



Work Plan, Pressure Gauge Installation

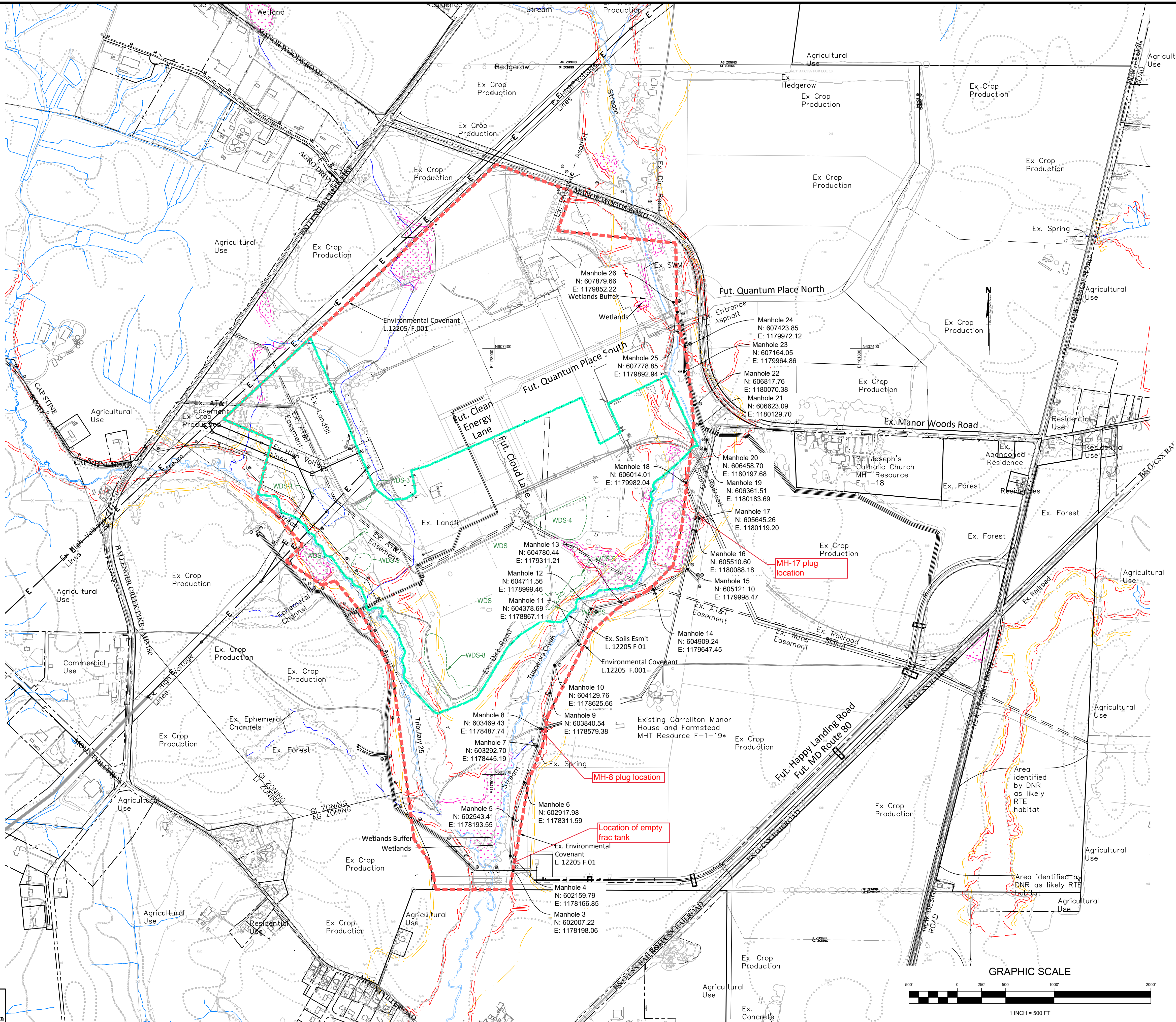
Former East Alcoa Property

June 23, 2023

Geo-Technology Associates, Inc. (GTA), on behalf of Quantum Maryland LLC, has prepared the following Work Plan for the installation of pressure gauges on plugs within a sewer line at the Former East Alcoa Property (“Site”). These activities are proposed to address concerns transmitted by the Land Restoration Program and Water and Sciences Administration.

Existing plugs are located at the sewer pipe flowing into MH-17 (from the pipe going towards MH-18) and the pipe flowing out of MH-8 (into the pipe flowing towards MH-7). Since the plug was placed in the sewer line entering into MH-17, this manhole is dry and the pressure gauge can be installed without vacating water. Water located in MH-8 will need to be vacated in order to install the pressure gauge at that location. It is anticipated that approximately 8,000-gallons will be vacated from MH-8 and placed in an empty frac tank located between MH-3 and MH-4. Plug and frac tank locations are depicted on the attached exhibit.

A frac tank containing approximately 21,000 gallons of water is currently located between MH-3 and MH-4, and water sampling of this tank was conducted on June 15, 2023. The sampling results did not identify detectable concentrations of total metals, PCBs, cyanide, VOCs, or PAHs. 1.7 ug/L nickel in the dissolved metals sample, and fluoride was 0.32 mg/L. The laboratory analysis report for this sampling is attached.

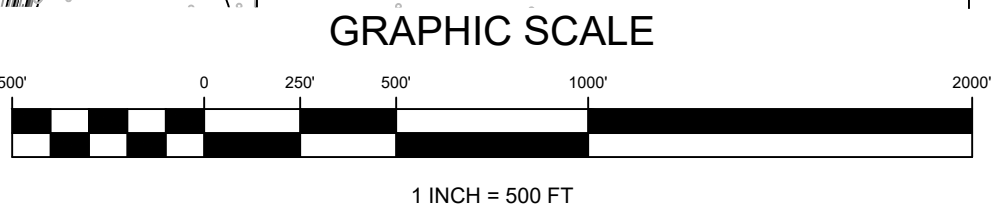


LEGEND

- EXISTING TREE
- EXISTING TREELINE
- EXISTING WETLAND
- EXISTING WETLAND BUFFER
- WASTE DISPOSAL SITE
- EFFECTIVE 100 YEAR FLOODPLAIN
- EFFECTIVE 100 YEAR FLOODPLAIN BUFFER
- PENDING 100 YEAR FLOODPLAIN
- PENDING 100 YEAR FLOODPLAIN BUFFER
- EXISTING STREAM VALLEY BUFFER
- EXISTING TOPO w/ CONTOUR LABEL
- SOILS LINES
- SOIL TYPE

HYDROLOGIC SOIL GROUPS

SOIL NAME	DESCRIPTION	HSG
AIB	Adamstown-Funkstown complex (0-8% slopes)	C
BIC	Buckeystown loam (3-8% slopes)	B
DiB	Duffield-Ryder silt loam (3-8% slopes)	B
HcB	Hagerstown-Opequon silty clay loams (3-8% slopes)rocky	B
LsA	Lindside silt loam (0-3% slopes)	C
MAA	Melvin-Lindside silt loam (0-3% slopes)	B/D



CALL "MISS UTILITY" AT
1-800-257-7777
72 Hours Before Start of Construction

REVISION	DATE	REVISION	DATE	BY	DATE

DEVELOPER/ OWNER:
QUANTUM MARYLAND, LLC
 500 E 4TH STREET SUITE 333
 AUSTIN, TX 78701
 PHONE: 530-417-7496
 CONTACT: AD ROBISON

Site Exhibit

RODGERS CONSULTING
 1947 Century Boulevard, Suite 200, Germantown, Maryland 20874
 Ph: 301.948.4700 Fx: 301.948.6256 www.rodgers.com

QUANTUM FREDERICK
 LIBER 15038 FOLIO 393
 ELECTION DISTRICT NO. 1
 FREDERICK COUNTY, MARYLAND

SCALE: 1"=500'
 JOB No. 1339A2
 June, 2023
 INDEX No. EXB-1
 SHEET No. 1 OF 1

Project Name: 31222314
PSS Project No.: 23061513

June 22, 2023

Kevin Plocek
GTA - Baltimore
1414 Key Highway, Ste. 201P
Baltimore, MD 21230



Reference: PSS Project No: **23061513**
Project Name: 31222314
Project Location: Baltimore
Project ID.: 31222314

Dear Kevin Plocek:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **23061513**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on July 20, 2023, with the exception of air canisters which are cleaned immediately following analysis. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Cathy Thompson".

Cathy Thompson
QA Officer



Explanation of Qualifiers

Project Name: 31222314

PSS Project No.: 23061513

Project ID: 31222314

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/15/2023 at 04:40 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
23061513-001	ST-1	GROUND WATER	06/15/23 12:30

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].
7. Method 180.1, The Determination of Turbidity by Nephelometry, recommends samples over 40 NTU be diluted until the turbidity falls below 40 units. Routine samples over 40 NTU may not be diluted as long as the data quality objectives are not affected.
8. Alkalinity results analyzed by EPA 310.2 that are reported by dilution are estimated and are not in compliance with method requirements.

Standard Flags/Abbreviations:

- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C** Results Pending Final Confirmation.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail** The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J** The target analyte was positively identified below the reporting limit but greater than the MDL.
- MDL** This is the Laboratory Method Detection Limit which is equivalent to the Limit of Detection (LOD). The LOD is the minimum result, which can be reliably discriminated from a blank with a predetermined confidence level. This value will remain constant across multiple similar instrumentation and among different analysts. An LOD is analyte and matrix specific.
- ND** Not Detected at or above the reporting limit.
- RL** PSS Reporting Limit.
- U** Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

Certificate of Analysis

Project Name: 31222314
PSS Project No.: 23061513

Sample ID: ST-1 **Date/Time Sampled: 06/15/2023 12:30** **PSS Sample ID: 23061513-001**
Matrix: GROUND WATER **Date/Time Received: 06/15/2023 16:40**

MDE TCL Volatile Organic Compounds Analytical Method: SW-846 8260 D Preparation Method: SW5030B

Qualifier(s): See Sample Receipt section on Case Narrative. See Batch 204476 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	ND	ug/L	5.0		1	06/20/23	06/20/23 16:31	1011
Benzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Bromochloromethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Bromoform	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Bromomethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
2-Butanone (MEK)	ND	ug/L	5.0		1	06/20/23	06/20/23 16:31	1011
Carbon Disulfide	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Carbon tetrachloride	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Chlorobenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Chloroethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Chloroform	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Chloromethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Cyclohexane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2-Dibromoethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Ethylbenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
2-Hexanone (MBK)	ND	ug/L	5.0		1	06/20/23	06/20/23 16:31	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Methyl Acetate	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Methylcyclohexane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Methylene chloride	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011

Certificate of Analysis

Project Name: 31222314
PSS Project No.: 23061513

Sample ID: ST-1 **Date/Time Sampled: 06/15/2023 12:30** **PSS Sample ID: 23061513-001**
Matrix: GROUND WATER **Date/Time Received: 06/15/2023 16:40**

MDE TCL Volatile Organic Compounds Analytical Method: SW-846 8260 D Preparation Method: SW5030B

Qualifier(s): See Sample Receipt section on Case Narrative. See Batch 204476 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0		1	06/20/23	06/20/23 16:31	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Naphthalene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Styrene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Toluene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Trichloroethene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Trichlorofluoromethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,2,4-Trimethylbenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
1,3,5-Trimethylbenzene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
Vinyl chloride	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011
m&p-Xylene	ND	ug/L	2.0		1	06/20/23	06/20/23 16:31	1011
o-Xylene	ND	ug/L	1.0		1	06/20/23	06/20/23 16:31	1011

Surrogate(s)	Recovery	Limits						
4-Bromofluorobenzene	115 %	88-120	1		06/20/23	06/20/23 16:31	1011	
Dibromofluoromethane	97 %	92-107	1		06/20/23	06/20/23 16:31	1011	
Toluene-D8	97 %	95-106	1		06/20/23	06/20/23 16:31	1011	

MDE Polyaromatic Hydrocarbons (PAHs) Analytical Method: SW-846 8270 E Preparation Method: SW3510C

Qualifier(s): See Batch 204475 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Acenaphthylene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Anthracene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Benzo(a)anthracene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Benzo(a)pyrene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Benzo(b)fluoranthene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Benzo(g,h,i)perylene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070

Certificate of Analysis

Project Name: 31222314

PSS Project No.: 23061513

Sample ID: ST-1 **Date/Time Sampled: 06/15/2023 12:30** **PSS Sample ID: 23061513-001**
Matrix: GROUND WATER **Date/Time Received: 06/15/2023 16:40**

MDE Polyaromatic Hydrocarbons (PAHs) Analytical Method: SW-846 8270 E Preparation Method: SW3510C

Qualifier(s): See Batch 204475 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzo(k)fluoranthene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Chrysene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Dibenz(a,h)Anthracene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Fluoranthene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Fluorene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Indeno(1,2,3-c,d)Pyrene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
2-Methylnaphthalene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Naphthalene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Phenanthrene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070
Pyrene	ND	ug/L	0.25		1	06/20/23	06/20/23 15:43	1070

<i>Surrogate(s)</i>	<i>Recovery</i>	<i>Limits</i>						
<i>2-Fluorobiphenyl</i>	76 %	59-108			1	06/20/23	06/20/23 15:43	1070
<i>2-Fluorophenol</i>	71 %	47-100			1	06/20/23	06/20/23 15:43	1070
<i>Nitrobenzene-d5</i>	67 %	47-108			1	06/20/23	06/20/23 15:43	1070
<i>Phenol-d6</i>	69 %	57-102			1	06/20/23	06/20/23 15:43	1070
<i>Terphenyl-D14</i>	87 %	77-120			1	06/20/23	06/20/23 15:43	1070
<i>2,4,6-Tribromophenol</i>	83 %	55-120			1	06/20/23	06/20/23 15:43	1070

Project Name: 31222314

PSS Project No.: 23061513

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Matrix spike and matrix spike duplicate analyses may not be performed due to insufficient sample quantity. In these instances, a laboratory control sample and laboratory control sample duplicate are analyzed unless otherwise noted or specified in the method.

Sample Receipt:

Received one voa vial for sample 001 with headspace.

Sample aliquots for dissolved metals were not field filtered and were received unpreserved; as such, associated sample results are not suitable for compliance under the Clean Water Act and/or Safe Drinking Water Act.

Analytical:

Total Metals

Batch: 204492

Method exceedance: Recovery of the low-level initial calibration readback standard for chromium was 126%; limits are 80 - 120%. The recovery of the mid-level initial calibration readback standard met acceptance criteria. All batch QC was also acceptable.

Analytical:

Dissolved Priority Pollutant Metals

Batch: 204501

The result reported for the dissolved analysis is higher than the result reported for the total analysis. The results reported are within the precision limits associated with the methods.

Method exceedance: Recovery of the low-level initial calibration readback standard for chromium was 126%; limits are 80 - 120%. The recovery of the mid-level initial calibration readback standard met acceptance criteria. All batch QC was also acceptable.

Analytical:

TCL Volatiles plus Oxygenates

Batch: 204476

Continuing calibration verification standard (CCV) meets method criteria in that more than 80% of analytes are within acceptance limits, see QC summary.

Laboratory control sample (LCS) exceedances identified; see QC summary. Exceedances meet marginal exceedance criteria.

Analytical:

Polyaromatic Hydrocarbons (PAHs)

Batch: 204475

Method exceedance: Quality control sample surrogate exceedance identified, see QC summary.

Case Narrative

Project Name: 31222314

PSS Project No.: 23061513

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

Lab Chronology

Project Name: 31222314
PSS Project No.: 23061513

Method	Client Sample ID	Analysis Type	PSS Sample ID	Mtx	Prep Batch	Analytical Batch	Prepared	Analyzed
EPA 200.8	ST-1	Initial	23061513-001	W	95935	204492	06/20/2023 11:05	06/20/2023 22:42
	95935-1-BKS	BKS	95935-1-BKS	W	95935	204492	06/20/2023 11:05	06/20/2023 22:12
	95935-1-BLK	BLK	95935-1-BLK	W	95935	204492	06/20/2023 11:05	06/20/2023 22:07
	Dulles Outfall 1 S	MS	23061415-001 S	W	95935	204492	06/20/2023 11:05	06/20/2023 22:22
	Dulles Outfall 1 SD	MSD	23061415-001 S	W	95935	204492	06/20/2023 11:05	06/20/2023 22:27
EPA 200.8 Dissolved	ST-1	Initial	23061513-001	W	95956	204501	06/20/2023 16:45	06/21/2023 01:28
	95956-1-BKS	BKS	95956-1-BKS	W	95956	204501	06/20/2023 16:45	06/21/2023 01:23
	95956-1-BLK	BLK	95956-1-BLK	W	95956	204501	06/20/2023 16:45	06/21/2023 01:18
	ST-1 S	MS	23061513-001 S	W	95956	204501	06/20/2023 16:45	06/21/2023 01:32
	ST-1 SD	MSD	23061513-001 S	W	95956	204501	06/20/2023 16:45	06/21/2023 01:37
EPA 300.0	ST-1	Initial	23061513-001	W	95913	204440	06/16/2023 11:24	06/16/2023 12:52
	95913-1-BKS	BKS	95913-1-BKS	W	95913	204440	06/16/2023 10:32	06/16/2023 12:07
	95913-1-BLK	BLK	95913-1-BLK	W	95913	204440	06/16/2023 10:32	06/16/2023 11:44
	ST-1 S	MS	23061513-001 S	W	95913	204440	06/16/2023 11:24	06/16/2023 13:15
	ST-1 SD	MSD	23061513-001 S	W	95913	204440	06/16/2023 11:24	06/16/2023 13:38
EPA 608 .3	ST-1	Initial	23061513-001	W	95927	204504	06/19/2023 10:21	06/20/2023 20:25
	95927-1-BKS	BKS	95927-1-BKS	W	95927	204504	06/19/2023 10:21	06/20/2023 19:28
	95927-1-BLK	BLK	95927-1-BLK	W	95927	204504	06/19/2023 10:21	06/20/2023 08:11
	95927-1-BSD	BSD	95927-1-BSD	W	95927	204504	06/19/2023 10:21	06/20/2023 19:56
SM 4500-CN C,E - 2016	ST-1	Initial	23061513-001	W	95983	204544	06/22/2023 11:31	06/22/2023 13:39
	95983-1-BKS	BKS	95983-1-BKS	W	95983	204544	06/22/2023 12:07	06/22/2023 13:33
	95983-1-BLK	BLK	95983-1-BLK	W	95983	204544	06/22/2023 12:07	06/22/2023 13:31
	95983-1-BSD	BSD	95983-1-BSD	W	95983	204544	06/22/2023 11:31	06/22/2023 13:35
	23061513-001 S	MS	23061513-001 S	W	95983	204544	06/22/2023 11:31	06/22/2023 13:41
	23061513-001 SD	MSD	23061513-001 S	W	95983	204544	06/22/2023 11:31	06/22/2023 13:43
SW-846 8260 D	ST-1	Initial	23061513-001	W	95959	204476	06/20/2023 10:34	06/20/2023 16:31
	95959-1-BKS	BKS	95959-1-BKS	W	95959	204476	06/20/2023 10:34	06/20/2023 10:34
	95959-1-BLK	BLK	95959-1-BLK	W	95959	204476	06/20/2023 10:34	06/20/2023 11:50
	MW-34 S	MS	23061419-006 S	W	95959	204476	06/20/2023 10:34	06/20/2023 14:51
	MW-34 SD	MSD	23061419-006 S	W	95959	204476	06/20/2023 10:34	06/20/2023 15:14
SW-846 8270 E	ST-1	Initial	23061513-001	W	95947	204475	06/20/2023 09:15	06/20/2023 15:43
	95947-1-BKS	BKS	95947-1-BKS	W	95947	204475	06/20/2023 09:15	06/20/2023 13:01
	95947-1-BLK	BLK	95947-1-BLK	W	95947	204475	06/20/2023 09:15	06/20/2023 11:12
	95947-1-BSD	BSD	95947-1-BSD	W	95947	204475	06/20/2023 09:15	06/20/2023 13:28

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: SM 4500-CN C,E -2016

Seq Number: 204544

Matrix: Water

Prep Method: SM4500CN-CPRE

Date Prep: 06/22/23

MB Sample Id: 95983-1-BLK

LCS Sample Id: 95983-1-BKS

LCSD Sample Id: 95983-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	RPD	RPD Limit	Units	Flag
Cyanide, Total	<0.01000	0.1000	0.09399	94	0.09670	97	83-117	3	20	mg/L	

Analytical Method: SM 4500-CN C,E -2016

Seq Number: 204544

Matrix: Ground Water

Prep Method: SM4500CN-CPRE

Date Prep: 06/22/23

Parent Sample Id: 23061513-001

MS Sample Id: 23061513-001 S

MSD Sample Id: 23061513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	RPD	RPD Limit	Units	Flag
Cyanide, Total	<0.01000	0.1000	0.09761	98	0.09571	96	67-124	2	20	mg/L	

Analytical Method: EPA 200.8

Seq Number: 204492

Matrix: Water

Prep Method: E200.8_PREP

Date Prep: 06/20/23

MB Sample Id: 95935-1-BLK

LCS Sample Id: 95935-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Flag
Antimony	<5.000	25.00	26.37	105	85-115	ug/L	
Arsenic	<1.000	50.00	52.42	105	85-115	ug/L	
Beryllium	<1.000	50.00	48.33	97	85-115	ug/L	
Cadmium	<1.000	50.00	51.22	102	85-115	ug/L	
Chromium	<1.000	50.00	52.34	105	85-115	ug/L	
Copper	<1.000	50.00	52.12	104	85-115	ug/L	
Lead	<1.000	50.00	51.54	103	85-115	ug/L	
Mercury	<0.2000	1.000	0.9930	99	85-115	ug/L	
Nickel	<1.000	50.00	50.78	102	85-115	ug/L	
Selenium	<1.000	50.00	50.78	102	85-115	ug/L	
Silver	<1.000	5.000	5.155	103	85-115	ug/L	
Thallium	<1.000	50.00	50.69	101	85-115	ug/L	
Zinc	<20.00	100	104.9	105	85-115	ug/L	

Project Name 31222314
PSS Project No.: 23061513

Analytical Method: EPA 200.8 Dissolved

Seq Number: 204501 Matrix: Water
MB Sample Id: 95956-1-BLK LCS Sample Id: 95956-1-BKS

Prep Method: E200.8_PREP
Date Prep: 06/20/23

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Flag
Antimony	<5.000	25.00	25.07	100	85-115	ug/L	
Arsenic	<1.000	50.00	53.17	106	85-115	ug/L	
Beryllium	<1.000	50.00	46.57	93	85-115	ug/L	
Cadmium	<1.000	50.00	50.18	100	85-115	ug/L	
Chromium	<1.000	50.00	52.75	106	85-115	ug/L	
Copper	<1.000	50.00	52.14	104	85-115	ug/L	
Lead	<1.000	50.00	50.90	102	85-115	ug/L	
Mercury	<0.2000	1.000	1.054	105	85-115	ug/L	
Nickel	<1.000	50.00	51.50	103	85-115	ug/L	
Selenium	<1.000	50.00	53.75	108	85-115	ug/L	
Silver	<1.000	5.000	5.098	102	85-115	ug/L	
Thallium	<1.000	50.00	50.10	100	85-115	ug/L	
Zinc	<20.00	100	103.9	104	85-115	ug/L	

Analytical Method: EPA 200.8 Dissolved

Seq Number: 204501 Matrix: Ground Water
Parent Sample Id: 23061513-001 MS Sample Id: 23061513-001 S

Prep Method: E200.8_PREP
Date Prep: 06/20/23
MSD Sample Id: 23061513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	RPD	RPD Limit	Units	Flag
Antimony	<5.000	25.00	25.20	101	25.75	103	70-130	2	25	ug/L	
Arsenic	<1.000	50.00	53.85	108	54.73	109	70-130	2	25	ug/L	
Beryllium	<1.000	50.00	48.16	96	49.29	99	70-130	2	25	ug/L	
Cadmium	<1.000	50.00	49.30	99	50.58	101	70-130	3	25	ug/L	
Chromium	<1.000	50.00	51.99	104	52.82	106	70-130	2	25	ug/L	
Copper	<1.000	50.00	49.92	100	50.92	102	70-130	2	25	ug/L	
Lead	<1.000	50.00	49.54	99	50.98	102	70-130	3	25	ug/L	
Mercury	<0.2000	1.000	1.136	114	1.108	111	70-130	2	25	ug/L	
Nickel	1.729	50.00	50.93	98	51.27	99	70-130	1	25	ug/L	
Selenium	<1.000	50.00	62.91	126	62.44	125	70-130	1	25	ug/L	
Silver	<1.000	5.000	4.950	99	5.103	102	70-130	3	25	ug/L	
Thallium	<1.000	50.00	50.17	100	51.34	103	70-130	2	25	ug/L	
Zinc	<20.00	100	102.6	103	105.9	106	70-130	3	25	ug/L	

Analytical Method: EPA 300.0

Seq Number: 204440 Matrix: Water
MB Sample Id: 95913-1-BLK LCS Sample Id: 95913-1-BKS

Prep Method: E300.0P
Date Prep: 06/16/23

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Flag
Fluoride	<0.2500	2.500	2.390	96	90-110	mg/L	

Project Name 31222314
PSS Project No.: 23061513

Analytical Method: EPA 300.0

Seq Number: 204440 Matrix: Ground Water Prep Method: E300.0P
Parent Sample Id: 23061513-001 MS Sample Id: 23061513-001 S Date Prep: 06/16/23
MSD Sample Id: 23061513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	RPD	RPD Limit	Units	Flag
Fluoride	0.3179	2.500	2.841	101	2.798	99	90-121	2	20	mg/L	

Analytical Method: EPA 608 .3

Seq Number: 204504 Matrix: Water Prep Method: E608P
MB Sample Id: 95927-1-BLK LCS Sample Id: 95927-1-BKS Date Prep: 06/19/23
LCSD Sample Id: 95927-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	RPD	RPD Limit	Units	Flag
PCB-1016	<0.0005	0.002000	0.001798	90	0.001917	96	50-140	6	20	mg/L	
PCB-1260	<0.0005	0.002000	0.001969	98	0.002100	105	8-140	6	20	mg/L	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units
Decachlorobiphenyl	108		90		95		76-127	%
Tetrachloro-m-xylene	83		87		94		31-111	%

Analytical Method: SW-846 8270 E

Seq Number: 204475 Matrix: Water Prep Method: SW3510C
MB Sample Id: 95947-1-BLK LCS Sample Id: 95947-1-BKS Date Prep: 06/20/23
LCSD Sample Id: 95947-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	RPD	RPD Limit	Units	Flag
Acenaphthene	<0.2500	5.000	4.000	80	3.680	74	68-108	8	20	ug/L	
Acenaphthylene	<0.2500	5.000	3.970	79	3.690	74	68-112	7	20	ug/L	
Anthracene	<0.2500	5.000	5.090	102	4.800	96	75-114	6	20	ug/L	
Benzo(a)anthracene	<0.2500	5.000	4.710	94	4.460	89	77-116	5	20	ug/L	
Benzo(a)pyrene	<0.2500	5.000	4.890	98	4.630	93	84-138	5	20	ug/L	
Benzo(b)fluoranthene	<0.2500	5.000	4.610	92	4.130	83	77-139	11	20	ug/L	
Benzo(g,h,i)perylene	<0.2500	5.000	4.820	96	4.590	92	79-127	5	20	ug/L	
Benzo(k)fluoranthene	<0.2500	5.000	4.990	100	5.150	103	73-122	3	20	ug/L	
Chrysene	<0.2500	5.000	4.900	98	4.820	96	76-121	2	20	ug/L	
Dibenz(a,h)Anthracene	<0.2500	5.000	4.960	99	4.710	94	80-130	5	20	ug/L	
Fluoranthene	<0.2500	5.000	4.980	100	4.660	93	76-118	7	20	ug/L	
Fluorene	<0.2500	5.000	4.250	85	3.970	79	75-116	7	20	ug/L	
Indeno(1,2,3-c,d)Pyrene	<0.2500	5.000	4.830	97	4.290	86	74-137	12	20	ug/L	
2-Methylnaphthalene	<0.2500	5.000	3.830	77	3.600	72	60-116	6	20	ug/L	
Naphthalene	<0.2500	5.000	3.480	70	3.260	65	65-102	7	20	ug/L	
Phenanthrene	<0.2500	5.000	4.670	93	4.450	89	69-116	5	20	ug/L	
Pyrene	<0.2500	5.000	4.840	97	4.630	93	80-114	4	20	ug/L	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units
2-Fluorobiphenyl	84		66		60		59-108	%
2-Fluorophenol	78		56		54		47-100	%
Nitrobenzene-d5	79		58		55		47-108	%
Phenol-d6	82		60		56	*	57-102	%
Terphenyl-D14	92		85		83		77-120	%
2,4,6-Tribromophenol	87		84		79		55-120	%

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: SW-846 8260 D

Seq Number: 204476

Matrix: Water

Prep Method: SW5030B

Date Prep: 06/20/23

MB Sample Id: 95959-1-BLK

LCS Sample Id: 95959-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Flag
Acetone	<5.000	50.00	35.90	72	49-154	ug/L	
Benzene	<1.000	50.00	55.17	110	76-112	ug/L	
Bromochloromethane	<1.000	50.00	49.43	99	74-119	ug/L	
Bromodichloromethane	<1.000	50.00	56.76	114	78-117	ug/L	
Bromoform	<1.000	50.00	50.97	102	69-123	ug/L	
Bromomethane	<1.000	50.00	42.61	85	42-118	ug/L	
2-Butanone (MEK)	<5.000	50.00	45.11	90	55-136	ug/L	
Carbon Disulfide	<1.000	50.00	59.91	120	80-124	ug/L	
Carbon tetrachloride	<1.000	50.00	50.25	101	77-119	ug/L	
Chlorobenzene	<1.000	50.00	52.91	106	76-114	ug/L	
Chloroethane	<1.000	50.00	49.76	100	61-113	ug/L	
Chloroform	<1.000	50.00	53.86	108	75-113	ug/L	
Chloromethane	<1.000	50.00	53.46	107	41-148	ug/L	
Cyclohexane	<1.000	50.00	59.72	119	76-135	ug/L	
1,2-Dibromo-3-chloropropane	<1.000	50.00	53.93	108	52-131	ug/L	
Dibromochloromethane	<1.000	50.00	51.92	104	79-121	ug/L	
1,2-Dibromoethane	<1.000	50.00	53.11	106	77-119	ug/L	
1,2-Dichlorobenzene	<1.000	50.00	52.54	105	75-121	ug/L	
1,3-Dichlorobenzene	<1.000	50.00	52.27	105	77-120	ug/L	
Dichlorodifluoromethane	<1.000	50.00	51.36	103	49-122	ug/L	
1,4-Dichlorobenzene	<1.000	50.00	52.33	105	76-118	ug/L	
1,1-Dichloroethane	<1.000	50.00	58.51	117	75-118	ug/L	
1,2-Dichloroethane	<1.000	50.00	53.75	108	72-115	ug/L	
cis-1,2-Dichloroethene	<1.000	50.00	51.58	103	75-119	ug/L	
1,1-Dichloroethene	<1.000	50.00	47.12	94	74-119	ug/L	
1,2-Dichloropropane	<1.000	50.00	59.43	119	76-115	ug/L	H
cis-1,3-Dichloropropene	<1.000	50.00	55.65	111	83-122	ug/L	
trans-1,3-Dichloropropene	<1.000	50.00	48.86	98	76-118	ug/L	
trans-1,2-Dichloroethene	<1.000	50.00	50.99	102	73-121	ug/L	
Ethylbenzene	<1.000	50.00	56.29	113	78-118	ug/L	
2-Hexanone (MBK)	<5.000	50.00	55.08	110	55-136	ug/L	
Isopropylbenzene	<1.000	50.00	55.41	111	76-126	ug/L	
Methyl Acetate	<1.000	50.00	48.60	97	61-117	ug/L	
Methylcyclohexane	<1.000	50.00	51.85	104	82-126	ug/L	
Methylene chloride	<1.000	50.00	54.36	109	75-113	ug/L	
4-Methyl-2-Pentanone (MIBK)	<5.000	50.00	59.23	118	57-127	ug/L	
Methyl-t-Butyl Ether	<1.000	50.00	48.83	98	71-114	ug/L	
Naphthalene	<1.000	50.00	47.16	94	60-122	ug/L	
Styrene	<1.000	50.00	55.70	111	81-124	ug/L	
1,1,2,2-Tetrachloroethane	<1.000	50.00	56.75	114	66-123	ug/L	
Tetrachloroethene	<1.000	50.00	47.37	95	76-123	ug/L	
Toluene	<1.000	50.00	52.53	105	77-112	ug/L	
1,2,3-Trichlorobenzene	<1.000	50.00	46.25	93	73-129	ug/L	
1,2,4-Trichlorobenzene	<1.000	50.00	46.38	93	73-130	ug/L	
1,1,1-Trichloroethane	<1.000	50.00	49.63	99	79-118	ug/L	
Trichloroethene	<1.000	50.00	52.36	105	77-112	ug/L	
1,1,2-Trichloroethane	<1.000	50.00	54.34	109	75-115	ug/L	
Trichlorofluoromethane	<1.000	50.00	45.23	90	74-125	ug/L	
1,1,2-Trichlorotrifluoroethane	<1.000	50.00	48.73	97	77-123	ug/L	
1,2,4-Trimethylbenzene	<1.000	50.00	54.90	110	76-127	ug/L	
1,3,5-Trimethylbenzene	<1.000	50.00	54.77	110	76-126	ug/L	

Project Name 31222314
PSS Project No.: 23061513

Analytical Method: SW-846 8260 D

Seq Number: 204476

MB Sample Id: 95959-1-BLK

Matrix: Water

LCS Sample Id: 95959-1-BKS

Prep Method: SW5030B

Date Prep: 06/20/23

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Flag
Vinyl chloride	<1.000	50.00	60.61	121	53-151	ug/L	
m&p-Xylene	<2.000	100	107.5	108	79-121	ug/L	
o-Xylene	<1.000	50.00	53.43	107	78-122	ug/L	
Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	
4-Bromofluorobenzene	114		106		88-120	%	
Dibromofluoromethane	97		98		92-107	%	
Toluene-D8	98		100		95-106	%	

F = RPD exceeded the laboratory control limits
 X = Recovery of MS, MSD or both outside of QC Criteria
 H= Recovery of BS,BSD or both exceeded the laboratory control limits
 L = Recovery of BS,BSD or both below the laboratory control limits

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: SM 4500-CN C,E -2016

Seq Number: 204544

Matrix: Water

CCV Sample Id: CCV-01

Analyzed Date: 06/22/23 13:27

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Cyanide, Total	100	95.46	95	90-110	ug/L	

Analytical Method: SM 4500-CN C,E -2016

Seq Number: 204544

Matrix: Water

CCV Sample Id: CCV-02

Analyzed Date: 06/22/23 13:51

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Cyanide, Total	100	93.15	93	90-110	ug/L	

Analytical Method: SM 4500-CN C,E -2016

Seq Number: 204096

Matrix: Water

Parent Sample Id: ICV

ICV Sample Id: ICV

Analyzed Date: 06/06/23 13:15

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Cyanide, Total	100	100.5	101	90-110	ug/L	

Analytical Method: SM 4500-CN C,E -2016

Seq Number: 204544

Matrix: Water

Parent Sample Id: MRL

MRL Sample Id: MRL

Analyzed Date: 06/22/23 13:37

Parameter	Spike Amount	MRL Result	MRL %Rec	Limits	Units	Flag
Cyanide, Total	10.00	9.771	98	50-150	ug/L	

Project Name 31222314
PSS Project No.: 23061513

Analytical Method: EPA 200.8

Seq Number: 204492

Matrix: Water

CCV Sample Id: CCV 1

Analyzed Date: 06/20/23 21:57

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Antimony	50.00	52.52	105	85-115	ug/L	
Arsenic	100	104.9	105	85-115	ug/L	
Beryllium	100	100.9	101	85-115	ug/L	
Cadmium	100	102.1	102	85-115	ug/L	
Chromium	100	104.2	104	85-115	ug/L	
Copper	100	102.1	102	85-115	ug/L	
Lead	100	101.8	102	85-115	ug/L	
Mercury	1.000	0.9720	97	85-115	ug/L	
Nickel	100	101.8	102	85-115	ug/L	
Selenium	100	100	100	85-115	ug/L	
Silver	10.00	10.18	102	85-115	ug/L	
Thallium	100	101.9	102	85-115	ug/L	
Zinc	200	210	105	85-115	ug/L	

Analytical Method: EPA 200.8

Seq Number: 204492

Matrix: Water

CCV Sample Id: CCV 2

Analyzed Date: 06/20/23 23:01

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Antimony	50.00	52.21	104	85-115	ug/L	
Arsenic	100	104.5	105	85-115	ug/L	
Beryllium	100	102.7	103	85-115	ug/L	
Cadmium	100	101.7	102	85-115	ug/L	
Chromium	100	103.6	104	85-115	ug/L	
Copper	100	102.2	102	85-115	ug/L	
Lead	100	100.9	101	85-115	ug/L	
Mercury	1.000	0.9660	97	85-115	ug/L	
Nickel	100	101.1	101	85-115	ug/L	
Selenium	100	100.9	101	85-115	ug/L	
Silver	10.00	10.29	103	85-115	ug/L	
Thallium	100	91.13	91	85-115	ug/L	
Zinc	200	207.9	104	85-115	ug/L	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: EPA 200.8

Seq Number: 204492

Matrix: Water

CCV Sample Id: CCV 3

Analyzed Date: 06/21/23 00:03

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Antimony	50.00	53.21	106	85-115	ug/L	
Arsenic	100	107	107	85-115	ug/L	
Beryllium	100	101.9	102	85-115	ug/L	
Cadmium	100	103.2	103	85-115	ug/L	
Chromium	100	105.5	106	85-115	ug/L	
Copper	100	104	104	85-115	ug/L	
Lead	100	102.3	102	85-115	ug/L	
Mercury	1.000	0.9540	95	85-115	ug/L	
Nickel	100	102.6	103	85-115	ug/L	
Selenium	100	95.60	96	85-115	ug/L	
Silver	10.00	10.25	103	85-115	ug/L	
Thallium	100	94.71	95	85-115	ug/L	
Zinc	200	212.4	106	85-115	ug/L	

Analytical Method: EPA 200.8

Seq Number: 204492

Matrix: Water

Parent Sample Id: ICV 1

ICV Sample Id: ICV 1

Analyzed Date: 06/20/23 20:38

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Antimony	25.00	25.65	103	90-110	ug/L	
Arsenic	50.00	51.55	103	90-110	ug/L	
Beryllium	50.00	49.61	99	90-110	ug/L	
Cadmium	50.00	50.29	101	90-110	ug/L	
Chromium	50.00	51.38	103	90-110	ug/L	
Copper	50.00	51.29	103	90-110	ug/L	
Lead	50.00	50.50	101	90-110	ug/L	
Mercury	1.000	1.024	102	90-110	ug/L	
Nickel	50.00	50.25	101	90-110	ug/L	
Selenium	50.00	51.85	104	90-110	ug/L	
Silver	5.000	5.083	102	90-110	ug/L	
Thallium	50.00	50.07	100	90-110	ug/L	
Zinc	100	103.1	103	90-110	ug/L	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: EPA 200.8 Dissolved

Seq Number: 204501

Matrix: Water

CCV Sample Id: CCV 4

Analyzed Date: 06/21/23 01:08

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Antimony	50.00	51.62	103	85-115	ug/L	
Arsenic	100	105.9	106	85-115	ug/L	
Beryllium	100	99.32	99	85-115	ug/L	
Cadmium	100	101.7	102	85-115	ug/L	
Chromium	100	105.9	106	85-115	ug/L	
Copper	100	104.3	104	85-115	ug/L	
Lead	100	89.04	89	85-115	ug/L	
Mercury	1.000	0.9600	96	85-115	ug/L	
Nickel	100	103.5	104	85-115	ug/L	
Selenium	100	106.1	106	85-115	ug/L	
Silver	10.00	10.23	102	85-115	ug/L	
Thallium	100	98.22	98	85-115	ug/L	
Zinc	200	209.2	105	85-115	ug/L	

Analytical Method: EPA 200.8 Dissolved

Seq Number: 204501

Matrix: Water

CCV Sample Id: CCV 5

Analyzed Date: 06/21/23 02:07

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Antimony	50.00	51.70	103	85-115	ug/L	
Arsenic	100	103.4	103	85-115	ug/L	
Beryllium	100	94.00	94	85-115	ug/L	
Cadmium	100	100.7	101	85-115	ug/L	
Chromium	100	103.3	103	85-115	ug/L	
Copper	100	102.4	102	85-115	ug/L	
Lead	100	101.1	101	85-115	ug/L	
Mercury	1.000	0.9760	98	85-115	ug/L	
Nickel	100	100.8	101	85-115	ug/L	
Selenium	100	106.8	107	85-115	ug/L	
Silver	10.00	10.18	102	85-115	ug/L	
Thallium	100	97.74	98	85-115	ug/L	
Zinc	200	206.3	103	85-115	ug/L	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: EPA 200.8 Dissolved

Seq Number: 204501

Matrix: Water

Parent Sample Id: ICV 1

ICV Sample Id: ICV 1

Analyzed Date: 06/20/23 20:38

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Antimony	25.00	25.65	103	90-110	ug/L	
Arsenic	50.00	51.55	103	90-110	ug/L	
Beryllium	50.00	49.61	99	90-110	ug/L	
Cadmium	50.00	50.29	101	90-110	ug/L	
Chromium	50.00	51.38	103	90-110	ug/L	
Copper	50.00	51.29	103	90-110	ug/L	
Lead	50.00	50.50	101	90-110	ug/L	
Mercury	1.000	1.024	102	90-110	ug/L	
Nickel	50.00	50.25	101	90-110	ug/L	
Selenium	50.00	51.85	104	90-110	ug/L	
Silver	5.000	5.083	102	90-110	ug/L	
Thallium	50.00	50.07	100	90-110	ug/L	
Zinc	100	103.1	103	90-110	ug/L	

Analytical Method: EPA 300.0

Seq Number: 204440

Matrix: Water

CCV Sample Id: CCV-01

Analyzed Date: 06/16/23 10:58

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Fluoride	2.500	2.418	97	90-110	mg/L	

Analytical Method: EPA 300.0

Seq Number: 204440

Matrix: Water

CCV Sample Id: CCV-02

Analyzed Date: 06/16/23 14:01

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Fluoride	2.500	2.399	96	90-110	mg/L	

Analytical Method: EPA 300.0

Seq Number: 204440

Matrix: Water

CCV Sample Id: CCV-03

Analyzed Date: 06/16/23 18:52

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Fluoride	2.500	2.455	98	90-110	mg/L	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: EPA 300.0

Seq Number: 204300

Matrix: Water

Parent Sample Id: ICV-01

ICV Sample Id: ICV-01

Analyzed Date: 06/09/23 15:10

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Fluoride	2.500	2.545	102	90-110	mg/L	

Analytical Method: EPA 608 .3

Seq Number: 204504

Matrix: Water

CCV Sample Id: CCV-01

Analyzed Date: 06/20/23 07:43

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
PCB-1016	0.1000	0.08934	89	75-125	mg/L	
PCB-1016	0.1000	0.09340	93	75-125	mg/L	
PCB-1016	0.1000	0.08869	89	75-125	mg/L	
PCB-1016	0.1000	0.08868	89	75-125	mg/L	
PCB-1016	0.1000	0.09205	92	75-125	mg/L	
PCB-1260	0.1000	0.09503	95	75-125	mg/L	
PCB-1260	0.1000	0.09123	91	75-125	mg/L	
PCB-1260	0.1000	0.09105	91	75-125	mg/L	
PCB-1260	0.1000	0.08890	89	75-125	mg/L	
PCB-1260	0.1000	0.08567	86	75-125	mg/L	

Surrogate	CCV Result	Limits	Units	Flag
Decachlorobiphenyl	107	76-127	%	
Tetrachloro-m-xylene	85	31-111	%	

Analytical Method: EPA 608 .3

Seq Number: 204504

Matrix: Water

CCV Sample Id: CCV-02

Analyzed Date: 06/20/23 10:03

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
PCB-1016	0.1000	0.09198	92	75-125	mg/L	
PCB-1016	0.1000	0.09652	97	75-125	mg/L	
PCB-1016	0.1000	0.09185	92	75-125	mg/L	
PCB-1016	0.1000	0.09257	93	75-125	mg/L	
PCB-1016	0.1000	0.09437	94	75-125	mg/L	
PCB-1260	0.1000	0.09780	98	75-125	mg/L	
PCB-1260	0.1000	0.09507	95	75-125	mg/L	
PCB-1260	0.1000	0.09360	94	75-125	mg/L	
PCB-1260	0.1000	0.09304	93	75-125	mg/L	
PCB-1260	0.1000	0.08928	89	75-125	mg/L	

Surrogate	CCV Result	Limits	Units	Flag
Decachlorobiphenyl	110	76-127	%	
Tetrachloro-m-xylene	87	31-111	%	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: EPA 608 .3

Seq Number: 204504

Matrix: Water

CCV Sample Id: CCV-03

Analyzed Date: 06/20/23 17:35

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
PCB-1016	0.1000	0.09019	90	75-125	mg/L	
PCB-1016	0.1000	0.09672	97	75-125	mg/L	
PCB-1016	0.1000	0.09899	99	75-125	mg/L	
PCB-1016	0.1000	0.09480	95	75-125	mg/L	
PCB-1016	0.1000	0.09652	97	75-125	mg/L	
PCB-1260	0.1000	0.09875	99	75-125	mg/L	
PCB-1260	0.1000	0.09961	100	75-125	mg/L	
PCB-1260	0.1000	0.09364	94	75-125	mg/L	
PCB-1260	0.1000	0.09485	95	75-125	mg/L	
PCB-1260	0.1000	0.09010	90	75-125	mg/L	

Surrogate	CCV Result	Limits	Units	Flag
Decachlorobiphenyl	87	76-127	%	
Tetrachloro-m-xylene	86	31-111	%	

Analytical Method: EPA 608 .3

Seq Number: 204504

Matrix: Water

CCV Sample Id: CCV-04

Analyzed Date: 06/20/23 22:45

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
PCB-1016	0.1000	0.09282	93	75-125	mg/L	
PCB-1016	0.1000	0.09822	98	75-125	mg/L	
PCB-1016	0.1000	0.1006	101	75-125	mg/L	
PCB-1016	0.1000	0.09629	96	75-125	mg/L	
PCB-1016	0.1000	0.09819	98	75-125	mg/L	
PCB-1260	0.1000	0.1005	101	75-125	mg/L	
PCB-1260	0.1000	0.1019	102	75-125	mg/L	
PCB-1260	0.1000	0.09637	96	75-125	mg/L	
PCB-1260	0.1000	0.09815	98	75-125	mg/L	
PCB-1260	0.1000	0.09405	94	75-125	mg/L	

Surrogate	CCV Result	Limits	Units	Flag
Decachlorobiphenyl	94	76-127	%	
Tetrachloro-m-xylene	88	31-111	%	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: SW-846 8270 E

Seq Number: 204475

Matrix: Water

CCV Sample Id: CCV-01

Analyzed Date: 06/20/23 07:33

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Acenaphthene	40000	36820	92	80-120	ug/L	
Acenaphthylene	40000	36320	91	80-120	ug/L	
Anthracene	40000	39440	99	80-120	ug/L	
Benzo(a)anthracene	40000	38940	97	80-120	ug/L	
Benzo(a)pyrene	40000	39200	98	80-120	ug/L	
Benzo(b)fluoranthene	40000	41000	103	80-120	ug/L	
Benzo(g,h,i)perylene	40000	39910	100	80-120	ug/L	
Benzo(k)fluoranthene	40000	36420	91	80-120	ug/L	
Chrysene	40000	37950	95	80-120	ug/L	
Dibenz(a,h)Anthracene	40000	40540	101	80-120	ug/L	
Fluoranthene	40000	37730	94	80-120	ug/L	
Fluorene	40000	37630	94	80-120	ug/L	
Indeno(1,2,3-c,d)Pyrene	40000	38760	97	80-120	ug/L	
2-Methylnaphthalene	40000	36400	91	80-120	ug/L	
Naphthalene	40000	37240	93	80-120	ug/L	
Phenanthrene	40000	37360	93	80-120	ug/L	
Pyrene	40000	38830	97	80-120	ug/L	

Surrogate	CCV Result	Limits	Units	Flag
2-Fluorobiphenyl	93	80-120	%	
2-Fluorophenol	94	80-120	%	
Nitrobenzene-d5	91	80-120	%	
Phenol-d6	97	80-120	%	
Terphenyl-D14	99	80-120	%	
2,4,6-Tribromophenol	102	80-120	%	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: SW-846 8270 E

Seq Number: 202929

Matrix: Solid

Parent Sample Id: ICV-01

ICV Sample Id: ICV-01

Analyzed Date: 04/21/23 15:08

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Acenaphthene	40.00	37.54	94	70-130	mg/kg	
Acenaphthylene	40.00	38.14	95	70-130	mg/kg	
Anthracene	40.00	37.93	95	70-130	mg/kg	
Benzo(a)anthracene	40.00	38.41	96	70-130	mg/kg	
Benzo(a)pyrene	40.00	39.68	99	70-130	mg/kg	
Benzo(b)fluoranthene	40.00	45.17	113	70-130	mg/kg	
Benzo(g,h,i)perylene	40.00	41.01	103	70-130	mg/kg	
Benzo(k)fluoranthene	40.00	32.47	81	70-130	mg/kg	
Chrysene	40.00	38.63	97	70-130	mg/kg	
Dibenz(a,h)Anthracene	40.00	41.53	104	70-130	mg/kg	
Fluoranthene	40.00	38.03	95	70-130	mg/kg	
Fluorene	40.00	36.83	92	70-130	mg/kg	
Indeno(1,2,3-c,d)Pyrene	40.00	43.70	109	70-130	mg/kg	
2-Methylnaphthalene	40.00	36.35	91	70-130	mg/kg	
Naphthalene	40.00	36.18	90	70-130	mg/kg	
Phenanthrene	40.00	36.00	90	70-130	mg/kg	
Pyrene	40.00	38.27	96	70-130	mg/kg	

Surrogate	ICV Result	Limits	Units	Flag
2-Fluorobiphenyl	96	70-130	%	
2-Fluorophenol	96	70-130	%	
Nitrobenzene-d5	97	70-130	%	
Phenol-d6	93	70-130	%	
Terphenyl-D14	97	70-130	%	
2,4,6-Tribromophenol	106	70-130	%	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: SW-846 8260 D

Seq Number: 204476

Matrix: Water

CCV Sample Id: CCV-01

Analyzed Date: 06/20/23 10:34

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Acetone	50.00	35.90	72	80-120	ug/L	X
Benzene	50.00	55.17	110	80-120	ug/L	
Bromochloromethane	50.00	49.43	99	80-120	ug/L	
Bromodichloromethane	50.00	56.76	114	80-120	ug/L	
Bromoform	50.00	50.97	102	80-120	ug/L	
Bromomethane	50.00	42.61	85	80-120	ug/L	
2-Butanone (MEK)	50.00	45.11	90	80-120	ug/L	
Carbon Disulfide	50.00	59.91	120	80-120	ug/L	
Carbon tetrachloride	50.00	50.25	101	80-120	ug/L	
Chlorobenzene	50.00	52.91	106	80-120	ug/L	
Chloroethane	50.00	49.76	100	80-120	ug/L	
Chloroform	50.00	53.86	108	80-120	ug/L	
Chloromethane	50.00	53.46	107	80-120	ug/L	
Cyclohexane	50.00	59.72	119	80-120	ug/L	
1,2-Dibromo-3-chloropropane	50.00	53.93	108	80-120	ug/L	
Dibromochloromethane	50.00	51.92	104	80-120	ug/L	
1,2-Dibromoethane	50.00	53.11	106	80-120	ug/L	
1,2-Dichlorobenzene	50.00	52.54	105	80-120	ug/L	
1,3-Dichlorobenzene	50.00	52.27	105	80-120	ug/L	
Dichlorodifluoromethane	50.00	51.36	103	80-120	ug/L	
1,4-Dichlorobenzene	50.00	52.33	105	80-120	ug/L	
1,1-Dichloroethane	50.00	58.51	117	80-120	ug/L	
1,2-Dichloroethane	50.00	53.75	108	80-120	ug/L	
cis-1,2-Dichloroethene	50.00	51.58	103	80-120	ug/L	
1,1-Dichloroethene	50.00	47.12	94	80-120	ug/L	
1,2-Dichloropropane	50.00	59.43	119	80-120	ug/L	
cis-1,3-Dichloropropene	50.00	55.65	111	80-120	ug/L	
trans-1,3-Dichloropropene	50.00	48.86	98	80-120	ug/L	
trans-1,2-Dichloroethene	50.00	50.99	102	80-120	ug/L	
Ethylbenzene	50.00	56.29	113	80-120	ug/L	
2-Hexanone (MBK)	50.00	55.08	110	80-120	ug/L	
Isopropylbenzene	50.00	55.41	111	80-120	ug/L	
Methyl Acetate	50.00	48.60	97	80-120	ug/L	
Methylcyclohexane	50.00	51.85	104	80-120	ug/L	
Methylene chloride	50.00	54.36	109	80-120	ug/L	
4-Methyl-2-Pentanone (MIBK)	50.00	59.23	118	80-120	ug/L	
Methyl-t-Butyl Ether	50.00	48.83	98	80-120	ug/L	
Naphthalene	50.00	47.16	94	80-120	ug/L	
Styrene	50.00	55.70	111	80-120	ug/L	
1,1,2,2-Tetrachloroethane	50.00	56.75	114	80-120	ug/L	
Tetrachloroethene	50.00	47.37	95	80-120	ug/L	
Toluene	50.00	52.53	105	80-120	ug/L	
1,2,3-Trichlorobenzene	50.00	46.25	93	80-120	ug/L	
1,2,4-Trichlorobenzene	50.00	46.38	93	80-120	ug/L	
1,1,1-Trichloroethane	50.00	49.63	99	80-120	ug/L	
Trichloroethene	50.00	52.36	105	80-120	ug/L	
1,1,2-Trichloroethane	50.00	54.34	109	80-120	ug/L	
Trichlorofluoromethane	50.00	45.23	90	80-120	ug/L	
1,1,2-Trichlorotrifluoroethane	50.00	48.73	97	80-120	ug/L	
1,2,4-Trimethylbenzene	50.00	54.90	110	80-120	ug/L	
1,3,5-Trimethylbenzene	50.00	54.77	110	80-120	ug/L	

Project Name 31222314
PSS Project No.: 23061513

Analytical Method: SW-846 8260 D

Seq Number: 204476

Matrix: Water

CCV Sample Id: CCV-01

Analyzed Date: 06/20/23 10:34

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Vinyl chloride	50.00	60.61	121	80-120	ug/L	X
m&p-Xylene	100	107.5	108	80-120	ug/L	
o-Xylene	50.00	53.43	107	80-120	ug/L	

Surrogate	CCV Result	Limits	Units	Flag
4-Bromofluorobenzene	106	80-120	%	
Dibromofluoromethane	98	80-120	%	
Toluene-D8	100	80-120	%	

Project Name 31222314

PSS Project No.: 23061513

Analytical Method: SW-846 8260 D

Seq Number: 203365

Matrix: Water

Parent Sample Id: ICV-01

ICV Sample Id: ICV-01

Analyzed Date: 05/10/23 12:41

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Acetone	50.00	44.92	90	70-130	ug/L	
Benzene	50.00	47.90	96	70-130	ug/L	
Bromochloromethane	50.00	46.91	94	70-130	ug/L	
Bromodichloromethane	50.00	49.95	100	70-130	ug/L	
Bromoform	50.00	45.02	90	70-130	ug/L	
Bromomethane	50.00	46.46	93	70-130	ug/L	
2-Butanone (MEK)	50.00	45.39	91	70-130	ug/L	
Carbon Disulfide	50.00	49.58	99	70-130	ug/L	
Carbon tetrachloride	50.00	48.79	98	70-130	ug/L	
Chlorobenzene	50.00	47.96	96	70-130	ug/L	
Chloroethane	50.00	47.23	94	70-130	ug/L	
Chloroform	50.00	47.86	96	70-130	ug/L	
Chloromethane	50.00	47.85	96	70-130	ug/L	
Cyclohexane	50.00	48.54	97	70-130	ug/L	
1,2-Dibromo-3-chloropropane	50.00	44.59	89	70-130	ug/L	
Dibromochloromethane	50.00	46.12	92	70-130	ug/L	
1,2-Dibromoethane	50.00	47.99	96	70-130	ug/L	
1,2-Dichlorobenzene	50.00	47.36	95	70-130	ug/L	
1,3-Dichlorobenzene	50.00	47.53	95	70-130	ug/L	
Dichlorodifluoromethane	50.00	42.92	86	70-130	ug/L	
1,4-Dichlorobenzene	50.00	47.56	95	70-130	ug/L	
1,1-Dichloroethane	50.00	48.31	97	70-130	ug/L	
1,2-Dichloroethane	50.00	47.38	95	70-130	ug/L	
cis-1,2-Dichloroethene	50.00	47.15	94	70-130	ug/L	
1,1-Dichloroethene	50.00	47.17	94	70-130	ug/L	
1,2-Dichloropropane	50.00	48.24	96	70-130	ug/L	
cis-1,3-Dichloropropene	50.00	50.40	101	70-130	ug/L	
trans-1,3-Dichloropropene	50.00	46.31	93	70-130	ug/L	
trans-1,2-Dichloroethene	50.00	46.78	94	70-130	ug/L	
Ethylbenzene	50.00	49.23	98	70-130	ug/L	
2-Hexanone (MBK)	50.00	47.16	94	70-130	ug/L	
Isopropylbenzene	50.00	49.22	98	70-130	ug/L	
Methyl Acetate	50.00	44.65	89	70-130	ug/L	
Methylcyclohexane	50.00	49.09	98	70-130	ug/L	
Methylene chloride	50.00	46.97	94	70-130	ug/L	
4-Methyl-2-Pentanone (MIBK)	50.00	46.44	93	70-130	ug/L	
Methyl-t-Butyl Ether	50.00	46.61	93	70-130	ug/L	
Naphthalene	50.00	46.34	93	70-130	ug/L	
Styrene	50.00	50.11	100	70-130	ug/L	
1,1,2,2-Tetrachloroethane	50.00	46.51	93	70-130	ug/L	
Tetrachloroethene	50.00	47.08	94	70-130	ug/L	
Toluene	50.00	47.80	96	70-130	ug/L	
1,2,3-Trichlorobenzene	50.00	45.40	91	70-130	ug/L	
1,2,4-Trichlorobenzene	50.00	46.02	92	70-130	ug/L	
1,1,1-Trichloroethane	50.00	48.14	96	70-130	ug/L	
Trichloroethene	50.00	47.39	95	70-130	ug/L	
1,1,2-Trichloroethane	50.00	47.10	94	70-130	ug/L	
Trichlorofluoromethane	50.00	47.72	95	70-130	ug/L	
1,1,2-Trichlorotrifluoroethane	50.00	47.53	95	70-130	ug/L	
1,2,4-Trimethylbenzene	50.00	49.21	98	70-130	ug/L	
1,3,5-Trimethylbenzene	50.00	49.04	98	70-130	ug/L	

Project Name 31222314
PSS Project No.: 23061513

Analytical Method: SW-846 8260 D

Seq Number: 203365

Matrix: Water

Parent Sample Id: ICV-01

ICV Sample Id: ICV-01

Analyzed Date: 05/10/23 12:41

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Vinyl chloride	50.00	39.90	80	70-130	ug/L	
m&p-Xylene	100	98.57	99	70-130	ug/L	
o-Xylene	50.00	48.32	97	70-130	ug/L	

Surrogate	ICV Result	Limits	Units	Flag
4-Bromofluorobenzene	101	70-130	%	
Dibromofluoromethane	99	70-130	%	
Toluene-D8	100	70-130	%	

X = Recovery outside of QC Criteria

Sample Receipt Checklist

Project Name: 31222314
 PSS Project No.: 23061513

Client Name GTA - Baltimore
Disposal Date 07/20/2023

Received By Tyler Enwright
Date Received 06/15/2023 04:40:00 PM
Delivered By Client
Tracking No Not Applicable
Logged In By Tyler Enwright

Shipping Container(s)

No. of Coolers 1

Custody Seal(s) Intact? N/A
 Seal(s) Signed / Dated? N/A

Ice Present
 Temp (deg C) 5.6
 Temp Blank Present No

Documentation

COC agrees with sample labels? Yes
 Chain of Custody Yes

Sampler Name Benjamin Salazar
 MD DW Cert. No. N/A

Sample Container

Appropriate for Specified Analysis? Yes
 Intact? Yes
 Labeled and Labels Legible? Yes

Custody Seal(s) Intact? Not Applicable
 Seal(s) Signed / Dated Not Applicable

Holding Time

All Samples Received Within Holding Time(s)? Yes

Total No. of Samples Received 1
 Total No. of Containers Received 9

Preservation

Total Metals (pH<2) Yes
 Dissolved Metals, filtered within 15 minutes of collection (pH<2) No
 Orthophosphorus, filtered within 15 minutes of collection N/A
 Cyanides (pH>12) Yes
 Sulfide (pH>9) N/A
 TOC, DOC (field filtered), COD, Phenols (pH<2) N/A
 TOX, TKN, NH3, Total Phos (pH<2) N/A
 VOC, BTEX (VOA Vials Rcvd Preserved) (pH<2) Yes
 Do VOA vials have zero headspace? No
 624 VOC (Rcvd at least one unpreserved VOA vial) N/A
 524 VOC (Rcvd with trip blanks) (pH<2) N/A

Sample Receipt Checklist

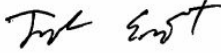
Project Name: 31222314
PSS Project No.: 23061513

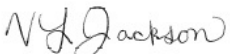
Client Name	GTA - Baltimore	Received By	Tyler Enwright
Disposal Date	07/20/2023	Date Received	06/15/2023 04:40:00 PM
		Delivered By	Client
		Tracking No	Not Applicable
		Logged In By	Tyler Enwright

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Received one voa vial for sample 001 with headspace.
Sample aliquots for dissolved metals were not field filtered and were received unpreserved; as such, associated sample results are not suitable for compliance under the Clean Water Act and/or Safe Drinking Water Act.

Samples Inspected/Checklist Completed By:  Date: 06/15/2023
Tyler Enwright

PM Review and Approval:  Date: 06/15/2023
Lynn Jackson