**Multiple Analysis**
VOCs (SW846 Method 8260C), SVOCs (SW846 Method 8270D), PAHs (SW846 Method 8270D SIM), Mercury (SW846 Method 7470A), Tributyl Tin (ALS SOP), TOC (SW846 Method 9060A), and TSS (Standard Methods 2540D)
**Stage 2A Review**
**Data Quality Control (QC)**

| | |
|---|---|
| Site: PHSS-Swan Island Basin | SDG #: K2212518 |
| Laboratory: ALS Environmental | Project #: DT2002.03.03.03.01 |
| HydroGeoLogic, Inc. Validator: Joseph Vilain | Validation Date: 06.01.23 |
| HGL QC Reviewer: Ken Rapuano | Peer Review Date: 06.01.23 |

| Client Sample ID | Laboratory Sample ID | Matrix |
|---|---|---|
| SIB-SW-AAM131-CAR-102122 | K2212518-001 | Water |
| SIB-SW-AAQ005-CAR-102122 | K2212518-002 | Water |
| SIB-SW-AAM169-CAR-102122 | K2212518-003 | Water |
| SIB-SW-AAM107-CAR-102122 | K2212518-004 | Water |
| SIB-SW-AAP957-CAR-102122 | K2212518-005 | Water |
| SIB-SW-AAM131-CAR-ST-102122 | K2212518-006 | Storm Water |
| SIB-SW-AAQ005-CAR-ST-102122 | K2212518-007 | Storm Water |
| SIB-SW-AAM169-CAR-ST-102122 | K2212518-008 | Storm Water |
| SIB-SW-AAM107-CAR-ST-102122 | K2212518-009 | Storm Water |
| SIB-SW-AAP957-CAR-ST-102122 | K2212518-010 | Storm Water |
| SIB-SW-AAM131-CAR-SE-102122 | K2212518-011 | Sediment |
| SIB-SW-AAQ005-CAR-SE-102122 | K2212518-012 | Sediment |
| SIB-SW-AAM169-CAR-SE-102122 | K2212518-013 | Sediment |
| SIB-SW-AAM107-CAR-SE-102122 | K2212518-014 | Sediment |
| SIB-SW-AAP957-CAR-SE-102122 | K2212518-015 | Sediment |

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. Several revisions of this data package were produced to complete the reporting of the analyses of the samples. It was noted that the COC was incorrect in the analyte lists and requested analyses. The reported analyses and analytes have been determined to be correct. It was noted in the narrative that due to lab oversight, pentachlorophenol was not reported in the results

*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.

Laboratory Blanks – The TOC calibration blanks were free from contamination. The SVOCs method blank was contaminated with bis(2-ethylhexyl)phthalate. All sample bis(2-ethylhexyl)phthalate results were below the qualification threshold and should be qualified U. The PAH method blank was contaminated with benz(a)anthracene, chrysene, fluoranthene, and pyrene, all detections of these analytes were below the qualification threshold and should be qualified U. All other blanks were free from contamination.

> ***Qualification:*** **All detected bis(2-ethylhexyl)phthalate, benz(a)anthracene, chrysene, fluoranthene, and pyrene results are qualified U.**

Trip Blanks – A trip blank was not submitted with the samples in this SDG.

> *Qualification:* None required.

Rinsate Blanks – Rinsate blanks were not submitted with the samples in this SDG.

> *Qualification:* None required.

Ambient Blanks – An ambient blank was not submitted with this SDG.

> *Qualification:* None required.

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

> *Qualification:* None required.

Surrogates – All surrogates were within QAPP control limits.

> *Qualification: None required*.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) – MS/MSD was not performed for this SDG.

> *Qualification:* None required.

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

> *Qualification:* None required.

Laboratory Duplicate – A laboratory replicate was performed on sample SIB-SW-AAM131-CAR-ST-102122 for TSS; the RPD was within control limits.

> *Qualification:* None required.

Compound Quantitation – Analyte non-detections were reported as ND with the associated MDL and MRL included on the result summary pages. This reporting format is equivalent to reporting non-detected data in the EPA “MDL U” format. Analytes detected between the MDL and MRL 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/L except TDS in mg/L):

| Sample | Analyte | Lab Value | Lab Qualifier | Validated Value | Validated Qualifier | Reason Code |
|---|---|---|---|---|---|---|
| SIB-SW-AAM131-CAR-ST-102122 | bis(2-Ethylhexyl)phthalate | 2.4 | B | 2.4 | U | MBH |
| | Benz(a)anthracene | 0.010 | J | 0.010 | U | MBL |
| | Chrysene | 0.0098 | J | 0.0098 | U | MBL |
| | Fluoranthene | 0.020 | J | 0.020 | U | MBL |
| | Pyrene | 0.019 | J | 0.019 | U | MBL |
| SIB-SW-AAQ005-CAR-ST-102122 | bis(2-Ethylhexyl)phthalate | 2.3 | B | 2.3 | U | MBH |
| | Fluoranthene | 0.036 | -- | 0.036 | U | MBL |
| | Pyrene | 0.035 | -- | 0.035 | U | MBL |
| SIB-SW-AAM169-CAR-ST-102122 | bis(2-Ethylhexyl)phthalate | 2.2 | B | 2.2 | U | MBH |
| | Fluoranthene | 0.019 | J | 0.019 | U | MBL |
| | Pyrene | 0.024 | -- | 0.024 | U | MBL |
| SIB-SW-AAM107-CAR-ST-102122 | bis(2-Ethylhexyl)phthalate | 2.4 | B | 2.4 | U | MBH |
| | Fluoranthene | 0.016 | J | 0.016 | U | MBL |
| | Pyrene | 0018 | J | 0018 | U | MBL |
| SIB-SW-AAP957-CAR-ST-102122 | bis(2-Ethylhexyl)phthalate | 2.2 | B | 2.2 | U | MBH |
| | Fluoranthene | 0.020 | J | 0.020 | U | MBL |
| | Pyrene | 0.023 | -- | 0.023 | U | MBL |