



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 19, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP015W

X	Well	Spring	Stream	Other
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Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 36.43 "

Longitude: 76° 27' 10.82"

Depth to Water Level: 63.79 ft

Measured from: Land Surface X TOC

Casing Stickup: 1.90 ft

Elevation of Water Level: 512.61 ft./MSL

Sampling Depth: 135 ft

Volume of Water Column:	125.00	gal
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Total Well Depth: 148.9 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.0

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____gpm

Sample Date (mm/dd/yy): 2/3/2025

Sample Collection Time: 11:04

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398717001 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP015W

Sample Date 2/3/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	35	SM20-2320B
CALCIUM, TOTAL	30.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	31.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	25.6	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	5.6 ND	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	29 E	EPA 300
pH-FIELD (SU)	5.46	FIELD
pH-LAB (SU)	7.62	SM20-4500HB
POTASSIUM, TOTAL	2.3	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	20.7	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	469	FIELD
SPEC. COND., LAB (umhos/cm)	485	SW846 9050A
SULFATE	31.6	EPA 300
ALKALINITY	35	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	266	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.2	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.7	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP015W

Sample Date 2/3/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



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SECTION A. APPLICANT IDENTIFIER

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Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP30RW

X	Well	Spring	Stream	Other
---	------	--------	--------	-------

Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 15.52 "

Longitude: 76 ° 27 ' 26.8 "

Depth to Water Level: 37.82 ft

Measured from: Land Surface X TOC

Casing Stickup: 2.20 ft

Elevation of Water Level: 524.48 ft./MSL

Sampling Depth: 85 ft

Volume of Water Column:	76.63	gal
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Total Well Depth: 90 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.1

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/3/2025

Sample Collection Time: 12:49

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398717002 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP30RW

Sample Date 2/3/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	38	SM20-2320B
CALCIUM, TOTAL	65.7	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	365	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	21.5	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	4300	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	4.9	EPA 300
pH-FIELD (SU)	5.46	FIELD
pH-LAB (SU)	7.63	SM20-4500HB
POTASSIUM, TOTAL	10.7	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	167	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1430	FIELD
SPEC. COND., LAB (umhos/cm)	1440	SW846 9050A
SULFATE	66.2	EPA 300
ALKALINITY	38	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	770	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.96	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.75	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP30RW

Sample Date 2/3/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP04AW

X	Well	Spring	Stream	Other
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Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 15.4 "

Longitude: 76 ° 27 ' 26.58 "

Depth to Water Level: 39.83 ft

Measured from: Land Surface X TOC

Casing Stickup: 2.52 ft

Elevation of Water Level: 520.89 ft./MSL

Sampling Depth: 146 ft

Volume of Water Column:	384.33	gal
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Total Well Depth: 301.52 ft

Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: X Yes No

Well Volumes Purged: 1.0

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____gpm

Sample Date (mm/dd/yy): 2/3/2025

Sample Collection Time: 13:19

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398717003 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP04AW

Sample Date 2/3/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	188	SM20-2320B
CALCIUM, TOTAL	162	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	318	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	27.1	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	360	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	2.5 ND	EPA 300
pH-FIELD (SU)	6.96	FIELD
pH-LAB (SU)	8.2	SM20-4500HB
POTASSIUM, TOTAL	2.9	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	91.3	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1441	FIELD
SPEC. COND., LAB (umhos/cm)	1480	SW846 9050A
SULFATE	54.9	EPA 300
ALKALINITY	188	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	888	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.78	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.8	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP04AW

Sample Date 2/3/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



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SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP02DW

X	Well	Spring	Stream	Other
---	------	--------	--------	-------

Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 27.74 "

Longitude: 76 ° 27 ' 1.49 "

Depth to Water Level: 30.28 ft

Measured from: Land Surface X TOC

Casing Stickup: _____ ft

Elevation of Water Level: 479.32 ft./MSL

Sampling Depth: 120 ft

Volume of Water Column: _____ gal

Total Well Depth: 152 ft

Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: X Yes No

Well Volumes Purged: 1.0

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____gpm

Sample Date (mm/dd/yy): 2/4/2025

Sample Collection Time: 10:54

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398927001 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP02DW

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	127	SM20-2320B
CALCIUM, TOTAL	129	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	372	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	380	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	19.5	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	69	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	8	EPA 300
pH-FIELD (SU)	7.12	FIELD
pH-LAB (SU)	8.26	SM20-4500HB
POTASSIUM, TOTAL	1.6	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	134	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1453	FIELD
SPEC. COND., LAB (umhos/cm)	1500	SW846 9050A
SULFATE	48.7	EPA 300
ALKALINITY	127	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	900	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.93	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	4.6	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

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Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP02DW

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



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SECTION B. FACILITY INFORMATION

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Monitoring Point Number: FFMP02SW X Well ___ Spring ___ Stream ___ Other

 Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 27.9 " Longitude: 76 ° 27 ' 1.58 "

Depth to Water Level:	16.52	ft	Measured from:	Land Surface	X	TOC
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Casing Stickup: ft Elevation of Water Level: 493.38 ft./MSL

Sampling Depth: 18 ft Volume of Water Column: gal

Total Well Depth: 25 ft Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: X Yes No Well Volumes Purged: 1.5

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/4/2025 Sample Collection Time: 11:19

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398927002 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP02SW

Sample Date 2/4/2025

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ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	28	SM20-2320B
CALCIUM, TOTAL	39	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	177	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	96	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	13.2	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	41	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	12.5	EPA 300
pH-FIELD (SU)	5.37	FIELD
pH-LAB (SU)	7.34	SM20-4500HB
POTASSIUM, TOTAL	3.8	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	95.4	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	723	FIELD
SPEC. COND., LAB (umhos/cm)	819	SW846 9050A
SULFATE	60.5	EPA 300
ALKALINITY	28	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	436	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.2	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	7.5	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP02SW

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

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FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP03AW

X	Well	Spring	Stream	Other
---	------	--------	--------	-------

Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 24.05 "

Longitude: 76 ° 27 ' 30.58 "

Depth to Water Level: 55.36 ft

Measured from: Land Surface X TOC

Casing Stickup: 1.20 ft

Elevation of Water Level: 535.54 ft./MSL

Sampling Depth: 130 ft

Volume of Water Column:	134.88	gal
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Total Well Depth: 147.2 ft

Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: X Yes No

Well Volumes Purged: 2.5

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/4/2025

Sample Collection Time: 12:53

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398927003 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP03AW

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	13	SM20-2320B
CALCIUM, TOTAL	22	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	55.6	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	18.4	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	290	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	22.6 E	EPA 300
pH-FIELD (SU)	5.13	FIELD
pH-LAB (SU)	7.08	SM20-4500HB
POTASSIUM, TOTAL	1.4	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	17.1	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	377	FIELD
SPEC. COND., LAB (umhos/cm)	385	SW846 9050A
SULFATE	2 ND	EPA 300
ALKALINITY	13	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	214	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.3 ND	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP03AW

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

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FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP005W

X	Well	Spring	Stream	Other
---	------	--------	--------	-------

Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 10.67 "

Longitude: 76° 27' 21.3"

Depth to Water Level: 79.44 ft

Measured from: Land Surface X TOC

Casing Stickup: 1.70 ft

Elevation of Water Level: 457.96 ft./MSL

Sampling Depth: 135 ft

Volume of Water Column:	103.63	gal
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Total Well Depth: 150 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.0

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/4/2025

Sample Collection Time: 13:43

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398927004 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP005W

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	59	SM20-2320B
CALCIUM, TOTAL	77.8	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	171	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	18.1	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	150	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1.8	EPA 300
pH-FIELD (SU)	5.58	FIELD
pH-LAB (SU)	7.82	SM20-4500HB
POTASSIUM, TOTAL	3.1	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	46.2	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	770	FIELD
SPEC. COND., LAB (umhos/cm)	793	SW846 9050A
SULFATE	68.6	EPA 300
ALKALINITY	59	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	522	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.2	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.3	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP005W

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

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FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP26RW

X	Well	Spring	Stream	Other
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Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 11.03 "

Longitude: 76 ° 27 ' 20.3 "

Depth to Water Level: 89.43 ft

Measured from: Land Surface X TOC

Casing Stickup: 3.30 ft

Elevation of Water Level: 457.97 ft./MSL

Sampling Depth: 105 ft

Volume of Water Column:	36.08	gal
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Total Well Depth: 114 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.1

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/4/2025

Sample Collection Time: 14:18

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3398927005 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP26RW

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	66	SM20-2320B
CALCIUM, TOTAL	71.2	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	156	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	18.2	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	670	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1.3	EPA 300
pH-FIELD (SU)	5.59	FIELD
pH-LAB (SU)	7.85	SM20-4500HB
POTASSIUM, TOTAL	7	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	56.8	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	791	FIELD
SPEC. COND., LAB (umhos/cm)	800	SW846 9050A
SULFATE	99.9	EPA 300
ALKALINITY	66	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	434	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.7	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.3 ND	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP26RW

Sample Date 2/4/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



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FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP029W

X	Well	Spring	Stream	Other
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Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 12.93 "

Longitude: 76 ° 27 ' 0.67 "

Depth to Water Level: 41.91 ft

Measured from: Land Surface X TOC

Casing Stickup: 2.00 ft

Elevation of Water Level: 435.39 ft./MSL

Sampling Depth: 55 ft

Volume of Water Column:	24.36	gal
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Total Well Depth: 58.5 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 2.3

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/5/2025

Sample Collection Time: 9:09

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399149001 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP029W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	12	SM20-2320B
CALCIUM, TOTAL	13.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	58.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	10.1	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	12	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	3.9	EPA 300
pH-FIELD (SU)	4.68	FIELD
pH-LAB (SU)	7.07	SM20-4500HB
POTASSIUM, TOTAL	2	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	13.8	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	236	FIELD
SPEC. COND., LAB (umhos/cm)	241	SW846 9050A
SULFATE	2 ND	EPA 300
ALKALINITY	12	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	139	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.8	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP029W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
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FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284
Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP017W X Well ___ Spring ___ Stream ___ Other

 Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 8.5 " Longitude: 76 ° 27 ' 6.17 "

Depth to Water Level:	44.29	ft	Measured from:	Land Surface	X	TOC
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Casing Stickup: 2.00 ft Elevation of Water Level: 436.41 ft./MSL

Sampling Depth:	135 ft	Volume of Water Column:	155.99 gal
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Total Well Depth: 150.5 ft Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: X Yes No Well Volumes Purged: 1.1

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____gpm

Sample Date (mm/dd/yy): 2/5/2025 Sample Collection Time: 9:51

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399149002 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP017W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.13	D6919-09
BICARBONATE ALKALINITY	85	SM20-2320B
CALCIUM, TOTAL	152	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	538	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	52.8	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	1300	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	4.7	EPA 300
pH-FIELD (SU)	5.99	FIELD
pH-LAB (SU)	7.87	SM20-4500HB
POTASSIUM, TOTAL	13.7	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	155	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1947	FIELD
SPEC. COND., LAB (umhos/cm)	2020	SW846 9050A
SULFATE	132	EPA 300
ALKALINITY	85	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	1150	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	3.2	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	1.3	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP017W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 19, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Section 273.284
Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP039W

X	Well	Spring	Stream	Other
---	------	--------	--------	-------

Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 10.38 "

Longitude: 76° 27' 2.83"

Depth to Water Level: 16.44 ft

Measured from: Land Surface X TOC

Casing Stickup: 2.04 ft

Elevation of Water Level: 439.02 ft./MSL

Sampling Depth: 118 ft

Volume of Water Column:	166.78	gal
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Total Well Depth: 130 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.1

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/5/2025

Sample Collection Time: 12:07

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399149003 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP039W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.27	D6919-09
BICARBONATE ALKALINITY	44	SM20-2320B
CALCIUM, TOTAL	68.2	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	243	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	1700	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	23.5	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	730	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	3.4	EPA 300
pH-FIELD (SU)	5.82	FIELD
pH-LAB (SU)	7.54	SM20-4500HB
POTASSIUM, TOTAL	6.3	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	69.6	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	921	FIELD
SPEC. COND., LAB (umhos/cm)	934	SW846 9050A
SULFATE	42	EPA 300
ALKALINITY	44	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	552	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.3	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	17	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

^T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP039W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP038W

X	Well	Spring	Stream	Other
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Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 10.18 "

Longitude: 76° 27' 2.2"

Depth to Water Level: 22.48 ft

Measured from: Land Surface X TOC

Casing Stickup: 2.15 ft

Elevation of Water Level: 431.56 ft./MSL

Sampling Depth: 46 ft

Volume of Water Column:	40.42	gal
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Total Well Depth: 50 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.1

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/5/2025

Sample Collection Time: 13:11

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399149004 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP038W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	77	SM20-2320B
CALCIUM, TOTAL	68.5	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	99	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	1600	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	6.2	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	77	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	8.14	FIELD
pH-LAB (SU)	8.14	SM20-4500HB
POTASSIUM, TOTAL	1.2	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	14.2	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	464	FIELD
SPEC. COND., LAB (umhos/cm)	476	SW846 9050A
SULFATE	13	EPA 300
ALKALINITY	77	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	296	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	18	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP038W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1.3	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP035W

X	Well	Spring	Stream	Other
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Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 15.95 "

Longitude: 76° 26' 57.26"

Depth to Water Level: 43.53 ft

Measured from: Land Surface X TOC

Casing Stickup: 1.45 ft

Elevation of Water Level: 434.03 ft./MSL

Sampling Depth: 65 ft

Volume of Water Column:	38.88	gal
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Total Well Depth: 70 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.0

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/5/2025

Sample Collection Time: 14:29

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399149005 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP035W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	141	SM20-2320B
CALCIUM, TOTAL	106	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	166	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	18.7	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	16	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	7.7	EPA 300
pH-FIELD (SU)	6.68	FIELD
pH-LAB (SU)	8.17	SM20-4500HB
POTASSIUM, TOTAL	3.3	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	51.5	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	887	FIELD
SPEC. COND., LAB (umhos/cm)	920	SW846 9050A
SULFATE	49.6	EPA 300
ALKALINITY	141	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	534	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.99	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	1.5	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP035W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP036W

X	Well	Spring	Stream	Other
---	------	--------	--------	-------

Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 16.03 "

Longitude: 76 ° 26 ' 57.28 "

Depth to Water Level: 51.5 ft

Measured from: Land Surface X TOC

Casing Stickup: 1.91 ft

Elevation of Water Level: 426.73 ft./MSL

Sampling Depth: 135 ft

Volume of Water Column:	129.98	gal
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Total Well Depth: 140 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 1.7

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/5/2025

Sample Collection Time: 15:29

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399149006 Final Lab Analysis CompletionDate: 2/21/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP036W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	101	SM20-2320B
CALCIUM, TOTAL	53.5	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	36.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	930	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	5.2	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	98	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	8.1	FIELD
pH-LAB (SU)	8.28	SM20-4500HB
POTASSIUM, TOTAL	0.92	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	15.7	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	360	FIELD
SPEC. COND., LAB (umhos/cm)	367	SW846 9050A
SULFATE	35.4	EPA 300
ALKALINITY	101	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	207	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	7.7	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP036W

Sample Date 2/5/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 19, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Section 273.284

Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP033W

X	Well	Spring	Stream	Other
---	------	--------	--------	-------

Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 31.09 "

Longitude: 76 ° 27 ' 4.98 "

Depth to Water Level: 20.88 ft

Measured from: Land Surface X TOC

Casing Stickup: 0.49 ft

Elevation of Water Level: 495.64 ft./MSL

Sampling Depth: 79 ft

Volume of Water Column:	110.33	gal
-------------------------	--------	-----

Total Well Depth: 96 ft

Sampling Method: X Pumped Bailed Grab

Well Purged: X Yes No

Well Volumes Purged: 2.7

Sample Field Filtered (must be 0.45 micron)?: Yes ☒ No ☐

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/6/2025

Sample Collection Time: 13:33

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: Yes ☒ No ☐ If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399527001 Final Lab Analysis CompletionDate: 2/20/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP033W

Sample Date 2/6/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	28	SM20-2320B
CALCIUM, TOTAL	40.6	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	87.1	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	2800	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	14.1	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	150	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	11.9	EPA 300
pH-FIELD (SU)	5.49	FIELD
pH-LAB (SU)	7.39	SM20-4500HB
POTASSIUM, TOTAL	2.4	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	21.4	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	439	FIELD
SPEC. COND., LAB (umhos/cm)	442	SW846 9050A
SULFATE	14	EPA 300
ALKALINITY	28	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	364	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	11	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP033W

Sample Date 2/6/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT**



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

**FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES**

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General Reference: Section 273.284
Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP034W ☒ Well ☐ Spring ☐ Stream ☐ Other
☐ Upgradient/Upstream ☒ Downgradient/Downstream

Location (County): Lancaster County

Municipality: _____

Sampling Point Latitude: _____ ° _____ ' _____ " Longitude: _____ ° _____ ' _____ "

Depth to Water Level: 10.98 ft Measured from: ☐ Land Surface ☒ TOC

Casing Stickup: _____ ft Elevation of Water Level: 461.9 ft./MSL

Sampling Depth: 25.85 ft Volume of Water Column: _____ gal

Total Well Depth: 121 ft Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: ☒ Yes ☐ No Well Volumes Purged: 2.2

Sample Field Filtered (must be 0.45 micron)?: ☐ Yes ☒ No

Spring Flow Rate: _____ gpm

Sample Date (mm/dd/yy): 2/6/2025 Sample Collection Time: 13:47

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: ☐ Yes ☒ No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399527002 Final Lab Analysis Completion Date: 2/20/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments: _____

I.D. No 101389

Monitoring Point No. FFMP034W

Sample Date 2/6/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	34	SM20-2320B
CALCIUM, TOTAL	60.4	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	159	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	1600	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	21.9	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	78	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	11.5	EPA 300
pH-FIELD (SU)	5.65	FIELD
pH-LAB (SU)	7.46	SM20-4500HB
POTASSIUM, TOTAL	3.1	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	47.5	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	706	FIELD
SPEC. COND., LAB (umhos/cm)	721	SW846 9050A
SULFATE	34.5	EPA 300
ALKALINITY	34	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	524	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.68	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	45	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP034W

Sample Date 2/6/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT**



Date Prepared/Revised
04/29/2025

DEP USE ONLY

Date Received

**FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES**

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General Reference: Section 273.284
Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP031W

☒ Well ☐ Spring ☐ Stream ☐ Other

☒ Upgradient/Upstream ☐ Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 31.2 "

Longitude: 76 ° 27 ' 23.53 "

Depth to Water Level: 73.61 ft

Measured from: ☐ Land Surface ☒ TOC

Casing Stickup: 2.38 ft

Elevation of Water Level: 539.05 ft./MSL

Sampling Depth: 130 ft

Volume of Water Column: 97.50 gal

Total Well Depth: 140 ft

Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: ☒ Yes ☐ No

Well Volumes Purged: 1.7

Sample Field Filtered (must be 0.45 micron)?: ☐ Yes ☒ No

Spring Flow Rate: gpm

Sample Date (mm/dd/yy): 2/7/2025

Sample Collection Time: 9:45

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: ☐ Yes ☒ No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399736001 Final Lab Analysis Completion Date: 2/20/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP031W

Sample Date 2/7/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	102	SM20-2320B
CALCIUM, TOTAL	65.4	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	22.1	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	2800	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	4.2	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	310	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1.3	EPA 300
pH-FIELD (SU)	7.35	FIELD
pH-LAB (SU)	8.13	SM20-4500HB
POTASSIUM, TOTAL	1.9	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	9.8	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	324	FIELD
SPEC. COND., LAB (umhos/cm)	364	SW846 9050A
SULFATE	49.6	EPA 300
ALKALINITY	102	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	214	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	28	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP031W

Sample Date 2/7/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT**



Date Prepared/Revised
04/29/2025

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**FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES**

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General Reference: Section 273.284
Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258.

SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP002W

☒ Well ☐ Spring ☐ Stream ☐ Other

☒ Upgradient/Upstream ☐ Downgradient/Downstream

Location (County): Lancaster County

Municipality: Manor Township

Sampling Point Latitude: 39 ° 57 ' 32.25 "

Longitude: 76 ° 27 ' 24.03 "

Depth to Water Level: 72.42 ft

Measured from: ☐ Land Surface ☒ TOC

Casing Stickup: 1.60 ft

Elevation of Water Level: 540.78 ft./MSL

Sampling Depth: 85 ft

Volume of Water Column: 142.72 gal

Total Well Depth: 169.6 ft

Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: ☒ Yes ☐ No

Well Volumes Purged: 1.8

Sample Field Filtered (must be 0.45 micron)?: ☐ Yes ☒ No

Spring Flow Rate: gpm

Sample Date (mm/dd/yy): 2/7/2025

Sample Collection Time: 10:05

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: ☐ Yes ☒ No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399736002 Final Lab Analysis Completion Date: 2/20/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP002W

Sample Date 2/7/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	D6919-09
BICARBONATE ALKALINITY	5 ND	SM20-2320B
CALCIUM, TOTAL	19.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	18.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	190	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	7.5	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	280	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	15.1	EPA 300
pH-FIELD (SU)	4.35	FIELD
pH-LAB (SU)	6.47	SM20-4500HB
POTASSIUM, TOTAL	4.6	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	16.3	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	254	FIELD
SPEC. COND., LAB (umhos/cm)	261	SW846 9050A
SULFATE	32.7	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	166	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.63	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	2.4	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP002W

Sample Date 2/7/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT**



Date Prepared/Revised
04/29/2025

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**FORM 19
MUNICIPAL WASTE LANDFILL
QUARTERLY AND ANNUAL WATER QUALITY ANALYSES**

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Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. FACILITY INFORMATION

Monitoring Wells must be designed and constructed in accordance with Department Standards. INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D° MM' SS.S")

Monitoring Point Number: FFMP032W

☒ Well ☐ Spring ☐ Stream ☐ Other

☒ Upgradient/Upstream ☐ Downgradient/Downstream

Location (County): Lancaster County

Municipality: MANOR TOWNSHIP

Sampling Point Latitude: 39 ° 57 ' 33.45 "

Longitude: 76 ° 27 ' 17.71 "

Depth to Water Level: 52.54 ft

Measured from: ☐ Land Surface ☒ TOC

Casing Stickup: 2.06 ft

Elevation of Water Level: 541.55 ft./MSL

Sampling Depth: 62 ft

Volume of Water Column: 32.99 gal

Total Well Depth: 75 ft

Sampling Method: ☒ Pumped ☐ Bailed ☐ Grab

Well Purged: ☒ Yes ☐ No

Well Volumes Purged: 0.3

Sample Field Filtered (must be 0.45 micron)?: ☐ Yes ☒ No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 2/7/2025

Sample Collection Time: 10:38

Sample Collector's Name: Mr. Brian G Shade

Sample Collector's Affiliation: ALS

Laboratory(ies) Performing Analysis: ALS Environmental

Were any holding times exceeded?: ☐ Yes ☒ No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3399736003 Final Lab Analysis Completion Date: 2/20/2025

Name/Affiliation of Person who Filled Out Form: Daniel A. Brown

Comments:

I.D. No 101389

Monitoring Point No. FFMP032W

Sample Date 2/7/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****ANALYTES****1-Q. Inorganics (Enter all data in mg/l except as noted)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.38	D6919-09
BICARBONATE ALKALINITY	59	SM20-2320B
CALCIUM, TOTAL	21	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	33.6	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	9300	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	7.1	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	810	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	6.57	FIELD
pH-LAB (SU)	7.88	SM20-4500HB
POTASSIUM, TOTAL	1.7	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	14.2	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	243	FIELD
SPEC. COND., LAB (umhos/cm)	225	SW846 9050A
SULFATE	2 ND	EPA 300
ALKALINITY	59	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	119	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.51	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	95	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.

T Please indicate detection limit if analyte is not detected.

** Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).

Remaining quarterly samples only require total metals analysis.

I.D. No 101389

Monitoring Point No. FFMP032W

Sample Date 2/7/2025

FORM 19**QUARTERLY AND ANNUAL WATER QUALITY ANALYSES****2-Q. Organics (Enter all data in ug/l)**

ANALYTE	VALUE^T	ANALYSIS METHOD NUMBER
BENZENE	1 ND	SW846 8260B
1,2-DIBROMOETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHANE	1 ND	SW846 8260B
1,1-DICHLOROETHENE	1 ND	SW846 8260B
1,2-DICHLOROETHANE	1 ND	SW846 8260B
CIS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
TRANS 1,2-DICHLOROETHENE	1 ND	SW846 8260B
ETHYLBENZENE	1 ND	SW846 8260B
METHYLENE CHLORIDE	1 ND	SW846 8260B
TETRACHLOROETHENE	1 ND	SW846 8260B
TOLUENE	1 ND	SW846 8260B
1,1,1-TRICHLOROETHANE	1 ND	SW846 8260B
TRICHLOROETHENE	1 ND	SW846 8260B
VINYL CHLORIDE	1 ND	SW846 8260B
XYLENES (TOTAL)	3 ND	SW846 8260B

T Please indicate detection limit if analyte is not detected.



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3399527
Report ID 389701 on 2/21/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 06, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3399527001	FFMP033W	Ground Water	02/06/2025 13:33	02/06/2025 17:05	BGS	Analytical Laboratory Service
3399527002	FFMP034W	Ground Water	02/06/2025 13:47	02/06/2025 17:05	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The concentration of this analyte was greater than 4 times the concentration of the spike added to the matrix spike. According to protocol, the calculation for percent recovery of the matrix spike is not valid.



Detected Results Summary

Client Sample ID	FFMP033W	Collected	02/06/2025 13:33		
Lab Sample ID	3399527001	Lab Receipt	02/06/2025 17:05		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	20.88	Feet		Field	#
Dissolved Oxygen	1.14	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	516.52	Feet		Field	#
Flow Rate	1.88	gal/min		Field	#
Ground Water Elevation	495.64	ft/MSL		Field	#
Oxidation-Reduction Potential	137	mV		Field	#
pH, Field (SM4500B)	5.49	pH_Units		Field	#
Sample Depth	79.00	Feet		Field	#
Specific Conductance, Field	439	umhos/cm	1	Field	#
Temperature	15.34	Deg. C		Field	#
Total Well Depth	100.00	Feet		Field	#
Turbidity, Field	4	NTU	1	Field	#
Volume in Water Column	116.31	Gallons		Field	#
Water Level After Purge	38.83	Feet		Field	#
Well Volumes Purged	2.67	Vol		Field	#
METALS					
Calcium, Total	40.6	mg/L	0.11	SW846 6010C	#
Iron, Total	2.8	mg/L	0.067	SW846 6010C	#
Magnesium, Total	14.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.15	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.4	mg/L	0.56	SW846 6010C	#
Sodium, Total	21.4	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	28	mg/L	5	SM2320B-2011	#
Alkalinity, Total	28	mg/L	5	SM2320B-2011	#
Chloride	87.1	mg/L	2.0	EPA 300.0	#
Nitrate-N	11.9	mg/L	1.0	EPA 300.0	#
pH	7.39	pH_Units		S4500HB-11	#
Specific Conductance	442	umhos/cm	5	SW846 9050A	#
Sulfate	14.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	364	mg/L	25	SM2540C-15	#
Turbidity	11	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP034W	Collected	02/06/2025 13:47		
Lab Sample ID	3399527002	Lab Receipt	02/06/2025 17:05		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	10.98	Feet		Field	#
Dissolved Oxygen	1.37	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	472.88	Feet		Field	#
Flow Rate	1.89	gal/min		Field	#
Ground Water Elevation	461.90	ft/MSL		Field	#
Oxidation-Reduction Potential	169	mV		Field	#
pH, Field (SM4500B)	5.65	pH_Units		Field	#
Sample Depth	25.85	Feet		Field	#
Specific Conductance, Field	706	umhos/cm	1	Field	#
Temperature	14.57	Deg. C		Field	#
Total Well Depth	121.00	Feet		Field	#
Turbidity, Field	4	NTU	1	Field	#
Volume in Water Column	161.73	Gallons		Field	#
Water Level After Purge	21.18	Feet		Field	#
Well Volumes Purged	2.24	Vol		Field	#
METALS					
Calcium, Total	60.4	mg/L	0.11	SW846 6010C	#
Iron, Total	1.6	mg/L	0.067	SW846 6010C	#
Magnesium, Total	21.9	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.078	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	47.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	34	mg/L	5	SM2320B-2011	#
Alkalinity, Total	34	mg/L	5	SM2320B-2011	#
Chloride	159	mg/L	2.0	EPA 300.0	#
Nitrate-N	11.5	mg/L	1.0	EPA 300.0	#
pH	7.46	pH_Units		S4500HB-11	#
Specific Conductance	721	umhos/cm	5	SW846 9050A	#
Sulfate	34.5	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	524	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.68	mg/L	0.50	SW846 9060A	#
Turbidity	45	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP033W	Collected	02/06/2025 13:33
Lab Sample ID	3399527001	Lab Receipt	02/06/2025 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	20.88		Feet		Field	1	02/06/2025 13:33	BGS	D
Dissolved Oxygen	1.14		mg/L	0.01	Field	1	02/06/2025 13:33	BGS	D
Elev Top MW Casing above MSL	516.52		Feet		Field	1	02/06/2025 13:33	BGS	D
Flow Rate	1.88		gal/min		Field	1	02/06/2025 13:33	BGS	D
Ground Water Elevation	495.64		ft/MSL		Field	1	02/06/2025 13:33	BGS	D
Oxidation-Reduction Potential	137		mV		Field	1	02/06/2025 13:33	BGS	D
pH, Field (SM4500B)	5.49		pH_Units		Field	1	02/06/2025 13:33	BGS	D
Sample Depth	79.00		Feet		Field	1	02/06/2025 13:33	BGS	D
Specific Conductance, Field	439		umhos/cm	1	Field	1	02/06/2025 13:33	BGS	D
Temperature	15.34		Deg. C		Field	1	02/06/2025 13:33	BGS	D
Total Well Depth	100.00		Feet		Field	1	02/06/2025 13:33	BGS	D
Turbidity, Field	4		NTU	1	Field	1	02/06/2025 13:33	BGS	D
Volume in Water Column	116.31		Gallons		Field	1	02/06/2025 13:33	BGS	D
Water Level After Purge	38.83		Feet		Field	1	02/06/2025 13:33	BGS	D
Well Volumes Purged	2.67		Vol		Field	1	02/06/2025 13:33	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	40.6		mg/L	0.11	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Iron, Total	2.8		mg/L	0.067	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Magnesium, Total	14.1		mg/L	0.11	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Manganese, Total	0.15		mg/L	0.0056	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Potassium, Total	2.4		mg/L	0.56	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Sodium, Total	21.4		mg/L	0.56	SW846 6010C	1	02/11/2025 13:58	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 22:37	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H



Results

Client Sample ID	FFMP033W	Collected	02/06/2025 13:33
Lab Sample ID	3399527001	Lab Receipt	02/06/2025 17:05

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			104%	62 – 133		02/18/2025 22:37		
4-Bromofluorobenzene	460-00-4			93.8%	79 – 114		02/18/2025 22:37		
Dibromofluoromethane	1868-53-7			102%	78 – 116		02/18/2025 22:37		
Toluene-d8	2037-26-5			95.5%	76 – 127		02/18/2025 22:37		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	28		mg/L	5	SM2320B-2011	1	02/09/2025 03:42	JXK	B
Alkalinity, Total	28	1	mg/L	5	SM2320B-2011	1	02/09/2025 03:42	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 13:33	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	87.1		mg/L	2.0	EPA 300.0	2	02/07/2025 12:34	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/07/2025 12:34	J1W	B
Nitrate-N	11.9		mg/L	1.0	EPA 300.0	2	02/07/2025 12:34	J1W	B
pH	7.39	2	pH_Units		S4500HB-11	1	02/09/2025 03:42	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 17:16	AKH	G
Specific Conductance	442		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	14.0		mg/L	2.0	EPA 300.0	2	02/07/2025 12:34	J1W	B
Total Dissolved Solids	364		mg/L	25	SM2540C-15	1	02/12/2025 08:45	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	11		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FFMP034W	Collected	02/06/2025 13:47
Lab Sample ID	3399527002	Lab Receipt	02/06/2025 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	10.98		Feet		Field	1	02/06/2025 13:46	BGS	D
Dissolved Oxygen	1.37		mg/L	0.01	Field	1	02/06/2025 13:46	BGS	D
Elev Top MW Casing above MSL	472.88		Feet		Field	1	02/06/2025 13:46	BGS	D
Flow Rate	1.89		gal/min		Field	1	02/06/2025 13:46	BGS	D
Ground Water Elevation	461.90		ft/MSL		Field	1	02/06/2025 13:46	BGS	D
Oxidation-Reduction Potential	169		mV		Field	1	02/06/2025 13:46	BGS	D
pH, Field (SM4500B)	5.65		pH_Units		Field	1	02/06/2025 13:46	BGS	D
Sample Depth	25.85		Feet		Field	1	02/06/2025 13:46	BGS	D
Specific Conductance, Field	706		umhos/cm	1	Field	1	02/06/2025 13:46	BGS	D
Temperature	14.57		Deg. C		Field	1	02/06/2025 13:46	BGS	D
Total Well Depth	121.00		Feet		Field	1	02/06/2025 13:46	BGS	D
Turbidity, Field	4		NTU	1	Field	1	02/06/2025 13:46	BGS	D
Volume in Water Column	161.73		Gallons		Field	1	02/06/2025 13:46	BGS	D
Water Level After Purge	21.18		Feet		Field	1	02/06/2025 13:46	BGS	D
Well Volumes Purged	2.24		Vol		Field	1	02/06/2025 13:46	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	60.4	3	mg/L	0.11	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Iron, Total	1.6		mg/L	0.067	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Magnesium, Total	21.9	3	mg/L	0.11	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Manganese, Total	0.078		mg/L	0.0056	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Potassium, Total	3.1		mg/L	0.56	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Sodium, Total	47.5		mg/L	0.56	SW846 6010C	1	02/11/2025 13:59	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 22:58	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H



Results

Client Sample ID	FFMP034W	Collected	02/06/2025 13:47
Lab Sample ID	3399527002	Lab Receipt	02/06/2025 17:05

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			106%	62 – 133		02/18/2025 22:58		
4-Bromofluorobenzene	460-00-4			99.9%	79 – 114		02/18/2025 22:58		
Dibromofluoromethane	1868-53-7			105%	78 – 116		02/18/2025 22:58		
Toluene-d8	2037-26-5			98%	76 – 127		02/18/2025 22:58		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	34		mg/L	5	SM2320B-2011	1	02/09/2025 04:49	JXK	B
Alkalinity, Total	34	1	mg/L	5	SM2320B-2011	1	02/09/2025 04:49	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 16:54	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	159		mg/L	2.0	EPA 300.0	2	02/07/2025 12:45	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/07/2025 12:45	J1W	B
Nitrate-N	11.5		mg/L	1.0	EPA 300.0	2	02/07/2025 12:45	J1W	B
pH	7.46	2	pH_Units		S4500HB-11	1	02/19/2025 15:56	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 18:04	AKH	G
Specific Conductance	721		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	34.5		mg/L	2.0	EPA 300.0	2	02/07/2025 12:45	J1W	B
Total Dissolved Solids	524		mg/L	25	SM2540C-15	1	02/12/2025 08:45	RAG	B
Total Organic Carbon (TOC)	0.68		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	45		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399527001	FFMP033W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399527002	FFMP034W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399527001	FFMP033W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02	ANN	SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392937
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385764
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1387514
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386879
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3399527002	FFMP034W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02	ANN	SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392937
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1393594
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1387514
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386879
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P: 717-944-5541



CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

Client Name: Lancaster County Solid Waste MA		Temp Taken By:		In term ILU:		WO Temp (°C)		Y N NA	
Address: 1299 Harrisburg Pike PO Box 4424		Receipt info completed by:		WV Containers 0-8°C		Y N NA		Deviations? NO YES	
Lancaster PA 17604		Cooler Custody Seals Intact		Y N NA		Y N NA		If YES, list below.	
		Sample Custody Seal Intact		Y N NA		Y N NA			
		Received on Ice		Y N NA		Y N NA			
		Coolers & Samples Intact		Y N NA		Y N NA			
		Correct Containers Provided		Y N NA		Y N NA			
		Sample Label/COC Agree		Y N NA		Y N NA			
		Adequate Sample Volumes		Y N NA		Y N NA			
		VOA only: Trip Blank		Y N NA		Y N NA			
		NJ ≤ 4 days? Y N		Y N		Y N			
		Courier/Tracking #		PWSID #		PWS Phone #			
		Sample(s) for Radiation testing? Y N		Rad Screen (uCi) Y N		New Source? Y N		Client contact:	
		Reportable SDWA Sample(s)? Y N		New Source Contact:					
		SDWA State of Origin?							
		PWSID #							
		PWS Contact:							
		SDWA Sample Type Key: D=Distribution E=Entry Point							
		R=Raw P=Plant C=Check S=Special A=Annual Startup							
		Sample/COC Remarks							
		Contains Short Hold Testing YES NO							
		Internal Use: If less than 48 hours - notify lab upon receipt							
		Data Deliverables							
		Standard Lvl 1		CLP-like		HSCA		State Samples Collected In	
		Standard Lvl 2		DOD		Landfill		NY	
		Standard Lvl 3		NJ RED		NJ GW		NJ	
		Standard Lvl 4		NJ Full				PA	
		Excel Summary		Sample Disposal		Lab		WV	
		Equis		Special				FL	
		Custom						other	
		EDDS:							
		Format Type							
		SW=Surface Water WP=Wipe WW=Wastewater							
		ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057							
		Rev 07.06.2023							



right solution.
right person.

Middletown Sample Condition Form

Client Cancaster County Workorder 3399827
 Temp °C 1° Therm ID 524 Ice? (Y) N N/A Initials & Date DB 2/6/25
 Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client

N/A - Not Applicable

UC - Updated coc with missing information

Review Comments:



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3398927
Report ID 390327 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 04, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3398927001	FFMP02DW	Ground Water	02/04/2025 10:54	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927002	FFMP02SW	Ground Water	02/04/2025 11:19	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927003	FFMP03AW	Ground Water	02/04/2025 12:53	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927004	FFMP005W	Ground Water	02/04/2025 13:43	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927005	FFMP26RW	Ground Water	02/04/2025 14:18	02/04/2025 15:45	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID Sample ID

Result Notations

Notation Ref.	
E	Result reported exceeds instrument calibration
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The sample was originally run within hold time, but required further analysis that exceeded hold time.
4	This sample was reran out of hold within the instrument's calibration range, for the analyte Nitrate/Nitrite -N, and confirms the initial in-hold reported result.
5	The QC sample type MS for method EPA 350.1 was outside the control limits for the analyte Ammonia-N, Low Level. The % Recovery was reported as 67.2 and the control limits were 80 to 120.
6	The QC sample type MS for method SW846 8260B was outside the control limits for the analyte Ethylbenzene. The % Recovery was reported as 129 and the control limits were 80 to 124.



Detected Results Summary

Client Sample ID	FFMP02DW	Collected	02/04/2025 10:54		
Lab Sample ID	3398927001	Lab Receipt	02/04/2025 15:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	30.28	Feet		Field	#
Elev Top MW Casing above MSL	509.60	Feet		Field	#
Flow Rate	2.07	gal/min		Field	#
Ground Water Elevation	479.32	ft/MSL		Field	#
Oxidation-Reduction Potential	-0.8	mV		Field	#
pH, Field (SM4500B)	7.12	pH_Units		Field	#
Sample Depth	120.00	Feet		Field	#
Specific Conductance, Field	1453	umhos/cm	1	Field	#
Temperature	13.17	Deg. C		Field	#
Total Well Depth	153.00	Feet		Field	#
Turbidity, Field	5	NTU	1	Field	#
Volume in Water Column	180.40	Gallons		Field	#
Water Level After Purge	82.35	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	129	mg/L	0.11	SW846 6010C	#
Iron, Total	0.38	mg/L	0.067	SW846 6010C	#
Magnesium, Total	19.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.069	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.6	mg/L	0.56	SW846 6010C	#
Sodium, Total	134	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	127	mg/L	5	SM2320B-2011	#
Alkalinity, Total	127	mg/L	5	SM2320B-2011	#
Chloride	372	mg/L	5.0	EPA 300.0	#
Nitrate-N	8.0	mg/L	2.5	EPA 300.0	#
pH	8.26	pH_Units		S4500HB-11	#
Specific Conductance	1500	umhos/cm	5	SW846 9050A	#
Sulfate	48.7	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	900	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.93	mg/L	0.50	SW846 9060A	#
Turbidity	4.6	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP02SW	Collected	02/04/2025 11:19		
Lab Sample ID	3398927002	Lab Receipt	02/04/2025 15:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	16.52	Feet		Field	#
Dissolved Oxygen	4.23	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	509.90	Feet		Field	#
Flow Rate	0.99	gal/min		Field	#
Ground Water Elevation	493.38	ft/MSL		Field	#
Oxidation-Reduction Potential	204	mV		Field	#
pH, Field (SM4500B)	5.37	pH_Units		Field	#
Sample Depth	18.00	Feet		Field	#
Specific Conductance, Field	723	umhos/cm	1	Field	#
Temperature	15.83	Deg. C		Field	#
Total Well Depth	22.70	Feet		Field	#
Turbidity, Field	11	NTU	1	Field	#
Volume in Water Column	4.02	Gallons		Field	#
Water Level After Purge	19.21	Feet		Field	#
Well Volumes Purged	1.48	Vol		Field	#
METALS					
Calcium, Total	39.0	mg/L	0.11	SW846 6010C	#
Iron, Total	0.096	mg/L	0.067	SW846 6010C	#
Magnesium, Total	13.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.041	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.8	mg/L	0.56	SW846 6010C	#
Sodium, Total	95.4	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	28	mg/L	5	SM2320B-2011	#
Alkalinity, Total	28	mg/L	5	SM2320B-2011	#
Chloride	177	mg/L	2.0	EPA 300.0	#
Nitrate-N	12.5	mg/L	1.0	EPA 300.0	#
pH	7.34	pH_Units		S4500HB-11	#
Specific Conductance	819	umhos/cm	5	SW846 9050A	#
Sulfate	60.5	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	436	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.2	mg/L	0.50	SW846 9060A	#
Turbidity	7.5	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP03AW	Collected	02/04/2025 12:53
Lab Sample ID	3398927003	Lab Receipt	02/04/2025 15:45

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	55.36	Feet		Field	#
Dissolved Oxygen	7.65	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	590.90	Feet		Field	#
Flow Rate	1.87	gal/min		Field	#
Ground Water Elevation	535.54	ft/MSL		Field	#
Oxidation-Reduction Potential	332	mV		Field	#
pH, Field (SM4500B)	5.13	pH_Units		Field	#
Sample Depth	130.00	Feet		Field	#
Specific Conductance, Field	377	umhos/cm	1	Field	#
Temperature	14.75	Deg. C		Field	#
Total Well Depth	148.40	Feet		Field	#
Volume in Water Column	136.77	Gallons		Field	#
Water Level After Purge	94.05	Feet		Field	#
Well Volumes Purged	2.53	Vol		Field	#
METALS					
Calcium, Total	22.0	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.4	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.29	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.4	mg/L	0.56	SW846 6010C	#
Sodium, Total	17.1	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	13	mg/L	5	SM2320B-2011	#
Alkalinity, Total	13	mg/L	5	SM2320B-2011	#
Chloride	55.6	mg/L	2.0	EPA 300.0	#
Nitrate-N	22.6	mg/L	1.0	EPA 300.0	#
pH	7.08	pH_Units		S4500HB-11	#
Specific Conductance	385	umhos/cm	5	SW846 9050A	#
Total Dissolved Solids	214	mg/L	25	SM2540C-15	#



Detected Results Summary

Client Sample ID	FFMP005W	Collected	02/04/2025 13:43		
Lab Sample ID	3398927004	Lab Receipt	02/04/2025 15:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	79.44	Feet		Field	#
Dissolved Oxygen	0.07	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	537.40	Feet		Field	#
Flow Rate	1.94	gal/min		Field	#
Ground Water Elevation	457.96	ft/MSL		Field	#
Oxidation-Reduction Potential	258	mV		Field	#
pH, Field (SM4500B)	5.58	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	770	umhos/cm	1	Field	#
Temperature	13.72	Deg. C		Field	#
Total Well Depth	149.70	Feet		Field	#
Volume in Water Column	103.28	Gallons		Field	#
Water Level After Purge	102.34	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	77.8	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.15	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	46.2	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	59	mg/L	5	SM2320B-2011	#
Alkalinity, Total	59	mg/L	5	SM2320B-2011	#
Chloride	171	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.8	mg/L	1.0	EPA 300.0	#
pH	7.82	pH_Units		S4500HB-11	#
Specific Conductance	793	umhos/cm	5	SW846 9050A	#
Sulfate	68.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	522	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.2	mg/L	0.50	SW846 9060A	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP26RW	Collected	02/04/2025 14:18		
Lab Sample ID	3398927005	Lab Receipt	02/04/2025 15:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	89.43	Feet		Field	#
Dissolved Oxygen	0.19	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	547.40	Feet		Field	#
Flow Rate	0.94	gal/min		Field	#
Ground Water Elevation	457.97	ft/MSL		Field	#
Oxidation-Reduction Potential	305	mV		Field	#
pH, Field (SM4500B)	5.59	pH_Units		Field	#
Sample Depth	105.00	Feet		Field	#
Specific Conductance, Field	791	umhos/cm	1	Field	#
Temperature	15.89	Deg. C		Field	#
Total Well Depth	118.30	Feet		Field	#
Volume in Water Column	42.44	Gallons		Field	#
Water Level After Purge	93.92	Feet		Field	#
Well Volumes Purged	1.11	Vol		Field	#
METALS					
Calcium, Total	71.2	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.67	mg/L	0.0056	SW846 6010C	#
Potassium, Total	7.0	mg/L	0.56	SW846 6010C	#
Sodium, Total	56.8	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	66	mg/L	5	SM2320B-2011	#
Alkalinity, Total	66	mg/L	5	SM2320B-2011	#
Chloride	156	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.3	mg/L	1.0	EPA 300.0	#
pH	7.85	pH_Units		S4500HB-11	#
Specific Conductance	800	umhos/cm	5	SW846 9050A	#
Sulfate	99.9	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	434	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.7	mg/L	0.50	SW846 9060A	#



Results

Client Sample ID	FFMP02DW	Collected	02/04/2025 10:54
Lab Sample ID	3398927001	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	30.28		Feet		Field	1	02/04/2025 10:54	BGS	D
Dissolved Oxygen	ND	ND	mg/L	0.01	Field	1	02/04/2025 10:54	BGS	D
Elev Top MW Casing above MSL	509.60		Feet		Field	1	02/04/2025 10:54	BGS	D
Flow Rate	2.07		gal/min		Field	1	02/04/2025 10:54	BGS	D
Ground Water Elevation	479.32		ft/MSL		Field	1	02/04/2025 10:54	BGS	D
Oxidation-Reduction Potential	-0.8		mV		Field	1	02/04/2025 10:54	BGS	D
pH, Field (SM4500B)	7.12		pH_Units		Field	1	02/04/2025 10:54	BGS	D
Sample Depth	120.00		Feet		Field	1	02/04/2025 10:54	BGS	D
Specific Conductance, Field	1453		umhos/cm	1	Field	1	02/04/2025 10:54	BGS	D
Temperature	13.17		Deg. C		Field	1	02/04/2025 10:54	BGS	D
Total Well Depth	153.00		Feet		Field	1	02/04/2025 10:54	BGS	D
Turbidity, Field	5		NTU	1	Field	1	02/04/2025 10:54	BGS	D
Volume in Water Column	180.40		Gallons		Field	1	02/04/2025 10:54	BGS	D
Water Level After Purge	82.35		Feet		Field	1	02/04/2025 10:54	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	02/04/2025 10:54	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	129		mg/L	0.11	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Iron, Total	0.38		mg/L	0.067	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Magnesium, Total	19.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Manganese, Total	0.069		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Potassium, Total	1.6		mg/L	0.56	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Sodium, Total	134		mg/L	0.56	SW846 6010C	1	02/21/2025 09:34	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 02:00	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H



Results

Client Sample ID	FFMP02DW	Collected	02/04/2025 10:54
Lab Sample ID	3398927001	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			101%	62 – 133		02/15/2025 02:00		
4-Bromofluorobenzene	460-00-4			95.1%	79 – 114		02/15/2025 02:00		
Dibromofluoromethane	1868-53-7			101%	78 – 116		02/15/2025 02:00		
Toluene-d8	2037-26-5			101%	76 – 127		02/15/2025 02:00		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	127		mg/L	5	SM2320B-2011	1	02/07/2025 17:25	JXK	B
Alkalinity, Total	127	1	mg/L	5	SM2320B-2011	1	02/07/2025 17:25	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 15:21	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	372		mg/L	5.0	EPA 300.0	5	02/05/2025 15:59	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/05/2025 15:59	J1W	B
Nitrate-N	8.0		mg/L	2.5	EPA 300.0	5	02/05/2025 15:59	J1W	B
pH	8.26	2	pH_Units		S4500HB-11	1	02/07/2025 17:25	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 15:26	AKH	G
Specific Conductance	1500		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	48.7		mg/L	5.0	EPA 300.0	5	02/05/2025 15:59	J1W	B
Total Dissolved Solids	900		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	0.93		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	4.6		NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP02SW	Collected	02/04/2025 11:19
Lab Sample ID	3398927002	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	16.52		Feet		Field	1	02/04/2025 11:19	BGS	D
Dissolved Oxygen	4.23		mg/L	0.01	Field	1	02/04/2025 11:19	BGS	D
Elev Top MW Casing above MSL	509.90		Feet		Field	1	02/04/2025 11:19	BGS	D
Flow Rate	0.99		gal/min		Field	1	02/04/2025 11:19	BGS	D
Ground Water Elevation	493.38		ft/MSL		Field	1	02/04/2025 11:19	BGS	D
Oxidation-Reduction Potential	204		mV		Field	1	02/04/2025 11:19	BGS	D
pH, Field (SM4500B)	5.37		pH_Units		Field	1	02/04/2025 11:19	BGS	D
Sample Depth	18.00		Feet		Field	1	02/04/2025 11:19	BGS	D
Specific Conductance, Field	723		umhos/cm	1	Field	1	02/04/2025 11:19	BGS	D
Temperature	15.83		Deg. C		Field	1	02/04/2025 11:19	BGS	D
Total Well Depth	22.70		Feet		Field	1	02/04/2025 11:19	BGS	D
Turbidity, Field	11		NTU	1	Field	1	02/04/2025 11:19	BGS	D
Volume in Water Column	4.02		Gallons		Field	1	02/04/2025 11:19	BGS	D
Water Level After Purge	19.21		Feet		Field	1	02/04/2025 11:19	BGS	D
Well Volumes Purged	1.48		Vol		Field	1	02/04/2025 11:19	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	39.0		mg/L	0.11	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Iron, Total	0.096		mg/L	0.067	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Magnesium, Total	13.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Manganese, Total	0.041		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Potassium, Total	3.8		mg/L	0.56	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Sodium, Total	95.4		mg/L	0.56	SW846 6010C	1	02/21/2025 09:35	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 02:20	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H



Results

Client Sample ID	FFMP02SW	Collected	02/04/2025 11:19
Lab Sample ID	3398927002	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			93.9%	62 – 133		02/15/2025 02:20		
4-Bromofluorobenzene	460-00-4			101%	79 – 114		02/15/2025 02:20		
Dibromofluoromethane	1868-53-7			93.2%	78 – 116		02/15/2025 02:20		
Toluene-d8	2037-26-5			98.8%	76 – 127		02/15/2025 02:20		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	28		mg/L	5	SM2320B-2011	1	02/07/2025 17:37	JXK	B
Alkalinity, Total	28	1	mg/L	5	SM2320B-2011	1	02/07/2025 17:37	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 17:15	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	177		mg/L	2.0	EPA 300.0	2	02/05/2025 16:11	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:11	J1W	B
Nitrate-N	12.5		mg/L	1.0	EPA 300.0	2	02/05/2025 16:11	J1W	B
pH	7.34	2	pH_Units		S4500HB-11	1	02/07/2025 17:37	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 15:30	AKH	G
Specific Conductance	819		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	60.5		mg/L	2.0	EPA 300.0	2	02/05/2025 16:11	J1W	B
Total Dissolved Solids	436		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.2		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	7.5		NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP03AW	Collected	02/04/2025 12:53
Lab Sample ID	3398927003	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	55.36		Feet		Field	1	02/04/2025 12:53	BGS	D
Dissolved Oxygen	7.65		mg/L	0.01	Field	1	02/04/2025 12:53	BGS	D
Elev Top MW Casing above MSL	590.90		Feet		Field	1	02/04/2025 12:53	BGS	D
Flow Rate	1.87		gal/min		Field	1	02/04/2025 12:53	BGS	D
Ground Water Elevation	535.54		ft/MSL		Field	1	02/04/2025 12:53	BGS	D
Oxidation-Reduction Potential	332		mV		Field	1	02/04/2025 12:53	BGS	D
pH, Field (SM4500B)	5.13		pH_Units		Field	1	02/04/2025 12:53	BGS	D
Sample Depth	130.00		Feet		Field	1	02/04/2025 12:53	BGS	D
Specific Conductance, Field	377		umhos/cm	1	Field	1	02/04/2025 12:53	BGS	D
Temperature	14.75		Deg. C		Field	1	02/04/2025 12:53	BGS	D
Total Well Depth	148.40		Feet		Field	1	02/04/2025 12:53	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/04/2025 12:53	BGS	D
Volume in Water Column	136.77		Gallons		Field	1	02/04/2025 12:53	BGS	D
Water Level After Purge	94.05		Feet		Field	1	02/04/2025 12:53	BGS	D
Well Volumes Purged	2.53		Vol		Field	1	02/04/2025 12:53	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	22.0		mg/L	0.11	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Magnesium, Total	18.4		mg/L	0.11	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Manganese, Total	0.29		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Potassium, Total	1.4		mg/L	0.56	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Sodium, Total	17.1		mg/L	0.56	SW846 6010C	1	02/21/2025 09:52	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 02:40	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H



Results

Client Sample ID	FFMP03AW	Collected	02/04/2025 12:53
Lab Sample ID	3398927003	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			104%	62 – 133		02/15/2025 02:40		
4-Bromofluorobenzene	460-00-4			98%	79 – 114		02/15/2025 02:40		
Dibromofluoromethane	1868-53-7			103%	78 – 116		02/15/2025 02:40		
Toluene-d8	2037-26-5			104%	76 – 127		02/15/2025 02:40		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	13		mg/L	5	SM2320B-2011	1	02/07/2025 17:50	JXK	B
Alkalinity, Total	13	1	mg/L	5	SM2320B-2011	1	02/07/2025 17:50	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 17:09	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	55.6		mg/L	2.0	EPA 300.0	2	02/05/2025 16:22	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:22	J1W	B
Nitrate-N	22.6	E,3,4	mg/L	1.0	EPA 300.0	2	02/05/2025 16:22	J1W	B
pH	7.08	2	pH_Units		S4500HB-11	1	02/07/2025 17:50	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 13:03	AKH	G
Specific Conductance	385		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/05/2025 16:22	J1W	B
Total Dissolved Solids	214		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP005W	Collected	02/04/2025 13:43
Lab Sample ID	3398927004	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	79.44		Feet		Field	1	02/04/2025 13:43	BGS	D
Dissolved Oxygen	0.07		mg/L	0.01	Field	1	02/04/2025 13:43	BGS	D
Elev Top MW Casing above MSL	537.40		Feet		Field	1	02/04/2025 13:43	BGS	D
Flow Rate	1.94		gal/min		Field	1	02/04/2025 13:43	BGS	D
Ground Water Elevation	457.96		ft/MSL		Field	1	02/04/2025 13:43	BGS	D
Oxidation-Reduction Potential	258		mV		Field	1	02/04/2025 13:43	BGS	D
pH, Field (SM4500B)	5.58		pH_Units		Field	1	02/04/2025 13:43	BGS	D
Sample Depth	135.00		Feet		Field	1	02/04/2025 13:43	BGS	D
Specific Conductance, Field	770		umhos/cm	1	Field	1	02/04/2025 13:43	BGS	D
Temperature	13.72		Deg. C		Field	1	02/04/2025 13:43	BGS	D
Total Well Depth	149.70		Feet		Field	1	02/04/2025 13:43	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/04/2025 13:43	BGS	D
Volume in Water Column	103.28		Gallons		Field	1	02/04/2025 13:43	BGS	D
Water Level After Purge	102.34		Feet		Field	1	02/04/2025 13:43	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	02/04/2025 13:43	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	77.8		mg/L	0.11	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Magnesium, Total	18.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Manganese, Total	0.15		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Potassium, Total	3.1		mg/L	0.56	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Sodium, Total	46.2		mg/L	0.56	SW846 6010C	1	02/21/2025 09:53	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:00	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H



Results

Client Sample ID	FFMP005W	Collected	02/04/2025 13:43
Lab Sample ID	3398927004	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			94.1%	62 – 133		02/15/2025 03:00		
4-Bromofluorobenzene	460-00-4			101%	79 – 114		02/15/2025 03:00		
Dibromofluoromethane	1868-53-7			92.4%	78 – 116		02/15/2025 03:00		
Toluene-d8	2037-26-5			98%	76 – 127		02/15/2025 03:00		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	59		mg/L	5	SM2320B-2011	1	02/07/2025 18:01	JXK	B
Alkalinity, Total	59	1	mg/L	5	SM2320B-2011	1	02/07/2025 18:01	JXK	B
Ammonia-N, Low Level	ND	ND,5	mg/L	0.10	SM 4500-NH3G	1	02/11/2025 14:13	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	171		mg/L	2.0	EPA 300.0	2	02/05/2025 16:34	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:34	J1W	B
Nitrate-N	1.8		mg/L	1.0	EPA 300.0	2	02/05/2025 16:34	J1W	B
pH	7.82	2	pH_Units		S4500HB-11	1	02/07/2025 18:01	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 12:53	AKH	G
Specific Conductance	793		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	68.6		mg/L	2.0	EPA 300.0	2	02/05/2025 16:34	J1W	B
Total Dissolved Solids	522		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.2		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP26RW	Collected	02/04/2025 14:18
Lab Sample ID	3398927005	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	89.43		Feet		Field	1	02/04/2025 14:18	BGS	D
Dissolved Oxygen	0.19		mg/L	0.01	Field	1	02/04/2025 14:18	BGS	D
Elev Top MW Casing above MSL	547.40		Feet		Field	1	02/04/2025 14:18	BGS	D
Flow Rate	0.94		gal/min		Field	1	02/04/2025 14:18	BGS	D
Ground Water Elevation	457.97		ft/MSL		Field	1	02/04/2025 14:18	BGS	D
Oxidation-Reduction Potential	305		mV		Field	1	02/04/2025 14:18	BGS	D
pH, Field (SM4500B)	5.59		pH_Units		Field	1	02/04/2025 14:18	BGS	D
Sample Depth	105.00		Feet		Field	1	02/04/2025 14:18	BGS	D
Specific Conductance, Field	791		umhos/cm	1	Field	1	02/04/2025 14:18	BGS	D
Temperature	15.89		Deg. C		Field	1	02/04/2025 14:18	BGS	D
Total Well Depth	118.30		Feet		Field	1	02/04/2025 14:18	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/04/2025 14:18	BGS	D
Volume in Water Column	42.44		Gallons		Field	1	02/04/2025 14:18	BGS	D
Water Level After Purge	93.92		Feet		Field	1	02/04/2025 14:18	BGS	D
Well Volumes Purged	1.11		Vol		Field	1	02/04/2025 14:18	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	71.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Magnesium, Total	18.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Manganese, Total	0.67		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Potassium, Total	7.0		mg/L	0.56	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Sodium, Total	56.8		mg/L	0.56	SW846 6010C	1	02/21/2025 09:54	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Ethylbenzene	ND	ND,6	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:19	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H



Results

Client Sample ID	FFMP26RW	Collected	02/04/2025 14:18
Lab Sample ID	3398927005	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			104%	62 – 133		02/15/2025 03:19		
4-Bromofluorobenzene	460-00-4			99.7%	79 – 114		02/15/2025 03:19		
Dibromofluoromethane	1868-53-7			103%	78 – 116		02/15/2025 03:19		
Toluene-d8	2037-26-5			104%	76 – 127		02/15/2025 03:19		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	66		mg/L	5	SM2320B-2011	1	02/07/2025 18:12	JXK	B
Alkalinity, Total	66	1	mg/L	5	SM2320B-2011	1	02/07/2025 18:12	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 17:18	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	156		mg/L	2.0	EPA 300.0	2	02/05/2025 16:45	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:45	J1W	B
Nitrate-N	1.3		mg/L	1.0	EPA 300.0	2	02/05/2025 16:45	J1W	B
pH	7.85	2	pH_Units		S4500HB-11	1	02/07/2025 18:12	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 13:07	AKH	G
Specific Conductance	800		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	99.9		mg/L	2.0	EPA 300.0	2	02/05/2025 16:45	J1W	B
Total Dissolved Solids	434		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.7		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3398927001	FFMP02DW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398927002	FFMP02SW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398927003	FFMP03AW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398927004	FFMP005W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3398927005	FFMP26RW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3398927001	FFMP02DW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398927002	FFMP02SW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398927003	FFMP03AW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398927004	FFMP005W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387060
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3398927005	FFMP26RW	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



**CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS**

3398927
Logged By: SL
PM: SJB

	of
--	----

[illegible]



right solutions.
right partner.

Middletown Sample Condition Form

Client lancaſter ſolid waſte Workorder 3398927
 Temp °C 1 Therm ID 511 Ice? (Y) N N/A Initials & Date MP 2/4/25
 Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement	↓			
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method	↓			
Received within hold time				
Containers intact				
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)			↓	
NJ ≤ 4 Days				
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C			↓	
SDWA compliance reporting				

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client

N/A - Not Applicable

UC - Updated coc with missing information

Review Comments:

25 of 25

2/24/2025 7:37 PM



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3399736
Report ID 390219 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 07, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3399736001	FFMP031W	Ground Water	02/07/2025 09:45	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736002	FFMP002W	Ground Water	02/07/2025 10:05	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736003	FFMP032W	Ground Water	02/07/2025 10:38	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736004	FIELD BLANK	Water	02/07/2025 15:00	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736005	TRIP BLANK	Water	02/07/2025 16:20	02/07/2025 16:20	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.



Detected Results Summary

Client Sample ID	FFMP031W	Collected	02/07/2025 09:45		
Lab Sample ID	3399736001	Lab Receipt	02/07/2025 16:20		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	73.61	Feet		Field	#
Dissolved Oxygen	3.30	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	612.66	Feet		Field	#
Flow Rate	1.95	gal/min		Field	#
Ground Water Elevation	539.05	ft/MSL		Field	#
Oxidation-Reduction Potential	156	mV		Field	#
pH, Field (SM4500B)	7.35	pH_Units		Field	#
Sample Depth	130.00	Feet		Field	#
Specific Conductance, Field	324	umhos/cm	1	Field	#
Temperature	12.87	Deg. C		Field	#
Total Well Depth	142.70	Feet		Field	#
Turbidity, Field	25	NTU	1	Field	#
Volume in Water Column	101.56	Gallons		Field	#
Water Level After Purge	130.19	Feet		Field	#
Well Volumes Purged	1.73	Vol		Field	#
METALS					
Calcium, Total	65.4	mg/L	0.11	SW846 6010C	#
Iron, Total	2.8	mg/L	0.067	SW846 6010C	#
Magnesium, Total	4.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.31	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.9	mg/L	0.56	SW846 6010C	#
Sodium, Total	9.8	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	102	mg/L	5	SM2320B-2011	#
Alkalinity, Total	102	mg/L	5	SM2320B-2011	#
Chloride	22.1	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.3	mg/L	1.0	EPA 300.0	#
pH	8.13	pH_Units		S4500HB-11	#
Specific Conductance	364	umhos/cm	5	SW846 9050A	#
Sulfate	49.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	214	mg/L	25	SM2540C-15	#
Turbidity	28	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP002W	Collected	02/07/2025 10:05		
Lab Sample ID	3399736002	Lab Receipt	02/07/2025 16:20		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	72.42	Feet		Field	#
Dissolved Oxygen	3.28	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	613.20	Feet		Field	#
Flow Rate	1.90	gal/min		Field	#
Ground Water Elevation	540.78	ft/MSL		Field	#
Oxidation-Reduction Potential	268	mV		Field	#
pH, Field (SM4500B)	4.35	pH_Units		Field	#
Sample Depth	85.00	Feet		Field	#
Specific Conductance, Field	254	umhos/cm	1	Field	#
Temperature	13.85	Deg. C		Field	#
Total Well Depth	90.02	Feet		Field	#
Volume in Water Column	25.87	Gallons		Field	#
Water Level After Purge	85.68	Feet		Field	#
Well Volumes Purged	1.76	Vol		Field	#
METALS					
Calcium, Total	19.1	mg/L	0.11	SW846 6010C	#
Iron, Total	0.19	mg/L	0.067	SW846 6010C	#
Magnesium, Total	7.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.28	mg/L	0.0056	SW846 6010C	#
Potassium, Total	4.6	mg/L	0.56	SW846 6010C	#
Sodium, Total	16.3	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Chloride	18.2	mg/L	2.0	EPA 300.0	#
Nitrate-N	15.1	mg/L	1.0	EPA 300.0	#
pH	6.47	pH_Units		S4500HB-11	#
Specific Conductance	261	umhos/cm	5	SW846 9050A	#
Sulfate	32.7	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	166	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.63	mg/L	0.50	SW846 9060A	#
Turbidity	2.4	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP032W	Collected	02/07/2025 10:38		
Lab Sample ID	3399736003	Lab Receipt	02/07/2025 16:20		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	52.54	Feet		Field	#
Dissolved Oxygen	0.27	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	594.09	Feet		Field	#
Flow Rate	0.47	gal/min		Field	#
Ground Water Elevation	541.55	ft/MSL		Field	#
Oxidation-Reduction Potential	-68	mV		Field	#
pH, Field (SM4500B)	6.57	pH_Units		Field	#
Sample Depth	62.00	Feet		Field	#
Specific Conductance, Field	243	umhos/cm	1	Field	#
Temperature	14.03	Deg. C		Field	#
Total Well Depth	77.60	Feet		Field	#
Turbidity, Field	9	NTU	1	Field	#
Volume in Water Column	36.84	Gallons		Field	#
Water Level After Purge	58.25	Feet		Field	#
Well Volumes Purged	0.31	Vol		Field	#
METALS					
Calcium, Total	21.0	mg/L	0.11	SW846 6010C	#
Iron, Total	9.3	mg/L	0.067	SW846 6010C	#
Magnesium, Total	7.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.81	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	14.2	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	59	mg/L	5	SM2320B-2011	#
Alkalinity, Total	59	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.38	mg/L	0.10	SM 4500-NH3G	#
Chloride	33.6	mg/L	2.0	EPA 300.0	#
pH	7.88	pH_Units		S4500HB-11	#
Specific Conductance	225	umhos/cm	5	SW846 9050A	#
Total Dissolved Solids	119	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.51	mg/L	0.50	SW846 9060A	#
Turbidity	95	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FIELD BLANK	Collected	02/07/2025 15:00
Lab Sample ID	3399736004	Lab Receipt	02/07/2025 16:20

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
pH	5.55	pH_Units		S4500HB-11	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP031W	Collected	02/07/2025 09:45
Lab Sample ID	3399736001	Lab Receipt	02/07/2025 16:20

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	73.61		Feet		Field	1	02/07/2025 09:45	BGS	D
Dissolved Oxygen	3.30		mg/L	0.01	Field	1	02/07/2025 09:45	BGS	D
Elev Top MW Casing above MSL	612.66		Feet		Field	1	02/07/2025 09:45	BGS	D
Flow Rate	1.95		gal/min		Field	1	02/07/2025 09:45	BGS	D
Ground Water Elevation	539.05		ft/MSL		Field	1	02/07/2025 09:45	BGS	D
Oxidation-Reduction Potential	156		mV		Field	1	02/07/2025 09:45	BGS	D
pH, Field (SM4500B)	7.35		pH_Units		Field	1	02/07/2025 09:45	BGS	D
Sample Depth	130.00		Feet		Field	1	02/07/2025 09:45	BGS	D
Specific Conductance, Field	324		umhos/cm	1	Field	1	02/07/2025 09:45	BGS	D
Temperature	12.87		Deg. C		Field	1	02/07/2025 09:45	BGS	D
Total Well Depth	142.70		Feet		Field	1	02/07/2025 09:45	BGS	D
Turbidity, Field	25		NTU	1	Field	1	02/07/2025 09:45	BGS	D
Volume in Water Column	101.56		Gallons		Field	1	02/07/2025 09:45	BGS	D
Water Level After Purge	130.19		Feet		Field	1	02/07/2025 09:45	BGS	D
Well Volumes Purged	1.73		Vol		Field	1	02/07/2025 09:45	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	65.4		mg/L	0.11	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Iron, Total	2.8		mg/L	0.067	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Magnesium, Total	4.2		mg/L	0.11	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Manganese, Total	0.31		mg/L	0.0056	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Potassium, Total	1.9		mg/L	0.56	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Sodium, Total	9.8		mg/L	0.56	SW846 6010C	1	02/11/2025 14:04	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H



Results

Client Sample ID	FFMP031W	Collected	02/07/2025 09:45
Lab Sample ID	3399736001	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			102%	62 – 133		02/19/2025 03:55		
4-Bromofluorobenzene	460-00-4			88%	79 – 114		02/19/2025 03:55		
Dibromofluoromethane	1868-53-7			99.7%	78 – 116		02/19/2025 03:55		
Toluene-d8	2037-26-5			95.2%	76 – 127		02/19/2025 03:55		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	102		mg/L	5	SM2320B-2011	1	02/13/2025 23:53	JXK	B
Alkalinity, Total	102	1	mg/L	5	SM2320B-2011	1	02/13/2025 23:53	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 13:51	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	22.1		mg/L	2.0	EPA 300.0	2	02/08/2025 17:28	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 17:28	GMM	B
Nitrate-N	1.3		mg/L	1.0	EPA 300.0	2	02/08/2025 17:28	GMM	B
pH	8.13	2	pH_Units		S4500HB-11	1	02/13/2025 23:53	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:18	AKH	G
Specific Conductance	364		umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	49.6		mg/L	2.0	EPA 300.0	2	02/08/2025 17:28	GMM	B
Total Dissolved Solids	214		mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	28		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FFMP002W	Collected	02/07/2025 10:05
Lab Sample ID	3399736002	Lab Receipt	02/07/2025 16:20

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	72.42		Feet		Field	1	02/07/2024 10:05	BGS	D
Dissolved Oxygen	3.28		mg/L	0.01	Field	1	02/07/2024 10:05	BGS	D
Elev Top MW Casing above MSL	613.20		Feet		Field	1	02/07/2024 10:05	BGS	D
Flow Rate	1.90		gal/min		Field	1	02/07/2024 10:05	BGS	D
Ground Water Elevation	540.78		ft/MSL		Field	1	02/07/2024 10:05	BGS	D
Oxidation-Reduction Potential	268		mV		Field	1	02/07/2024 10:05	BGS	D
pH, Field (SM4500B)	4.35		pH_Units		Field	1	02/07/2024 10:05	BGS	D
Sample Depth	85.00		Feet		Field	1	02/07/2024 10:05	BGS	D
Specific Conductance, Field	254		umhos/cm	1	Field	1	02/07/2024 10:05	BGS	D
Temperature	13.85		Deg. C		Field	1	02/07/2024 10:05	BGS	D
Total Well Depth	90.02		Feet		Field	1	02/07/2024 10:05	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/07/2024 10:05	BGS	D
Volume in Water Column	25.87		Gallons		Field	1	02/07/2024 10:05	BGS	D
Water Level After Purge	85.68		Feet		Field	1	02/07/2024 10:05	BGS	D
Well Volumes Purged	1.76		Vol		Field	1	02/07/2024 10:05	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	19.1		mg/L	0.11	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Iron, Total	0.19		mg/L	0.067	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Magnesium, Total	7.5		mg/L	0.11	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Manganese, Total	0.28		mg/L	0.0056	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Potassium, Total	4.6		mg/L	0.56	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Sodium, Total	16.3		mg/L	0.56	SW846 6010C	1	02/11/2025 14:05	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H



Results

Client Sample ID	FFMP002W	Collected	02/07/2025 10:05
Lab Sample ID	3399736002	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			90.1%	62 – 133		02/19/2025 04:15		
4-Bromofluorobenzene	460-00-4			103%	79 – 114		02/19/2025 04:15		
Dibromofluoromethane	1868-53-7			88.3%	78 – 116		02/19/2025 04:15		
Toluene-d8	2037-26-5			98.4%	76 – 127		02/19/2025 04:15		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	02/14/2025 00:05	JXK	B
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	02/14/2025 00:05	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 15:21	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	18.2		mg/L	2.0	EPA 300.0	2	02/08/2025 17:39	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 17:39	GMM	B
Nitrate-N	15.1		mg/L	1.0	EPA 300.0	2	02/08/2025 17:39	GMM	B
pH	6.47	2	pH_Units		S4500HB-11	1	02/14/2025 00:05	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:36	AKH	G
Specific Conductance	261		umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	32.7		mg/L	2.0	EPA 300.0	2	02/08/2025 17:39	GMM	B
Total Dissolved Solids	166		mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	0.63		mg/L	0.50	SW846 9060A	1	02/12/2025 01:50	PAG	E
Turbidity	2.4		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FFMP032W	Collected	02/07/2025 10:38
Lab Sample ID	3399736003	Lab Receipt	02/07/2025 16:20

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	52.54		Feet		Field	1	02/07/2025 10:38	BGS	D
Dissolved Oxygen	0.27		mg/L	0.01	Field	1	02/07/2025 10:38	BGS	D
Elev Top MW Casing above MSL	594.09		Feet		Field	1	02/07/2025 10:38	BGS	D
Flow Rate	0.47		gal/min		Field	1	02/07/2025 10:38	BGS	D
Ground Water Elevation	541.55		ft/MSL		Field	1	02/07/2025 10:38	BGS	D
Oxidation-Reduction Potential	-68		mV		Field	1	02/07/2025 10:38	BGS	D
pH, Field (SM4500B)	6.57		pH_Units		Field	1	02/07/2025 10:38	BGS	D
Sample Depth	62.00		Feet		Field	1	02/07/2025 10:38	BGS	D
Specific Conductance, Field	243		umhos/cm	1	Field	1	02/07/2025 10:38	BGS	D
Temperature	14.03		Deg. C		Field	1	02/07/2025 10:38	BGS	D
Total Well Depth	77.60		Feet		Field	1	02/07/2025 10:38	BGS	D
Turbidity, Field	9		NTU	1	Field	1	02/07/2025 10:38	BGS	D
Volume in Water Column	36.84		Gallons		Field	1	02/07/2025 10:38	BGS	D
Water Level After Purge	58.25		Feet		Field	1	02/07/2025 10:38	BGS	D
Well Volumes Purged	0.31		Vol		Field	1	02/07/2025 10:38	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	21.0		mg/L	0.11	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Iron, Total	9.3		mg/L	0.067	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Magnesium, Total	7.1		mg/L	0.11	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Manganese, Total	0.81		mg/L	0.0056	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Potassium, Total	1.7		mg/L	0.56	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Sodium, Total	14.2		mg/L	0.56	SW846 6010C	1	02/11/2025 14:06	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H



Results

Client Sample ID	FFMP032W	Collected	02/07/2025 10:38
Lab Sample ID	3399736003	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			96.7%	62 – 133		02/19/2025 04:35		
4-Bromofluorobenzene	460-00-4			108%	79 – 114		02/19/2025 04:35		
Dibromofluoromethane	1868-53-7			96.5%	78 – 116		02/19/2025 04:35		
Toluene-d8	2037-26-5			102%	76 – 127		02/19/2025 04:35		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	59		mg/L	5	SM2320B-2011	1	02/14/2025 00:16	JXK	B
Alkalinity, Total	59	1	mg/L	5	SM2320B-2011	1	02/14/2025 00:16	JXK	B
Ammonia-N, Low Level	0.38		mg/L	0.10	SM 4500-NH3G	1	02/13/2025 15:39	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	33.6		mg/L	2.0	EPA 300.0	2	02/08/2025 17:50	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 17:50	GMM	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/08/2025 17:50	GMM	B
pH	7.88	2	pH_Units		S4500HB-11	1	02/14/2025 00:16	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:55	AKH	G
Specific Conductance	225		umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/08/2025 17:50	GMM	B
Total Dissolved Solids	119		mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	0.51		mg/L	0.50	SW846 9060A	1	02/12/2025 01:50	PAG	E
Turbidity	95		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FIELD BLANK	Collected	02/07/2025 15:00
Lab Sample ID	3399736004	Lab Receipt	02/07/2025 16:20

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	ND	ND	mg/L	0.11	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Magnesium, Total	ND	ND	mg/L	0.11	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Manganese, Total	ND	ND	mg/L	0.0056	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Potassium, Total	ND	ND	mg/L	0.56	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Sodium, Total	ND	ND	mg/L	0.56	SW846 6010C	1	02/11/2025 14:13	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	91.5%	62 – 133	02/19/2025 00:17	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	02/19/2025 00:17	
Dibromofluoromethane	1868-53-7	91.2%	78 – 116	02/19/2025 00:17	
Toluene-d8	2037-26-5	98.7%	76 – 127	02/19/2025 00:17	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	02/14/2025 00:26	JXK	B
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	02/14/2025 00:26	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 16:24	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	ND	ND	mg/L	2.0	EPA 300.0	2	02/08/2025 18:02	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 18:02	GMM	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/08/2025 18:02	GMM	B
pH	5.55	2	pH_Units		S4500HB-11	1	02/14/2025 00:26	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:28	AKH	G



Results

Client Sample ID	FIELD BLANK	Collected	02/07/2025 15:00
Lab Sample ID	3399736004	Lab Receipt	02/07/2025 16:20

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Specific Conductance	ND	ND	umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/08/2025 18:02	GMM	B
Total Dissolved Solids	ND	ND	mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/12/2025 01:50	PAG	E
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	TRIP BLANK	Collected	02/07/2025 16:20
Lab Sample ID	3399736005	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.2%	62 – 133	02/18/2025 23:57	
4-Bromofluorobenzene	460-00-4	95.5%	79 – 114	02/18/2025 23:57	
Dibromofluoromethane	1868-53-7	99.7%	78 – 116	02/18/2025 23:57	
Toluene-d8	2037-26-5	100%	76 – 127	02/18/2025 23:57	



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399736001	FFMP031W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736002	FFMP002W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736003	FFMP032W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736004	FIELD BLANK	SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736005	TRIP BLANK	SW846 8260B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399736001	FFMP031W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02		SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
		N/A	N/A	N/A		SW846 9050A	1394860
		N/A	N/A	N/A		SW846 9060A	1386879
		SW846 9066	1392908	02/19/2025 08:55	AKH	SW846 9066	1393466
3399736002	FFMP002W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02		SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
		N/A	N/A	N/A		SW846 9050A	1394860
		N/A	N/A	N/A		SW846 9060A	1387566
		SW846 9066	1392908	02/19/2025 08:55	AKH	SW846 9066	1393466
3399736003	FFMP032W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02		SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
		N/A	N/A	N/A		SW846 9050A	1394860
		N/A	N/A	N/A		SW846 9060A	1387566
		SW846 9066	1392908	02/19/2025 08:55	AKH	SW846 9066	1393466
3399736004	FIELD BLANK	SW846 3015A	1386698	02/11/2025 09:02	ANN	SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
		N/A	N/A	N/A		SW846 9050A	1394860
		N/A	N/A	N/A		SW846 9060A	1387566
		SW846 9066	1392908	02/19/2025 08:55		AKH	SW846 9066
		3399736005	TRIP BLANK	N/A	N/A	N/A	SW846 8260B



301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/

REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

3399736

Logged By: SLS
PH: SJB



of

Client Name: Lancaster County Solid Waste MA		AG	AN	CG	P	P	P	P	P	P	WO Temp (°C)
Address: 1299 Harrisburg Pike PO Box 4424		Container Size	40ml	125ml	40ml	500ml	250ml	250ml	125ml	125ml	Y N NA
Lancaster PA 17604		Preservative	HCL	H2SO4	HCL	UNP	UNP	H2SO4	HNO3		Deviations? NO YES If YES, list below
Contact: Dan Brown		Orthophosphate Filtered?		Yes	No	Hexavalent Chromium Filtered?		Yes	No	Receipt Info completed by: _____ Cooler Custody Seals Intact Y N NA Sample Custody Seal Intact Y N NA Received on Ice Y N NA Coolers & Samples Intact Y N NA Correct Containers Provided Y N NA Sample Label/COC Agree Y N NA Adequate Sample Volumes Y N NA VOA only: Trip Blank Y N NA NJ ≤ 4 days? Y N NA Client contact: _____ Date/Tech: _____	
Phone#: 717-735-0193		ANALYSIS / METHOD REQUESTED									
Project Name#: Frey Farm Quarterly GWMP		Enter Number of Containers Per Sample or Field Results Below.									
Bill To: Lancaster County Solid Waste MA		PH, CL, SPC, F, SO4, NO3, TP, TDS									
Purchase Order #:		Alkalinity, Bicarbonate									
TAT ☒ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.		VOC Form 190									
Date Required: _____		O-OH									
Email? ☒ dbrown@lcswwma.org		TOC									
Sample Description/Location (as it will appear on the lab report)		SDWA Sample Type (see key)									
Date Collected mm/dd/yyyy		Enter Number of Containers Per Sample or Field Results Below.									
Time h:mm		Metals Fe, Mn, Na, Ca, K, Mg									
1 FFMP031W		NH3-N, COD									
2 FFMP002W		Sample Depth for AUX Data									
3 FFMP032W		FM									
4 Field Blank		SDWA State of Origin? _____									
5 Trip Blank		PWS Contact: _____ PWS Phone #: _____									
6		SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup									
7		Sample/COC Remarks									
8		Contains Short Hold Testing YES NO									
9		Internal Use: If less than 48 hours - notify lab upon receipt									
10		State Samples Collected In NY NJ PA WV FL other									
Circle Sample Collector: ALS/Tech Client ID: _____		Data Deliverables									
Name: _____		EDDs									
Date: _____		Excel Summary									
Time _____		Equis									
1 1500		Custom									
3 1500		Sample Disposal									
5 1500		Lab x									
7 1500		Special									
9 1500		Format Type									
10 1500		EDDS:									

* G-Grab, C-Composite

**Matrix - A-Air, D-Drinking Water, GW-Groundwater, O-Oil, LW-Liquid Waste, S-Solid/Sludge, SW-Surface Water, WP-Wipe, WW-Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057



right solution,
right person.

Middletown Sample Condition Form

Client Lancaster County Workorder 3399736
 Temp °C 6 Therm ID 524 Ice? Y N N/A Initials & Date DAG 2/8/25
 Fedex UPS Client ALS Other Tracking # _____

21 of 21

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			☒	
Sample Custody Seals present & intact			☒	
Chain-of-Custody present	☒			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	☒			
COC/bottle labels complete & in agreement	☒			
• Sample location	☒			
• Date and time of sample collection	☒			
• Type(s) of preservation	☒			
• Number of containers	☒			
• Composite or grab	☒			
• Matrix	☒			
Proper containers, preservation, and volume per method	☒			
Received within hold time	☒			
Containers intact	☒			
Trip blanks present (EPA 504, EPA 524)	☒			
Field blanks present (Hg 1631, PFAS)			☒	
NJ ≤ 4 Days			☒	
CR6 Samples Filtered			☒	
OP Samples Filtered			☒	
WV Containers 0-6°C			☒	
SDWA compliance reporting			☒	

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client
 N/A - Not Applicable
 UC - Updated coc with missing information

Review Comments:

2/24/2025 3:07 PM



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3398717
Report ID 390330 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 03, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3398717001	FFMP015W	Ground Water	02/03/2025 11:04	02/03/2025 14:50	BGS	Analytical Laboratory Service
3398717002	FFMP30RW	Ground Water	02/03/2025 12:49	02/03/2025 14:50	BGS	Analytical Laboratory Service
3398717003	FFMP04AW	Ground Water	02/03/2025 13:19	02/03/2025 14:50	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
E	Result reported exceeds instrument calibration
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The sample was originally run within hold time, but required further analysis that exceeded hold time.
3	This sample was reran out of hold within the instrument's calibration range, for the analyte Nitrate/Nitrite -N, and confirms the initial in-hold reported result.
4	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
5	Analyte was analyzed past the 48 hour holding time.



Detected Results Summary

Client Sample ID	FFMP015W	Collected	02/03/2025 11:04		
Lab Sample ID	3398717001	Lab Receipt	02/03/2025 14:50		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	63.79	Feet		Field	#
Dissolved Oxygen	7.81	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	576.40	Feet		Field	#
Flow Rate	1.22	gal/min		Field	#
Ground Water Elevation	512.61	ft/MSL		Field	#
Oxidation-Reduction Potential	269	mV		Field	#
pH, Field (SM4500B)	5.46	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	469	umhos/cm	1	Field	#
Temperature	8.29	Deg. C		Field	#
Total Well Depth	149.90	Feet		Field	#
Volume in Water Column	126.58	Gallons		Field	#
Water Level After Purge	85.25	Feet		Field	#
Well Volumes Purged	1.01	Vol		Field	#
METALS					
Calcium, Total	30.1	mg/L	0.11	SW846 6010C	#
Magnesium, Total	25.6	mg/L	0.11	SW846 6010C	#
Potassium, Total	2.3	mg/L	0.56	SW846 6010C	#
Sodium, Total	20.7	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	35	mg/L	5	SM2320B-2011	#
Alkalinity, Total	35	mg/L	5	SM2320B-2011	#
Chloride	31.9	mg/L	2.0	EPA 300.0	#
Nitrate-N	29.0	mg/L	1.0	EPA 300.0	#
pH	7.62	pH_Units		S4500HB-11	#
Specific Conductance	485	umhos/cm	5	SW846 9050A	#
Sulfate	31.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	266	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.2	mg/L	0.50	SW846 9060A	#
Turbidity	0.70	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP30RW	Collected	02/03/2025 12:49		
Lab Sample ID	3398717002	Lab Receipt	02/03/2025 14:50		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	37.82	Feet		Field	#
Dissolved Oxygen	0.13	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	562.30	Feet		Field	#
Flow Rate	1.48	gal/min		Field	#
Ground Water Elevation	524.48	ft/MSL		Field	#
Oxidation-Reduction Potential	281	mV		Field	#
pH, Field (SM4500B)	5.46	pH_Units		Field	#
Sample Depth	85.00	Feet		Field	#
Specific Conductance, Field	1430	umhos/cm	1	Field	#
Temperature	14.00	Deg. C		Field	#
Total Well Depth	94.20	Feet		Field	#
Volume in Water Column	82.88	Gallons		Field	#
Water Level After Purge	59.52	Feet		Field	#
Well Volumes Purged	1.07	Vol		Field	#
METALS					
Calcium, Total	65.7	mg/L	0.11	SW846 6010C	#
Magnesium, Total	21.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	4.3	mg/L	0.0056	SW846 6010C	#
Potassium, Total	10.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	167	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	38	mg/L	5	SM2320B-2011	#
Alkalinity, Total	38	mg/L	5	SM2320B-2011	#
Chloride	365	mg/L	5.0	EPA 300.0	#
Nitrate-N	4.9	mg/L	2.5	EPA 300.0	#
pH	7.63	pH_Units		S4500HB-11	#
Specific Conductance	1440	umhos/cm	5	SW846 9050A	#
Sulfate	66.2	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	770	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.96	mg/L	0.50	SW846 9060A	#
Turbidity	0.75	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP04AW	Collected	02/03/2025 13:19		
Lab Sample ID	3398717003	Lab Receipt	02/03/2025 14:50		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	39.83	Feet		Field	#
Dissolved Oxygen	0.03	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	560.72	Feet		Field	#
Flow Rate	1.91	gal/min		Field	#
Ground Water Elevation	520.89	ft/MSL		Field	#
Oxidation-Reduction Potential	97	mV		Field	#
pH, Field (SM4500B)	6.96	pH_Units		Field	#
Sample Depth	146.00	Feet		Field	#
Specific Conductance, Field	1441	umhos/cm	1	Field	#
Temperature	13.54	Deg. C		Field	#
Total Well Depth	148.50	Feet		Field	#
Volume in Water Column	159.74	Gallons		Field	#
Water Level After Purge	87.84	Feet		Field	#
Well Volumes Purged	1.02	Vol		Field	#
METALS					
Calcium, Total	162	mg/L	0.11	SW846 6010C	#
Magnesium, Total	27.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.36	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.9	mg/L	0.56	SW846 6010C	#
Sodium, Total	91.3	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	188	mg/L	5	SM2320B-2011	#
Alkalinity, Total	188	mg/L	5	SM2320B-2011	#
Chloride	318	mg/L	5.0	EPA 300.0	#
pH	8.20	pH_Units		S4500HB-11	#
Specific Conductance	1480	umhos/cm	5	SW846 9050A	#
Sulfate	54.9	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	888	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.78	mg/L	0.50	SW846 9060A	#
Turbidity	0.80	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP015W	Collected	02/03/2025 11:04
Lab Sample ID	3398717001	Lab Receipt	02/03/2025 14:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	63.79		Feet		Field	1	02/03/2025 11:04	BGS	D
Dissolved Oxygen	7.81		mg/L	0.01	Field	1	02/03/2025 11:04	BGS	D
Elev Top MW Casing above MSL	576.40		Feet		Field	1	02/03/2025 11:04	BGS	D
Flow Rate	1.22		gal/min		Field	1	02/03/2025 11:04	BGS	D
Ground Water Elevation	512.61		ft/MSL		Field	1	02/03/2025 11:04	BGS	D
Oxidation-Reduction Potential	269		mV		Field	1	02/03/2025 11:04	BGS	D
pH, Field (SM4500B)	5.46		pH_Units		Field	1	02/03/2025 11:04	BGS	D
Sample Depth	135.00		Feet		Field	1	02/03/2025 11:04	BGS	D
Specific Conductance, Field	469		umhos/cm	1	Field	1	02/03/2025 11:04	BGS	D
Temperature	8.29		Deg. C		Field	1	02/03/2025 11:04	BGS	D
Total Well Depth	149.90		Feet		Field	1	02/03/2025 11:04	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/03/2025 11:04	BGS	D
Volume in Water Column	126.58		Gallons		Field	1	02/03/2025 11:04	BGS	D
Water Level After Purge	85.25		Feet		Field	1	02/03/2025 11:04	BGS	D
Well Volumes Purged	1.01		Vol		Field	1	02/03/2025 11:04	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	30.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Magnesium, Total	25.6		mg/L	0.11	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Manganese, Total	ND	ND	mg/L	0.0056	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Potassium, Total	2.3		mg/L	0.56	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Sodium, Total	20.7		mg/L	0.56	SW846 6010C	1	02/21/2025 09:31	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:39	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H



Results

Client Sample ID	FFMP015W	Collected	02/03/2025 11:04
Lab Sample ID	3398717001	Lab Receipt	02/03/2025 14:50

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			94.6%	62 – 133		02/15/2025 03:39		
4-Bromofluorobenzene	460-00-4			97.7%	79 – 114		02/15/2025 03:39		
Dibromofluoromethane	1868-53-7			92.8%	78 – 116		02/15/2025 03:39		
Toluene-d8	2037-26-5			98.8%	76 – 127		02/15/2025 03:39		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	35		mg/L	5	SM2320B-2011	1	02/07/2025 03:01	JXK	B
Alkalinity, Total	35	1	mg/L	5	SM2320B-2011	1	02/07/2025 03:01	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/05/2025 13:28	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	31.9		mg/L	2.0	EPA 300.0	2	02/04/2025 11:53	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/04/2025 11:53	J1W	B
Nitrate-N	29.0	E,2,3	mg/L	1.0	EPA 300.0	2	02/04/2025 11:53	J1W	B
pH	7.62	4	pH_Units		S4500HB-11	1	02/07/2025 03:01	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 14:54	AKH	G
Specific Conductance	485		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	31.6		mg/L	2.0	EPA 300.0	2	02/04/2025 11:53	J1W	B
Total Dissolved Solids	266		mg/L	25	SM2540C-15	1	02/07/2025 09:00	RAG	B
Total Organic Carbon (TOC)	1.2		mg/L	0.50	SW846 9060A	1	02/04/2025 19:00	PAG	E
Turbidity	0.70	5	NTU	0.30	SM2130B-2011	1	02/04/2025 09:09	NPF	B



Results

Client Sample ID	FFMP30RW	Collected	02/03/2025 12:49
Lab Sample ID	3398717002	Lab Receipt	02/03/2025 14:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	37.82		Feet		Field	1	02/03/2025 12:49	BGS	D
Dissolved Oxygen	0.13		mg/L	0.01	Field	1	02/03/2025 12:49	BGS	D
Elev Top MW Casing above MSL	562.30		Feet		Field	1	02/03/2025 12:49	BGS	D
Flow Rate	1.48		gal/min		Field	1	02/03/2025 12:49	BGS	D
Ground Water Elevation	524.48		ft/MSL		Field	1	02/03/2025 12:49	BGS	D
Oxidation-Reduction Potential	281		mV		Field	1	02/03/2025 12:49	BGS	D
pH, Field (SM4500B)	5.46		pH_Units		Field	1	02/03/2025 12:49	BGS	D
Sample Depth	85.00		Feet		Field	1	02/03/2025 12:49	BGS	D
Specific Conductance, Field	1430		umhos/cm	1	Field	1	02/03/2025 12:49	BGS	D
Temperature	14.00		Deg. C		Field	1	02/03/2025 12:49	BGS	D
Total Well Depth	94.20		Feet		Field	1	02/03/2025 12:49	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/03/2025 12:49	BGS	D
Volume in Water Column	82.88		Gallons		Field	1	02/03/2025 12:49	BGS	D
Water Level After Purge	59.52		Feet		Field	1	02/03/2025 12:49	BGS	D
Well Volumes Purged	1.07		Vol		Field	1	02/03/2025 12:49	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	65.7		mg/L	0.11	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Magnesium, Total	21.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Manganese, Total	4.3		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Potassium, Total	10.7		mg/L	0.56	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Sodium, Total	167		mg/L	0.56	SW846 6010C	1	02/21/2025 09:32	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:59	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H



Results

Client Sample ID	FFMP30RW	Collected	02/03/2025 12:49
Lab Sample ID	3398717002	Lab Receipt	02/03/2025 14:50

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			103%	62 – 133		02/15/2025 03:59		
4-Bromofluorobenzene	460-00-4			97.5%	79 – 114		02/15/2025 03:59		
Dibromofluoromethane	1868-53-7			102%	78 – 116		02/15/2025 03:59		
Toluene-d8	2037-26-5			103%	76 – 127		02/15/2025 03:59		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	38		mg/L	5	SM2320B-2011	1	02/07/2025 03:13	JXK	B
Alkalinity, Total	38	1	mg/L	5	SM2320B-2011	1	02/07/2025 03:13	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/05/2025 11:51	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	365		mg/L	5.0	EPA 300.0	5	02/04/2025 12:06	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/04/2025 12:06	J1W	B
Nitrate-N	4.9		mg/L	2.5	EPA 300.0	5	02/04/2025 12:06	J1W	B
pH	7.63	4	pH_Units		S4500HB-11	1	02/07/2025 03:13	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 15:00	AKH	G
Specific Conductance	1440		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	66.2		mg/L	5.0	EPA 300.0	5	02/04/2025 12:06	J1W	B
Total Dissolved Solids	770		mg/L	25	SM2540C-15	1	02/07/2025 09:00	RAG	B
Total Organic Carbon (TOC)	0.96		mg/L	0.50	SW846 9060A	1	02/04/2025 19:00	PAG	E
Turbidity	0.75	5	NTU	0.30	SM2130B-2011	1	02/04/2025 09:09	NPF	B



Results

Client Sample ID	FFMP04AW	Collected	02/03/2025 13:19
Lab Sample ID	3398717003	Lab Receipt	02/03/2025 14:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	39.83		Feet		Field	1	02/03/2025 13:19	BGS	D
Dissolved Oxygen	0.03		mg/L	0.01	Field	1	02/03/2025 13:19	BGS	D
Elev Top MW Casing above MSL	560.72		Feet		Field	1	02/03/2025 13:19	BGS	D
Flow Rate	1.91		gal/min		Field	1	02/03/2025 13:19	BGS	D
Ground Water Elevation	520.89		ft/MSL		Field	1	02/03/2025 13:19	BGS	D
Oxidation-Reduction Potential	97		mV		Field	1	02/03/2025 13:19	BGS	D
pH, Field (SM4500B)	6.96		pH_Units		Field	1	02/03/2025 13:19	BGS	D
Sample Depth	146.00		Feet		Field	1	02/03/2025 13:19	BGS	D
Specific Conductance, Field	1441		umhos/cm	1	Field	1	02/03/2025 13:19	BGS	D
Temperature	13.54		Deg. C		Field	1	02/03/2025 13:19	BGS	D
Total Well Depth	148.50		Feet		Field	1	02/03/2025 13:19	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/03/2025 13:19	BGS	D
Volume in Water Column	159.74		Gallons		Field	1	02/03/2025 13:19	BGS	D
Water Level After Purge	87.84		Feet		Field	1	02/03/2025 13:19	BGS	D
Well Volumes Purged	1.02		Vol		Field	1	02/03/2025 13:19	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	162		mg/L	0.11	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Magnesium, Total	27.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Manganese, Total	0.36		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Potassium, Total	2.9		mg/L	0.56	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Sodium, Total	91.3		mg/L	0.56	SW846 6010C	1	02/21/2025 09:33	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 04:19	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H



Results

Client Sample ID	FFMP04AW	Collected	02/03/2025 13:19
Lab Sample ID	3398717003	Lab Receipt	02/03/2025 14:50

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			92.6%	62 – 133		02/15/2025 04:19		
4-Bromofluorobenzene	460-00-4			105%	79 – 114		02/15/2025 04:19		
Dibromofluoromethane	1868-53-7			92.5%	78 – 116		02/15/2025 04:19		
Toluene-d8	2037-26-5			99.4%	76 – 127		02/15/2025 04:19		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	188		mg/L	5	SM2320B-2011	1	02/07/2025 03:24	JXK	B
Alkalinity, Total	188	1	mg/L	5	SM2320B-2011	1	02/07/2025 03:24	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/05/2025 12:00	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	318		mg/L	5.0	EPA 300.0	5	02/04/2025 12:19	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/04/2025 12:19	J1W	B
Nitrate-N	ND	ND	mg/L	2.5	EPA 300.0	5	02/04/2025 12:19	J1W	B
pH	8.20	4	pH_Units		S4500HB-11	1	02/07/2025 03:24	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 14:56	AKH	G
Specific Conductance	1480		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	54.9		mg/L	5.0	EPA 300.0	5	02/04/2025 12:19	J1W	B
Total Dissolved Solids	888		mg/L	25	SM2540C-15	1	02/07/2025 09:00	RAG	B
Total Organic Carbon (TOC)	0.78		mg/L	0.50	SW846 9060A	1	02/04/2025 19:00	PAG	E
Turbidity	0.80	5	NTU	0.30	SM2130B-2011	1	02/04/2025 09:09	NPF	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3398717001	FFMP015W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398717002	FFMP30RW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398717003	FFMP04AW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3398717001	FFMP015W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1383163
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1383309
		N/A	N/A	N/A		SM2130B-2011	1383171
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385003
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1383270
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398717002	FFMP30RW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1383163
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1383313
		N/A	N/A	N/A		SM2130B-2011	1383171
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385005
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1383270
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398717003	FFMP04AW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1383163
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1383309
		N/A	N/A	N/A		SM2130B-2011	1383171
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385005
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1383270
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.



3398717
Logged Bu: SLS
PN: SJB

717

of

Client Name: Lancaster County Solid Waste MA		Container Type	AG	AN	CG	P	P	P	P
Address: 1299 Harrisburg Pike PO Box 4424 Lancaster PA 17604		Container Size	40ml	125ml	40ml	500ml	250ml	250ml	125ml
		Preservative	HCL	H2SO4	HCL	UNP	UNP	H2SO4	HNO3
		Orthophosphate Filtered?	Yes	No	Hexavalent Chromium Filtered?	Yes	No	Yes	No
ANALYSIS / METHOD REQUESTED									
Contact: Dan Brown		SDWA Sample Type (see key)	TOC	O-OH	VOC Form 19Q	Alkalinity, Bicarbonate	FM	Sample Depth for AUX Data	Metals Fe, Mn, Na, Ca, K, Mg
Phone#: 717-735-0193		Enter Number of Containers Per Sample or Field Results Below.							
Project Name#: Frey Farm Quarterly GWMP		1	2	1	2	1	1	1	2
Bill To: Lancaster County Solid Waste MA		2	1	2	1	1	1	1	2
Purchase Order #:		3	2	1	2	1	1	1	2
TAT ☒ Normal-Standard TAT is 10-12 business days.									
Date Required: ☐ Rush-Subject to ALS approval and surcharges.									
Email? ☒ dbrown@lcswwma.org									
Sample Description/Location (as it will appear on the lab report)		Date Collected mm/dd/yy	Time hh:mm						
1 FFMP015W		2/3/25	1104						
2 FFMP30RW		2/3/25	1249						
3 FFMP04AW		2/3/25	1319						
4									
5									
6									
7									
8									
9									
10									
Circle Sample Collector/ALS Tech/Client Name: <i>DB</i>		Comments:							
Date: 2-3-25		Relinquished By / Company Name: <i>DB</i>							
1		2							
3		4							
5		6							
7		8							
9		10							
10									
Receipt Info completed by: <i>3398717</i>		Receipt Info completed by: <i>3398717</i>							
Cooler Custody Seals Intact		Cooler Custody Seals Intact							
Sample Custody Seal Intact		Sample Custody Seal Intact							
Received on Ice		Received on Ice							
Coolers & Samples Intact		Coolers & Samples Intact							
Correct Containers Provided		Correct Containers Provided							
Sample Label/COC Agree		Sample Label/COC Agree							
Adequate Sample Volumes		Adequate Sample Volumes							
VOA only: Trip Blank		VOA only: Trip Blank							
NJ ≤ 4 days?		NJ ≤ 4 days?							
Courier/Tracking #		Courier/Tracking #							
Client contact: <i>3398717</i>		Client contact: <i>3398717</i>							
Date/Tech: <i>3398717</i>		Date/Tech: <i>3398717</i>							
Sample(s) for Radiation testing?		Sample(s) for Radiation testing?							
Reportable SDWA Sample(s)?		Reportable SDWA Sample(s)?							
SDWA State of Origin?		SDWA State of Origin?							
PWSID #		PWSID #							
PWS Contact:		PWS Contact:							
PWS Phone #:		PWS Phone #:							
SDWA Sample Type Key: D=Distribution E=Entry Point		SDWA Sample Type Key: D=Distribution E=Entry Point							
R=Raw P=Plant C=Check S=Special A=Annual Startup		R=Raw P=Plant C=Check S=Special A=Annual Startup							
Sample/COC Remarks		Sample/COC Remarks							
Contains Short Hold Testing YES NO		Contains Short Hold Testing YES NO							
Internal Use: If less than 48 hours - notify lab upon receipt		Internal Use: If less than 48 hours - notify lab upon receipt							
Data Deliverables		Data Deliverables							
Standard Lvl 1		Standard Lvl 1							
Standard Lvl 2		Standard Lvl 2							
Standard Lvl 3		Standard Lvl 3							
Standard Lvl 4		Standard Lvl 4							
Excel Summary		Excel Summary							
Equis		Equis							
Custom		Custom							
EDDS:		EDDS:							
Format Type		Format Type							
State Samples Collected In		State Samples Collected In							
NY		NY							
NJ		NJ							
PA		PA							
WV		WV							
FL		FL							
other		other							



Right solution.
Right partner.

Middletown Sample Condition Form

Client Lancaster County Workorder 3398717
 Temp °C 6 Therm ID 571 Ice? (Y) N N/A Initials & Date MP 2/3/25
 Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement				
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method				
Received within hold time				
Containers intact				
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)				
NJ ≤ 4 Days				
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C				
SDWA compliance reporting				

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client

N/A - Not Applicable

UC - Updated coc with missing information

Review Comments:



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3399149
Report ID 390329 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 05, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3399149001	FFMP029W	Ground Water	02/05/2025 09:09	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149002	FFMP017W	Ground Water	02/05/2025 09:51	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149003	FFMP039W	Ground Water	02/05/2025 12:07	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149004	FFMP038W	Ground Water	02/05/2025 13:11	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149005	FFMP035W	Ground Water	02/05/2025 14:29	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149006	FFMP036W	Ground Water	02/05/2025 15:29	02/05/2025 16:45	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The QC sample type MS for method EPA 350.1 was outside the control limits for the analyte Ammonia-N, Low Level. The % Recovery was reported as 72.1 and the control limits were 80 to 120.
4	The QC sample type MS for method EPA 300.0 was outside the control limits for the analyte Chloride. The % Recovery was reported as 78.8 and the control limits were 80 to 120.



Detected Results Summary

Client Sample ID	FFMP029W	Collected	02/05/2025 09:09		
Lab Sample ID	3399149001	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	41.91	Feet		Field	#
Dissolved Oxygen	5.91	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	477.30	Feet		Field	#
Flow Rate	2.09	gal/min		Field	#
Ground Water Elevation	435.39	ft/MSL		Field	#
Oxidation-Reduction Potential	260	mV		Field	#
pH, Field (SM4500B)	4.68	pH_Units		Field	#
Sample Depth	55.00	Feet		Field	#
Specific Conductance, Field	236	umhos/cm	1	Field	#
Temperature	14.60	Deg. C		Field	#
Total Well Depth	60.50	Feet		Field	#
Volume in Water Column	27.33	Gallons		Field	#
Water Level After Purge	47.75	Feet		Field	#
Well Volumes Purged	2.29	Vol		Field	#
METALS					
Calcium, Total	13.1	mg/L	0.11	SW846 6010C	#
Magnesium, Total	10.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.012	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.0	mg/L	0.56	SW846 6010C	#
Sodium, Total	13.8	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	12	mg/L	5	SM2320B-2011	#
Alkalinity, Total	12	mg/L	5	SM2320B-2011	#
Chloride	58.2	mg/L	2.0	EPA 300.0	#
Nitrate-N	3.9	mg/L	1.0	EPA 300.0	#
pH	7.07	pH_Units		S4500HB-11	#
Specific Conductance	241	umhos/cm	5	SW846 9050A	#
Total Dissolved Solids	139	mg/L	25	SM2540C-15	#
Turbidity	0.80	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP017W	Collected	02/05/2025 09:51		
Lab Sample ID	3399149002	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	44.29	Feet		Field	#
Dissolved Oxygen	1.01	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	480.70	Feet		Field	#
Flow Rate	1.94	gal/min		Field	#
Ground Water Elevation	436.41	ft/MSL		Field	#
Oxidation-Reduction Potential	207	mV		Field	#
pH, Field (SM4500B)	5.99	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	1947	umhos/cm	1	Field	#
Temperature	12.71	Deg. C		Field	#
Total Well Depth	150.50	Feet		Field	#
Volume in Water Column	156.13	Gallons		Field	#
Water Level After Purge	50.93	Feet		Field	#
Well Volumes Purged	1.12	Vol		Field	#
METALS					
Calcium, Total	152	mg/L	0.11	SW846 6010C	#
Magnesium, Total	52.8	mg/L	0.11	SW846 6010C	#
Manganese, Total	1.3	mg/L	0.0056	SW846 6010C	#
Potassium, Total	13.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	155	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	85	mg/L	5	SM2320B-2011	#
Alkalinity, Total	85	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.13	mg/L	0.10	SM 4500-NH3G	#
Chloride	538	mg/L	10.0	EPA 300.0	#
Nitrate-N	4.7	mg/L	2.5	EPA 300.0	#
pH	7.87	pH_Units		S4500HB-11	#
Specific Conductance	2020	umhos/cm	5	SW846 9050A	#
Sulfate	132	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	1150	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	3.2	mg/L	0.50	SW846 9060A	#
Turbidity	1.3	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP039W	Collected	02/05/2025 12:07		
Lab Sample ID	3399149003	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	16.44	Feet		Field	#
Elev Top MW Casing above MSL	455.65	Feet		Field	#
Flow Rate	1.88	gal/min		Field	#
Ground Water Elevation	439.21	ft/MSL		Field	#
Oxidation-Reduction Potential	112	mV		Field	#
pH, Field (SM4500B)	5.82	pH_Units		Field	#
Sample Depth	118.00	Feet		Field	#
Specific Conductance, Field	921	umhos/cm	1	Field	#
Temperature	14.12	Deg. C		Field	#
Total Well Depth	131.50	Feet		Field	#
Turbidity, Field	4	NTU	1	Field	#
Volume in Water Column	169.14	Gallons		Field	#
Water Level After Purge	22.07	Feet		Field	#
Well Volumes Purged	1.06	Vol		Field	#
METALS					
Calcium, Total	68.2	mg/L	0.11	SW846 6010C	#
Iron, Total	1.7	mg/L	0.067	SW846 6010C	#
Magnesium, Total	23.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.73	mg/L	0.0056	SW846 6010C	#
Potassium, Total	6.3	mg/L	0.56	SW846 6010C	#
Sodium, Total	69.6	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	44	mg/L	5	SM2320B-2011	#
Alkalinity, Total	44	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.27	mg/L	0.10	SM 4500-NH3G	#
Chloride	243	mg/L	5.0	EPA 300.0	#
Nitrate-N	3.4	mg/L	1.0	EPA 300.0	#
pH	7.54	pH_Units		S4500HB-11	#
Specific Conductance	934	umhos/cm	5	SW846 9050A	#
Sulfate	42.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	552	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.3	mg/L	0.50	SW846 9060A	#
Turbidity	17	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP038W	Collected	02/05/2025 13:11		
Lab Sample ID	3399149004	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	22.48	Feet		Field	#
Dissolved Oxygen	0.03	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	454.05	Feet		Field	#
Flow Rate	0.35	gal/min		Field	#
Ground Water Elevation	431.57	ft/MSL		Field	#
Oxidation-Reduction Potential	-192	mV		Field	#
pH, Field (SM4500B)	8.14	pH_Units		Field	#
Sample Depth	46.00	Feet		Field	#
Specific Conductance, Field	464	umhos/cm	1	Field	#
Temperature	10.41	Deg. C		Field	#
Total Well Depth	52.00	Feet		Field	#
Turbidity, Field	2	NTU	1	Field	#
Volume in Water Column	43.39	Gallons		Field	#
Water Level After Purge	32.41	Feet		Field	#
Well Volumes Purged	1.13	Vol		Field	#
METALS					
Calcium, Total	68.5	mg/L	0.11	SW846 6010C	#
Iron, Total	1.6	mg/L	0.067	SW846 6010C	#
Magnesium, Total	6.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.077	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.2	mg/L	0.56	SW846 6010C	#
Sodium, Total	14.2	mg/L	0.56	SW846 6010C	#
VOLATILE ORGANICS					
Toluene	1.3	ug/L	1.0	SW846 8260B	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	77	mg/L	5	SM2320B-2011	#
Alkalinity, Total	77	mg/L	5	SM2320B-2011	#
Chloride	99.0	mg/L	2.0	EPA 300.0	#
pH	8.14	pH_Units		S4500HB-11	#
Specific Conductance	476	umhos/cm	5	SW846 9050A	#
Sulfate	13.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	296	mg/L	25	SM2540C-15	#
Turbidity	18	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP035W	Collected	02/05/2025 14:29		
Lab Sample ID	3399149005	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	43.53	Feet		Field	#
Dissolved Oxygen	0.21	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	477.56	Feet		Field	#
Flow Rate	0.78	gal/min		Field	#
Ground Water Elevation	434.03	ft/MSL		Field	#
Oxidation-Reduction Potential	96	mV		Field	#
pH, Field (SM4500B)	6.68	pH_Units		Field	#
Sample Depth	65.00	Feet		Field	#
Specific Conductance, Field	887	umhos/cm	1	Field	#
Temperature	12.32	Deg. C		Field	#
Total Well Depth	71.80	Feet		Field	#
Volume in Water Column	41.56	Gallons		Field	#
Water Level After Purge	48.33	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	106	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.7	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.016	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.3	mg/L	0.56	SW846 6010C	#
Sodium, Total	51.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	141	mg/L	5	SM2320B-2011	#
Alkalinity, Total	141	mg/L	5	SM2320B-2011	#
Chloride	166	mg/L	2.0	EPA 300.0	#
Nitrate-N	7.7	mg/L	1.0	EPA 300.0	#
pH	8.17	pH_Units		S4500HB-11	#
Specific Conductance	920	umhos/cm	5	SW846 9050A	#
Sulfate	49.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	534	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.99	mg/L	0.50	SW846 9060A	#
Turbidity	1.5	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP036W	Collected	02/05/2025 15:29		
Lab Sample ID	3399149006	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	51.50	Feet		Field	#
Dissolved Oxygen	0.12	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	478.23	Feet		Field	#
Flow Rate	1.65	gal/min		Field	#
Ground Water Elevation	426.73	ft/MSL		Field	#
Oxidation-Reduction Potential	-165	mV		Field	#
pH, Field (SM4500B)	8.10	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	360	umhos/cm	1	Field	#
Temperature	6.57	Deg. C		Field	#
Total Well Depth	142.60	Feet		Field	#
Volume in Water Column	133.92	Gallons		Field	#
Water Level After Purge	78.25	Feet		Field	#
Well Volumes Purged	1.73	Vol		Field	#
METALS					
Calcium, Total	53.5	mg/L	0.11	SW846 6010C	#
Iron, Total	0.93	mg/L	0.067	SW846 6010C	#
Magnesium, Total	5.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.098	mg/L	0.0056	SW846 6010C	#
Potassium, Total	0.92	mg/L	0.56	SW846 6010C	#
Sodium, Total	15.7	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	101	mg/L	5	SM2320B-2011	#
Alkalinity, Total	101	mg/L	5	SM2320B-2011	#
Chloride	36.2	mg/L	2.0	EPA 300.0	#
pH	8.28	pH_Units		S4500HB-11	#
Specific Conductance	367	umhos/cm	5	SW846 9050A	#
Sulfate	35.4	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	207	mg/L	25	SM2540C-15	#
Turbidity	7.7	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP029W	Collected	02/05/2025 09:09
Lab Sample ID	3399149001	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	41.91		Feet		Field	1	02/05/2025 09:09	BGS	D
Dissolved Oxygen	5.91		mg/L	0.01	Field	1	02/05/2025 09:09	BGS	D
Elev Top MW Casing above MSL	477.30		Feet		Field	1	02/05/2025 09:09	BGS	D
Flow Rate	2.09		gal/min		Field	1	02/05/2025 09:09	BGS	D
Ground Water Elevation	435.39		ft/MSL		Field	1	02/05/2025 09:09	BGS	D
Oxidation-Reduction Potential	260		mV		Field	1	02/05/2025 09:09	BGS	D
pH, Field (SM4500B)	4.68		pH_Units		Field	1	02/05/2025 09:09	BGS	D
Sample Depth	55.00		Feet		Field	1	02/05/2025 09:09	BGS	D
Specific Conductance, Field	236		umhos/cm	1	Field	1	02/05/2025 09:09	BGS	D
Temperature	14.60		Deg. C		Field	1	02/05/2025 09:09	BGS	D
Total Well Depth	60.50		Feet		Field	1	02/05/2025 09:09	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 09:09	BGS	D
Volume in Water Column	27.33		Gallons		Field	1	02/05/2025 09:09	BGS	D
Water Level After Purge	47.75		Feet		Field	1	02/05/2025 09:09	BGS	D
Well Volumes Purged	2.29		Vol		Field	1	02/05/2025 09:09	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	13.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Magnesium, Total	10.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Manganese, Total	0.012		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Potassium, Total	2.0		mg/L	0.56	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Sodium, Total	13.8		mg/L	0.56	SW846 6010C	1	02/21/2025 09:55	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H



Results

Client Sample ID	FFMP029W	Collected	02/05/2025 09:09
Lab Sample ID	3399149001	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			91.1%	62 – 133		02/18/2025 02:13		
4-Bromofluorobenzene	460-00-4			98.5%	79 – 114		02/18/2025 02:13		
Dibromofluoromethane	1868-53-7			91.6%	78 – 116		02/18/2025 02:13		
Toluene-d8	2037-26-5			97.2%	76 – 127		02/18/2025 02:13		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	12		mg/L	5	SM2320B-2011	1	02/08/2025 20:40	JXK	B
Alkalinity, Total	12	1	mg/L	5	SM2320B-2011	1	02/08/2025 20:40	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 12:57	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	58.2		mg/L	2.0	EPA 300.0	2	02/06/2025 12:09	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 12:09	J1W	B
Nitrate-N	3.9		mg/L	1.0	EPA 300.0	2	02/06/2025 12:09	J1W	B
pH	7.07	2	pH_Units		S4500HB-11	1	02/08/2025 01:38	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:13	AKH	G
Specific Conductance	241		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/06/2025 12:09	J1W	B
Total Dissolved Solids	139		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	0.80		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP017W	Collected	02/05/2025 09:51
Lab Sample ID	3399149002	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	44.29		Feet		Field	1	02/05/2025 09:51	BGS	D
Dissolved Oxygen	1.01		mg/L	0.01	Field	1	02/05/2025 09:51	BGS	D
Elev Top MW Casing above MSL	480.70		Feet		Field	1	02/05/2025 09:51	BGS	D
Flow Rate	1.94		gal/min		Field	1	02/05/2025 09:51	BGS	D
Ground Water Elevation	436.41		ft/MSL		Field	1	02/05/2025 09:51	BGS	D
Oxidation-Reduction Potential	207		mV		Field	1	02/05/2025 09:51	BGS	D
pH, Field (SM4500B)	5.99		pH_Units		Field	1	02/05/2025 09:51	BGS	D
Sample Depth	135.00		Feet		Field	1	02/05/2025 09:51	BGS	D
Specific Conductance, Field	1947		umhos/cm	1	Field	1	02/05/2025 09:51	BGS	D
Temperature	12.71		Deg. C		Field	1	02/05/2025 09:51	BGS	D
Total Well Depth	150.50		Feet		Field	1	02/05/2025 09:51	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 09:51	BGS	D
Volume in Water Column	156.13		Gallons		Field	1	02/05/2025 09:51	BGS	D
Water Level After Purge	50.93		Feet		Field	1	02/05/2025 09:51	BGS	D
Well Volumes Purged	1.12		Vol		Field	1	02/05/2025 09:51	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	152		mg/L	0.11	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Magnesium, Total	52.8		mg/L	0.11	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Manganese, Total	1.3		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Potassium, Total	13.7		mg/L	0.56	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Sodium, Total	155		mg/L	0.56	SW846 6010C	1	02/21/2025 09:57	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H



Results

Client Sample ID	FFMP017W	Collected	02/05/2025 09:51
Lab Sample ID	3399149002	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			91.3%	62 – 133		02/18/2025 02:33		
4-Bromofluorobenzene	460-00-4			95.2%	79 – 114		02/18/2025 02:33		
Dibromofluoromethane	1868-53-7			90.7%	78 – 116		02/18/2025 02:33		
Toluene-d8	2037-26-5			98.1%	76 – 127		02/18/2025 02:33		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	85		mg/L	5	SM2320B-2011	1	02/08/2025 20:51	JXK	B
Alkalinity, Total	85	1	mg/L	5	SM2320B-2011	1	02/08/2025 20:51	JXK	B
Ammonia-N, Low Level	0.13	3	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 13:42	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	538		mg/L	10.0	EPA 300.0	10	02/07/2025 19:14	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/06/2025 12:21	J1W	B
Nitrate-N	4.7		mg/L	2.5	EPA 300.0	5	02/06/2025 12:21	J1W	B
pH	7.87	2	pH_Units		S4500HB-11	1	02/08/2025 01:49	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:03	AKH	G
Specific Conductance	2020		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	132		mg/L	5.0	EPA 300.0	5	02/06/2025 12:21	J1W	B
Total Dissolved Solids	1150		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	3.2		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	1.3		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP039W	Collected	02/05/2025 12:07
Lab Sample ID	3399149003	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	16.44		Feet		Field	1	02/05/2025 12:07	BGS	D
Dissolved Oxygen	ND	ND	mg/L	0.01	Field	1	02/05/2025 12:07	BGS	D
Elev Top MW Casing above MSL	455.65		Feet		Field	1	02/05/2025 12:07	BGS	D
Flow Rate	1.88		gal/min		Field	1	02/05/2025 12:07	BGS	D
Ground Water Elevation	439.21		ft/MSL		Field	1	02/05/2025 12:07	BGS	D
Oxidation-Reduction Potential	112		mV		Field	1	02/05/2025 12:07	BGS	D
pH, Field (SM4500B)	5.82		pH_Units		Field	1	02/05/2025 12:07	BGS	D
Sample Depth	118.00		Feet		Field	1	02/05/2025 12:07	BGS	D
Specific Conductance, Field	921		umhos/cm	1	Field	1	02/05/2025 12:07	BGS	D
Temperature	14.12		Deg. C		Field	1	02/05/2025 12:07	BGS	D
Total Well Depth	131.50		Feet		Field	1	02/05/2025 12:07	BGS	D
Turbidity, Field	4		NTU	1	Field	1	02/05/2025 12:07	BGS	D
Volume in Water Column	169.14		Gallons		Field	1	02/05/2025 12:07	BGS	D
Water Level After Purge	22.07		Feet		Field	1	02/05/2025 12:07	BGS	D
Well Volumes Purged	1.06		Vol		Field	1	02/05/2025 12:07	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	68.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Iron, Total	1.7		mg/L	0.067	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Magnesium, Total	23.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Manganese, Total	0.73		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Potassium, Total	6.3		mg/L	0.56	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Sodium, Total	69.6		mg/L	0.56	SW846 6010C	1	02/21/2025 09:58	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H



Results

Client Sample ID	FFMP039W	Collected	02/05/2025 12:07
Lab Sample ID	3399149003	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			92.6%	62 – 133		02/18/2025 02:52		
4-Bromofluorobenzene	460-00-4			104%	79 – 114		02/18/2025 02:52		
Dibromofluoromethane	1868-53-7			92.4%	78 – 116		02/18/2025 02:52		
Toluene-d8	2037-26-5			101%	76 – 127		02/18/2025 02:52		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	44		mg/L	5	SM2320B-2011	1	02/08/2025 21:03	JXK	B
Alkalinity, Total	44	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:03	JXK	B
Ammonia-N, Low Level	0.27		mg/L	0.10	SM 4500-NH3G	1	02/12/2025 10:24	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	243		mg/L	5.0	EPA 300.0	5	02/07/2025 19:25	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 12:32	J1W	B
Nitrate-N	3.4		mg/L	1.0	EPA 300.0	2	02/06/2025 12:32	J1W	B
pH	7.54	2	pH_Units		S4500HB-11	1	02/08/2025 02:00	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:10	AKH	G
Specific Conductance	934		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	42.0		mg/L	2.0	EPA 300.0	2	02/06/2025 12:32	J1W	B
Total Dissolved Solids	552		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.3		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	17		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP038W	Collected	02/05/2025 13:11
Lab Sample ID	3399149004	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	22.48		Feet		Field	1	02/05/2025 13:11	BGS	D
Dissolved Oxygen	0.03		mg/L	0.01	Field	1	02/05/2025 13:11	BGS	D
Elev Top MW Casing above MSL	454.05		Feet		Field	1	02/05/2025 13:11	BGS	D
Flow Rate	0.35		gal/min		Field	1	02/05/2025 13:11	BGS	D
Ground Water Elevation	431.57		ft/MSL		Field	1	02/05/2025 13:11	BGS	D
Oxidation-Reduction Potential	-192		mV		Field	1	02/05/2025 13:11	BGS	D
pH, Field (SM4500B)	8.14		pH_Units		Field	1	02/05/2025 13:11	BGS	D
Sample Depth	46.00		Feet		Field	1	02/05/2025 13:11	BGS	D
Specific Conductance, Field	464		umhos/cm	1	Field	1	02/05/2025 13:11	BGS	D
Temperature	10.41		Deg. C		Field	1	02/05/2025 13:11	BGS	D
Total Well Depth	52.00		Feet		Field	1	02/05/2025 13:11	BGS	D
Turbidity, Field	2		NTU	1	Field	1	02/05/2025 13:11	BGS	D
Volume in Water Column	43.39		Gallons		Field	1	02/05/2025 13:11	BGS	D
Water Level After Purge	32.41		Feet		Field	1	02/05/2025 13:11	BGS	D
Well Volumes Purged	1.13		Vol		Field	1	02/05/2025 13:11	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	68.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Iron, Total	1.6		mg/L	0.067	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Magnesium, Total	6.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Manganese, Total	0.077		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Potassium, Total	1.2		mg/L	0.56	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Sodium, Total	14.2		mg/L	0.56	SW846 6010C	1	02/21/2025 09:59	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Toluene	1.3		ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H



Results

Client Sample ID	FFMP038W	Collected	02/05/2025 13:11
Lab Sample ID	3399149004	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			96.2%	62 – 133		02/18/2025 03:12		
4-Bromofluorobenzene	460-00-4			92%	79 – 114		02/18/2025 03:12		
Dibromofluoromethane	1868-53-7			96.5%	78 – 116		02/18/2025 03:12		
Toluene-d8	2037-26-5			97.3%	76 – 127		02/18/2025 03:12		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	77		mg/L	5	SM2320B-2011	1	02/08/2025 21:14	JXK	B
Alkalinity, Total	77	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:14	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/11/2025 20:22	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	99.0	4	mg/L	2.0	EPA 300.0	2	02/06/2025 12:44	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 12:44	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/06/2025 12:44	J1W	B
pH	8.14	2	pH_Units		S4500HB-11	1	02/08/2025 02:11	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:17	AKH	G
Specific Conductance	476		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	13.0		mg/L	2.0	EPA 300.0	2	02/06/2025 12:44	J1W	B
Total Dissolved Solids	296		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	18		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP035W	Collected	02/05/2025 14:29
Lab Sample ID	3399149005	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	43.53		Feet		Field	1	02/05/2025 14:29	BGS	D
Dissolved Oxygen	0.21		mg/L	0.01	Field	1	02/05/2025 14:29	BGS	D
Elev Top MW Casing above MSL	477.56		Feet		Field	1	02/05/2025 14:29	BGS	D
Flow Rate	0.78		gal/min		Field	1	02/05/2025 14:29	BGS	D
Ground Water Elevation	434.03		ft/MSL		Field	1	02/05/2025 14:29	BGS	D
Oxidation-Reduction Potential	96		mV		Field	1	02/05/2025 14:29	BGS	D
pH, Field (SM4500B)	6.68		pH_Units		Field	1	02/05/2025 14:29	BGS	D
Sample Depth	65.00		Feet		Field	1	02/05/2025 14:29	BGS	D
Specific Conductance, Field	887		umhos/cm	1	Field	1	02/05/2025 14:29	BGS	D
Temperature	12.32		Deg. C		Field	1	02/05/2025 14:29	BGS	D
Total Well Depth	71.80		Feet		Field	1	02/05/2025 14:29	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 14:29	BGS	D
Volume in Water Column	41.56		Gallons		Field	1	02/05/2025 14:29	BGS	D
Water Level After Purge	48.33		Feet		Field	1	02/05/2025 14:29	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	02/05/2025 14:29	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	106		mg/L	0.11	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Magnesium, Total	18.7		mg/L	0.11	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Manganese, Total	0.016		mg/L	0.0056	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Potassium, Total	3.3		mg/L	0.56	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Sodium, Total	51.5		mg/L	0.56	SW846 6010C	1	02/21/2025 10:00	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H



Results

Client Sample ID	FFMP035W	Collected	02/05/2025 14:29
Lab Sample ID	3399149005	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			92.1%	62 – 133		02/18/2025 03:32		
4-Bromofluorobenzene	460-00-4			102%	79 – 114		02/18/2025 03:32		
Dibromofluoromethane	1868-53-7			91.9%	78 – 116		02/18/2025 03:32		
Toluene-d8	2037-26-5			99%	76 – 127		02/18/2025 03:32		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	141		mg/L	5	SM2320B-2011	1	02/08/2025 21:26	JXK	B
Alkalinity, Total	141	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:26	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 15:30	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	166		mg/L	2.0	EPA 300.0	2	02/06/2025 13:29	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 13:29	J1W	B
Nitrate-N	7.7		mg/L	1.0	EPA 300.0	2	02/06/2025 13:29	J1W	B
pH	8.17	2	pH_Units		S4500HB-11	1	02/08/2025 02:22	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:19	AKH	G
Specific Conductance	920		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	49.6		mg/L	2.0	EPA 300.0	2	02/06/2025 13:29	J1W	B
Total Dissolved Solids	534		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	0.99		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	1.5		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP036W	Collected	02/05/2025 15:29
Lab Sample ID	3399149006	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	51.50		Feet		Field	1	02/05/2025 15:29	BGS	D
Dissolved Oxygen	0.12		mg/L	0.01	Field	1	02/05/2025 15:29	BGS	D
Elev Top MW Casing above MSL	478.23		Feet		Field	1	02/05/2025 15:29	BGS	D
Flow Rate	1.65		gal/min		Field	1	02/05/2025 15:29	BGS	D
Ground Water Elevation	426.73		ft/MSL		Field	1	02/05/2025 15:29	BGS	D
Oxidation-Reduction Potential	-165		mV		Field	1	02/05/2025 15:29	BGS	D
pH, Field (SM4500B)	8.10		pH_Units		Field	1	02/05/2025 15:29	BGS	D
Sample Depth	135.00		Feet		Field	1	02/05/2025 15:29	BGS	D
Specific Conductance, Field	360		umhos/cm	1	Field	1	02/05/2025 15:29	BGS	D
Temperature	6.57		Deg. C		Field	1	02/05/2025 15:29	BGS	D
Total Well Depth	142.60		Feet		Field	1	02/05/2025 15:29	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 15:29	BGS	D
Volume in Water Column	133.92		Gallons		Field	1	02/05/2025 15:29	BGS	D
Water Level After Purge	78.25		Feet		Field	1	02/05/2025 15:29	BGS	D
Well Volumes Purged	1.73		Vol		Field	1	02/05/2025 15:29	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	53.5		mg/L	0.11	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Iron, Total	0.93		mg/L	0.067	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Magnesium, Total	5.2		mg/L	0.11	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Manganese, Total	0.098		mg/L	0.0056	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Potassium, Total	0.92		mg/L	0.56	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Sodium, Total	15.7		mg/L	0.56	SW846 6010C	1	02/21/2025 10:01	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H



Results

Client Sample ID	FFMP036W	Collected	02/05/2025 15:29
Lab Sample ID	3399149006	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			94.5%	62 – 133		02/18/2025 03:52		
4-Bromofluorobenzene	460-00-4			96.3%	79 – 114		02/18/2025 03:52		
Dibromofluoromethane	1868-53-7			94.3%	78 – 116		02/18/2025 03:52		
Toluene-d8	2037-26-5			99.7%	76 – 127		02/18/2025 03:52		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	101		mg/L	5	SM2320B-2011	1	02/08/2025 21:37	JXK	B
Alkalinity, Total	101	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:37	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/11/2025 19:49	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	36.2		mg/L	2.0	EPA 300.0	2	02/06/2025 13:41	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 13:41	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/06/2025 13:41	J1W	B
pH	8.28	2	pH_Units		S4500HB-11	1	02/08/2025 02:32	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:06	AKH	G
Specific Conductance	367		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	35.4		mg/L	2.0	EPA 300.0	2	02/06/2025 13:41	J1W	B
Total Dissolved Solids	207		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	7.7		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399149001	FFMP029W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149002	FFMP017W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149003	FFMP039W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149004	FFMP038W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399149005	FFMP035W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149006	FFMP036W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399149001	FFMP029W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3399149002	FFMP017W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3399149003	FFMP039W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3399149004	FFMP038W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387060
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399149005	FFMP035W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3399149006	FFMP036W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387060
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



Middletown Sample Condition Form

Client Lancaster Solid Waste Workorder 3399149
Temp °C 1 Therm ID 571 Ice? (Y) N N/A Initials & Date MP 2/5/25
Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement	↓			
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method				
Received within hold time				
Containers intact	↓			
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)			↓	
NJ ≤ 4 Days				
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C			↓	
SDWA compliance reporting				

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing information

Review Comments:

Low-Flow Test Report:

Test Date / Time: 2/6/2025 10:34:42 AM
Project: FFMP034W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP034W Well Diameter: 6 in Total Depth: 121 ft Initial Depth to Water: 10.98 ft	Pump Type: Grundfos Pump Intake From TOC: 25.85 ft Estimated Total Volume Pumped: 341.832 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.74 gal/min Final Draw Down: 21.18 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/6/2025 10:34 AM	00:00	6.07 pH	14.14 °C	731.80 µS/cm	0.44 mg/L	192.03 NTU	-16.7 mV	10.98 ft	1.89 gal/min
2/6/2025 10:39 AM	05:00	5.83 pH	14.20 °C	719.23 µS/cm	0.75 mg/L	133.78 NTU	39.5 mV	10.98 ft	1.89 gal/min
2/6/2025 10:44 AM	10:00	5.69 pH	14.22 °C	713.22 µS/cm	0.95 mg/L	110.23 NTU	70.8 mV	10.98 ft	1.89 gal/min
2/6/2025 10:49 AM	15:00	5.61 pH	14.29 °C	710.60 µS/cm	1.06 mg/L	102.45 NTU	89.5 mV	10.98 ft	1.89 gal/min
2/6/2025 10:54 AM	20:00	5.56 pH	14.34 °C	710.49 µS/cm	1.13 mg/L	114.46 NTU	104.2 mV	18.91 ft	1.84 gal/min
2/6/2025 10:59 AM	25:00	5.51 pH	14.31 °C	709.65 µS/cm	1.20 mg/L	235.13 NTU	116.8 mV	18.91 ft	1.84 gal/min
2/6/2025 11:04 AM	30:00	5.48 pH	14.35 °C	709.11 µS/cm	1.23 mg/L	72.73 NTU	124.2 mV	18.91 ft	1.84 gal/min
2/6/2025 11:09 AM	35:00	5.47 pH	14.41 °C	710.02 µS/cm	1.25 mg/L	71.00 NTU	130.9 mV	18.91 ft	1.84 gal/min
2/6/2025 11:14 AM	40:00	5.44 pH	14.40 °C	708.94 µS/cm	1.28 mg/L	59.01 NTU	138.1 mV	19.23 ft	1.83 gal/min
2/6/2025 11:19 AM	45:00	5.43 pH	14.44 °C	709.48 µS/cm	1.30 mg/L	45.77 NTU	142.7 mV	19.23 ft	1.83 gal/min
2/6/2025 11:24 AM	50:00	5.42 pH	14.46 °C	709.17 µS/cm	1.31 mg/L	35.90 NTU	145.3 mV	19.23 ft	1.83 gal/min
2/6/2025 11:29 AM	55:00	5.42 pH	14.48 °C	709.01 µS/cm	1.32 mg/L	28.64 NTU	149.1 mV	19.23 ft	1.83 gal/min
2/6/2025 11:34 AM	01:00:00	5.46 pH	14.48 °C	710.52 µS/cm	1.31 mg/L	36.17 NTU	146.6 mV	20.25 ft	1.77 gal/min
2/6/2025 11:39 AM	01:05:00	5.46 pH	14.50 °C	709.87 µS/cm	1.32 mg/L	26.11 NTU	147.9 mV	20.25 ft	1.77 gal/min
2/6/2025 11:44 AM	01:10:00	5.48 pH	14.50 °C	708.93 µS/cm	1.34 mg/L	22.50 NTU	149.4 mV	20.25 ft	1.77 gal/min
2/6/2025 11:49 AM	01:15:00	5.54 pH	14.51 °C	709.79 µS/cm	1.29 mg/L	60.11 NTU	139.8 mV	20.25 ft	1.77 gal/min

2/6/2025 11:51 AM	01:17:15	5.54 pH	14.50 °C	709.26 µS/cm	1.31 mg/L	52.12 NTU	141.9 mV	20.35 ft	1.74 gal/min
2/6/2025 11:56 AM	01:22:15	5.54 pH	14.49 °C	708.76 µS/cm	1.35 mg/L	33.52 NTU	148.6 mV	20.35 ft	1.74 gal/min
2/6/2025 12:01 PM	01:27:15	5.57 pH	14.50 °C	708.42 µS/cm	1.34 mg/L	22.65 NTU	148.1 mV	20.35 ft	1.74 gal/min
2/6/2025 12:06 PM	01:32:15	5.59 pH	14.50 °C	708.69 µS/cm	1.35 mg/L	17.27 NTU	149.9 mV	20.35 ft	1.74 gal/min
2/6/2025 12:11 PM	01:37:15	5.61 pH	14.49 °C	708.31 µS/cm	1.35 mg/L	14.07 NTU	150.2 mV	20.44 ft	1.74 gal/min
2/6/2025 12:16 PM	01:42:15	5.61 pH	14.56 °C	707.94 µS/cm	1.36 mg/L	11.03 NTU	151.3 mV	20.44 ft	1.74 gal/min
2/6/2025 12:21 PM	01:47:15	5.63 pH	14.50 °C	708.75 µS/cm	1.36 mg/L	10.24 NTU	151.9 mV	20.44 ft	1.74 gal/min
2/6/2025 12:26 PM	01:52:15	5.65 pH	14.52 °C	708.27 µS/cm	1.35 mg/L	9.41 NTU	151.0 mV	20.44 ft	1.74 gal/min
2/6/2025 12:31 PM	01:57:15	5.67 pH	14.51 °C	708.91 µS/cm	1.32 mg/L	59.54 NTU	146.4 mV	20.60 ft	1.74 gal/min
2/6/2025 12:36 PM	02:02:15	5.67 pH	14.52 °C	708.93 µS/cm	1.34 mg/L	27.59 NTU	149.0 mV	20.60 ft	1.74 gal/min
2/6/2025 12:41 PM	02:07:15	5.65 pH	14.53 °C	708.23 µS/cm	1.36 mg/L	20.72 NTU	153.6 mV	20.60 ft	1.74 gal/min
2/6/2025 12:46 PM	02:12:15	5.65 pH	14.49 °C	707.75 µS/cm	1.36 mg/L	12.87 NTU	156.1 mV	20.60 ft	1.74 gal/min
2/6/2025 12:51 PM	02:17:15	5.66 pH	14.52 °C	708.21 µS/cm	1.36 mg/L	9.88 NTU	156.8 mV	20.68 ft	1.74 gal/min
2/6/2025 12:56 PM	02:22:15	5.66 pH	14.54 °C	707.47 µS/cm	1.37 mg/L	8.45 NTU	158.3 mV	20.68 ft	1.74 gal/min
2/6/2025 1:01 PM	02:27:15	5.66 pH	14.56 °C	707.64 µS/cm	1.37 mg/L	6.91 NTU	160.9 mV	20.68 ft	1.74 gal/min
2/6/2025 1:06 PM	02:32:15	5.66 pH	14.56 °C	707.54 µS/cm	1.36 mg/L	8.04 NTU	158.9 mV	20.68 ft	1.74 gal/min
2/6/2025 1:11 PM	02:37:15	5.66 pH	14.59 °C	707.16 µS/cm	1.37 mg/L	5.42 NTU	161.5 mV	21.11 ft	1.74 gal/min
2/6/2025 1:16 PM	02:42:15	5.67 pH	14.58 °C	708.22 µS/cm	1.36 mg/L	9.63 NTU	161.3 mV	21.11 ft	1.74 gal/min
2/6/2025 1:21 PM	02:47:15	5.66 pH	14.55 °C	707.00 µS/cm	1.36 mg/L	16.68 NTU	163.0 mV	21.11 ft	1.74 gal/min
2/6/2025 1:26 PM	02:52:15	5.68 pH	14.54 °C	708.02 µS/cm	1.34 mg/L	15.46 NTU	159.4 mV	21.11 ft	1.74 gal/min
2/6/2025 1:31 PM	02:57:15	5.66 pH	14.54 °C	707.37 µS/cm	1.36 mg/L	7.84 NTU	162.1 mV	21.11 ft	1.74 gal/min
2/6/2025 1:36 PM	03:02:15	5.66 pH	14.58 °C	707.23 µS/cm	1.36 mg/L	5.86 NTU	165.2 mV	21.11 ft	1.74 gal/min
2/6/2025 1:41 PM	03:07:15	5.66 pH	14.58 °C	707.34 µS/cm	1.36 mg/L	4.46 NTU	167.0 mV	21.11 ft	1.74 gal/min
2/6/2025 1:46 PM	03:12:15	5.65 pH	14.57 °C	705.99 µS/cm	1.37 mg/L	3.52 NTU	168.6 mV	21.11 ft	1.74 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/7/2025 9:41:32 AM
Project: FFMP031W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP031W Latitude: 39.95435556984637 Longitude: -76.45012078026487 Well Diameter: 6 in Total Depth: 142.7 ft Initial Depth to Water: 124.14 ft	Pump Intake From TOC: 130 ft Estimated Total Volume Pumped: 7.8 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.95 gal/min Final Draw Down: 125.53 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:
Well was purged dry yesterday, sampling today.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/7/2025 9:41 AM	00:00	7.79 pH	13.50 °C	349.10 µS/cm	8.31 mg/L	37.41 NTU	175.6 mV	124.14 ft	1.95 gal/min
2/7/2025 9:43 AM	02:00	7.43 pH	12.96 °C	356.94 µS/cm	2.07 mg/L	25.76 NTU	165.4 mV	124.14 ft	1.95 gal/min
2/7/2025 9:45 AM	04:00	7.35 pH	12.87 °C	323.90 µS/cm	3.30 mg/L	25.22 NTU	155.5 mV	124.14 ft	1.95 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/6/2025 2:22:57 PM
Project: FFMP031W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP031W Latitude: 39.95435556984637 Longitude: -76.45012078026487 Well Diameter: 6 in Total Depth: 142.7 ft Initial Depth to Water: 73.61 ft	Pump Intake From TOC: 130 ft Estimated Total Volume Pumped: 170.4 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.86 gal/min Final Draw Down: 130.19 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10		
2/6/2025 2:22 PM	00:00	7.78 pH	13.21 °C	391.48 µS/cm	0.11 mg/L	2.51 NTU	86.7 mV	73.61 ft	1.95 gal/min
2/6/2025 2:27 PM	05:00	7.83 pH	13.42 °C	391.56 µS/cm	0.05 mg/L	0.00 NTU	75.6 mV	73.61 ft	1.95 gal/min
2/6/2025 2:32 PM	10:00	7.84 pH	13.51 °C	391.45 µS/cm	0.03 mg/L	0.21 NTU	69.8 mV	73.61 ft	1.95 gal/min
2/6/2025 2:37 PM	15:00	7.80 pH	13.65 °C	390.48 µS/cm	0.02 mg/L	0.51 NTU	65.8 mV	73.61 ft	1.95 gal/min
2/6/2025 2:42 PM	20:00	7.72 pH	13.74 °C	384.66 µS/cm	0.02 mg/L	1.08 NTU	47.7 mV	73.61 ft	1.92 gal/min
2/6/2025 2:47 PM	25:00	7.80 pH	13.85 °C	350.55 µS/cm	0.01 mg/L	0.64 NTU	-127.5 mV	73.61 ft	1.92 gal/min
2/6/2025 2:52 PM	30:00	8.28 pH	13.94 °C	315.04 µS/cm	0.01 mg/L	0.43 NTU	-262.4 mV	73.61 ft	1.92 gal/min
2/6/2025 2:57 PM	35:00	8.34 pH	14.09 °C	312.75 µS/cm	0.00 mg/L	0.77 NTU	-295.7 mV	73.61 ft	1.92 gal/min
2/6/2025 3:02 PM	40:00	8.36 pH	14.25 °C	311.55 µS/cm	0.00 mg/L	0.94 NTU	-310.4 mV	73.61 ft	1.86 gal/min
2/6/2025 3:07 PM	45:00	8.37 pH	14.40 °C	311.16 µS/cm	0.00 mg/L	1.92 NTU	-316.9 mV	73.61 ft	1.86 gal/min
2/6/2025 3:12 PM	50:00	8.38 pH	14.55 °C	310.12 µS/cm	0.00 mg/L	2.87 NTU	-319.4 mV	73.61 ft	1.86 gal/min
2/6/2025 3:17 PM	55:00	8.37 pH	14.71 °C	310.01 µS/cm	0.00 mg/L	7.16 NTU	-321.4 mV	73.61 ft	1.86 gal/min
2/6/2025 3:22 PM	01:00:00	8.35 pH	14.92 °C	309.46 µS/cm	0.00 mg/L	15.77 NTU	-321.1 mV	73.61 ft	1.86 gal/min
2/6/2025 3:27 PM	01:05:00	8.34 pH	15.13 °C	309.23 µS/cm	0.00 mg/L	20.49 NTU	-320.8 mV	73.61 ft	1.86 gal/min
2/6/2025 3:32 PM	01:10:00	8.33 pH	15.06 °C	308.52 µS/cm	0.00 mg/L	25.09 NTU	-320.7 mV	73.61 ft	1.86 gal/min
2/6/2025 3:37 PM	01:15:00	8.31 pH	14.59 °C	304.43 µS/cm	0.00 mg/L	25.78 NTU	-314.0 mV	73.61 ft	1.86 gal/min
2/6/2025 3:42 PM	01:20:00	8.22 pH	15.00 °C	300.66 µS/cm	0.00 mg/L	22.66 NTU	-299.6 mV	73.61 ft	1.86 gal/min

2/6/2025 3:47 PM	01:25:00	8.10 pH	15.30 °C	296.16 µS/cm	0.00 mg/L	47.34 NTU	-275.2 mV	73.61 ft	1.86 gal/min
2/6/2025 3:52 PM	01:30:00	8.02 pH	14.96 °C	290.50 µS/cm	0.00 mg/L	218.17 NTU	-250.4 mV	73.61 ft	1.86 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/5/2025 1:09:09 PM
Project: FFMP036W 2024 Q5 Q1
Operator Name: Jeff Musser

Location Name: FFMP036W Well Diameter: 6 in Total Depth: 142.6 ft Initial Depth to Water: 51.5 ft	Pump Type: Grundfos Pump Intake From TOC: 135 ft Estimated Total Volume Pumped: 223.8 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.59 gal/min Final Draw Down: 78.25 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/5/2025 1:09 PM	00:00	7.76 pH	12.70 °C	553.97 µS/cm	0.41 mg/L	37.83 NTU	-142.7 mV	51.50 ft	1.65 gal/min
2/5/2025 1:14 PM	05:00	7.82 pH	13.02 °C	538.50 µS/cm	0.18 mg/L	31.35 NTU	-165.2 mV	51.50 ft	1.65 gal/min
2/5/2025 1:19 PM	10:00	7.93 pH	13.18 °C	484.23 µS/cm	0.09 mg/L	25.15 NTU	-177.8 mV	51.50 ft	1.65 gal/min
2/5/2025 1:24 PM	15:00	8.04 pH	13.20 °C	425.58 µS/cm	0.06 mg/L	13.09 NTU	-189.2 mV	51.50 ft	1.65 gal/min
2/5/2025 1:29 PM	20:00	8.10 pH	13.38 °C	397.56 µS/cm	0.04 mg/L	5.86 NTU	-198.6 mV	69.89 ft	1.59 gal/min
2/5/2025 1:34 PM	25:00	8.15 pH	13.35 °C	381.94 µS/cm	0.02 mg/L	10.35 NTU	-204.4 mV	69.89 ft	1.59 gal/min
2/5/2025 1:39 PM	30:00	8.17 pH	13.28 °C	374.82 µS/cm	0.02 mg/L	2.61 NTU	-207.9 mV	69.89 ft	1.59 gal/min
2/5/2025 1:44 PM	35:00	8.17 pH	13.41 °C	372.84 µS/cm	0.02 mg/L	1.83 NTU	-210.1 mV	69.89 ft	1.59 gal/min
2/5/2025 1:49 PM	40:00	8.18 pH	13.28 °C	372.04 µS/cm	0.02 mg/L	10.64 NTU	-212.2 mV	73.82 ft	1.59 gal/min
2/5/2025 1:54 PM	45:00	8.19 pH	13.29 °C	364.45 µS/cm	0.02 mg/L	0.42 NTU	-214.2 mV	73.82 ft	1.59 gal/min
2/5/2025 1:59 PM	50:00	8.19 pH	13.38 °C	362.31 µS/cm	0.02 mg/L	2.19 NTU	-215.4 mV	73.82 ft	1.59 gal/min
2/5/2025 2:04 PM	55:00	8.20 pH	13.29 °C	358.30 µS/cm	0.02 mg/L	0.00 NTU	-216.6 mV	73.82 ft	1.59 gal/min
2/5/2025 2:09 PM	01:00:00	8.21 pH	12.67 °C	358.94 µS/cm	0.03 mg/L	10.84 NTU	-215.7 mV	76.19 ft	1.59 gal/min
2/5/2025 2:14 PM	01:05:00	8.21 pH	12.82 °C	360.51 µS/cm	0.03 mg/L	1.60 NTU	-215.4 mV	76.19 ft	1.59 gal/min
2/5/2025 2:19 PM	01:10:00	8.21 pH	12.30 °C	358.44 µS/cm	0.04 mg/L	0.41 NTU	-212.4 mV	76.19 ft	1.59 gal/min
2/5/2025 2:24 PM	01:15:00	8.22 pH	11.68 °C	360.32 µS/cm	0.03 mg/L	3.50 NTU	-209.4 mV	76.19 ft	1.59 gal/min

2/5/2025 2:29 PM	01:20:00	8.22 pH	11.27 °C	355.58 µS/cm	0.04 mg/L	16.81 NTU	-206.4 mV	77.08 ft	1.59 gal/min
2/5/2025 2:34 PM	01:25:00	8.21 pH	10.80 °C	355.13 µS/cm	0.05 mg/L	9.57 NTU	-201.5 mV	77.08 ft	1.59 gal/min
2/5/2025 2:39 PM	01:30:00	8.21 pH	9.89 °C	356.78 µS/cm	0.06 mg/L	0.14 NTU	-195.9 mV	77.08 ft	1.59 gal/min
2/5/2025 2:44 PM	01:35:00	8.21 pH	8.92 °C	356.66 µS/cm	0.06 mg/L	5.62 NTU	-189.0 mV	77.08 ft	1.59 gal/min
2/5/2025 2:49 PM	01:40:00	8.18 pH	8.78 °C	356.85 µS/cm	0.07 mg/L	14.40 NTU	-187.4 mV	77.93 ft	1.59 gal/min
2/5/2025 2:54 PM	01:45:00	8.17 pH	8.17 °C	355.88 µS/cm	0.08 mg/L	40.55 NTU	-183.9 mV	77.93 ft	1.59 gal/min
2/5/2025 2:59 PM	01:50:00	8.15 pH	7.75 °C	356.90 µS/cm	0.09 mg/L	9.67 NTU	-177.6 mV	77.93 ft	1.59 gal/min
2/5/2025 3:04 PM	01:55:00	8.12 pH	6.94 °C	358.00 µS/cm	0.10 mg/L	14.67 NTU	-167.6 mV	77.93 ft	1.59 gal/min
2/5/2025 3:09 PM	02:00:00	8.10 pH	5.76 °C	356.72 µS/cm	0.11 mg/L	18.42 NTU	-158.1 mV	77.99 ft	1.59 gal/min
2/5/2025 3:14 PM	02:05:00	8.06 pH	5.81 °C	359.73 µS/cm	0.13 mg/L	26.82 NTU	-158.4 mV	77.99 ft	1.59 gal/min
2/5/2025 3:19 PM	02:10:00	8.07 pH	6.62 °C	359.54 µS/cm	0.13 mg/L	81.99 NTU	-168.2 mV	77.99 ft	1.59 gal/min
2/5/2025 3:24 PM	02:15:00	8.09 pH	6.98 °C	359.99 µS/cm	0.13 mg/L	105.90 NTU	-172.9 mV	77.99 ft	1.59 gal/min
2/5/2025 3:29 PM	02:20:00	8.10 pH	6.57 °C	359.64 µS/cm	0.12 mg/L	0.00 NTU	-165.2 mV	77.99 ft	1.59 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/6/2025 3:22:53 PM
Project: FFMP032W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP032W Well Diameter: 6 in Total Depth: 77.6 ft Initial Depth to Water: 52.54 ft	Pump Type: Grundfos Pump Intake From TOC: 62 ft Estimated Total Volume Pumped: 11.28 gal Flow Cell Volume: 130 ml Final Flow Rate: 0.47 gal/min Final Draw Down: 58.25 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:
Well was purged dry before 1 well volume and stabilization. Will sample 2/7/25

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/6/2025 3:22 PM	00:00	6.13 pH	13.17 °C	249.30 µS/cm	1.48 mg/L	5.79 NTU	44.9 mV	52.54 ft	0.47 gal/min
2/6/2025 3:24 PM	02:00	6.57 pH	14.11 °C	248.64 µS/cm	0.38 mg/L	8.19 NTU	-31.4 mV	52.54 ft	0.47 gal/min
2/6/2025 3:26 PM	04:00	6.76 pH	14.52 °C	248.39 µS/cm	0.31 mg/L	7.67 NTU	-58.8 mV	52.54 ft	0.47 gal/min
2/6/2025 3:28 PM	06:00	6.85 pH	14.76 °C	248.04 µS/cm	0.30 mg/L	6.56 NTU	-72.7 mV	52.54 ft	0.47 gal/min
2/6/2025 3:30 PM	08:00	6.89 pH	14.80 °C	247.68 µS/cm	0.28 mg/L	6.10 NTU	-80.6 mV	52.54 ft	0.47 gal/min
2/6/2025 3:32 PM	10:00	6.91 pH	14.90 °C	247.59 µS/cm	0.27 mg/L	7.36 NTU	-85.5 mV	52.54 ft	0.47 gal/min
2/6/2025 3:34 PM	12:00	6.93 pH	14.95 °C	247.41 µS/cm	0.26 mg/L	6.36 NTU	-88.7 mV	56.97 ft	0.47 gal/min
2/6/2025 3:36 PM	14:00	6.93 pH	15.11 °C	247.43 µS/cm	0.24 mg/L	7.81 NTU	-91.1 mV	56.97 ft	0.47 gal/min
2/6/2025 3:38 PM	16:00	6.94 pH	15.08 °C	246.92 µS/cm	0.26 mg/L	9.39 NTU	-92.5 mV	56.97 ft	0.47 gal/min
2/6/2025 3:40 PM	18:00	6.98 pH	14.74 °C	247.00 µS/cm	0.27 mg/L	9.62 NTU	-93.5 mV	56.97 ft	0.47 gal/min
2/6/2025 3:42 PM	20:00	6.92 pH	14.21 °C	0.07 µS/cm	9.04 mg/L	0.00 NTU	-51.0 mV	56.97 ft	0.47 gal/min
2/6/2025 3:44 PM	22:00	6.92 pH	13.64 °C	0.07 µS/cm	10.22 mg/L	0.00 NTU	-25.5 mV	56.97 ft	0.47 gal/min
2/6/2025 3:46 PM	24:00	6.83 pH	13.14 °C	0.07 µS/cm	10.36 mg/L	0.00 NTU	-10.9 mV	56.97 ft	0.47 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/7/2025 9:59:36 AM
Project: FFMP002W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP002W Well Diameter: 6 in Total Depth: 90.02 ft Initial Depth to Water: 82.71 ft	Pump Type: Grundfos Pump Intake From TOC: 85 ft Estimated Total Volume Pumped: 11.4 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.9 gal/min Final Draw Down: 83.37 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:
Well was purged dry yesterday, sampling today.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/7/2025 9:59 AM	00:00	9.21 pH	14.88 °C	173.63 µS/cm	8.60 mg/L	2.32 NTU	48.8 mV	82.71 ft	1.90 gal/min
2/7/2025 10:01 AM	02:00	4.56 pH	13.27 °C	256.77 µS/cm	3.25 mg/L	0.00 NTU	241.9 mV	82.71 ft	1.90 gal/min
2/7/2025 10:03 AM	04:00	4.35 pH	13.93 °C	255.66 µS/cm	3.24 mg/L	0.06 NTU	266.5 mV	82.71 ft	1.90 gal/min
2/7/2025 10:05 AM	06:00	4.35 pH	13.85 °C	253.95 µS/cm	3.28 mg/L	0.14 NTU	267.6 mV	82.71 ft	1.90 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/7/2025 10:28:31 AM
Project: FFMP032W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP032W Well Diameter: 6 in Total Depth: 77.6 ft Initial Depth to Water: 52.86 ft	Pump Type: Grundfos Pump Intake From TOC: 62 ft Estimated Total Volume Pumped: 4.7 gal Flow Cell Volume: 130 ml Final Flow Rate: 0.47 gal/min Final Draw Down: 55.61 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/7/2025 10:28 AM	00:00	6.00 pH	13.19 °C	244.39 µS/cm	1.55 mg/L	19.33 NTU	24.9 mV	52.86 ft	0.47 gal/min
2/7/2025 10:30 AM	02:00	6.28 pH	13.65 °C	244.67 µS/cm	0.25 mg/L	11.76 NTU	-26.8 mV	52.86 ft	0.47 gal/min
2/7/2025 10:32 AM	04:00	6.38 pH	14.04 °C	245.07 µS/cm	0.23 mg/L	10.10 NTU	-44.6 mV	52.86 ft	0.47 gal/min
2/7/2025 10:34 AM	06:00	6.45 pH	14.53 °C	245.48 µS/cm	0.23 mg/L	9.90 NTU	-55.3 mV	52.86 ft	0.47 gal/min
2/7/2025 10:36 AM	08:00	6.51 pH	14.61 °C	244.80 µS/cm	0.24 mg/L	9.53 NTU	-62.4 mV	52.86 ft	0.47 gal/min
2/7/2025 10:38 AM	10:00	6.57 pH	14.03 °C	243.32 µS/cm	0.27 mg/L	9.15 NTU	-67.8 mV	52.86 ft	0.47 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/3/2025 11:54:47 AM
Project: FFMP04AW 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP04AW Well Diameter: 6 in Total Depth: 148.5 ft Initial Depth to Water: 39.83 ft	Pump Type: Grundfos Pump Intake From TOC: 146 ft Estimated Total Volume Pumped: 154.45 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.62 gal/min Final Draw Down: 87.84 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/3/2025 11:54 AM	00:00	6.80 pH	13.03 °C	1,434.5 µS/cm	0.15 mg/L	0.00 NTU	76.1 mV	39.83 ft	1.91 gal/min
2/3/2025 11:59 AM	05:00	6.89 pH	13.23 °C	1,438.2 µS/cm	0.07 mg/L	0.00 NTU	98.6 mV	39.83 ft	1.91 gal/min
2/3/2025 12:04 PM	10:00	6.94 pH	13.31 °C	1,439.1 µS/cm	0.05 mg/L	0.00 NTU	106.8 mV	39.83 ft	1.91 gal/min
2/3/2025 12:09 PM	15:00	6.96 pH	13.37 °C	1,439.2 µS/cm	0.04 mg/L	0.00 NTU	110.7 mV	39.83 ft	1.91 gal/min
2/3/2025 12:14 PM	20:00	6.97 pH	13.39 °C	1,439.8 µS/cm	0.03 mg/L	0.00 NTU	112.7 mV	60.92 ft	1.83 gal/min
2/3/2025 12:19 PM	25:00	6.97 pH	13.46 °C	1,439.5 µS/cm	0.02 mg/L	0.00 NTU	113.6 mV	60.92 ft	1.83 gal/min
2/3/2025 12:24 PM	30:00	6.97 pH	13.51 °C	1,439.6 µS/cm	0.02 mg/L	0.00 NTU	113.9 mV	60.92 ft	1.83 gal/min
2/3/2025 12:29 PM	35:00	6.97 pH	13.58 °C	1,439.7 µS/cm	0.02 mg/L	0.00 NTU	114.3 mV	60.92 ft	1.83 gal/min
2/3/2025 12:34 PM	40:00	6.97 pH	13.60 °C	1,439.7 µS/cm	0.02 mg/L	0.00 NTU	114.1 mV	75.68 ft	1.77 gal/min
2/3/2025 12:39 PM	45:00	6.97 pH	13.66 °C	1,440.0 µS/cm	0.02 mg/L	0.00 NTU	113.4 mV	75.68 ft	1.77 gal/min
2/3/2025 12:44 PM	50:00	6.97 pH	13.77 °C	1,440.3 µS/cm	0.02 mg/L	0.00 NTU	111.8 mV	75.68 ft	1.77 gal/min
2/3/2025 12:49 PM	55:00	6.97 pH	13.78 °C	1,440.6 µS/cm	0.02 mg/L	0.00 NTU	109.8 mV	75.68 ft	1.77 gal/min
2/3/2025 12:54 PM	01:00:00	6.97 pH	13.81 °C	1,440.8 µS/cm	0.01 mg/L	0.00 NTU	107.9 mV	81.22 ft	1.77 gal/min
2/3/2025 12:59 PM	01:05:00	6.97 pH	13.84 °C	1,440.7 µS/cm	0.01 mg/L	0.00 NTU	106.0 mV	81.22 ft	1.77 gal/min
2/3/2025 1:04 PM	01:10:00	6.97 pH	13.90 °C	1,441.1 µS/cm	0.02 mg/L	0.00 NTU	103.8 mV	81.22 ft	1.77 gal/min
2/3/2025 1:09 PM	01:15:00	6.97 pH	13.98 °C	1,441.2 µS/cm	0.02 mg/L	0.00 NTU	101.5 mV	81.22 ft	1.77 gal/min

2/3/2025 1:14 PM	01:20:00	6.97 pH	13.83 °C	1,440.9 μS/cm	0.02 mg/L	0.00 NTU	99.1 mV	87.03 ft	1.77 gal/min
2/3/2025 1:19 PM	01:25:00	6.96 pH	13.54 °C	1,440.9 μS/cm	0.03 mg/L	0.00 NTU	96.6 mV	87.03 ft	1.77 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/5/2025 10:32:04 AM
Project: FFMP039W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP039W Latitude: 39.95711800509591 Longitude: -76.43958047629526 Well Diameter: 6 in Total Depth: 131.5 ft Initial Depth to Water: 16.44 ft	Pump Type: Grundfos Pump Intake From TOC: 118 ft Estimated Total Volume Pumped: 175.65 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.83 gal/min Final Draw Down: 22.07 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/5/2025 10:32 AM	00:00	6.38 pH	14.06 °C	961.09 µS/cm	0.21 mg/L	124.80 NTU	25.2 mV	16.44 ft	1.88 gal/min
2/5/2025 10:37 AM	05:00	6.05 pH	14.19 °C	950.20 µS/cm	0.08 mg/L	86.54 NTU	44.2 mV	16.44 ft	1.88 gal/min
2/5/2025 10:42 AM	10:00	5.89 pH	14.20 °C	936.48 µS/cm	0.05 mg/L	42.68 NTU	73.1 mV	16.44 ft	1.88 gal/min
2/5/2025 10:47 AM	15:00	5.83 pH	14.18 °C	918.41 µS/cm	0.03 mg/L	30.48 NTU	89.3 mV	16.44 ft	1.88 gal/min
2/5/2025 10:52 AM	20:00	5.77 pH	14.14 °C	906.46 µS/cm	0.02 mg/L	33.54 NTU	99.9 mV	21.87 ft	1.85 gal/min
2/5/2025 10:57 AM	25:00	5.79 pH	14.14 °C	903.53 µS/cm	0.02 mg/L	17.35 NTU	102.7 mV	21.87 ft	1.85 gal/min
2/5/2025 11:02 AM	30:00	5.79 pH	14.17 °C	900.66 µS/cm	0.01 mg/L	74.37 NTU	106.0 mV	21.87 ft	1.85 gal/min
2/5/2025 11:07 AM	35:00	5.78 pH	14.16 °C	898.21 µS/cm	0.01 mg/L	32.25 NTU	107.9 mV	21.87 ft	1.85 gal/min
2/5/2025 11:12 AM	40:00	5.78 pH	14.16 °C	898.23 µS/cm	0.00 mg/L	17.48 NTU	111.0 mV	21.98 ft	1.85 gal/min
2/5/2025 11:17 AM	45:00	5.79 pH	14.13 °C	900.91 µS/cm	0.00 mg/L	14.46 NTU	113.0 mV	21.98 ft	1.85 gal/min
2/5/2025 11:22 AM	50:00	5.80 pH	14.14 °C	903.90 µS/cm	0.00 mg/L	8.14 NTU	111.0 mV	21.98 ft	1.85 gal/min
2/5/2025 11:27 AM	55:00	5.79 pH	14.09 °C	906.38 µS/cm	0.00 mg/L	10.75 NTU	113.2 mV	21.98 ft	1.85 gal/min
2/5/2025 11:32 AM	01:00:00	5.81 pH	14.13 °C	909.01 µS/cm	0.00 mg/L	7.90 NTU	112.5 mV	22.02 ft	1.83 gal/min
2/5/2025 11:37 AM	01:05:00	5.81 pH	14.16 °C	911.74 µS/cm	0.00 mg/L	4.72 NTU	111.3 mV	22.02 ft	1.83 gal/min
2/5/2025 11:42 AM	01:10:00	5.81 pH	14.13 °C	913.68 µS/cm	0.00 mg/L	3.65 NTU	113.0 mV	22.02 ft	1.83 gal/min
2/5/2025 11:47 AM	01:15:00	5.80 pH	14.16 °C	915.24 µS/cm	0.00 mg/L	7.03 NTU	113.3 mV	22.02 ft	1.83 gal/min

2/5/2025 11:52 AM	01:20:00	5.82 pH	14.15 °C	916.50 µS/cm	0.00 mg/L	5.21 NTU	112.7 mV	22.05 ft	1.83 gal/min
2/5/2025 11:57 AM	01:25:00	5.83 pH	14.16 °C	918.28 µS/cm	0.00 mg/L	2.84 NTU	110.3 mV	22.05 ft	1.83 gal/min
2/5/2025 12:02 PM	01:30:00	5.83 pH	14.15 °C	920.15 µS/cm	0.00 mg/L	2.90 NTU	111.7 mV	22.05 ft	1.83 gal/min
2/5/2025 12:07 PM	01:35:00	5.82 pH	14.12 °C	920.51 µS/cm	0.00 mg/L	4.46 NTU	112.4 mV	22.05 ft	1.83 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/4/2025 9:48:50 AM
Project: FFMP03AW 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP03AW Latitude: 39.9571229000665 Longitude: -76.43954931058346 Well Diameter: 6 in Total Depth: 148.4 ft	Pump Intake From TOC: 130 ft Estimated Total Volume Pumped: 301.8 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.6 gal/min Final Draw Down: 94.05 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/4/2025 9:48 AM	00:00	5.35 pH	13.16 °C	470.28 µS/cm	1.08 mg/L		246.6 mV	55.36 ft	1.87 gal/min
2/4/2025 9:53 AM	05:00	5.34 pH	13.41 °C	465.58 µS/cm	1.18 mg/L	0.00 NTU	254.6 mV	55.36 ft	1.87 gal/min
2/4/2025 9:58 AM	10:00	5.02 pH	13.49 °C	405.20 µS/cm	1.27 mg/L	0.00 NTU	271.4 mV	55.36 ft	1.87 gal/min
2/4/2025 10:03 AM	15:00	4.69 pH	13.50 °C	375.42 µS/cm	1.17 mg/L	0.00 NTU	294.7 mV	55.36 ft	1.87 gal/min
2/4/2025 10:08 AM	20:00	4.61 pH	13.60 °C	371.19 µS/cm	1.02 mg/L	0.00 NTU	312.1 mV	76.35 ft	1.62 gal/min
2/4/2025 10:13 AM	25:00	4.61 pH	13.66 °C	370.33 µS/cm	1.00 mg/L	0.00 NTU	323.6 mV	76.35 ft	1.62 gal/min
2/4/2025 10:18 AM	30:00	4.60 pH	13.70 °C	369.43 µS/cm	0.99 mg/L	0.00 NTU	332.4 mV	76.35 ft	1.62 gal/min
2/4/2025 10:23 AM	35:00	4.60 pH	13.76 °C	368.71 µS/cm	0.98 mg/L	0.00 NTU	339.1 mV	76.35 ft	1.62 gal/min
2/4/2025 10:28 AM	40:00	4.62 pH	13.82 °C	368.56 µS/cm	0.98 mg/L	0.00 NTU	344.0 mV	83.60 ft	1.60 gal/min
2/4/2025 10:33 AM	45:00	4.64 pH	13.89 °C	368.62 µS/cm	0.98 mg/L	0.00 NTU	347.3 mV	83.60 ft	1.60 gal/min
2/4/2025 10:38 AM	50:00	4.65 pH	13.93 °C	368.29 µS/cm	0.98 mg/L	0.00 NTU	350.0 mV	83.60 ft	1.60 gal/min
2/4/2025 10:43 AM	55:00	4.68 pH	13.93 °C	368.43 µS/cm	0.98 mg/L	0.00 NTU	352.0 mV	83.60 ft	1.60 gal/min
2/4/2025 10:48 AM	01:00:00	4.70 pH	13.98 °C	368.66 µS/cm	0.98 mg/L	0.00 NTU	353.1 mV	83.60 ft	1.60 gal/min
2/4/2025 10:53 AM	01:05:00	4.72 pH	14.01 °C	368.76 µS/cm	0.98 mg/L	0.00 NTU	354.0 mV	83.60 ft	1.60 gal/min
2/4/2025 10:58 AM	01:10:00	4.75 pH	14.07 °C	368.95 µS/cm	0.98 mg/L	0.00 NTU	354.2 mV	83.60 ft	1.60 gal/min
2/4/2025 11:03 AM	01:15:00	4.78 pH	14.12 °C	369.46 µS/cm	0.99 mg/L	0.00 NTU	353.6 mV	83.60 ft	1.60 gal/min
2/4/2025 11:08 AM	01:20:00	4.81 pH	14.13 °C	369.17 µS/cm	1.01 mg/L	0.00 NTU	352.7 mV	83.60 ft	1.60 gal/min

2/4/2025 11:13 AM	01:25:00	4.84 pH	14.24 °C	369.17 µS/cm	1.07 mg/L	0.00 NTU	351.6 mV	83.60 ft	1.60 gal/min
2/4/2025 11:18 AM	01:30:00	4.88 pH	14.29 °C	368.89 µS/cm	1.15 mg/L	0.00 NTU	350.2 mV	83.60 ft	1.60 gal/min
2/4/2025 11:23 AM	01:35:00	4.91 pH	14.32 °C	368.70 µS/cm	1.23 mg/L	0.00 NTU	349.2 mV	83.60 ft	1.60 gal/min
2/4/2025 11:28 AM	01:40:00	4.93 pH	14.35 °C	368.51 µS/cm	1.32 mg/L	0.00 NTU	348.7 mV	83.60 ft	1.60 gal/min
2/4/2025 11:33 AM	01:45:00	4.95 pH	14.36 °C	368.46 µS/cm	1.43 mg/L	0.00 NTU	348.3 mV	83.60 ft	1.60 gal/min
2/4/2025 11:38 AM	01:50:00	4.97 pH	14.37 °C	368.52 µS/cm	1.56 mg/L	0.00 NTU	347.9 mV	93.01 ft	1.60 gal/min
2/4/2025 11:43 AM	01:55:00	4.99 pH	14.40 °C	369.15 µS/cm	1.77 mg/L	0.00 NTU	347.3 mV	93.01 ft	1.60 gal/min
2/4/2025 11:48 AM	02:00:00	4.99 pH	14.40 °C	369.08 µS/cm	1.94 mg/L	0.00 NTU	346.6 mV	93.01 ft	1.60 gal/min
2/4/2025 11:53 AM	02:05:00	5.00 pH	14.39 °C	369.68 µS/cm	2.26 mg/L	0.00 NTU	346.3 mV	93.01 ft	1.60 gal/min
2/4/2025 11:58 AM	02:10:00	5.02 pH	14.43 °C	370.26 µS/cm	2.63 mg/L	0.00 NTU	345.3 mV	93.66 ft	1.60 gal/min
2/4/2025 12:03 PM	02:15:00	5.05 pH	14.63 °C	371.26 µS/cm	3.23 mg/L	0.00 NTU	342.2 mV	93.66 ft	1.60 gal/min
2/4/2025 12:08 PM	02:20:00	5.07 pH	14.55 °C	371.87 µS/cm	3.69 mg/L	0.00 NTU	341.6 mV	93.66 ft	1.60 gal/min
2/4/2025 12:13 PM	02:25:00	5.09 pH	14.65 °C	372.93 µS/cm	4.23 mg/L	0.00 NTU	340.3 mV	93.66 ft	1.60 gal/min
2/4/2025 12:18 PM	02:30:00	5.11 pH	14.54 °C	373.40 µS/cm	4.77 mg/L	0.00 NTU	338.6 mV	93.66 ft	1.60 gal/min
2/4/2025 12:23 PM	02:35:00	5.12 pH	14.83 °C	374.15 µS/cm	5.37 mg/L	0.00 NTU	336.6 mV	93.66 ft	1.60 gal/min
2/4/2025 12:28 PM	02:40:00	5.13 pH	14.82 °C	374.68 µS/cm	5.95 mg/L	0.00 NTU	335.1 mV	93.66 ft	1.60 gal/min
2/4/2025 12:33 PM	02:45:00	5.13 pH	14.73 °C	375.38 µS/cm	6.36 mg/L	0.00 NTU	334.6 mV	93.66 ft	1.60 gal/min
2/4/2025 12:38 PM	02:50:00	5.13 pH	14.87 °C	375.59 µS/cm	6.72 mg/L	0.00 NTU	333.8 mV	93.66 ft	1.60 gal/min
2/4/2025 12:43 PM	02:55:00	5.13 pH	14.72 °C	375.90 µS/cm	7.10 mg/L	0.00 NTU	333.3 mV	93.66 ft	1.60 gal/min
2/4/2025 12:48 PM	03:00:00	5.14 pH	14.76 °C	376.77 µS/cm	7.43 mg/L	0.00 NTU	332.4 mV	93.66 ft	1.60 gal/min
2/4/2025 12:53 PM	03:05:00	5.13 pH	14.75 °C	376.76 µS/cm	7.65 mg/L	0.00 NTU	331.8 mV	93.66 ft	1.60 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/4/2025 1:28:44 PM
Project: FFMP26RW 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP26RW Well Diameter: 6 in Total Depth: 118.3 ft Initial Depth to Water: 89.43 ft	Pump Type: Grundfos Pump Intake From TOC: 105 ft Estimated Total Volume Pumped: 47 gal Flow Cell Volume: 130 ml Final Flow Rate: 0.94 gal/min Final Draw Down: 93.92 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/4/2025 1:28 PM	00:00	5.53 pH	14.64 °C	795.34 µS/cm	0.34 mg/L	0.00 NTU	311.9 mV	89.43 ft	0.94 gal/min
2/4/2025 1:33 PM	05:00	5.56 pH	15.26 °C	794.94 µS/cm	0.31 mg/L	0.00 NTU	308.9 mV	89.43 ft	0.94 gal/min
2/4/2025 1:38 PM	10:00	5.59 pH	15.45 °C	794.70 µS/cm	0.28 mg/L	0.00 NTU	308.4 mV	89.43 ft	0.94 gal/min
2/4/2025 1:43 PM	15:00	5.59 pH	15.49 °C	794.44 µS/cm	0.27 mg/L	0.00 NTU	308.2 mV	89.43 ft	0.94 gal/min
2/4/2025 1:48 PM	20:00	5.60 pH	15.51 °C	792.90 µS/cm	0.27 mg/L	0.00 NTU	308.0 mV	89.43 ft	0.94 gal/min
2/4/2025 1:53 PM	25:00	5.59 pH	15.80 °C	792.97 µS/cm	0.26 mg/L	0.00 NTU	308.2 mV	89.43 ft	0.94 gal/min
2/4/2025 1:58 PM	30:00	5.59 pH	15.77 °C	792.93 µS/cm	0.25 mg/L	0.00 NTU	307.0 mV	89.43 ft	0.94 gal/min
2/4/2025 2:03 PM	35:00	5.59 pH	15.79 °C	792.59 µS/cm	0.24 mg/L	0.00 NTU	305.5 mV	89.43 ft	0.94 gal/min
2/4/2025 2:08 PM	40:00	5.59 pH	15.73 °C	791.39 µS/cm	0.22 mg/L	0.00 NTU	305.3 mV	89.43 ft	0.94 gal/min
2/4/2025 2:13 PM	45:00	5.59 pH	15.90 °C	790.95 µS/cm	0.20 mg/L	0.03 NTU	304.5 mV	89.43 ft	0.94 gal/min
2/4/2025 2:18 PM	50:00	5.59 pH	15.89 °C	790.60 µS/cm	0.19 mg/L	0.00 NTU	304.6 mV	89.43 ft	0.94 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/5/2025 8:39:44 AM
Project: FFMP029W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP029W Latitude: 39.9571460052465 Longitude: -76.43943051286227 Well Diameter: 6 in Total Depth: 60.5 ft Initial Depth to Water: 41.91 ft	Pump Type: Grundfos Pump Intake From TOC: 55 ft Estimated Total Volume Pumped: 61.8 gal Flow Cell Volume: 130 ml Final Flow Rate: 2 gal/min Final Draw Down: 47.75 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/5/2025 8:39 AM	00:00	4.54 pH	14.42 °C	228.03 µS/cm	5.99 mg/L	0.31 NTU	197.7 mV	41.91 ft	2.09 gal/min
2/5/2025 8:44 AM	05:00	4.63 pH	14.62 °C	224.82 µS/cm	5.98 mg/L	0.00 NTU	226.7 mV	41.91 ft	2.09 gal/min
2/5/2025 8:49 AM	10:00	4.65 pH	14.63 °C	223.04 µS/cm	6.07 mg/L	0.00 NTU	235.9 mV	41.91 ft	2.09 gal/min
2/5/2025 8:54 AM	15:00	4.66 pH	14.61 °C	229.14 µS/cm	5.93 mg/L	0.00 NTU	244.4 mV	41.91 ft	2.09 gal/min
2/5/2025 8:59 AM	20:00	4.67 pH	14.61 °C	233.91 µS/cm	5.86 mg/L	0.00 NTU	250.6 mV	46.53 ft	2.00 gal/min
2/5/2025 9:04 AM	25:00	4.68 pH	14.59 °C	235.63 µS/cm	5.89 mg/L	0.00 NTU	255.4 mV	46.53 ft	2.00 gal/min
2/5/2025 9:09 AM	30:00	4.68 pH	14.60 °C	236.48 µS/cm	5.91 mg/L	0.00 NTU	259.8 mV	46.53 ft	2.00 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/5/2025 1:34:27 PM
Project: FFMP035W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP035W Well Diameter: 6 in Total Depth: 71.8 ft Initial Depth to Water: 43.53 ft	Pump Type: Grundfos Pump Intake From TOC: 65 ft Estimated Total Volume Pumped: 42.9 gal Flow Cell Volume: 130 ml Final Flow Rate: 0.78 gal/min Final Draw Down: 48.33 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5 %	+/- 3 %	+/- 0.3 %	+/- 10 %	+/- 10	+/- 0	
2/5/2025 1:34 PM	00:00	6.89 pH	11.68 °C	889.63 µS/cm	1.74 mg/L	0.12 NTU	35.5 mV	43.53 ft	0.78 gal/min
2/5/2025 1:39 PM	05:00	6.73 pH	13.65 °C	889.81 µS/cm	0.30 mg/L	0.00 NTU	75.9 mV	43.53 ft	0.78 gal/min
2/5/2025 1:44 PM	10:00	6.71 pH	14.10 °C	890.92 µS/cm	0.26 mg/L	0.00 NTU	87.2 mV	43.53 ft	0.78 gal/min
2/5/2025 1:49 PM	15:00	6.70 pH	14.00 °C	890.30 µS/cm	0.25 mg/L	0.00 NTU	92.9 mV	43.53 ft	0.78 gal/min
2/5/2025 1:54 PM	20:00	6.69 pH	13.96 °C	890.71 µS/cm	0.24 mg/L	0.00 NTU	95.7 mV	47.34 ft	0.78 gal/min
2/5/2025 1:59 PM	25:00	6.68 pH	14.21 °C	891.68 µS/cm	0.22 mg/L	0.00 NTU	96.8 mV	47.34 ft	0.78 gal/min
2/5/2025 2:04 PM	30:00	6.68 pH	14.10 °C	891.17 µS/cm	0.21 mg/L	0.00 NTU	96.6 mV	47.34 ft	0.78 gal/min
2/5/2025 2:09 PM	35:00	6.68 pH	13.00 °C	889.20 µS/cm	0.20 mg/L	0.00 NTU	96.6 mV	47.34 ft	0.78 gal/min
2/5/2025 2:14 PM	40:00	6.67 pH	13.01 °C	890.35 µS/cm	0.20 mg/L	0.00 NTU	96.7 mV	48.03 ft	0.78 gal/min
2/5/2025 2:19 PM	45:00	6.68 pH	12.83 °C	889.39 µS/cm	0.20 mg/L	0.00 NTU	95.7 mV	48.03 ft	0.78 gal/min
2/5/2025 2:24 PM	50:00	6.67 pH	12.49 °C	889.31 µS/cm	0.21 mg/L	0.00 NTU	95.9 mV	48.03 ft	0.78 gal/min
2/5/2025 2:29 PM	55:00	6.68 pH	12.32 °C	887.14 µS/cm	0.21 mg/L	0.00 NTU	96.2 mV	48.03 ft	0.78 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/5/2025 10:51:07 AM
Project: FFMP038W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP038W Well Diameter: 6 in Total Depth: 52 ft Initial Depth to Water: 22.48 ft	Pump Type: Grundfos Pump Intake From TOC: 46 ft Estimated Total Volume Pumped: 49 gal Flow Cell Volume: 130 ml Final Flow Rate: 0.35 gal/min Final Draw Down: 32.41 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/5/2025 10:51 AM	00:00	8.05 pH	12.72 °C	478.90 µS/cm	0.33 mg/L	70.53 NTU	-181.9 mV	22.48 ft	0.35 gal/min
2/5/2025 10:56 AM	05:00	8.09 pH	12.80 °C	477.56 µS/cm	0.30 mg/L	19.27 NTU	-182.4 mV	22.48 ft	0.35 gal/min
2/5/2025 11:01 AM	10:00	8.06 pH	12.56 °C	477.11 µS/cm	0.25 mg/L	5.60 NTU	-180.4 mV	25.86 ft	0.35 gal/min
2/5/2025 11:06 AM	15:00	8.03 pH	11.69 °C	476.60 µS/cm	0.23 mg/L	3.62 NTU	-175.8 mV	25.86 ft	0.35 gal/min
2/5/2025 11:11 AM	20:00	7.99 pH	11.03 °C	476.38 µS/cm	0.23 mg/L	3.14 NTU	-168.7 mV	25.86 ft	0.35 gal/min
2/5/2025 11:16 AM	25:00	7.96 pH	10.19 °C	475.08 µS/cm	0.24 mg/L	2.67 NTU	-160.0 mV	26.87 ft	0.35 gal/min
2/5/2025 11:21 AM	30:00	7.92 pH	9.05 °C	474.02 µS/cm	0.25 mg/L	2.35 NTU	-148.2 mV	26.87 ft	0.35 gal/min
2/5/2025 11:26 AM	35:00	7.88 pH	7.60 °C	474.42 µS/cm	0.24 mg/L	2.13 NTU	-140.1 mV	26.87 ft	0.35 gal/min
2/5/2025 11:31 AM	40:00	7.84 pH	7.61 °C	481.17 µS/cm	0.24 mg/L	1.89 NTU	-135.7 mV	26.87 ft	0.35 gal/min
2/5/2025 11:36 AM	45:00	7.89 pH	10.06 °C	476.24 µS/cm	0.20 mg/L	2.32 NTU	-149.9 mV	27.69 ft	0.35 gal/min
2/5/2025 11:41 AM	50:00	7.96 pH	9.15 °C	474.44 µS/cm	0.19 mg/L	1.86 NTU	-146.8 mV	27.69 ft	0.35 gal/min
2/5/2025 11:46 AM	55:00	7.98 pH	7.92 °C	473.47 µS/cm	0.19 mg/L	1.52 NTU	-140.9 mV	27.69 ft	0.35 gal/min
2/5/2025 11:51 AM	01:00:00	7.94 pH	8.00 °C	475.16 µS/cm	0.17 mg/L	1.42 NTU	-137.0 mV	27.69 ft	0.35 gal/min
2/5/2025 11:56 AM	01:05:00	7.92 pH	9.63 °C	477.88 µS/cm	0.17 mg/L	1.25 NTU	-145.6 mV	28.63 ft	0.35 gal/min
2/5/2025 12:01 PM	01:10:00	7.99 pH	9.63 °C	475.39 µS/cm	0.14 mg/L	1.52 NTU	-151.2 mV	28.63 ft	0.35 gal/min
2/5/2025 12:06 PM	01:15:00	8.01 pH	9.98 °C	475.02 µS/cm	0.13 mg/L	1.52 NTU	-157.9 mV	28.63 ft	0.35 gal/min

2/5/2025 12:11 PM	01:20:00	8.04 pH	8.98 °C	473.06 µS/cm	0.11 mg/L	1.06 NTU	-155.5 mV	28.63 ft	0.35 gal/min
2/5/2025 12:16 PM	01:25:00	8.00 pH	8.92 °C	475.16 µS/cm	0.12 mg/L	0.91 NTU	-144.2 mV	29.72 ft	0.35 gal/min
2/5/2025 12:21 PM	01:30:00	8.02 pH	7.14 °C	466.57 µS/cm	0.11 mg/L	1.04 NTU	-140.7 mV	29.72 ft	0.35 gal/min
2/5/2025 12:26 PM	01:35:00	8.10 pH	12.53 °C	473.58 µS/cm	0.10 mg/L	1.20 NTU	-184.8 mV	29.72 ft	0.35 gal/min
2/5/2025 12:31 PM	01:40:00	8.12 pH	12.48 °C	472.77 µS/cm	0.08 mg/L	1.28 NTU	-190.6 mV	29.72 ft	0.35 gal/min
2/5/2025 12:36 PM	01:45:00	8.12 pH	11.83 °C	471.00 µS/cm	0.06 mg/L	1.35 NTU	-191.3 mV	30.88 ft	0.35 gal/min
2/5/2025 12:41 PM	01:50:00	8.12 pH	10.72 °C	468.30 µS/cm	0.06 mg/L	1.34 NTU	-186.9 mV	30.88 ft	0.35 gal/min
2/5/2025 12:46 PM	01:55:00	8.08 pH	10.30 °C	469.76 µS/cm	0.07 mg/L	1.20 NTU	-172.5 mV	30.88 ft	0.35 gal/min
2/5/2025 12:51 PM	02:00:00	8.06 pH	10.38 °C	470.33 µS/cm	0.07 mg/L	0.98 NTU	-159.1 mV	30.88 ft	0.35 gal/min
2/5/2025 12:56 PM	02:05:00	8.06 pH	10.71 °C	473.17 µS/cm	0.11 mg/L	2.77 NTU	-164.4 mV	30.88 ft	0.35 gal/min
2/5/2025 1:01 PM	02:10:00	8.12 pH	11.73 °C	467.32 µS/cm	0.05 mg/L	1.94 NTU	-192.9 mV	30.88 ft	0.35 gal/min
2/5/2025 1:06 PM	02:15:00	8.13 pH	11.45 °C	467.13 µS/cm	0.03 mg/L	2.57 NTU	-195.0 mV	30.88 ft	0.35 gal/min
2/5/2025 1:11 PM	02:20:00	8.14 pH	10.41 °C	463.80 µS/cm	0.03 mg/L	2.15 NTU	-191.8 mV	30.88 ft	0.35 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/6/2025 2:31:39 PM
Project: FFMP002W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP002W Well Diameter: 6 in Total Depth: 90.02 ft Initial Depth to Water: 72.42 ft	Pump Type: Grundfos Pump Intake From TOC: 85 ft Estimated Total Volume Pumped: 44.88 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.72 gal/min Final Draw Down: 85.68 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/6/2025 2:31 PM	00:00	4.57 pH	13.74 °C	251.33 µS/cm	2.81 mg/L	0.00 NTU	259.9 mV	72.42 ft	1.90 gal/min
2/6/2025 2:33 PM	02:00	4.61 pH	14.08 °C	251.15 µS/cm	2.81 mg/L	0.00 NTU	270.7 mV	72.42 ft	1.90 gal/min
2/6/2025 2:35 PM	04:00	4.62 pH	14.26 °C	251.16 µS/cm	2.81 mg/L	0.00 NTU	279.9 mV	72.42 ft	1.90 gal/min
2/6/2025 2:37 PM	06:00	4.63 pH	14.36 °C	251.16 µS/cm	2.80 mg/L	0.00 NTU	287.3 mV	72.42 ft	1.90 gal/min
2/6/2025 2:39 PM	08:00	4.62 pH	14.46 °C	251.13 µS/cm	2.79 mg/L	0.00 NTU	293.6 mV	72.42 ft	1.90 gal/min
2/6/2025 2:41 PM	10:00	4.62 pH	14.49 °C	251.08 µS/cm	2.78 mg/L	0.00 NTU	298.7 mV	72.42 ft	1.90 gal/min
2/6/2025 2:43 PM	12:00	4.61 pH	14.57 °C	251.13 µS/cm	2.78 mg/L	0.00 NTU	303.0 mV	72.42 ft	1.90 gal/min
2/6/2025 2:45 PM	14:00	4.61 pH	14.64 °C	251.11 µS/cm	2.87 mg/L	0.00 NTU	306.9 mV	72.42 ft	1.90 gal/min
2/6/2025 2:47 PM	16:00	4.60 pH	14.77 °C	250.93 µS/cm	3.12 mg/L	0.02 NTU	310.4 mV	72.42 ft	1.90 gal/min
2/6/2025 2:49 PM	18:00	4.60 pH	14.84 °C	250.75 µS/cm	3.38 mg/L	0.01 NTU	313.4 mV	72.42 ft	1.90 gal/min
2/6/2025 2:51 PM	20:00	4.59 pH	14.92 °C	250.75 µS/cm	3.49 mg/L	0.00 NTU	316.1 mV	83.23 ft	1.72 gal/min
2/6/2025 2:53 PM	22:00	4.59 pH	15.02 °C	250.74 µS/cm	3.50 mg/L	0.05 NTU	318.4 mV	83.23 ft	1.72 gal/min
2/6/2025 2:55 PM	24:00	4.59 pH	15.14 °C	250.85 µS/cm	3.51 mg/L	0.15 NTU	320.6 mV	83.23 ft	1.72 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/5/2025 8:21:45 AM
Project: FFMP017W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP017W Well Diameter: 6 in Total Depth: 150.5 ft Initial Depth to Water: 44.29 ft	Pump Type: Grundfos Pump Intake From TOC: 135 ft Estimated Total Volume Pumped: 178.8 gal Flow Cell Volume: 130 ml Final Flow Rate: 2 gal/min Final Draw Down: 50.93 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/5/2025 8:21 AM	00:00	6.08 pH	12.34 °C	2,062.1 µS/cm	0.21 mg/L	0.37 NTU	62.8 mV	44.29 ft	1.94 gal/min
2/5/2025 8:26 AM	05:00	6.12 pH	12.62 °C	2,063.7 µS/cm	0.06 mg/L	0.03 NTU	121.3 mV	44.29 ft	1.94 gal/min
2/5/2025 8:31 AM	10:00	6.13 pH	12.69 °C	2,061.9 µS/cm	0.01 mg/L	0.00 NTU	143.2 mV	44.29 ft	1.94 gal/min
2/5/2025 8:36 AM	15:00	6.12 pH	12.74 °C	2,061.0 µS/cm	0.00 mg/L	0.00 NTU	156.0 mV	44.29 ft	1.94 gal/min
2/5/2025 8:41 AM	20:00	6.11 pH	12.71 °C	2,057.8 µS/cm	0.00 mg/L	0.00 NTU	164.3 mV	49.91 ft	2.00 gal/min
2/5/2025 8:46 AM	25:00	5.92 pH	12.73 °C	1,974.9 µS/cm	0.00 mg/L	0.00 NTU	178.9 mV	49.91 ft	2.00 gal/min
2/5/2025 8:51 AM	30:00	5.90 pH	12.76 °C	1,969.7 µS/cm	0.00 mg/L	0.00 NTU	188.0 mV	49.91 ft	2.00 gal/min
2/5/2025 8:56 AM	35:00	5.90 pH	12.77 °C	1,968.8 µS/cm	0.00 mg/L	0.00 NTU	193.7 mV	49.91 ft	2.00 gal/min
2/5/2025 9:01 AM	40:00	5.89 pH	12.78 °C	1,967.1 µS/cm	0.00 mg/L	0.00 NTU	197.5 mV	50.70 ft	2.00 gal/min
2/5/2025 9:06 AM	45:00	5.89 pH	12.75 °C	1,967.6 µS/cm	0.00 mg/L	0.00 NTU	200.1 mV	50.70 ft	2.00 gal/min
2/5/2025 9:11 AM	50:00	5.90 pH	12.73 °C	1,967.5 µS/cm	0.00 mg/L	0.00 NTU	202.3 mV	50.70 ft	2.00 gal/min
2/5/2025 9:16 AM	55:00	5.90 pH	12.71 °C	1,965.8 µS/cm	0.00 mg/L	0.00 NTU	204.0 mV	50.70 ft	2.00 gal/min
2/5/2025 9:21 AM	01:00:00	5.91 pH	12.68 °C	1,962.6 µS/cm	0.07 mg/L	0.00 NTU	205.1 mV	50.91 ft	2.00 gal/min
2/5/2025 9:26 AM	01:05:00	5.91 pH	12.73 °C	1,945.0 µS/cm	0.27 mg/L	0.00 NTU	206.1 mV	50.91 ft	2.00 gal/min
2/5/2025 9:31 AM	01:10:00	5.91 pH	12.75 °C	1,895.3 µS/cm	1.22 mg/L	0.00 NTU	208.1 mV	50.91 ft	2.00 gal/min
2/5/2025 9:36 AM	01:15:00	5.93 pH	12.79 °C	1,915.0 µS/cm	1.12 mg/L	0.00 NTU	208.4 mV	50.91 ft	2.00 gal/min

2/5/2025 9:41 AM	01:20:00	5.95 pH	12.79 °C	1,928.8 μS/cm	1.06 mg/L	0.00 NTU	208.0 mV	50.93 ft	2.00 gal/min
2/5/2025 9:46 AM	01:25:00	5.97 pH	12.72 °C	1,941.1 μS/cm	1.02 mg/L	0.00 NTU	207.5 mV	50.93 ft	2.00 gal/min
2/5/2025 9:51 AM	01:30:00	5.99 pH	12.71 °C	1,946.9 μS/cm	1.01 mg/L	0.00 NTU	207.1 mV	50.93 ft	2.00 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/4/2025 12:48:53 PM
Project: FFMP005W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP005W Well Diameter: 6 in Total Depth: 149.7 ft Initial Depth to Water: 79.44 ft	Pump Type: Grundfos Pump Intake From TOC: 135 ft Estimated Total Volume Pumped: 103.2 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.84 gal/min Final Draw Down: 102.34 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/4/2025 12:48 PM	00:00	5.60 pH	13.02 °C	768.10 µS/cm	0.43 mg/L	1.92 NTU	204.2 mV	79.44 ft	1.94 gal/min
2/4/2025 12:53 PM	05:00	5.33 pH	13.51 °C	766.91 µS/cm	0.05 mg/L	0.00 NTU	241.9 mV	79.44 ft	1.94 gal/min
2/4/2025 12:58 PM	10:00	5.42 pH	13.55 °C	767.02 µS/cm	0.04 mg/L	0.00 NTU	246.2 mV	79.44 ft	1.94 gal/min
2/4/2025 1:03 PM	15:00	5.49 pH	13.61 °C	767.27 µS/cm	0.03 mg/L	0.00 NTU	247.0 mV	79.44 ft	1.94 gal/min
2/4/2025 1:08 PM	20:00	5.53 pH	13.59 °C	767.46 µS/cm	0.04 mg/L	0.00 NTU	248.2 mV	93.71 ft	1.84 gal/min
2/4/2025 1:13 PM	25:00	5.55 pH	13.64 °C	767.69 µS/cm	0.04 mg/L	0.00 NTU	248.9 mV	93.71 ft	1.84 gal/min
2/4/2025 1:18 PM	30:00	5.57 pH	13.71 °C	768.62 µS/cm	0.05 mg/L	0.00 NTU	249.6 mV	93.71 ft	1.84 gal/min
2/4/2025 1:23 PM	35:00	5.58 pH	13.71 °C	769.02 µS/cm	0.06 mg/L	0.00 NTU	251.1 mV	93.71 ft	1.84 gal/min
2/4/2025 1:28 PM	40:00	5.59 pH	13.72 °C	769.34 µS/cm	0.06 mg/L	0.00 NTU	252.8 mV	93.71 ft	1.84 gal/min
2/4/2025 1:33 PM	45:00	5.59 pH	13.74 °C	769.74 µS/cm	0.07 mg/L	0.00 NTU	254.3 mV	93.71 ft	1.84 gal/min
2/4/2025 1:38 PM	50:00	5.59 pH	13.72 °C	770.03 µS/cm	0.07 mg/L	0.00 NTU	256.2 mV	93.71 ft	1.84 gal/min
2/4/2025 1:43 PM	55:00	5.58 pH	13.72 °C	770.32 µS/cm	0.07 mg/L	0.00 NTU	257.8 mV	93.71 ft	1.84 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/4/2025 11:11:21 AM
Project: FFMP02SW 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP02SW Latitude: 0 Longitude: 0 Well Diameter: 4 in Total Depth: 22.7 ft Initial Depth to Water: 16.57 ft	Pump Intake From TOC: 18 ft Estimated Total Volume Pumped: 8 gal Flow Cell Volume: 130 ml Final Flow Rate: 1 gal/min Final Draw Down: 17.84 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/4/2025 11:11 AM	00:00	6.12 pH	13.31 °C	819.22 µS/cm	7.16 mg/L	16.13 NTU	81.3 mV	16.57 ft	1.00 gal/min
2/4/2025 11:12 AM	01:00	5.48 pH	13.85 °C	803.64 µS/cm	4.06 mg/L	6.41 NTU	150.1 mV	16.57 ft	1.00 gal/min
2/4/2025 11:13 AM	02:00	5.39 pH	14.31 °C	796.05 µS/cm	3.79 mg/L	5.98 NTU	174.7 mV	16.57 ft	1.00 gal/min
2/4/2025 11:14 AM	03:00	5.36 pH	14.68 °C	783.32 µS/cm	3.79 mg/L	6.75 NTU	185.6 mV	16.57 ft	1.00 gal/min
2/4/2025 11:15 AM	04:00	5.35 pH	14.93 °C	762.55 µS/cm	3.83 mg/L	7.76 NTU	191.8 mV	16.57 ft	1.00 gal/min
2/4/2025 11:16 AM	05:00	5.34 pH	15.16 °C	746.86 µS/cm	3.93 mg/L	7.88 NTU	196.0 mV	16.57 ft	1.00 gal/min
2/4/2025 11:17 AM	06:00	5.35 pH	15.29 °C	735.04 µS/cm	4.04 mg/L	8.19 NTU	199.6 mV	16.57 ft	1.00 gal/min
2/4/2025 11:18 AM	07:00	5.35 pH	15.55 °C	727.09 µS/cm	4.15 mg/L	11.58 NTU	202.0 mV	16.57 ft	1.00 gal/min
2/4/2025 11:19 AM	08:00	5.37 pH	15.83 °C	723.47 µS/cm	4.23 mg/L	10.62 NTU	203.9 mV	16.57 ft	1.00 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/4/2025 9:24:52 AM
Project: FFMP02DW 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP02DW Well Diameter: 6 in Total Depth: 153 ft Initial Depth to Water: 30.28 ft	Pump Type: Grundfos Pump Intake From TOC: 120 ft Estimated Total Volume Pumped: 165 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.72 gal/min Final Draw Down: 82.35 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/4/2025 9:24 AM	00:00	7.11 pH	12.88 °C	1,451.5 µS/cm	0.28 mg/L	4.93 NTU	174.6 mV	30.28 ft	2.07 gal/min
2/4/2025 9:29 AM	05:00	7.03 pH	13.34 °C	1,452.1 µS/cm	0.05 mg/L	3.81 NTU	137.2 mV	30.28 ft	2.07 gal/min
2/4/2025 9:34 AM	10:00	7.03 pH	13.44 °C	1,451.4 µS/cm	0.01 mg/L	4.55 NTU	104.7 mV	30.28 ft	2.07 gal/min
2/4/2025 9:39 AM	15:00	7.02 pH	13.48 °C	1,452.1 µS/cm	0.00 mg/L	4.81 NTU	72.9 mV	30.28 ft	2.07 gal/min
2/4/2025 9:44 AM	20:00	7.01 pH	13.56 °C	1,451.7 µS/cm	0.00 mg/L	3.45 NTU	52.7 mV	51.20 ft	1.88 gal/min
2/4/2025 9:49 AM	25:00	7.01 pH	13.69 °C	1,452.0 µS/cm	0.00 mg/L	4.37 NTU	44.5 mV	51.20 ft	1.88 gal/min
2/4/2025 9:54 AM	30:00	7.01 pH	13.81 °C	1,452.2 µS/cm	0.00 mg/L	3.89 NTU	36.6 mV	51.20 ft	1.88 gal/min
2/4/2025 9:59 AM	35:00	7.01 pH	13.83 °C	1,452.3 µS/cm	0.00 mg/L	7.54 NTU	30.1 mV	51.20 ft	1.88 gal/min
2/4/2025 10:04 AM	40:00	7.02 pH	13.88 °C	1,452.9 µS/cm	0.00 mg/L	4.10 NTU	24.4 mV	63.05 ft	1.72 gal/min
2/4/2025 10:09 AM	45:00	7.02 pH	13.88 °C	1,453.0 µS/cm	0.00 mg/L	3.90 NTU	19.6 mV	63.05 ft	1.72 gal/min
2/4/2025 10:14 AM	50:00	7.03 pH	13.91 °C	1,453.2 µS/cm	0.00 mg/L	4.05 NTU	15.7 mV	63.05 ft	1.72 gal/min
2/4/2025 10:19 AM	55:00	7.04 pH	13.96 °C	1,453.3 µS/cm	0.00 mg/L	3.95 NTU	12.6 mV	63.05 ft	1.72 gal/min
2/4/2025 10:24 AM	01:00:00	7.04 pH	14.01 °C	1,453.4 µS/cm	0.00 mg/L	4.13 NTU	9.7 mV	77.28 ft	1.72 gal/min
2/4/2025 10:29 AM	01:05:00	7.06 pH	14.13 °C	1,453.9 µS/cm	0.00 mg/L	4.14 NTU	7.2 mV	77.28 ft	1.72 gal/min
2/4/2025 10:34 AM	01:10:00	7.07 pH	14.15 °C	1,453.7 µS/cm	0.00 mg/L	4.69 NTU	2.8 mV	77.28 ft	1.72 gal/min
2/4/2025 10:39 AM	01:15:00	7.09 pH	14.12 °C	1,453.3 µS/cm	0.00 mg/L	5.29 NTU	0.7 mV	77.28 ft	1.72 gal/min

2/4/2025 10:44 AM	01:20:00	7.11 pH	13.55 °C	1,452.6 μS/cm	0.00 mg/L	4.62 NTU	-0.4 mV	77.28 ft	1.72 gal/min
2/4/2025 10:49 AM	01:25:00	7.11 pH	13.32 °C	1,452.8 μS/cm	0.00 mg/L	4.56 NTU	-0.5 mV	77.28 ft	1.72 gal/min
2/4/2025 10:54 AM	01:30:00	7.12 pH	13.17 °C	1,452.9 μS/cm	0.00 mg/L	4.53 NTU	-0.8 mV	77.28 ft	1.72 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/3/2025 2:21:14 PM
Project: FFMP02SW 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP02SW Well Diameter: 4 in Total Depth: 22.7 ft Initial Depth to Water: 16.52 ft	Pump Type: Grundfos Pump Intake From TOC: 18 ft Estimated Total Volume Pumped: 5.94 gal Flow Cell Volume: 130 ml Final Flow Rate: 0.99 gal/min Final Draw Down: 19.21 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757060
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Test Notes:
Well was purged dry

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/3/2025 2:21 PM	00:00	5.77 pH	13.82 °C	667.78 µS/cm	7.14 mg/L	29.92 NTU	152.0 mV	16.52 ft	0.99 gal/min
2/3/2025 2:22 PM	01:00	5.44 pH	14.11 °C	623.96 µS/cm	4.68 mg/L	27.54 NTU	182.8 mV	16.52 ft	0.99 gal/min
2/3/2025 2:23 PM	02:00	5.49 pH	14.31 °C	558.13 µS/cm	5.92 mg/L	142.71 NTU	186.3 mV	16.52 ft	0.99 gal/min
2/3/2025 2:24 PM	03:00	5.54 pH	14.46 °C	520.39 µS/cm	6.77 mg/L	152.47 NTU	187.8 mV	16.52 ft	0.99 gal/min
2/3/2025 2:25 PM	04:00	5.55 pH	14.65 °C	499.25 µS/cm	6.67 mg/L	126.31 NTU	189.3 mV	16.52 ft	0.99 gal/min
2/3/2025 2:26 PM	05:00	5.52 pH	14.83 °C	499.01 µS/cm	5.63 mg/L	97.50 NTU	192.0 mV	16.52 ft	0.99 gal/min
2/3/2025 2:27 PM	06:00	5.65 pH	14.89 °C	0.07 µS/cm	8.46 mg/L	0.00 NTU	192.0 mV	16.52 ft	0.99 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/3/2025 11:49:24 AM
Project: FFMP30RW 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP30RW Well Diameter: 6 in Total Depth: 94.2 ft Initial Depth to Water: 37.82 ft	Pump Type: Grundfos Pump Intake From TOC: 85 ft Estimated Total Volume Pumped: 85.6 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.26 gal/min Final Draw Down: 59.52 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/3/2025 11:49 AM	00:00	5.37 pH	13.35 °C	1,465.9 µS/cm	0.44 mg/L	0.03 NTU	197.8 mV	37.82 ft	1.48 gal/min
2/3/2025 11:54 AM	05:00	5.49 pH	13.53 °C	1,467.3 µS/cm	0.22 mg/L	0.00 NTU	204.7 mV	37.82 ft	1.48 gal/min
2/3/2025 11:59 AM	10:00	5.49 pH	13.59 °C	1,468.0 µS/cm	0.13 mg/L	0.00 NTU	222.0 mV	37.82 ft	1.48 gal/min
2/3/2025 12:04 PM	15:00	5.49 pH	13.64 °C	1,468.2 µS/cm	0.06 mg/L	0.00 NTU	238.8 mV	37.82 ft	1.48 gal/min
2/3/2025 12:09 PM	20:00	5.49 pH	13.66 °C	1,468.5 µS/cm	0.03 mg/L	0.19 NTU	245.7 mV	41.13 ft	1.42 gal/min
2/3/2025 12:14 PM	25:00	5.49 pH	13.69 °C	1,468.6 µS/cm	0.00 mg/L	0.00 NTU	249.6 mV	41.13 ft	1.42 gal/min
2/3/2025 12:19 PM	30:00	5.49 pH	13.73 °C	1,468.5 µS/cm	0.00 mg/L	0.02 NTU	253.9 mV	41.13 ft	1.42 gal/min
2/3/2025 12:24 PM	35:00	5.49 pH	13.74 °C	1,468.1 µS/cm	0.00 mg/L	0.01 NTU	259.3 mV	41.13 ft	1.42 gal/min
2/3/2025 12:29 PM	40:00	5.49 pH	13.79 °C	1,466.8 µS/cm	0.00 mg/L	0.06 NTU	264.4 mV	52.25 ft	1.38 gal/min
2/3/2025 12:34 PM	45:00	5.49 pH	13.84 °C	1,464.3 µS/cm	0.00 mg/L	0.05 NTU	268.4 mV	52.25 ft	1.38 gal/min
2/3/2025 12:39 PM	50:00	5.48 pH	13.88 °C	1,455.5 µS/cm	0.02 mg/L	0.15 NTU	273.1 mV	52.25 ft	1.38 gal/min
2/3/2025 12:44 PM	55:00	5.46 pH	13.96 °C	1,434.8 µS/cm	0.11 mg/L	0.26 NTU	278.2 mV	52.25 ft	1.38 gal/min
2/3/2025 12:49 PM	01:00:00	5.46 pH	14.00 °C	1,430.3 µS/cm	0.13 mg/L	0.25 NTU	281.1 mV	52.25 ft	1.38 gal/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/3/2025 9:19:08 AM
Project: FFMP015W 2025 Q1
Operator Name: Jeff Musser

Location Name: FFMP015W Well Diameter: 6 in Total Depth: 149.9 ft Initial Depth to Water: 63.79 ft	Pump Type: Grundfos Pump Intake From TOC: 135 ft Estimated Total Volume Pumped: 128.1 gal Flow Cell Volume: 130 ml Final Flow Rate: 1.22 gal/min Final Draw Down: 85.25 ft	Instrument Used: Aqua TROLL 600 Serial Number: 757073
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 3 %	+/- 3 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0	
2/3/2025 9:19 AM	00:00	5.41 pH	12.74 °C	473.00 µS/cm	7.91 mg/L	0.00 NTU	222.5 mV	63.79 ft	1.22 gal/min
2/3/2025 9:24 AM	05:00	5.34 pH	13.26 °C	472.43 µS/cm	7.81 mg/L	0.00 NTU	269.0 mV	63.79 ft	1.22 gal/min
2/3/2025 9:29 AM	10:00	5.33 pH	13.33 °C	472.35 µS/cm	7.80 mg/L	0.00 NTU	280.6 mV	63.79 ft	1.22 gal/min
2/3/2025 9:34 AM	15:00	5.32 pH	13.37 °C	472.50 µS/cm	7.80 mg/L	0.00 NTU	285.8 mV	63.79 ft	1.22 gal/min
2/3/2025 9:39 AM	20:00	5.31 pH	13.47 °C	472.42 µS/cm	7.79 mg/L	0.00 NTU	289.5 mV	63.79 ft	1.22 gal/min
2/3/2025 9:44 AM	25:00	5.31 pH	13.43 °C	472.28 µS/cm	7.79 mg/L	0.00 NTU	291.3 mV	63.79 ft	1.22 gal/min
2/3/2025 9:49 AM	30:00	5.32 pH	13.32 °C	472.23 µS/cm	7.79 mg/L	0.00 NTU	291.2 mV	63.79 ft	1.22 gal/min
2/3/2025 9:54 AM	35:00	5.32 pH	13.45 °C	472.22 µS/cm	7.79 mg/L	0.00 NTU	290.6 mV	63.79 ft	1.22 gal/min
2/3/2025 9:59 AM	40:00	5.33 pH	13.85 °C	472.05 µS/cm	7.78 mg/L	0.00 NTU	288.4 mV	63.79 ft	1.22 gal/min
2/3/2025 10:04 AM	45:00	5.36 pH	13.64 °C	472.04 µS/cm	7.78 mg/L	0.00 NTU	286.5 mV	63.79 ft	1.22 gal/min
2/3/2025 10:09 AM	50:00	5.37 pH	13.38 °C	471.89 µS/cm	7.78 mg/L	0.00 NTU	284.5 mV	63.79 ft	1.22 gal/min
2/3/2025 10:14 AM	55:00	5.39 pH	12.85 °C	471.77 µS/cm	7.79 mg/L	0.00 NTU	282.4 mV	63.79 ft	1.22 gal/min
2/3/2025 10:19 AM	01:00:00	5.40 pH	12.62 °C	471.60 µS/cm	7.78 mg/L	0.00 NTU	280.4 mV	63.79 ft	1.22 gal/min
2/3/2025 10:24 AM	01:05:00	5.41 pH	12.35 °C	471.66 µS/cm	7.79 mg/L	0.00 NTU	278.8 mV	63.79 ft	1.22 gal/min
2/3/2025 10:29 AM	01:10:00	5.41 pH	11.95 °C	471.37 µS/cm	7.80 mg/L	0.00 NTU	277.3 mV	63.79 ft	1.22 gal/min
2/3/2025 10:34 AM	01:15:00	5.42 pH	11.40 °C	471.52 µS/cm	7.81 mg/L	0.00 NTU	276.3 mV	63.79 ft	1.22 gal/min

2/3/2025 10:39 AM	01:20:00	5.42 pH	11.70 °C	472.28 µS/cm	7.83 mg/L	0.00 NTU	275.4 mV	63.79 ft	1.22 gal/min
2/3/2025 10:44 AM	01:25:00	5.44 pH	11.32 °C	470.85 µS/cm	7.79 mg/L	0.00 NTU	273.3 mV	63.79 ft	1.22 gal/min
2/3/2025 10:49 AM	01:30:00	5.46 pH	10.67 °C	470.81 µS/cm	7.80 mg/L	0.00 NTU	271.8 mV	63.79 ft	1.22 gal/min
2/3/2025 10:54 AM	01:35:00	5.46 pH	9.90 °C	471.26 µS/cm	7.82 mg/L	0.00 NTU	270.5 mV	63.79 ft	1.22 gal/min
2/3/2025 10:59 AM	01:40:00	5.46 pH	9.43 °C	471.47 µS/cm	7.84 mg/L	0.00 NTU	269.7 mV	63.79 ft	1.22 gal/min
2/3/2025 11:04 AM	01:45:00	5.46 pH	8.29 °C	468.70 µS/cm	7.81 mg/L	0.00 NTU	268.6 mV	63.79 ft	1.22 gal/min

Samples

Sample ID:	Description:
------------	--------------



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3398927
Report ID 390327 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 04, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3398927001	FFMP02DW	Ground Water	02/04/2025 10:54	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927002	FFMP02SW	Ground Water	02/04/2025 11:19	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927003	FFMP03AW	Ground Water	02/04/2025 12:53	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927004	FFMP005W	Ground Water	02/04/2025 13:43	02/04/2025 15:45	BGS	Analytical Laboratory Service
3398927005	FFMP26RW	Ground Water	02/04/2025 14:18	02/04/2025 15:45	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID Sample ID

Result Notations

Notation Ref.	
E	Result reported exceeds instrument calibration
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The sample was originally run within hold time, but required further analysis that exceeded hold time.
4	This sample was reran out of hold within the instrument's calibration range, for the analyte Nitrate/Nitrite -N, and confirms the initial in-hold reported result.
5	The QC sample type MS for method EPA 350.1 was outside the control limits for the analyte Ammonia-N, Low Level. The % Recovery was reported as 67.2 and the control limits were 80 to 120.
6	The QC sample type MS for method SW846 8260B was outside the control limits for the analyte Ethylbenzene. The % Recovery was reported as 129 and the control limits were 80 to 124.



Detected Results Summary

Client Sample ID		FFMP02DW		Collected	02/04/2025 10:54
Lab Sample ID		3398927001		Lab Receipt	02/04/2025 15:45
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	30.28	Feet		Field	#
Elev Top MW Casing above MSL	509.60	Feet		Field	#
Flow Rate	2.07	gal/min		Field	#
Ground Water Elevation	479.32	ft/MSL		Field	#
Oxidation-Reduction Potential	-0.8	mV		Field	#
pH, Field (SM4500B)	7.12	pH_Units		Field	#
Sample Depth	120.00	Feet		Field	#
Specific Conductance, Field	1453	umhos/cm	1	Field	#
Temperature	13.17	Deg. C		Field	#
Total Well Depth	153.00	Feet		Field	#
Turbidity, Field	5	NTU	1	Field	#
Volume in Water Column	180.40	Gallons		Field	#
Water Level After Purge	82.35	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	129	mg/L	0.11	SW846 6010C	#
Iron, Total	0.38	mg/L	0.067	SW846 6010C	#
Magnesium, Total	19.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.069	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.6	mg/L	0.56	SW846 6010C	#
Sodium, Total	134	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	127	mg/L	5	SM2320B-2011	#
Alkalinity, Total	127	mg/L	5	SM2320B-2011	#
Chloride	372	mg/L	5.0	EPA 300.0	#
Nitrate-N	8.0	mg/L	2.5	EPA 300.0	#
pH	8.26	pH_Units		S4500HB-11	#
Specific Conductance	1500	umhos/cm	5	SW846 9050A	#
Sulfate	48.7	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	900	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.93	mg/L	0.50	SW846 9060A	#
Turbidity	4.6	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP02SW	Collected	02/04/2025 11:19		
Lab Sample ID	3398927002	Lab Receipt	02/04/2025 15:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	16.52	Feet		Field	#
Dissolved Oxygen	4.23	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	509.90	Feet		Field	#
Flow Rate	0.99	gal/min		Field	#
Ground Water Elevation	493.38	ft/MSL		Field	#
Oxidation-Reduction Potential	204	mV		Field	#
pH, Field (SM4500B)	5.37	pH_Units		Field	#
Sample Depth	18.00	Feet		Field	#
Specific Conductance, Field	723	umhos/cm	1	Field	#
Temperature	15.83	Deg. C		Field	#
Total Well Depth	22.70	Feet		Field	#
Turbidity, Field	11	NTU	1	Field	#
Volume in Water Column	4.02	Gallons		Field	#
Water Level After Purge	19.21	Feet		Field	#
Well Volumes Purged	1.48	Vol		Field	#
METALS					
Calcium, Total	39.0	mg/L	0.11	SW846 6010C	#
Iron, Total	0.096	mg/L	0.067	SW846 6010C	#
Magnesium, Total	13.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.041	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.8	mg/L	0.56	SW846 6010C	#
Sodium, Total	95.4	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	28	mg/L	5	SM2320B-2011	#
Alkalinity, Total	28	mg/L	5	SM2320B-2011	#
Chloride	177	mg/L	2.0	EPA 300.0	#
Nitrate-N	12.5	mg/L	1.0	EPA 300.0	#
pH	7.34	pH_Units		S4500HB-11	#
Specific Conductance	819	umhos/cm	5	SW846 9050A	#
Sulfate	60.5	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	436	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.2	mg/L	0.50	SW846 9060A	#
Turbidity	7.5	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP03AW	Collected	02/04/2025 12:53
Lab Sample ID	3398927003	Lab Receipt	02/04/2025 15:45

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	55.36	Feet		Field	#
Dissolved Oxygen	7.65	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	590.90	Feet		Field	#
Flow Rate	1.87	gal/min		Field	#
Ground Water Elevation	535.54	ft/MSL		Field	#
Oxidation-Reduction Potential	332	mV		Field	#
pH, Field (SM4500B)	5.13	pH_Units		Field	#
Sample Depth	130.00	Feet		Field	#
Specific Conductance, Field	377	umhos/cm	1	Field	#
Temperature	14.75	Deg. C		Field	#
Total Well Depth	148.40	Feet		Field	#
Volume in Water Column	136.77	Gallons		Field	#
Water Level After Purge	94.05	Feet		Field	#
Well Volumes Purged	2.53	Vol		Field	#
METALS					
Calcium, Total	22.0	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.4	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.29	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.4	mg/L	0.56	SW846 6010C	#
Sodium, Total	17.1	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	13	mg/L	5	SM2320B-2011	#
Alkalinity, Total	13	mg/L	5	SM2320B-2011	#
Chloride	55.6	mg/L	2.0	EPA 300.0	#
Nitrate-N	22.6	mg/L	1.0	EPA 300.0	#
pH	7.08	pH_Units		S4500HB-11	#
Specific Conductance	385	umhos/cm	5	SW846 9050A	#
Total Dissolved Solids	214	mg/L	25	SM2540C-15	#



Detected Results Summary

Client Sample ID	FFMP005W	Collected	02/04/2025 13:43		
Lab Sample ID	3398927004	Lab Receipt	02/04/2025 15:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	79.44	Feet		Field	#
Dissolved Oxygen	0.07	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	537.40	Feet		Field	#
Flow Rate	1.94	gal/min		Field	#
Ground Water Elevation	457.96	ft/MSL		Field	#
Oxidation-Reduction Potential	258	mV		Field	#
pH, Field (SM4500B)	5.58	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	770	umhos/cm	1	Field	#
Temperature	13.72	Deg. C		Field	#
Total Well Depth	149.70	Feet		Field	#
Volume in Water Column	103.28	Gallons		Field	#
Water Level After Purge	102.34	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	77.8	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.15	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	46.2	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	59	mg/L	5	SM2320B-2011	#
Alkalinity, Total	59	mg/L	5	SM2320B-2011	#
Chloride	171	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.8	mg/L	1.0	EPA 300.0	#
pH	7.82	pH_Units		S4500HB-11	#
Specific Conductance	793	umhos/cm	5	SW846 9050A	#
Sulfate	68.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	522	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.2	mg/L	0.50	SW846 9060A	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP26RW	Collected	02/04/2025 14:18		
Lab Sample ID	3398927005	Lab Receipt	02/04/2025 15:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	89.43	Feet		Field	#
Dissolved Oxygen	0.19	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	547.40	Feet		Field	#
Flow Rate	0.94	gal/min		Field	#
Ground Water Elevation	457.97	ft/MSL		Field	#
Oxidation-Reduction Potential	305	mV		Field	#
pH, Field (SM4500B)	5.59	pH_Units		Field	#
Sample Depth	105.00	Feet		Field	#
Specific Conductance, Field	791	umhos/cm	1	Field	#
Temperature	15.89	Deg. C		Field	#
Total Well Depth	118.30	Feet		Field	#
Volume in Water Column	42.44	Gallons		Field	#
Water Level After Purge	93.92	Feet		Field	#
Well Volumes Purged	1.11	Vol		Field	#
METALS					
Calcium, Total	71.2	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.67	mg/L	0.0056	SW846 6010C	#
Potassium, Total	7.0	mg/L	0.56	SW846 6010C	#
Sodium, Total	56.8	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	66	mg/L	5	SM2320B-2011	#
Alkalinity, Total	66	mg/L	5	SM2320B-2011	#
Chloride	156	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.3	mg/L	1.0	EPA 300.0	#
pH	7.85	pH_Units		S4500HB-11	#
Specific Conductance	800	umhos/cm	5	SW846 9050A	#
Sulfate	99.9	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	434	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.7	mg/L	0.50	SW846 9060A	#



Results

Client Sample ID	FFMP02DW	Collected	02/04/2025 10:54
Lab Sample ID	3398927001	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	30.28		Feet		Field	1	02/04/2025 10:54	BGS	D
Dissolved Oxygen	ND	ND	mg/L	0.01	Field	1	02/04/2025 10:54	BGS	D
Elev Top MW Casing above MSL	509.60		Feet		Field	1	02/04/2025 10:54	BGS	D
Flow Rate	2.07		gal/min		Field	1	02/04/2025 10:54	BGS	D
Ground Water Elevation	479.32		ft/MSL		Field	1	02/04/2025 10:54	BGS	D
Oxidation-Reduction Potential	-0.8		mV		Field	1	02/04/2025 10:54	BGS	D
pH, Field (SM4500B)	7.12		pH_Units		Field	1	02/04/2025 10:54	BGS	D
Sample Depth	120.00		Feet		Field	1	02/04/2025 10:54	BGS	D
Specific Conductance, Field	1453		umhos/cm	1	Field	1	02/04/2025 10:54	BGS	D
Temperature	13.17		Deg. C		Field	1	02/04/2025 10:54	BGS	D
Total Well Depth	153.00		Feet		Field	1	02/04/2025 10:54	BGS	D
Turbidity, Field	5		NTU	1	Field	1	02/04/2025 10:54	BGS	D
Volume in Water Column	180.40		Gallons		Field	1	02/04/2025 10:54	BGS	D
Water Level After Purge	82.35		Feet		Field	1	02/04/2025 10:54	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	02/04/2025 10:54	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	129		mg/L	0.11	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Iron, Total	0.38		mg/L	0.067	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Magnesium, Total	19.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Manganese, Total	0.069		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Potassium, Total	1.6		mg/L	0.56	SW846 6010C	1	02/21/2025 09:34	MSY	J1
Sodium, Total	134		mg/L	0.56	SW846 6010C	1	02/21/2025 09:34	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 02:00	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:00	BST	H



Results

Client Sample ID	FFMP02DW	Collected	02/04/2025 10:54
Lab Sample ID	3398927001	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			101%	62 – 133		02/15/2025 02:00		
4-Bromofluorobenzene	460-00-4			95.1%	79 – 114		02/15/2025 02:00		
Dibromofluoromethane	1868-53-7			101%	78 – 116		02/15/2025 02:00		
Toluene-d8	2037-26-5			101%	76 – 127		02/15/2025 02:00		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	127		mg/L	5	SM2320B-2011	1	02/07/2025 17:25	JXK	B
Alkalinity, Total	127	1	mg/L	5	SM2320B-2011	1	02/07/2025 17:25	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 15:21	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	372		mg/L	5.0	EPA 300.0	5	02/05/2025 15:59	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/05/2025 15:59	J1W	B
Nitrate-N	8.0		mg/L	2.5	EPA 300.0	5	02/05/2025 15:59	J1W	B
pH	8.26	2	pH_Units		S4500HB-11	1	02/07/2025 17:25	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 15:26	AKH	G
Specific Conductance	1500		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	48.7		mg/L	5.0	EPA 300.0	5	02/05/2025 15:59	J1W	B
Total Dissolved Solids	900		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	0.93		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	4.6		NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP02SW	Collected	02/04/2025 11:19
Lab Sample ID	3398927002	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	16.52		Feet		Field	1	02/04/2025 11:19	BGS	D
Dissolved Oxygen	4.23		mg/L	0.01	Field	1	02/04/2025 11:19	BGS	D
Elev Top MW Casing above MSL	509.90		Feet		Field	1	02/04/2025 11:19	BGS	D
Flow Rate	0.99		gal/min		Field	1	02/04/2025 11:19	BGS	D
Ground Water Elevation	493.38		ft/MSL		Field	1	02/04/2025 11:19	BGS	D
Oxidation-Reduction Potential	204		mV		Field	1	02/04/2025 11:19	BGS	D
pH, Field (SM4500B)	5.37		pH_Units		Field	1	02/04/2025 11:19	BGS	D
Sample Depth	18.00		Feet		Field	1	02/04/2025 11:19	BGS	D
Specific Conductance, Field	723		umhos/cm	1	Field	1	02/04/2025 11:19	BGS	D
Temperature	15.83		Deg. C		Field	1	02/04/2025 11:19	BGS	D
Total Well Depth	22.70		Feet		Field	1	02/04/2025 11:19	BGS	D
Turbidity, Field	11		NTU	1	Field	1	02/04/2025 11:19	BGS	D
Volume in Water Column	4.02		Gallons		Field	1	02/04/2025 11:19	BGS	D
Water Level After Purge	19.21		Feet		Field	1	02/04/2025 11:19	BGS	D
Well Volumes Purged	1.48		Vol		Field	1	02/04/2025 11:19	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	39.0		mg/L	0.11	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Iron, Total	0.096		mg/L	0.067	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Magnesium, Total	13.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Manganese, Total	0.041		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Potassium, Total	3.8		mg/L	0.56	SW846 6010C	1	02/21/2025 09:35	MSY	J1
Sodium, Total	95.4		mg/L	0.56	SW846 6010C	1	02/21/2025 09:35	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 02:20	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:20	BST	H



Results

Client Sample ID	FFMP02SW	Collected	02/04/2025 11:19
Lab Sample ID	3398927002	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			93.9%	62 – 133		02/15/2025 02:20		
4-Bromofluorobenzene	460-00-4			101%	79 – 114		02/15/2025 02:20		
Dibromofluoromethane	1868-53-7			93.2%	78 – 116		02/15/2025 02:20		
Toluene-d8	2037-26-5			98.8%	76 – 127		02/15/2025 02:20		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	28		mg/L	5	SM2320B-2011	1	02/07/2025 17:37	JXK	B
Alkalinity, Total	28	1	mg/L	5	SM2320B-2011	1	02/07/2025 17:37	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 17:15	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	177		mg/L	2.0	EPA 300.0	2	02/05/2025 16:11	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:11	J1W	B
Nitrate-N	12.5		mg/L	1.0	EPA 300.0	2	02/05/2025 16:11	J1W	B
pH	7.34	2	pH_Units		S4500HB-11	1	02/07/2025 17:37	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 15:30	AKH	G
Specific Conductance	819		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	60.5		mg/L	2.0	EPA 300.0	2	02/05/2025 16:11	J1W	B
Total Dissolved Solids	436		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.2		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	7.5		NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP03AW	Collected	02/04/2025 12:53
Lab Sample ID	3398927003	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	55.36		Feet		Field	1	02/04/2025 12:53	BGS	D
Dissolved Oxygen	7.65		mg/L	0.01	Field	1	02/04/2025 12:53	BGS	D
Elev Top MW Casing above MSL	590.90		Feet		Field	1	02/04/2025 12:53	BGS	D
Flow Rate	1.87		gal/min		Field	1	02/04/2025 12:53	BGS	D
Ground Water Elevation	535.54		ft/MSL		Field	1	02/04/2025 12:53	BGS	D
Oxidation-Reduction Potential	332		mV		Field	1	02/04/2025 12:53	BGS	D
pH, Field (SM4500B)	5.13		pH_Units		Field	1	02/04/2025 12:53	BGS	D
Sample Depth	130.00		Feet		Field	1	02/04/2025 12:53	BGS	D
Specific Conductance, Field	377		umhos/cm	1	Field	1	02/04/2025 12:53	BGS	D
Temperature	14.75		Deg. C		Field	1	02/04/2025 12:53	BGS	D
Total Well Depth	148.40		Feet		Field	1	02/04/2025 12:53	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/04/2025 12:53	BGS	D
Volume in Water Column	136.77		Gallons		Field	1	02/04/2025 12:53	BGS	D
Water Level After Purge	94.05		Feet		Field	1	02/04/2025 12:53	BGS	D
Well Volumes Purged	2.53		Vol		Field	1	02/04/2025 12:53	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	22.0		mg/L	0.11	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Magnesium, Total	18.4		mg/L	0.11	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Manganese, Total	0.29		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Potassium, Total	1.4		mg/L	0.56	SW846 6010C	1	02/21/2025 09:52	MSY	J1
Sodium, Total	17.1		mg/L	0.56	SW846 6010C	1	02/21/2025 09:52	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 02:40	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 02:40	BST	H



Results

Client Sample ID	FFMP03AW	Collected	02/04/2025 12:53
Lab Sample ID	3398927003	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			104%	62 – 133		02/15/2025 02:40		
4-Bromofluorobenzene	460-00-4			98%	79 – 114		02/15/2025 02:40		
Dibromofluoromethane	1868-53-7			103%	78 – 116		02/15/2025 02:40		
Toluene-d8	2037-26-5			104%	76 – 127		02/15/2025 02:40		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	13		mg/L	5	SM2320B-2011	1	02/07/2025 17:50	JXK	B
Alkalinity, Total	13	1	mg/L	5	SM2320B-2011	1	02/07/2025 17:50	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 17:09	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	55.6		mg/L	2.0	EPA 300.0	2	02/05/2025 16:22	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:22	J1W	B
Nitrate-N	22.6	E,3,4	mg/L	1.0	EPA 300.0	2	02/05/2025 16:22	J1W	B
pH	7.08	2	pH_Units		S4500HB-11	1	02/07/2025 17:50	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 13:03	AKH	G
Specific Conductance	385		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/05/2025 16:22	J1W	B
Total Dissolved Solids	214		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP005W	Collected	02/04/2025 13:43
Lab Sample ID	3398927004	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	79.44		Feet		Field	1	02/04/2025 13:43	BGS	D
Dissolved Oxygen	0.07		mg/L	0.01	Field	1	02/04/2025 13:43	BGS	D
Elev Top MW Casing above MSL	537.40		Feet		Field	1	02/04/2025 13:43	BGS	D
Flow Rate	1.94		gal/min		Field	1	02/04/2025 13:43	BGS	D
Ground Water Elevation	457.96		ft/MSL		Field	1	02/04/2025 13:43	BGS	D
Oxidation-Reduction Potential	258		mV		Field	1	02/04/2025 13:43	BGS	D
pH, Field (SM4500B)	5.58		pH_Units		Field	1	02/04/2025 13:43	BGS	D
Sample Depth	135.00		Feet		Field	1	02/04/2025 13:43	BGS	D
Specific Conductance, Field	770		umhos/cm	1	Field	1	02/04/2025 13:43	BGS	D
Temperature	13.72		Deg. C		Field	1	02/04/2025 13:43	BGS	D
Total Well Depth	149.70		Feet		Field	1	02/04/2025 13:43	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/04/2025 13:43	BGS	D
Volume in Water Column	103.28		Gallons		Field	1	02/04/2025 13:43	BGS	D
Water Level After Purge	102.34		Feet		Field	1	02/04/2025 13:43	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	02/04/2025 13:43	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	77.8		mg/L	0.11	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Magnesium, Total	18.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Manganese, Total	0.15		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Potassium, Total	3.1		mg/L	0.56	SW846 6010C	1	02/21/2025 09:53	MSY	J1
Sodium, Total	46.2		mg/L	0.56	SW846 6010C	1	02/21/2025 09:53	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:00	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:00	BST	H



Results

Client Sample ID	FFMP005W	Collected	02/04/2025 13:43
Lab Sample ID	3398927004	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			94.1%	62 – 133		02/15/2025 03:00		
4-Bromofluorobenzene	460-00-4			101%	79 – 114		02/15/2025 03:00		
Dibromofluoromethane	1868-53-7			92.4%	78 – 116		02/15/2025 03:00		
Toluene-d8	2037-26-5			98%	76 – 127		02/15/2025 03:00		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	59		mg/L	5	SM2320B-2011	1	02/07/2025 18:01	JXK	B
Alkalinity, Total	59	1	mg/L	5	SM2320B-2011	1	02/07/2025 18:01	JXK	B
Ammonia-N, Low Level	ND	ND,5	mg/L	0.10	SM 4500-NH3G	1	02/11/2025 14:13	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	171		mg/L	2.0	EPA 300.0	2	02/05/2025 16:34	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:34	J1W	B
Nitrate-N	1.8		mg/L	1.0	EPA 300.0	2	02/05/2025 16:34	J1W	B
pH	7.82	2	pH_Units		S4500HB-11	1	02/07/2025 18:01	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 12:53	AKH	G
Specific Conductance	793		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	68.6		mg/L	2.0	EPA 300.0	2	02/05/2025 16:34	J1W	B
Total Dissolved Solids	522		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.2		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Results

Client Sample ID	FFMP26RW	Collected	02/04/2025 14:18
Lab Sample ID	3398927005	Lab Receipt	02/04/2025 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	89.43		Feet		Field	1	02/04/2025 14:18	BGS	D
Dissolved Oxygen	0.19		mg/L	0.01	Field	1	02/04/2025 14:18	BGS	D
Elev Top MW Casing above MSL	547.40		Feet		Field	1	02/04/2025 14:18	BGS	D
Flow Rate	0.94		gal/min		Field	1	02/04/2025 14:18	BGS	D
Ground Water Elevation	457.97		ft/MSL		Field	1	02/04/2025 14:18	BGS	D
Oxidation-Reduction Potential	305		mV		Field	1	02/04/2025 14:18	BGS	D
pH, Field (SM4500B)	5.59		pH_Units		Field	1	02/04/2025 14:18	BGS	D
Sample Depth	105.00		Feet		Field	1	02/04/2025 14:18	BGS	D
Specific Conductance, Field	791		umhos/cm	1	Field	1	02/04/2025 14:18	BGS	D
Temperature	15.89		Deg. C		Field	1	02/04/2025 14:18	BGS	D
Total Well Depth	118.30		Feet		Field	1	02/04/2025 14:18	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/04/2025 14:18	BGS	D
Volume in Water Column	42.44		Gallons		Field	1	02/04/2025 14:18	BGS	D
Water Level After Purge	93.92		Feet		Field	1	02/04/2025 14:18	BGS	D
Well Volumes Purged	1.11		Vol		Field	1	02/04/2025 14:18	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	71.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Magnesium, Total	18.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Manganese, Total	0.67		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Potassium, Total	7.0		mg/L	0.56	SW846 6010C	1	02/21/2025 09:54	MSY	J1
Sodium, Total	56.8		mg/L	0.56	SW846 6010C	1	02/21/2025 09:54	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Ethylbenzene	ND	ND,6	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:19	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:19	BST	H



Results

Client Sample ID	FFMP26RW	Collected	02/04/2025 14:18
Lab Sample ID	3398927005	Lab Receipt	02/04/2025 15:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			104%	62 – 133		02/15/2025 03:19		
4-Bromofluorobenzene	460-00-4			99.7%	79 – 114		02/15/2025 03:19		
Dibromofluoromethane	1868-53-7			103%	78 – 116		02/15/2025 03:19		
Toluene-d8	2037-26-5			104%	76 – 127		02/15/2025 03:19		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	66		mg/L	5	SM2320B-2011	1	02/07/2025 18:12	JXK	B
Alkalinity, Total	66	1	mg/L	5	SM2320B-2011	1	02/07/2025 18:12	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 17:18	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	156		mg/L	2.0	EPA 300.0	2	02/05/2025 16:45	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/05/2025 16:45	J1W	B
Nitrate-N	1.3		mg/L	1.0	EPA 300.0	2	02/05/2025 16:45	J1W	B
pH	7.85	2	pH_Units		S4500HB-11	1	02/07/2025 18:12	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 13:07	AKH	G
Specific Conductance	800		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	99.9		mg/L	2.0	EPA 300.0	2	02/05/2025 16:45	J1W	B
Total Dissolved Solids	434		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.7		mg/L	0.50	SW846 9060A	1	02/05/2025 18:30	PAG	E
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	02/05/2025 08:34	GMM	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3398927001	FFMP02DW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398927002	FFMP02SW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398927003	FFMP03AW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398927004	FFMP005W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3398927005	FFMP26RW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3398927001	FFMP02DW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398927002	FFMP02SW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398927003	FFMP03AW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398927004	FFMP005W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387060
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3398927005	FFMP26RW	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1384160
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384169
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385700
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1384289
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



**CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS**

3398927
Logged By: SL
PM: SJB

	of
--	----

[illegible]



right solutions.
right partner.

Middletown Sample Condition Form

Client lancaſter ſolid waſte Workorder 3398927
 Temp °C 1 Therm ID 511 Ice? (Y) N N/A Initials & Date MP 2/4/25
 Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement	↓			
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method	↓			
Received within hold time				
Containers intact				
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)			↓	
NJ ≤ 4 Days				
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C			↓	
SDWA compliance reporting				

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client

N/A - Not Applicable

UC - Updated coc with missing information

Review Comments:

25 of 25

2/24/2025 7:37 PM



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3399736
Report ID 390219 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 07, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3399736001	FFMP031W	Ground Water	02/07/2025 09:45	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736002	FFMP002W	Ground Water	02/07/2025 10:05	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736003	FFMP032W	Ground Water	02/07/2025 10:38	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736004	FIELD BLANK	Water	02/07/2025 15:00	02/07/2025 16:20	BGS	Analytical Laboratory Service
3399736005	TRIP BLANK	Water	02/07/2025 16:20	02/07/2025 16:20	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.



Detected Results Summary

Client Sample ID	FFMP031W	Collected	02/07/2025 09:45		
Lab Sample ID	3399736001	Lab Receipt	02/07/2025 16:20		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	73.61	Feet		Field	#
Dissolved Oxygen	3.30	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	612.66	Feet		Field	#
Flow Rate	1.95	gal/min		Field	#
Ground Water Elevation	539.05	ft/MSL		Field	#
Oxidation-Reduction Potential	156	mV		Field	#
pH, Field (SM4500B)	7.35	pH_Units		Field	#
Sample Depth	130.00	Feet		Field	#
Specific Conductance, Field	324	umhos/cm	1	Field	#
Temperature	12.87	Deg. C		Field	#
Total Well Depth	142.70	Feet		Field	#
Turbidity, Field	25	NTU	1	Field	#
Volume in Water Column	101.56	Gallons		Field	#
Water Level After Purge	130.19	Feet		Field	#
Well Volumes Purged	1.73	Vol		Field	#
METALS					
Calcium, Total	65.4	mg/L	0.11	SW846 6010C	#
Iron, Total	2.8	mg/L	0.067	SW846 6010C	#
Magnesium, Total	4.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.31	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.9	mg/L	0.56	SW846 6010C	#
Sodium, Total	9.8	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	102	mg/L	5	SM2320B-2011	#
Alkalinity, Total	102	mg/L	5	SM2320B-2011	#
Chloride	22.1	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.3	mg/L	1.0	EPA 300.0	#
pH	8.13	pH_Units		S4500HB-11	#
Specific Conductance	364	umhos/cm	5	SW846 9050A	#
Sulfate	49.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	214	mg/L	25	SM2540C-15	#
Turbidity	28	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP002W	Collected	02/07/2025 10:05		
Lab Sample ID	3399736002	Lab Receipt	02/07/2025 16:20		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	72.42	Feet		Field	#
Dissolved Oxygen	3.28	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	613.20	Feet		Field	#
Flow Rate	1.90	gal/min		Field	#
Ground Water Elevation	540.78	ft/MSL		Field	#
Oxidation-Reduction Potential	268	mV		Field	#
pH, Field (SM4500B)	4.35	pH_Units		Field	#
Sample Depth	85.00	Feet		Field	#
Specific Conductance, Field	254	umhos/cm	1	Field	#
Temperature	13.85	Deg. C		Field	#
Total Well Depth	90.02	Feet		Field	#
Volume in Water Column	25.87	Gallons		Field	#
Water Level After Purge	85.68	Feet		Field	#
Well Volumes Purged	1.76	Vol		Field	#
METALS					
Calcium, Total	19.1	mg/L	0.11	SW846 6010C	#
Iron, Total	0.19	mg/L	0.067	SW846 6010C	#
Magnesium, Total	7.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.28	mg/L	0.0056	SW846 6010C	#
Potassium, Total	4.6	mg/L	0.56	SW846 6010C	#
Sodium, Total	16.3	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Chloride	18.2	mg/L	2.0	EPA 300.0	#
Nitrate-N	15.1	mg/L	1.0	EPA 300.0	#
pH	6.47	pH_Units		S4500HB-11	#
Specific Conductance	261	umhos/cm	5	SW846 9050A	#
Sulfate	32.7	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	166	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.63	mg/L	0.50	SW846 9060A	#
Turbidity	2.4	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP032W	Collected	02/07/2025 10:38		
Lab Sample ID	3399736003	Lab Receipt	02/07/2025 16:20		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	52.54	Feet		Field	#
Dissolved Oxygen	0.27	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	594.09	Feet		Field	#
Flow Rate	0.47	gal/min		Field	#
Ground Water Elevation	541.55	ft/MSL		Field	#
Oxidation-Reduction Potential	-68	mV		Field	#
pH, Field (SM4500B)	6.57	pH_Units		Field	#
Sample Depth	62.00	Feet		Field	#
Specific Conductance, Field	243	umhos/cm	1	Field	#
Temperature	14.03	Deg. C		Field	#
Total Well Depth	77.60	Feet		Field	#
Turbidity, Field	9	NTU	1	Field	#
Volume in Water Column	36.84	Gallons		Field	#
Water Level After Purge	58.25	Feet		Field	#
Well Volumes Purged	0.31	Vol		Field	#
METALS					
Calcium, Total	21.0	mg/L	0.11	SW846 6010C	#
Iron, Total	9.3	mg/L	0.067	SW846 6010C	#
Magnesium, Total	7.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.81	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	14.2	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	59	mg/L	5	SM2320B-2011	#
Alkalinity, Total	59	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.38	mg/L	0.10	SM 4500-NH3G	#
Chloride	33.6	mg/L	2.0	EPA 300.0	#
pH	7.88	pH_Units		S4500HB-11	#
Specific Conductance	225	umhos/cm	5	SW846 9050A	#
Total Dissolved Solids	119	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.51	mg/L	0.50	SW846 9060A	#
Turbidity	95	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FIELD BLANK	Collected	02/07/2025 15:00		
Lab Sample ID	3399736004	Lab Receipt	02/07/2025 16:20		
Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
pH	5.55	pH_Units		S4500HB-11	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP031W	Collected	02/07/2025 09:45
Lab Sample ID	3399736001	Lab Receipt	02/07/2025 16:20

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	73.61		Feet		Field	1	02/07/2025 09:45	BGS	D
Dissolved Oxygen	3.30		mg/L	0.01	Field	1	02/07/2025 09:45	BGS	D
Elev Top MW Casing above MSL	612.66		Feet		Field	1	02/07/2025 09:45	BGS	D
Flow Rate	1.95		gal/min		Field	1	02/07/2025 09:45	BGS	D
Ground Water Elevation	539.05		ft/MSL		Field	1	02/07/2025 09:45	BGS	D
Oxidation-Reduction Potential	156		mV		Field	1	02/07/2025 09:45	BGS	D
pH, Field (SM4500B)	7.35		pH_Units		Field	1	02/07/2025 09:45	BGS	D
Sample Depth	130.00		Feet		Field	1	02/07/2025 09:45	BGS	D
Specific Conductance, Field	324		umhos/cm	1	Field	1	02/07/2025 09:45	BGS	D
Temperature	12.87		Deg. C		Field	1	02/07/2025 09:45	BGS	D
Total Well Depth	142.70		Feet		Field	1	02/07/2025 09:45	BGS	D
Turbidity, Field	25		NTU	1	Field	1	02/07/2025 09:45	BGS	D
Volume in Water Column	101.56		Gallons		Field	1	02/07/2025 09:45	BGS	D
Water Level After Purge	130.19		Feet		Field	1	02/07/2025 09:45	BGS	D
Well Volumes Purged	1.73		Vol		Field	1	02/07/2025 09:45	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	65.4		mg/L	0.11	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Iron, Total	2.8		mg/L	0.067	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Magnesium, Total	4.2		mg/L	0.11	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Manganese, Total	0.31		mg/L	0.0056	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Potassium, Total	1.9		mg/L	0.56	SW846 6010C	1	02/11/2025 14:04	MSY	J1
Sodium, Total	9.8		mg/L	0.56	SW846 6010C	1	02/11/2025 14:04	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 03:55	PDK	H



Results

Client Sample ID	FFMP031W	Collected	02/07/2025 09:45
Lab Sample ID	3399736001	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			102%	62 – 133		02/19/2025 03:55		
4-Bromofluorobenzene	460-00-4			88%	79 – 114		02/19/2025 03:55		
Dibromofluoromethane	1868-53-7			99.7%	78 – 116		02/19/2025 03:55		
Toluene-d8	2037-26-5			95.2%	76 – 127		02/19/2025 03:55		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	102		mg/L	5	SM2320B-2011	1	02/13/2025 23:53	JXK	B
Alkalinity, Total	102	1	mg/L	5	SM2320B-2011	1	02/13/2025 23:53	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 13:51	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	22.1		mg/L	2.0	EPA 300.0	2	02/08/2025 17:28	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 17:28	GMM	B
Nitrate-N	1.3		mg/L	1.0	EPA 300.0	2	02/08/2025 17:28	GMM	B
pH	8.13	2	pH_Units		S4500HB-11	1	02/13/2025 23:53	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:18	AKH	G
Specific Conductance	364		umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	49.6		mg/L	2.0	EPA 300.0	2	02/08/2025 17:28	GMM	B
Total Dissolved Solids	214		mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	28		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FFMP002W	Collected	02/07/2025 10:05
Lab Sample ID	3399736002	Lab Receipt	02/07/2025 16:20

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	72.42		Feet		Field	1	02/07/2024 10:05	BGS	D
Dissolved Oxygen	3.28		mg/L	0.01	Field	1	02/07/2024 10:05	BGS	D
Elev Top MW Casing above MSL	613.20		Feet		Field	1	02/07/2024 10:05	BGS	D
Flow Rate	1.90		gal/min		Field	1	02/07/2024 10:05	BGS	D
Ground Water Elevation	540.78		ft/MSL		Field	1	02/07/2024 10:05	BGS	D
Oxidation-Reduction Potential	268		mV		Field	1	02/07/2024 10:05	BGS	D
pH, Field (SM4500B)	4.35		pH_Units		Field	1	02/07/2024 10:05	BGS	D
Sample Depth	85.00		Feet		Field	1	02/07/2024 10:05	BGS	D
Specific Conductance, Field	254		umhos/cm	1	Field	1	02/07/2024 10:05	BGS	D
Temperature	13.85		Deg. C		Field	1	02/07/2024 10:05	BGS	D
Total Well Depth	90.02		Feet		Field	1	02/07/2024 10:05	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/07/2024 10:05	BGS	D
Volume in Water Column	25.87		Gallons		Field	1	02/07/2024 10:05	BGS	D
Water Level After Purge	85.68		Feet		Field	1	02/07/2024 10:05	BGS	D
Well Volumes Purged	1.76		Vol		Field	1	02/07/2024 10:05	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	19.1		mg/L	0.11	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Iron, Total	0.19		mg/L	0.067	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Magnesium, Total	7.5		mg/L	0.11	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Manganese, Total	0.28		mg/L	0.0056	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Potassium, Total	4.6		mg/L	0.56	SW846 6010C	1	02/11/2025 14:05	MSY	J1
Sodium, Total	16.3		mg/L	0.56	SW846 6010C	1	02/11/2025 14:05	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:15	PDK	H



Results

Client Sample ID	FFMP002W	Collected	02/07/2025 10:05
Lab Sample ID	3399736002	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			90.1%	62 – 133		02/19/2025 04:15		
4-Bromofluorobenzene	460-00-4			103%	79 – 114		02/19/2025 04:15		
Dibromofluoromethane	1868-53-7			88.3%	78 – 116		02/19/2025 04:15		
Toluene-d8	2037-26-5			98.4%	76 – 127		02/19/2025 04:15		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	02/14/2025 00:05	JXK	B
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	02/14/2025 00:05	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 15:21	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	18.2		mg/L	2.0	EPA 300.0	2	02/08/2025 17:39	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 17:39	GMM	B
Nitrate-N	15.1		mg/L	1.0	EPA 300.0	2	02/08/2025 17:39	GMM	B
pH	6.47	2	pH_Units		S4500HB-11	1	02/14/2025 00:05	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:36	AKH	G
Specific Conductance	261		umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	32.7		mg/L	2.0	EPA 300.0	2	02/08/2025 17:39	GMM	B
Total Dissolved Solids	166		mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	0.63		mg/L	0.50	SW846 9060A	1	02/12/2025 01:50	PAG	E
Turbidity	2.4		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FFMP032W	Collected	02/07/2025 10:38
Lab Sample ID	3399736003	Lab Receipt	02/07/2025 16:20

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	52.54		Feet		Field	1	02/07/2025 10:38	BGS	D
Dissolved Oxygen	0.27		mg/L	0.01	Field	1	02/07/2025 10:38	BGS	D
Elev Top MW Casing above MSL	594.09		Feet		Field	1	02/07/2025 10:38	BGS	D
Flow Rate	0.47		gal/min		Field	1	02/07/2025 10:38	BGS	D
Ground Water Elevation	541.55		ft/MSL		Field	1	02/07/2025 10:38	BGS	D
Oxidation-Reduction Potential	-68		mV		Field	1	02/07/2025 10:38	BGS	D
pH, Field (SM4500B)	6.57		pH_Units		Field	1	02/07/2025 10:38	BGS	D
Sample Depth	62.00		Feet		Field	1	02/07/2025 10:38	BGS	D
Specific Conductance, Field	243		umhos/cm	1	Field	1	02/07/2025 10:38	BGS	D
Temperature	14.03		Deg. C		Field	1	02/07/2025 10:38	BGS	D
Total Well Depth	77.60		Feet		Field	1	02/07/2025 10:38	BGS	D
Turbidity, Field	9		NTU	1	Field	1	02/07/2025 10:38	BGS	D
Volume in Water Column	36.84		Gallons		Field	1	02/07/2025 10:38	BGS	D
Water Level After Purge	58.25		Feet		Field	1	02/07/2025 10:38	BGS	D
Well Volumes Purged	0.31		Vol		Field	1	02/07/2025 10:38	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	21.0		mg/L	0.11	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Iron, Total	9.3		mg/L	0.067	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Magnesium, Total	7.1		mg/L	0.11	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Manganese, Total	0.81		mg/L	0.0056	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Potassium, Total	1.7		mg/L	0.56	SW846 6010C	1	02/11/2025 14:06	MSY	J1
Sodium, Total	14.2		mg/L	0.56	SW846 6010C	1	02/11/2025 14:06	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 04:35	PDK	H



Results

Client Sample ID	FFMP032W	Collected	02/07/2025 10:38
Lab Sample ID	3399736003	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			96.7%	62 – 133		02/19/2025 04:35		
4-Bromofluorobenzene	460-00-4			108%	79 – 114		02/19/2025 04:35		
Dibromofluoromethane	1868-53-7			96.5%	78 – 116		02/19/2025 04:35		
Toluene-d8	2037-26-5			102%	76 – 127		02/19/2025 04:35		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	59		mg/L	5	SM2320B-2011	1	02/14/2025 00:16	JXK	B
Alkalinity, Total	59	1	mg/L	5	SM2320B-2011	1	02/14/2025 00:16	JXK	B
Ammonia-N, Low Level	0.38		mg/L	0.10	SM 4500-NH3G	1	02/13/2025 15:39	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	33.6		mg/L	2.0	EPA 300.0	2	02/08/2025 17:50	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 17:50	GMM	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/08/2025 17:50	GMM	B
pH	7.88	2	pH_Units		S4500HB-11	1	02/14/2025 00:16	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:55	AKH	G
Specific Conductance	225		umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/08/2025 17:50	GMM	B
Total Dissolved Solids	119		mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	0.51		mg/L	0.50	SW846 9060A	1	02/12/2025 01:50	PAG	E
Turbidity	95		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FIELD BLANK	Collected	02/07/2025 15:00
Lab Sample ID	3399736004	Lab Receipt	02/07/2025 16:20

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	ND	ND	mg/L	0.11	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Magnesium, Total	ND	ND	mg/L	0.11	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Manganese, Total	ND	ND	mg/L	0.0056	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Potassium, Total	ND	ND	mg/L	0.56	SW846 6010C	1	02/11/2025 14:13	MSY	J1
Sodium, Total	ND	ND	mg/L	0.56	SW846 6010C	1	02/11/2025 14:13	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/19/2025 00:17	PDK	H

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	91.5%	62 – 133	02/19/2025 00:17	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	02/19/2025 00:17	
Dibromofluoromethane	1868-53-7	91.2%	78 – 116	02/19/2025 00:17	
Toluene-d8	2037-26-5	98.7%	76 – 127	02/19/2025 00:17	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	02/14/2025 00:26	JXK	B
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	02/14/2025 00:26	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 16:24	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/11/2025 10:15	KMS	A
Chloride	ND	ND	mg/L	2.0	EPA 300.0	2	02/08/2025 18:02	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/08/2025 18:02	GMM	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/08/2025 18:02	GMM	B
pH	5.55	2	pH_Units		S4500HB-11	1	02/14/2025 00:26	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/19/2025 12:28	AKH	G



Results

Client Sample ID	FIELD BLANK	Collected	02/07/2025 15:00
Lab Sample ID	3399736004	Lab Receipt	02/07/2025 16:20

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Specific Conductance	ND	ND	umhos/cm	5	SW846 9050A	1	02/20/2025 17:37	LMD	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/08/2025 18:02	GMM	B
Total Dissolved Solids	ND	ND	mg/L	25	SM2540C-15	1	02/13/2025 09:17	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/12/2025 01:50	PAG	E
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	TRIP BLANK	Collected	02/07/2025 16:20
Lab Sample ID	3399736005	Lab Receipt	02/07/2025 16:20

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 23:57	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.2%	62 – 133	02/18/2025 23:57	
4-Bromofluorobenzene	460-00-4	95.5%	79 – 114	02/18/2025 23:57	
Dibromofluoromethane	1868-53-7	99.7%	78 – 116	02/18/2025 23:57	
Toluene-d8	2037-26-5	100%	76 – 127	02/18/2025 23:57	



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399736001	FFMP031W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736002	FFMP002W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736003	FFMP032W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736004	FIELD BLANK	SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399736005	TRIP BLANK	SW846 8260B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399736001	FFMP031W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02		SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
		N/A	N/A	N/A		SW846 9050A	1394860
		N/A	N/A	N/A		SW846 9060A	1386879
3399736002	FFMP002W	SW846 9066	1392908	02/19/2025 08:55	AKH	SW846 9066	1393466
		N/A	N/A	N/A		Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02		SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
		N/A	N/A	N/A		SW846 9050A	1394860
3399736003	FFMP032W	N/A	N/A	N/A	ANN	SW846 9060A	1387566
		SW846 9066	1392908	02/19/2025 08:55		SW846 9066	1393466
		N/A	N/A	N/A		Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02		SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
3399736004	FIELD BLANK	N/A	N/A	N/A	ANN	SW846 9050A	1394860
		SW846 3015A	1386698	02/11/2025 09:02		SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392970
		N/A	N/A	N/A		EPA 300.0	1386066
		N/A	N/A	N/A		EPA 410.4	1387475
		N/A	N/A	N/A		S4500HB-11	1387629
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1387629
		N/A	N/A	N/A		SM2540C-15	1388166
		N/A	N/A	N/A		SW846 9050A	1394860
		N/A	N/A	N/A		SW846 9060A	1387566
3399736005	TRIP BLANK	SW846 9066	1392908	02/19/2025 08:55	AKH	SW846 9066	1393466
		N/A	N/A	N/A		SW846 8260B	1392970



301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

3399736

Logged By: SLS
PH: SJB



of

Client Name: Lancaster County Solid Waste MA		Container Type	AG	AN	CG	P	P	P	P	P	P	WO Temp (°C)
Address: 1299 Harrisburg Pike PO Box 4424		Container Size	40ml	125ml	40ml	500ml	250ml	250ml	125ml	250ml	125ml	Y N NA
Lancaster PA 17604		Preservative	HCL	H2SO4	HCL	UNP	UNP	H2SO4	HNO3			Deviations? NO YES If YES, list below
Contact: Dan Brown		Receipt Info completed by: _____										
Phone#: 717-735-0193		Cooler Custody Seals Intact Y N NA										
Project Name#: Frey Farm Quarterly GWMP		Sample Custody Seal Intact Y N NA										
Bill To: Lancaster County Solid Waste MA		Received on Ice Y N NA										
Purchase Order #:		Coolers & Samples Intact Y N NA										
TAT ☒ Normal-Standard TAT is 10-12 business days.		Correct Containers Provided Y N NA										
Rush-Subject to ALS approval and surcharges.		Sample Label/COC Agree Y N NA										
Date Required: Approved?		Adequate Sample Volumes Y N NA										
Email? ☒ dbrown@lcswwma.org		VOA only: Trip Blank Y N NA										
		NJ ≤ 4 days? Y N NA										
		Client contact: _____										
		Date/Tech: _____										
Sample Description/Location (as it will appear on the lab report)		Date Collected mm/dd/yyyy	Time hhr:mm	Sample(s) for Radiation testing? Y N								
1 FFMP031W		2/7/25	0945	Reportable SDWA Sample(s)? Y N								
2 FFMP002W		2/7/25	1005	SDWA State of Origin? _____								
3 FFMP032W		2/7/25	1038	PWSID # _____								
4 Field Blank		2/7/25	1500	PWS Contact: _____								
5 Trip Blank		2/7/25	1620	PWS Phone #: _____								
6				SDWA Sample Type Key: D=Distribution E=Entry Point								
7				R=Raw P=Plant C=Check S=Special A=Annual Startup								
8				Sample/COC Remarks								
9				Contains Short Hold Testing YES NO								
10				Internal Use: If less than 48 hours - notify lab upon receipt								
Circle Sample Collector: ALS/Tech Client		Comments:		Data Deliverables				State Samples Collected In				
Name: _____ ID: _____								Standard Lvl 1 ☐ CLP-like ☐ HSCA ☐ NY				
Date: _____								Standard Lvl 2 ☐ DOD ☐ Landfill ☐ NJ				
Relinquished By / Company Name		Received By / Company Name						Standard Lvl 3 ☐ NJ RED ☐ NJ GW				
1 ALS ALS ALS		2 ALS ALS ALS						Standard Lvl 4 ☐ NJ Full ☐ PA				
3		4						Excel Summary ☐ Lab ☒ WV				
5		6						Equis ☐ Special ☐ FL				
7		8						Custom ☐ other _____				
9		10						EDDS: _____				
								Format Type _____				

* G-Grab, C-Composite

**Matrix - A=Air, D=Drinking Water, GW=Groundwater, O=Oil, LW=Liquid Waste, S=Solid/Sludge, SW=Surface Water, WP=Pipe, WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 07.06.2023



right solution,
right person.

Middletown Sample Condition Form

Client Lancaster County Workorder 3399736
 Temp °C 6 Therm ID 524 Ice? Y N N/A Initials & Date DAG 2/8/25
 Fedex UPS Client ALS Other Tracking # _____

21 of 21

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			☒	
Sample Custody Seals present & intact			☒	
Chain-of-Custody present	☒			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	☒			
COC/bottle labels complete & in agreement	☒			
• Sample location	☒			
• Date and time of sample collection	☒			
• Type(s) of preservation	☒			
• Number of containers	☒			
• Composite or grab	☒			
• Matrix	☒			
Proper containers, preservation, and volume per method	☒			
Received within hold time	☒			
Containers intact	☒			
Trip blanks present (EPA 504, EPA 524)	☒			
Field blanks present (Hg 1631, PFAS)			☒	
NJ ≤ 4 Days			☒	
CR6 Samples Filtered			☒	
OP Samples Filtered			☒	
WV Containers 0-6°C			☒	
SDWA compliance reporting			☒	

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client
 N/A - Not Applicable
 UC - Updated coc with missing information

Review Comments:

2/24/2025 3:07 PM



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3398717
Report ID 390330 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 03, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3398717001	FFMP015W	Ground Water	02/03/2025 11:04	02/03/2025 14:50	BGS	Analytical Laboratory Service
3398717002	FFMP30RW	Ground Water	02/03/2025 12:49	02/03/2025 14:50	BGS	Analytical Laboratory Service
3398717003	FFMP04AW	Ground Water	02/03/2025 13:19	02/03/2025 14:50	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID	Sample ID
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Result Notations	
Notation Ref.	
E	Result reported exceeds instrument calibration
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The sample was originally run within hold time, but required further analysis that exceeded hold time.
3	This sample was reran out of hold within the instrument's calibration range, for the analyte Nitrate/Nitrite -N, and confirms the initial in-hold reported result.
4	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
5	Analyte was analyzed past the 48 hour holding time.



Detected Results Summary

Client Sample ID	FFMP015W	Collected	02/03/2025 11:04		
Lab Sample ID	3398717001	Lab Receipt	02/03/2025 14:50		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	63.79	Feet		Field	#
Dissolved Oxygen	7.81	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	576.40	Feet		Field	#
Flow Rate	1.22	gal/min		Field	#
Ground Water Elevation	512.61	ft/MSL		Field	#
Oxidation-Reduction Potential	269	mV		Field	#
pH, Field (SM4500B)	5.46	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	469	umhos/cm	1	Field	#
Temperature	8.29	Deg. C		Field	#
Total Well Depth	149.90	Feet		Field	#
Volume in Water Column	126.58	Gallons		Field	#
Water Level After Purge	85.25	Feet		Field	#
Well Volumes Purged	1.01	Vol		Field	#
METALS					
Calcium, Total	30.1	mg/L	0.11	SW846 6010C	#
Magnesium, Total	25.6	mg/L	0.11	SW846 6010C	#
Potassium, Total	2.3	mg/L	0.56	SW846 6010C	#
Sodium, Total	20.7	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	35	mg/L	5	SM2320B-2011	#
Alkalinity, Total	35	mg/L	5	SM2320B-2011	#
Chloride	31.9	mg/L	2.0	EPA 300.0	#
Nitrate-N	29.0	mg/L	1.0	EPA 300.0	#
pH	7.62	pH_Units		S4500HB-11	#
Specific Conductance	485	umhos/cm	5	SW846 9050A	#
Sulfate	31.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	266	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.2	mg/L	0.50	SW846 9060A	#
Turbidity	0.70	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP30RW	Collected	02/03/2025 12:49		
Lab Sample ID	3398717002	Lab Receipt	02/03/2025 14:50		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	37.82	Feet		Field	#
Dissolved Oxygen	0.13	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	562.30	Feet		Field	#
Flow Rate	1.48	gal/min		Field	#
Ground Water Elevation	524.48	ft/MSL		Field	#
Oxidation-Reduction Potential	281	mV		Field	#
pH, Field (SM4500B)	5.46	pH_Units		Field	#
Sample Depth	85.00	Feet		Field	#
Specific Conductance, Field	1430	umhos/cm	1	Field	#
Temperature	14.00	Deg. C		Field	#
Total Well Depth	94.20	Feet		Field	#
Volume in Water Column	82.88	Gallons		Field	#
Water Level After Purge	59.52	Feet		Field	#
Well Volumes Purged	1.07	Vol		Field	#
METALS					
Calcium, Total	65.7	mg/L	0.11	SW846 6010C	#
Magnesium, Total	21.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	4.3	mg/L	0.0056	SW846 6010C	#
Potassium, Total	10.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	167	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	38	mg/L	5	SM2320B-2011	#
Alkalinity, Total	38	mg/L	5	SM2320B-2011	#
Chloride	365	mg/L	5.0	EPA 300.0	#
Nitrate-N	4.9	mg/L	2.5	EPA 300.0	#
pH	7.63	pH_Units		S4500HB-11	#
Specific Conductance	1440	umhos/cm	5	SW846 9050A	#
Sulfate	66.2	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	770	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.96	mg/L	0.50	SW846 9060A	#
Turbidity	0.75	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP04AW	Collected	02/03/2025 13:19		
Lab Sample ID	3398717003	Lab Receipt	02/03/2025 14:50		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	39.83	Feet		Field	#
Dissolved Oxygen	0.03	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	560.72	Feet		Field	#
Flow Rate	1.91	gal/min		Field	#
Ground Water Elevation	520.89	ft/MSL		Field	#
Oxidation-Reduction Potential	97	mV		Field	#
pH, Field (SM4500B)	6.96	pH_Units		Field	#
Sample Depth	146.00	Feet		Field	#
Specific Conductance, Field	1441	umhos/cm	1	Field	#
Temperature	13.54	Deg. C		Field	#
Total Well Depth	148.50	Feet		Field	#
Volume in Water Column	159.74	Gallons		Field	#
Water Level After Purge	87.84	Feet		Field	#
Well Volumes Purged	1.02	Vol		Field	#
METALS					
Calcium, Total	162	mg/L	0.11	SW846 6010C	#
Magnesium, Total	27.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.36	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.9	mg/L	0.56	SW846 6010C	#
Sodium, Total	91.3	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	188	mg/L	5	SM2320B-2011	#
Alkalinity, Total	188	mg/L	5	SM2320B-2011	#
Chloride	318	mg/L	5.0	EPA 300.0	#
pH	8.20	pH_Units		S4500HB-11	#
Specific Conductance	1480	umhos/cm	5	SW846 9050A	#
Sulfate	54.9	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	888	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.78	mg/L	0.50	SW846 9060A	#
Turbidity	0.80	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP015W	Collected	02/03/2025 11:04
Lab Sample ID	3398717001	Lab Receipt	02/03/2025 14:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	63.79		Feet		Field	1	02/03/2025 11:04	BGS	D
Dissolved Oxygen	7.81		mg/L	0.01	Field	1	02/03/2025 11:04	BGS	D
Elev Top MW Casing above MSL	576.40		Feet		Field	1	02/03/2025 11:04	BGS	D
Flow Rate	1.22		gal/min		Field	1	02/03/2025 11:04	BGS	D
Ground Water Elevation	512.61		ft/MSL		Field	1	02/03/2025 11:04	BGS	D
Oxidation-Reduction Potential	269		mV		Field	1	02/03/2025 11:04	BGS	D
pH, Field (SM4500B)	5.46		pH_Units		Field	1	02/03/2025 11:04	BGS	D
Sample Depth	135.00		Feet		Field	1	02/03/2025 11:04	BGS	D
Specific Conductance, Field	469		umhos/cm	1	Field	1	02/03/2025 11:04	BGS	D
Temperature	8.29		Deg. C		Field	1	02/03/2025 11:04	BGS	D
Total Well Depth	149.90		Feet		Field	1	02/03/2025 11:04	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/03/2025 11:04	BGS	D
Volume in Water Column	126.58		Gallons		Field	1	02/03/2025 11:04	BGS	D
Water Level After Purge	85.25		Feet		Field	1	02/03/2025 11:04	BGS	D
Well Volumes Purged	1.01		Vol		Field	1	02/03/2025 11:04	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	30.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Magnesium, Total	25.6		mg/L	0.11	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Manganese, Total	ND	ND	mg/L	0.0056	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Potassium, Total	2.3		mg/L	0.56	SW846 6010C	1	02/21/2025 09:31	MSY	J1
Sodium, Total	20.7		mg/L	0.56	SW846 6010C	1	02/21/2025 09:31	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:39	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:39	BST	H



Results

Client Sample ID	FFMP015W	Collected	02/03/2025 11:04
Lab Sample ID	3398717001	Lab Receipt	02/03/2025 14:50

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			94.6%	62 – 133		02/15/2025 03:39		
4-Bromofluorobenzene	460-00-4			97.7%	79 – 114		02/15/2025 03:39		
Dibromofluoromethane	1868-53-7			92.8%	78 – 116		02/15/2025 03:39		
Toluene-d8	2037-26-5			98.8%	76 – 127		02/15/2025 03:39		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	35		mg/L	5	SM2320B-2011	1	02/07/2025 03:01	JXK	B
Alkalinity, Total	35	1	mg/L	5	SM2320B-2011	1	02/07/2025 03:01	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/05/2025 13:28	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	31.9		mg/L	2.0	EPA 300.0	2	02/04/2025 11:53	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/04/2025 11:53	J1W	B
Nitrate-N	29.0	E,2,3	mg/L	1.0	EPA 300.0	2	02/04/2025 11:53	J1W	B
pH	7.62	4	pH_Units		S4500HB-11	1	02/07/2025 03:01	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 14:54	AKH	G
Specific Conductance	485		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	31.6		mg/L	2.0	EPA 300.0	2	02/04/2025 11:53	J1W	B
Total Dissolved Solids	266		mg/L	25	SM2540C-15	1	02/07/2025 09:00	RAG	B
Total Organic Carbon (TOC)	1.2		mg/L	0.50	SW846 9060A	1	02/04/2025 19:00	PAG	E
Turbidity	0.70	5	NTU	0.30	SM2130B-2011	1	02/04/2025 09:09	NPF	B



Results

Client Sample ID	FFMP30RW	Collected	02/03/2025 12:49
Lab Sample ID	3398717002	Lab Receipt	02/03/2025 14:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	37.82		Feet		Field	1	02/03/2025 12:49	BGS	D
Dissolved Oxygen	0.13		mg/L	0.01	Field	1	02/03/2025 12:49	BGS	D
Elev Top MW Casing above MSL	562.30		Feet		Field	1	02/03/2025 12:49	BGS	D
Flow Rate	1.48		gal/min		Field	1	02/03/2025 12:49	BGS	D
Ground Water Elevation	524.48		ft/MSL		Field	1	02/03/2025 12:49	BGS	D
Oxidation-Reduction Potential	281		mV		Field	1	02/03/2025 12:49	BGS	D
pH, Field (SM4500B)	5.46		pH_Units		Field	1	02/03/2025 12:49	BGS	D
Sample Depth	85.00		Feet		Field	1	02/03/2025 12:49	BGS	D
Specific Conductance, Field	1430		umhos/cm	1	Field	1	02/03/2025 12:49	BGS	D
Temperature	14.00		Deg. C		Field	1	02/03/2025 12:49	BGS	D
Total Well Depth	94.20		Feet		Field	1	02/03/2025 12:49	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/03/2025 12:49	BGS	D
Volume in Water Column	82.88		Gallons		Field	1	02/03/2025 12:49	BGS	D
Water Level After Purge	59.52		Feet		Field	1	02/03/2025 12:49	BGS	D
Well Volumes Purged	1.07		Vol		Field	1	02/03/2025 12:49	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	65.7		mg/L	0.11	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Magnesium, Total	21.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Manganese, Total	4.3		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Potassium, Total	10.7		mg/L	0.56	SW846 6010C	1	02/21/2025 09:32	MSY	J1
Sodium, Total	167		mg/L	0.56	SW846 6010C	1	02/21/2025 09:32	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 03:59	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 03:59	BST	H



Results

Client Sample ID	FFMP30RW	Collected	02/03/2025 12:49
Lab Sample ID	3398717002	Lab Receipt	02/03/2025 14:50

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			103%	62 – 133		02/15/2025 03:59		
4-Bromofluorobenzene	460-00-4			97.5%	79 – 114		02/15/2025 03:59		
Dibromofluoromethane	1868-53-7			102%	78 – 116		02/15/2025 03:59		
Toluene-d8	2037-26-5			103%	76 – 127		02/15/2025 03:59		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	38		mg/L	5	SM2320B-2011	1	02/07/2025 03:13	JXK	B
Alkalinity, Total	38	1	mg/L	5	SM2320B-2011	1	02/07/2025 03:13	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/05/2025 11:51	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	365		mg/L	5.0	EPA 300.0	5	02/04/2025 12:06	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/04/2025 12:06	J1W	B
Nitrate-N	4.9		mg/L	2.5	EPA 300.0	5	02/04/2025 12:06	J1W	B
pH	7.63	4	pH_Units		S4500HB-11	1	02/07/2025 03:13	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 15:00	AKH	G
Specific Conductance	1440		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	66.2		mg/L	5.0	EPA 300.0	5	02/04/2025 12:06	J1W	B
Total Dissolved Solids	770		mg/L	25	SM2540C-15	1	02/07/2025 09:00	RAG	B
Total Organic Carbon (TOC)	0.96		mg/L	0.50	SW846 9060A	1	02/04/2025 19:00	PAG	E
Turbidity	0.75	5	NTU	0.30	SM2130B-2011	1	02/04/2025 09:09	NPF	B



Results

Client Sample ID	FFMP04AW	Collected	02/03/2025 13:19
Lab Sample ID	3398717003	Lab Receipt	02/03/2025 14:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	39.83		Feet		Field	1	02/03/2025 13:19	BGS	D
Dissolved Oxygen	0.03		mg/L	0.01	Field	1	02/03/2025 13:19	BGS	D
Elev Top MW Casing above MSL	560.72		Feet		Field	1	02/03/2025 13:19	BGS	D
Flow Rate	1.91		gal/min		Field	1	02/03/2025 13:19	BGS	D
Ground Water Elevation	520.89		ft/MSL		Field	1	02/03/2025 13:19	BGS	D
Oxidation-Reduction Potential	97		mV		Field	1	02/03/2025 13:19	BGS	D
pH, Field (SM4500B)	6.96		pH_Units		Field	1	02/03/2025 13:19	BGS	D
Sample Depth	146.00		Feet		Field	1	02/03/2025 13:19	BGS	D
Specific Conductance, Field	1441		umhos/cm	1	Field	1	02/03/2025 13:19	BGS	D
Temperature	13.54		Deg. C		Field	1	02/03/2025 13:19	BGS	D
Total Well Depth	148.50		Feet		Field	1	02/03/2025 13:19	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/03/2025 13:19	BGS	D
Volume in Water Column	159.74		Gallons		Field	1	02/03/2025 13:19	BGS	D
Water Level After Purge	87.84		Feet		Field	1	02/03/2025 13:19	BGS	D
Well Volumes Purged	1.02		Vol		Field	1	02/03/2025 13:19	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	162		mg/L	0.11	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Magnesium, Total	27.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Manganese, Total	0.36		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Potassium, Total	2.9		mg/L	0.56	SW846 6010C	1	02/21/2025 09:33	MSY	J1
Sodium, Total	91.3		mg/L	0.56	SW846 6010C	1	02/21/2025 09:33	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/15/2025 04:19	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/15/2025 04:19	BST	H



Results

Client Sample ID	FFMP04AW	Collected	02/03/2025 13:19
Lab Sample ID	3398717003	Lab Receipt	02/03/2025 14:50

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			92.6%	62 – 133		02/15/2025 04:19		
4-Bromofluorobenzene	460-00-4			105%	79 – 114		02/15/2025 04:19		
Dibromofluoromethane	1868-53-7			92.5%	78 – 116		02/15/2025 04:19		
Toluene-d8	2037-26-5			99.4%	76 – 127		02/15/2025 04:19		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	188		mg/L	5	SM2320B-2011	1	02/07/2025 03:24	JXK	B
Alkalinity, Total	188	1	mg/L	5	SM2320B-2011	1	02/07/2025 03:24	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/05/2025 12:00	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/07/2025 10:35	KMS	A
Chloride	318		mg/L	5.0	EPA 300.0	5	02/04/2025 12:19	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/04/2025 12:19	J1W	B
Nitrate-N	ND	ND	mg/L	2.5	EPA 300.0	5	02/04/2025 12:19	J1W	B
pH	8.20	4	pH_Units		S4500HB-11	1	02/07/2025 03:24	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 14:56	AKH	G
Specific Conductance	1480		umhos/cm	5	SW846 9050A	1	02/18/2025 14:10	MAN	B
Sulfate	54.9		mg/L	5.0	EPA 300.0	5	02/04/2025 12:19	J1W	B
Total Dissolved Solids	888		mg/L	25	SM2540C-15	1	02/07/2025 09:00	RAG	B
Total Organic Carbon (TOC)	0.78		mg/L	0.50	SW846 9060A	1	02/04/2025 19:00	PAG	E
Turbidity	0.80	5	NTU	0.30	SM2130B-2011	1	02/04/2025 09:09	NPF	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3398717001	FFMP015W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398717002	FFMP30RW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3398717003	FFMP04AW	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3398717001	FFMP015W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1383163
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1383309
		N/A	N/A	N/A		SM2130B-2011	1383171
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385003
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1383270
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398717002	FFMP30RW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1383163
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1383313
		N/A	N/A	N/A		SM2130B-2011	1383171
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385005
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1383270
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3398717003	FFMP04AW	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02	ANN	SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1390368
		N/A	N/A	N/A		EPA 300.0	1383163
		N/A	N/A	N/A		EPA 410.4	1385070
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1383309
		N/A	N/A	N/A		SM2130B-2011	1383171
		N/A	N/A	N/A		SM2320B-2011	1385032
		N/A	N/A	N/A		SM2540C-15	1385005
		N/A	N/A	N/A		SW846 9050A	1392892
		N/A	N/A	N/A		SW846 9060A	1383270
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



CHAIN OF CUSTODY/

**301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541**



3398717

Logged By: STS
EM: SJB



ted by Receiving Lab)

352 WO Temp (°C) (0

ted by Receiving Lab)

352 WO Temp (°C) (0

[illegible]



Right solution.
Right partner.

Middletown Sample Condition Form

Client Lancaster County Workorder 3398717
 Temp °C 6 Therm ID 571 Ice? (Y) N N/A Initials & Date MP 2/3/25
 Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement				
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method				
Received within hold time				
Containers intact				
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)				
NJ ≤ 4 Days				
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C				
SDWA compliance reporting				

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client

N/A - Not Applicable

UC - Updated coc with missing information

Review Comments:



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3399149
Report ID 390329 on 2/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 05, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3399149001	FFMP029W	Ground Water	02/05/2025 09:09	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149002	FFMP017W	Ground Water	02/05/2025 09:51	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149003	FFMP039W	Ground Water	02/05/2025 12:07	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149004	FFMP038W	Ground Water	02/05/2025 13:11	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149005	FFMP035W	Ground Water	02/05/2025 14:29	02/05/2025 16:45	BGS	Analytical Laboratory Service
3399149006	FFMP036W	Ground Water	02/05/2025 15:29	02/05/2025 16:45	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The QC sample type MS for method EPA 350.1 was outside the control limits for the analyte Ammonia-N, Low Level. The % Recovery was reported as 72.1 and the control limits were 80 to 120.
4	The QC sample type MS for method EPA 300.0 was outside the control limits for the analyte Chloride. The % Recovery was reported as 78.8 and the control limits were 80 to 120.



Detected Results Summary

Client Sample ID	FFMP029W	Collected	02/05/2025 09:09		
Lab Sample ID	3399149001	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	41.91	Feet		Field	#
Dissolved Oxygen	5.91	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	477.30	Feet		Field	#
Flow Rate	2.09	gal/min		Field	#
Ground Water Elevation	435.39	ft/MSL		Field	#
Oxidation-Reduction Potential	260	mV		Field	#
pH, Field (SM4500B)	4.68	pH_Units		Field	#
Sample Depth	55.00	Feet		Field	#
Specific Conductance, Field	236	umhos/cm	1	Field	#
Temperature	14.60	Deg. C		Field	#
Total Well Depth	60.50	Feet		Field	#
Volume in Water Column	27.33	Gallons		Field	#
Water Level After Purge	47.75	Feet		Field	#
Well Volumes Purged	2.29	Vol		Field	#
METALS					
Calcium, Total	13.1	mg/L	0.11	SW846 6010C	#
Magnesium, Total	10.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.012	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.0	mg/L	0.56	SW846 6010C	#
Sodium, Total	13.8	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	12	mg/L	5	SM2320B-2011	#
Alkalinity, Total	12	mg/L	5	SM2320B-2011	#
Chloride	58.2	mg/L	2.0	EPA 300.0	#
Nitrate-N	3.9	mg/L	1.0	EPA 300.0	#
pH	7.07	pH_Units		S4500HB-11	#
Specific Conductance	241	umhos/cm	5	SW846 9050A	#
Total Dissolved Solids	139	mg/L	25	SM2540C-15	#
Turbidity	0.80	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP017W	Collected	02/05/2025 09:51		
Lab Sample ID	3399149002	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	44.29	Feet		Field	#
Dissolved Oxygen	1.01	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	480.70	Feet		Field	#
Flow Rate	1.94	gal/min		Field	#
Ground Water Elevation	436.41	ft/MSL		Field	#
Oxidation-Reduction Potential	207	mV		Field	#
pH, Field (SM4500B)	5.99	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	1947	umhos/cm	1	Field	#
Temperature	12.71	Deg. C		Field	#
Total Well Depth	150.50	Feet		Field	#
Volume in Water Column	156.13	Gallons		Field	#
Water Level After Purge	50.93	Feet		Field	#
Well Volumes Purged	1.12	Vol		Field	#
METALS					
Calcium, Total	152	mg/L	0.11	SW846 6010C	#
Magnesium, Total	52.8	mg/L	0.11	SW846 6010C	#
Manganese, Total	1.3	mg/L	0.0056	SW846 6010C	#
Potassium, Total	13.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	155	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	85	mg/L	5	SM2320B-2011	#
Alkalinity, Total	85	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.13	mg/L	0.10	SM 4500-NH3G	#
Chloride	538	mg/L	10.0	EPA 300.0	#
Nitrate-N	4.7	mg/L	2.5	EPA 300.0	#
pH	7.87	pH_Units		S4500HB-11	#
Specific Conductance	2020	umhos/cm	5	SW846 9050A	#
Sulfate	132	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	1150	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	3.2	mg/L	0.50	SW846 9060A	#
Turbidity	1.3	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP039W	Collected	02/05/2025 12:07		
Lab Sample ID	3399149003	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	16.44	Feet		Field	#
Elev Top MW Casing above MSL	455.65	Feet		Field	#
Flow Rate	1.88	gal/min		Field	#
Ground Water Elevation	439.21	ft/MSL		Field	#
Oxidation-Reduction Potential	112	mV		Field	#
pH, Field (SM4500B)	5.82	pH_Units		Field	#
Sample Depth	118.00	Feet		Field	#
Specific Conductance, Field	921	umhos/cm	1	Field	#
Temperature	14.12	Deg. C		Field	#
Total Well Depth	131.50	Feet		Field	#
Turbidity, Field	4	NTU	1	Field	#
Volume in Water Column	169.14	Gallons		Field	#
Water Level After Purge	22.07	Feet		Field	#
Well Volumes Purged	1.06	Vol		Field	#
METALS					
Calcium, Total	68.2	mg/L	0.11	SW846 6010C	#
Iron, Total	1.7	mg/L	0.067	SW846 6010C	#
Magnesium, Total	23.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.73	mg/L	0.0056	SW846 6010C	#
Potassium, Total	6.3	mg/L	0.56	SW846 6010C	#
Sodium, Total	69.6	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	44	mg/L	5	SM2320B-2011	#
Alkalinity, Total	44	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.27	mg/L	0.10	SM 4500-NH3G	#
Chloride	243	mg/L	5.0	EPA 300.0	#
Nitrate-N	3.4	mg/L	1.0	EPA 300.0	#
pH	7.54	pH_Units		S4500HB-11	#
Specific Conductance	934	umhos/cm	5	SW846 9050A	#
Sulfate	42.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	552	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.3	mg/L	0.50	SW846 9060A	#
Turbidity	17	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP038W	Collected	02/05/2025 13:11		
Lab Sample ID	3399149004	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	22.48	Feet		Field	#
Dissolved Oxygen	0.03	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	454.05	Feet		Field	#
Flow Rate	0.35	gal/min		Field	#
Ground Water Elevation	431.57	ft/MSL		Field	#
Oxidation-Reduction Potential	-192	mV		Field	#
pH, Field (SM4500B)	8.14	pH_Units		Field	#
Sample Depth	46.00	Feet		Field	#
Specific Conductance, Field	464	umhos/cm	1	Field	#
Temperature	10.41	Deg. C		Field	#
Total Well Depth	52.00	Feet		Field	#
Turbidity, Field	2	NTU	1	Field	#
Volume in Water Column	43.39	Gallons		Field	#
Water Level After Purge	32.41	Feet		Field	#
Well Volumes Purged	1.13	Vol		Field	#
METALS					
Calcium, Total	68.5	mg/L	0.11	SW846 6010C	#
Iron, Total	1.6	mg/L	0.067	SW846 6010C	#
Magnesium, Total	6.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.077	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.2	mg/L	0.56	SW846 6010C	#
Sodium, Total	14.2	mg/L	0.56	SW846 6010C	#
VOLATILE ORGANICS					
Toluene	1.3	ug/L	1.0	SW846 8260B	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	77	mg/L	5	SM2320B-2011	#
Alkalinity, Total	77	mg/L	5	SM2320B-2011	#
Chloride	99.0	mg/L	2.0	EPA 300.0	#
pH	8.14	pH_Units		S4500HB-11	#
Specific Conductance	476	umhos/cm	5	SW846 9050A	#
Sulfate	13.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	296	mg/L	25	SM2540C-15	#
Turbidity	18	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP035W	Collected	02/05/2025 14:29		
Lab Sample ID	3399149005	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	43.53	Feet		Field	#
Dissolved Oxygen	0.21	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	477.56	Feet		Field	#
Flow Rate	0.78	gal/min		Field	#
Ground Water Elevation	434.03	ft/MSL		Field	#
Oxidation-Reduction Potential	96	mV		Field	#
pH, Field (SM4500B)	6.68	pH_Units		Field	#
Sample Depth	65.00	Feet		Field	#
Specific Conductance, Field	887	umhos/cm	1	Field	#
Temperature	12.32	Deg. C		Field	#
Total Well Depth	71.80	Feet		Field	#
Volume in Water Column	41.56	Gallons		Field	#
Water Level After Purge	48.33	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	106	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.7	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.016	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.3	mg/L	0.56	SW846 6010C	#
Sodium, Total	51.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	141	mg/L	5	SM2320B-2011	#
Alkalinity, Total	141	mg/L	5	SM2320B-2011	#
Chloride	166	mg/L	2.0	EPA 300.0	#
Nitrate-N	7.7	mg/L	1.0	EPA 300.0	#
pH	8.17	pH_Units		S4500HB-11	#
Specific Conductance	920	umhos/cm	5	SW846 9050A	#
Sulfate	49.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	534	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.99	mg/L	0.50	SW846 9060A	#
Turbidity	1.5	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP036W	Collected	02/05/2025 15:29		
Lab Sample ID	3399149006	Lab Receipt	02/05/2025 16:45		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	51.50	Feet		Field	#
Dissolved Oxygen	0.12	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	478.23	Feet		Field	#
Flow Rate	1.65	gal/min		Field	#
Ground Water Elevation	426.73	ft/MSL		Field	#
Oxidation-Reduction Potential	-165	mV		Field	#
pH, Field (SM4500B)	8.10	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	360	umhos/cm	1	Field	#
Temperature	6.57	Deg. C		Field	#
Total Well Depth	142.60	Feet		Field	#
Volume in Water Column	133.92	Gallons		Field	#
Water Level After Purge	78.25	Feet		Field	#
Well Volumes Purged	1.73	Vol		Field	#
METALS					
Calcium, Total	53.5	mg/L	0.11	SW846 6010C	#
Iron, Total	0.93	mg/L	0.067	SW846 6010C	#
Magnesium, Total	5.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.098	mg/L	0.0056	SW846 6010C	#
Potassium, Total	0.92	mg/L	0.56	SW846 6010C	#
Sodium, Total	15.7	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	101	mg/L	5	SM2320B-2011	#
Alkalinity, Total	101	mg/L	5	SM2320B-2011	#
Chloride	36.2	mg/L	2.0	EPA 300.0	#
pH	8.28	pH_Units		S4500HB-11	#
Specific Conductance	367	umhos/cm	5	SW846 9050A	#
Sulfate	35.4	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	207	mg/L	25	SM2540C-15	#
Turbidity	7.7	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP029W	Collected	02/05/2025 09:09
Lab Sample ID	3399149001	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	41.91		Feet		Field	1	02/05/2025 09:09	BGS	D
Dissolved Oxygen	5.91		mg/L	0.01	Field	1	02/05/2025 09:09	BGS	D
Elev Top MW Casing above MSL	477.30		Feet		Field	1	02/05/2025 09:09	BGS	D
Flow Rate	2.09		gal/min		Field	1	02/05/2025 09:09	BGS	D
Ground Water Elevation	435.39		ft/MSL		Field	1	02/05/2025 09:09	BGS	D
Oxidation-Reduction Potential	260		mV		Field	1	02/05/2025 09:09	BGS	D
pH, Field (SM4500B)	4.68		pH_Units		Field	1	02/05/2025 09:09	BGS	D
Sample Depth	55.00		Feet		Field	1	02/05/2025 09:09	BGS	D
Specific Conductance, Field	236		umhos/cm	1	Field	1	02/05/2025 09:09	BGS	D
Temperature	14.60		Deg. C		Field	1	02/05/2025 09:09	BGS	D
Total Well Depth	60.50		Feet		Field	1	02/05/2025 09:09	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 09:09	BGS	D
Volume in Water Column	27.33		Gallons		Field	1	02/05/2025 09:09	BGS	D
Water Level After Purge	47.75		Feet		Field	1	02/05/2025 09:09	BGS	D
Well Volumes Purged	2.29		Vol		Field	1	02/05/2025 09:09	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	13.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Magnesium, Total	10.1		mg/L	0.11	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Manganese, Total	0.012		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Potassium, Total	2.0		mg/L	0.56	SW846 6010C	1	02/21/2025 09:55	MSY	J1
Sodium, Total	13.8		mg/L	0.56	SW846 6010C	1	02/21/2025 09:55	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:13	PDK	H



Results

Client Sample ID	FFMP029W	Collected	02/05/2025 09:09
Lab Sample ID	3399149001	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			91.1%	62 – 133		02/18/2025 02:13		
4-Bromofluorobenzene	460-00-4			98.5%	79 – 114		02/18/2025 02:13		
Dibromofluoromethane	1868-53-7			91.6%	78 – 116		02/18/2025 02:13		
Toluene-d8	2037-26-5			97.2%	76 – 127		02/18/2025 02:13		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	12		mg/L	5	SM2320B-2011	1	02/08/2025 20:40	JXK	B
Alkalinity, Total	12	1	mg/L	5	SM2320B-2011	1	02/08/2025 20:40	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 12:57	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	58.2		mg/L	2.0	EPA 300.0	2	02/06/2025 12:09	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 12:09	J1W	B
Nitrate-N	3.9		mg/L	1.0	EPA 300.0	2	02/06/2025 12:09	J1W	B
pH	7.07	2	pH_Units		S4500HB-11	1	02/08/2025 01:38	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:13	AKH	G
Specific Conductance	241		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	02/06/2025 12:09	J1W	B
Total Dissolved Solids	139		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	0.80		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP017W	Collected	02/05/2025 09:51
Lab Sample ID	3399149002	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	44.29		Feet		Field	1	02/05/2025 09:51	BGS	D
Dissolved Oxygen	1.01		mg/L	0.01	Field	1	02/05/2025 09:51	BGS	D
Elev Top MW Casing above MSL	480.70		Feet		Field	1	02/05/2025 09:51	BGS	D
Flow Rate	1.94		gal/min		Field	1	02/05/2025 09:51	BGS	D
Ground Water Elevation	436.41		ft/MSL		Field	1	02/05/2025 09:51	BGS	D
Oxidation-Reduction Potential	207		mV		Field	1	02/05/2025 09:51	BGS	D
pH, Field (SM4500B)	5.99		pH_Units		Field	1	02/05/2025 09:51	BGS	D
Sample Depth	135.00		Feet		Field	1	02/05/2025 09:51	BGS	D
Specific Conductance, Field	1947		umhos/cm	1	Field	1	02/05/2025 09:51	BGS	D
Temperature	12.71		Deg. C		Field	1	02/05/2025 09:51	BGS	D
Total Well Depth	150.50		Feet		Field	1	02/05/2025 09:51	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 09:51	BGS	D
Volume in Water Column	156.13		Gallons		Field	1	02/05/2025 09:51	BGS	D
Water Level After Purge	50.93		Feet		Field	1	02/05/2025 09:51	BGS	D
Well Volumes Purged	1.12		Vol		Field	1	02/05/2025 09:51	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	152		mg/L	0.11	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Magnesium, Total	52.8		mg/L	0.11	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Manganese, Total	1.3		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Potassium, Total	13.7		mg/L	0.56	SW846 6010C	1	02/21/2025 09:57	MSY	J1
Sodium, Total	155		mg/L	0.56	SW846 6010C	1	02/21/2025 09:57	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:33	PDK	H



Results

Client Sample ID	FFMP017W	Collected	02/05/2025 09:51
Lab Sample ID	3399149002	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			91.3%	62 – 133		02/18/2025 02:33		
4-Bromofluorobenzene	460-00-4			95.2%	79 – 114		02/18/2025 02:33		
Dibromofluoromethane	1868-53-7			90.7%	78 – 116		02/18/2025 02:33		
Toluene-d8	2037-26-5			98.1%	76 – 127		02/18/2025 02:33		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	85		mg/L	5	SM2320B-2011	1	02/08/2025 20:51	JXK	B
Alkalinity, Total	85	1	mg/L	5	SM2320B-2011	1	02/08/2025 20:51	JXK	B
Ammonia-N, Low Level	0.13	3	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 13:42	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	538		mg/L	10.0	EPA 300.0	10	02/07/2025 19:14	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	02/06/2025 12:21	J1W	B
Nitrate-N	4.7		mg/L	2.5	EPA 300.0	5	02/06/2025 12:21	J1W	B
pH	7.87	2	pH_Units		S4500HB-11	1	02/08/2025 01:49	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:03	AKH	G
Specific Conductance	2020		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	132		mg/L	5.0	EPA 300.0	5	02/06/2025 12:21	J1W	B
Total Dissolved Solids	1150		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	3.2		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	1.3		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP039W	Collected	02/05/2025 12:07
Lab Sample ID	3399149003	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	16.44		Feet		Field	1	02/05/2025 12:07	BGS	D
Dissolved Oxygen	ND	ND	mg/L	0.01	Field	1	02/05/2025 12:07	BGS	D
Elev Top MW Casing above MSL	455.65		Feet		Field	1	02/05/2025 12:07	BGS	D
Flow Rate	1.88		gal/min		Field	1	02/05/2025 12:07	BGS	D
Ground Water Elevation	439.21		ft/MSL		Field	1	02/05/2025 12:07	BGS	D
Oxidation-Reduction Potential	112		mV		Field	1	02/05/2025 12:07	BGS	D
pH, Field (SM4500B)	5.82		pH_Units		Field	1	02/05/2025 12:07	BGS	D
Sample Depth	118.00		Feet		Field	1	02/05/2025 12:07	BGS	D
Specific Conductance, Field	921		umhos/cm	1	Field	1	02/05/2025 12:07	BGS	D
Temperature	14.12		Deg. C		Field	1	02/05/2025 12:07	BGS	D
Total Well Depth	131.50		Feet		Field	1	02/05/2025 12:07	BGS	D
Turbidity, Field	4		NTU	1	Field	1	02/05/2025 12:07	BGS	D
Volume in Water Column	169.14		Gallons		Field	1	02/05/2025 12:07	BGS	D
Water Level After Purge	22.07		Feet		Field	1	02/05/2025 12:07	BGS	D
Well Volumes Purged	1.06		Vol		Field	1	02/05/2025 12:07	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	68.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Iron, Total	1.7		mg/L	0.067	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Magnesium, Total	23.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Manganese, Total	0.73		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Potassium, Total	6.3		mg/L	0.56	SW846 6010C	1	02/21/2025 09:58	MSY	J1
Sodium, Total	69.6		mg/L	0.56	SW846 6010C	1	02/21/2025 09:58	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 02:52	PDK	H



Results

Client Sample ID	FFMP039W	Collected	02/05/2025 12:07
Lab Sample ID	3399149003	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			92.6%	62 – 133		02/18/2025 02:52		
4-Bromofluorobenzene	460-00-4			104%	79 – 114		02/18/2025 02:52		
Dibromofluoromethane	1868-53-7			92.4%	78 – 116		02/18/2025 02:52		
Toluene-d8	2037-26-5			101%	76 – 127		02/18/2025 02:52		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	44		mg/L	5	SM2320B-2011	1	02/08/2025 21:03	JXK	B
Alkalinity, Total	44	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:03	JXK	B
Ammonia-N, Low Level	0.27		mg/L	0.10	SM 4500-NH3G	1	02/12/2025 10:24	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	243		mg/L	5.0	EPA 300.0	5	02/07/2025 19:25	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 12:32	J1W	B
Nitrate-N	3.4		mg/L	1.0	EPA 300.0	2	02/06/2025 12:32	J1W	B
pH	7.54	2	pH_Units		S4500HB-11	1	02/08/2025 02:00	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:10	AKH	G
Specific Conductance	934		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	42.0		mg/L	2.0	EPA 300.0	2	02/06/2025 12:32	J1W	B
Total Dissolved Solids	552		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	1.3		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	17		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP038W	Collected	02/05/2025 13:11
Lab Sample ID	3399149004	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	22.48		Feet		Field	1	02/05/2025 13:11	BGS	D
Dissolved Oxygen	0.03		mg/L	0.01	Field	1	02/05/2025 13:11	BGS	D
Elev Top MW Casing above MSL	454.05		Feet		Field	1	02/05/2025 13:11	BGS	D
Flow Rate	0.35		gal/min		Field	1	02/05/2025 13:11	BGS	D
Ground Water Elevation	431.57		ft/MSL		Field	1	02/05/2025 13:11	BGS	D
Oxidation-Reduction Potential	-192		mV		Field	1	02/05/2025 13:11	BGS	D
pH, Field (SM4500B)	8.14		pH_Units		Field	1	02/05/2025 13:11	BGS	D
Sample Depth	46.00		Feet		Field	1	02/05/2025 13:11	BGS	D
Specific Conductance, Field	464		umhos/cm	1	Field	1	02/05/2025 13:11	BGS	D
Temperature	10.41		Deg. C		Field	1	02/05/2025 13:11	BGS	D
Total Well Depth	52.00		Feet		Field	1	02/05/2025 13:11	BGS	D
Turbidity, Field	2		NTU	1	Field	1	02/05/2025 13:11	BGS	D
Volume in Water Column	43.39		Gallons		Field	1	02/05/2025 13:11	BGS	D
Water Level After Purge	32.41		Feet		Field	1	02/05/2025 13:11	BGS	D
Well Volumes Purged	1.13		Vol		Field	1	02/05/2025 13:11	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	68.5		mg/L	0.11	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Iron, Total	1.6		mg/L	0.067	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Magnesium, Total	6.2		mg/L	0.11	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Manganese, Total	0.077		mg/L	0.0056	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Potassium, Total	1.2		mg/L	0.56	SW846 6010C	1	02/21/2025 09:59	MSY	J1
Sodium, Total	14.2		mg/L	0.56	SW846 6010C	1	02/21/2025 09:59	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Toluene	1.3		ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:12	PDK	H



Results

Client Sample ID	FFMP038W	Collected	02/05/2025 13:11
Lab Sample ID	3399149004	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			96.2%	62 – 133		02/18/2025 03:12		
4-Bromofluorobenzene	460-00-4			92%	79 – 114		02/18/2025 03:12		
Dibromofluoromethane	1868-53-7			96.5%	78 – 116		02/18/2025 03:12		
Toluene-d8	2037-26-5			97.3%	76 – 127		02/18/2025 03:12		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	77		mg/L	5	SM2320B-2011	1	02/08/2025 21:14	JXK	B
Alkalinity, Total	77	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:14	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/11/2025 20:22	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	99.0	4	mg/L	2.0	EPA 300.0	2	02/06/2025 12:44	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 12:44	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/06/2025 12:44	J1W	B
pH	8.14	2	pH_Units		S4500HB-11	1	02/08/2025 02:11	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:17	AKH	G
Specific Conductance	476		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	13.0		mg/L	2.0	EPA 300.0	2	02/06/2025 12:44	J1W	B
Total Dissolved Solids	296		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	18		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP035W	Collected	02/05/2025 14:29
Lab Sample ID	3399149005	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	43.53		Feet		Field	1	02/05/2025 14:29	BGS	D
Dissolved Oxygen	0.21		mg/L	0.01	Field	1	02/05/2025 14:29	BGS	D
Elev Top MW Casing above MSL	477.56		Feet		Field	1	02/05/2025 14:29	BGS	D
Flow Rate	0.78		gal/min		Field	1	02/05/2025 14:29	BGS	D
Ground Water Elevation	434.03		ft/MSL		Field	1	02/05/2025 14:29	BGS	D
Oxidation-Reduction Potential	96		mV		Field	1	02/05/2025 14:29	BGS	D
pH, Field (SM4500B)	6.68		pH_Units		Field	1	02/05/2025 14:29	BGS	D
Sample Depth	65.00		Feet		Field	1	02/05/2025 14:29	BGS	D
Specific Conductance, Field	887		umhos/cm	1	Field	1	02/05/2025 14:29	BGS	D
Temperature	12.32		Deg. C		Field	1	02/05/2025 14:29	BGS	D
Total Well Depth	71.80		Feet		Field	1	02/05/2025 14:29	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 14:29	BGS	D
Volume in Water Column	41.56		Gallons		Field	1	02/05/2025 14:29	BGS	D
Water Level After Purge	48.33		Feet		Field	1	02/05/2025 14:29	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	02/05/2025 14:29	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	106		mg/L	0.11	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Magnesium, Total	18.7		mg/L	0.11	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Manganese, Total	0.016		mg/L	0.0056	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Potassium, Total	3.3		mg/L	0.56	SW846 6010C	1	02/21/2025 10:00	MSY	J1
Sodium, Total	51.5		mg/L	0.56	SW846 6010C	1	02/21/2025 10:00	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:32	PDK	H



Results

Client Sample ID	FFMP035W	Collected	02/05/2025 14:29
Lab Sample ID	3399149005	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			92.1%	62 – 133		02/18/2025 03:32		
4-Bromofluorobenzene	460-00-4			102%	79 – 114		02/18/2025 03:32		
Dibromofluoromethane	1868-53-7			91.9%	78 – 116		02/18/2025 03:32		
Toluene-d8	2037-26-5			99%	76 – 127		02/18/2025 03:32		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	141		mg/L	5	SM2320B-2011	1	02/08/2025 21:26	JXK	B
Alkalinity, Total	141	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:26	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/12/2025 15:30	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	166		mg/L	2.0	EPA 300.0	2	02/06/2025 13:29	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 13:29	J1W	B
Nitrate-N	7.7		mg/L	1.0	EPA 300.0	2	02/06/2025 13:29	J1W	B
pH	8.17	2	pH_Units		S4500HB-11	1	02/08/2025 02:22	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:19	AKH	G
Specific Conductance	920		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	49.6		mg/L	2.0	EPA 300.0	2	02/06/2025 13:29	J1W	B
Total Dissolved Solids	534		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	0.99		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	1.5		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Results

Client Sample ID	FFMP036W	Collected	02/05/2025 15:29
Lab Sample ID	3399149006	Lab Receipt	02/05/2025 16:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	51.50		Feet		Field	1	02/05/2025 15:29	BGS	D
Dissolved Oxygen	0.12		mg/L	0.01	Field	1	02/05/2025 15:29	BGS	D
Elev Top MW Casing above MSL	478.23		Feet		Field	1	02/05/2025 15:29	BGS	D
Flow Rate	1.65		gal/min		Field	1	02/05/2025 15:29	BGS	D
Ground Water Elevation	426.73		ft/MSL		Field	1	02/05/2025 15:29	BGS	D
Oxidation-Reduction Potential	-165		mV		Field	1	02/05/2025 15:29	BGS	D
pH, Field (SM4500B)	8.10		pH_Units		Field	1	02/05/2025 15:29	BGS	D
Sample Depth	135.00		Feet		Field	1	02/05/2025 15:29	BGS	D
Specific Conductance, Field	360		umhos/cm	1	Field	1	02/05/2025 15:29	BGS	D
Temperature	6.57		Deg. C		Field	1	02/05/2025 15:29	BGS	D
Total Well Depth	142.60		Feet		Field	1	02/05/2025 15:29	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	02/05/2025 15:29	BGS	D
Volume in Water Column	133.92		Gallons		Field	1	02/05/2025 15:29	BGS	D
Water Level After Purge	78.25		Feet		Field	1	02/05/2025 15:29	BGS	D
Well Volumes Purged	1.73		Vol		Field	1	02/05/2025 15:29	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	53.5		mg/L	0.11	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Iron, Total	0.93		mg/L	0.067	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Magnesium, Total	5.2		mg/L	0.11	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Manganese, Total	0.098		mg/L	0.0056	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Potassium, Total	0.92		mg/L	0.56	SW846 6010C	1	02/21/2025 10:01	MSY	J1
Sodium, Total	15.7		mg/L	0.56	SW846 6010C	1	02/21/2025 10:01	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 03:52	PDK	H



Results

Client Sample ID	FFMP036W	Collected	02/05/2025 15:29
Lab Sample ID	3399149006	Lab Receipt	02/05/2025 16:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			94.5%	62 – 133		02/18/2025 03:52		
4-Bromofluorobenzene	460-00-4			96.3%	79 – 114		02/18/2025 03:52		
Dibromofluoromethane	1868-53-7			94.3%	78 – 116		02/18/2025 03:52		
Toluene-d8	2037-26-5			99.7%	76 – 127		02/18/2025 03:52		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	101		mg/L	5	SM2320B-2011	1	02/08/2025 21:37	JXK	B
Alkalinity, Total	101	1	mg/L	5	SM2320B-2011	1	02/08/2025 21:37	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/11/2025 19:49	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	36.2		mg/L	2.0	EPA 300.0	2	02/06/2025 13:41	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/06/2025 13:41	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	02/06/2025 13:41	J1W	B
pH	8.28	2	pH_Units		S4500HB-11	1	02/08/2025 02:32	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 16:06	AKH	G
Specific Conductance	367		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	35.4		mg/L	2.0	EPA 300.0	2	02/06/2025 13:41	J1W	B
Total Dissolved Solids	207		mg/L	25	SM2540C-15	1	02/11/2025 09:26	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	7.7		NTU	0.30	SM2130B-2011	1	02/06/2025 11:08	NPF	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399149001	FFMP029W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149002	FFMP017W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149003	FFMP039W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149004	FFMP038W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399149005	FFMP035W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399149006	FFMP036W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399149001	FFMP029W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
3399149002	FFMP017W	SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
		N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
3399149003	FFMP039W	N/A	N/A	N/A	ANN	SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58		SW846 9066	1386738
		N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
3399149004	FFMP038W	N/A	N/A	N/A	ANN	SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58		SW846 9066	1386738
		N/A	N/A	N/A		Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387060



Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399149005	FFMP035W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387065
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3399149006	FFMP036W	N/A	N/A	N/A	ANN	Field	1390090
		SW846 3015A	1384763	02/06/2025 09:02		SW846 6010C	1395597
		N/A	N/A	N/A		SW846 8260B	1392564
		N/A	N/A	N/A		EPA 300.0	1384963
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385032
		N/A	N/A	N/A		SM 4500-NH3G	1387060
		N/A	N/A	N/A		SM2130B-2011	1384969
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1385701
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386874
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738



301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P: 717-944-5541

CHAIN OF CUSTODY/

REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:

ALS Quoi

3399149

Logged By: D1G
FY: SJB



of

Client Name: Lancaster County Solid Waste MA		Container Type	AG	AN	CG	P	P	P	P	P	Temp Taken By:	Therm ID:	WO Temp (°C)
Address: 1299 Harrisburg Pike PO Box 4424		Container Size	40ml	125ml	40ml	500ml	250ml	250ml	125ml		Receipt Info completed by: WV Containers 0-6°C Y N NA		
Lancaster PA 17604		Preservative	HCL	H2SO4	HCL	UNP	UNP	H2SO4	HNO3		Cooler Custody Seals Intact Y N NA Deviations? NO YES		
											Sample Custody Seal Intact Y N NA If YES, list below:		
											Received on Ice Y N NA		
											Coolers & Samples Intact Y N NA		
											Correct Containers Provided Y N NA		
											Sample Label/COC Agree Y N NA		
											Adequate Sample Volumes Y N NA		
											VOA only: Trip Blank Y N NA		
											NJ ≤ 4 days? Y N NA		
											Courier/Tracking #		
											Client contact: Date/Tech:		
											Sample(s) for Radiation testing? Y N Rad Screen (uCi)		
											Reportable SDWA Sample(s)? Y N New Source? Y N		
											SDWA State of Origin? New Source Contact:		
											PWSID #		
											PWS Contact: PWS Phone #:		
											SDWA Sample Type Key: D=Distribution E=Entry Point		
											R=Raw P=Plant C=Check S=Special A=Annual Startup		
											Sample/COC Remarks		
											Contains Short Hold Testing YES NO		
											Internal Use: If less than 48 hours - notify lab upon receipt		
											State Samples Collected In NY NJ PA WV FL other		
											Standard Lvl 1 CLP-like HSCA		
											Standard Lvl 2 DOD Landfill		
											Standard Lvl 3 NJ RED NJ GW		
											Standard Lvl 4 NJ Full		
											Excel Summary Sample Disposal		
											Equis Lab x		
											Custom Special		
											EDDS: Format Type		

Circle Sample Collector: ALS Tech / Client		Relinquished By / Company Name	
Name: <u>200 unode</u>	ID: <u>200 unode</u>	2 <u>DAG-ALS</u>	
Date: <u>2-5-25</u>	Time: <u>10:45</u>	4	
		6	
		8	
		10	

Sample Description/Location	Date Collected	Time
1 FFMP029W	2/5/25	0909
2 FFMP017W	2/5/25	0951
3 FFMP039W	2/5/25	1207
4 FFMP038W	2/5/25	1311
5 FFMP035W	2/5/25	1429
6 FFMP036W	2/5/25	1529
7		
8		
9		
10		

Comments:

Purchase Order #: TAT ☒ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.

Date Required: 2/5/25 Approved? dbrown@lcswwma.org

Email? ☒ dbrown@lcswwma.org

Contact: Dan Brown

Phone#: 717-735-0193

Project Name#: Frey Farm Quarterly GWMP

Bill To: Lancaster County Solid Waste MA



Middletown Sample Condition Form

Client Lancaster Solid Waste Workorder 3399149
Temp °C 1 Therm ID 571 Ice? (Y) N N/A Initials & Date MP 2/5/25
Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement	↓			
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method				
Received within hold time				
Containers intact	↓			
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)			↓	
NJ ≤ 4 Days				
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C				
SDWA compliance reporting			↓	

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing information

Review Comments:



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**
Project 1ST QTR 2025 GWMP-FORM 19Q
Workorder 3399527
Report ID 389701 on 2/21/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 06, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Jordan Bigler - Lancaster County Solid Waste Authority
Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3399527001	FFMP033W	Ground Water	02/06/2025 13:33	02/06/2025 17:05	BGS	Analytical Laboratory Service
3399527002	FFMP034W	Ground Water	02/06/2025 13:47	02/06/2025 17:05	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID	Sample ID
--------	-----------

Result Notations

Notation Ref.

1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The concentration of this analyte was greater than 4 times the concentration of the spike added to the matrix spike. According to protocol, the calculation for percent recovery of the matrix spike is not valid.



Detected Results Summary

Client Sample ID	FFMP033W	Collected	02/06/2025 13:33		
Lab Sample ID	3399527001	Lab Receipt	02/06/2025 17:05		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	20.88	Feet		Field	#
Dissolved Oxygen	1.14	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	516.52	Feet		Field	#
Flow Rate	1.88	gal/min		Field	#
Ground Water Elevation	495.64	ft/MSL		Field	#
Oxidation-Reduction Potential	137	mV		Field	#
pH, Field (SM4500B)	5.49	pH_Units		Field	#
Sample Depth	79.00	Feet		Field	#
Specific Conductance, Field	439	umhos/cm	1	Field	#
Temperature	15.34	Deg. C		Field	#
Total Well Depth	100.00	Feet		Field	#
Turbidity, Field	4	NTU	1	Field	#
Volume in Water Column	116.31	Gallons		Field	#
Water Level After Purge	38.83	Feet		Field	#
Well Volumes Purged	2.67	Vol		Field	#
METALS					
Calcium, Total	40.6	mg/L	0.11	SW846 6010C	#
Iron, Total	2.8	mg/L	0.067	SW846 6010C	#
Magnesium, Total	14.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.15	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.4	mg/L	0.56	SW846 6010C	#
Sodium, Total	21.4	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	28	mg/L	5	SM2320B-2011	#
Alkalinity, Total	28	mg/L	5	SM2320B-2011	#
Chloride	87.1	mg/L	2.0	EPA 300.0	#
Nitrate-N	11.9	mg/L	1.0	EPA 300.0	#
pH	7.39	pH_Units		S4500HB-11	#
Specific Conductance	442	umhos/cm	5	SW846 9050A	#
Sulfate	14.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	364	mg/L	25	SM2540C-15	#
Turbidity	11	NTU	0.30	SM2130B-2011	#



Detected Results Summary

Client Sample ID	FFMP034W	Collected	02/06/2025 13:47		
Lab Sample ID	3399527002	Lab Receipt	02/06/2025 17:05		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	10.98	Feet		Field	#
Dissolved Oxygen	1.37	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	472.88	Feet		Field	#
Flow Rate	1.89	gal/min		Field	#
Ground Water Elevation	461.90	ft/MSL		Field	#
Oxidation-Reduction Potential	169	mV		Field	#
pH, Field (SM4500B)	5.65	pH_Units		Field	#
Sample Depth	25.85	Feet		Field	#
Specific Conductance, Field	706	umhos/cm	1	Field	#
Temperature	14.57	Deg. C		Field	#
Total Well Depth	121.00	Feet		Field	#
Turbidity, Field	4	NTU	1	Field	#
Volume in Water Column	161.73	Gallons		Field	#
Water Level After Purge	21.18	Feet		Field	#
Well Volumes Purged	2.24	Vol		Field	#
METALS					
Calcium, Total	60.4	mg/L	0.11	SW846 6010C	#
Iron, Total	1.6	mg/L	0.067	SW846 6010C	#
Magnesium, Total	21.9	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.078	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	47.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	34	mg/L	5	SM2320B-2011	#
Alkalinity, Total	34	mg/L	5	SM2320B-2011	#
Chloride	159	mg/L	2.0	EPA 300.0	#
Nitrate-N	11.5	mg/L	1.0	EPA 300.0	#
pH	7.46	pH_Units		S4500HB-11	#
Specific Conductance	721	umhos/cm	5	SW846 9050A	#
Sulfate	34.5	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	524	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.68	mg/L	0.50	SW846 9060A	#
Turbidity	45	NTU	0.30	SM2130B-2011	#



Results

Client Sample ID	FFMP033W	Collected	02/06/2025 13:33
Lab Sample ID	3399527001	Lab Receipt	02/06/2025 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	20.88		Feet		Field	1	02/06/2025 13:33	BGS	D
Dissolved Oxygen	1.14		mg/L	0.01	Field	1	02/06/2025 13:33	BGS	D
Elev Top MW Casing above MSL	516.52		Feet		Field	1	02/06/2025 13:33	BGS	D
Flow Rate	1.88		gal/min		Field	1	02/06/2025 13:33	BGS	D
Ground Water Elevation	495.64		ft/MSL		Field	1	02/06/2025 13:33	BGS	D
Oxidation-Reduction Potential	137		mV		Field	1	02/06/2025 13:33	BGS	D
pH, Field (SM4500B)	5.49		pH_Units		Field	1	02/06/2025 13:33	BGS	D
Sample Depth	79.00		Feet		Field	1	02/06/2025 13:33	BGS	D
Specific Conductance, Field	439		umhos/cm	1	Field	1	02/06/2025 13:33	BGS	D
Temperature	15.34		Deg. C		Field	1	02/06/2025 13:33	BGS	D
Total Well Depth	100.00		Feet		Field	1	02/06/2025 13:33	BGS	D
Turbidity, Field	4		NTU	1	Field	1	02/06/2025 13:33	BGS	D
Volume in Water Column	116.31		Gallons		Field	1	02/06/2025 13:33	BGS	D
Water Level After Purge	38.83		Feet		Field	1	02/06/2025 13:33	BGS	D
Well Volumes Purged	2.67		Vol		Field	1	02/06/2025 13:33	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	40.6		mg/L	0.11	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Iron, Total	2.8		mg/L	0.067	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Magnesium, Total	14.1		mg/L	0.11	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Manganese, Total	0.15		mg/L	0.0056	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Potassium, Total	2.4		mg/L	0.56	SW846 6010C	1	02/11/2025 13:58	MSY	J1
Sodium, Total	21.4		mg/L	0.56	SW846 6010C	1	02/11/2025 13:58	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 22:37	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:37	BST	H



Results

Client Sample ID	FFMP033W	Collected	02/06/2025 13:33
Lab Sample ID	3399527001	Lab Receipt	02/06/2025 17:05

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			104%	62 – 133		02/18/2025 22:37		
4-Bromofluorobenzene	460-00-4			93.8%	79 – 114		02/18/2025 22:37		
Dibromofluoromethane	1868-53-7			102%	78 – 116		02/18/2025 22:37		
Toluene-d8	2037-26-5			95.5%	76 – 127		02/18/2025 22:37		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	28		mg/L	5	SM2320B-2011	1	02/09/2025 03:42	JXK	B
Alkalinity, Total	28	1	mg/L	5	SM2320B-2011	1	02/09/2025 03:42	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 13:33	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	87.1		mg/L	2.0	EPA 300.0	2	02/07/2025 12:34	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/07/2025 12:34	J1W	B
Nitrate-N	11.9		mg/L	1.0	EPA 300.0	2	02/07/2025 12:34	J1W	B
pH	7.39	2	pH_Units		S4500HB-11	1	02/09/2025 03:42	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 17:16	AKH	G
Specific Conductance	442		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	14.0		mg/L	2.0	EPA 300.0	2	02/07/2025 12:34	J1W	B
Total Dissolved Solids	364		mg/L	25	SM2540C-15	1	02/12/2025 08:45	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	11		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Results

Client Sample ID	FFMP034W	Collected	02/06/2025 13:47
Lab Sample ID	3399527002	Lab Receipt	02/06/2025 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	10.98		Feet		Field	1	02/06/2025 13:46	BGS	D
Dissolved Oxygen	1.37		mg/L	0.01	Field	1	02/06/2025 13:46	BGS	D
Elev Top MW Casing above MSL	472.88		Feet		Field	1	02/06/2025 13:46	BGS	D
Flow Rate	1.89		gal/min		Field	1	02/06/2025 13:46	BGS	D
Ground Water Elevation	461.90		ft/MSL		Field	1	02/06/2025 13:46	BGS	D
Oxidation-Reduction Potential	169		mV		Field	1	02/06/2025 13:46	BGS	D
pH, Field (SM4500B)	5.65		pH_Units		Field	1	02/06/2025 13:46	BGS	D
Sample Depth	25.85		Feet		Field	1	02/06/2025 13:46	BGS	D
Specific Conductance, Field	706		umhos/cm	1	Field	1	02/06/2025 13:46	BGS	D
Temperature	14.57		Deg. C		Field	1	02/06/2025 13:46	BGS	D
Total Well Depth	121.00		Feet		Field	1	02/06/2025 13:46	BGS	D
Turbidity, Field	4		NTU	1	Field	1	02/06/2025 13:46	BGS	D
Volume in Water Column	161.73		Gallons		Field	1	02/06/2025 13:46	BGS	D
Water Level After Purge	21.18		Feet		Field	1	02/06/2025 13:46	BGS	D
Well Volumes Purged	2.24		Vol		Field	1	02/06/2025 13:46	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	60.4	3	mg/L	0.11	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Iron, Total	1.6		mg/L	0.067	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Magnesium, Total	21.9	3	mg/L	0.11	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Manganese, Total	0.078		mg/L	0.0056	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Potassium, Total	3.1		mg/L	0.56	SW846 6010C	1	02/11/2025 13:59	MSY	J1
Sodium, Total	47.5		mg/L	0.56	SW846 6010C	1	02/11/2025 13:59	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	02/18/2025 22:58	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	02/18/2025 22:58	BST	H



Results

Client Sample ID	FFMP034W	Collected	02/06/2025 13:47
Lab Sample ID	3399527002	Lab Receipt	02/06/2025 17:05

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
SURROGATES									
Compound	CAS No			Recovery	Limits(%)		Analysis Date/Time		Qualifiers
1,2-Dichloroethane-d4	17060-07-0			106%	62 – 133		02/18/2025 22:58		
4-Bromofluorobenzene	460-00-4			99.9%	79 – 114		02/18/2025 22:58		
Dibromofluoromethane	1868-53-7			105%	78 – 116		02/18/2025 22:58		
Toluene-d8	2037-26-5			98%	76 – 127		02/18/2025 22:58		

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	34		mg/L	5	SM2320B-2011	1	02/09/2025 04:49	JXK	B
Alkalinity, Total	34	1	mg/L	5	SM2320B-2011	1	02/09/2025 04:49	JXK	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	02/13/2025 16:54	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	02/10/2025 11:40	KMS	A
Chloride	159		mg/L	2.0	EPA 300.0	2	02/07/2025 12:45	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	02/07/2025 12:45	J1W	B
Nitrate-N	11.5		mg/L	1.0	EPA 300.0	2	02/07/2025 12:45	J1W	B
pH	7.46	2	pH_Units		S4500HB-11	1	02/19/2025 15:56	JXK	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	02/10/2025 18:04	AKH	G
Specific Conductance	721		umhos/cm	5	SW846 9050A	1	02/20/2025 14:24	MAN	B
Sulfate	34.5		mg/L	2.0	EPA 300.0	2	02/07/2025 12:45	J1W	B
Total Dissolved Solids	524		mg/L	25	SM2540C-15	1	02/12/2025 08:45	RAG	B
Total Organic Carbon (TOC)	0.68		mg/L	0.50	SW846 9060A	1	02/11/2025 01:22	PAG	E
Turbidity	45		NTU	0.30	SM2130B-2011	1	02/08/2025 10:47	NPF	B



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3399527001	FFMP033W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	
3399527002	FFMP034W	Field	N/A	
		SW846 6010C	SW846 3015A	
		SW846 8260B	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2540C-15	N/A	
		SW846 9050A	N/A	
		SW846 9060A	N/A	
		SW846 9066	SW846 9066	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3399527001	FFMP033W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02	ANN	SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392937
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1385764
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1387514
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386879
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738
3399527002	FFMP034W	N/A	N/A	N/A		Field	1390090
		SW846 3015A	1386698	02/11/2025 09:02	ANN	SW846 6010C	1387557
		N/A	N/A	N/A		SW846 8260B	1392937
		N/A	N/A	N/A		EPA 300.0	1385663
		N/A	N/A	N/A		EPA 410.4	1386701
		N/A	N/A	N/A		S4500HB-11	1393594
		N/A	N/A	N/A		SM 4500-NH3G	1387626
		N/A	N/A	N/A		SM2130B-2011	1386062
		N/A	N/A	N/A		SM2320B-2011	1385764
		N/A	N/A	N/A		SM2540C-15	1387514
		N/A	N/A	N/A		SW846 9050A	1394691
		N/A	N/A	N/A		SW846 9060A	1386879
		SW846 9066	1386737	02/10/2025 09:58	AKH	SW846 9066	1386738

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P: 717-944-5541



CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

Client Name: Lancaster County Solid Waste MA		Temp Taken By:		In term ILU:		WO Temp (°C)		Y N NA	
Address: 1299 Harrisburg Pike PO Box 4424		Receipt info completed by:		WV Containers 0-8°C		Y N NA		Deviations? NO YES	
Lancaster PA 17604		Cooler Custody Seals Intact		Y N NA		Y N NA		If YES, list below.	
		Sample Custody Seal Intact		Y N NA		Y N NA			
		Received on Ice		Y N NA		Y N NA			
		Coolers & Samples Intact		Y N NA		Y N NA			
		Correct Containers Provided		Y N NA		Y N NA			
		Sample Label/COC Agree		Y N NA		Y N NA			
		Adequate Sample Volumes		Y N NA		Y N NA			
		VOA only: Trip Blank		Y N NA		Y N NA			
		NJ ≤ 4 days? Y N		Y N		Y N			
		Courier/Tracking #		PWSID #		PWS Phone #			
		Sample(s) for Radiation testing? Y N		Rad Screen (uCi) Y N		New Source? Y N		New Source Contact:	
		Reportable SDWA Sample(s)? Y N							
		SDWA State of Origin? Y N							
		PWSID #							
		PWS Contact:							
		SDWA Sample Type Key: D=Distribution E=Entry Point							
		R=Raw P=Plant C=Check S=Special A=Annual Startup							
		Sample/COC Remarks							
		Contains Short Hold Testing YES NO							
		Internal Use: If less than 48 hours - notify lab upon receipt							
		Data Deliverables							
		Standard Lvl 1		CLP-like		HSCA		State Samples Collected In	
		Standard Lvl 2		DOD		Landfill		NY	
		Standard Lvl 3		NJ RED		NJ GW		NJ	
		Standard Lvl 4		NJ Full				PA	
		Excel Summary		Sample Disposal		Lab		WV	
		Equis		Special				FL	
		Custom						other	
		EDDS:							
		Format Type							
		SW=Surface Water; WP=Wipe; WW=Wastewater							
		ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057							
		Rev 07.06.2023							



right solution.
right person.

Middletown Sample Condition Form

Client Cancaster County Workorder 3399827
 Temp °C 1° Therm ID 524 Ice? (Y) N N/A Initials & Date DB 2/6/25
 Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client

N/A - Not Applicable

UC - Updated coc with missing information

Review Comments:
