL (3)	14	JK	14	J	EMPC
SIB-090-OHW-1-2-10102022	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (182)	23.5	JK	23.5	J	EMPC
SIB-090-OHW-1-2-10102022	PCB-40/71	35.5	CJK	35.5	J	EMPC
SIB-090-OHW-1-2-10102022	2,3,3',4'-TETRACHLOROBIPHENYL (56)	65.8	JK	65.8	J	EMPC
SIB-090-OHW-1-2-10102022	2,2',3-TRICHLOROBIPHENYL (16)	14.3	J	14.3	U	EBL
SIB-090-OHW-1-2-10102022	2,4',6-TRICHLOROBIPHENYL (32)	12.7	JK	12.7	J	EMPC
SIB-093-TOB-1-2-10072022	3,3'-DICHLOROBIPHENYL (11)	49	BJK	49	UJ	MBL,EMPC
SIB-093-TOB-1-2-10072022	2,2',3,4',5,6'-HEXACHLOROBIPHENYL (148)	20.8	JK	20.8	J	EMPC
SIB-093-TOB-1-2-10072022	2,3,3',4',5-PENTACHLOROBIPHENYL (107)	42.7	JK	42.7	J	EMPC
SIB-093-TOB-1-2-10072022	PCB-40/71	10.3	CJK	10.3	UJ	EBL,EMPC
SIB-093-TOB-1-2-10072022	PCB-45/51	2.74	CJK	2.74	J	EMPC
SIB-093-TOB-1-2-10072022	PCB-50/53	3.32	CJK	3.32	UJ	EBL,EMPC
SIB-093-TOB-1-2-10072022	2,3,4,4'-TETRACHLOROBIPHENYL (60)	9.76	J	9.76	U	EBL
SIB-093-TOB-1-2-10072022	2,3',4,4'-TETRACHLOROBIPHENYL (66)	50.5	JK	50.5	J	EMPC
SIB-093-TOB-1-2-10072022	2,2',4-TRICHLOROBIPHENYL (17)	4.17	J	4.17	U	EBL
SIB-093-TOB-1-2-10072022	PCB-20/28	14.4	BCJ	14.4	U	MBL
SIB-093-TOB-1-2-10072022	2,3,4'-TRICHLOROBIPHENYL (22)	6.68	JK	6.68	J	EMPC
SIB-093-TOB-1-2-10072022	PCB-26/29	3.28	CJK	3.28	UJ	EBL,EMPC

SIB-093-TOB-1-2-10072022	3,4,4'-TRICHLOROBIPHENYL (37)	11	J	11	U	EBL
SIB-092-MLW-1-2-10102022	2,2',3,3',4,5,5'-HEPTACHLOROBIPHENYL (172)	52.5	JK	52.5	J	EMPC
SIB-092-MLW-1-2-10102022	2,2',3,3',4,6,6'-HEPTACHLOROBIPHENYL (176)	36.5	JK	36.5	J	EMPC
SIB-092-MLW-1-2-10102022	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (189)	12.3	JK	12.3	J	EMPC
SIB-092-MLW-1-2-10102022	2,2',3,3',4,4',5,6,6'-NONACHLOROBIPHENYL (207)	31.9	JK	31.9	J	EMPC
SIB-092-MLW-1-2-10102022	PCB-197/200	37.1	CJK	37.1	J	EMPC
SIB-092-MLW-1-2-10102022	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	23.5	JK	23.5	J	EMPC
SIB-092-MLW-1-2-10102022	PCB-61/70/74/76	89.9	CJK	89.9	J	EMPC
SIB-092-MLW-1-2-10102022	PCB-20/28	14.5	BCJK	14.5	UJ	MBL,EMPC
SIB-092-MLW-1-2-10102022	PCB-21/33	17.9	CJK	17.9	J	EMPC
SIB-092-MLW-1-2-10102022	2,4',5-TRICHLOROBIPHENYL (31)	12.1	JK	12.1	J	EMPC
SIB-095-TOB-1-2-10072022	4-CHLOROBIPHENYL (3)	12.8	JK	12.8	J	EMPC
SIB-095-TOB-1-2-10072022	3,3'-DICHLOROBIPHENYL (11)	36.4	BJK	36.4	UJ	MBL,EMPC
SIB-095-TOB-1-2-10072022	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (182)	17.8	JK	17.8	J	EMPC
SIB-095-TOB-1-2-10072022	3,3',4,4',5,5'-HEXACHLOROBIPHENYL (169)	15.6	JK	15.6	J	EMPC
SIB-095-TOB-1-2-10072022	2,2',3,3',5-PENTACHLOROBIPHENYL (83)	21.2	JK	21.2	J	EMPC
SIB-095-TOB-1-2-10072022	PCB-108/124	20.8	CJK	20.8	J	EMPC
SIB-095-TOB-1-2-10072022	PCB-45/51	3.62	CJK	3.62	J	EMPC
SIB-095-TOB-1-2-10072022	PCB-49/69	10.9	CJK	10.9	J	EMPC
SIB-095-TOB-1-2-10072022	PCB-50/53	2.72	CJK	2.72	UJ	EBL,EMPC
SIB-095-TOB-1-2-10072022	2,3,3',4'-TETRACHLOROBIPHENYL (56)	8.02	J	8.02	U	EBL
SIB-095-TOB-1-2-10072022	2,3,4',6-TETRACHLOROBIPHENYL (64)	7.57	JK	7.57	UJ	EBL,EMPC
SIB-095-TOB-1-2-10072022	PCB-18/30	6.03	CJK	6.03	J	EMPC
SIB-095-TOB-1-2-10072022	PCB-20/28	7.92	BCJ	7.92	U	MBL
SIB-095-TOB-1-2-10072022	PCB-21/33	4.61	CJK	4.61	J	EMPC
SIB-095-TOB-1-2-10072022	2,4',5-TRICHLOROBIPHENYL (31)	6.84	JK	6.84	J	EMPC