



Laboratory Report of Analysis

To: USACE- Alaska District (COE)
CEPOA-EN-ES-M P.O. Box 898
Elmendorf AFB, AK 99506
(907) 753-2700

Report Number: **1223589**

Client Project: **22-052 Wildwood Summer 2022 GW**

Dear Sean Benjamin,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

Justin Nelson
Project Manager
Justin.Nelson@sgs.com

Date

Case Narrative

SGS Client: **USACE- Alaska District (COE)**

SGS Project: **1223589**

Project Name/Site: **22-052 Wildwood Summer 2022 GW**

Project Contact: **Sean Benjamin**

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 07/20/2022 3:37:47PM

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/31/2022 for Nitrate as N by SM 4500NO3-F) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

| | |
|--------------------|---|
| * | The analyte has exceeded allowable regulatory or control limits. |
| ! | Surrogate out of control limits. |
| B | Indicates the analyte is found in a blank associated with the sample. |
| CCV/CVA/CVB | Continuing Calibration Verification |
| CCCV/CVC/CVCA/CVCB | Closing Continuing Calibration Verification |
| CL | Control Limit |
| DF | Analytical Dilution Factor |
| DL | Detection Limit (i.e., maximum method detection limit) |
| E | The analyte result is above the calibrated range. |
| GT | Greater Than |
| IB | Instrument Blank |
| ICV | Initial Calibration Verification |
| J | The quantitation is an estimation. |
| LCS(D) | Laboratory Control Spike (Duplicate) |
| LLQC/LLIQC | Low Level Quantitation Check |
| LOD | Limit of Detection (i.e., 1/2 of the LOQ) |
| LOQ | Limit of Quantitation (i.e., reporting or practical quantitation limit) |
| LT | Less Than |
| MB | Method Blank |
| MS(D) | Matrix Spike (Duplicate) |
| ND | Indicates the analyte is not detected. |
| RPD | Relative Percent Difference |
| TNTC | Too Numerous To Count |
| U | Indicates the analyte was analyzed for but not detected. |

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

Sample Summary

| <u>Client Sample ID</u> | <u>Lab Sample ID</u> | <u>Collected</u> | <u>Received</u> | <u>Matrix</u> |
|---------------------------|----------------------|------------------|-----------------|-------------------------------|
| 22WW-LF-MW01 | 1223589001 | 06/27/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-LF-MW01(1223589001BM | 1223589002 | 06/27/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-LF-MW01(1223589001BM | 1223589003 | 06/27/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-LF-MW02 | 1223589004 | 06/27/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-LF-MW03 | 1223589005 | 06/27/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-OF-MW01 | 1223589006 | 06/28/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-OF-MW02 | 1223589007 | 06/28/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-OF-MW03 | 1223589008 | 06/28/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-OF-MW04 | 1223589009 | 06/28/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW11 | 1223589010 | 06/28/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW23 | 1223589011 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW24 | 1223589012 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW24(1223589012BM | 1223589013 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW24(1223589012BM | 1223589014 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW50 | 1223589015 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW06 | 1223589016 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW04 | 1223589017 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW03 | 1223589018 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-AP397 | 1223589019 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TF-MW30 | 1223589020 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-UST-MW01 | 1223589021 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-EB | 1223589022 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |
| 22WW-TB | 1223589023 | 06/29/2022 | 06/30/2022 | Water (Surface, Eff., Ground) |

Method

AK102

SW8260D

Method Description

DRO Low Volume (W)

Volatile Organic Compounds(W)Custom List

Detectable Results Summary

| | | | |
|---|-----------------------|---------------|--------------|
| Client Sample ID: 22WW-OF-MW01 Lab Sample ID: 1223589006 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 2.49 | mg/L |
| Client Sample ID: 22WW-OF-MW02 Lab Sample ID: 1223589007 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 1.74 | mg/L |
| Client Sample ID: 22WW-OF-MW03 Lab Sample ID: 1223589008 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 0.372J | mg/L |
| Client Sample ID: 22WW-OF-MW04 Lab Sample ID: 1223589009 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 1.55 | mg/L |
| Client Sample ID: 22WW-TF-MW11 Lab Sample ID: 1223589010 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 7.67 | mg/L |
| Client Sample ID: 22WW-TF-MW23 Lab Sample ID: 1223589011 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 0.699 | mg/L |
| Client Sample ID: 22WW-TF-MW24 Lab Sample ID: 1223589012 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 1.20 | mg/L |
| Client Sample ID: 22WW-TF-MW50 Lab Sample ID: 1223589015 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 0.969 | mg/L |
| Client Sample ID: 22WW-TF-MW06 Lab Sample ID: 1223589016 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 3.26 | mg/L |
| Client Sample ID: 22WW-TF-MW04 Lab Sample ID: 1223589017 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 6.61 | mg/L |
| Client Sample ID: 22WW-TF-MW03 Lab Sample ID: 1223589018 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 2.79 | mg/L |
| Client Sample ID: 22WW-TF-AP397 Lab Sample ID: 1223589019 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 0.496J | mg/L |
| Client Sample ID: 22WW-TF-MW30 Lab Sample ID: 1223589020 | <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
| Semivolatile Organic Fuels | Diesel Range Organics | 0.453J | mg/L |

Print Date: 07/20/2022 3:37:51PM

Detectable Results Summary

Client Sample ID: **22WW-UST-MW01**

Lab Sample ID: 1223589021

Semivolatile Organic Fuels

| <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
|-----------------------|---------------|--------------|
| Diesel Range Organics | 0.299J | mg/L |

Client Sample ID: **22WW-EB**

Lab Sample ID: 1223589022

Semivolatile Organic Fuels

| <u>Parameter</u> | <u>Result</u> | <u>Units</u> |
|-----------------------|---------------|--------------|
| Diesel Range Organics | 0.256J | mg/L |

Print Date: 07/20/2022 3:37:51PM



Results of 22WW-LF-MW01

Client Sample ID: 22WW-LF-MW01
Client Project ID: 22-052 Wildwood Summer 2022 GW
Lab Sample ID: 1223589001
Lab Project ID: 1223589

Collection Date: 06/27/22 18:13
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: LF-MW1

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Vinyl chloride and Surrogates (1,2-Dichloroethane-D4, 4-Bromofluorobenzene, Toluene-d8).

Batch Information

Analytical Batch: VMS21774
Analytical Method: SW8260D
Analyst: AZL
Analytical Date/Time: 07/09/22 14:22
Container ID: 1223589001-A

Prep Batch: VXX38836
Prep Method: SW5030B
Prep Date/Time: 07/09/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL



Results of 22WW-LF-MW02

Client Sample ID: 22WW-LF-MW02
Client Project ID: 22-052 Wildwood Summer 2022 GW
Lab Sample ID: 1223589004
Lab Project ID: 1223589

Collection Date: 06/27/22 18:29
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: LF-MW2

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Vinyl chloride and Surrogates (1,2-Dichloroethane-D4, 4-Bromofluorobenzene, Toluene-d8).

Batch Information

Analytical Batch: VMS21774
Analytical Method: SW8260D
Analyst: AZL
Analytical Date/Time: 07/09/22 14:37
Container ID: 1223589004-A

Prep Batch: VXX38836
Prep Method: SW5030B
Prep Date/Time: 07/09/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL



Results of 22WW-LF-MW03

Client Sample ID: 22WW-LF-MW03
Client Project ID: 22-052 Wildwood Summer 2022 GW
Lab Sample ID: 1223589005
Lab Project ID: 1223589

Collection Date: 06/27/22 18:20
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: LF-MW3

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Vinyl chloride and Surrogates (1,2-Dichloroethane-D4, 4-Bromofluorobenzene, Toluene-d8).

Batch Information

Analytical Batch: VMS21774
Analytical Method: SW8260D
Analyst: AZL
Analytical Date/Time: 07/09/22 14:52
Container ID: 1223589005-A

Prep Batch: VXX38836
Prep Method: SW5030B
Prep Date/Time: 07/09/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL



Results of **22WW-OF-MW01**

Client Sample ID: **22WW-OF-MW01**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589006
Lab Project ID: 1223589

Collection Date: 06/28/22 09:55
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: OF-MW1

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|---------------|-------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 2.49 | | 0.545 | 0.182 | mg/L | 1 | | 07/12/22 21:15 |
| Surrogates | | | | | | | | |
| 5a Androstane (surr) | 72.6 | | 50-150 | | % | 1 | | 07/12/22 21:15 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 21:15
Container ID: 1223589006-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 275 mL
Prep Extract Vol: 1 mL



Results of 22WW-OF-MW02

Client Sample ID: **22WW-OF-MW02**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589007
Lab Project ID: 1223589

Collection Date: 06/28/22 09:15
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: OF-MW2

Results by Semivolatile Organic Fuels

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 1.74 | 0.600 | 0.200 | mg/L | 1 | | 07/12/22 21:25 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 80.3 | 50-150 | | % | 1 | | 07/12/22 21:25 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 21:25
Container ID: 1223589007-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL



Results of **22WW-OF-MW03**

Client Sample ID: **22WW-OF-MW03**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589008
Lab Project ID: 1223589

Collection Date: 06/28/22 08:47
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: OF-MW3

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 0.372 J | 0.600 | 0.200 | mg/L | 1 | | 07/12/22 21:56 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 60.4 | 50-150 | | % | 1 | | 07/12/22 21:56 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 21:56
Container ID: 1223589008-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL



Results of **22WW-OF-MW04**

Client Sample ID: **22WW-OF-MW04**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589009
Lab Project ID: 1223589

Collection Date: 06/28/22 09:20
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: OF-MW4

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 1.55 | 0.600 | 0.200 | mg/L | 1 | | 07/12/22 22:07 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 73.6 | 50-150 | | % | 1 | | 07/12/22 22:07 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 22:07
Container ID: 1223589009-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL



Results of 22WW-TF-MW11

Client Sample ID: **22WW-TF-MW11**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589010
Lab Project ID: 1223589

Collection Date: 06/28/22 13:20
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-MW11

Results by Semivolatile Organic Fuels

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 7.67 | 0.577 | 0.192 | mg/L | 1 | | 07/12/22 22:17 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 82.7 | 50-150 | | % | 1 | | 07/12/22 22:17 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 22:17
Container ID: 1223589010-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL



Results of **22WW-TF-MW23**

Client Sample ID: **22WW-TF-MW23**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589011
Lab Project ID: 1223589

Collection Date: 06/29/22 09:05
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-MW23

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 0.699 | 0.577 | 0.192 | mg/L | 1 | | 07/12/22 22:27 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 77.7 | 50-150 | | % | 1 | | 07/12/22 22:27 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 22:27
Container ID: 1223589011-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL



Results of **22WW-TF-MW24**

Client Sample ID: **22WW-TF-MW24**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589012
Lab Project ID: 1223589

Collection Date: 06/29/22 08:54
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-MW24

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result</u> | <u>Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|---------------|-------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 1.20 | | 0.577 | 0.192 | mg/L | 1 | | 07/12/22 22:37 |
| Surrogates | | | | | | | | |
| 5a Androstane (surr) | 79.4 | | 50-150 | | % | 1 | | 07/12/22 22:37 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 22:37
Container ID: 1223589012-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL



Results of **22WW-TF-MW50**

Client Sample ID: **22WW-TF-MW50**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589015
Lab Project ID: 1223589

Collection Date: 06/29/22 09:00
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-MW50

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 0.969 | 0.566 | 0.189 | mg/L | 1 | | 07/12/22 23:08 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 76.5 | 50-150 | | % | 1 | | 07/12/22 23:08 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 23:08
Container ID: 1223589015-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 265 mL
Prep Extract Vol: 1 mL



Results of **22WW-TF-MW06**

Client Sample ID: **22WW-TF-MW06**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589016
Lab Project ID: 1223589

Collection Date: 06/29/22 10:10
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-MW06

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 3.26 | 0.577 | 0.192 | mg/L | 1 | | 07/12/22 23:19 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 71.2 | 50-150 | | % | 1 | | 07/12/22 23:19 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 23:19
Container ID: 1223589016-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Results of 22WW-TF-MW04

Client Sample ID: **22WW-TF-MW04**
 Client Project ID: **22-052 Wildwood Summer 2022 GW**
 Lab Sample ID: 1223589017
 Lab Project ID: 1223589

Collection Date: 06/29/22 10:39
 Received Date: 06/30/22 14:35
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location: TF-MW04

Results by Semivolatile Organic Fuels

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 6.61 | 0.577 | 0.192 | mg/L | 1 | | 07/12/22 23:29 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 76.4 | 50-150 | | % | 1 | | 07/12/22 23:29 |

Batch Information

Analytical Batch: XFC16282
 Analytical Method: AK102
 Analyst: MDT
 Analytical Date/Time: 07/12/22 23:29
 Container ID: 1223589017-A

Prep Batch: XXX46580
 Prep Method: SW3520C
 Prep Date/Time: 07/08/22 15:45
 Prep Initial Wt./Vol.: 260 mL
 Prep Extract Vol: 1 mL



Results of **22WW-TF-MW03**

Client Sample ID: **22WW-TF-MW03**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589018
Lab Project ID: 1223589

Collection Date: 06/29/22 11:02
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-MW03

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 2.79 | 0.588 | 0.196 | mg/L | 1 | | 07/12/22 23:39 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 70.9 | 50-150 | | % | 1 | | 07/12/22 23:39 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 23:39
Container ID: 1223589018-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 255 mL
Prep Extract Vol: 1 mL



Results of **22WW-TF-AP397**

Client Sample ID: **22WW-TF-AP397**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589019
Lab Project ID: 1223589

Collection Date: 06/29/22 14:30
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-AP397

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 0.496 J | 0.588 | 0.196 | mg/L | 1 | | 07/12/22 23:49 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 73 | 50-150 | | % | 1 | | 07/12/22 23:49 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/12/22 23:49
Container ID: 1223589019-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 255 mL
Prep Extract Vol: 1 mL



Results of **22WW-TF-MW30**

Client Sample ID: **22WW-TF-MW30**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589020
Lab Project ID: 1223589

Collection Date: 06/29/22 15:41
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: TF-MW30

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 0.453 J | 0.566 | 0.189 | mg/L | 1 | | 07/13/22 00:00 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 88.3 | 50-150 | | % | 1 | | 07/13/22 00:00 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/13/22 00:00
Container ID: 1223589020-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 265 mL
Prep Extract Vol: 1 mL



Results of **22WW-UST-MW01**

Client Sample ID: **22WW-UST-MW01**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589021
Lab Project ID: 1223589

Collection Date: 06/29/22 12:01
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: UST-MW01

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 0.299 J | 0.577 | 0.192 | mg/L | 1 | | 07/13/22 00:10 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 78 | 50-150 | | % | 1 | | 07/13/22 00:10 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/13/22 00:10
Container ID: 1223589021-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL



Results of **22WW-EB**

Client Sample ID: **22WW-EB**
Client Project ID: **22-052 Wildwood Summer 2022 GW**
Lab Sample ID: 1223589022
Lab Project ID: 1223589

Collection Date: 06/29/22 14:10
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: EB

Results by **Semivolatile Organic Fuels**

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|-----------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Diesel Range Organics | 0.256 J | 0.612 | 0.204 | mg/L | 1 | | 07/13/22 00:20 |
| Surrogates | | | | | | | |
| 5a Androstane (surr) | 86.4 | 50-150 | | % | 1 | | 07/13/22 00:20 |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Analyst: MDT
Analytical Date/Time: 07/13/22 00:20
Container ID: 1223589022-A

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 07/08/22 15:45
Prep Initial Wt./Vol.: 245 mL
Prep Extract Vol: 1 mL



Results of 22WW-EB

Client Sample ID: 22WW-EB
Client Project ID: 22-052 Wildwood Summer 2022 GW
Lab Sample ID: 1223589022
Lab Project ID: 1223589

Collection Date: 06/29/22 14:10
Received Date: 06/30/22 14:35
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location: EB

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Includes Vinyl chloride and Surrogates (1,2-Dichloroethane-D4, 4-Bromofluorobenzene, Toluene-d8).

Batch Information

Analytical Batch: VMS21782
Analytical Method: SW8260D
Analyst: AZL
Analytical Date/Time: 07/11/22 22:32
Container ID: 1223589022-C

Prep Batch: VXX38846
Prep Method: SW5030B
Prep Date/Time: 07/11/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of 22WW-TB

Client Sample ID: **22WW-TB**
 Client Project ID: **22-052 Wildwood Summer 2022 GW**
 Lab Sample ID: 1223589023
 Lab Project ID: 1223589

Collection Date: 06/29/22 16:00
 Received Date: 06/30/22 14:35
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location: T. BLANK

Results by Volatile GC/MS

| <u>Parameter</u> | <u>Result Qual</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> | <u>DF</u> | <u>Allowable Limits</u> | <u>Date Analyzed</u> |
|------------------------------|--------------------|---------------|-----------|--------------|-----------|-------------------------|----------------------|
| Vinyl chloride | 0.0750 U | 0.150 | 0.0500 | ug/L | 1 | | 07/11/22 18:46 |
| Surrogates | | | | | | | |
| 1,2-Dichloroethane-D4 (surr) | 106 | 81-118 | | % | 1 | | 07/11/22 18:46 |
| 4-Bromofluorobenzene (surr) | 104 | 85-114 | | % | 1 | | 07/11/22 18:46 |
| Toluene-d8 (surr) | 97.1 | 89-112 | | % | 1 | | 07/11/22 18:46 |

Batch Information

Analytical Batch: VMS21782
 Analytical Method: SW8260D
 Analyst: AZL
 Analytical Date/Time: 07/11/22 18:46
 Container ID: 1223589023-A

Prep Batch: VXX38846
 Prep Method: SW5030B
 Prep Date/Time: 07/11/22 06:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Method Blank

Blank ID: MB for HBN 1839562 [VXX/38836]
Blank Lab ID: 1672614

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1223589001, 1223589004, 1223589005

Results by SW8260D

| <u>Parameter</u> | <u>Results</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> |
|------------------------------|----------------|---------------|-----------|--------------|
| Vinyl chloride | 0.0750U | 0.150 | 0.0500 | ug/L |
| Surrogates | | | | |
| 1,2-Dichloroethane-D4 (surr) | 108 | 81-118 | | % |
| 4-Bromofluorobenzene (surr) | 103 | 85-114 | | % |
| Toluene-d8 (surr) | 96.2 | 89-112 | | % |

Batch Information

Analytical Batch: VMS21774
Analytical Method: SW8260D
Instrument: Agilent 7890-75MS
Analyst: AZL
Analytical Date/Time: 7/9/2022 10:06:00AM

Prep Batch: VXX38836
Prep Method: SW5030B
Prep Date/Time: 7/9/2022 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 07/20/2022 3:37:55PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1223589 [VXX38836]
 Blank Spike Lab ID: 1672615
 Date Analyzed: 07/09/2022 10:53

Spike Duplicate ID: LCSD for HBN 1223589 [VXX38836]
 Spike Duplicate Lab ID: 1672616
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1223589001, 1223589004, 1223589005

Results by SW8260D

| Parameter | Blank Spike (ug/L) | | | Spike Duplicate (ug/L) | | | CL | RPD (%) | RPD CL |
|------------------------------|--------------------|--------|---------|------------------------|--------|---------|------------|---------|---------|
| | Spike | Result | Rec (%) | Spike | Result | Rec (%) | | | |
| Vinyl chloride | 30 | 29.1 | 97 | 30 | 31.5 | 105 | (58-137) | 7.80 | (< 20) |
| Surrogates | | | | | | | | | |
| 1,2-Dichloroethane-D4 (surr) | 30 | | 99 | 30 | | 100 | (81-118) | 1.20 | |
| 4-Bromofluorobenzene (surr) | 30 | | 102 | 30 | | 102 | (85-114) | 0.10 | |
| Toluene-d8 (surr) | 30 | | 96 | 30 | | 99 | (89-112) | 3.50 | |

Batch Information

Analytical Batch: **VMS21774**
 Analytical Method: **SW8260D**
 Instrument: **Agilent 7890-75MS**
 Analyst: **AZL**

Prep Batch: **VXX38836**
 Prep Method: **SW5030B**
 Prep Date/Time: **07/09/2022 06:00**
 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 07/20/2022 3:37:57PM



Billable Matrix Spike Summary

Original Sample ID: 1223589001
MS Sample ID: 1223589002 BMS
MSD Sample ID: 1223589003 BMSD

Analysis Date: 07/09/2022 14:22
Analysis Date: 07/09/2022 11:53
Analysis Date: 07/09/2022 12:08
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

Results by SW8260D

| Parameter | Sample | Matrix Spike (ug/L) | | | Spike Duplicate (ug/L) | | | CL | RPD (%) | RPD CL |
|------------------------------|---------|---------------------|--------|---------|------------------------|--------|---------|--------|---------|---------|
| | | Spike | Result | Rec (%) | Spike | Result | Rec (%) | | | |
| Vinyl chloride | 0.0750U | 30.0 | 31.1 | 104 | 30.0 | 30.3 | 101 | 58-137 | 2.70 | (< 20) |
| Surrogates | | | | | | | | | | |
| 1,2-Dichloroethane-D4 (surr) | | 30.0 | 29.9 | 100 | 30.0 | 30.1 | 100 | 81-118 | 0.67 | |
| 4-Bromofluorobenzene (surr) | | 30.0 | 30.5 | 102 | 30.0 | 30.6 | 102 | 85-114 | 0.23 | |
| Toluene-d8 (surr) | | 30.0 | 29.6 | 99 | 30.0 | 29.6 | 99 | 89-112 | 0.30 | |

Batch Information

Analytical Batch: VMS21774
Analytical Method: SW8260D
Instrument: Agilent 7890-75MS
Analyst: AZL
Analytical Date/Time: 7/9/2022 11:53:00AM

Prep Batch: VXX38836
Prep Method: Volatiles Extraction 8240/8260
Prep Date/Time: 7/9/2022 6:00:00AM
Prep Initial Wt./Vol.: 5.00mL
Prep Extract Vol: 5.00mL

Print Date: 07/20/2022 3:37:58PM

Method Blank

Blank ID: MB for HBN 1839627 [VXX/38846]
 Blank Lab ID: 1672871

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
 1223589022, 1223589023

Results by SW8260D

| <u>Parameter</u> | <u>Results</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> |
|------------------------------|----------------|---------------|-----------|--------------|
| Vinyl chloride | 0.0750U | 0.150 | 0.0500 | ug/L |
| Surrogates | | | | |
| 1,2-Dichloroethane-D4 (surr) | 109 | 81-118 | | % |
| 4-Bromofluorobenzene (surr) | 103 | 85-114 | | % |
| Toluene-d8 (surr) | 97.1 | 89-112 | | % |

Batch Information

Analytical Batch: VMS21782
 Analytical Method: SW8260D
 Instrument: Agilent 7890-75MS
 Analyst: AZL
 Analytical Date/Time: 7/11/2022 4:14:00PM

Prep Batch: VXX38846
 Prep Method: SW5030B
 Prep Date/Time: 7/11/2022 6:00:00AM
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL

Print Date: 07/20/2022 3:37:59PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1223589 [VXX38846]
 Blank Spike Lab ID: 1672872
 Date Analyzed: 07/11/2022 16:29

Spike Duplicate ID: LCSD for HBN 1223589 [VXX38846]
 Spike Duplicate Lab ID: 1672873
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1223589022, 1223589023

Results by SW8260D

| Parameter | Blank Spike (ug/L) | | | Spike Duplicate (ug/L) | | | CL | RPD (%) | RPD CL |
|------------------------------|--------------------|--------|---------|------------------------|--------|---------|------------|---------|---------|
| | Spike | Result | Rec (%) | Spike | Result | Rec (%) | | | |
| Vinyl chloride | 30 | 26.6 | 89 | 30 | 26.1 | 87 | (58-137) | 2.20 | (< 20) |
| Surrogates | | | | | | | | | |
| 1,2-Dichloroethane-D4 (surr) | 30 | | 100 | 30 | | 100 | (81-118) | 0.53 | |
| 4-Bromofluorobenzene (surr) | 30 | | 102 | 30 | | 102 | (85-114) | 0.39 | |
| Toluene-d8 (surr) | 30 | | 100 | 30 | | 100 | (89-112) | 0.27 | |

Batch Information

Analytical Batch: **VMS21782**
 Analytical Method: **SW8260D**
 Instrument: **Agilent 7890-75MS**
 Analyst: **AZL**

Prep Batch: **VXX38846**
 Prep Method: **SW5030B**
 Prep Date/Time: **07/11/2022 06:00**
 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL



Method Blank

Blank ID: MB for HBN 1839382 [XXX/46580]
Blank Lab ID: 1672372

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1223589006, 1223589007, 1223589008, 1223589009, 1223589010, 1223589011, 1223589012, 1223589015, 1223589016, 1223589017, 1223589018, 1223589019, 1223589020, 1223589021, 1223589022

Results by AK102

| <u>Parameter</u> | <u>Results</u> | <u>LOQ/CL</u> | <u>DL</u> | <u>Units</u> |
|-----------------------|----------------|---------------|-----------|--------------|
| Diesel Range Organics | 0.300U | 0.600 | 0.200 | mg/L |
| Surrogates | | | | |
| 5a Androstane (surr) | 92.1 | 60-120 | | % |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Instrument: Agilent 7890B R
Analyst: MDT
Analytical Date/Time: 7/12/2022 8:44:00PM

Prep Batch: XXX46580
Prep Method: SW3520C
Prep Date/Time: 7/8/2022 3:45:22PM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Print Date: 07/20/2022 3:38:03PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1223589 [XXX46580]
 Blank Spike Lab ID: 1672373
 Date Analyzed: 07/12/2022 20:54

Spike Duplicate ID: LCSD for HBN 1223589 [XXX46580]
 Spike Duplicate Lab ID: 1672374
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1223589006, 1223589007, 1223589008, 1223589009, 1223589010, 1223589011, 1223589012, 1223589015, 1223589016, 1223589017, 1223589018, 1223589019, 1223589020, 1223589021, 1223589022

Results by AK102

| Parameter | Blank Spike (mg/L) | | | Spike Duplicate (mg/L) | | | CL | RPD (%) | RPD CL |
|-----------------------|--------------------|--------|---------|------------------------|--------|---------|------------|---------|---------|
| | Spike | Result | Rec (%) | Spike | Result | Rec (%) | | | |
| Diesel Range Organics | 20 | 21.4 | 107 | 20 | 19.1 | 96 | (75-125) | 11.50 | (< 20) |

Surrogates

| | | | | | | | | | |
|----------------------|-----|--|-----|-----|--|----|------------|------|--|
| 5a Androstane (surr) | 0.4 | | 101 | 0.4 | | 93 | (60-120) | 8.30 | |
|----------------------|-----|--|-----|-----|--|----|------------|------|--|

Batch Information

Analytical Batch: **XFC16282**
 Analytical Method: **AK102**
 Instrument: **Agilent 7890B R**
 Analyst: **MDT**

Prep Batch: **XXX46580**
 Prep Method: **SW3520C**
 Prep Date/Time: **07/08/2022 15:45**
 Spike Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL
 Dupe Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL



Billable Matrix Spike Summary

Original Sample ID: 1223589012
MS Sample ID: 1223589013 BMS
MSD Sample ID: 1223589014 BMSD

Analysis Date: 07/12/2022 22:37
Analysis Date: 07/12/2022 22:48
Analysis Date: 07/12/2022 22:58
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

Results by AK102

| Parameter | Sample | Matrix Spike (mg/L) | | | Spike Duplicate (mg/L) | | | CL | RPD (%) | RPD CL |
|-----------------------|--------|---------------------|--------|---------|------------------------|--------|---------|--------|---------|---------|
| | | Spike | Result | Rec (%) | Spike | Result | Rec (%) | | | |
| Diesel Range Organics | 1.20 | 19.2 | 21.4 | 105 | 19.2 | 17.8 | 86 | 75-125 | 18.70 | (< 30) |
| Surrogates | | | | | | | | | | |
| 5a Androstane (surr) | | 0.385 | .389 | 101 | 0.385 | 0.336 | 88 | 50-150 | 14.60 | |

Batch Information

Analytical Batch: XFC16282
Analytical Method: AK102
Instrument: Agilent 7890B R
Analyst: MDT
Analytical Date/Time: 7/12/2022 10:48:00PM

Prep Batch: XXX46580
Prep Method: Cont. Liq/Liq Ext. for AK102 Low Volume
Prep Date/Time: 7/8/2022 3:45:22PM
Prep Initial Wt./Vol.: 260.00mL
Prep Extract Vol: 1.00mL

Print Date: 07/20/2022 3:38:07PM

1223589



U.S. Army Corps of Engineers
Chain of Custody

SHIP TO: SGS
200 W Potter
Anchorage, AK 99518
907-562-2343

Pg 1 of 1
Cooler name: WILDWOOD 20ZZ
Chain of Custody Number:

PH 357292 XL

| PROJ NO. 22-052 | | PROJECT NAME Wildwood Summer 2022 GW Sampling | | | Matrox | # Containers | AK102 (DRO) | 8260D (Vinyl Chloride) | | | | | | | | REMARKS |
|---|-----------|--|----------------------------|------------------------------|--------|--------------|-------------|------------------------|--------------|--|--|--|--|--|--|------------------------------|
| SAMPLERS: (Signature) Jenny Salamanca/Jake Sweet | | | | | | | | | | | | | | | | |
| SAMPLE ID # | Date | Time | Location ID (10 char. max) | | | | | | | | | | | | | |
| ① AC 22WW-LF-MW01 | 27-Jun-22 | 1813 | LF-MW1 | GW | 9 | | X | | | | | | | | | ② AC ③ AC MS/MSD THIS SAMPLE |
| ④ AC 22WW-LF-MW02 | 27-Jun-22 | 1829 | LF-MW2 | GW | 3 | | X | | | | | | | | | |
| ⑤ AC 22WW-LF-MW03 | 27-Jun-22 | 1820 | LF-MW3 | GW | 3 | | X | | | | | | | | | |
| ⑥ AB 22WW-OF-MW01 | 28-Jun-22 | 955 | OF-MW1 | GW | 2 | X | | | | | | | | | | |
| ⑦ AB 22WW-OF-MW02 | 28-Jun-22 | 915 | OF-MW2 | GW | 2 | X | | | | | | | | | | |
| ⑧ AB 22WW-OF-MW03 | 28-Jun-22 | 847 | OF-MW3 | GW | 2 | X | | | | | | | | | | |
| ⑨ AB 22WW-OF-MW04 | 28-Jun-22 | 920 | OF-MW4 | GW | 2 | X | | | | | | | | | | |
| ⑩ AB 22WW-TF-MW11 | 28-Jun-22 | 1320 | TF-MW11 | GW | 2 | X | | | | | | | | | | |
| ⑪ AB 22WW-TF-MW23 | 29-Jun-22 | 905 | TF-MW23 | GW | 2 | X | | | | | | | | | | |
| ⑫ AB 22WW-TF-MW24 | 29-Jun-22 | 854 | TF-MW24 | GW | 6 | X | | | | | | | | | | ⑬ AB ⑭ AB MS/MSD THIS SAMPLE |
| ⑬ AB 22WW-TF-MW50 | 29-Jun-22 | 900 | TF-MW50 | GW | 2 | X | | | | | | | | | | |
| ⑭ AB 22WW-TF-MW06 | 29-Jun-22 | 1010 | TF-MW06 | GW | 2 | X | | | | | | | | | | |
| ⑮ AB 22WW-TF-MW04 | 29-Jun-22 | 1039 | TF-MW04 | GW | 2 | X | | | | | | | | | | |
| ⑯ AB 22WW-TF-MW03 | 29-Jun-22 | 1102 | TF-MW03 | GW | 2 | X | | | | | | | | | | |
| ⑰ AB 22WW-TF-AP397 | 29-Jun-22 | 1430 | TF-AP397 | GW | 2 | X | | | | | | | | | | |
| ⑱ AB 22WW-TF-MW30 | 29-Jun-22 | 1541 | TF-MW30 | GW | 2 | X | | | | | | | | | | |
| ⑲ AB 22WW-UST-MW01 | 29-Jun-22 | 1201 | UST-MW01 | GW | 2 | X | | | | | | | | | | |
| ⑳ AF 22WW-EB | 29-Jun-22 | 1410 | EB | GW | 5 | X | X | | | | | | | | | |
| ㉑ AC 22WW-TB | 29-Jun-22 | 1600 | T. BLANK | GW | 3 | | X | | | | | | | | | TRIP BLANK |
| Relinquished by: (Signature) | | Date | Time | Received by: (Signature) | | | Date | Time | Remarks | | | | | | | |
| Relinquished by: (Signature) | | Date | Time | Received by: (Signature) | | | Date | Time | Level IV PDF | | | | | | | |
| Relinquished by: (Signature) | | Date | Time | Rec'd at Lab by: (Signature) | | | Date | Time | SEDD EDD | | | | | | | |
| | | | | <i>Jenny Salamanca</i> | | | 6/30/22 | 14:35 | Std Turn | | | | | | | |

Distribution: Original accompanies Shipment; Copy to Coordinate Field Files

Laboratory Contract #

Credit Card: Call Sean Benjamin

Cooler Temp: _____

Temp. Blank: 4.0 DEG
absent HC



SGS Workorder #:

1223589

1223589

| Review Criteria | Condition (Yes, No, N/A) | Exceptions Noted below |
|-----------------|--------------------------|------------------------|
|-----------------|--------------------------|------------------------|

Chain of Custody / Temperature Requirements

Note: Temperature and COC seal information is found on the chain of custody form

DOD only: Did all sample coolers have a corresponding COC?

If <0°C, were sample containers ice free?

Note containers received with ice:

Identify any containers received at non-compliant temperature:

(Use form FS-0029 if more space is needed)

Holding Time / Documentation / Sample Condition Requirement

Note: Refer to form F-083 "Sample Guide" for specific holding times and sample containers.

Were samples received within analytical holding time?

Do sample labels match COC? Record discrepancies.

Note: If information on containers differs from COC, default to COC information for login. If times differ <1hr, record details & login per COC.

Were analytical requests clear?

(i.e. method is specified for analyses with multiple option for method (Eg, BTEX 8021 vs 8260, Metals 6020 vs 200.8)

Were proper containers (type/mass/volume/preservative)used?

Note: Exemption for metals analysis by 200.8/6020 in water.

Volatile Analysis Requirements (VOC, GRO, LL-Hg, etc.)

Were all soil VOAs received with a corresponding % solids container?

Were Trip Blanks (e.g., VOAs, LL-Hg) in cooler with samples?

Were all water VOA vials free of headspace (e.g., bubbles ≤ 6mm)?

Were all soil VOAs field extracted with Methanol+BFB?

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

| <u>Container Id</u> | <u>Preservative</u> | <u>Container Condition</u> | <u>Container Id</u> | <u>Preservative</u> | <u>Container Condition</u> |
|---------------------|---------------------|----------------------------|---------------------|---------------------|----------------------------|
| 1223589001-A | HCL to pH < 2 | OK | 1223589022-C | HCL to pH < 2 | OK |
| 1223589001-B | HCL to pH < 2 | OK | 1223589022-D | HCL to pH < 2 | OK |
| 1223589001-C | HCL to pH < 2 | OK | 1223589022-E | HCL to pH < 2 | OK |
| 1223589002-A | HCL to pH < 2 | OK | 1223589023-A | HCL to pH < 2 | OK |
| 1223589002-B | HCL to pH < 2 | OK | 1223589023-B | HCL to pH < 2 | OK |
| 1223589002-C | HCL to pH < 2 | OK | 1223589023-C | HCL to pH < 2 | OK |
| 1223589003-A | HCL to pH < 2 | OK | | | |
| 1223589003-B | HCL to pH < 2 | OK | | | |
| 1223589003-C | HCL to pH < 2 | OK | | | |
| 1223589004-A | HCL to pH < 2 | OK | | | |
| 1223589004-B | HCL to pH < 2 | OK | | | |
| 1223589004-C | HCL to pH < 2 | OK | | | |
| 1223589005-A | HCL to pH < 2 | OK | | | |
| 1223589005-B | HCL to pH < 2 | OK | | | |
| 1223589005-C | HCL to pH < 2 | OK | | | |
| 1223589006-A | HCL to pH < 2 | OK | | | |
| 1223589006-B | HCL to pH < 2 | OK | | | |
| 1223589007-A | HCL to pH < 2 | OK | | | |
| 1223589007-B | HCL to pH < 2 | OK | | | |
| 1223589008-A | HCL to pH < 2 | OK | | | |
| 1223589008-B | HCL to pH < 2 | OK | | | |
| 1223589009-A | HCL to pH < 2 | OK | | | |
| 1223589009-B | HCL to pH < 2 | OK | | | |
| 1223589010-A | HCL to pH < 2 | OK | | | |
| 1223589010-B | HCL to pH < 2 | OK | | | |
| 1223589011-A | HCL to pH < 2 | OK | | | |
| 1223589011-B | HCL to pH < 2 | OK | | | |
| 1223589012-A | HCL to pH < 2 | OK | | | |
| 1223589012-B | HCL to pH < 2 | OK | | | |
| 1223589013-A | HCL to pH < 2 | OK | | | |
| 1223589013-B | HCL to pH < 2 | OK | | | |
| 1223589014-A | HCL to pH < 2 | OK | | | |
| 1223589014-B | HCL to pH < 2 | OK | | | |
| 1223589015-A | HCL to pH < 2 | OK | | | |
| 1223589015-B | HCL to pH < 2 | OK | | | |
| 1223589016-A | HCL to pH < 2 | OK | | | |
| 1223589016-B | HCL to pH < 2 | OK | | | |
| 1223589017-A | HCL to pH < 2 | OK | | | |
| 1223589017-B | HCL to pH < 2 | OK | | | |
| 1223589018-A | HCL to pH < 2 | OK | | | |
| 1223589018-B | HCL to pH < 2 | OK | | | |
| 1223589019-A | HCL to pH < 2 | OK | | | |
| 1223589019-B | HCL to pH < 2 | OK | | | |
| 1223589020-A | HCL to pH < 2 | OK | | | |
| 1223589020-B | HCL to pH < 2 | OK | | | |
| 1223589021-A | HCL to pH < 2 | OK | | | |
| 1223589021-B | HCL to pH < 2 | OK | | | |
| 1223589022-A | HCL to pH < 2 | OK | | | |
| 1223589022-B | HCL to pH < 2 | OK | | | |

Container Id

Preservative

Container
Condition

Container Id

Preservative

Container
Condition

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

QN - Insufficient sample quantity provided.