Stage 2A Review
Data Quality Control (QC)

Site: PHSS-SIB PDI	SDG #: Case 23F0227
Laboratory: ARI	Date: 8/22/2023
HydroGeoLogic, Inc. Reviewer: Deanna Valdebenito Peer Reviewer: Ken Rapuano (8.28.23)	Project: DT2002

Client Sample ID	Laboratory Sample ID	Analyses	Matrix
SIB-120-OHW-1-2-10032022	23F0227-01	PCB Aroclors and Total Metals	Solid
SIB-119-OHW-1-2-10032022	23F0227-02	PCB Aroclors and Total Metals	Solid
SIB-119-TOB-1-2-10042022	23F0227-03	PCB Aroclors and Total Metals	Solid
SIB-118-TOB-1-2-10042022	23F0227-04	PCB Aroclors	Solid
SIB-116-TOB-1-2-10042022	23F0227-05	PCB Aroclors and Total Metals	Solid
SIB-115-TOB-1-2-10042022	23F0227-06	PCB Aroclors and Total Metals	Solid
SIB-114-TOB-1-2-10042022	23F0227-07	PCB Aroclors and Total Metals	Solid
SIB-114-TOB-2-3-10042022	23F0227-08	PCB Aroclors and Total Metals	Solid
SIB-113-TOB-1-2-10042022	23F0227-09	PCB Aroclors and Total Metals	Solid
SIB-112-MLW-1-2-10042022	23F0227-10	PCB Aroclors and Total Metals	Solid
SIB-112-MLW-2-3-10042022	23F0227-11	PCB Aroclors and Total Metals	Solid
SIB-112-TOB-1-2-10052022	23F0227-12	PCB Aroclors and Total Metals	Solid
SIB-112-TOB-2-3-10052022	23F0227-13	PCB Aroclors and Total Metals	Solid
SIB-106-TOB-1-2-10052022	23F0227-14	PCB Aroclors and Total Metals	Solid

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.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory in acceptable condition and temperature and were properly preserved. Only one sample container was received for sample SIB-118-TOB-1-2-10042022 and metals analyses were not performed on this sample.

Qualification: None required.

Holding Times – All samples were prepared and analyzed within their required holding times. The narrative noted that mercury and PCB Aroclors samples were frozen to extend holding times; this is in accordance with the QAPP archiving protocols. All mercury samples were analyzed on day 261-263 from collection, which is greater than the 180-day holding time for frozen mercury samples. All mercury results are detections and should be qualified J, reason code HTA.

***Qualification:* All mercury results are qualified J, reason code HTA.**

Method Blanks – All method blanks were free from contamination except for the blank associated with method 6020B UCT-KED which contained zinc-67 contamination (1.4 mg/kg). Only the zinc result for

sample SIB-116-TOB-1-2-10042022 was quantified using zinc-67; the zinc result for this sample is greater than the qualification limit of 7 mg/kg and no further qualification is required.

Qualification: None required.

Rinsate Blanks – Equipment rinse blank EB01-10052022 (results reported in SDG 22J0175) is associated with all sample results reported in this SDG. The rinse blank was contaminated with low levels of chromium; chromium is not a target analyte for riverbank soil samples and no qualification is required.

Qualification: None required.

Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) – All LCS/LCSD %Rs and RPDs were within QAPP control limits. A standard reference material was also reported for each PCB, metals, and mercury preparation batch; the SRM %Rs met the control limits.

Qualification: None required.

Surrogates – All surrogates were within QAPP control limits except surrogate Decachlorobiphenyl [2C] for samples SIB-115-TOB-1-2-10042022 and SIB-113-TOB-1-2-10042022; in both cases, the single discrepancy was above the upper control limit by greater than 20%. All detected Aroclors should be qualified J with reason code SSH.

Qualification: For sample SIB-115-TOB-1-2-10042022 analytes Aroclor 1248, Aroclor 1254 and Aroclor 1260 are qualified J. For sample SIB-113-TOB-1-2-10042022 analytes Aroclor 1254 and Aroclor 1260 are qualified J.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) – An MS/MSD was performed on sample SIB-119-OHW-1-2-10032022 (Method 8082A) and had all %R and RPDs within QAPP control limits.

Qualification: None required.

Field Duplicate – A field duplicate was not submitted with the samples in this SDG.

Qualification: None required.

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

Qualification: None required.

Compound Quantitation – Analyte results were reported with the associated DL, LOD, and LOQ in the DoD format instead of with the associated MDL and RL. Non-detected results were reported on the hardcopy as <#, where # corresponds to the LOD. The HGL reviewer confirmed that the value associated with non-detected results in the EDD is the MDL, in accordance with the project reporting requirements. Analytes detected between the MDL and RL were reported as J-qualified results by the laboratory. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table (concentrations in µg/kg [Aroclors] or mg/kg [metals]):

Sample	Analyte	Lab Value	Lab Qualifier	Validated Value	Validated Qualifier	Reason Code
SIB-120-OHW-1-2-10032022	Mercury	0.0418	H	0.0418	J	HTA
SIB-119-OHW-1-2-10032022	Mercury	0.0322	H	0.0322	J	HTA
SIB-119-TOB-1-2-10042022	Mercury	0.0556	H	0.0556	J	HTA
SIB-118-TOB-1-2-10042022	None required.					
SIB-116-TOB-1-2-10042022	Mercury	0.0372	H	0.0372	J	HTA
SIB-115-TOB-1-2-10042022	Aroclor 1248	9.5	-	9.5	J	SSH
	Aroclor 1254	12.8	-	12.8	J	SSH
	Aroclor 1260	18.3	-	18.3	J	SSH
	Mercury	0.0389	H	0.0389	J	HTA
SIB-114-TOB-1-2-10042022	Mercury	0.0467	H	0.0467	J	HTA
SIB-114-TOB-2-3-10042022	Mercury	0.0369	H	0.0369	J	HTA
SIB-113-TOB-1-2-10042022	Aroclor 1254	6.9	-	6.9	J	SSH
	Aroclor 1260	11.3	-	11.3	J	SSH
	Mercury	0.0343	H	0.0343	J	HTA
SIB-112-MLW-1-2-10042022	Mercury	0.0443	H	0.0443	J	HTA
SIB-112-MLW-2-3-10042022	Mercury	0.0275	H J	0.0275	J	HTA
SIB-112-TOB-1-2-10052022	Mercury	0.0425	H	0.0425	J	HTA
SIB-112-TOB-2-3-10052022	Mercury	0.035	H	0.035	J	HTA
SIB-106-TOB-1-2-10052022	Mercury	0.027	H	0.027	J	HTA