2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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

___ 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: 60.61 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 1.90 ft — Elevation of Water Level: 515.79 ft./MSL

Sampling Depth: 135 ft — Volume of Water Column: 129.67 gal

Total Well Depth: 148.9 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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/5/2024 — Sample Collection Time: 11:22

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372011001 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP015W
Sample Date	8/5/2024

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	23	SM20-2320B
CALCIUM, TOTAL	14.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	13.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	15.4	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	23	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	12.1	EPA 300
pH-FIELD (SU)	5.57	FIELD
pH-LAB (SU)	7.47	SM20-4500HB
POTASSIUM, TOTAL	2.1	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	18.5	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	402	FIELD
SPEC. COND., LAB (umhos/cm)	730	SW846 9050A
SULFATE	49.5	EPA 300
ALKALINITY	23	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	188	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.95	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.	FFMP015W
Sample Date	8/5/2024

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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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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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

Facitlity 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 — X Well ___ Spring ___ Stream ___ Other

___ Upgradient/Upstream X Downgradient/Downstream

Location (County): Lancaster County — Municipality: ___

Sampling Point — Latitude: ___ ° ___ ' ___ " — Longitude: ___ ° ___ ' ___ "

Depth to Water Level: 10.96 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: ___ ft — Elevation of Water Level: 461.92 ft./MSL

Sampling Depth: 25.85 ft — Volume of Water Column: ___ gal

Total Well Depth: 121 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 1.3

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/5/2024 — Sample Collection Time: 13:07

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372011002 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments: ___

I.D. No	101389
Monitoring Point No.	FFMP034W
Sample Date	8/5/2024

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	41	SM20-2320B
CALCIUM, TOTAL	61.3	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	161	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	2900	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	21.6	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	99	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	10.6	EPA 300
pH-FIELD (SU)	5.8	FIELD
pH-LAB (SU)	7.77	SM20-4500HB
POTASSIUM, TOTAL	2.7	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	44.6	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1033	FIELD
SPEC. COND., LAB (umhos/cm)	1440	SW846 9050A
SULFATE	31	EPA 300
ALKALINITY	41	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	546	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.65	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	32	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	8/5/2024

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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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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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

Facitlity 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

___ 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: 31.06 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.52 ft — Elevation of Water Level: 529.66 ft./MSL

Sampling Depth: 146 ft — Volume of Water Column: 397.21 gal

Total Well Depth: 301.52 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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/5/2024 — Sample Collection Time: 14:23

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372011003 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP04AW
Sample Date	8/5/2024

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	161	SM20-2320B
CALCIUM, TOTAL	167	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	323	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	26.5	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	390	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	2.5 ND	EPA 300
pH-FIELD (SU)	6.93	FIELD
pH-LAB (SU)	8.27	SM20-4500HB
POTASSIUM, TOTAL	2.8	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	92	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	2040	FIELD
SPEC. COND., LAB (umhos/cm)	387	SW846 9050A
SULFATE	56.1	EPA 300
ALKALINITY	190	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	1120	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.89	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.4	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.	FFMP04AW
Sample Date	8/5/2024

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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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

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General Reference: Section 273.284
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SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facitlity 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: 51.08 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 1.20 ft — Elevation of Water Level: 539.82 ft./MSL

Sampling Depth: 130 ft — Volume of Water Column: 141.17 gal

Total Well Depth: 147.2 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 1.3

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/5/2024 — Sample Collection Time: 14:50

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372011004 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP03AW
Sample Date	8/5/2024

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	44	SM20-2320B
CALCIUM, TOTAL	21.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	47	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	16.7	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	350	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	18.1	EPA 300
pH-FIELD (SU)	4.96	FIELD
pH-LAB (SU)	7.78	SM20-4500HB
POTASSIUM, TOTAL	1.6	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	15.6	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	489	FIELD
SPEC. COND., LAB (umhos/cm)	819	SW846 9050A
SULFATE	4.8	EPA 300
ALKALINITY	44	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	262	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	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.
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I.D. No	101389
Monitoring Point No.	FFMP03AW
Sample Date	8/5/2024

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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DEPARTMENT OF ENVIRONMENTAL PROTECTION
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Site Name: Frey Farm Landfill

Facitlity 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: 72.2 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 1.70 ft — Elevation of Water Level: 465.20 ft./MSL

Sampling Depth: 135 ft — Volume of Water Column: 114.26 gal

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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/6/2024 — Sample Collection Time: 10:43

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372273001 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP005W
Sample Date	8/6/2024

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	65	SM20-2320B
CALCIUM, TOTAL	77	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	157	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)	180	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1.3	EPA 300
pH-FIELD (SU)	5.61	FIELD
pH-LAB (SU)	7.89	SM20-4500HB
POTASSIUM, TOTAL	3.2	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	47	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1079	FIELD
SPEC. COND., LAB (umhos/cm)	777	SW846 9050A
SULFATE	75.3	EPA 300
ALKALINITY	65	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	536	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.4	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.	FFMP005W
Sample Date	8/6/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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

___ 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: 82.2 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 3.30 ft — Elevation of Water Level: 465.20 ft./MSL

Sampling Depth: 105 ft — Volume of Water Column: 46.70 gal

Total Well Depth: 114 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 2.5

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/6/2024 — Sample Collection Time: 10:58

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372273002 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP26RW
Sample Date	8/6/2024

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	61	SM20-2320B
CALCIUM, TOTAL	67.7	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	148	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	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	610	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1.3	EPA 300
pH-FIELD (SU)	5.36	FIELD
pH-LAB (SU)	7.88	SM20-4500HB
POTASSIUM, TOTAL	6.5	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	53.1	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1056	FIELD
SPEC. COND., LAB (umhos/cm)	760	SW846 9050A
SULFATE	88.1	EPA 300
ALKALINITY	61	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	492	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.7	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.5	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.	FFMP26RW
Sample Date	8/6/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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

___ 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: 43.22 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 1.45 ft — Elevation of Water Level: 434.34 ft./MSL

Sampling Depth: 65 ft — Volume of Water Column: 39.33 gal

Total Well Depth: 70 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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/6/2024 — Sample Collection Time: 13:02

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372273003 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP035W
Sample Date	8/6/2024

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	122	SM20-2320B
CALCIUM, TOTAL	91.8	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	169	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	290	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	22.5	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	11	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	8.8	EPA 300
pH-FIELD (SU)	6.56	FIELD
pH-LAB (SU)	8.15	SM20-4500HB
POTASSIUM, TOTAL	4.5	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	57.9	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1288	FIELD
SPEC. COND., LAB (umhos/cm)	919	SW846 9050A
SULFATE	51.1	EPA 300
ALKALINITY	122	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	644	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.3	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	1.2	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	8/6/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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: 51.02 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 1.91 ft — Elevation of Water Level: 427.21 ft./MSL

Sampling Depth: 135 ft — Volume of Water Column: 130.68 gal

Total Well Depth: 140 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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/6/2024 — Sample Collection Time: 13:17

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372273004 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP036W
Sample Date	8/6/2024

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	90	SM20-2320B
CALCIUM, TOTAL	47.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	34.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	1400	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	5	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	120	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	8.08	FIELD
pH-LAB (SU)	8.31	SM20-4500HB
POTASSIUM, TOTAL	1	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	15.5	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	478	FIELD
SPEC. COND., LAB (umhos/cm)	336	SW846 9050A
SULFATE	28.7	EPA 300
ALKALINITY	93	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	198	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	13	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	8/6/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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

___ 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: 39.45 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.00 ft — Elevation of Water Level: 437.85 ft./MSL

Sampling Depth: 55 ft — Volume of Water Column: 27.98 gal

Total Well Depth: 58.5 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 3.5

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/6/2024 — Sample Collection Time: 15:02

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372273005 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP029W
Sample Date	8/6/2024

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	11	SM20-2320B
CALCIUM, TOTAL	16	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	76.7	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	11.8	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	30	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	4.3	EPA 300
pH-FIELD (SU)	5.12	FIELD
pH-LAB (SU)	7.12	SM20-4500HB
POTASSIUM, TOTAL	2.2	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	21.2	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	420	FIELD
SPEC. COND., LAB (umhos/cm)	309	SW846 9050A
SULFATE	133	EPA 300
ALKALINITY	11	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	240	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.53	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.4	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.	FFMP029W
Sample Date	8/6/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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: 39.25 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.00 ft — Elevation of Water Level: 441.45 ft./MSL

Sampling Depth: 135 ft — Volume of Water Column: 163.39 gal

Total Well Depth: 150.5 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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/6/2024 — Sample Collection Time: 16:00

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372273006 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP017W
Sample Date	8/6/2024

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	0.54	D6919-09
BICARBONATE ALKALINITY	92	SM20-2320B
CALCIUM, TOTAL	178	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	16	EPA 410.4
CHLORIDE	75.3	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	90	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	54.1	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	1900	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	3.6	EPA 300
pH-FIELD (SU)	6.11	FIELD
pH-LAB (SU)	8	SM20-4500HB
POTASSIUM, TOTAL	18.2	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	183	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	3137	FIELD
SPEC. COND., LAB (umhos/cm)	2570	SW846 9050A
SULFATE	4.8	EPA 300
ALKALINITY	92	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	1690	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	4.2	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	1.7	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.	FFMP017W
Sample Date	8/6/2024

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.

2540-FM-BWM0041 Rev. 6/2005

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Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facitlity 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: 17.32 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.04 ft — Elevation of Water Level: 438.14 ft./MSL

Sampling Depth: 118 ft — Volume of Water Column: 165.49 gal

Total Well Depth: 130 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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/7/2024 — Sample Collection Time: 11:43

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372454001 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP039W
Sample Date	8/7/2024

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	45	SM20-2320B
CALCIUM, TOTAL	75.6	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	270	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	1300	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	26	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	870	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	3	EPA 300
pH-FIELD (SU)	5.74	FIELD
pH-LAB (SU)	7.32	SM20-4500HB
POTASSIUM, TOTAL	6.4	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	72.4	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1469	FIELD
SPEC. COND., LAB (umhos/cm)	1020	SW846 9050A
SULFATE	46.2	EPA 300
ALKALINITY	45	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	672	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.3	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	4.4	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.	FFMP039W
Sample Date	8/7/2024

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.

2540-FM-BWM0041 Rev. 6/2005

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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

Facitlity 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

___ 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: 20.28 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.15 ft — Elevation of Water Level: 433.76 ft./MSL

Sampling Depth: 46 ft — Volume of Water Column: 43.65 gal

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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/7/2024 — Sample Collection Time: 11:56

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372454002 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP038W
Sample Date	8/7/2024

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	78	SM20-2320B
CALCIUM, TOTAL	70.4	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	96.5	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	1400	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	6.3	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	67	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	7.95	FIELD
pH-LAB (SU)	8.19	SM20-4500HB
POTASSIUM, TOTAL	1.1	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	12.4	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	658	FIELD
SPEC. COND., LAB (umhos/cm)	480	SW846 9050A
SULFATE	14.4	EPA 300
ALKALINITY	78	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	344	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	15	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	8/7/2024

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	2.3	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.

2540-FM-BWM0041 Rev. 6/2005

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SECTION A. APPLICANT IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Mana

Site Name: Frey Farm Landfill

Facitlity 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: 36.57 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.20 ft — Elevation of Water Level: 525.73 ft./MSL

Sampling Depth: 85 ft — Volume of Water Column: 78.47 gal

Total Well Depth: 90 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 2.0

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/7/2024 — Sample Collection Time: 14:19

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372454003 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP30RW
Sample Date	8/7/2024

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	63	SM20-2320B
CALCIUM, TOTAL	73.3	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	330	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	67	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	20.4	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	4200	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	5.2	EPA 300
pH-FIELD (SU)	5.7	FIELD
pH-LAB (SU)	7.53	SM20-4500HB
POTASSIUM, TOTAL	9.1	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	145	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1882	FIELD
SPEC. COND., LAB (umhos/cm)	1320	SW846 9050A
SULFATE	56.9	EPA 300
ALKALINITY	63	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	834	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.9	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	0.6	SM 2130B

* Indicator Analyte - For comparison with detection zone analytes.
T Please indicate detection limit if analyte is not detected.
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I.D. No	101389
Monitoring Point No.	FFMP30RW
Sample Date	8/7/2024

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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Site Name: Frey Farm Landfill

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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: 20.38 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 0.49 ft — Elevation of Water Level: 496.14 ft./MSL

Sampling Depth: 79 ft — Volume of Water Column: 111.06 gal

Total Well Depth: 96 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 2.0

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/7/2024 — Sample Collection Time: 14:34

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372454004 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP033W
Sample Date	8/7/2024

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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	0.18	D6919-09
BICARBONATE ALKALINITY	35	SM20-2320B
CALCIUM, TOTAL	41.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	87.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	73800	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	14.2	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	500	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	10.3	EPA 300
pH-FIELD (SU)	5.57	FIELD
pH-LAB (SU)	7.04	SM20-4500HB
POTASSIUM, TOTAL	2	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	19.5	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	617	FIELD
SPEC. COND., LAB (umhos/cm)	452	SW846 9050A
SULFATE	13.1	EPA 300
ALKALINITY	35	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	350	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	20 ND	SW846 9066
TURBIDITY (N.T.U.)	290	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	8/7/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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 — X Well ___ Spring ___ Stream ___ Other

X 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: 67.41 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.38 ft — Elevation of Water Level: 545.25 ft./MSL

Sampling Depth: 130 ft — Volume of Water Column: 106.61 gal

Total Well Depth: 140 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 1.4

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/8/2024 — Sample Collection Time: 11:12

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372788001 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP031W
Sample Date	8/8/2024

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	84	SM20-2320B
CALCIUM, TOTAL	63.4	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	21	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	2900	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	4.9	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	470	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	8.12	FIELD
pH-LAB (SU)	8.23	SM20-4500HB
POTASSIUM, TOTAL	1.7	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	10.5	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	1 ND	FIELD
SPEC. COND., LAB (umhos/cm)	324	SW846 9050A
SULFATE	49.1	EPA 300
ALKALINITY	84	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	178	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	24	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	8/8/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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 — X Well ___ Spring ___ Stream ___ Other

X 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: 67.76 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 1.60 ft — Elevation of Water Level: 545.44 ft./MSL

Sampling Depth: 85 ft — Volume of Water Column: 149.57 gal

Total Well Depth: 169.6 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 0.6

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/8/2024 — Sample Collection Time: 10:20

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372788002 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP002W
Sample Date	8/8/2024

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	18.2	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	16.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	67 ND	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	7.2	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	250	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	17.4	EPA 300
pH-FIELD (SU)	4.41	FIELD
pH-LAB (SU)	5.95	SM20-4500HB
POTASSIUM, TOTAL	1.1	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	13.4	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	351	FIELD
SPEC. COND., LAB (umhos/cm)	247	SW846 9050A
SULFATE	13.8	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	179	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.56	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	1.1	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	8/8/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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: 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: 14.25 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: ___ ft — Elevation of Water Level: 495.65 ft./MSL

Sampling Depth: 18 ft — Volume of Water Column: ___ gal

Total Well Depth: 25 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 0.9

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/8/2024 — Sample Collection Time: 12:01

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372788003 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP02SW
Sample Date	8/8/2024

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	0.3	D6919-09
BICARBONATE ALKALINITY	30	SM20-2320B
CALCIUM, TOTAL	21.9	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	13.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	620	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	6.9	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	21	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	7.4	EPA 300
pH-FIELD (SU)	5.55	FIELD
pH-LAB (SU)	7.48	SM20-4500HB
POTASSIUM, TOTAL	7.2	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	10.9	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	348	FIELD
SPEC. COND., LAB (umhos/cm)	248	SW846 9050A
SULFATE	39	EPA 300
ALKALINITY	30	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	141	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	4.3	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	27	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	8/8/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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: 27.02 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: ___ ft — Elevation of Water Level: 482.58 ft./MSL

Sampling Depth: 120 ft — Volume of Water Column: ___ gal

Total Well Depth: 152 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 X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/8/2024 — Sample Collection Time: 13:26

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372788004 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP02DW
Sample Date	8/8/2024

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	130	SM20-2320B
CALCIUM, TOTAL	132	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	355	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	620	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	19.8	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	310	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	7.4	EPA 300
pH-FIELD (SU)	7.12	FIELD
pH-LAB (SU)	8.23	SM20-4500HB
POTASSIUM, TOTAL	1.4	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	134	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	2194	FIELD
SPEC. COND., LAB (umhos/cm)	1510	SW846 9050A
SULFATE	44.1	EPA 300
ALKALINITY	130	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	990	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.88	SW846 9060A
TOTAL PHENOLICS (ug/l)	4 ND	SW846 9066
TURBIDITY (N.T.U.)	7.9	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.	FFMP02DW
Sample Date	8/8/2024

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.

2540-FM-BWM0041 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
10/16/2024
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

Facitlity 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 — X Well ___ Spring ___ Stream ___ Other

X 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: 49.25 ft — Measured from: ___ Land Surface X TOC

Casing Stickup: 2.06 ft — Elevation of Water Level: 544.84 ft./MSL

Sampling Depth: 62 ft — Volume of Water Column: 37.82 gal

Total Well Depth: 75 ft — Sampling Method: X Pumped ___ Bailed ___ Grab

Well Purged: X Yes ___ No — Well Volumes Purged: 0.5

Sample Field Filtered (must be 0.45 micron)?: ___ Yes X No

Spring Flow Rate: ___ gpm

Sample Date (mm/dd/yy): 8/8/2024 — Sample Collection Time: 13:13

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 X No If yes, please explain in comments field.

Lab Accreditation Number(s): 22-293

Lab Sample Number(s): 3372788005 — Final Lab Analysis CompletionDate: 8/13/2024

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

Comments:

I.D. No	101389
Monitoring Point No.	FFMP032W
Sample Date	8/8/2024

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	0.76	D6919-09
BICARBONATE ALKALINITY	68	SM20-2320B
CALCIUM, TOTAL	19.1	SW846 6010C
CALCIUM, DISSOLVED		SW846 6010C
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.4
CHLORIDE	29.7	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	7000	SW846 6010C
IRON, DISSOLVED (ug/l)		SW846 6010C
MAGNESIUM, TOTAL	6.6	SW846 6010C
MAGNESIUM, DISSOLVED		SW846 6010C
MANGANESE, TOTAL (ug/l)	730	SW846 6010C
MANGANESE, DISSOLVED (ug/l)		SW846 6010C
NITRATE-NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	7.08	FIELD
pH-LAB (SU)	8.14	SM20-4500HB
POTASSIUM, TOTAL	1.6	SW846 6010C
POTASSIUM, DISSOLVED		SW846 6010C
SODIUM, TOTAL	13.2	SW846 6010C
SODIUM, DISSOLVED		SW846 6010C
SPEC. COND., FIELD (umhos/cm)	335	FIELD
SPEC. COND., LAB (umhos/cm)	219	SW846 9050A
SULFATE	2 ND	EPA 300
ALKALINITY	68	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	104	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.55	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	8/8/2024

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 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3rd QTR 2024 GWMP-FORM 19Q
Workorder 3372454
Report ID 348024 on 8/21/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 07, 2024.

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.

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

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

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3372454001	FFMP039W	Ground Water	08/07/2024 11:43	08/07/2024 15:50	BGS	Analytical Laboratory Service
3372454002	FFMP038W	Ground Water	08/07/2024 11:56	08/07/2024 15:50	BGS	Analytical Laboratory Service
3372454003	FFMP30RW	Ground Water	08/07/2024 14:19	08/07/2024 15:50	BGS	Analytical Laboratory Service
3372454004	FFMP033W	Ground Water	08/07/2024 14:34	08/07/2024 15:50	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.	
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	FFMP039W	Collected	08/07/2024 11:43
Lab Sample ID	3372454001	Lab Receipt	08/07/2024 15:50

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	17.32	Feet		Field	#
Elev Top MW Casing above MSL	455.65	Feet		Field	#
Flow Rate	1.93	gal/min		Field	#
Ground Water Elevation	438.33	ft/MSL		Field	#
Oxidation-Reduction Potential	127	mV		Field	#
pH, Field (SM4500B)	5.74	pH_Units		Field	#
Sample Depth	118.00	Feet		Field	#
Specific Conductance, Field	1469	umhos/cm	1	Field	#
Temperature	14.14	Deg. C		Field	#
Total Well Depth	131.50	Feet		Field	#
Volume in Water Column	167.84	Gallons		Field	#
Water Level After Purge	24.23	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	75.6	mg/L	0.11	SW846 6010C	#
Iron, Total	1.3	mg/L	0.067	SW846 6010C	#
Magnesium, Total	26.0	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.87	mg/L	0.0056	SW846 6010C	#
Potassium, Total	6.4	mg/L	0.56	SW846 6010C	#
Sodium, Total	72.4	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	45	mg/L	5	SM2320B-2011	#
Alkalinity, Total	45	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.38	mg/L	0.10	SM 4500-NH3G	#
Chloride	270	mg/L	5.0	EPA 300.0	#
Nitrate-N	3.0	mg/L	1.0	EPA 300.0	#
pH	7.32	pH_Units		S4500HB-11	#
Specific Conductance	1020	umhos/cm	5	SW846 9050A	#
Sulfate	46.2	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	672	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.3	mg/L	0.50	SW846 9060A	#
Turbidity	4.4	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP038W	Collected	08/07/2024 11:56
Lab Sample ID	3372454002	Lab Receipt	08/07/2024 15:50

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	20.28	Feet		Field	#
Dissolved Oxygen	0.16	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	454.05	Feet		Field	#
Flow Rate	0.55	gal/min		Field	#
Ground Water Elevation	433.77	ft/MSL		Field	#
Oxidation-Reduction Potential	-201	mV		Field	#
pH, Field (SM4500B)	7.95	pH_Units		Field	#
Sample Depth	46.00	Feet		Field	#
Specific Conductance, Field	658	umhos/cm	1	Field	#
Temperature	17.91	Deg. C		Field	#
Total Well Depth	52.00	Feet		Field	#
Turbidity, Field	5	NTU	1	Field	#
Volume in Water Column	46.63	Gallons		Field	#
Water Level After Purge	28.85	Feet		Field	#
Well Volumes Purged	1.06	Vol		Field	#
METALS					
Calcium, Total	70.4	mg/L	0.11	SW846 6010C	#
Iron, Total	1.4	mg/L	0.067	SW846 6010C	#
Magnesium, Total	6.3	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.067	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	12.4	mg/L	0.56	SW846 6010C	#
VOLATILE ORGANICS					
Toluene	2.3	ug/L	1.0	SW846 8260B	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	78	mg/L	5	SM2320B-2011	#
Alkalinity, Total	78	mg/L	5	SM2320B-2011	#
Chloride	96.5	mg/L	2.0	EPA 300.0	#
pH	8.19	pH_Units		S4500HB-11	#
Specific Conductance	480	umhos/cm	5	SW846 9050A	#
Sulfate	14.4	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	344	mg/L	25	SM2540C-15	#
Turbidity	15	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP30RW	Collected	08/07/2024 14:19
Lab Sample ID	3372454003	Lab Receipt	08/07/2024 15:50

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	36.57	Feet		Field	#
Dissolved Oxygen	1.62	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	562.30	Feet		Field	#
Flow Rate	2.07	gal/min		Field	#
Ground Water Elevation	525.73	ft/MSL		Field	#
Oxidation-Reduction Potential	169	mV		Field	#
pH, Field (SM4500B)	5.70	pH_Units		Field	#
Sample Depth	85.00	Feet		Field	#
Specific Conductance, Field	1882	umhos/cm	1	Field	#
Temperature	14.64	Deg. C		Field	#
Total Well Depth	94.20	Feet		Field	#
Volume in Water Column	84.72	Gallons		Field	#
Water Level After Purge	74.25	Feet		Field	#
Well Volumes Purged	1.95	Vol		Field	#
METALS					
Calcium, Total	73.3	mg/L	0.11	SW846 6010C	#
Iron, Total	0.067	mg/L	0.067	SW846 6010C	#
Magnesium, Total	20.4	mg/L	0.11	SW846 6010C	#
Manganese, Total	4.2	mg/L	0.0056	SW846 6010C	#
Potassium, Total	9.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	145	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	63	mg/L	5	SM2320B-2011	#
Alkalinity, Total	63	mg/L	5	SM2320B-2011	#
Chloride	330	mg/L	5.0	EPA 300.0	#
Nitrate-N	5.2	mg/L	2.5	EPA 300.0	#
pH	7.53	pH_Units		S4500HB-11	#
Specific Conductance	1320	umhos/cm	5	SW846 9050A	#
Sulfate	56.9	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	834	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.90	mg/L	0.50	SW846 9060A	#
Turbidity	0.60	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP033W	Collected	08/07/2024 14:34
Lab Sample ID	3372454004	Lab Receipt	08/07/2024 15:50

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	20.38	Feet		Field	#
Dissolved Oxygen	1.24	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	516.52	Feet		Field	#
Flow Rate	1.91	gal/min		Field	#
Ground Water Elevation	496.14	ft/MSL		Field	#
Oxidation-Reduction Potential	135	mV		Field	#
pH, Field (SM4500B)	5.57	pH_Units		Field	#
Sample Depth	79.00	Feet		Field	#
Specific Conductance, Field	617	umhos/cm	1	Field	#
Temperature	15.80	Deg. C		Field	#
Total Well Depth	100.00	Feet		Field	#
Turbidity, Field	3	NTU	1	Field	#
Volume in Water Column	117.04	Gallons		Field	#
Water Level After Purge	38.88	Feet		Field	#
Well Volumes Purged	1.96	Vol		Field	#
METALS					
Calcium, Total	41.1	mg/L	0.11	SW846 6010C	#
Iron, Total	73.8	mg/L	0.067	SW846 6010C	#
Magnesium, Total	14.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.50	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.0	mg/L	0.56	SW846 6010C	#
Sodium, Total	19.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	35	mg/L	5	SM2320B-2011	#
Alkalinity, Total	35	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.18	mg/L	0.10	SM 4500-NH3G	#
Chloride	87.4	mg/L	2.0	EPA 300.0	#
Nitrate-N	10.3	mg/L	1.0	EPA 300.0	#
pH	7.04	pH_Units		S4500HB-11	#
Specific Conductance	452	umhos/cm	5	SW846 9050A	#
Sulfate	13.1	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	350	mg/L	25	SM2540C-15	#
Turbidity	290	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	FFMP039W	Collected	08/07/2024 11:43
Lab Sample ID	3372454001	Lab Receipt	08/07/2024 15:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	17.32		Feet		Field	1	08/07/2024 11:43	BGS	D
Dissolved Oxygen	ND	ND	mg/L	0.01	Field	1	08/07/2024 11:43	BGS	D
Elev Top MW Casing above MSL	455.65		Feet		Field	1	08/07/2024 11:43	BGS	D
Flow Rate	1.93		gal/min		Field	1	08/07/2024 11:43	BGS	D
Ground Water Elevation	438.33		ft/MSL		Field	1	08/07/2024 11:43	BGS	D
Oxidation-Reduction Potential	127		mV		Field	1	08/07/2024 11:43	BGS	D
pH, Field (SM4500B)	5.74		pH_Units		Field	1	08/07/2024 11:43	BGS	D
Sample Depth	118.00		Feet		Field	1	08/07/2024 11:43	BGS	D
Specific Conductance, Field	1469		umhos/cm	1	Field	1	08/07/2024 11:43	BGS	D
Temperature	14.14		Deg. C		Field	1	08/07/2024 11:43	BGS	D
Total Well Depth	131.50		Feet		Field	1	08/07/2024 11:43	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/07/2024 11:43	BGS	D
Volume in Water Column	167.84		Gallons		Field	1	08/07/2024 11:43	BGS	D
Water Level After Purge	24.23		Feet		Field	1	08/07/2024 11:43	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	08/07/2024 11:43	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	75.6		mg/L	0.11	SW846 6010C	1	08/13/2024 09:30	MSY	J1
Iron, Total	1.3		mg/L	0.067	SW846 6010C	1	08/13/2024 09:30	MSY	J1
Magnesium, Total	26.0		mg/L	0.11	SW846 6010C	1	08/13/2024 09:30	MSY	J1
Manganese, Total	0.87		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:30	MSY	J1
Potassium, Total	6.4		mg/L	0.56	SW846 6010C	1	08/13/2024 09:30	MSY	J1
Sodium, Total	72.4		mg/L	0.56	SW846 6010C	1	08/13/2024 09:30	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	08/10/2024 17:02	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 17:02	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:02	BST	H

Results

Client Sample ID	FFMP039W	Collected	08/07/2024 11:43
Lab Sample ID	3372454001	Lab Receipt	08/07/2024 15:50

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	102%	62 – 133	08/10/2024 17:02	
4-Bromofluorobenzene	460-00-4	99.1%	79 – 114	08/10/2024 17:02	
Dibromofluoromethane	1868-53-7	101%	78 – 116	08/10/2024 17:02	
Toluene-d8	2037-26-5	99.6%	76 – 127	08/10/2024 17:02	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	45		mg/L	5	SM2320B-2011	1	08/09/2024 21:14	KMV	B
Alkalinity, Total	45	1	mg/L	5	SM2320B-2011	1	08/09/2024 21:14	KMV	B
Ammonia-N, Low Level	0.38		mg/L	0.10	SM 4500-NH3G	1	08/12/2024 12:59	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	270		mg/L	5.0	EPA 300.0	5	08/10/2024 12:55	GMM	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/08/2024 15:59	J1W	B
Nitrate-N	3.0		mg/L	1.0	EPA 300.0	2	08/08/2024 15:59	J1W	B
pH	7.32	2	pH_Units		S4500HB-11	1	08/09/2024 21:14	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 13:28	AKH	G
Specific Conductance	1020		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	46.2		mg/L	2.0	EPA 300.0	2	08/08/2024 15:59	J1W	B
Total Dissolved Solids	672		mg/L	25	SM2540C-15	1	08/12/2024 15:30	RAG	B
Total Organic Carbon (TOC)	1.3		mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	4.4		NTU	0.30	SM2130B-2011	1	08/08/2024 09:39	GMM	B

Results

Client Sample ID	FFMP038W	Collected	08/07/2024 11:56
Lab Sample ID	3372454002	Lab Receipt	08/07/2024 15:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	20.28		Feet		Field	1	08/07/2024 11:56	BGS	D
Dissolved Oxygen	0.16		mg/L	0.01	Field	1	08/07/2024 11:56	BGS	D
Elev Top MW Casing above MSL	454.05		Feet		Field	1	08/07/2024 11:56	BGS	D
Flow Rate	0.55		gal/min		Field	1	08/07/2024 11:56	BGS	D
Ground Water Elevation	433.77		ft/MSL		Field	1	08/07/2024 11:56	BGS	D
Oxidation-Reduction Potential	-201		mV		Field	1	08/07/2024 11:56	BGS	D
pH, Field (SM4500B)	7.95		pH_Units		Field	1	08/07/2024 11:56	BGS	D
Sample Depth	46.00		Feet		Field	1	08/07/2024 11:56	BGS	D
Specific Conductance, Field	658		umhos/cm	1	Field	1	08/07/2024 11:56	BGS	D
Temperature	17.91		Deg. C		Field	1	08/07/2024 11:56	BGS	D
Total Well Depth	52.00		Feet		Field	1	08/07/2024 11:56	BGS	D
Turbidity, Field	5		NTU	1	Field	1	08/07/2024 11:56	BGS	D
Volume in Water Column	46.63		Gallons		Field	1	08/07/2024 11:56	BGS	D
Water Level After Purge	28.85		Feet		Field	1	08/07/2024 11:56	BGS	D
Well Volumes Purged	1.06		Vol		Field	1	08/07/2024 11:56	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	70.4		mg/L	0.11	SW846 6010C	1	08/13/2024 09:31	MSY	J1
Iron, Total	1.4		mg/L	0.067	SW846 6010C	1	08/13/2024 09:31	MSY	J1
Magnesium, Total	6.3		mg/L	0.11	SW846 6010C	1	08/13/2024 09:31	MSY	J1
Manganese, Total	0.067		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:31	MSY	J1
Potassium, Total	1.1		mg/L	0.56	SW846 6010C	1	08/13/2024 09:31	MSY	J1
Sodium, Total	12.4		mg/L	0.56	SW846 6010C	1	08/13/2024 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	08/10/2024 17:22	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Toluene	2.3		ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 17:22	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:22	BST	H

Results

Client Sample ID	FFMP038W	Collected	08/07/2024 11:56
Lab Sample ID	3372454002	Lab Receipt	08/07/2024 15:50

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	102%	62 – 133	08/10/2024 17:22	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	08/10/2024 17:22	
Dibromofluoromethane	1868-53-7	97.8%	78 – 116	08/10/2024 17:22	
Toluene-d8	2037-26-5	101%	76 – 127	08/10/2024 17:22	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	78		mg/L	5	SM2320B-2011	1	08/09/2024 21:25	KMV	B
Alkalinity, Total	78	1	mg/L	5	SM2320B-2011	1	08/09/2024 21:25	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 13:41	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	96.5		mg/L	2.0	EPA 300.0	2	08/08/2024 16:10	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/08/2024 16:10	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/08/2024 16:10	J1W	B
pH	8.19	2	pH_Units		S4500HB-11	1	08/09/2024 21:25	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 13:05	AKH	G
Specific Conductance	480		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	14.4		mg/L	2.0	EPA 300.0	2	08/08/2024 16:10	J1W	B
Total Dissolved Solids	344		mg/L	25	SM2540C-15	1	08/12/2024 15:30	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	15		NTU	0.30	SM2130B-2011	1	08/08/2024 09:39	GMM	B

Results

Client Sample ID	FFMP30RW	Collected	08/07/2024 14:19
Lab Sample ID	3372454003	Lab Receipt	08/07/2024 15:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	36.57		Feet		Field	1	08/07/2024 14:19	BGS	D
Dissolved Oxygen	1.62		mg/L	0.01	Field	1	08/07/2024 14:19	BGS	D
Elev Top MW Casing above MSL	562.30		Feet		Field	1	08/07/2024 14:19	BGS	D
Flow Rate	2.07		gal/min		Field	1	08/07/2024 14:19	BGS	D
Ground Water Elevation	525.73		ft/MSL		Field	1	08/07/2024 14:19	BGS	D
Oxidation-Reduction Potential	169		mV		Field	1	08/07/2024 14:19	BGS	D
pH, Field (SM4500B)	5.70		pH_Units		Field	1	08/07/2024 14:19	BGS	D
Sample Depth	85.00		Feet		Field	1	08/07/2024 14:19	BGS	D
Specific Conductance, Field	1882		umhos/cm	1	Field	1	08/07/2024 14:19	BGS	D
Temperature	14.64		Deg. C		Field	1	08/07/2024 14:19	BGS	D
Total Well Depth	94.20		Feet		Field	1	08/07/2024 14:19	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/07/2024 14:19	BGS	D
Volume in Water Column	84.72		Gallons		Field	1	08/07/2024 14:19	BGS	D
Water Level After Purge	74.25		Feet		Field	1	08/07/2024 14:19	BGS	D
Well Volumes Purged	1.95		Vol		Field	1	08/07/2024 14:19	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	73.3		mg/L	0.11	SW846 6010C	1	08/13/2024 09:33	MSY	J1
Iron, Total	0.067		mg/L	0.067	SW846 6010C	1	08/13/2024 09:33	MSY	J1
Magnesium, Total	20.4		mg/L	0.11	SW846 6010C	1	08/13/2024 09:33	MSY	J1
Manganese, Total	4.2		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:33	MSY	J1
Potassium, Total	9.1		mg/L	0.56	SW846 6010C	1	08/13/2024 09:33	MSY	J1
Sodium, Total	145		mg/L	0.56	SW846 6010C	1	08/13/2024 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	08/10/2024 17:43	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 17:43	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 17:43	BST	H

Results

Client Sample ID	FFMP30RW	Collected	08/07/2024 14:19
Lab Sample ID	3372454003	Lab Receipt	08/07/2024 15:50

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	102%	62 – 133	08/10/2024 17:43	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	08/10/2024 17:43	
Dibromofluoromethane	1868-53-7	96.2%	78 – 116	08/10/2024 17:43	
Toluene-d8	2037-26-5	101%	76 – 127	08/10/2024 17:43	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	63		mg/L	5	SM2320B-2011	1	08/09/2024 21:35	KMV	B
Alkalinity, Total	63	1	mg/L	5	SM2320B-2011	1	08/09/2024 21:35	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 11:56	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	330		mg/L	5.0	EPA 300.0	5	08/08/2024 16:21	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	08/08/2024 16:21	J1W	B
Nitrate-N	5.2		mg/L	2.5	EPA 300.0	5	08/08/2024 16:21	J1W	B
pH	7.53	2	pH_Units		S4500HB-11	1	08/09/2024 21:35	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 13:47	AKH	G
Specific Conductance	1320		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	56.9		mg/L	5.0	EPA 300.0	5	08/08/2024 16:21	J1W	B
Total Dissolved Solids	834		mg/L	25	SM2540C-15	1	08/12/2024 16:30	RAG	B
Total Organic Carbon (TOC)	0.90		mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	0.60		NTU	0.30	SM2130B-2011	1	08/08/2024 09:39	GMM	B

Results

Client Sample ID	FFMP033W	Collected	08/07/2024 14:34
Lab Sample ID	3372454004	Lab Receipt	08/07/2024 15:50

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	20.38		Feet		Field	1	08/07/2024 14:34	BGS	D
Dissolved Oxygen	1.24		mg/L	0.01	Field	1	08/07/2024 14:34	BGS	D
Elev Top MW Casing above MSL	516.52		Feet		Field	1	08/07/2024 14:34	BGS	D
Flow Rate	1.91		gal/min		Field	1	08/07/2024 14:34	BGS	D
Ground Water Elevation	496.14		ft/MSL		Field	1	08/07/2024 14:34	BGS	D
Oxidation-Reduction Potential	135		mV		Field	1	08/07/2024 14:34	BGS	D
pH, Field (SM4500B)	5.57		pH_Units		Field	1	08/07/2024 14:34	BGS	D
Sample Depth	79.00		Feet		Field	1	08/07/2024 14:34	BGS	D
Specific Conductance, Field	617		umhos/cm	1	Field	1	08/07/2024 14:34	BGS	D
Temperature	15.80		Deg. C		Field	1	08/07/2024 14:34	BGS	D
Total Well Depth	100.00		Feet		Field	1	08/07/2024 14:34	BGS	D
Turbidity, Field	3		NTU	1	Field	1	08/07/2024 14:34	BGS	D
Volume in Water Column	117.04		Gallons		Field	1	08/07/2024 14:34	BGS	D
Water Level After Purge	38.88		Feet		Field	1	08/07/2024 14:34	BGS	D
Well Volumes Purged	1.96		Vol		Field	1	08/07/2024 14:34	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	41.1		mg/L	0.11	SW846 6010C	1	08/13/2024 09:37	MSY	J1
Iron, Total	73.8		mg/L	0.067	SW846 6010C	1	08/13/2024 09:37	MSY	J1
Magnesium, Total	14.2		mg/L	0.11	SW846 6010C	1	08/13/2024 09:37	MSY	J1
Manganese, Total	0.50		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:37	MSY	J1
Potassium, Total	2.0		mg/L	0.56	SW846 6010C	1	08/13/2024 09:37	MSY	J1
Sodium, Total	19.5		mg/L	0.56	SW846 6010C	1	08/13/2024 09:37	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	08/10/2024 18:03	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 18:03	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 18:03	BST	H

Results

Client Sample ID	FFMP033W	Collected	08/07/2024 14:34
Lab Sample ID	3372454004	Lab Receipt	08/07/2024 15:50

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	104%	62 – 133	08/10/2024 18:03	
4-Bromofluorobenzene	460-00-4	96.5%	79 – 114	08/10/2024 18:03	
Dibromofluoromethane	1868-53-7	97.8%	78 – 116	08/10/2024 18:03	
Toluene-d8	2037-26-5	99.7%	76 – 127	08/10/2024 18:03	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	35		mg/L	5	SM2320B-2011	1	08/09/2024 21:47	KMV	B
Alkalinity, Total	35	1	mg/L	5	SM2320B-2011	1	08/09/2024 21:47	KMV	B
Ammonia-N, Low Level	0.18		mg/L	0.10	SM 4500-NH3G	1	08/12/2024 10:20	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	87.4		mg/L	2.0	EPA 300.0	2	08/08/2024 16:33	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/08/2024 16:33	J1W	B
Nitrate-N	10.3		mg/L	1.0	EPA 300.0	2	08/08/2024 16:33	J1W	B
pH	7.04	2	pH_Units		S4500HB-11	1	08/09/2024 21:47	KMV	B
Phenolics	ND	ND	mg/L	0.02	SW846 9066	5	08/13/2024 13:21	AKH	G
Specific Conductance	452		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	13.1		mg/L	2.0	EPA 300.0	2	08/08/2024 16:33	J1W	B
Total Dissolved Solids	350		mg/L	25	SM2540C-15	1	08/12/2024 16:30	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	290		NTU	0.30	SM2130B-2011	1	08/08/2024 09:39	GMM	B

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3372454001	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	
3372454002	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	
3372454003	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	
3372454004	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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3372454001	FFMP039W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1268308
		N/A	N/A	N/A		EPA 300.0	1271516
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1270415
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1268322
		N/A	N/A	N/A		SM2320B-2011	1270415
		N/A	N/A	N/A		SM2540C-15	1272441
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1269015
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372454002	FFMP038W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1268308
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1270415
		N/A	N/A	N/A		SM 4500-NH3G	1270023
		N/A	N/A	N/A		SM2130B-2011	1268322
		N/A	N/A	N/A		SM2320B-2011	1270415
		N/A	N/A	N/A		SM2540C-15	1272441
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1269015
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372454003	FFMP30RW	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1268308
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1270415
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1268322
		N/A	N/A	N/A		SM2320B-2011	1270415
		N/A	N/A	N/A		SM2540C-15	1272442
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1269015
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372454004	FFMP033W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1268308
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1270415
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1268322
		N/A	N/A	N/A		SM2320B-2011	1270415
		N/A	N/A	N/A		SM2540C-15	1272442
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1269015
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496

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.

3372454

Logged By: SLS
PM: SJB

54 of

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike PO Box 4424
Lancaster PA 17604

Contact: Dan Brown
Phone#: 717-735-0193
Project Name/#: Frey Farm Quarterly GWMP
Bill To: Lancaster County Solid Waste MA
Purchase Order #:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] dbrown@lcswma.org

Container Type	AG	AN	CG	P	P			P	P
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

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	O-OH	VOC Form 19Q	pH, CL, SpC, F, SO4, NO3, Tb, TDS	Alkalinity, Bicarbonate	FM	Sample Debth for AUX Data	NH3-N, COD	Metals Fe,Mn,Na,Ca,K,Mg
							Enter Number of Containers Per Sample or Field Results Below.								
1	FFMP039W	8/7/24	1143		G	GW	2	1	2	1	1	x	x	1	2
2	FFMP038W	8/7/24	1156		G	GW	2	1	2	1	1	x	x	1	2
3	FFMP30RW	8/7/24	1430 1419		G	GW	2	1	2	1	1	x	x	1	2
4	FFMP033W	8/7/24	1434		G	GW	2	1	2	1	1	x	x	1	2
5															
6															
7															
8															
9															
10															

(Completed by Receiving Lab)
Therm ID: WO Temp (°C)
WV Containers 0-6°C Y N NA

Temp By: 06 | WO Temp (°C): 2 | Therm ID: 510

Receipt Info Completed By: DPB
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N NA
CR6 Samples Filtered Y N NA
OP Samples Filtered Y N NA
VOA Trip Blank Y N NA
NJ≤ 4 Days? Y
Rad Screen (uCi)
Courier/Tracking #:

SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

Deviations? NO YES
If YES, list below:

Client contact:
Date/Tech:

Rad Screen (uCi)
New Source? Y N
New Source Contact:
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

Circle Sample Collector: ALS Tech / Client
Name: RJSharle ID:

Comments:

Date	Time		Relinquished By / Company Name		Received By / Company Name
8-7-24	1550	1	RJSharle ALS	2	
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom
EDDS: Format Type

Sample Disposal: Lab [x] Special [ ]

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3rd QTR 2024 GWMP-FORM 19Q
Workorder 3372788
Report ID 348021 on 8/21/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 08, 2024.

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.

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

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

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3372788001	FFMP031W	Ground Water	08/08/2024 11:12	08/08/2024 15:45	BGS	Analytical Laboratory Service
3372788002	FFMP002W	Ground Water	08/08/2024 10:20	08/08/2024 15:45	BGS	Analytical Laboratory Service
3372788003	FFMP02SW	Ground Water	08/08/2024 12:01	08/08/2024 15:45	BGS	Analytical Laboratory Service
3372788004	FFMP02DW	Ground Water	08/08/2024 13:26	08/08/2024 15:45	BGS	Analytical Laboratory Service
3372788005	FFMP032W	Ground Water	08/08/2024 13:13	08/08/2024 15:45	BGS	Analytical Laboratory Service
3372788006	FIELD BLANK	Water	08/08/2024 14:00	08/08/2024 15:45	BGS	Analytical Laboratory Service
3372788007	TRIP BLANK	Water	08/08/2024 15:45	08/08/2024 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.	
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	08/08/2024 11:12
Lab Sample ID	3372788001	Lab Receipt	08/08/2024 15:45

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	67.41	Feet		Field	#
Dissolved Oxygen	8.65	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	612.66	Feet		Field	#
Flow Rate	1.99	gal/min		Field	#
Ground Water Elevation	545.25	ft/MSL		Field	#
Oxidation-Reduction Potential	-130	mV		Field	#
pH, Field (SM4500B)	8.12	pH_Units		Field	#
Sample Depth	130.00	Feet		Field	#
Temperature	18.99	Deg. C		Field	#
Total Well Depth	142.70	Feet		Field	#
Turbidity, Field	100	NTU	1	Field	#
Volume in Water Column	110.68	Gallons		Field	#
Water Level After Purge	124.02	Feet		Field	#
Well Volumes Purged	1.44	Vol		Field	#
METALS					
Calcium, Total	63.4	mg/L	0.11	SW846 6010C	#
Iron, Total	2.9	mg/L	0.067	SW846 6010C	#
Magnesium, Total	4.9	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.47	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	10.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	84	mg/L	5	SM2320B-2011	#
Alkalinity, Total	84	mg/L	5	SM2320B-2011	#
Chloride	21.0	mg/L	2.0	EPA 300.0	#
pH	8.23	pH_Units		S4500HB-11	#
Specific Conductance	324	umhos/cm	5	SW846 9050A	#
Sulfate	49.1	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	178	mg/L	25	SM2540C-15	#
Turbidity	24	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP002W	Collected	08/08/2024 10:20
Lab Sample ID	3372788002	Lab Receipt	08/08/2024 15:45

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	67.76	Feet		Field	#
Dissolved Oxygen	5.69	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	613.20	Feet		Field	#
Flow Rate	1.12	gal/min		Field	#
Ground Water Elevation	545.44	ft/MSL		Field	#
Oxidation-Reduction Potential	331	mV		Field	#
pH, Field (SM4500B)	4.41	pH_Units		Field	#
Sample Depth	85.00	Feet		Field	#
Specific Conductance, Field	351	umhos/cm	1	Field	#
Temperature	15.57	Deg. C		Field	#
Total Well Depth	90.02	Feet		Field	#
Volume in Water Column	32.72	Gallons		Field	#
Water Level After Purge	80.41	Feet		Field	#
Well Volumes Purged	0.62	Vol		Field	#
METALS					
Calcium, Total	18.2	mg/L	0.11	SW846 6010C	#
Magnesium, Total	7.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.25	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	13.4	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Chloride	16.9	mg/L	2.0	EPA 300.0	#
Nitrate-N	17.4	mg/L	1.0	EPA 300.0	#
pH	5.95	pH_Units		S4500HB-11	#
Specific Conductance	247	umhos/cm	5	SW846 9050A	#
Sulfate	13.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	179	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.56	mg/L	0.50	SW846 9060A	#
Turbidity	1.1	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP02SW	Collected	08/08/2024 12:01
Lab Sample ID	3372788003	Lab Receipt	08/08/2024 15:45

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	14.25	Feet		Field	#
Dissolved Oxygen	6.33	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	509.90	Feet		Field	#
Flow Rate	1.00	gal/min		Field	#
Ground Water Elevation	495.65	ft/MSL		Field	#
Oxidation-Reduction Potential	219	mV		Field	#
pH, Field (SM4500B)	5.55	pH_Units		Field	#
Sample Depth	18.00	Feet		Field	#
Specific Conductance, Field	348	umhos/cm	1	Field	#
Temperature	18.59	Deg. C		Field	#
Total Well Depth	22.70	Feet		Field	#
Turbidity, Field	24	NTU	1	Field	#
Volume in Water Column	5.49	Gallons		Field	#
Water Level After Purge	15.42	Feet		Field	#
Well Volumes Purged	0.91	Vol		Field	#
METALS					
Calcium, Total	21.9	mg/L	0.11	SW846 6010C	#
Iron, Total	0.62	mg/L	0.067	SW846 6010C	#
Magnesium, Total	6.9	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.021	mg/L	0.0056	SW846 6010C	#
Potassium, Total	7.2	mg/L	0.56	SW846 6010C	#
Sodium, Total	10.9	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	30	mg/L	5	SM2320B-2011	#
Alkalinity, Total	30	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.30	mg/L	0.10	SM 4500-NH3G	#
Chloride	13.4	mg/L	2.0	EPA 300.0	#
Nitrate-N	7.4	mg/L	1.0	EPA 300.0	#
pH	7.48	pH_Units		S4500HB-11	#
Specific Conductance	248	umhos/cm	5	SW846 9050A	#
Sulfate	39.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	141	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	4.3	mg/L	0.50	SW846 9060A	#
Turbidity	27	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP02DW	Collected	08/08/2024 13:26
Lab Sample ID	3372788004	Lab Receipt	08/08/2024 15:45

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	27.02	Feet		Field	#
Dissolved Oxygen	0.06	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	509.60	Feet		Field	#
Flow Rate	2.10	gal/min		Field	#
Ground Water Elevation	482.58	ft/MSL		Field	#
Oxidation-Reduction Potential	-7	mV		Field	#
pH, Field (SM4500B)	7.12	pH_Units		Field	#
Sample Depth	120.00	Feet		Field	#
Specific Conductance, Field	2194	umhos/cm	1	Field	#
Temperature	19.92	Deg. C		Field	#
Total Well Depth	153.00	Feet		Field	#
Turbidity, Field	8	NTU	1	Field	#
Volume in Water Column	185.19	Gallons		Field	#
Water Level After Purge	79.96	Feet		Field	#
Well Volumes Purged	1.13	Vol		Field	#
METALS					
Calcium, Total	132	mg/L	0.11	SW846 6010C	#
Iron, Total	0.62	mg/L	0.067	SW846 6010C	#
Magnesium, Total	19.8	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.31	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.4	mg/L	0.56	SW846 6010C	#
Sodium, Total	134	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	130	mg/L	5	SM2320B-2011	#
Alkalinity, Total	130	mg/L	5	SM2320B-2011	#
Chloride	355	mg/L	5.0	EPA 300.0	#
Nitrate-N	7.4	mg/L	2.5	EPA 300.0	#
pH	8.23	pH_Units		S4500HB-11	#
Specific Conductance	1510	umhos/cm	5	SW846 9050A	#
Sulfate	44.1	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	990	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.88	mg/L	0.50	SW846 9060A	#
Turbidity	7.9	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP032W	Collected	08/08/2024 13:13
Lab Sample ID	3372788005	Lab Receipt	08/08/2024 15:45

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	49.25	Feet		Field	#
Dissolved Oxygen	0.24	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	594.09	Feet		Field	#
Flow Rate	0.44	gal/min		Field	#
Ground Water Elevation	544.84	ft/MSL		Field	#
Oxidation-Reduction Potential	-135	mV		Field	#
pH, Field (SM4500B)	7.08	pH_Units		Field	#
Sample Depth	62.00	Feet		Field	#
Specific Conductance, Field	335	umhos/cm	1	Field	#
Temperature	18.89	Deg. C		Field	#
Total Well Depth	77.60	Feet		Field	#
Volume in Water Column	41.67	Gallons		Field	#
Water Level After Purge	56.28	Feet		Field	#
Well Volumes Purged	0.46	Vol		Field	#
METALS					
Calcium, Total	19.1	mg/L	0.11	SW846 6010C	#
Iron, Total	7.0	mg/L	0.067	SW846 6010C	#
Magnesium, Total	6.6	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.73	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.6	mg/L	0.56	SW846 6010C	#
Sodium, Total	13.2	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	68	mg/L	5	SM2320B-2011	#
Alkalinity, Total	68	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.76	mg/L	0.10	SM 4500-NH3G	#
Chloride	29.7	mg/L	2.0	EPA 300.0	#
pH	8.14	pH_Units		S4500HB-11	#
Specific Conductance	219	umhos/cm	5	SW846 9050A	#
Total Dissolved Solids	104	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.55	mg/L	0.50	SW846 9060A	#
Turbidity	95	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FIELD BLANK	Collected	08/08/2024 14:00
Lab Sample ID	3372788006	Lab Receipt	08/08/2024 15:45

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
pH	5.74	pH_Units		S4500HB-11	#
Total Organic Carbon (TOC)	1.6	mg/L	0.50	SW846 9060A	#
Turbidity	0.40	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	FFMP031W	Collected	08/08/2024 11:12
Lab Sample ID	3372788001	Lab Receipt	08/08/2024 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	67.41		Feet		Field	1	08/08/2024 11:12	BGS	D
Dissolved Oxygen	8.65		mg/L	0.01	Field	1	08/08/2024 11:12	BGS	D
Elev Top MW Casing above MSL	612.66		Feet		Field	1	08/08/2024 11:12	BGS	D
Flow Rate	1.99		gal/min		Field	1	08/08/2024 11:12	BGS	D
Ground Water Elevation	545.25		ft/MSL		Field	1	08/08/2024 11:12	BGS	D
Oxidation-Reduction Potential	-130		mV		Field	1	08/08/2024 11:12	BGS	D
pH, Field (SM4500B)	8.12		pH_Units		Field	1	08/08/2024 11:12	BGS	D
Sample Depth	130.00		Feet		Field	1	08/08/2024 11:12	BGS	D
Specific Conductance, Field	ND	ND	umhos/cm	1	Field	1	08/08/2024 11:12	BGS	D
Temperature	18.99		Deg. C		Field	1	08/08/2024 11:12	BGS	D
Total Well Depth	142.70		Feet		Field	1	08/08/2024 11:12	BGS	D
Turbidity, Field	100		NTU	1	Field	1	08/08/2024 11:12	BGS	D
Volume in Water Column	110.68		Gallons		Field	1	08/08/2024 11:12	BGS	D
Water Level After Purge	124.02		Feet		Field	1	08/08/2024 11:12	BGS	D
Well Volumes Purged	1.44		Vol		Field	1	08/08/2024 11:12	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	63.4		mg/L	0.11	SW846 6010C	1	08/13/2024 09:38	MSY	J
Iron, Total	2.9		mg/L	0.067	SW846 6010C	1	08/13/2024 09:38	MSY	J
Magnesium, Total	4.9		mg/L	0.11	SW846 6010C	1	08/13/2024 09:38	MSY	J
Manganese, Total	0.47		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:38	MSY	J
Potassium, Total	1.7		mg/L	0.56	SW846 6010C	1	08/13/2024 09:38	MSY	J
Sodium, Total	10.5		mg/L	0.56	SW846 6010C	1	08/13/2024 09:38	MSY	J

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	08/13/2024 18:34	ILY	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:34	ILY	H

Results

Client Sample ID	FFMP031W	Collected	08/08/2024 11:12
Lab Sample ID	3372788001	Lab Receipt	08/08/2024 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	106%	62 – 133	08/13/2024 18:34	
4-Bromofluorobenzene	460-00-4	97.7%	79 – 114	08/13/2024 18:34	
Dibromofluoromethane	1868-53-7	98.3%	78 – 116	08/13/2024 18:34	
Toluene-d8	2037-26-5	99.7%	76 – 127	08/13/2024 18:34	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	84		mg/L	5	SM2320B-2011	1	08/12/2024 17:04	KMV	B
Alkalinity, Total	84	1	mg/L	5	SM2320B-2011	1	08/12/2024 17:04	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 16:15	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/12/2024 12:09	KMS	A
Chloride	21.0		mg/L	2.0	EPA 300.0	2	08/09/2024 22:46	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/09/2024 22:46	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/09/2024 22:46	J1W	B
pH	8.23	2	pH_Units		S4500HB-11	1	08/12/2024 17:04	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 15:22	AKH	G
Specific Conductance	324		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	49.1		mg/L	2.0	EPA 300.0	2	08/09/2024 22:46	J1W	B
Total Dissolved Solids	178		mg/L	25	SM2540C-15	1	08/13/2024 16:00	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	08/09/2024 23:19	PAG	E
Turbidity	24		NTU	0.30	SM2130B-2011	1	08/09/2024 08:51	NPF	B

Results

Client Sample ID	FFMP002W	Collected	08/08/2024 10:20
Lab Sample ID	3372788002	Lab Receipt	08/08/2024 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	67.76		Feet		Field	1	08/08/2024 10:20	BGS	D
Dissolved Oxygen	5.69		mg/L	0.01	Field	1	08/08/2024 10:20	BGS	D
Elev Top MW Casing above MSL	613.20		Feet		Field	1	08/08/2024 10:20	BGS	D
Flow Rate	1.12		gal/min		Field	1	08/08/2024 10:20	BGS	D
Ground Water Elevation	545.44		ft/MSL		Field	1	08/08/2024 10:20	BGS	D
Oxidation-Reduction Potential	331		mV		Field	1	08/08/2024 10:20	BGS	D
pH, Field (SM4500B)	4.41		pH_Units		Field	1	08/08/2024 10:20	BGS	D
Sample Depth	85.00		Feet		Field	1	08/08/2024 10:20	BGS	D
Specific Conductance, Field	351		umhos/cm	1	Field	1	08/08/2024 10:20	BGS	D
Temperature	15.57		Deg. C		Field	1	08/08/2024 10:20	BGS	D
Total Well Depth	90.02		Feet		Field	1	08/08/2024 10:20	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/08/2024 10:20	BGS	D
Volume in Water Column	32.72		Gallons		Field	1	08/08/2024 10:20	BGS	D
Water Level After Purge	80.41		Feet		Field	1	08/08/2024 10:20	BGS	D
Well Volumes Purged	0.62		Vol		Field	1	08/08/2024 10:20	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	18.2		mg/L	0.11	SW846 6010C	1	08/13/2024 09:40	MSY	J
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/13/2024 09:40	MSY	J
Magnesium, Total	7.2		mg/L	0.11	SW846 6010C	1	08/13/2024 09:40	MSY	J
Manganese, Total	0.25		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:40	MSY	J
Potassium, Total	1.1		mg/L	0.56	SW846 6010C	1	08/13/2024 09:40	MSY	J
Sodium, Total	13.4		mg/L	0.56	SW846 6010C	1	08/13/2024 09:40	MSY	J

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	08/13/2024 18:54	ILY	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:54	ILY	H

Results

Client Sample ID	FFMP002W	Collected	08/08/2024 10:20
Lab Sample ID	3372788002	Lab Receipt	08/08/2024 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	08/13/2024 18:54	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	08/13/2024 18:54	
Dibromofluoromethane	1868-53-7	97.7%	78 – 116	08/13/2024 18:54	
Toluene-d8	2037-26-5	101%	76 – 127	08/13/2024 18:54	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	08/12/2024 17:15	KMV	B
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	08/12/2024 17:15	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 16:18	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/12/2024 12:09	KMS	A
Chloride	16.9		mg/L	2.0	EPA 300.0	2	08/09/2024 23:32	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/09/2024 23:32	J1W	B
Nitrate-N	17.4		mg/L	1.0	EPA 300.0	2	08/09/2024 23:32	J1W	B
pH	5.95	2	pH_Units		S4500HB-11	1	08/12/2024 17:15	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 15:08	AKH	G
Specific Conductance	247		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	13.8		mg/L	2.0	EPA 300.0	2	08/09/2024 23:32	J1W	B
Total Dissolved Solids	179		mg/L	25	SM2540C-15	1	08/13/2024 16:00	RAG	B
Total Organic Carbon (TOC)	0.56		mg/L	0.50	SW846 9060A	1	08/09/2024 23:19	PAG	E
Turbidity	1.1		NTU	0.30	SM2130B-2011	1	08/09/2024 08:51	NPF	B

Results

Client Sample ID	FFMP02SW	Collected	08/08/2024 12:01
Lab Sample ID	3372788003	Lab Receipt	08/08/2024 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	14.25		Feet		Field	1	08/08/2024 12:01	BGS	D
Dissolved Oxygen	6.33		mg/L	0.01	Field	1	08/08/2024 12:01	BGS	D
Elev Top MW Casing above MSL	509.90		Feet		Field	1	08/08/2024 12:01	BGS	D
Flow Rate	1.00		gal/min		Field	1	08/08/2024 12:01	BGS	D
Ground Water Elevation	495.65		ft/MSL		Field	1	08/08/2024 12:01	BGS	D
Oxidation-Reduction Potential	219		mV		Field	1	08/08/2024 12:01	BGS	D
pH, Field (SM4500B)	5.55		pH_Units		Field	1	08/08/2024 12:01	BGS	D
Sample Depth	18.00		Feet		Field	1	08/08/2024 12:01	BGS	D
Specific Conductance, Field	348		umhos/cm	1	Field	1	08/08/2024 12:01	BGS	D
Temperature	18.59		Deg. C		Field	1	08/08/2024 12:01	BGS	D
Total Well Depth	22.70		Feet		Field	1	08/08/2024 12:01	BGS	D
Turbidity, Field	24		NTU	1	Field	1	08/08/2024 12:01	BGS	D
Volume in Water Column	5.49		Gallons		Field	1	08/08/2024 12:01	BGS	D
Water Level After Purge	15.42		Feet		Field	1	08/08/2024 12:01	BGS	D
Well Volumes Purged	0.91		Vol		Field	1	08/08/2024 12:01	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	21.9		mg/L	0.11	SW846 6010C	1	08/13/2024 09:41	MSY	J
Iron, Total	0.62		mg/L	0.067	SW846 6010C	1	08/13/2024 09:41	MSY	J
Magnesium, Total	6.9		mg/L	0.11	SW846 6010C	1	08/13/2024 09:41	MSY	J
Manganese, Total	0.021		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:41	MSY	J
Potassium, Total	7.2		mg/L	0.56	SW846 6010C	1	08/13/2024 09:41	MSY	J
Sodium, Total	10.9		mg/L	0.56	SW846 6010C	1	08/13/2024 09:41	MSY	J

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	08/13/2024 19:15	ILY	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:15	ILY	H

Results

Client Sample ID	FFMP02SW	Collected	08/08/2024 12:01
Lab Sample ID	3372788003	Lab Receipt	08/08/2024 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	105%	62 – 133	08/13/2024 19:15	
4-Bromofluorobenzene	460-00-4	99.6%	79 – 114	08/13/2024 19:15	
Dibromofluoromethane	1868-53-7	97%	78 – 116	08/13/2024 19:15	
Toluene-d8	2037-26-5	102%	76 – 127	08/13/2024 19:15	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	30		mg/L	5	SM2320B-2011	1	08/12/2024 17:27	KMV	B
Alkalinity, Total	30	1	mg/L	5	SM2320B-2011	1	08/12/2024 17:27	KMV	B
Ammonia-N, Low Level	0.30		mg/L	0.10	SM 4500-NH3G	1	08/12/2024 15:47	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/12/2024 12:09	KMS	A
Chloride	13.4		mg/L	2.0	EPA 300.0	2	08/09/2024 23:44	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/09/2024 23:44	J1W	B
Nitrate-N	7.4		mg/L	1.0	EPA 300.0	2	08/09/2024 23:44	J1W	B
pH	7.48	2	pH_Units		S4500HB-11	1	08/12/2024 17:27	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 15:00	AKH	G
Specific Conductance	248		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	39.0		mg/L	2.0	EPA 300.0	2	08/09/2024 23:44	J1W	B
Total Dissolved Solids	141		mg/L	25	SM2540C-15	1	08/13/2024 16:00	RAG	B
Total Organic Carbon (TOC)	4.3		mg/L	0.50	SW846 9060A	1	08/09/2024 23:19	PAG	E
Turbidity	27		NTU	0.30	SM2130B-2011	1	08/09/2024 08:51	NPF	B

Results

Client Sample ID	FFMP02DW	Collected	08/08/2024 13:26
Lab Sample ID	3372788004	Lab Receipt	08/08/2024 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	27.02		Feet		Field	1	08/08/2024 13:26	BGS	D
Dissolved Oxygen	0.06		mg/L	0.01	Field	1	08/08/2024 13:26	BGS	D
Elev Top MW Casing above MSL	509.60		Feet		Field	1	08/08/2024 13:26	BGS	D
Flow Rate	2.10		gal/min		Field	1	08/08/2024 13:26	BGS	D
Ground Water Elevation	482.58		ft/MSL		Field	1	08/08/2024 13:26	BGS	D
Oxidation-Reduction Potential	-7		mV		Field	1	08/08/2024 13:26	BGS	D
pH, Field (SM4500B)	7.12		pH_Units		Field	1	08/08/2024 13:26	BGS	D
Sample Depth	120.00		Feet		Field	1	08/08/2024 13:26	BGS	D
Specific Conductance, Field	2194		umhos/cm	1	Field	1	08/08/2024 13:26	BGS	D
Temperature	19.92		Deg. C		Field	1	08/08/2024 13:26	BGS	D
Total Well Depth	153.00		Feet		Field	1	08/08/2024 13:26	BGS	D
Turbidity, Field	8		NTU	1	Field	1	08/08/2024 13:26	BGS	D
Volume in Water Column	185.19		Gallons		Field	1	08/08/2024 13:26	BGS	D
Water Level After Purge	79.96		Feet		Field	1	08/08/2024 13:26	BGS	D
Well Volumes Purged	1.13		Vol		Field	1	08/08/2024 13:26	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	132		mg/L	0.11	SW846 6010C	1	08/13/2024 10:12	MSY	J1
Iron, Total	0.62		mg/L	0.067	SW846 6010C	1	08/13/2024 10:12	MSY	J1
Magnesium, Total	19.8		mg/L	0.11	SW846 6010C	1	08/13/2024 10:12	MSY	J1
Manganese, Total	0.31		mg/L	0.0056	SW846 6010C	1	08/13/2024 10:12	MSY	J1
Potassium, Total	1.4		mg/L	0.56	SW846 6010C	1	08/13/2024 10:12	MSY	J1
Sodium, Total	134		mg/L	0.56	SW846 6010C	1	08/13/2024 10:12	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	08/13/2024 19:35	ILY	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:35	ILY	H

Results

Client Sample ID	FFMP02DW	Collected	08/08/2024 13:26
Lab Sample ID	3372788004	Lab Receipt	08/08/2024 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	106%	62 – 133	08/13/2024 19:35	
4-Bromofluorobenzene	460-00-4	95.6%	79 – 114	08/13/2024 19:35	
Dibromofluoromethane	1868-53-7	97.1%	78 – 116	08/13/2024 19:35	
Toluene-d8	2037-26-5	99.6%	76 – 127	08/13/2024 19:35	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	130		mg/L	5	SM2320B-2011	1	08/12/2024 17:38	KMV	B
Alkalinity, Total	130	1	mg/L	5	SM2320B-2011	1	08/12/2024 17:38	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 15:50	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/12/2024 12:09	KMS	A
Chloride	355		mg/L	5.0	EPA 300.0	5	08/09/2024 23:55	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	08/09/2024 23:55	J1W	B
Nitrate-N	7.4		mg/L	2.5	EPA 300.0	5	08/09/2024 23:55	J1W	B
pH	8.23	2	pH_Units		S4500HB-11	1	08/12/2024 17:38	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 15:04	AKH	G
Specific Conductance	1510		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	44.1		mg/L	5.0	EPA 300.0	5	08/09/2024 23:55	J1W	B
Total Dissolved Solids	990		mg/L	25	SM2540C-15	1	08/13/2024 16:00	RAG	B
Total Organic Carbon (TOC)	0.88		mg/L	0.50	SW846 9060A	1	08/09/2024 23:19	PAG	E
Turbidity	7.9		NTU	0.30	SM2130B-2011	1	08/09/2024 08:51	NPF	B

Results

Client Sample ID	FFMP032W	Collected	08/08/2024 13:13
Lab Sample ID	3372788005	Lab Receipt	08/08/2024 15:45

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	49.25		Feet		Field	1	08/08/2024 13:13	BGS	D
Dissolved Oxygen	0.24		mg/L	0.01	Field	1	08/08/2024 13:13	BGS	D
Elev Top MW Casing above MSL	594.09		Feet		Field	1	08/08/2024 13:13	BGS	D
Flow Rate	0.44		gal/min		Field	1	08/08/2024 13:13	BGS	D
Ground Water Elevation	544.84		ft/MSL		Field	1	08/08/2024 13:13	BGS	D
Oxidation-Reduction Potential	-135		mV		Field	1	08/08/2024 13:13	BGS	D
pH, Field (SM4500B)	7.08		pH_Units		Field	1	08/08/2024 13:13	BGS	D
Sample Depth	62.00		Feet		Field	1	08/08/2024 13:13	BGS	D
Specific Conductance, Field	335		umhos/cm	1	Field	1	08/08/2024 13:13	BGS	D
Temperature	18.89		Deg. C		Field	1	08/08/2024 13:13	BGS	D
Total Well Depth	77.60		Feet		Field	1	08/08/2024 13:13	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/08/2024 13:13	BGS	D
Volume in Water Column	41.67		Gallons		Field	1	08/08/2024 13:13	BGS	D
Water Level After Purge	56.28		Feet		Field	1	08/08/2024 13:13	BGS	D
Well Volumes Purged	0.46		Vol		Field	1	08/08/2024 13:13	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	08/13/2024 10:14	MSY	J1
Iron, Total	7.0		mg/L	0.067	SW846 6010C	1	08/13/2024 10:14	MSY	J1
Magnesium, Total	6.6		mg/L	0.11	SW846 6010C	1	08/13/2024 10:14	MSY	J1
Manganese, Total	0.73		mg/L	0.0056	SW846 6010C	1	08/13/2024 10:14	MSY	J1
Potassium, Total	1.6		mg/L	0.56	SW846 6010C	1	08/13/2024 10:14	MSY	J1
Sodium, Total	13.2		mg/L	0.56	SW846 6010C	1	08/13/2024 10:14	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	08/13/2024 19:55	ILY	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 19:55	ILY	H

Results

Client Sample ID	FFMP032W	Collected	08/08/2024 13:13
Lab Sample ID	3372788005	Lab Receipt	08/08/2024 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	08/13/2024 19:55	
4-Bromofluorobenzene	460-00-4	98.9%	79 – 114	08/13/2024 19:55	
Dibromofluoromethane	1868-53-7	95.6%	78 – 116	08/13/2024 19:55	
Toluene-d8	2037-26-5	98.6%	76 – 127	08/13/2024 19:55	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	68		mg/L	5	SM2320B-2011	1	08/12/2024 17:49	KMV	B
Alkalinity, Total	68	1	mg/L	5	SM2320B-2011	1	08/12/2024 17:49	KMV	B
Ammonia-N, Low Level	0.76		mg/L	0.10	SM 4500-NH3G	1	08/12/2024 16:21	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/12/2024 12:09	KMS	A
Chloride	29.7		mg/L	2.0	EPA 300.0	2	08/10/2024 00:07	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/10/2024 00:07	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/10/2024 00:07	J1W	B
pH	8.14	2	pH_Units		S4500HB-11	1	08/12/2024 17:49	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 14:53	AKH	G
Specific Conductance	219		umhos/cm	5	SW846 9050A	1	08/13/2024 14:53	LMD	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	08/10/2024 00:07	J1W	B
Total Dissolved Solids	104		mg/L	25	SM2540C-15	1	08/13/2024 16:00	RAG	B
Total Organic Carbon (TOC)	0.55		mg/L	0.50	SW846 9060A	1	08/09/2024 23:19	PAG	E
Turbidity	95		NTU	0.30	SM2130B-2011	1	08/09/2024 08:51	NPF	B

Results

Client Sample ID	FIELD BLANK	Collected	08/08/2024 14:00
Lab Sample ID	3372788006	Lab Receipt	08/08/2024 15:45

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	ND	ND	mg/L	0.11	SW846 6010C	1	08/13/2024 10:15	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/13/2024 10:15	MSY	J1
Magnesium, Total	ND	ND	mg/L	0.11	SW846 6010C	1	08/13/2024 10:15	MSY	J1
Manganese, Total	ND	ND	mg/L	0.0056	SW846 6010C	1	08/13/2024 10:15	MSY	J1
Potassium, Total	ND	ND	mg/L	0.56	SW846 6010C	1	08/13/2024 10:15	MSY	J1
Sodium, Total	ND	ND	mg/L	0.56	SW846 6010C	1	08/13/2024 10:15	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	08/13/2024 17:53	ILY	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 17:53	ILY	H

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	106%	62 – 133	08/13/2024 17:53	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	08/13/2024 17:53	
Dibromofluoromethane	1868-53-7	98.4%	78 – 116	08/13/2024 17:53	
Toluene-d8	2037-26-5	101%	76 – 127	08/13/2024 17:53	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	08/12/2024 18:09	KMV	B
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	08/12/2024 18:09	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 15:44	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/12/2024 12:09	KMS	A
Chloride	ND	ND	mg/L	2.0	EPA 300.0	2	08/10/2024 00:18	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/10/2024 00:18	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/10/2024 00:18	J1W	B
pH	5.74	2	pH_Units		S4500HB-11	1	08/12/2024 18:09	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 14:56	AKH	G

Results

Client Sample ID	FIELD BLANK	Collected	08/08/2024 14:00
Lab Sample ID	3372788006	Lab Receipt	08/08/2024 15:45

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	08/13/2024 14:53	LMD	B
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	08/10/2024 00:18	J1W	B
Total Dissolved Solids	ND	ND	mg/L	25	SM2540C-15	1	08/13/2024 16:00	RAG	B
Total Organic Carbon (TOC)	1.6		mg/L	0.50	SW846 9060A	1	08/09/2024 23:19	PAG	E
Turbidity	0.40		NTU	0.30	SM2130B-2011	1	08/09/2024 08:51	NPF	B

Results

Client Sample ID	TRIP BLANK	Collected	08/08/2024 15:45
Lab Sample ID	3372788007	Lab Receipt	08/08/2024 15:45

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	08/13/2024 18:13	ILY	A
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/13/2024 18:13	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	106%	62 – 133	08/13/2024 18:13	
4-Bromofluorobenzene	460-00-4	97.3%	79 – 114	08/13/2024 18:13	
Dibromofluoromethane	1868-53-7	98%	78 – 116	08/13/2024 18:13	
Toluene-d8	2037-26-5	99%	76 – 127	08/13/2024 18:13	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3372788001	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	
3372788002	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	
3372788003	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	
3372788004	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	

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3372788005	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	
3372788006	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	
3372788007	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
3372788001	FFMP031W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1273122
		N/A	N/A	N/A		EPA 300.0	1269911
		N/A	N/A	N/A		EPA 410.4	1272438
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1269917
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2540C-15	1272446
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1270212
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372788002	FFMP002W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1273122
		N/A	N/A	N/A		EPA 300.0	1269911
		N/A	N/A	N/A		EPA 410.4	1272438
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1269917
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2540C-15	1272446
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1270212
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372788003	FFMP02SW	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1273122
		N/A	N/A	N/A		EPA 300.0	1269911
		N/A	N/A	N/A		EPA 410.4	1272438
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1270023
		N/A	N/A	N/A		SM2130B-2011	1269917
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2540C-15	1272446
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1270212
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372788004	FFMP02DW	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1272308	08/12/2024 05:40	ANN	SW846 6010C	1273038
		N/A	N/A	N/A		SW846 8260B	1273122
		N/A	N/A	N/A		EPA 300.0	1269911
		N/A	N/A	N/A		EPA 410.4	1272438
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1270023
		N/A	N/A	N/A		SM2130B-2011	1269917
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2540C-15	1272446
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1270212
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3372788005	FFMP032W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1272308	08/12/2024 05:40	ANN	SW846 6010C	1273038
		N/A	N/A	N/A		SW846 8260B	1273122
		N/A	N/A	N/A		EPA 300.0	1269911
		N/A	N/A	N/A		EPA 410.4	1272438
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1269917
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2540C-15	1272446
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1270212
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372788006	FIELD BLANK	SW846 3015A	1272308	08/12/2024 05:40	ANN	SW846 6010C	1273038
		N/A	N/A	N/A		SW846 8260B	1273122
		N/A	N/A	N/A		EPA 300.0	1269911
		N/A	N/A	N/A		EPA 410.4	1272438
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1270023
		N/A	N/A	N/A		SM2130B-2011	1269917
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2540C-15	1272446
		N/A	N/A	N/A		SW846 9050A	1273309
		N/A	N/A	N/A		SW846 9060A	1270212
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372788007	TRIP BLANK	N/A	N/A	N/A		SW846 8260B	1273122

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.

3372788
Logged By: SLS
PM: SJB

-788 of

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike PO Box 4424
Lancaster PA 17604

Contact: Dan Brown
Phone#: 717-735-0193
Project Name/#: Frey Farm Quarterly GWMP
Bill To: Lancaster County Solid Waste MA
Purchase Order #:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] dbrown@lcswma.org

	Container Type	AG	AN	CG	P	P			P		
	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

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	O-OH	VOC Form 19Q	pH, CL, SpC, F, SO4, NO3, Tb, TDS	Alkalinity, Bicarbonate	FM	Sample Depth for AUX Data	NH3-N, COD	Metals Fe,Mn,Na,Ca,K,Mg	
							Enter Number of Containers Per Sample or Field Results Below.									
1	FFMP031W	8/8/24	1112		G	GW	2	1	2	1	1	x	x	1	2	
2	FFMP002W	8/8/24	1020		G	GW	2	1	2	1	1	x	x	1	2	
3	FFMP02SW	8/8/24	1201		G	GW	2	1	2	1	1	x	x	1	2	
4	FFMP02DW	8/8/24	1326		G	GW	2	1	2	1	1	x	x	1	2	
5	FFMP032W	8/8/24	1313		G	GW	2	1	2	1	1	x	x	1	2	
6	Field Blank	8/8/24	1400			DI	2	1	2	1	1			1	2	
7	Trip Blank	8/8/24	1545			DI			2							
8																
9																
10																

Circle Sample Collector: ALS Tech / Client
Name: [illegible] ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
8-8-24	1545	1	[illegible] ALS	2	DAG/LAS
		3		4	
		5		6	
		7		8	
		9		10	

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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

Rev 07.06.2023

ion (completed by Receiving Lab)
Temp Taken By: [illegible] Therm ID: 570 WO Temp (°C) 4
Receipt Info completed by: DAG WV Containers 0-6°C Y N NA

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	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N
Courier/Tracking #

Deviations? NO YES
If YES, list below:
line dino GIC

DAG 8/8/24
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

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3rd QTR 2024 GWMP-FORM 19Q
Workorder 3372011
Report ID 348025 on 8/21/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 05, 2024.

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.

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

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

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3372011001	FFMP015W	Ground Water	08/05/2024 11:22	08/05/2024 16:00	BGS	Analytical Laboratory Service
3372011002	FFMP034W	Ground Water	08/05/2024 13:07	08/05/2024 16:00	BGS	Analytical Laboratory Service
3372011003	FFMP04AW	Ground Water	08/05/2024 14:23	08/05/2024 16:00	BGS	Analytical Laboratory Service
3372011004	FFMP03AW	Ground Water	08/05/2024 14:50	08/05/2024 16:00	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.
4	The QC sample type MSD for method SW846 6010C was outside the control limits for the analyte Magnesium, Total. The % Recovery was reported as 161 and the control limits were 75 to 125.

Detected Results Summary

Client Sample ID	FFMP015W	Collected	08/05/2024 11:22
Lab Sample ID	3372011001	Lab Receipt	08/05/2024 16:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	60.61	Feet		Field	#
Dissolved Oxygen	8.23	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	576.40	Feet		Field	#
Flow Rate	1.93	gal/min		Field	#
Ground Water Elevation	515.79	ft/MSL		Field	#
Oxidation-Reduction Potential	317	mV		Field	#
pH, Field (SM4500B)	5.57	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	402	umhos/cm	1	Field	#
Temperature	16.23	Deg. C		Field	#
Total Well Depth	149.90	Feet		Field	#
Volume in Water Column	131.26	Gallons		Field	#
Water Level After Purge	107.84	Feet		Field	#
Well Volumes Purged	1.10	Vol		Field	#
METALS					
Calcium, Total	14.1	mg/L	0.11	SW846 6010C	#
Magnesium, Total	15.4	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.023	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.1	mg/L	0.56	SW846 6010C	#
Sodium, Total	18.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	23	mg/L	5	SM2320B-2011	#
Alkalinity, Total	23	mg/L	5	SM2320B-2011	#
Chloride	13.9	mg/L	2.0	EPA 300.0	#
Nitrate-N	12.1	mg/L	1.0	EPA 300.0	#
pH	7.47	pH_Units		S4500HB-11	#
Specific Conductance	730	umhos/cm	5	SW846 9050A	#
Sulfate	49.5	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	188	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.95	mg/L	0.50	SW846 9060A	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP034W	Collected	08/05/2024 13:07
Lab Sample ID	3372011002	Lab Receipt	08/05/2024 16:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	10.96	Feet		Field	#
Dissolved Oxygen	1.47	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	472.88	Feet		Field	#
Flow Rate	1.64	gal/min		Field	#
Ground Water Elevation	461.92	ft/MSL		Field	#
Oxidation-Reduction Potential	165	mV		Field	#
pH, Field (SM4500B)	5.80	pH_Units		Field	#
Sample Depth	25.85	Feet		Field	#
Specific Conductance, Field	1033	umhos/cm	1	Field	#
Temperature	14.34	Deg. C		Field	#
Total Well Depth	121.00	Feet		Field	#
Turbidity, Field	2	NTU	1	Field	#
Volume in Water Column	161.76	Gallons		Field	#
Water Level After Purge	20.47	Feet		Field	#
Well Volumes Purged	1.32	Vol		Field	#
METALS					
Calcium, Total	61.3	mg/L	0.11	SW846 6010C	#
Iron, Total	2.9	mg/L	0.067	SW846 6010C	#
Magnesium, Total	21.6	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.099	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.7	mg/L	0.56	SW846 6010C	#
Sodium, Total	44.6	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	41	mg/L	5	SM2320B-2011	#
Alkalinity, Total	41	mg/L	5	SM2320B-2011	#
Chloride	161	mg/L	2.0	EPA 300.0	#
Nitrate-N	10.6	mg/L	1.0	EPA 300.0	#
pH	7.77	pH_Units		S4500HB-11	#
Specific Conductance	1440	umhos/cm	5	SW846 9050A	#
Sulfate	31.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	546	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.65	mg/L	0.50	SW846 9060A	#
Turbidity	32	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP04AW	Collected	08/05/2024 14:23
Lab Sample ID	3372011003	Lab Receipt	08/05/2024 16:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	31.06	Feet		Field	#
Dissolved Oxygen	0.08	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	560.72	Feet		Field	#
Flow Rate	1.82	gal/min		Field	#
Ground Water Elevation	529.66	ft/MSL		Field	#
Oxidation-Reduction Potential	110	mV		Field	#
pH, Field (SM4500B)	6.93	pH_Units		Field	#
Sample Depth	146.00	Feet		Field	#
Specific Conductance, Field	2040	umhos/cm	1	Field	#
Temperature	18.73	Deg. C		Field	#
Total Well Depth	148.50	Feet		Field	#
Volume in Water Column	172.64	Gallons		Field	#
Water Level After Purge	86.21	Feet		Field	#
Well Volumes Purged	1.00	Vol		Field	#
METALS					
Calcium, Total	167	mg/L	0.11	SW846 6010C	#
Magnesium, Total	26.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.39	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.8	mg/L	0.56	SW846 6010C	#
Sodium, Total	92.0	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	161	mg/L	5	SM2320B-2011	#
Alkalinity, Total	190	mg/L	5	SM2320B-2011	#
Chloride	323	mg/L	5.0	EPA 300.0	#
pH	8.27	pH_Units		S4500HB-11	#
Specific Conductance	387	umhos/cm	5	SW846 9050A	#
Sulfate	56.1	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	1120	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.89	mg/L	0.50	SW846 9060A	#
Turbidity	0.40	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP03AW	Collected	08/05/2024 14:50
Lab Sample ID	3372011004	Lab Receipt	08/05/2024 16:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	51.08	Feet		Field	#
Dissolved Oxygen	1.83	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	590.90	Feet		Field	#
Flow Rate	1.88	gal/min		Field	#
Ground Water Elevation	539.82	ft/MSL		Field	#
Oxidation-Reduction Potential	302	mV		Field	#
pH, Field (SM4500B)	4.96	pH_Units		Field	#
Sample Depth	130.00	Feet		Field	#
Specific Conductance, Field	489	umhos/cm	1	Field	#
Temperature	15.09	Deg. C		Field	#
Total Well Depth	148.40	Feet		Field	#
Volume in Water Column	143.06	Gallons		Field	#
Water Level After Purge	89.89	Feet		Field	#
Well Volumes Purged	1.25	Vol		Field	#
METALS					
Calcium, Total	21.1	mg/L	0.11	SW846 6010C	#
Magnesium, Total	16.7	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.35	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.6	mg/L	0.56	SW846 6010C	#
Sodium, Total	15.6	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	44	mg/L	5	SM2320B-2011	#
Alkalinity, Total	44	mg/L	5	SM2320B-2011	#
Chloride	47.0	mg/L	2.0	EPA 300.0	#
Nitrate-N	18.1	mg/L	1.0	EPA 300.0	#
pH	7.78	pH_Units		S4500HB-11	#
Specific Conductance	819	umhos/cm	5	SW846 9050A	#
Sulfate	4.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	262	mg/L	25	SM2540C-15	#
Turbidity	0.75	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	FFMP015W	Collected	08/05/2024 11:22
Lab Sample ID	3372011001	Lab Receipt	08/05/2024 16:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	60.61		Feet		Field	1	08/05/2024 11:22	BGS	D
Dissolved Oxygen	8.23		mg/L	0.01	Field	1	08/05/2024 11:22	BGS	D
Elev Top MW Casing above MSL	576.40		Feet		Field	1	08/05/2024 11:22	BGS	D
Flow Rate	1.93		gal/min		Field	1	08/05/2024 11:22	BGS	D
Ground Water Elevation	515.79		ft/MSL		Field	1	08/05/2024 11:22	BGS	D
Oxidation-Reduction Potential	317		mV		Field	1	08/05/2024 11:22	BGS	D
pH, Field (SM4500B)	5.57		pH_Units		Field	1	08/05/2024 11:22	BGS	D
Sample Depth	135.00		Feet		Field	1	08/05/2024 11:22	BGS	D
Specific Conductance, Field	402		umhos/cm	1	Field	1	08/05/2024 11:22	BGS	D
Temperature	16.23		Deg. C		Field	1	08/05/2024 11:22	BGS	D
Total Well Depth	149.90		Feet		Field	1	08/05/2024 11:22	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/05/2024 11:22	BGS	D
Volume in Water Column	131.26		Gallons		Field	1	08/05/2024 11:22	BGS	D
Water Level After Purge	107.84		Feet		Field	1	08/05/2024 11:22	BGS	D
Well Volumes Purged	1.10		Vol		Field	1	08/05/2024 11:22	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	14.1		mg/L	0.11	SW846 6010C	1	08/07/2024 10:45	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/07/2024 10:45	MSY	J1
Magnesium, Total	15.4		mg/L	0.11	SW846 6010C	1	08/07/2024 10:45	MSY	J1
Manganese, Total	0.023		mg/L	0.0056	SW846 6010C	1	08/07/2024 10:45	MSY	J1
Potassium, Total	2.1		mg/L	0.56	SW846 6010C	1	08/07/2024 10:45	MSY	J1
Sodium, Total	18.5		mg/L	0.56	SW846 6010C	1	08/07/2024 10:45	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	08/07/2024 07:14	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:14	PDK	H

Results

Client Sample ID	FFMP015W	Collected	08/05/2024 11:22
Lab Sample ID	3372011001	Lab Receipt	08/05/2024 16:00

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	08/07/2024 07:14	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	08/07/2024 07:14	
Dibromofluoromethane	1868-53-7	99.8%	78 – 116	08/07/2024 07:14	
Toluene-d8	2037-26-5	106%	76 – 127	08/07/2024 07:14	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	23		mg/L	5	SM2320B-2011	1	08/06/2024 23:26	KMV	B
Alkalinity, Total	23	1	mg/L	5	SM2320B-2011	1	08/06/2024 23:26	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/07/2024 10:57	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/07/2024 11:30	KMS	A
Chloride	13.9		mg/L	2.0	EPA 300.0	2	08/06/2024 11:10	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/06/2024 11:10	J1W	B
Nitrate-N	12.1		mg/L	1.0	EPA 300.0	2	08/06/2024 11:10	J1W	B
pH	7.47	2	pH_Units		S4500HB-11	1	08/06/2024 23:26	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 11:37	AKH	G
Specific Conductance	730		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	49.5		mg/L	2.0	EPA 300.0	2	08/06/2024 11:10	J1W	B
Total Dissolved Solids	188		mg/L	25	SM2540C-15	1	08/06/2024 16:50	RAG	B
Total Organic Carbon (TOC)	0.95		mg/L	0.50	SW846 9060A	1	08/06/2024 23:19	PAG	E
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	08/06/2024 13:46	NPF	B

Results

Client Sample ID	FFMP034W	Collected	08/05/2024 13:07
Lab Sample ID	3372011002	Lab Receipt	08/05/2024 16:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	10.96		Feet		Field	1	08/05/2024 12:07	BGS	D
Dissolved Oxygen	1.47		mg/L	0.01	Field	1	08/05/2024 12:07	BGS	D
Elev Top MW Casing above MSL	472.88		Feet		Field	1	08/05/2024 12:07	BGS	D
Flow Rate	1.64		gal/min		Field	1	08/05/2024 12:07	BGS	D
Ground Water Elevation	461.92		ft/MSL		Field	1	08/05/2024 12:07	BGS	D
Oxidation-Reduction Potential	165		mV		Field	1	08/05/2024 12:07	BGS	D
pH, Field (SM4500B)	5.80		pH_Units		Field	1	08/05/2024 12:07	BGS	D
Sample Depth	25.85		Feet		Field	1	08/05/2024 12:07	BGS	D
Specific Conductance, Field	1033		umhos/cm	1	Field	1	08/05/2024 12:07	BGS	D
Temperature	14.34		Deg. C		Field	1	08/05/2024 12:07	BGS	D
Total Well Depth	121.00		Feet		Field	1	08/05/2024 12:07	BGS	D
Turbidity, Field	2		NTU	1	Field	1	08/05/2024 12:07	BGS	D
Volume in Water Column	161.76		Gallons		Field	1	08/05/2024 12:07	BGS	D
Water Level After Purge	20.47		Feet		Field	1	08/05/2024 12:07	BGS	D
Well Volumes Purged	1.32		Vol		Field	1	08/05/2024 12:07	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	61.3		mg/L	0.11	SW846 6010C	1	08/07/2024 10:46	MSY	J1
Iron, Total	2.9		mg/L	0.067	SW846 6010C	1	08/07/2024 10:46	MSY	J1
Magnesium, Total	21.6		mg/L	0.11	SW846 6010C	1	08/07/2024 10:46	MSY	J1
Manganese, Total	0.099		mg/L	0.0056	SW846 6010C	1	08/07/2024 10:46	MSY	J1
Potassium, Total	2.7		mg/L	0.56	SW846 6010C	1	08/07/2024 10:46	MSY	J1
Sodium, Total	44.6		mg/L	0.56	SW846 6010C	1	08/07/2024 10:46	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	08/07/2024 07:38	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 07:38	PDK	H

Results

Client Sample ID	FFMP034W	Collected	08/05/2024 13:07
Lab Sample ID	3372011002	Lab Receipt	08/05/2024 16:00

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	08/07/2024 07:38	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	08/07/2024 07:38	
Dibromofluoromethane	1868-53-7	101%	78 – 116	08/07/2024 07:38	
Toluene-d8	2037-26-5	105%	76 – 127	08/07/2024 07:38	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	41		mg/L	5	SM2320B-2011	1	08/07/2024 00:13	KMV	B
Alkalinity, Total	41	1	mg/L	5	SM2320B-2011	1	08/07/2024 00:13	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/07/2024 11:00	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/07/2024 11:30	KMS	A
Chloride	161		mg/L	2.0	EPA 300.0	2	08/06/2024 11:21	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/06/2024 11:21	J1W	B
Nitrate-N	10.6		mg/L	1.0	EPA 300.0	2	08/06/2024 11:21	J1W	B
pH	7.77	2	pH_Units		S4500HB-11	1	08/07/2024 00:13	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 11:26	AKH	G
Specific Conductance	1440		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	31.0		mg/L	2.0	EPA 300.0	2	08/06/2024 11:21	J1W	B
Total Dissolved Solids	546		mg/L	25	SM2540C-15	1	08/06/2024 16:50	RAG	B
Total Organic Carbon (TOC)	0.65		mg/L	0.50	SW846 9060A	1	08/06/2024 23:19	PAG	E
Turbidity	32		NTU	0.30	SM2130B-2011	1	08/06/2024 13:46	NPF	B

Results

Client Sample ID	FFMP04AW	Collected	08/05/2024 14:23
Lab Sample ID	3372011003	Lab Receipt	08/05/2024 16:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	31.06		Feet		Field	1	08/05/2024 14:23	BGS	D
Dissolved Oxygen	0.08		mg/L	0.01	Field	1	08/05/2024 14:23	BGS	D
Elev Top MW Casing above MSL	560.72		Feet		Field	1	08/05/2024 14:23	BGS	D
Flow Rate	1.82		gal/min		Field	1	08/05/2024 14:23	BGS	D
Ground Water Elevation	529.66		ft/MSL		Field	1	08/05/2024 14:23	BGS	D
Oxidation-Reduction Potential	110		mV		Field	1	08/05/2024 14:23	BGS	D
pH, Field (SM4500B)	6.93		pH_Units		Field	1	08/05/2024 14:23	BGS	D
Sample Depth	146.00		Feet		Field	1	08/05/2024 14:23	BGS	D
Specific Conductance, Field	2040		umhos/cm	1	Field	1	08/05/2024 14:23	BGS	D
Temperature	18.73		Deg. C		Field	1	08/05/2024 14:23	BGS	D
Total Well Depth	148.50		Feet		Field	1	08/05/2024 14:23	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/05/2024 14:23	BGS	D
Volume in Water Column	172.64		Gallons		Field	1	08/05/2024 14:23	BGS	D
Water Level After Purge	86.21		Feet		Field	1	08/05/2024 14:23	BGS	D
Well Volumes Purged	1.00		Vol		Field	1	08/05/2024 14:23	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	167	3	mg/L	0.11	SW846 6010C	1	08/07/2024 10:52	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/07/2024 10:52	MSY	J1
Magnesium, Total	26.5	4	mg/L	0.11	SW846 6010C	1	08/07/2024 10:52	MSY	J1
Manganese, Total	0.39		mg/L	0.0056	SW846 6010C	1	08/07/2024 10:52	MSY	J1
Potassium, Total	2.8		mg/L	0.56	SW846 6010C	1	08/07/2024 10:52	MSY	J1
Sodium, Total	92.0		mg/L	0.56	SW846 6010C	1	08/07/2024 10:52	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	08/07/2024 08:01	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:01	PDK	H

Results

Client Sample ID	FFMP04AW	Collected	08/05/2024 14:23
Lab Sample ID	3372011003	Lab Receipt	08/05/2024 16:00

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	08/07/2024 08:01	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	08/07/2024 08:01	
Dibromofluoromethane	1868-53-7	98.7%	78 – 116	08/07/2024 08:01	
Toluene-d8	2037-26-5	105%	76 – 127	08/07/2024 08:01	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	161		mg/L	5	SM2320B-2011	1	08/07/2024 00:28	KMV	B
Alkalinity, Total	190	1	mg/L	5	SM2320B-2011	1	08/07/2024 00:28	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/07/2024 11:09	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/07/2024 11:30	KMS	A
Chloride	323		mg/L	5.0	EPA 300.0	5	08/06/2024 11:33	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	08/06/2024 11:33	J1W	B
Nitrate-N	ND	ND	mg/L	2.5	EPA 300.0	5	08/06/2024 11:33	J1W	B
pH	8.27	2	pH_Units		S4500HB-11	1	08/07/2024 00:28	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 11:29	AKH	G
Specific Conductance	387		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	56.1		mg/L	5.0	EPA 300.0	5	08/06/2024 11:33	J1W	B
Total Dissolved Solids	1120		mg/L	25	SM2540C-15	1	08/06/2024 16:50	RAG	B
Total Organic Carbon (TOC)	0.89		mg/L	0.50	SW846 9060A	1	08/06/2024 23:19	PAG	E
Turbidity	0.40		NTU	0.30	SM2130B-2011	1	08/06/2024 13:46	NPF	B

Results

Client Sample ID	FFMP03AW	Collected	08/05/2024 14:50
Lab Sample ID	3372011004	Lab Receipt	08/05/2024 16:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	51.08		Feet		Field	1	08/05/2024 14:50	BGS	D
Dissolved Oxygen	1.83		mg/L	0.01	Field	1	08/05/2024 14:50	BGS	D
Elev Top MW Casing above MSL	590.90		Feet		Field	1	08/05/2024 14:50	BGS	D
Flow Rate	1.88		gal/min		Field	1	08/05/2024 14:50	BGS	D
Ground Water Elevation	539.82		ft/MSL		Field	1	08/05/2024 14:50	BGS	D
Oxidation-Reduction Potential	302		mV		Field	1	08/05/2024 14:50	BGS	D
pH, Field (SM4500B)	4.96		pH_Units		Field	1	08/05/2024 14:50	BGS	D
Sample Depth	130.00		Feet		Field	1	08/05/2024 14:50	BGS	D
Specific Conductance, Field	489		umhos/cm	1	Field	1	08/05/2024 14:50	BGS	D
Temperature	15.09		Deg. C		Field	1	08/05/2024 14:50	BGS	D
Total Well Depth	148.40		Feet		Field	1	08/05/2024 14:50	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/05/2024 14:50	BGS	D
Volume in Water Column	143.06		Gallons		Field	1	08/05/2024 14:50	BGS	D
Water Level After Purge	89.89		Feet		Field	1	08/05/2024 14:50	BGS	D
Well Volumes Purged	1.25		Vol		Field	1	08/05/2024 14:50	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	21.1		mg/L	0.11	SW846 6010C	1	08/07/2024 10:57	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/07/2024 10:57	MSY	J1
Magnesium, Total	16.7		mg/L	0.11	SW846 6010C	1	08/07/2024 10:57	MSY	J1
Manganese, Total	0.35		mg/L	0.0056	SW846 6010C	1	08/07/2024 10:57	MSY	J1
Potassium, Total	1.6		mg/L	0.56	SW846 6010C	1	08/07/2024 10:57	MSY	J1
Sodium, Total	15.6		mg/L	0.56	SW846 6010C	1	08/07/2024 10:57	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	08/07/2024 08:24	PDK	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/07/2024 08:24	PDK	H

Results

Client Sample ID	FFMP03AW	Collected	08/05/2024 14:50
Lab Sample ID	3372011004	Lab Receipt	08/05/2024 16:00

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	08/07/2024 08:24	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	08/07/2024 08:24	
Dibromofluoromethane	1868-53-7	97.8%	78 – 116	08/07/2024 08:24	
Toluene-d8	2037-26-5	103%	76 – 127	08/07/2024 08:24	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	44		mg/L	5	SM2320B-2011	1	08/07/2024 00:39	KMV	B
Alkalinity, Total	44	1	mg/L	5	SM2320B-2011	1	08/07/2024 00:39	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/07/2024 10:51	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/07/2024 11:30	KMS	A
Chloride	47.0		mg/L	2.0	EPA 300.0	2	08/06/2024 11:44	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/06/2024 11:44	J1W	B
Nitrate-N	18.1		mg/L	1.0	EPA 300.0	2	08/06/2024 11:44	J1W	B
pH	7.78	2	pH_Units		S4500HB-11	1	08/07/2024 00:39	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 11:33	AKH	G
Specific Conductance	819		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	4.8		mg/L	2.0	EPA 300.0	2	08/06/2024 11:44	J1W	B
Total Dissolved Solids	262		mg/L	25	SM2540C-15	1	08/06/2024 16:50	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	08/06/2024 23:19	PAG	E
Turbidity	0.75		NTU	0.30	SM2130B-2011	1	08/06/2024 13:46	NPF	B

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3372011001	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	
3372011002	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	
3372011003	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	
3372011004	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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3372011001	FFMP015W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1267510	08/07/2024 04:40	ANN	SW846 6010C	1267652
		N/A	N/A	N/A		SW846 8260B	1267409
		N/A	N/A	N/A		EPA 300.0	1266608
		N/A	N/A	N/A		EPA 410.4	1267629
		N/A	N/A	N/A		S4500HB-11	1266672
		N/A	N/A	N/A		SM 4500-NH3G	1266737
		N/A	N/A	N/A		SM2130B-2011	1266621
		N/A	N/A	N/A		SM2320B-2011	1266672
		N/A	N/A	N/A		SM2540C-15	1266648
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1266829
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372011002	FFMP034W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1267510	08/07/2024 04:40	ANN	SW846 6010C	1267652
		N/A	N/A	N/A		SW846 8260B	1267409
		N/A	N/A	N/A		EPA 300.0	1266608
		N/A	N/A	N/A		EPA 410.4	1267629
		N/A	N/A	N/A		S4500HB-11	1266672
		N/A	N/A	N/A		SM 4500-NH3G	1266737
		N/A	N/A	N/A		SM2130B-2011	1266621
		N/A	N/A	N/A		SM2320B-2011	1266672
		N/A	N/A	N/A		SM2540C-15	1266648
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1266829
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372011003	FFMP04AW	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1267510	08/07/2024 04:40	ANN	SW846 6010C	1267652
		N/A	N/A	N/A		SW846 8260B	1267409
		N/A	N/A	N/A		EPA 300.0	1266608
		N/A	N/A	N/A		EPA 410.4	1267629
		N/A	N/A	N/A		S4500HB-11	1266672
		N/A	N/A	N/A		SM 4500-NH3G	1266737
		N/A	N/A	N/A		SM2130B-2011	1266621
		N/A	N/A	N/A		SM2320B-2011	1266672
		N/A	N/A	N/A		SM2540C-15	1266648
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1266829
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372011004	FFMP03AW	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1267510	08/07/2024 04:40	ANN	SW846 6010C	1267652
		N/A	N/A	N/A		SW846 8260B	1267409
		N/A	N/A	N/A		EPA 300.0	1266608
		N/A	N/A	N/A		EPA 410.4	1267629
		N/A	N/A	N/A		S4500HB-11	1266672
		N/A	N/A	N/A		SM 4500-NH3G	1266737
		N/A	N/A	N/A		SM2130B-2011	1266621
		N/A	N/A	N/A		SM2320B-2011	1266672
		N/A	N/A	N/A		SM2540C-15	1266648
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1266829
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496

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 #: 3372011 Logged By: DIG PM: SJB

ALS Quote #: ____ of ____

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike PO Box 4424
Lancaster PA 17604

Contact: Dan Brown
Phone#: 717-735-0193
Project Name/#: Frey Farm Quarterly GWMP
Bill To: Lancaster County Solid Waste MA
Purchase Order #:

TAT: [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] dbrown@lcswma.org

	Container Type	AG	AN	CG	P	P			P	P	
	Container Size	40ml	125ml	40ml	1L	500ml			250ml	125ml	
	Preservative	HCL	H2SO4	HCL	UNP	UNP			H2SO4	HNO3	

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	O-OH	VOC Form 19Q	pH, CL, SpC, F, SO4, NO3, Tb, TDS	Alkalinity, Bicarbonate	FM	Sample Debth for AUX Data	NH3-N, COD	Metals Fe,Mn,Na,Ca,K,Mg	
							Enter Number of Containers Per Sample or Field Results Below.									
1	FFMP015W	8/5/24	1122		G	GW	2	1	2	1	1	x	x	1	2	
2	FFMP034W	8/5/24	1307		G	GW	2	1	2	1	1	x	x	1	2	
3	FFMP04AW	8/5/24	1423		G	GW	2	1	2	1	1	x	x	1	2	
4	FFMP03AW2	8/5/24	1450		G	GW	2	1	2	1	1	x	x	1	2	- Sample that was Labeled "FFMP03AW" DG 8/5/24
5																
6																
7																
8																
9																
10																

Temp Taken By: CS Therm ID: 569 WO Temp (°C) 7

Receipt Info completed by: ____ WV Containers 0-6°C Y N NA

Cooler Custod: Temp By: DB | WO Temp (°C): 7 | Therm ID: 569

Sample Custo: Receipt Info Completed By: DPB

Received on I: Cooler Custody Seal Intact Y N NA

Coolers & Sa: Sample Custody Seal Intact Y N NA

Correct Conta: Received on Ice Y N NA

Sample Label: Cooler & Samples Intact Y N

Adequate Sa: Correct Containers Provided Y N

VOA only: Tri: Sample Label/COC Agree

NJ ≤ 4 days: Adequate Sample Volumes Y N

Courier/Trackir: CR6 Samples Filtered Y N NA

OP Samples Filtered Y N NA

VOA Trip Blank Y N NA

NJ≤ 4 Days? Y N

Rad Screen (uCi) ____

Courier/Tracking #: ____

Sample(s) fo: ____ (uCi)____

Reportable S: ____ Y N

SDWA State: ____ Contact:

PWSID #__

PWS Contact: ____

SDWA Compliance Y N

PWSID

WV Containers 0-6°C Y N NA

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

Circle Sample Collector: ALS Tech / Client
Name: DG Shuck ID: ____

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
8-5-24	1600	1	DG Shuck ALS	2	DAG/ALS
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] ____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type ____

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] ____ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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

Rev 07.06.2023

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3rd QTR 2024 GWMP-FORM 19Q
Workorder 3372273
Report ID 348022 on 8/21/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 06, 2024.

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.

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

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

Susan Scherer
Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3372273001	FFMP005W	Ground Water	08/06/2024 10:43	08/06/2024 17:30	BGS	Analytical Laboratory Service
3372273002	FFMP26RW	Ground Water	08/06/2024 10:58	08/06/2024 17:30	BGS	Analytical Laboratory Service
3372273003	FFMP035W	Ground Water	08/06/2024 13:02	08/06/2024 17:30	BGS	Analytical Laboratory Service
3372273004	FFMP036W	Ground Water	08/06/2024 13:17	08/06/2024 17:30	BGS	Analytical Laboratory Service
3372273005	FFMP029W	Ground Water	08/06/2024 15:02	08/06/2024 17:30	BGS	Analytical Laboratory Service
3372273006	FFMP017W	Ground Water	08/06/2024 16:00	08/06/2024 17:30	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 DUP for method SW846 8260B was outside the control limits for the analyte Benzene. The RPD was reported as 0 and the upper control limit is .
4	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte 1,2-Dibromoethane. The RPD was reported as 0 and the upper control limit is .
5	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte 1,1-Dichloroethane. The RPD was reported as 0 and the upper control limit is .
6	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte 1,2-Dichloroethane. The RPD was reported as 0 and the upper control limit is .
7	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte 1,1-Dichloroethene. The RPD was reported as 0 and the upper control limit is .
8	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte cis-1,2-Dichloroethene. The RPD was reported as 0 and the upper control limit is .
9	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte trans-1,2-Dichloroethene. The RPD was reported as 0 and the upper control limit is .
10	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte Ethylbenzene. The RPD was reported as 0 and the upper control limit is .
11	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte Methylene Chloride. The RPD was reported as 0 and the upper control limit is .
12	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte Tetrachloroethene. The RPD was reported as 0 and the upper control limit is .
13	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte Toluene. The RPD was reported as 0 and the upper control limit is .
14	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte Total Xylenes. The RPD was reported as 0 and the upper control limit is .
15	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte 1,1,1-Trichloroethane. The RPD was reported as 0 and the upper control limit is .
16	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte Trichloroethene. The RPD was reported as 0 and the upper control limit is .
17	The QC sample type DUP for method SW846 8260B was outside the control limits for the analyte Vinyl Chloride. The RPD was reported as 0 and the upper control limit is .

Detected Results Summary

Client Sample ID	FFMP005W	Collected	08/06/2024 10:43
Lab Sample ID	3372273001	Lab Receipt	08/06/2024 17:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	72.20	Feet		Field	#
Elev Top MW Casing above MSL	537.40	Feet		Field	#
Flow Rate	1.81	gal/min		Field	#
Ground Water Elevation	465.20	ft/MSL		Field	#
Oxidation-Reduction Potential	271	mV		Field	#
pH, Field (SM4500B)	5.61	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	1079	umhos/cm	1	Field	#
Temperature	14.20	Deg. C		Field	#
Total Well Depth	149.70	Feet		Field	#
Volume in Water Column	113.93	Gallons		Field	#
Water Level After Purge	94.73	Feet		Field	#
Well Volumes Purged	1.03	Vol		Field	#
METALS					
Calcium, Total	77.0	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.2	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.18	mg/L	0.0056	SW846 6010C	#
Potassium, Total	3.2	mg/L	0.56	SW846 6010C	#
Sodium, Total	47.0	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	65	mg/L	5	SM2320B-2011	#
Alkalinity, Total	65	mg/L	5	SM2320B-2011	#
Chloride	157	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.3	mg/L	1.0	EPA 300.0	#
pH	7.89	pH_Units		S4500HB-11	#
Specific Conductance	777	umhos/cm	5	SW846 9050A	#
Sulfate	75.3	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	536	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.4	mg/L	0.50	SW846 9060A	#

Detected Results Summary

Client Sample ID	FFMP26RW	Collected	08/06/2024 10:58
Lab Sample ID	3372273002	Lab Receipt	08/06/2024 17:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	82.20	Feet		Field	#
Dissolved Oxygen	0.04	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	547.40	Feet		Field	#
Flow Rate	2.02	gal/min		Field	#
Ground Water Elevation	465.20	ft/MSL		Field	#
Oxidation-Reduction Potential	245	mV		Field	#
pH, Field (SM4500B)	5.36	pH_Units		Field	#
Sample Depth	105.00	Feet		Field	#
Specific Conductance, Field	1056	umhos/cm	1	Field	#
Temperature	17.77	Deg. C		Field	#
Total Well Depth	118.30	Feet		Field	#
Volume in Water Column	53.07	Gallons		Field	#
Water Level After Purge	88.40	Feet		Field	#
Well Volumes Purged	2.47	Vol		Field	#
METALS					
Calcium, Total	67.7	mg/L	0.11	SW846 6010C	#
Magnesium, Total	18.0	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.61	mg/L	0.0056	SW846 6010C	#
Potassium, Total	6.5	mg/L	0.56	SW846 6010C	#
Sodium, Total	53.1	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	61	mg/L	5	SM2320B-2011	#
Alkalinity, Total	61	mg/L	5	SM2320B-2011	#
Chloride	148	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.3	mg/L	1.0	EPA 300.0	#
pH	7.88	pH_Units		S4500HB-11	#
Specific Conductance	760	umhos/cm	5	SW846 9050A	#
Sulfate	88.1	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	492	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.7	mg/L	0.50	SW846 9060A	#
Turbidity	0.50	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP035W	Collected	08/06/2024 13:02
Lab Sample ID	3372273003	Lab Receipt	08/06/2024 17:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	43.22	Feet		Field	#
Dissolved Oxygen	1.81	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	434.34	ft/MSL		Field	#
Oxidation-Reduction Potential	139	mV		Field	#
pH, Field (SM4500B)	6.56	pH_Units		Field	#
Sample Depth	65.00	Feet		Field	#
Specific Conductance, Field	1288	umhos/cm	1	Field	#
Temperature	26.26	Deg. C		Field	#
Total Well Depth	71.80	Feet		Field	#
Volume in Water Column	42.01	Gallons		Field	#
Water Level After Purge	49.48	Feet		Field	#
Well Volumes Purged	1.11	Vol		Field	#
METALS					
Calcium, Total	91.8	mg/L	0.11	SW846 6010C	#
Iron, Total	0.29	mg/L	0.067	SW846 6010C	#
Magnesium, Total	22.5	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.011	mg/L	0.0056	SW846 6010C	#
Potassium, Total	4.5	mg/L	0.56	SW846 6010C	#
Sodium, Total	57.9	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	122	mg/L	5	SM2320B-2011	#
Alkalinity, Total	122	mg/L	5	SM2320B-2011	#
Chloride	169	mg/L	2.0	EPA 300.0	#
Nitrate-N	8.8	mg/L	1.0	EPA 300.0	#
pH	8.15	pH_Units		S4500HB-11	#
Specific Conductance	919	umhos/cm	5	SW846 9050A	#
Sulfate	51.1	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	644	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.3	mg/L	0.50	SW846 9060A	#
Turbidity	1.2	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP036W	Collected	08/06/2024 13:17
Lab Sample ID	3372273004	Lab Receipt	08/06/2024 17:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	51.02	Feet		Field	#
Dissolved Oxygen	0.01	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	478.23	Feet		Field	#
Flow Rate	1.64	gal/min		Field	#
Ground Water Elevation	427.21	ft/MSL		Field	#
Oxidation-Reduction Potential	-252	mV		Field	#
pH, Field (SM4500B)	8.08	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	478	umhos/cm	1	Field	#
Temperature	24.14	Deg. C		Field	#
Total Well Depth	142.60	Feet		Field	#
Turbidity, Field	6	NTU	1	Field	#
Volume in Water Column	134.62	Gallons		Field	#
Water Level After Purge	86.61	Feet		Field	#
Well Volumes Purged	1.04	Vol		Field	#
METALS					
Calcium, Total	47.1	mg/L	0.11	SW846 6010C	#
Iron, Total	1.4	mg/L	0.067	SW846 6010C	#
Magnesium, Total	5.0	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.12	mg/L	0.0056	SW846 6010C	#
Potassium, Total	1.0	mg/L	0.56	SW846 6010C	#
Sodium, Total	15.5	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	90	mg/L	5	SM2320B-2011	#
Alkalinity, Total	93	mg/L	5	SM2320B-2011	#
Chloride	34.9	mg/L	2.0	EPA 300.0	#
pH	8.31	pH_Units		S4500HB-11	#
Specific Conductance	336	umhos/cm	5	SW846 9050A	#
Sulfate	28.7	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	198	mg/L	25	SM2540C-15	#
Turbidity	13	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP029W	Collected	08/06/2024 15:02
Lab Sample ID	3372273005	Lab Receipt	08/06/2024 17:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	39.45	Feet		Field	#
Dissolved Oxygen	5.82	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	477.30	Feet		Field	#
Flow Rate	1.97	gal/min		Field	#
Ground Water Elevation	437.85	ft/MSL		Field	#
Oxidation-Reduction Potential	282	mV		Field	#
pH, Field (SM4500B)	5.12	pH_Units		Field	#
Sample Depth	55.00	Feet		Field	#
Specific Conductance, Field	420	umhos/cm	1	Field	#
Temperature	14.87	Deg. C		Field	#
Total Well Depth	60.50	Feet		Field	#
Volume in Water Column	30.94	Gallons		Field	#
Water Level After Purge	45.12	Feet		Field	#
Well Volumes Purged	3.50	Vol		Field	#
METALS					
Calcium, Total	16.0	mg/L	0.11	SW846 6010C	#
Magnesium, Total	11.8	mg/L	0.11	SW846 6010C	#
Manganese, Total	0.030	mg/L	0.0056	SW846 6010C	#
Potassium, Total	2.2	mg/L	0.56	SW846 6010C	#
Sodium, Total	21.2	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	11	mg/L	5	SM2320B-2011	#
Alkalinity, Total	11	mg/L	5	SM2320B-2011	#
Chloride	76.7	mg/L	10.0	EPA 300.0	#
Nitrate-N	4.3	mg/L	2.5	EPA 300.0	#
pH	7.12	pH_Units		S4500HB-11	#
Specific Conductance	309	umhos/cm	5	SW846 9050A	#
Sulfate	133	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	240	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.53	mg/L	0.50	SW846 9060A	#
Turbidity	0.40	NTU	0.30	SM2130B-2011	#

Detected Results Summary

Client Sample ID	FFMP017W	Collected	08/06/2024 16:00
Lab Sample ID	3372273006	Lab Receipt	08/06/2024 17:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
Depth to Water Level	39.25	Feet		Field	#
Dissolved Oxygen	0.21	mg/L	0.01	Field	#
Elev Top MW Casing above MSL	480.70	Feet		Field	#
Flow Rate	2.05	gal/min		Field	#
Ground Water Elevation	441.45	ft/MSL		Field	#
Oxidation-Reduction Potential	152	mV		Field	#
pH, Field (SM4500B)	6.11	pH_Units		Field	#
Sample Depth	135.00	Feet		Field	#
Specific Conductance, Field	3137	umhos/cm	1	Field	#
Temperature	13.29	Deg. C		Field	#
Total Well Depth	150.50	Feet		Field	#
Turbidity, Field	3	NTU	1	Field	#
Volume in Water Column	163.54	Gallons		Field	#
Water Level After Purge	54.62	Feet		Field	#
Well Volumes Purged	1.00	Vol		Field	#
METALS					
Calcium, Total	178	mg/L	0.11	SW846 6010C	#
Iron, Total	0.090	mg/L	0.067	SW846 6010C	#
Magnesium, Total	54.1	mg/L	0.11	SW846 6010C	#
Manganese, Total	1.9	mg/L	0.0056	SW846 6010C	#
Potassium, Total	18.2	mg/L	0.56	SW846 6010C	#
Sodium, Total	183	mg/L	0.56	SW846 6010C	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	92	mg/L	5	SM2320B-2011	#
Alkalinity, Total	92	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.54	mg/L	0.10	SM 4500-NH3G	#
Chemical Oxygen Demand (COD)	16	mg/L	15	EPA 410.4	#
Chloride	75.3	mg/L	2.0	EPA 300.0	#
Nitrate-N	3.6	mg/L	1.0	EPA 300.0	#
pH	8.00	pH_Units		S4500HB-11	#
Specific Conductance	2570	umhos/cm	50	SW846 9050A	#
Sulfate	4.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	1690	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	4.2	mg/L	0.50	SW846 9060A	#
Turbidity	1.7	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	FFMP005W	Collected	08/06/2024 10:43
Lab Sample ID	3372273001	Lab Receipt	08/06/2024 17:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	72.20		Feet		Field	1	08/06/2024 10:43	BGS	D
Dissolved Oxygen	ND	ND	mg/L	0.01	Field	1	08/06/2024 10:43	BGS	D
Elev Top MW Casing above MSL	537.40		Feet		Field	1	08/06/2024 10:43	BGS	D
Flow Rate	1.81		gal/min		Field	1	08/06/2024 10:43	BGS	D
Ground Water Elevation	465.20		ft/MSL		Field	1	08/06/2024 10:43	BGS	D
Oxidation-Reduction Potential	271		mV		Field	1	08/06/2024 10:43	BGS	D
pH, Field (SM4500B)	5.61		pH_Units		Field	1	08/06/2024 10:43	BGS	D
Sample Depth	135.00		Feet		Field	1	08/06/2024 10:43	BGS	D
Specific Conductance, Field	1079		umhos/cm	1	Field	1	08/06/2024 10:43	BGS	D
Temperature	14.20		Deg. C		Field	1	08/06/2024 10:43	BGS	D
Total Well Depth	149.70		Feet		Field	1	08/06/2024 10:43	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/06/2024 10:43	BGS	D
Volume in Water Column	113.93		Gallons		Field	1	08/06/2024 10:43	BGS	D
Water Level After Purge	94.73		Feet		Field	1	08/06/2024 10:43	BGS	D
Well Volumes Purged	1.03		Vol		Field	1	08/06/2024 10:43	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	77.0		mg/L	0.11	SW846 6010C	1	08/13/2024 09:01	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/13/2024 09:01	MSY	J1
Magnesium, Total	18.2		mg/L	0.11	SW846 6010C	1	08/13/2024 09:01	MSY	J1
Manganese, Total	0.18		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:01	MSY	J1
Potassium, Total	3.2		mg/L	0.56	SW846 6010C	1	08/13/2024 09:01	MSY	J1
Sodium, Total	47.0		mg/L	0.56	SW846 6010C	1	08/13/2024 09:01	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	08/10/2024 14:39	BST	I
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 14:39	BST	I
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 14:39	BST	I

Results

Client Sample ID	FFMP005W	Collected	08/06/2024 10:43
Lab Sample ID	3372273001	Lab Receipt	08/06/2024 17:30

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	100%	62 – 133	08/10/2024 14:39	
4-Bromofluorobenzene	460-00-4	98.2%	79 – 114	08/10/2024 14:39	
Dibromofluoromethane	1868-53-7	95.1%	78 – 116	08/10/2024 14:39	
Toluene-d8	2037-26-5	99.4%	76 – 127	08/10/2024 14:39	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	65		mg/L	5	SM2320B-2011	1	08/08/2024 17:20	KMV	B
Alkalinity, Total	65	1	mg/L	5	SM2320B-2011	1	08/08/2024 17:20	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 14:12	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	157		mg/L	2.0	EPA 300.0	2	08/08/2024 08:55	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/08/2024 08:55	J1W	B
Nitrate-N	1.3		mg/L	1.0	EPA 300.0	2	08/08/2024 08:55	J1W	B
pH	7.89	2	pH_Units		S4500HB-11	1	08/08/2024 17:20	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 12:04	AKH	G
Specific Conductance	777		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	75.3		mg/L	2.0	EPA 300.0	2	08/08/2024 08:55	J1W	B
Total Dissolved Solids	536		mg/L	25	SM2540C-15	1	08/08/2024 15:30	RAG	B
Total Organic Carbon (TOC)	1.4		mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/07/2024 13:40	NPF	B

Results

Client Sample ID	FFMP26RW	Collected	08/06/2024 10:58
Lab Sample ID	3372273002	Lab Receipt	08/06/2024 17:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	82.20		Feet		Field	1	08/06/2024 10:58	BGS	D
Dissolved Oxygen	0.04		mg/L	0.01	Field	1	08/06/2024 10:58	BGS	D
Elev Top MW Casing above MSL	547.40		Feet		Field	1	08/06/2024 10:58	BGS	D
Flow Rate	2.02		gal/min		Field	1	08/06/2024 10:58	BGS	D
Ground Water Elevation	465.20		ft/MSL		Field	1	08/06/2024 10:58	BGS	D
Oxidation-Reduction Potential	245		mV		Field	1	08/06/2024 10:58	BGS	D
pH, Field (SM4500B)	5.36		pH_Units		Field	1	08/06/2024 10:58	BGS	D
Sample Depth	105.00		Feet		Field	1	08/06/2024 10:58	BGS	D
Specific Conductance, Field	1056		umhos/cm	1	Field	1	08/06/2024 10:58	BGS	D
Temperature	17.77		Deg. C		Field	1	08/06/2024 10:58	BGS	D
Total Well Depth	118.30		Feet		Field	1	08/06/2024 10:58	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/06/2024 10:58	BGS	D
Volume in Water Column	53.07		Gallons		Field	1	08/06/2024 10:58	BGS	D
Water Level After Purge	88.40		Feet		Field	1	08/06/2024 10:58	BGS	D
Well Volumes Purged	2.47		Vol		Field	1	08/06/2024 10:58	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	67.7		mg/L	0.11	SW846 6010C	1	08/13/2024 09:02	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/13/2024 09:02	MSY	J1
Magnesium, Total	18.0		mg/L	0.11	SW846 6010C	1	08/13/2024 09:02	MSY	J1
Manganese, Total	0.61		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:02	MSY	J1
Potassium, Total	6.5		mg/L	0.56	SW846 6010C	1	08/13/2024 09:02	MSY	J1
Sodium, Total	53.1		mg/L	0.56	SW846 6010C	1	08/13/2024 09:02	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	08/10/2024 15:00	BST	H
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 15:00	BST	H
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 15:00	BST	H

Results

Client Sample ID	FFMP26RW	Collected	08/06/2024 10:58
Lab Sample ID	3372273002	Lab Receipt	08/06/2024 17:30

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	08/10/2024 15:00	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	08/10/2024 15:00	
Dibromofluoromethane	1868-53-7	97.4%	78 – 116	08/10/2024 15:00	
Toluene-d8	2037-26-5	99.7%	76 – 127	08/10/2024 15:00	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	61		mg/L	5	SM2320B-2011	1	08/08/2024 17:32	KMV	B
Alkalinity, Total	61	1	mg/L	5	SM2320B-2011	1	08/08/2024 17:32	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 14:26	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	148		mg/L	2.0	EPA 300.0	2	08/07/2024 19:11	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/07/2024 19:11	J1W	B
Nitrate-N	1.3		mg/L	1.0	EPA 300.0	2	08/07/2024 19:11	J1W	B
pH	7.88	2	pH_Units		S4500HB-11	1	08/08/2024 17:32	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 12:58	AKH	G
Specific Conductance	760		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	88.1		mg/L	2.0	EPA 300.0	2	08/07/2024 19:11	J1W	B
Total Dissolved Solids	492		mg/L	25	SM2540C-15	1	08/08/2024 15:30	RAG	B
Total Organic Carbon (TOC)	1.7		mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	0.50		NTU	0.30	SM2130B-2011	1	08/07/2024 13:40	NPF	B

Results

Client Sample ID	FFMP035W	Collected	08/06/2024 13:02
Lab Sample ID	3372273003	Lab Receipt	08/06/2024 17:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	43.22		Feet		Field	1	08/06/2024 13:02	BGS	D
Dissolved Oxygen	1.81		mg/L	0.01	Field	1	08/06/2024 13:02	BGS	D
Elev Top MW Casing above MSL	477.56		Feet		Field	1	08/06/2024 13:02	BGS	D
Flow Rate	0.78		gal/min		Field	1	08/06/2024 13:02	BGS	D
Ground Water Elevation	434.34		ft/MSL		Field	1	08/06/2024 13:02	BGS	D
Oxidation-Reduction Potential	139		mV		Field	1	08/06/2024 13:02	BGS	D
pH, Field (SM4500B)	6.56		pH_Units		Field	1	08/06/2024 13:02	BGS	D
Sample Depth	65.00		Feet		Field	1	08/06/2024 13:02	BGS	D
Specific Conductance, Field	1288		umhos/cm	1	Field	1	08/06/2024 13:02	BGS	D
Temperature	26.26		Deg. C		Field	1	08/06/2024 13:02	BGS	D
Total Well Depth	71.80		Feet		Field	1	08/06/2024 13:02	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/06/2024 13:02	BGS	D
Volume in Water Column	42.01		Gallons		Field	1	08/06/2024 13:02	BGS	D
Water Level After Purge	49.48		Feet		Field	1	08/06/2024 13:02	BGS	D
Well Volumes Purged	1.11		Vol		Field	1	08/06/2024 13:02	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	91.8		mg/L	0.11	SW846 6010C	1	08/13/2024 09:11	MSY	J1
Iron, Total	0.29		mg/L	0.067	SW846 6010C	1	08/13/2024 09:11	MSY	J1
Magnesium, Total	22.5		mg/L	0.11	SW846 6010C	1	08/13/2024 09:11	MSY	J1
Manganese, Total	0.011		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:11	MSY	J1
Potassium, Total	4.5		mg/L	0.56	SW846 6010C	1	08/13/2024 09:11	MSY	J1
Sodium, Total	57.9		mg/L	0.56	SW846 6010C	1	08/13/2024 09:11	MSY	J1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,15	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
1,1-Dichloroethane	ND	ND,5	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
1,1-Dichloroethene	ND	ND,7	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
1,2-Dibromoethane	ND	ND,4	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
1,2-Dichloroethane	ND	ND,6	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Benzene	ND	ND,3	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
cis-1,2-Dichloroethene	ND	ND,8	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Ethylbenzene	ND	ND,10	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Methylene Chloride	ND	ND,11	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Tetrachloroethene	ND	ND,12	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Toluene	ND	ND,13	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Total Xylenes	ND	ND,14	ug/L	3.0	SW846 8260B	1	08/10/2024 15:20	BST	I
trans-1,2-Dichloroethene	ND	ND,9	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Trichloroethene	ND	ND,16	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I
Vinyl Chloride	ND	ND,17	ug/L	1.0	SW846 8260B	1	08/10/2024 15:20	BST	I

Results

Client Sample ID	FFMP035W	Collected	08/06/2024 13:02
Lab Sample ID	3372273003	Lab Receipt	08/06/2024 17:30

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	100%	62 – 133	08/10/2024 15:20	
4-Bromofluorobenzene	460-00-4	98.2%	79 – 114	08/10/2024 15:20	
Dibromofluoromethane	1868-53-7	94.7%	78 – 116	08/10/2024 15:20	
Toluene-d8	2037-26-5	100%	76 – 127	08/10/2024 15:20	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	122		mg/L	5	SM2320B-2011	1	08/08/2024 17:43	KMV	B
Alkalinity, Total	122	1	mg/L	5	SM2320B-2011	1	08/08/2024 17:43	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 14:18	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	169		mg/L	2.0	EPA 300.0	2	08/07/2024 19:22	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/07/2024 19:22	J1W	B
Nitrate-N	8.8		mg/L	1.0	EPA 300.0	2	08/07/2024 19:22	J1W	B
pH	8.15	2	pH_Units		S4500HB-11	1	08/08/2024 17:43	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 12:35	AKH	G
Specific Conductance	919		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	51.1		mg/L	2.0	EPA 300.0	2	08/07/2024 19:22	J1W	B
Total Dissolved Solids	644		mg/L	25	SM2540C-15	1	08/08/2024 15:30	RAG	B
Total Organic Carbon (TOC)	1.3		mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	1.2		NTU	0.30	SM2130B-2011	1	08/07/2024 13:40	NPF	B

Results

Client Sample ID	FFMP036W	Collected	08/06/2024 13:17
Lab Sample ID	3372273004	Lab Receipt	08/06/2024 17:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	51.02		Feet		Field	1	08/06/2024 13:17	BGS	D
Dissolved Oxygen	0.01		mg/L	0.01	Field	1	08/06/2024 13:17	BGS	D
Elev Top MW Casing above MSL	478.23		Feet		Field	1	08/06/2024 13:17	BGS	D
Flow Rate	1.64		gal/min		Field	1	08/06/2024 13:17	BGS	D
Ground Water Elevation	427.21		ft/MSL		Field	1	08/06/2024 13:17	BGS	D
Oxidation-Reduction Potential	-252		mV		Field	1	08/06/2024 13:17	BGS	D
pH, Field (SM4500B)	8.08		pH_Units		Field	1	08/06/2024 13:17	BGS	D
Sample Depth	135.00		Feet		Field	1	08/06/2024 13:17	BGS	D
Specific Conductance, Field	478		umhos/cm	1	Field	1	08/06/2024 13:17	BGS	D
Temperature	24.14		Deg. C		Field	1	08/06/2024 13:17	BGS	D
Total Well Depth	142.60		Feet		Field	1	08/06/2024 13:17	BGS	D
Turbidity, Field	6		NTU	1	Field	1	08/06/2024 13:17	BGS	D
Volume in Water Column	134.62		Gallons		Field	1	08/06/2024 13:17	BGS	D
Water Level After Purge	86.61		Feet		Field	1	08/06/2024 13:17	BGS	D
Well Volumes Purged	1.04		Vol		Field	1	08/06/2024 13:17	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	47.1		mg/L	0.11	SW846 6010C	1	08/13/2024 09:12	MSY	J1
Iron, Total	1.4		mg/L	0.067	SW846 6010C	1	08/13/2024 09:12	MSY	J1
Magnesium, Total	5.0		mg/L	0.11	SW846 6010C	1	08/13/2024 09:12	MSY	J1
Manganese, Total	0.12		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:12	MSY	J1
Potassium, Total	1.0		mg/L	0.56	SW846 6010C	1	08/13/2024 09:12	MSY	J1
Sodium, Total	15.5		mg/L	0.56	SW846 6010C	1	08/13/2024 09:12	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	08/10/2024 16:01	BST	I
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 16:01	BST	I
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:01	BST	I

Results

Client Sample ID	FFMP036W	Collected	08/06/2024 13:17
Lab Sample ID	3372273004	Lab Receipt	08/06/2024 17:30

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	99.8%	62 – 133	08/10/2024 16:01	
4-Bromofluorobenzene	460-00-4	94%	79 – 114	08/10/2024 16:01	
Dibromofluoromethane	1868-53-7	95.6%	78 – 116	08/10/2024 16:01	
Toluene-d8	2037-26-5	96.9%	76 – 127	08/10/2024 16:01	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	90		mg/L	5	SM2320B-2011	1	08/08/2024 17:54	KMV	B
Alkalinity, Total	93	1	mg/L	5	SM2320B-2011	1	08/08/2024 17:54	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 14:44	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	34.9		mg/L	2.0	EPA 300.0	2	08/07/2024 20:31	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/07/2024 20:31	J1W	B
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/07/2024 20:31	J1W	B
pH	8.31	2	pH_Units		S4500HB-11	1	08/08/2024 17:54	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 12:54	AKH	G
Specific Conductance	336		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	28.7		mg/L	2.0	EPA 300.0	2	08/07/2024 20:31	J1W	B
Total Dissolved Solids	198		mg/L	25	SM2540C-15	1	08/08/2024 15:30	RAG	B
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	13		NTU	0.30	SM2130B-2011	1	08/07/2024 13:40	NPF	B

Results

Client Sample ID	FFMP029W	Collected	08/06/2024 15:02
Lab Sample ID	3372273005	Lab Receipt	08/06/2024 17:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	39.45		Feet		Field	1	08/06/2024 15:02	BGS	D
Dissolved Oxygen	5.82		mg/L	0.01	Field	1	08/06/2024 15:02	BGS	D
Elev Top MW Casing above MSL	477.30		Feet		Field	1	08/06/2024 15:02	BGS	D
Flow Rate	1.97		gal/min		Field	1	08/06/2024 15:02	BGS	D
Ground Water Elevation	437.85		ft/MSL		Field	1	08/06/2024 15:02	BGS	D
Oxidation-Reduction Potential	282		mV		Field	1	08/06/2024 15:02	BGS	D
pH, Field (SM4500B)	5.12		pH_Units		Field	1	08/06/2024 15:02	BGS	D
Sample Depth	55.00		Feet		Field	1	08/06/2024 15:02	BGS	D
Specific Conductance, Field	420		umhos/cm	1	Field	1	08/06/2024 15:02	BGS	D
Temperature	14.87		Deg. C		Field	1	08/06/2024 15:02	BGS	D
Total Well Depth	60.50		Feet		Field	1	08/06/2024 15:02	BGS	D
Turbidity, Field	ND	ND	NTU	1	Field	1	08/06/2024 15:02	BGS	D
Volume in Water Column	30.94		Gallons		Field	1	08/06/2024 15:02	BGS	D
Water Level After Purge	45.12		Feet		Field	1	08/06/2024 15:02	BGS	D
Well Volumes Purged	3.50		Vol		Field	1	08/06/2024 15:02	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	16.0		mg/L	0.11	SW846 6010C	1	08/13/2024 09:13	MSY	J1
Iron, Total	ND	ND	mg/L	0.067	SW846 6010C	1	08/13/2024 09:13	MSY	J1
Magnesium, Total	11.8		mg/L	0.11	SW846 6010C	1	08/13/2024 09:13	MSY	J1
Manganese, Total	0.030		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:13	MSY	J1
Potassium, Total	2.2		mg/L	0.56	SW846 6010C	1	08/13/2024 09:13	MSY	J1
Sodium, Total	21.2		mg/L	0.56	SW846 6010C	1	08/13/2024 09:13	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	08/10/2024 16:21	BST	I
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 16:21	BST	I
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:21	BST	I

Results

Client Sample ID	FFMP029W	Collected	08/06/2024 15:02
Lab Sample ID	3372273005	Lab Receipt	08/06/2024 17:30

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	08/10/2024 16:21	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	08/10/2024 16:21	
Dibromofluoromethane	1868-53-7	98.5%	78 – 116	08/10/2024 16:21	
Toluene-d8	2037-26-5	101%	76 – 127	08/10/2024 16:21	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	11		mg/L	5	SM2320B-2011	1	08/08/2024 18:06	KMV	B
Alkalinity, Total	11	1	mg/L	5	SM2320B-2011	1	08/08/2024 18:06	KMV	B
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/12/2024 14:15	AYS	A
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	76.7		mg/L	10.0	EPA 300.0	10	08/08/2024 23:58	J1W	B
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	08/07/2024 20:42	J1W	B
Nitrate-N	4.3		mg/L	2.5	EPA 300.0	5	08/07/2024 20:42	J1W	B
pH	7.12	2	pH_Units		S4500HB-11	1	08/08/2024 18:06	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 12:31	AKH	G
Specific Conductance	309		umhos/cm	5	SW846 9050A	1	08/09/2024 00:00	KMV	B
Sulfate	133		mg/L	5.0	EPA 300.0	5	08/07/2024 20:42	J1W	B
Total Dissolved Solids	240		mg/L	25	SM2540C-15	1	08/08/2024 15:30	RAG	B
Total Organic Carbon (TOC)	0.53		mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	0.40		NTU	0.30	SM2130B-2011	1	08/07/2024 13:40	NPF	B

Results

Client Sample ID	FFMP017W	Collected	08/06/2024 16:00
Lab Sample ID	3372273006	Lab Receipt	08/06/2024 17:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Depth to Water Level	39.25		Feet		Field	1	08/06/2024 16:00	BGS	D
Dissolved Oxygen	0.21		mg/L	0.01	Field	1	08/06/2024 16:00	BGS	D
Elev Top MW Casing above MSL	480.70		Feet		Field	1	08/06/2024 16:00	BGS	D
Flow Rate	2.05		gal/min		Field	1	08/06/2024 16:00	BGS	D
Ground Water Elevation	441.45		ft/MSL		Field	1	08/06/2024 16:00	BGS	D
Oxidation-Reduction Potential	152		mV		Field	1	08/06/2024 16:00	BGS	D
pH, Field (SM4500B)	6.11		pH_Units		Field	1	08/06/2024 16:00	BGS	D
Sample Depth	135.00		Feet		Field	1	08/06/2024 16:00	BGS	D
Specific Conductance, Field	3137		umhos/cm	1	Field	1	08/06/2024 16:00	BGS	D
Temperature	13.29		Deg. C		Field	1	08/06/2024 16:00	BGS	D
Total Well Depth	150.50		Feet		Field	1	08/06/2024 16:00	BGS	D
Turbidity, Field	3		NTU	1	Field	1	08/06/2024 16:00	BGS	D
Volume in Water Column	163.54		Gallons		Field	1	08/06/2024 16:00	BGS	D
Water Level After Purge	54.62		Feet		Field	1	08/06/2024 16:00	BGS	D
Well Volumes Purged	1.00		Vol		Field	1	08/06/2024 16:00	BGS	D

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Total	178		mg/L	0.11	SW846 6010C	1	08/13/2024 09:14	MSY	J1
Iron, Total	0.090		mg/L	0.067	SW846 6010C	1	08/13/2024 09:14	MSY	J1
Magnesium, Total	54.1		mg/L	0.11	SW846 6010C	1	08/13/2024 09:14	MSY	J1
Manganese, Total	1.9		mg/L	0.0056	SW846 6010C	1	08/13/2024 09:14	MSY	J1
Potassium, Total	18.2		mg/L	0.56	SW846 6010C	1	08/13/2024 09:14	MSY	J1
Sodium, Total	183		mg/L	0.56	SW846 6010C	1	08/13/2024 09:14	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	08/10/2024 16:41	BST	I
1,1-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
1,1-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
1,2-Dibromoethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
1,2-Dichloroethane	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Benzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
cis-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Ethylbenzene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Methylene Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Tetrachloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Toluene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Total Xylenes	ND	ND	ug/L	3.0	SW846 8260B	1	08/10/2024 16:41	BST	I
trans-1,2-Dichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Trichloroethene	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I
Vinyl Chloride	ND	ND	ug/L	1.0	SW846 8260B	1	08/10/2024 16:41	BST	I

Results

Client Sample ID	FFMP017W	Collected	08/06/2024 16:00
Lab Sample ID	3372273006	Lab Receipt	08/06/2024 17:30

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	08/10/2024 16:41	
4-Bromofluorobenzene	460-00-4	98.2%	79 – 114	08/10/2024 16:41	
Dibromofluoromethane	1868-53-7	97.9%	78 – 116	08/10/2024 16:41	
Toluene-d8	2037-26-5	101%	76 – 127	08/10/2024 16:41	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	92		mg/L	5	SM2320B-2011	1	08/08/2024 18:25	KMV	B
Alkalinity, Total	92	1	mg/L	5	SM2320B-2011	1	08/08/2024 18:25	KMV	B
Ammonia-N, Low Level	0.54		mg/L	0.10	SM 4500-NH3G	1	08/12/2024 14:29	AYS	A
Chemical Oxygen Demand (COD)	16		mg/L	15	EPA 410.4	1	08/09/2024 11:40	KMS	A
Chloride	75.3		mg/L	2.0	EPA 300.0	2	08/07/2024 20:53	J1W	B
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/07/2024 20:53	J1W	B
Nitrate-N	3.6		mg/L	1.0	EPA 300.0	2	08/07/2024 20:53	J1W	B
pH	8.00	2	pH_Units		S4500HB-11	1	08/08/2024 18:25	KMV	B
Phenolics	ND	ND	mg/L	0.004	SW846 9066	1	08/13/2024 13:02	AKH	G
Specific Conductance	2570		umhos/cm	50	SW846 9050A	10	08/09/2024 00:00	KMV	B
Sulfate	4.8		mg/L	2.0	EPA 300.0	2	08/07/2024 20:53	J1W	B
Total Dissolved Solids	1690		mg/L	25	SM2540C-15	1	08/08/2024 15:30	RAG	B
Total Organic Carbon (TOC)	4.2		mg/L	0.50	SW846 9060A	1	08/09/2024 00:38	PAG	E
Turbidity	1.7		NTU	0.30	SM2130B-2011	1	08/07/2024 13:40	NPF	B

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3372273001	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	
3372273002	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	
3372273003	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	
3372273004	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	

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3372273005	FFMP029W	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	
3372273006	FFMP017W	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
3372273001	FFMP005W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1268308
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1267725
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1267717
		N/A	N/A	N/A		SM2320B-2011	1267725
		N/A	N/A	N/A		SM2540C-15	1268343
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1269010
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372273002	FFMP26RW	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1267609
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1267725
		N/A	N/A	N/A		SM 4500-NH3G	1270023
		N/A	N/A	N/A		SM2130B-2011	1267717
		N/A	N/A	N/A		SM2320B-2011	1267725
		N/A	N/A	N/A		SM2540C-15	1268343
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1269010
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372273003	FFMP035W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1267609
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1267725
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1267717
		N/A	N/A	N/A		SM2320B-2011	1267725
		N/A	N/A	N/A		SM2540C-15	1268343
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1269010
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372273004	FFMP036W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1267609
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1267725
		N/A	N/A	N/A		SM 4500-NH3G	1270023
		N/A	N/A	N/A		SM2130B-2011	1267717
		N/A	N/A	N/A		SM2320B-2011	1267725
		N/A	N/A	N/A		SM2540C-15	1268343
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1269010
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3372273005	FFMP029W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1267609
		N/A	N/A	N/A		EPA 300.0	1268308
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1267725
		N/A	N/A	N/A		SM 4500-NH3G	1270019
		N/A	N/A	N/A		SM2130B-2011	1267717
		N/A	N/A	N/A		SM2320B-2011	1267725
		N/A	N/A	N/A		SM2540C-15	1268343
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1269010
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496
3372273006	FFMP017W	N/A	N/A	N/A		Field	1279399
		SW846 3015A	1268208	08/09/2024 02:20	ANN	SW846 6010C	1273035
		N/A	N/A	N/A		SW846 8260B	1271708
		N/A	N/A	N/A		EPA 300.0	1267609
		N/A	N/A	N/A		EPA 410.4	1269925
		N/A	N/A	N/A		S4500HB-11	1267725
		N/A	N/A	N/A		SM 4500-NH3G	1270023
		N/A	N/A	N/A		SM2130B-2011	1267717
		N/A	N/A	N/A		SM2320B-2011	1267725
		N/A	N/A	N/A		SM2540C-15	1268343
		N/A	N/A	N/A		SW846 9050A	1267722
		N/A	N/A	N/A		SW846 9060A	1269010
		SW846 9066	1272493	08/12/2024 11:05	AKH	SW846 9066	1272496

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 #: 3372273
Logged By: MJE
PM: SJB
ALS Quote #:
of

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike PO Box 4424
Lancaster PA 17604

Contact: Dan Brown
Phone#: 717-735-0193
Project Name/#: Frey Farm Quarterly GWMP
Bill To: Lancaster County Solid Waste MA
Purchase Order #:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: **Approved?**
Email? [x] dbrown@lcswma.org

	Container Type	AG	AN	CG	P	P			P	P	
	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

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	O-OH	VOC Form 19Q	pH, CL, SpC, F, SO4, NO3, Tb, TDS	Alkalinity, Bicarbonate	FM	Sample Debth for AUX Data	NH3-N, COD	Metals Fe,Mn,Na,Ca,K,Mg	
							Enter Number of Containers Per Sample or Field Results Below.									
1	FFMP005W	8/6/24	1043		G	GW	2	1	2	1	1	x	x	1	2	
2	FFMP26RW	8/6/24	1058		G	GW	2	1	2	1	1	x	x	1	2	
3	FFMP035W	8/6/24	1302		G	GW	2	1	2	1	1	x	x	1	2	
4	FFMP036W	8/6/24	1317		G	GW	2	1	2	1	1	x	x	1	2	
5	FFMP029W	8/6/24	1502		G	GW	2	1	2	1	1	x	x	1	2	
6	FFMP017W	8/6/24	1600		G	GW	2	1	2	1	1	x	x	1	2	
7																
8																
9																
10																

Temp Taken By: Therm ID: 370 WO Temp (°C) 3
Receipt Info completed by:
WV Containers 0-6°C Y N NA
Deviations? NO YES
If YES, list below.

Temp By: DB | WO Temp (°C) 3 | Therm ID 516

Receipt Info Completed By: DPB
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
CR6 Samples Filtered Y N NA
OP Samples Filtered Y N NA
VOA Trip Blank Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi)
Courier/Tracking #:

SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

Client contact:
Date/Tech:

Rad Screen (uCi)
New Source? Y N
New Source Contact:

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

Circle Sample Collector: ALS Tech / Client
Name: [illegible] ID:

Comments:

Date:	Time	Relinquished By / Company Name		Received By / Company Name	
8-6-24	1730	1 [illegible] ALS	2	DAG/ALS	
		3	4		
		5	6		
		7	8		
		9	10		

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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

Rev 07.06.2023