


 Date Prepared/Revised
 01/29/2021

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

All information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 52, 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: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

Address: 3044 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 30.58" Longitude: 76° 26' 11.25"

Depth to Water Level: ft.

 Measured from: Land Surface TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

 Sampling Method: Pumped Bailed

 Well Purged: Yes No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 11:25 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

12/29/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	11	SM20-2321
CALCIUM, TOTAL	15.6	EPA 200.7
CALCIUM, DISSOLVED	15.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	22.8	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11.4	EPA 200.7
MAGNESIUM, DISSOLVED	11.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	23	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	23	EPA 200.7
NITRATE-NITROGEN	18.9	EPA 300

T Please indicate detection limit if analyte is not detected.

**FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	6.02	FIELD
pH-LAB (SU)	5.96	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	1.8	EPA 200.7
SODIUM, TOTAL	9.6	EPA 200.7
SODIUM, DISSOLVED	9	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	243	FIELD
SPEC. COND., LAB (umhos/cm)	238	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	11	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	144	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.


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FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: MILLER

Address: 3052 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 29.85" Longitude: 76° 26' 11.45"

Depth to Water Level: ft.

 Measured from: Land Surface TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

 Sampling Method: Pumped Bailed

 Well Purged: Yes No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 11:37 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

12/29/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	5 ND	SM20-2321
CALCIUM, TOTAL	14.9	EPA 200.7
CALCIUM, DISSOLVED	15	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	23.1	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	10.4	EPA 200.7
MAGNESIUM, DISSOLVED	10.6	EPA 200.7
MANGANESE, TOTAL (ug/l)	57	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	58	EPA 200.7
NITRATE-NITROGEN	17.8	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.5	FIELD
pH-LAB (SU)	5.64	SM4500B
POTASSIUM, TOTAL	2.2	EPA 200.7
POTASSIUM, DISSOLVED	2.2	EPA 200.7
SODIUM, TOTAL	7.8	EPA 200.7
SODIUM, DISSOLVED	7.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	219	FIELD
SPEC. COND., LAB (umhos/cm)	226	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	154	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.26	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



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FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

Address: 3056 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 28.44" Longitude: 76° 26' 10.43"

Depth to Water Level: _____ ft.

Measured from: Land Surface TOC

Casing Stick Up: _____ ft.

Elevation of Water Level: _____ ft./MSL

Total Well Depth: _____ ft.

Sampling Depth: _____ ft.

Sampling Method: Pumped Bailed

Well Purged: Yes No

Well Volumes Purged: _____

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 11:52 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number) 34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s) 22-293

Lab Analysis Date 12/27/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.116	SM4500D
BICARBONATE ALKALINITY	5 ND	SM20-2321
CALCIUM, TOTAL	11.7	EPA 200.7
CALCIUM, DISSOLVED	12.3	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	26.5	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	13.1	EPA 200.7
MAGNESIUM, DISSOLVED	13.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	79	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	84	EPA 200.7
NITRATE-NITROGEN	19	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.52	FIELD
pH-LAB (SU)	5.44	SM4500B
POTASSIUM, TOTAL	2.4	EPA 200.7
POTASSIUM, DISSOLVED	2.5	EPA 200.7
SODIUM, TOTAL	8.3	EPA 200.7
SODIUM, DISSOLVED	8.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	231	FIELD
SPEC. COND., LAB (umhos/cm)	242	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	116	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



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**FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES**

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General Reference: Act 101 Section 1103	
SECTION A. SITE IDENTIFIER	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
SECTION B. PRIVATE WATER SUPPLY INFORMATION	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")	
Facility Name:	Frey Farm Landfill
County:	Lancaster County
Township or Municipality:	MANOR TOWNSHIP
Landowner Name:	LCSWMA
Address:	3060 RIVER ROAD
Phone No.:	
Sampling Point:	Latitude: 39° 57' 27.63" Longitude: 76° 26' 10.01"
Depth to Water Level:	ft. Measured from: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Sampling Depth:	ft. Well Volumes Purged: _____
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Sample Field Filtered (must be 0.45 micron):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	12/14/2020 Sample Collection Time: 12:05 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	34 Dogwood Lane Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	12/27/2020
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, please explain in comments field.
Comments:	

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	5 ND	SM20-2321
CALCIUM, TOTAL	9.5	EPA 200.7
CALCIUM, DISSOLVED	11	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	20.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	66	EPA 200.7
IRON, DISSOLVED (ug/l)	60	EPA 200.7
MAGNESIUM, TOTAL	9.9	EPA 200.7
MAGNESIUM, DISSOLVED	11.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	100	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	120	EPA 200.7
NITRATE-NITROGEN	14.9	EPA 300

T Please indicate detection limit if analyte is not detected.

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MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.11	FIELD
pH-LAB (SU)	5.28	SM4500B
POTASSIUM, TOTAL	2.6	EPA 200.7
POTASSIUM, DISSOLVED	2.9	EPA 200.7
SODIUM, TOTAL	8.5	EPA 200.7
SODIUM, DISSOLVED	8.7	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	227	FIELD
SPEC. COND., LAB (umhos/cm)	212	EPA 120.1
SULFATE	10.6	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	126	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



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PRIVATE WATER SUPPLY
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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: SENSENICH

Address: 3076 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 28.2" Longitude: 76° 26' 11.1"

Depth to Water Level: _____ ft.

Measured from: Land Surface TOC

Casing Stick Up: _____ ft.

Elevation of Water Level: _____ ft./MSL

Total Well Depth: _____ ft.

Sampling Depth: _____ ft.

Sampling Method: Pumped Bailed

Well Purged: Yes No

Well Volumes Purged: _____

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 12:23 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number) 34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s) 22-293

Lab Analysis Date 12/28/2020

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

Comments:

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MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	8	SM20-2321
CALCIUM, TOTAL	13.8	EPA 200.7
CALCIUM, DISSOLVED	14.4	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	52.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	8.4	EPA 200.7
MAGNESIUM, DISSOLVED	8.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	160	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	170	EPA 200.7
NITRATE-NITROGEN	9	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.82	FIELD
pH-LAB (SU)	5.76	SM4500B
POTASSIUM, TOTAL	3.5	EPA 200.7
POTASSIUM, DISSOLVED	3.5	EPA 200.7
SODIUM, TOTAL	23.7	EPA 200.7
SODIUM, DISSOLVED	24.9	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	305	FIELD
SPEC. COND., LAB (umhos/cm)	291	EPA 120.1
SULFATE	10.8	EPA 300
ALKALINITY	8	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	118	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.51	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
01/29/2021

DEP USE ONLY

Date Received

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

All information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 52, 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: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

Address: 3079 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 21.99" Longitude: 76° 26' 10.58"

Depth to Water Level: _____ ft.

Measured from: Land Surface TOC

Casing Stick Up: _____ ft.

Elevation of Water Level: _____ ft./MSL

Total Well Depth: _____ ft.

Sampling Depth: _____ ft.

Sampling Method: Pumped Bailed

Well Purged: Yes No

Well Volumes Purged: _____

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 3:27 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number) 34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s) 22-293

Lab Analysis Date 12/28/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.103	SM4500D
BICARBONATE ALKALINITY	36	SM20-2321
CALCIUM, TOTAL	10.6	EPA 200.7
CALCIUM, DISSOLVED	10.7	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	33.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	46	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	6.2	EPA 200.7
MAGNESIUM, DISSOLVED	6.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	150	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	120	EPA 200.7
NITRATE-NITROGEN	0.2 ND	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	6.46	FIELD
pH-LAB (SU)	6.33	SM4500B
POTASSIUM, TOTAL	2.8	EPA 200.7
POTASSIUM, DISSOLVED	2.6	EPA 200.7
SODIUM, TOTAL	14	EPA 200.7
SODIUM, DISSOLVED	14.1	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	241	FIELD
SPEC. COND., LAB (umhos/cm)	198	EPA 120.1
SULFATE	12.6	EPA 300
ALKALINITY	36	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	150	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.13	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
01/29/2021

DEP USE ONLY

Date Received

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: WEBER

Address: 3088 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 21" Longitude: 76° 26' 7.1"

Depth to Water Level: _____ ft.

Measured from: Land Surface TOC

Casing Stick Up: _____ ft.

Elevation of Water Level: _____ ft./MSL

Total Well Depth: _____ ft.

Sampling Depth: _____ ft.

Sampling Method: Pumped Bailed

Well Purged: Yes No

Well Volumes Purged: _____

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 12:41 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

12/27/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS WEBER

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	106	SM20-2321
CALCIUM, TOTAL	0.19	EPA 200.7
CALCIUM, DISSOLVED	0.2	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	248	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	37	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.08	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	4.2	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	6	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS	WEBER
----	-------

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	7.01	FIELD
pH-LAB (SU)	6.89	SM4500B
POTASSIUM, TOTAL	2.3	EPA 200.7
POTASSIUM, DISSOLVED	2.3	EPA 200.7
SODIUM, TOTAL	222	EPA 200.7
SODIUM, DISSOLVED	224	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	992	FIELD
SPEC. COND., LAB (umhos/cm)	1010	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	106	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	544	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.12	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS WEBER

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
01/29/2021

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Date Received

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: KIRCHNER

Address: 3100 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 17.9" Longitude: 76° 26' 6.28"

Depth to Water Level: _____ ft.

Measured from: Land Surface TOC

Casing Stick Up: _____ ft.

Elevation of Water Level: _____ ft./MSL

Total Well Depth: _____ ft.

Sampling Depth: _____ ft.

Sampling Method: Pumped Bailed

Well Purged: Yes No

Well Volumes Purged: _____

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 12:56 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

12/27/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	19	SM20-2321
CALCIUM, TOTAL	14.4	EPA 200.7
CALCIUM, DISSOLVED	14.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	43.7	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	6.4	EPA 200.7
MAGNESIUM, DISSOLVED	6.5	EPA 200.7
MANGANESE, TOTAL (ug/l)	7.2	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	7.7	EPA 200.7
NITRATE-NITROGEN	3	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.92	FIELD
pH-LAB (SU)	6.03	SM4500B
POTASSIUM, TOTAL	1.7	EPA 200.7
POTASSIUM, DISSOLVED	1.6	EPA 200.7
SODIUM, TOTAL	16.5	EPA 200.7
SODIUM, DISSOLVED	16.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	239	FIELD
SPEC. COND., LAB (umhos/cm)	222	EPA 120.1
SULFATE	9.6	EPA 300
ALKALINITY	19	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	44	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
01/29/2021

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Date Received

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: FRY

Address: 3106 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 17.27" Longitude: 76° 26' 5.6"

Depth to Water Level: _____ ft.

Measured from: Land Surface TOC

Casing Stick Up: _____ ft.

Elevation of Water Level: _____ ft./MSL

Total Well Depth: _____ ft.

Sampling Depth: _____ ft.

Sampling Method: Pumped Bailed

Well Purged: Yes No

Well Volumes Purged: _____

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 1:16 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

12/27/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS FRY

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	12	SM20-2321
CALCIUM, TOTAL	19.7	EPA 200.7
CALCIUM, DISSOLVED	21.8	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	107	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	13.7	EPA 200.7
MAGNESIUM, DISSOLVED	14.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	49	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	55	EPA 200.7
NITRATE-NITROGEN	10.8	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS FRY

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	6.03	FIELD
pH-LAB (SU)	5.91	SM4500B
POTASSIUM, TOTAL	2.2	EPA 200.7
POTASSIUM, DISSOLVED	2.4	EPA 200.7
SODIUM, TOTAL	44.4	EPA 200.7
SODIUM, DISSOLVED	44.7	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	438	FIELD
SPEC. COND., LAB (umhos/cm)	472	EPA 120.1
SULFATE	5.4	EPA 300
ALKALINITY	12	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	252	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.14	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS FRY

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.


 Date Prepared/Revised
 01/29/2021

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

All information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 52, 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: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: BECK

Address: 3125 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 11.6" Longitude: 76° 26' 5.4"

Depth to Water Level: ft.

 Measured from: Land Surface TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

 Sampling Method: Pumped Bailed

 Well Purged: Yes No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 12/14/2020

Sample Collection Time: 2:00 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

34 Dogwood Lane

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

12/27/2020

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

Comments:

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS BECK

Sample Date

12/14/2020

1. Inorganics (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	128	SM20-2321
CALCIUM, TOTAL	5.6	EPA 200.7
CALCIUM, DISSOLVED	4.9	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	82.3	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.62	EPA 200.7
MAGNESIUM, DISSOLVED	0.55	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	5.2	EPA 300

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS BECK

Sample Date

12/14/2020

1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	7.08	FIELD
pH-LAB (SU)	7.09	SM4500B
POTASSIUM, TOTAL	1.1	EPA 200.7
POTASSIUM, DISSOLVED	0.5 ND	EPA 200.7
SODIUM, TOTAL	121	EPA 200.7
SODIUM, DISSOLVED	120	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	531	FIELD
SPEC. COND., LAB (umhos/cm)	553	EPA 120.1
SULFATE	10.9	EPA 300
ALKALINITY	128	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	284	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.62	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

FORM 52
MUNICIPAL WASTE LANDFILL
PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS BECK

Sample Date

12/14/2020

2. Organics (Enter all data in ug/l)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	1 ND	EPA 524.2
1,2-DIBROMOETHANE		EPA 524.2
1,1-DICHLOROETHANE	1 ND	EPA 524.2
1,1-DICHLOROETHENE	1 ND	EPA 524.2
1,2-DICHLOROETHANE	1 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	1 ND	EPA 524.2
ETHYLBENZENE	1 ND	EPA 524.2
METHYLENE CHLORIDE	1 ND	EPA 524.2
TETRACHLOROETHENE	1 ND	EPA 524.2
TOLUENE	1 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	1 ND	EPA 524.2
TRICHLOROETHENE	1 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	1 ND	EPA 524.2
VINYL CHLORIDE	1 ND	EPA 524.2
XYLENES (TOTAL)	3 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.

December 29, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER- 3100 RIVER RD	Workorder:	3146767
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020-3100 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

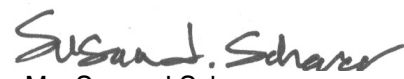
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Landowner , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146767001	3100 River Road, Conestoga, PA	Water	12/14/2020 12:56	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

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ANALYTICAL RESULTS

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

Lab ID: **3146767001** Date Collected: 12/14/2020 12:56 Matrix: Water
Sample ID: **3100 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 00:53	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	97.6		%	62 - 133	SW846 8260B			12/17/20 00:53	PDK	J
4-Bromofluorobenzene (S)	89.9		%	79 - 114	SW846 8260B			12/17/20 00:53	PDK	J
Dibromofluoromethane (S)	89.4		%	78 - 116	SW846 8260B			12/17/20 00:53	PDK	J
Toluene-d8 (S)	93.1		%	76 - 127	SW846 8260B			12/17/20 00:53	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	19		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	19	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 17:11	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	B
Chloride	43.7		mg/L	2.0	EPA 300.0			12/15/20 07:06	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 07:06	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/18/20 15:53	PAG	I
Nitrate-N	3.0		mg/L	0.20	EPA 300.0			12/15/20 07:06	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 07:06	MBW	C
pH	6.03	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	222		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	9.6		mg/L	2.0	EPA 300.0			12/15/20 07:06	MBW	C

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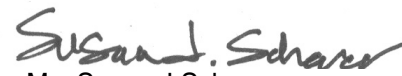
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ANALYTICAL RESULTS

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

Lab ID: **3146767001** Date Collected: 12/14/2020 12:56 Matrix: Water
Sample ID: **3100 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	44		mg/L	25	S2540C-11			12/16/20 11:27	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 01:28	PAG	F
Turbidity	ND		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	14.4		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:23	SRT	D
Calcium, Dissolved	14.6		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:31	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:23	SRT	D
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:31	SRT	E
Magnesium, Total	6.4		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:23	SRT	D
Magnesium, Dissolved	6.5		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:31	SRT	E
Manganese, Total	0.0072		mg/L	0.0025	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:23	SRT	D
Manganese, Dissolved	0.0077		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:31	SRT	E
Potassium, Total	1.7		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:23	SRT	D
Potassium, Dissolved	1.6		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:31	SRT	E
Sodium, Total	16.5		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:23	SRT	D
Sodium, Dissolved	16.4		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:31	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.92		pH_Units		Field			12/14/20 12:56	BGS	M
Specific Conductance, Field	239		umhos/cm	1	Field			12/14/20 12:56	BGS	M
Temperature	15.30		Deg. C		Field			12/14/20 12:56	BGS	M



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146767001	1	3100 River Road, Conestoga, PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146767001	2	3100 River Road, Conestoga, PA	S4500HB-11	pH
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.				

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146767001	3100 River Road, Conestoga, PA	ASTM D6919-09		
3146767001	3100 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3146767001	3100 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3146767001	3100 River Road, Conestoga, PA	EPA 300.0		
3146767001	3100 River Road, Conestoga, PA	EPA 410.4		
3146767001	3100 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3146767001	3100 River Road, Conestoga, PA	Field		
3146767001	3100 River Road, Conestoga, PA	S2540C-11		
3146767001	3100 River Road, Conestoga, PA	S4500HB-11		
3146767001	3100 River Road, Conestoga, PA	SM2130B-2011		
3146767001	3100 River Road, Conestoga, PA	SM2320B-2011		
3146767001	3100 River Road, Conestoga, PA	SM2510B-2011		
3146767001	3100 River Road, Conestoga, PA	SM5310B-2011		
3146767001	3100 River Road, Conestoga, PA	SW846 8260B		
3146767001	3100 River Road, Conestoga, PA	SW846 9020B		

ALS Environmental Laboratory Locations Across North America

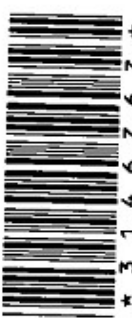
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 REQUEST FOR ANALYSIS**
**ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/
 SAMPLER. INSTRUCTIONS ON THE BACK.**

COC #: **ALS Q1**

1 of 1



34 Dogwood Lane • Middletown, PA 17057 • T: 717.944.5541 • F: 717.944.1430

Client Name: **LCSWMA - Larry Kirchner**

Address: **3100 River Road**

Conestoga, PA 17516

Contact: **Larry Kirchner**

Phone#: **(717) 584-0030**

Project Name#: **LCSWMA - Quarterly**

Bill To: **Lancaster County Solid Waste MA**

TAT Normal-Standard TAT is 10-12 business days.

Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved By: _____

Email? .Y

Fax? .Y No: _____

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL	PL	PL
40 ml	125 ml	250 ml	40 ml	250 ml	125 ml	125 ml	500 ml	500 ml	500 ml	500 ml	500 ml
HC1	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	None	None	None	None	None

ANALYSES/METHOD REQUESTED

TOC	O-OH	TOX	SW846-8260 VOCs	TM	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	PH, TDS, NO2, NO3, Cl, SO4, T	TB, SPC	Alkalinity, HCO3
2	1	2	2	3	1	1	1	1	1	1

Enter Number of Containers Per Sample or Field Results Below.

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	G	or C	Matrix	LOGGED BY (signature):	REVIEWED BY (signature):
1 3100RIVERRD	12/14/20	1256	G	DW	2	1	2
2							
3							
4							
5							
6							
7							
8							
9							
10							

Project Comments:

Relinquished By/ Company Name: **ALS**

Date: **12/14/20** Time: **12:56**

Received By/ Company Name: **[Signature]**

Date: **12/16/20** Time: **17:40**

Reportable to PADEP? Yes No

PWSID #

EDDS: Formal Type

Cooler Temp: _____ INERM IU: _____

No. of Coolers: Y N Initial

Custody Seals Present?

(if present) Seals Intact?

Received on Ice?

COC/Labels Complete/Accurate?

Cont. in Good Cond.?

Correct Containers?

Correct Sample Volumes?

Correct Preservation?

Headspace/Volatiles?

ALS Field Services: Pickup Labor

Composite_Sampling Rental_Equipment

Other:

Special Processing

USACE

Navy

State Samples Collected In

NY

NJ

PA

NC

* G=Grab; C=Composite ** Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; O=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater





301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: CCSWMA Work Order #: 314107107 Initials: TS Date: 12/20

1. Were airbills / tracking numbers present and recorded?..... NONE YES NO
Tracking number: _____
2. Are Custody Seals on shipping containers intact?..... NONE YES NO
3. Are Custody Seals on sample containers intact?..... NONE YES ~~NO~~
4. Is there a COC (Chain-of-Custody) present?..... YES NO
5. Are the COC and bottle labels complete, legible and in agreement?..... YES NO
 - 5a. Does the COC contain sample locations?..... YES NO
 - 5b. Does the COC contain date and time of sample collection for all samples?..... YES NO
 - 5c. Does the COC contain sample collectors name?..... YES NO
 - 5d. Does the COC note the type(s) of preservation for all bottles?..... YES NO
 - 5e. Does the COC note the number of bottles submitted for each sample?..... YES NO
 - 5f. Does the COC note the type of sample, composite or grab?..... YES NO
 - 5g. Does the COC note the matrix of the sample(s)?..... YES NO
6. Are all aqueous samples requiring preservation preserved correctly?..... N/A YES NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... YES NO
8. Are all samples within holding times for the requested analyses?..... YES NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... YES NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... N/A YES NO
11. Were the samples received on ice?..... YES NO
12. Were sample temperatures measured at 0.0-6.0°C..... YES NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... YES NO
 - 13a. Are the samples required for SDWA compliance reporting?..... N/A YES NO
 - 13b. Did the client provide a SDWA PWS ID#?..... N/A YES NO
 - 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... N/A YES NO
 - 13d. Did the client provide the SDWA sample location ID/Description?..... N/A YES NO
 - 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... N/A YES NO

Cooler #: _____

Temperature (°C): 2 _____

Thermometer ID: 309 _____

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

December 29, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER- 3088 RIVER RD	Workorder:	3146769
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020-3088 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

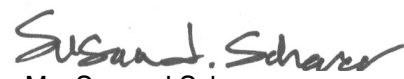
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Landowner , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

ALS Environmental Laboratory Locations Across North America

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SAMPLE SUMMARY

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146769001	3088 River Road, Conestoga PA	Water	12/14/2020 12:41	12/14/2020 17:40	Mr. Brian G Shade

ALS Environmental Laboratory Locations Across North America

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Vancouver Waterloo · Winnipeg · Yellowknife **United States:** Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York **Mexico:** Monterrey

SAMPLE SUMMARY

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

ALS Environmental Laboratory Locations Across North AmericaCanada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

ANALYTICAL RESULTS

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

Lab ID: **3146769001** Date Collected: 12/14/2020 12:41 Matrix: Water
Sample ID: **3088 River Road, Conestoga PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 01:38	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Trichlorofluoromethane	ND	3	ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 01:38	PDK	J
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	99.5		%	62 - 133	SW846 8260B			12/17/20 01:38	PDK	J
4-Bromofluorobenzene (S)	93.6		%	79 - 114	SW846 8260B			12/17/20 01:38	PDK	J
Dibromofluoromethane (S)	93.3		%	78 - 116	SW846 8260B			12/17/20 01:38	PDK	J
Toluene-d8 (S)	95.3		%	76 - 127	SW846 8260B			12/17/20 01:38	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	106		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	106	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 17:38	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	B
Chloride	248		mg/L	5.0	EPA 300.0			12/18/20 04:31	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 07:26	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/22/20 11:30	PAG	I
Nitrate-N	6.0		mg/L	0.20	EPA 300.0			12/15/20 07:26	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 07:26	MBW	C
pH	6.89	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	1010		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	ND		mg/L	2.0	EPA 300.0			12/15/20 07:26	MBW	C

ALS Environmental Laboratory Locations Across North America

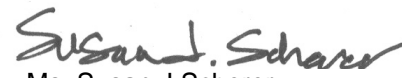
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ANALYTICAL RESULTS

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

Lab ID: **3146769001** Date Collected: 12/14/2020 12:41 Matrix: Water
Sample ID: **3088 River Road, Conestoga PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	544		mg/L	25	S2540C-11			12/16/20 11:27	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 01:28	PAG	F
Turbidity	0.12		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	0.19		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:34	SRT	D1
Calcium, Dissolved	0.20		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:56	SRT	E
Iron, Total	0.037		mg/L	0.030	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:34	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:56	SRT	E
Magnesium, Total	0.080		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:34	SRT	D1
Magnesium, Dissolved	ND		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:56	SRT	E
Manganese, Total	0.0042		mg/L	0.0025	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:34	SRT	D1
Manganese, Dissolved	ND		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:56	SRT	E
Potassium, Total	2.3		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:34	SRT	D1
Potassium, Dissolved	2.3		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:56	SRT	E
Sodium, Total	222		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:34	SRT	D1
Sodium, Dissolved	224		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:56	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	7.01		pH_Units		Field			12/14/20 12:41	BGS	M
Specific Conductance, Field	992		umhos/cm	1	Field			12/14/20 12:41	BGS	M
Temperature	13.20		Deg. C		Field			12/14/20 12:41	BGS	M



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146769001	1	3088 River Road, Conestoga PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146769001	2	3088 River Road, Conestoga PA	S4500HB-11	pH
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.				
3146769001	3	3088 River Road, Conestoga PA	SW846 8260B	Trichlorofluoromethane
The QC sample type MS for method SW846 8260B was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 124 and the control limits were 38 to 123.				

ALS Environmental Laboratory Locations Across North America

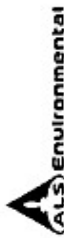
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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146769001	3088 River Road, Conestoga PA	ASTM D6919-09		
3146769001	3088 River Road, Conestoga PA	EPA 200.7	EPA ACID	
3146769001	3088 River Road, Conestoga PA	EPA 200.7	EPA TRMD	
3146769001	3088 River Road, Conestoga PA	EPA 300.0		
3146769001	3088 River Road, Conestoga PA	EPA 410.4		
3146769001	3088 River Road, Conestoga PA	EPA 420.4	420.4/9066	
3146769001	3088 River Road, Conestoga PA	Field		
3146769001	3088 River Road, Conestoga PA	S2540C-11		
3146769001	3088 River Road, Conestoga PA	S4500HB-11		
3146769001	3088 River Road, Conestoga PA	SM2130B-2011		
3146769001	3088 River Road, Conestoga PA	SM2320B-2011		
3146769001	3088 River Road, Conestoga PA	SM2510B-2011		
3146769001	3088 River Road, Conestoga PA	SM5310B-2011		
3146769001	3088 River Road, Conestoga PA	SW846 8260B		
3146769001	3088 River Road, Conestoga PA	SW846 9020B		

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 18 Dogwood Lane • Middletown, PA 17057 • Phone 717.944.5541 • Fax 717.944.1430 • www.alsenv.com

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

Generated by ALS

COC
 ALS

1 of 1



Client Name: LCSWMA - Hans Weber and Deb Kalbach

Address: 3088 River Road

Contact: Hans Weber and Deb Kalbach

Phone#: (717) 419-7992

Project Name#: LCSWMA - Quarterly

Bill To: LCSWMA - Hans Weber and Deb Kalbach

TAT Normal-Standard TAT is 10-12 business days.

Date Required: _____ Approved By: _____

Email? -Y -N

Fax? -Y -N

Container Type	AG	AN	AN	AN	CG	PL	PL	PL	PL	PL	PL	PL
Container Size	40 ml	125 ml	250 ml	250 ml	40 ml	250 ml	125 ml	125 ml	125 ml	500 ml	500 ml	500 ml
Preservative	HCl	H2SO4	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	HNO3	None	None	None
Matrix	TOC	O-OH	TOX	FM	SW846-8260 VOCs	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	pH, TDS, NO2, NO3, Cl, SO4, F, TB, SPC	Alkalinity, HCO3		

Enter Number of Containers Per Sample or Field Results Below.

Sample Date	Time	1	2	3	4	5	6	7	8	9	10
12/14/20	1241	G	DW	2	1	2	1	1	1	1	1
2											
3											
4											
5											
6											
7											
8											
9											
10											

Project Comments: _____

LOGGED BY (signature): _____

REVIEWED BY (signature): _____

Requisitioned By	Company Name	Date	Time	Received By	Company Name	Date	Time
1	ALS	12/14/20	1240	[Signature]	[Signature]	12/17/20	1240
3							
5							
7							
9							

ALS Field Services: Pickup Labor Rental_Equipment

Composite_Sampling Other:

Special Processing: Standard CLP-like USACE

State Samples Collected In: USACE Navy NY NJ PA NC

Reportable to PADEP? Yes No Lab Special

EDDS: Formal Type: _____ PWSID #: _____

**Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OL=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

* G=Grab; C=Composite

ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057

Rev 8/04



301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: LCSWMA Work Order #: 3146769 Initials: TS Date: 12/15/20

1. Were airbills / tracking numbers present and recorded?..... NONE YES NO
Tracking number: _____
2. Are Custody Seals on shipping containers intact?..... NONE YES NO
3. Are Custody Seals on sample containers intact?..... NONE YES ~~NO~~
4. Is there a COC (Chain-of-Custody) present?..... YES NO
5. Are the COC and bottle labels complete, legible and in agreement?..... YES NO
 - 5a. Does the COC contain sample locations?..... YES NO
 - 5b. Does the COC contain date and time of sample collection for all samples?..... YES NO
 - 5c. Does the COC contain sample collectors name?..... YES NO
 - 5d. Does the COC note the type(s) of preservation for all bottles?..... YES NO
 - 5e. Does the COC note the number of bottles submitted for each sample?..... YES NO
 - 5f. Does the COC note the type of sample, composite or grab?..... YES NO
 - 5g. Does the COC note the matrix of the sample(s)?..... YES NO
6. Are all aqueous samples requiring preservation preserved correctly?..... N/A YES NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... YES NO
8. Are all samples within holding times for the requested analyses?..... YES NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... YES NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... N/A YES NO
11. Were the samples received on ice?..... YES NO
12. Were sample temperatures measured at 0.0-6.0°C..... YES NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... YES NO
 - 13a. Are the samples required for SDWA compliance reporting?..... N/A YES NO
 - 13b. Did the client provide a SDWA PWS ID#?..... N/A YES NO
 - 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... N/A YES NO
 - 13d. Did the client provide the SDWA sample location ID/Description?..... N/A YES NO
 - 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... N/A YES NO

Cooler #: _____

Temperature (°C): 2 _____

Thermometer ID: 309 _____

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

³Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

December 30, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	FREY FARM	Workorder:	3146765
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020 3079 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

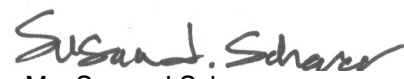
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

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ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146765001	3079RIVERRD	Water	12/14/2020 15:27	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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
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*	Result outside of QC limits

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ANALYTICAL RESULTS

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

Lab ID: **3146765001** Date Collected: 12/14/2020 15:27 Matrix: Water
Sample ID: **3079RIVERRD** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 00:08	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	98.7		%	62 - 133	SW846 8260B			12/17/20 00:08	PDK	J
4-Bromofluorobenzene (S)	91.1		%	79 - 114	SW846 8260B			12/17/20 00:08	PDK	J
Dibromofluoromethane (S)	91.2		%	78 - 116	SW846 8260B			12/17/20 00:08	PDK	J
Toluene-d8 (S)	95.7		%	76 - 127	SW846 8260B			12/17/20 00:08	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	36		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	36	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	0.103		mg/L	0.100	ASTM D6919-09			12/24/20 16:16	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/28/20 23:35	JAM	B
Chloride	33.2		mg/L	2.0	EPA 300.0			12/16/20 11:17	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/16/20 11:17	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/18/20 14:59	PAG	I
Nitrate-N	ND		mg/L	0.20	EPA 300.0			12/16/20 11:17	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/16/20 11:17	MBW	C
pH	6.33	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	198		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	12.6		mg/L	2.0	EPA 300.0			12/16/20 11:17	MBW	C

ALS Environmental Laboratory Locations Across North America

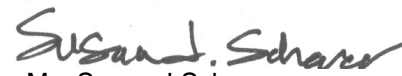
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ANALYTICAL RESULTS

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

Lab ID: **3146765001** Date Collected: 12/14/2020 15:27 Matrix: Water
Sample ID: **3079RIVERRD** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	150		mg/L	25	S2540C-11			12/16/20 11:27	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 01:28	PAG	F
Turbidity	0.13		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	10.6		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:08	SRT	D1
Calcium, Dissolved	10.7		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:42	SRT	E
Iron, Total	0.046		mg/L	0.030	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:08	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:42	SRT	E
Magnesium, Total	6.2		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:08	SRT	D1
Magnesium, Dissolved	6.2		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:42	SRT	E
Manganese, Total	0.15		mg/L	0.0025	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:08	SRT	D1
Manganese, Dissolved	0.12		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:42	SRT	E
Potassium, Total	2.8		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:08	SRT	D1
Potassium, Dissolved	2.6		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:42	SRT	E
Sodium, Total	14.0		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:08	SRT	D1
Sodium, Dissolved	14.1		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:42	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	6.46		pH_Units		Field			12/14/20 15:27	BGS	M
Specific Conductance, Field	241		umhos/cm	1	Field			12/14/20 15:27	BGS	M
Temperature	15.20		Deg. C		Field			12/14/20 15:27	BGS	M



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146765001	1	3079RIVERRD	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146765001	2	3079RIVERRD	S4500HB-11	pH
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.				

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Mexico: Monterrey

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146765001	3079RIVERRD	ASTM D6919-09		
3146765001	3079RIVERRD	EPA 200.7	EPA ACID	
3146765001	3079RIVERRD	EPA 200.7	EPA TRMD	
3146765001	3079RIVERRD	EPA 300.0		
3146765001	3079RIVERRD	EPA 410.4		
3146765001	3079RIVERRD	EPA 420.4	420.4/9066	
3146765001	3079RIVERRD	Field		
3146765001	3079RIVERRD	S2540C-11		
3146765001	3079RIVERRD	S4500HB-11		
3146765001	3079RIVERRD	SM2130B-2011		
3146765001	3079RIVERRD	SM2320B-2011		
3146765001	3079RIVERRD	SM2510B-2011		
3146765001	3079RIVERRD	SM5310B-2011		
3146765001	3079RIVERRD	SW846 8260B		
3146765001	3079RIVERRD	SW846 9020B		

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

Generated by ALS



1 of 1

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ALS Corporate Office • 17057 • Phone: 717.944.5541 • Fax: 717.944.1430 • www.als.com

Client Name: Lancaster County Solid Waste MA
Address: 1299 Harrisburg Pike, P.O. Box 4424
Lancaster, PA 17604
Contact: Dan Brown
Phone#: (717) 735-0193
Project Name#: LCSWMA - Quarterly Fire Co.
Bill To: Lancaster County Solid Waste MA

TAT Normal-Standard TAT is 10-12 business days.
 Rush-Subject to ALS approval and surcharges.
Date Required: _____ **Approved By:** _____
Email? -Y -N
Fax? -Y -N

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL
Container Size	40 ml	125 ml	250 ml	40 ml	250 ml	125 ml	125 ml	500 ml	500 ml
Preservative	HCl	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	None	None

ANALYSES/METHOD REQUESTED										
TOC	O-OH	TOX	SW846-8260 VOCs	FM	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	PH, TDS, NO2, NO3, Cl, SO4, F, Pb, Spc	Alkalinity, HCO3	

Enter Number of Containers Per Sample or Field Results Below.

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	G or C	Matrix	TOC	O-OH	TOX	SW846-8260 VOCs	FM	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	PH, TDS, NO2, NO3, Cl, SO4, F, Pb, Spc	Alkalinity, HCO3
1 3079RIVERRD	12/14/20	1527	G DW		2	1	2	23x		1	1	1	1	1
2														
3														
4														
5														
6														
7														
8														
9														
10														

Project Comments:

LOGGED BY (signature): _____

REVIEWED BY (signature): _____

Relinquished By / Company Name: *[Signature]* ALS
Date: 12/14/20 Time: 1740

Received By / Company Name: *[Signature]* ALS
Date: 12/14/20 Time: 1740

ALS Field Services: Pickup Labor
 Composite_Sampling Rental_Equipment
 Other:

Special Processing	State Samples Collected In
USACE <input type="checkbox"/>	USACE <input type="checkbox"/>
Navy <input type="checkbox"/>	Navy <input type="checkbox"/>
USACE <input type="checkbox"/>	NJ <input type="checkbox"/>
Reportable to PADEP? <input type="checkbox"/>	PA <input checked="" type="checkbox"/>
Yes <input type="checkbox"/>	NC <input type="checkbox"/>
PWSID # _____	Lab <input checked="" type="checkbox"/>
EDDS: Formal Type _____	Special <input type="checkbox"/>

* G=Grab; C=Composite **Matrix - Air=Air; DW=Drinking Water; GW=Groundwater; O=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057

Rev 8/04





301 Fulling Mill Road
 Middletown, PA 17057
 P: (717) 944-5541
 F: (717) 944-1430

Condition of Sample Receipt Form

Client: LCSWMA Work Order #: 3146765 Initials: TS Date: 12/5/20

1. Were airbills / tracking numbers present and recorded?..... NONE YES NO
 Tracking number: _____
2. Are Custody Seals on shipping containers intact?..... NONE YES NO
3. Are Custody Seals on sample containers intact?..... NONE YES NO
4. Is there a COC (Chain-of-Custody) present?..... YES NO
5. Are the COC and bottle labels complete, legible and in agreement?..... YES NO
 - 5a. Does the COC contain sample locations?..... YES NO
 - 5b. Does the COC contain date and time of sample collection for all samples?..... YES NO
 - 5c. Does the COC contain sample collectors name?..... YES NO
 - 5d. Does the COC note the type(s) of preservation for all bottles?..... YES NO
 - 5e. Does the COC note the number of bottles submitted for each sample?..... YES NO
 - 5f. Does the COC note the type of sample, composite or grab?..... YES NO
 - 5g. Does the COC note the matrix of the sample(s)?..... YES NO
6. Are all aqueous samples requiring preservation preserved correctly?¹..... N/A YES NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... YES NO
8. Are all samples within holding times for the requested analyses?..... YES NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... YES NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... N/A YES NO
11. Were the samples received on ice?..... YES NO
12. Were sample temperatures measured at 0.0-6.0°C..... YES NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... YES NO
 - 13a. Are the samples required for SDWA compliance reporting?..... N/A YES NO
 - 13b. Did the client provide a SDWA PWS ID#?..... N/A YES NO
 - 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... N/A YES NO
 - 13d. Did the client provide the SDWA sample location ID/Description?..... N/A YES NO
 - 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... N/A YES NO

Cooler #: _____

Temperature (°C): 2 _____

Thermometer ID: 309 _____

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

December 30, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER- 3076 RIVER RD	Workorder:	3146770
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020-3076 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

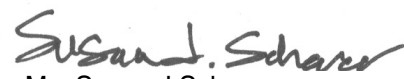
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ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Landowner , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146770001	3076 River Road, Conestoga, PA	Water	12/14/2020 12:23	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

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*	Result outside of QC limits

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ANALYTICAL RESULTS

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

Lab ID: **3146770001** Date Collected: 12/14/2020 12:23 Matrix: Water
Sample ID: **3076 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 02:01	PDK	L
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:01	PDK	L
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	99		%	62 - 133	SW846 8260B			12/17/20 02:01	PDK	L
4-Bromofluorobenzene (S)	92.9		%	79 - 114	SW846 8260B			12/17/20 02:01	PDK	L
Dibromofluoromethane (S)	92.5		%	78 - 116	SW846 8260B			12/17/20 02:01	PDK	L
Toluene-d8 (S)	95.1		%	76 - 127	SW846 8260B			12/17/20 02:01	PDK	L
WET CHEMISTRY										
Alkalinity, Bicarbonate	8		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	8	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 17:52	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/28/20 23:35	JAM	B
Chloride	52.9		mg/L	2.0	EPA 300.0			12/15/20 07:46	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 07:46	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/22/20 11:52	PAG	I
Nitrate-N	9.0		mg/L	0.20	EPA 300.0			12/15/20 07:46	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 07:46	MBW	C
pH	5.76	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	291		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	10.8		mg/L	2.0	EPA 300.0			12/15/20 07:46	MBW	C

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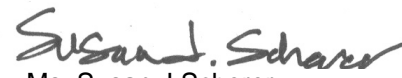
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ANALYTICAL RESULTS

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

Lab ID: **3146770001** Date Collected: 12/14/2020 12:23 Matrix: Water
Sample ID: **3076 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	118		mg/L	25	S2540C-11			12/17/20 11:19	KXH	C
Total Organic Carbon (TOC)	0.51		mg/L	0.50	SM5310B-2011			12/22/20 07:05	PAG	F
Turbidity	ND		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	13.8		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:27	SRT	D1
Calcium, Dissolved	14.4		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:00	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:27	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:00	SRT	E
Magnesium, Total	8.4		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:27	SRT	D1
Magnesium, Dissolved	8.7		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:00	SRT	E
Manganese, Total	0.16		mg/L	0.0025	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:27	SRT	D1
Manganese, Dissolved	0.17		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:00	SRT	E
Potassium, Total	3.5		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:27	SRT	D1
Potassium, Dissolved	3.5		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:00	SRT	E
Sodium, Total	23.7		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 16:27	SRT	D1
Sodium, Dissolved	24.9		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:00	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.82		pH_Units		Field			12/14/20 12:23	BGS	N
Specific Conductance, Field	305		umhos/cm	1	Field			12/14/20 12:23	BGS	N
Temperature	13.10		Deg. C		Field			12/14/20 12:23	BGS	N



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146770001	1	3076 River Road, Conestoga, PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
3146770001	2	3076 River Road, Conestoga, PA	S4500HB-11	pH
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.				

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Mexico: Monterrey

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146770001	3076 River Road, Conestoga, PA	ASTM D6919-09		
3146770001	3076 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3146770001	3076 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3146770001	3076 River Road, Conestoga, PA	EPA 300.0		
3146770001	3076 River Road, Conestoga, PA	EPA 410.4		
3146770001	3076 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3146770001	3076 River Road, Conestoga, PA	Field		
3146770001	3076 River Road, Conestoga, PA	S2540C-11		
3146770001	3076 River Road, Conestoga, PA	S4500HB-11		
3146770001	3076 River Road, Conestoga, PA	SM2130B-2011		
3146770001	3076 River Road, Conestoga, PA	SM2320B-2011		
3146770001	3076 River Road, Conestoga, PA	SM2510B-2011		
3146770001	3076 River Road, Conestoga, PA	SM5310B-2011		
3146770001	3076 River Road, Conestoga, PA	SW846 8260B		
3146770001	3076 River Road, Conestoga, PA	SW846 9020B		

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

COC #: **ALS QI**
 1 of 1
 * 3 1 4 6 7 0 *

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 1100 Independence • Middletown, PA 17057 • Phone: 717.944.5541 • Fax: 717.944.1430 • www.als.com

Client Name: LCSWMA - Brian Sensenich
 Address: 3076 Rover Road
 Conestoga, PA 17516
 Contact: Brian Sensenich
 Phone#: (717) 676-5779
 Project Name#: LCSWMA - Quarterly
 Bill To: LCSWMA - Brian Sensenich

TAT Normal-Standard TAT is 10-12 business days.
 Rush-Subject to ALS approval and surcharges.
 Date Required: _____ Approved By: _____
 Email? -Y -N
 Fax? -Y -N

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time
1 3076RIVERRD	12/14/20	1223
2		
3		
4		
5		
6		
7		
8		
9		
10		

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL	PL	PL	PL
Container Size	40 ml	125 ml	250 ml	40 ml	250 ml	125 ml	125 ml	125 ml	500 ml	500 ml	500 ml	500 ml
Preservative	HCl	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	HNO3	None	None	None	None

Matrix	TOC	O-OH	TOX	FM	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	pH, TDS, NO2, NO3, Cl, SO4, T	Tb, Spc	Alkalinity, HCO3
G or C	2	1	2	1	1	1	1	1	1	1

Enter Number of Containers Per Sample or Field Results Below.

ALS Field Services: Pickup Labor
 Composite_Sampling Rental_Equipment
 Other:

Project Comments:
 Relinquished By: Company Name: ALS
 Date: 12/14/20
 Time: 12:23

LOGGED BY (signature):
 REVIEWED BY (signature):
 Date: 12/14/20
 Time: 12:23

Special Processing: USACE Navy
 State Samples Collected In: NY NJ PA NC
 Reportable to PADEP? Yes No
 Sample Disposal: Lab Special
 PWSID #
 EDDS: Format Type-



301 Fulling Mill Road
 Middletown, PA 17057
 P: (717) 944-5541
 F: (717) 944-1430

Condition of Sample Receipt Form

Client: LC SUMMA Work Order #: 3146770 Initials: TS Date: 12/5/20

- | | | | |
|--|-------------|------------|---------------|
| 1. Were airbills / tracking numbers present and recorded?..... | <u>NONE</u> | YES | NO |
| Tracking number: _____ | | | |
| 2. Are Custody Seals on shipping containers intact?..... | <u>NONE</u> | YES | NO |
| 3. Are Custody Seals on sample containers intact?..... | <u>NONE</u> | YES | NO |
| 4. Is there a COC (Chain-of-Custody) present?..... | | <u>YES</u> | NO |
| 5. Are the COC and bottle labels complete, legible and in agreement?..... | | <u>YES</u> | NO |
| 5a. Does the COC contain sample locations?..... | | <u>YES</u> | NO |
| 5b. Does the COC contain date and time of sample collection for all samples?..... | | <u>YES</u> | NO |
| 5c. Does the COC contain sample collectors name?..... | | <u>YES</u> | NO |
| 5d. Does the COC note the type(s) of preservation for all bottles?..... | | <u>YES</u> | NO |
| 5e. Does the COC note the number of bottles submitted for each sample?..... | | <u>YES</u> | NO |
| 5f. Does the COC note the type of sample, composite or grab?..... | | <u>YES</u> | NO |
| 5g. Does the COC note the matrix of the sample(s)?..... | | <u>YES</u> | NO |
| 6. Are all aqueous samples requiring preservation preserved correctly?..... | N/A | <u>YES</u> | NO |
| 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... | | <u>YES</u> | NO |
| 8. Are all samples within holding times for the requested analyses?..... | | <u>YES</u> | NO |
| 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... | | <u>YES</u> | NO |
| 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... | <u>N/A</u> | YES | NO |
| 11. Were the samples received on ice?..... | | <u>YES</u> | NO |
| 12. Were sample temperatures measured at 0.0-6.0°C..... | | <u>YES</u> | NO |
| 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... | | <u>YES</u> | NO |
| 13a. Are the samples required for SDWA compliance reporting?..... | N/A | YES | <u>NO</u> |
| 13b. Did the client provide a SDWA PWS ID#?..... | N/A | YES | NO |
| 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... | N/A | YES | NO |
| 13d. Did the client provide the SDWA sample location ID/Description?..... | N/A | YES | NO |
| 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... | N/A | YES | NO |

Cooler #: _____
 Temperature (°C): 2
 Thermometer ID: 309
 Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

²Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

Rev 1/20/2020

December 29, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	FREY FARM	Workorder:	3146771
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020 3060 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

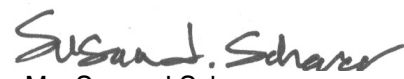
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

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ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146771001	3060RIVERRD	Water	12/14/2020 12:05	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

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ANALYTICAL RESULTS

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Lab ID: **3146771001** Date Collected: 12/14/2020 12:05 Matrix: Water
Sample ID: **3060RIVERRD** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 02:23	PDK	K
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:23	PDK	K
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	101		%	62 - 133	SW846 8260B			12/17/20 02:23	PDK	K
4-Bromofluorobenzene (S)	91.3		%	79 - 114	SW846 8260B			12/17/20 02:23	PDK	K
Dibromofluoromethane (S)	93		%	78 - 116	SW846 8260B			12/17/20 02:23	PDK	K
Toluene-d8 (S)	95		%	76 - 127	SW846 8260B			12/17/20 02:23	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	ND	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 18:06	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	B
Chloride	20.9		mg/L	2.0	EPA 300.0			12/15/20 08:07	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 08:07	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/22/20 12:16	PAG	I
Nitrate-N	14.9		mg/L	0.20	EPA 300.0			12/15/20 08:07	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 08:07	MBW	C
pH	5.28	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	212		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	10.6		mg/L	2.0	EPA 300.0			12/15/20 08:07	MBW	C

ALS Environmental Laboratory Locations Across North America

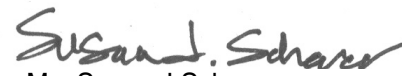
Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
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ANALYTICAL RESULTS

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Lab ID: **3146771001** Date Collected: 12/14/2020 12:05 Matrix: Water
Sample ID: **3060RIVERRD** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	126		mg/L	25	S2540C-11			12/17/20 11:19	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 07:05	PAG	F
Turbidity	ND		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	9.5		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:31	SRT	D1
Calcium, Dissolved	11.0		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:03	SRT	E
Iron, Total	0.066		mg/L	0.030	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:31	SRT	D1
Iron, Dissolved	0.060		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:03	SRT	E
Magnesium, Total	9.9		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:31	SRT	D1
Magnesium, Dissolved	11.2		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:03	SRT	E
Manganese, Total	0.10		mg/L	0.0025	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:31	SRT	D1
Manganese, Dissolved	0.12		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:03	SRT	E
Potassium, Total	2.6		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:31	SRT	D1
Potassium, Dissolved	2.9		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:03	SRT	E
Sodium, Total	8.5		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:31	SRT	D1
Sodium, Dissolved	8.7		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:03	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.11		pH_Units		Field			12/14/20 12:05	BGS	N
Specific Conductance, Field	227		umhos/cm	1	Field			12/14/20 12:05	BGS	N
Temperature	12.50		Deg. C		Field			12/14/20 12:05	BGS	N



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146771001	1	3060RIVERRD	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146771001	2	3060RIVERRD	S4500HB-11	pH
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.				

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 Vancouver Waterloo · Winnipeg · Yellowknife **United States:** Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York **Mexico:** Monterrey

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146771001	3060RIVERRD	ASTM D6919-09		
3146771001	3060RIVERRD	EPA 200.7	EPA ACID	
3146771001	3060RIVERRD	EPA 200.7	EPA TRMD	
3146771001	3060RIVERRD	EPA 300.0		
3146771001	3060RIVERRD	EPA 410.4		
3146771001	3060RIVERRD	EPA 420.4	420.4/9066	
3146771001	3060RIVERRD	Field		
3146771001	3060RIVERRD	S2540C-11		
3146771001	3060RIVERRD	S4500HB-11		
3146771001	3060RIVERRD	SM2130B-2011		
3146771001	3060RIVERRD	SM2320B-2011		
3146771001	3060RIVERRD	SM2510B-2011		
3146771001	3060RIVERRD	SM5310B-2011		
3146771001	3060RIVERRD	SW846 8260B		
3146771001	3060RIVERRD	SW846 9020B		

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

Generated by ALS

CC

1 of 1



Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike, P.O. Box 4424

Lancaster, PA 17604

Contact: Dan Brown

Phone#: (717) 735-0193

Project Name/ID: LCSWMA - Quarterly

Bill To: Lancaster County Solid Waste MA

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

Date Required: _____ Approved By: _____

Email? -Y -N

Fax? -Y -N

Sample Description/Location <small>(as it will appear on the lab report)</small>	Sample Date	Time
1 3060RIVERRD	12/14/20	1205
2		
3		
4		
5		
6		
7		
8		
9		
10		

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL
40 ml	H2SO4	125 ml	250 ml	40 ml	H2SO4	125 ml	HNO3	HNO3	HNO3	500 ml	500 ml	None	None			
Preservative	HCl	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	HNO3	HNO3	None	None					

Enter Number of Containers Per Sample or Field Results Below.

TOC	1	2	1	2	1	1	1	1	1	1	1	1					
FM																	
TOX																	
SW846-8260 VOCs																	
Dissolved Metals: Ca, Fe, Mg, Mn, K, Na																	
Metals: Ca, Fe, Mg, Mn, K, Na																	
PH, TDS, NO2, NO3, Cl, SO4, F, Tr, SPC																	
Alkalinity, HCO3																	

Project Comments:
 LOGGED BY (signature):
 REVIEWED BY (signature):

Received By / Company Name: [Signature] Date: 12/14/20 Time: 1740

4	6	8	10
---	---	---	----

ALS Field Services: Pickup Labor
 Composite_Sampling Rental_Equipment
 Other:

Special Processing:
 USACE Navy
 Reportable to PADEP? Yes No
 PWSID #

State Samples Collected In:
 NY NJ PA NC

Therm ID: _____
 Cooler Temp: _____

No. of Coolers: _____ Y N Initial

Custody Seals Present? (if present) Seals Intact?
 Received on Ice?
 COC/Labels Complete/Accurate?
 Cont. in Good Cond.?
 Correct Containers?
 Correct Sample Volumes?
 Correct Preservation?
 Headspace/Volatiles?

Courier Tracking #: _____

Sample/COC Comments



301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: LCSWMA Work Order #: 3146771 Initials: TS Date: 12/15/20

- | | | | |
|--|-------------|------------|-----------|
| 1. Were airbills / tracking numbers present and recorded?..... | <u>NONE</u> | YES | NO |
| Tracking number: _____ | | | |
| 2. Are Custody Seals on shipping containers intact?..... | <u>NONE</u> | YES | NO |
| 3. Are Custody Seals on sample containers intact?..... | <u>NONE</u> | YES | <u>NO</u> |
| 4. Is there a COC (Chain-of-Custody) present?..... | | <u>YES</u> | NO |
| 5. Are the COC and bottle labels complete, legible and in agreement?..... | | <u>YES</u> | NO |
| 5a. Does the COC contain sample locations?..... | | <u>YES</u> | NO |
| 5b. Does the COC contain date and time of sample collection for all samples?..... | | <u>YES</u> | NO |
| 5c. Does the COC contain sample collectors name?..... | | <u>YES</u> | NO |
| 5d. Does the COC note the type(s) of preservation for all bottles?..... | | <u>YES</u> | NO |
| 5e. Does the COC note the number of bottles submitted for each sample?..... | | <u>YES</u> | NO |
| 5f. Does the COC note the type of sample, composite or grab?..... | | <u>YES</u> | NO |
| 5g. Does the COC note the matrix of the sample(s)?..... | | <u>YES</u> | NO |
| 6. Are all aqueous samples requiring preservation preserved correctly? ¹ | N/A | <u>YES</u> | NO |
| 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... | | <u>YES</u> | NO |
| 8. Are all samples within holding times for the requested analyses?..... | | <u>YES</u> | NO |
| 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... | | <u>YES</u> | NO |
| 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... | <u>N/A</u> | YES | NO |
| 11. Were the samples received on ice?..... | | <u>YES</u> | NO |
| 12. Were sample temperatures measured at 0.0-6.0°C..... | | <u>YES</u> | NO |
| 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... | | <u>YES</u> | NO |
| 13a. Are the samples required for SDWA compliance reporting?..... | N/A | YES | <u>NO</u> |
| 13b. Did the client provide a SDWA PWS ID#?..... | N/A | YES | NO |
| 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... | N/A | YES | NO |
| 13d. Did the client provide the SDWA sample location ID/Description?..... | N/A | YES | NO |
| 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... | N/A | YES | NO |

Cooler #: _____
 Temperature (°C): 2 _____
 Thermometer ID: 309 _____
 Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

0 1

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis



December 29, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	FREY FARM	Workorder:	3146772
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020 3056 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

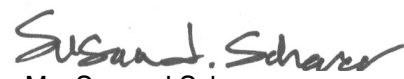
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146772001	3056RIVERRD	Water	12/14/2020 11:52	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

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ANALYTICAL RESULTS

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

Lab ID: **3146772001** Date Collected: 12/14/2020 11:52 Matrix: Water
Sample ID: **3056RIVERRD** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 02:46	PDK	K
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	102		%	62 - 133	SW846 8260B			12/17/20 02:46	PDK	K
4-Bromofluorobenzene (S)	92.4		%	79 - 114	SW846 8260B			12/17/20 02:46	PDK	K
Dibromofluoromethane (S)	93.9		%	78 - 116	SW846 8260B			12/17/20 02:46	PDK	K
Toluene-d8 (S)	96.1		%	76 - 127	SW846 8260B			12/17/20 02:46	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	ND	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	0.116		mg/L	0.100	ASTM D6919-09			12/24/20 18:19	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	B
Chloride	26.5		mg/L	2.0	EPA 300.0			12/15/20 10:09	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 10:09	MBW	C
Halogen, Total Organic (TOX)	64.0		ug/L	20.0	SW846 9020B			12/22/20 12:51	PAG	I
Nitrate-N	19.0		mg/L	0.20	EPA 300.0			12/15/20 10:09	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 10:09	MBW	C
pH	5.44	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	242		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	ND		mg/L	2.0	EPA 300.0			12/15/20 10:09	MBW	C

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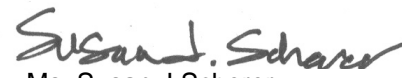
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ANALYTICAL RESULTS

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

Lab ID: **3146772001** Date Collected: 12/14/2020 11:52 Matrix: Water
Sample ID: **3056RIVERRD** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	116		mg/L	25	S2540C-11			12/17/20 11:19	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 07:05	PAG	F
Turbidity	ND		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	11.7		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:33	SRT	D
Calcium, Dissolved	12.3		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:07	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:33	SRT	D
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:07	SRT	E
Magnesium, Total	13.1		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:33	SRT	D
Magnesium, Dissolved	13.7		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:07	SRT	E
Manganese, Total	0.079		mg/L	0.0025	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:33	SRT	D
Manganese, Dissolved	0.084		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:07	SRT	E
Potassium, Total	2.4		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:33	SRT	D
Potassium, Dissolved	2.5		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:07	SRT	E
Sodium, Total	8.3		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 20:33	SRT	D
Sodium, Dissolved	8.2		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:07	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.52		pH_Units		Field			12/14/20 11:52	BGS	N
Specific Conductance, Field	231		umhos/cm	1	Field			12/14/20 11:52	BGS	N
Temperature	12.20		Deg. C		Field			12/14/20 11:52	BGS	N



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146772001	1	3056RIVERRD	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146772001	2	3056RIVERRD	S4500HB-11	pH
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.				

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Mexico: Monterrey

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146772001	3056RIVERRD	ASTM D6919-09		
3146772001	3056RIVERRD	EPA 200.7	EPA ACID	
3146772001	3056RIVERRD	EPA 200.7	EPA TRMD	
3146772001	3056RIVERRD	EPA 300.0		
3146772001	3056RIVERRD	EPA 410.4		
3146772001	3056RIVERRD	EPA 420.4	420.4/9066	
3146772001	3056RIVERRD	Field		
3146772001	3056RIVERRD	S2540C-11		
3146772001	3056RIVERRD	S4500HB-11		
3146772001	3056RIVERRD	SM2130B-2011		
3146772001	3056RIVERRD	SM2320B-2011		
3146772001	3056RIVERRD	SM2510B-2011		
3146772001	3056RIVERRD	SM5310B-2011		
3146772001	3056RIVERRD	SW846 8260B		
3146772001	3056RIVERRD	SW846 9020B		

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

COC #: **ALS QU**
 1 of 1
 * 3 1 4 6 7 7 2 *

Client Name: Lancaster County Solid Waste MA
 Address: 1299 Harrisburg Pike, P.O. Box 4424
 Lancaster, PA 17604
 Contact: Dan Brown
 Phone#: (717) 735-0193
 Project Name#: LCSWMA - Quarterly
 Bill To: Lancaster County Solid Waste MA

TAT Normal-Standard TAT is 10-12 business days.
 Rush-Subject to ALS approval and surcharges.
 Date Required: _____ Approved By: _____
 Email? .Y .N
 Fax? .Y .N

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	Matrix	TOC	O-OH	TOX	SW846-8260 VOCs	FM	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	PH, TDS, NO2, NO3, Cl, SO4, F, Pb, SPC	Alkalinity, HCO3
1 3056RIVERRD	12/14/20	1152	G DW	2	1	2	ASX	1	1	1	1	1	1	1
2														
3														
4														
5														
6														
7														
8														
9														
10														

Enter Number of Containers Per Sample or Field Results Below.

ALS Field Services: Pickup Labor
 Composite_Sampling Rental_Equipment
 Other:

Special Processing: USACE Navy State Samples Collected In

Standard CLP-like USACE

Reportable to PADEP? Yes No

Sample Disposal: Lab Special

LOGGED BY (signature): _____ Date: 12/14/20 Time: 1740
 REVIEWED BY (signature): _____ Date: 12/17/20 Time: 1740

Relinquished By	Company Name	Date	Time	Received By / Company Name	Date	Time
1 [Signature]	ALS	12/14/20	1740	[Signature]	12/17/20	1740
3						
5						
7						
9						



301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: CCSWMA Work Order #: 346772 Initials: TS Date: 12/15/20

- | | | | |
|--|-------------|------------|-----------|
| 1. Were airbills / tracking numbers present and recorded?..... | <u>NONE</u> | YES | NO |
| Tracking number: _____ | | | |
| 2. Are Custody Seals on shipping containers intact?..... | <u>NONE</u> | YES | NO |
| 3. Are Custody Seals on sample containers intact?..... | <u>NONE</u> | YES | <u>NO</u> |
| 4. Is there a COC (Chain-of-Custody) present?..... | | <u>YES</u> | NO |
| 5. Are the COC and bottle labels complete, legible and in agreement?..... | | <u>YES</u> | NO |
| 5a. Does the COC contain sample locations?..... | | <u>YES</u> | NO |
| 5b. Does the COC contain date and time of sample collection for all samples?..... | | <u>YES</u> | NO |
| 5c. Does the COC contain sample collectors name?..... | | <u>YES</u> | NO |
| 5d. Does the COC note the type(s) of preservation for all bottles?..... | | <u>YES</u> | NO |
| 5e. Does the COC note the number of bottles submitted for each sample?..... | | <u>YES</u> | NO |
| 5f. Does the COC note the type of sample, composite or grab?..... | | <u>YES</u> | NO |
| 5g. Does the COC note the matrix of the sample(s)?..... | | <u>YES</u> | NO |
| 6. Are all aqueous samples requiring preservation preserved correctly? ¹ | N/A | <u>YES</u> | NO |
| 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... | | <u>YES</u> | NO |
| 8. Are all samples within holding times for the requested analyses?..... | | <u>YES</u> | NO |
| 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... | | <u>YES</u> | NO |
| 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... | <u>N/A</u> | YES | NO |
| 11. Were the samples received on ice?..... | | <u>YES</u> | NO |
| 12. Were sample temperatures measured at 0.0-6.0°C..... | | <u>YES</u> | NO |
| 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... | | <u>YES</u> | NO |
| 13a. Are the samples required for SDWA compliance reporting?..... | N/A | YES | <u>NO</u> |
| 13b. Did the client provide a SDWA PWS ID#?..... | N/A | YES | NO |
| 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... | N/A | YES | NO |
| 13d. Did the client provide the SDWA sample location ID/Description?..... | N/A | YES | NO |
| 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... | N/A | YES | NO |

Cooler #: _____

Temperature (°C): 2 _____

Thermometer ID: 309 _____

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

0 5

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

December 30, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER- 3052 RIVER RD	Workorder:	3146773
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020-3052 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

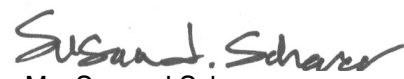
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

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ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Landowner , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146773001	3052 River Road, Conestoga, PA	Water	12/14/2020 11:37	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

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ANALYTICAL RESULTS

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

Lab ID: **3146773001** Date Collected: 12/14/2020 11:37 Matrix: Water
Sample ID: **3052 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 03:09	PDK	K
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	101		%	62 - 133	SW846 8260B			12/17/20 03:09	PDK	K
4-Bromofluorobenzene (S)	92.5		%	79 - 114	SW846 8260B			12/17/20 03:09	PDK	K
Dibromofluoromethane (S)	93.1		%	78 - 116	SW846 8260B			12/17/20 03:09	PDK	K
Toluene-d8 (S)	93.8		%	76 - 127	SW846 8260B			12/17/20 03:09	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	ND	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 18:33	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/29/20 01:35	JAM	B
Chloride	23.1		mg/L	2.0	EPA 300.0			12/15/20 10:29	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 10:29	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/22/20 14:52	PAG	I
Nitrate-N	17.8		mg/L	0.20	EPA 300.0			12/15/20 10:29	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 10:29	MBW	C
pH	5.64	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/23/20 15:00	VXF	12/23/20 16:43	VXF	H
Specific Conductance	226		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	ND		mg/L	2.0	EPA 300.0			12/15/20 10:29	MBW	C

ALS Environmental Laboratory Locations Across North America

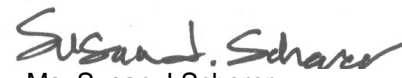
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ANALYTICAL RESULTS

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

Lab ID: **3146773001** Date Collected: 12/14/2020 11:37 Matrix: Water
Sample ID: **3052 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	154		mg/L	25	S2540C-11			12/17/20 11:19	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 07:05	PAG	F
Turbidity	0.26		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	14.9		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:50	SRT	D1
Calcium, Dissolved	15.0		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:11	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:50	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:11	SRT	E
Magnesium, Total	10.4		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:50	SRT	D1
Magnesium, Dissolved	10.6		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:11	SRT	E
Manganese, Total	0.057		mg/L	0.0025	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:50	SRT	D1
Manganese, Dissolved	0.058		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:11	SRT	E
Potassium, Total	2.2		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:50	SRT	D1
Potassium, Dissolved	2.2		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:11	SRT	E
Sodium, Total	7.8		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:50	SRT	D1
Sodium, Dissolved	7.4		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:11	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.50		pH_Units		Field			12/14/20 11:37	BGS	N
Specific Conductance, Field	219		umhos/cm	1	Field			12/14/20 11:37	BGS	N
Temperature	13.90		Deg. C		Field			12/14/20 11:37	BGS	N



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146773001	1	3052 River Road, Conestoga, PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146773001	2	3052 River Road, Conestoga, PA	S4500HB-11	pH
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.				

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

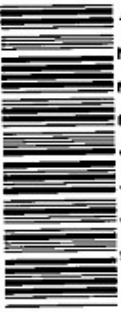
Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146773001	3052 River Road, Conestoga, PA	ASTM D6919-09		
3146773001	3052 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3146773001	3052 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3146773001	3052 River Road, Conestoga, PA	EPA 300.0		
3146773001	3052 River Road, Conestoga, PA	EPA 410.4		
3146773001	3052 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3146773001	3052 River Road, Conestoga, PA	Field		
3146773001	3052 River Road, Conestoga, PA	S2540C-11		
3146773001	3052 River Road, Conestoga, PA	S4500HB-11		
3146773001	3052 River Road, Conestoga, PA	SM2130B-2011		
3146773001	3052 River Road, Conestoga, PA	SM2320B-2011		
3146773001	3052 River Road, Conestoga, PA	SM2510B-2011		
3146773001	3052 River Road, Conestoga, PA	SM5310B-2011		
3146773001	3052 River Road, Conestoga, PA	SW846 8260B		
3146773001	3052 River Road, Conestoga, PA	SW846 9020B		

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

Generated by ALS

COC #:
ALS Quo



Client Name: LCSWMA - Gerald E. Miller, Sr.
 Address: 3052 River Road
 Conestoga, PA 17516

Contact: Gerald E. Miller, Sr.
 Phone#: (717) 872-5117

Project Name#: LCSWMA - Quarterly
 Bill To: Lancaster County Solid Waste MA

TAT Normal-Standard TAT is 10-12 business days.

Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved By: _____

Email? -Y

Fax? -Y No.:

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL	PL	PL	Rec
Container Size	40 ml	125 ml	250 ml	40 ml	250 ml	125 ml	125 ml	125 ml	500 ml	500 ml	500 ml	500 ml
Preservative	HCl	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	HNO3	None	None	None	None

ANALYSES/METHOD REQUESTED

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL	PL	PL	Rec
Matrix	TOC	O-OH	TOX	SW846-8260 VOCs	NH3-N, COD	TM	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	PH, TDS, NO2, NO3, Cl, SO4, F, TB, SPC	Alkalinity, HCO3	Alkalinity, HCO3	Alkalinity, HCO3

Enter Number of Containers Per Sample or Field Results Below.

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	G	DW	2	1	1	1	1	1	1	1
1 3052RIVERRD	12/14/20	1137										
2												
3												
4												
5												
6												
7												
8												
9												
10												

Project Comments:

LOGGED BY (signature): _____

REVIEWED BY (signature): _____

Requisitioned By / Company Name: *ALS*

Date: *12/14/20* Time: *1240*

Received By / Company Name: *SL* Date: *12/16/20* Time: *1740*

State Samples Collected In: NY NJ PA NC

Special Processing: USACE Navy Lab Special

ALS Field Services: Pickup Labor Composite_Sampling Rental_Equipment Other:

Reportable to PADEP? Yes No PWSID # _____ EDDS: Format Type: _____

* G=Grab; C=Composite ** Matrix - AL=Air; DW=Drinking Water; GW=Groundwater; O=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater





301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: LCSWMA Work Order #: 3146773 Initials: TS Date: 12/30/20

1. Were airbills / tracking numbers present and recorded?..... NONE YES NO
Tracking number: _____
2. Are Custody Seals on shipping containers intact?..... NONE YES NO
3. Are Custody Seals on sample containers intact?..... NONE YES ~~NO~~
4. Is there a COC (Chain-of-Custody) present?..... YES NO
5. Are the COC and bottle labels complete, legible and in agreement?..... YES NO
 - 5a. Does the COC contain sample locations?..... YES NO
 - 5b. Does the COC contain date and time of sample collection for all samples?..... YES NO
 - 5c. Does the COC contain sample collectors name?..... YES NO
 - 5d. Does the COC note the type(s) of preservation for all bottles?..... YES NO
 - 5e. Does the COC note the number of bottles submitted for each sample?..... YES NO
 - 5f. Does the COC note the type of sample, composite or grab?..... YES NO
 - 5g. Does the COC note the matrix of the sample(s)?..... YES NO
6. Are all aqueous samples requiring preservation preserved correctly?¹..... N/A YES NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... YES NO
8. Are all samples within holding times for the requested analyses?..... YES NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... YES NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... N/A YES NO
11. Were the samples received on ice?..... YES NO
12. Were sample temperatures measured at 0.0-6.0°C..... YES NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... YES NO
 - 13a. Are the samples required for SDWA compliance reporting?..... N/A YES NO
 - 13b. Did the client provide a SDWA PWS ID#?..... N/A YES NO
 - 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... N/A YES NO
 - 13d. Did the client provide the SDWA sample location ID/Description?..... N/A YES NO
 - 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... N/A YES NO

Cooler #: _____

Temperature (°C): 2 _____

Thermometer ID: 309 _____

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis



December 30, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER- 3044 RIVER RD	Workorder:	3146774
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020-3044 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

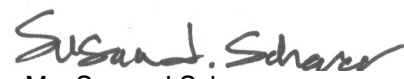
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146774001	3044 River Road, Conestoga, PA	Water	12/14/2020 11:25	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

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ANALYTICAL RESULTS

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

Lab ID: **3146774001** Date Collected: 12/14/2020 11:25 Matrix: Water
Sample ID: **3044 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 03:31	PDK	K
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	100		%	62 - 133	SW846 8260B			12/17/20 03:31	PDK	K
4-Bromofluorobenzene (S)	92.3		%	79 - 114	SW846 8260B			12/17/20 03:31	PDK	K
Dibromofluoromethane (S)	92.7		%	78 - 116	SW846 8260B			12/17/20 03:31	PDK	K
Toluene-d8 (S)	93.8		%	76 - 127	SW846 8260B			12/17/20 03:31	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	11		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	11	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 18:47	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/29/20 01:35	JAM	B
Chloride	22.8		mg/L	2.0	EPA 300.0			12/15/20 10:50	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 10:50	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/22/20 15:17	PAG	I
Nitrate-N	18.9		mg/L	0.20	EPA 300.0			12/15/20 10:50	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 10:50	MBW	C
pH	5.96	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/23/20 15:00	VXF	12/23/20 16:43	VXF	H
Specific Conductance	238		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	ND		mg/L	2.0	EPA 300.0			12/15/20 10:50	MBW	C

ALS Environmental Laboratory Locations Across North America

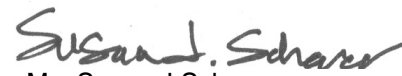
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ANALYTICAL RESULTS

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

Lab ID: **3146774001** Date Collected: 12/14/2020 11:25 Matrix: Water
Sample ID: **3044 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	144		mg/L	25	S2540C-11			12/17/20 11:19	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 07:05	PAG	F
Turbidity	ND		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	15.6		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:46	SRT	D1
Calcium, Dissolved	15.5		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:15	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:46	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:15	SRT	E
Magnesium, Total	11.4		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:46	SRT	D1
Magnesium, Dissolved	11.1		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:15	SRT	E
Manganese, Total	0.023		mg/L	0.0025	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:46	SRT	D1
Manganese, Dissolved	0.023		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:15	SRT	E
Potassium, Total	2.0		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:46	SRT	D1
Potassium, Dissolved	1.8		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:15	SRT	E
Sodium, Total	9.6		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 18:46	SRT	D1
Sodium, Dissolved	9.0		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 19:15	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	6.02		pH_Units		Field			12/14/20 11:25	BGS	N
Specific Conductance, Field	243		umhos/cm	1	Field			12/14/20 11:25	BGS	N
Temperature	12.80		Deg. C		Field			12/14/20 11:25	BGS	N



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146774001	1	3044 River Road, Conestoga, PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146774001	2	3044 River Road, Conestoga, PA	S4500HB-11	pH
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.				

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146774001	3044 River Road, Conestoga, PA	ASTM D6919-09		
3146774001	3044 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3146774001	3044 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3146774001	3044 River Road, Conestoga, PA	EPA 300.0		
3146774001	3044 River Road, Conestoga, PA	EPA 410.4		
3146774001	3044 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3146774001	3044 River Road, Conestoga, PA	Field		
3146774001	3044 River Road, Conestoga, PA	S2540C-11		
3146774001	3044 River Road, Conestoga, PA	S4500HB-11		
3146774001	3044 River Road, Conestoga, PA	SM2130B-2011		
3146774001	3044 River Road, Conestoga, PA	SM2320B-2011		
3146774001	3044 River Road, Conestoga, PA	SM2510B-2011		
3146774001	3044 River Road, Conestoga, PA	SM5310B-2011		
3146774001	3044 River Road, Conestoga, PA	SW846 8260B		
3146774001	3044 River Road, Conestoga, PA	SW846 9020B		

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301 Filling Mill Road • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

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

Generated by ALS

COC
ALS



1 of 1

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike, P.O. Box 4424
Lancaster, PA 17604

Contact: Dan Brown

Phone#: (717) 735-0193

Project Name#: LCSWMA - Quarterly

Bill To: Lancaster County Solid Waste MA

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

Date Required: _____ Approved By: _____

Email? Y N

Fax? Y N

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL
Container Size	40 ml	125 ml	250 ml	40 ml	125 ml	125 ml	125 ml	500 ml	500 ml
Preservative	HCl	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	None	None

ANALYSES/METHOD REQUESTED

Matrix	TOC	O-OH	TOX	SW846-8260 VOCs	TM	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	pH, TDS, NO2, NO3, Cl, SO4, T	Alkalinity, HCO3
G or C	2	1	2	1	1	1	1	1	1

Enter Number of Containers Per Sample or Field Results Below.

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time
1 3044RIVERRD	12/14/20	1125
2		
3		
4		
5		
6		
7		
8		
9		
10		

Project Comments:

LOGGED BY (signature):

REVIEWED BY (signature):

Requisitioned By / Company Name	Date	Time	Received By / Company Name	Date	Time
AS	12-14-20	1740		12-20	1740

Cooler temp: _____ Therm IU: _____

No. of Coolers: Y N Initial

Custody Seals Present? (if present) Seals Intact? Received on ice? COC/Labels Complete/Accurate? Cont. in Good Cond.? Correct Containers? Correct Sample Volumes? Correct Preservation? Headspace/Volatiles?

Courier/Tracking #: _____ Sample/COC Comments

ALS Field Services: Pickup Labor Composite_Sampling Rental_Equipment Other:

Special Processing: USACE Navy State Samples Collected In: NY NJ PA NC

Standard CLP-like USACE Reportable to PADEP? Yes No PWSID # _____ EDDS: Format Type: _____



301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: LC SWMA Work Order #: 3144774 Initials: TS Date: 12/30

1. Were airbills / tracking numbers present and recorded?..... NONE YES NO
Tracking number: _____
2. Are Custody Seals on shipping containers intact?..... NONE YES NO
3. Are Custody Seals on sample containers intact?..... NONE YES ~~NO~~
4. Is there a COC (Chain-of-Custody) present?..... YES NO
5. Are the COC and bottle labels complete, legible and in agreement?..... YES NO
 - 5a. Does the COC contain sample locations?..... YES NO
 - 5b. Does the COC contain date and time of sample collection for all samples?..... YES NO
 - 5c. Does the COC contain sample collectors name?..... YES NO
 - 5d. Does the COC note the type(s) of preservation for all bottles?..... YES NO
 - 5e. Does the COC note the number of bottles submitted for each sample?..... YES NO
 - 5f. Does the COC note the type of sample, composite or grab?..... YES NO
 - 5g. Does the COC note the matrix of the sample(s)?..... YES NO
6. Are all aqueous samples requiring preservation preserved correctly?¹..... N/A YES NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... YES NO
8. Are all samples within holding times for the requested analyses?..... YES NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... YES NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... N/A YES NO
11. Were the samples received on ice?..... YES NO
12. Were sample temperatures measured at 0.0-6.0°C..... YES NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... YES NO
 - 13a. Are the samples required for SDWA compliance reporting?..... N/A YES NO
 - 13b. Did the client provide a SDWA PWS ID#?..... N/A YES NO
 - 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... N/A YES NO
 - 13d. Did the client provide the SDWA sample location ID/Description?..... N/A YES NO
 - 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... N/A YES NO

Cooler #: _____
 Temperature (°C): 2 _____
 Thermometer ID: 309 _____
 Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

0

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis



December 29, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER- 3125 RIVER RD	Workorder:	3146768
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020-3125 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

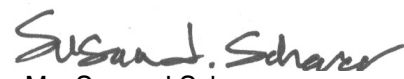
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Landowner , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

SAMPLE SUMMARY

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146768001	3125 River Road, Conestoga, PA	Water	12/14/2020 14:00	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

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ANALYTICAL RESULTS

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

Lab ID: **3146768001** Date Collected: 12/14/2020 14:00 Matrix: Water
Sample ID: **3125 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 01:16	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	101		%	62 - 133	SW846 8260B			12/17/20 01:16	PDK	J
4-Bromofluorobenzene (S)	93.6		%	79 - 114	SW846 8260B			12/17/20 01:16	PDK	J
Dibromofluoromethane (S)	92.5		%	78 - 116	SW846 8260B			12/17/20 01:16	PDK	J
Toluene-d8 (S)	95.9		%	76 - 127	SW846 8260B			12/17/20 01:16	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	128		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	128	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 17:24	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	B
Chloride	82.3		mg/L	2.0	EPA 300.0			12/15/20 06:25	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 06:25	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/21/20 16:34	PAG	I
Nitrate-N	5.2		mg/L	0.20	EPA 300.0			12/15/20 06:25	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 06:25	MBW	C
pH	7.09	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	553		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	10.9		mg/L	2.0	EPA 300.0			12/15/20 06:25	MBW	C

ALS Environmental Laboratory Locations Across North America

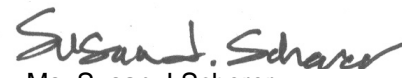
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ANALYTICAL RESULTS

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

Lab ID: **3146768001** Date Collected: 12/14/2020 14:00 Matrix: Water
Sample ID: **3125 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	284		mg/L	25	S2540C-11			12/16/20 11:27	KXH	C
Total Organic Carbon (TOC)	0.62		mg/L	0.50	SM5310B-2011			12/22/20 01:28	PAG	F
Turbidity	ND		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	5.6		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 15:44	SRT	D1
Calcium, Dissolved	4.9		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:52	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/19/20 09:35	AHI	12/21/20 15:44	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:52	SRT	E
Magnesium, Total	0.62		mg/L	0.050	EPA 200.7	12/19/20 09:35	AHI	12/21/20 15:44	SRT	D1
Magnesium, Dissolved	0.55		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:52	SRT	E
Manganese, Total	0.0025		mg/L	0.0025	EPA 200.7	12/19/20 09:35	AHI	12/21/20 15:44	SRT	D1
Manganese, Dissolved	ND		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:52	SRT	E
Potassium, Total	1.1		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 15:44	SRT	D1
Potassium, Dissolved	ND		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:52	SRT	E
Sodium, Total	121		mg/L	0.25	EPA 200.7	12/19/20 09:35	AHI	12/21/20 15:44	SRT	D1
Sodium, Dissolved	120		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:52	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	7.08		pH_Units		Field			12/14/20 14:00	BGS	M
Specific Conductance, Field	531		umhos/cm	1	Field			12/14/20 14:00	BGS	M
Temperature	15.00		Deg. C		Field			12/14/20 14:00	BGS	M



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146768001	1	3125 River Road, Conestoga, PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146768001	2	3125 River Road, Conestoga, PA	S4500HB-11	pH
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.				

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Mexico: Monterrey

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146768001	3125 River Road, Conestoga, PA	ASTM D6919-09		
3146768001	3125 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3146768001	3125 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3146768001	3125 River Road, Conestoga, PA	EPA 300.0		
3146768001	3125 River Road, Conestoga, PA	EPA 410.4		
3146768001	3125 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3146768001	3125 River Road, Conestoga, PA	Field		
3146768001	3125 River Road, Conestoga, PA	S2540C-11		
3146768001	3125 River Road, Conestoga, PA	S4500HB-11		
3146768001	3125 River Road, Conestoga, PA	SM2130B-2011		
3146768001	3125 River Road, Conestoga, PA	SM2320B-2011		
3146768001	3125 River Road, Conestoga, PA	SM2510B-2011		
3146768001	3125 River Road, Conestoga, PA	SM5310B-2011		
3146768001	3125 River Road, Conestoga, PA	SW846 8260B		
3146768001	3125 River Road, Conestoga, PA	SW846 9020B		

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Mexico: Monterrey



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 1100 Spring Lane • Middletown, PA 17057 • Phone: 717.944.1431 • Fax: 717.944.1430 • www.als.com

Generated by ALS

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

COC #:
 ALS Qu



Client Name: LCSWMA - Christian C. Beck
 Address: 3125 River Road
 Conesloga, PA 17516
 Contact: Christian C. Beck
 Phone#: (717) 871-0448
 Project Name#: LCSWMA - Quarterly
 Bill To: Lancaster County Solid Waste MA

TAT Normal-Standard TAT is 10-12 business days.
 Rush-Subject to ALS approval and surcharges.
 Date Required: _____ Approved By: _____
 Email? -Y -N
 Fax? -Y -N

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	Matrix	TOC	O-OH	TOX	SW846-8260 VOCs	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	PH, TDS, NO2, NO3, Cl, SO4, F, TR, SPC	Alkalinity, HCO3
1 3125RIVERRD	12/14/20	1400	G DW	2	1	2	23x	1	1	1	1
2											
3											
4											
5											
6											
7											
8											
9											
10											

Project Comments: _____
 LOGGED BY (signature): _____
 REVIEWED BY (signature): _____

Requested By: ALS
 Date: 12-14-20
 Time: 1400
 Received By / Company Name: [Signature]
 Date: 12-14-20
 Time: 1400

ALS Field Services: Pickup Labor
 Composite_Sampling Rental_Equipment
 Other:

Special Processing: USACE Navy
 State Samples Collected In: NY NJ PA NC

Sample Disposal: Lab Special
 Reportable to PADEP? Yes No
 PWSID #: _____
 EDDS: Formal Type: _____

* G=Grab, C=Composite **Matrix - A=Air, DW=Drinking Water, GW=Groundwater, O=Oil, OL=Other Liquid, SL=Sludge, SO=Soil, WP=Wipe, WW=Wastewater
 ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057
 Rev 8/04





301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: LCSWMA Work Order #: 3146760 Initials: TS Date: 12/20

- | | | | |
|--|-------------|------------|-----------|
| 1. Were airbills / tracking numbers present and recorded?..... | <u>NONE</u> | YES | NO |
| Tracking number: _____ | | | |
| 2. Are Custody Seals on shipping containers intact?..... | <u>NONE</u> | YES | NO |
| 3. Are Custody Seals on sample containers intact?..... | <u>NONE</u> | YES | <u>NO</u> |
| 4. Is there a COC (Chain-of-Custody) present?..... | | <u>YES</u> | NO |
| 5. Are the COC and bottle labels complete, legible and in agreement?..... | | <u>YES</u> | NO |
| 5a. Does the COC contain sample locations?..... | | <u>YES</u> | NO |
| 5b. Does the COC contain date and time of sample collection for all samples?..... | | <u>YES</u> | NO |
| 5c. Does the COC contain sample collectors name?..... | | <u>YES</u> | NO |
| 5d. Does the COC note the type(s) of preservation for all bottles?..... | | <u>YES</u> | NO |
| 5e. Does the COC note the number of bottles submitted for each sample?..... | | <u>YES</u> | NO |
| 5f. Does the COC note the type of sample, composite or grab?..... | | <u>YES</u> | NO |
| 5g. Does the COC note the matrix of the sample(s)?..... | | <u>YES</u> | NO |
| 6. Are all aqueous samples requiring preservation preserved correctly? ¹ | N/A | <u>YES</u> | NO |
| 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... | | <u>YES</u> | NO |
| 8. Are all samples within holding times for the requested analyses?..... | | <u>YES</u> | NO |
| 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... | | <u>YES</u> | NO |
| 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... | <u>N/A</u> | YES | NO |
| 11. Were the samples received on ice?..... | | <u>YES</u> | NO |
| 12. Were sample temperatures measured at 0.0-6.0°C..... | | <u>YES</u> | NO |
| 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... | | <u>YES</u> | NO |
| 13a. Are the samples required for SDWA compliance reporting?..... | N/A | YES | <u>NO</u> |
| 13b. Did the client provide a SDWA PWS ID#?..... | N/A | YES | NO |
| 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... | N/A | YES | NO |
| 13d. Did the client provide the SDWA sample location ID/Description?..... | N/A | YES | NO |
| 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... | N/A | YES | NO |

Cooler #: _____
 Temperature (°C): 2 _____
 Thermometer ID: 309 _____
 Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis



December 29, 2020

Mr. Daniel Brown
Lancaster County Solid Waste Authority
1299 Hbg Pike, P.O. Box 4425
Lancaster, PA 17604

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER- 3106 RIVER RD	Workorder:	3146766
Purchase Order:	PO-1000091	Workorder ID:	4TH QTR 2020-3106 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2020.

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 Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

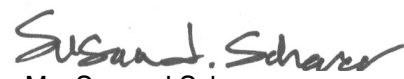
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications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

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ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Ashley Gichuki , Ms. Jordan Gallagher , Landowner , Mr. Jeff Musser

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


Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3146766001	3106 River Road, Conestoga, PA	Water	12/14/2020 13:16	12/14/2020 17:40	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

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).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- 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 performed in the laboratory and are therefore analyzed out of hold time.
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- 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.

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)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
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

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ANALYTICAL RESULTS

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

Lab ID: **3146766001** Date Collected: 12/14/2020 13:16 Matrix: Water
Sample ID: **3106 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 00:30	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	100		%	62 - 133	SW846 8260B			12/17/20 00:30	PDK	J
4-Bromofluorobenzene (S)	93.1		%	79 - 114	SW846 8260B			12/17/20 00:30	PDK	J
Dibromofluoromethane (S)	92.1		%	78 - 116	SW846 8260B			12/17/20 00:30	PDK	J
Toluene-d8 (S)	95.3		%	76 - 127	SW846 8260B			12/17/20 00:30	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	12		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	C
Alkalinity, Total	12	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	A
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 16:29	JXL	B
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	B
Chloride	107		mg/L	2.0	EPA 300.0			12/15/20 06:45	MBW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 06:45	MBW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/18/20 15:26	PAG	I
Nitrate-N	10.8		mg/L	0.20	EPA 300.0			12/15/20 06:45	MBW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 06:45	MBW	C
pH	5.91	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	C
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	H
Specific Conductance	472		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	5.4		mg/L	2.0	EPA 300.0			12/15/20 06:45	MBW	C

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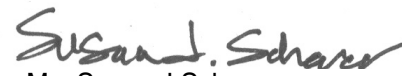
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ANALYTICAL RESULTS

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

Lab ID: **3146766001** Date Collected: 12/14/2020 13:16 Matrix: Water
Sample ID: **3106 River Road, Conestoga, PA** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Dissolved Solids	252		mg/L	25	S2540C-11			12/16/20 11:27	KXH	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 01:28	PAG	F
Turbidity	0.14		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	C
METALS										
Calcium, Total	19.7		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Calcium, Dissolved	21.8		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Magnesium, Total	13.7		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Magnesium, Dissolved	14.8		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Manganese, Total	0.049		mg/L	0.0025	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Manganese, Dissolved	0.055		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Potassium, Total	2.2		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Potassium, Dissolved	2.4		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Sodium, Total	44.4		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Sodium, Dissolved	44.7		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	6.03		pH_Units		Field			12/14/20 13:16	BGS	L
Specific Conductance, Field	438		umhos/cm	1	Field			12/14/20 13:16	BGS	L
Temperature	14.90		Deg. C		Field			12/14/20 13:16	BGS	L



Ms. Susan J Scherer

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3146766001	1	3106 River Road, Conestoga, PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.				
3146766001	2	3106 River Road, Conestoga, PA	S4500HB-11	pH
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.				

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3146766001	3106 River Road, Conestoga, PA	ASTM D6919-09		
3146766001	3106 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3146766001	3106 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3146766001	3106 River Road, Conestoga, PA	EPA 300.0		
3146766001	3106 River Road, Conestoga, PA	EPA 410.4		
3146766001	3106 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3146766001	3106 River Road, Conestoga, PA	Field		
3146766001	3106 River Road, Conestoga, PA	S2540C-11		
3146766001	3106 River Road, Conestoga, PA	S4500HB-11		
3146766001	3106 River Road, Conestoga, PA	SM2130B-2011		
3146766001	3106 River Road, Conestoga, PA	SM2320B-2011		
3146766001	3106 River Road, Conestoga, PA	SM2510B-2011		
3146766001	3106 River Road, Conestoga, PA	SM5310B-2011		
3146766001	3106 River Road, Conestoga, PA	SW846 8260B		
3146766001	3106 River Road, Conestoga, PA	SW846 9020B		

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

Generated by ALS

COC #:
ALS Q1

1 of 1
* 3 1 4 6 7 6 6 *

Client Name: LCSWMA - Aaron Fry
Address: 3106 River Road
Conestoga, PA 17516
Contact: Aaron Fry
Phone#: (717) 669-6831
Project Name#: LCSWMA - Quarterly
Bill To: LCSWMA - Aaron Fry

TAT Normal-Standard TAT is 10-12 business days.
 Rush-Subject to ALS approval and surcharges.
 Date Required: _____ Approved By: _____
 Email? -Y
 Fax? -Y No.:

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	Enter Number of Containers Per Sample or Field Results Below.										Matrix	G or C	LOGGED BY (signature):	REVIEWED BY (signature):			
			AG	AN	AN	CG	PL	PL	PL	PL	PL	PL					PL		
1 3106RIVERRO	12/14/20	1316	2	1	2	2	1	1	1	1	1	1	1	1	DW	G	[Signature]	[Signature]	
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Project Comments:
Relinquished By / Company Name: [Signature] ALS
Date: 12/14/20
Time: 1740
Received By / Company Name: [Signature]
Date: 12/17/20
Time: 1740

ALS Field Services: Pickup Labor
 Composite_Sampling Rental_Equipment
 Other:

Special Processing: USACE Navy State Samples Collected In

Reportable to PADEP? Yes No
 PWSID # _____
 EDDS: Format Type: _____

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* G=Grab; C=Composite ** Matrix - AL=Air; DW=Drinking Water; GW=Groundwater; OL=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057





301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

Client: LCSUMMA Work Order #: 31410764 Initials: TS Date: 12/15/20

- 1. Were airbills / tracking numbers present and recorded?..... NONE YES NO
Tracking number: _____
- 2. Are Custody Seals on shipping containers intact?..... NONE YES NO
- 3. Are Custody Seals on sample containers intact?..... NONE YES ~~NO~~
- 4. Is there a COC (Chain-of-Custody) present?..... YES NO
- 5. Are the COC and bottle labels complete, legible and in agreement?..... YES NO
 - 5a. Does the COC contain sample locations?..... YES NO
 - 5b. Does the COC contain date and time of sample collection for all samples?..... YES NO
 - 5c. Does the COC contain sample collectors name?..... YES NO
 - 5d. Does the COC note the type(s) of preservation for all bottles?..... YES NO
 - 5e. Does the COC note the number of bottles submitted for each sample?..... YES NO
 - 5f. Does the COC note the type of sample, composite or grab?..... YES NO
 - 5g. Does the COC note the matrix of the sample(s)?..... YES NO
- 6. Are all aqueous samples requiring preservation preserved correctly?¹..... N/A YES NO
- 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... YES NO
- 8. Are all samples within holding times for the requested analyses?..... YES NO
- 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... YES NO
- 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?..... N/A YES NO
- 11. Were the samples received on ice?..... YES NO
- 12. Were sample temperatures measured at 0.0-6.0°C..... YES NO
- 13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below..... YES NO
 - 13a. Are the samples required for SDWA compliance reporting?..... N/A YES NO
 - 13b. Did the client provide a SDWA PWS ID#?..... N/A YES NO
 - 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... N/A YES NO
 - 13d. Did the client provide the SDWA sample location ID/Description?..... N/A YES NO
 - 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... N/A YES NO

Cooler #: _____

Temperature (°C): 2 _____

Thermometer ID: 309 _____

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

100

5

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis