

June 29, 2017

Charlene Sauls PG; Licensed Professional Geologist
Pennsylvania Department of Environmental Protection
Bureau of Waste Management
909 Elmerton Avenue
Harrisburg, PA 17110-8200

REF: Private Water Supply
2nd Quarter 2017 Form 52 Water Quality Analysis
Frey Farm Landfill; BWM Permit #101389

Dear Ms. Sauls:

In accordance with the Municipal Waste Management Regulations, the Lancaster County Solid Waste Management Authority (LCSWMA) continues the above-referenced monitoring program.

Attached are the Forms 52, lab reports, and excel csv file for your Landlinks Access database. MCL and SMCL exceedances are as follows:

1. USEPA MCL's exceedance report; samples (3044RIVERRD, 3052RIVERRD, 3056 RIVERRD, 3060 RIVERRD, 3076RIVERRD and 3088RIVERRD) exceeded the limit for nitrate, samples are consistent with historic data the cause is attributed to agricultural impacts. No other MCL's were exceeded.
2. USEPA SMCL's exceedance report; samples 3052RIVERRD, 3056RIVERRD, 3060 RIVERRD, 3076RIVERRD, 3079RIVERRD, 3088RIVERRD and 3106RIVERRD exceeded the limit for manganese or iron which are consistent with historic data and are attributed to natural soil and geologic conditions.

Ground water monitoring concentrations were consistent with historic data, no significant deviations were observed.

Please do not hesitate in contacting me if you have any questions or concerns at mreider@lcswma.org.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark D. Reider".

Mark D Reider
Director of Environmental Compliance

Enclosures

Cc: Bob Zorbaugh, Dan Brown, Bob Eshbach
Ed Rawski, Randy Weiss (PADEP)



Date Prepared/Revised
06/26/2017

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 (D^o 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) 05/19/2017

Sample Collection Time: 12:00 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

06/01/2017

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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.197	SM4500D
BICARBONATE ALKALINITY	18	SM20-2321
CALCIUM, TOTAL	19.9	EPA 200.7
CALCIUM, DISSOLVED	19.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	21.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	280	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	10.5	EPA 200.7
MAGNESIUM, DISSOLVED	10.4	EPA 200.7
MANGANESE, TOTAL (ug/l)	21	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	10	EPA 200.7
NITRATE-NITROGEN	21.4	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

05/19/2017

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)	5.64	FIELD
pH-LAB (SU)	6.44	SM4500B
POTASSIUM, TOTAL	1.8	EPA 200.7
POTASSIUM, DISSOLVED	1.7	EPA 200.7
SODIUM, TOTAL	10.2	EPA 200.7
SODIUM, DISSOLVED	10	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	278	FIELD
SPEC. COND., LAB (umhos/cm)	235	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	18	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	186	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1.28	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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
06/26/2017

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 (D^o 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) 05/19/2017

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

06/01/2017

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

05/19/2017

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	15.5	EPA 200.7
CALCIUM, DISSOLVED	14.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	21.2	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	EPA 200.7
MAGNESIUM, DISSOLVED	10.5	EPA 200.7
MANGANESE, TOTAL (ug/l)	62	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	57	EPA 200.7
NITRATE-NITROGEN	19.4	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

05/19/2017

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)	4.81	FIELD
pH-LAB (SU)	5.72	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	1.9	EPA 200.7
SODIUM, TOTAL	7.7	EPA 200.7
SODIUM, DISSOLVED	7.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	238	FIELD
SPEC. COND., LAB (umhos/cm)	208	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	187	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 MILLER

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
06/26/2017

DEP USE ONLY

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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

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SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D^o 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) 05/19/2017

Sample Collection Time: 9:30 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

06/02/2017

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

05/19/2017

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	15.6	EPA 200.7
CALCIUM, DISSOLVED	15.1	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	24.2	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	12.2	EPA 200.7
MAGNESIUM, DISSOLVED	12.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	52	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	52	EPA 200.7
NITRATE-NITROGEN	22.5	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

05/19/2017

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)	4.92	FIELD
pH-LAB (SU)	5.87	SM4500B
POTASSIUM, TOTAL	2.3	EPA 200.7
POTASSIUM, DISSOLVED	2.1	EPA 200.7
SODIUM, TOTAL	8.9	EPA 200.7
SODIUM, DISSOLVED	8.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	275	FIELD
SPEC. COND., LAB (umhos/cm)	233	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	192	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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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PRIVATE WATER SUPPLY
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INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (D^o 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: ☒ 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) 05/19/2017

Sample Collection Time: 9:45 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

06/01/2017

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

Comments:

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PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/19/2017

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	10.9	EPA 200.7
CALCIUM, DISSOLVED	10.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	14.9	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	11.7	EPA 200.7
MAGNESIUM, DISSOLVED	11.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	64	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	62	EPA 200.7
NITRATE-NITROGEN	17.1	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

05/19/2017

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)	5.14	FIELD
pH-LAB (SU)	5.82	SM4500B
POTASSIUM, TOTAL	3.3	EPA 200.7
POTASSIUM, DISSOLVED	3.1	EPA 200.7
SODIUM, TOTAL	9.8	EPA 200.7
SODIUM, DISSOLVED	9.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	242	FIELD
SPEC. COND., LAB (umhos/cm)	202	EPA 120.1
SULFATE	10.2	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	172	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.

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Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
06/26/2017

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 (D^o 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) 05/18/2017

Sample Collection Time: 12:32 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

05/26/2017

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 SENSENICH

Sample Date

05/18/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	7	SM20-2321
CALCIUM, TOTAL	18.7	EPA 200.7
CALCIUM, DISSOLVED	16	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	51.6	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	9	EPA 200.7
MAGNESIUM, DISSOLVED	9	EPA 200.7
MANGANESE, TOTAL (ug/l)	150	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	150	EPA 200.7
NITRATE-NITROGEN	12.5	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

05/18/2017

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)	5.16	FIELD
pH-LAB (SU)	6.09	SM4500B
POTASSIUM, TOTAL	3.3	EPA 200.7
POTASSIUM, DISSOLVED	3.1	EPA 200.7
SODIUM, TOTAL	22.1	EPA 200.7
SODIUM, DISSOLVED	22.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	348	FIELD
SPEC. COND., LAB (umhos/cm)	264	EPA 120.1
SULFATE	10.8	EPA 300
ALKALINITY	7	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	191	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 SENSENICH

Sample Date

05/18/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
06/26/2017

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 (D^o 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) 05/19/2017

Sample Collection Time: 10:45 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

06/01/2017

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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	6	SM20-2321
CALCIUM, TOTAL	11.9	EPA 200.7
CALCIUM, DISSOLVED	10.8	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	35	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	5.4	EPA 200.7
MAGNESIUM, DISSOLVED	5	EPA 200.7
MANGANESE, TOTAL (ug/l)	170	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	150	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

05/19/2017

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)	4.99	FIELD
pH-LAB (SU)	5.73	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	1.9	EPA 200.7
SODIUM, TOTAL	11.7	EPA 200.7
SODIUM, DISSOLVED	10.8	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	198	FIELD
SPEC. COND., LAB (umhos/cm)	163	EPA 120.1
SULFATE	27.9	EPA 300
ALKALINITY	6	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	134	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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
06/26/2017

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 (D^o 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) 05/17/2017

Sample Collection Time: 9:49 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

05/26/2017

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

05/17/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	166	SM20-2321
CALCIUM, TOTAL	2.5	EPA 200.7
CALCIUM, DISSOLVED	0.1 ND	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	204	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	0.13	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	14.2	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 WEBER

Sample Date

05/17/2017

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)	6.89	FIELD
pH-LAB (SU)	7.23	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	1.4	EPA 200.7
SODIUM, TOTAL	219	EPA 200.7
SODIUM, DISSOLVED	217	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	1025	FIELD
SPEC. COND., LAB (umhos/cm)	1050	EPA 120.1
SULFATE	3.4	EPA 300
ALKALINITY	166	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	617	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

WEBER

Sample Date

05/17/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
06/26/2017

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 (D^o 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) 05/19/2017

Sample Collection Time: 2:10 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

05/31/2017

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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	27	SM20-2321
CALCIUM, TOTAL	18.8	EPA 200.7
CALCIUM, DISSOLVED	18.3	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	56.4	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	8.8	EPA 200.7
MAGNESIUM, DISSOLVED	8.6	EPA 200.7
MANGANESE, TOTAL (ug/l)	9.5	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	10	EPA 200.7
NITRATE-NITROGEN	4.8	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 KIRCHNER

Sample Date

05/19/2017

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)	5.18	FIELD
pH-LAB (SU)	6.55	SM4500B
POTASSIUM, TOTAL	1.7	EPA 200.7
POTASSIUM, DISSOLVED	1.6	EPA 200.7
SODIUM, TOTAL	16.2	EPA 200.7
SODIUM, DISSOLVED	15.9	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	299	FIELD
SPEC. COND., LAB (umhos/cm)	259	EPA 120.1
SULFATE	6.3	EPA 300
ALKALINITY	27	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	210	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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
06/26/2017

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 (DE° MM' SS.S")

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

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) 05/19/2017

Sample Collection Time: 10:50 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

06/01/2017

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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	13	SM20-2321
CALCIUM, TOTAL	13.2	EPA 200.7
CALCIUM, DISSOLVED	12.7	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	49.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	650	EPA 200.7
IRON, DISSOLVED (ug/l)	170	EPA 200.7
MAGNESIUM, TOTAL	8.1	EPA 200.7
MAGNESIUM, DISSOLVED	7.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	34	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	31	EPA 200.7
NITRATE-NITROGEN	9.2	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 LCSWMA

Sample Date

05/19/2017

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)	5.47	FIELD
pH-LAB (SU)	6.38	SM4500B
POTASSIUM, TOTAL	1.5	EPA 200.7
POTASSIUM, DISSOLVED	1.5	EPA 200.7
SODIUM, TOTAL	26.3	EPA 200.7
SODIUM, DISSOLVED	25.1	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	272	FIELD
SPEC. COND., LAB (umhos/cm)	250	EPA 120.1
SULFATE	3.1	EPA 300
ALKALINITY	13	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	198	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	5.36	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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
06/26/2017

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 (D^o 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) 05/19/2017

Sample Collection Time: 12:12 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

06/01/2017

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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	30	SM20-2321
CALCIUM, TOTAL	0.07	EPA 200.7
CALCIUM, DISSOLVED	0.18	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	94.9	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	0.062	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	8.5	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

05/19/2017

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)	5.6	FIELD
pH-LAB (SU)	6.57	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	1.8	EPA 200.7
SODIUM, TOTAL	86.5	EPA 200.7
SODIUM, DISSOLVED	84	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	405	FIELD
SPEC. COND., LAB (umhos/cm)	414	EPA 120.1
SULFATE	8.4	EPA 300
ALKALINITY	30	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)	0.1 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

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
BENZENE	0.5 ND	EPA 524.2
1,2-DIBROMOETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHANE	0.5 ND	EPA 524.2
1,1-DICHLOROETHENE	0.5 ND	EPA 524.2
1,2-DICHLOROETHANE	0.5 ND	EPA 524.2
CIS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
TRANS 1,2-DICHLOROETHENE	0.5 ND	EPA 524.2
ETHYLBENZENE	0.5 ND	EPA 524.2
METHYLENE CHLORIDE	0.5 ND	EPA 524.2
TETRACHLOROETHENE	0.5 ND	EPA 524.2
TOLUENE	0.5 ND	EPA 524.2
1,1,1-TRICHLOROETHANE	0.5 ND	EPA 524.2
TRICHLOROETHENE	0.5 ND	EPA 524.2
TRICHLOROFLUOROMETHANE	0.5 ND	EPA 524.2
VINYL CHLORIDE	0.5 ND	EPA 524.2
XYLENES (TOTAL)	0.5 ND	EPA 524.2

T Please indicate detection limit if analyte is not detected.

June 2, 2017

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	Workorder:	2231675
Purchase Order:		Workorder ID:	2ND QTR 2017-3044 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

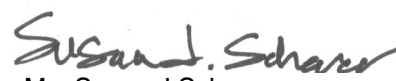
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2231675 2ND QTR 2017-3044 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231675001	3044 River Road, Conestoga, PA	Water	5/19/2017 12:00	5/19/2017 16:51	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 2231675 2ND QTR 2017-3044 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.

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: 2231675 2ND QTR 2017-3044 RIVER RD

Lab ID: **2231675001** Date Collected: 5/19/2017 12:00 Matrix: Water
Sample ID: **3044 River Road, Conestoga, PA** Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	18		mg/L	5	S2320B-97			5/21/17 19:10	MSA	C
Alkalinity, Total	18	1	mg/L	5	S2320B-97			5/21/17 19:10	MSA	C
Ammonia-N	0.197		mg/L	0.100	D6919-09			5/26/17 06:54	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	21.4		mg/L	2.0	EPA 300.0			5/20/17 19:09	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 19:09	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 14:27	PAG	I
Nitrate-N	21.4		mg/L	1.0	EPA 300.0			5/20/17 19:22	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 19:09	CHW	C
pH	6.44	2	pH_Units		S4500HB-11			5/21/17 19:10	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	235		umhos/cm	1	S2510B-97			5/21/17 19:10	MSA	C
Sulfate	ND		mg/L	2.0	EPA 300.0			5/20/17 19:09	CHW	C
Total Dissolved Solids	186	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	1.28		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

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ANALYTICAL RESULTS

Workorder: 2231675 2ND QTR 2017-3044 RIVER RD

Lab ID: **2231675001**

Date Collected: 5/19/2017 12:00

Matrix: Water

Sample ID: **3044 River Road, Conestoga, PA**

Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	90.8		%	70 - 130	EPA 524.2			5/27/17 01:37	CJG	K
4-Bromofluorobenzene (S)	83.3		%	70 - 130	EPA 524.2			5/27/17 01:37	CJG	K
METALS										
Calcium, Total	19.9		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Calcium, Dissolved	19.6		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Iron, Total	0.28		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Magnesium, Total	10.5		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Magnesium, Dissolved	10.4		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Manganese, Total	0.021		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Manganese, Dissolved	0.010		mg/L	0.0050	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Potassium, Total	1.8		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Potassium, Dissolved	1.7		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Sodium, Total	10.2		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Sodium, Dissolved	10		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.640		pH_Units		Field			5/19/17 12:00	BGS	M
Specific Conductance, Field	278		umhos/cm	1	Field			5/19/17 12:00	BGS	M
Temperature	18.30		Deg. C		Field			5/19/17 12:00	BGS	M



Ms. Susan J Scherer

Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231675001	1	3044 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231675001	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.				
2231675001	3	3044 River Road, Conestoga, PA	S2540C-11	Total Dissolved Solids
The method blank associated with this analyte had a result of 21 mg/L. Criteria states that the method blank should be less than 5 mg/L.				
2231675001	4	3044 River Road, Conestoga, PA	EPA 524.2	Trichlorofluoromethane
The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 69.7 and the control limits were 70 to 130.				

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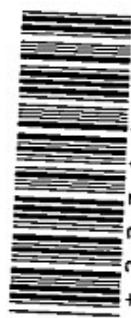


34 Dogwood Lane • Middletown, PA 17057 • Phone 717-944-5541 • Fax 717-944-1430

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

COC:
ALS

1 of 1



* 2 2 3 1 6 7 5 *

Client Name: LCSWMA - Nelson L. Smith

Address: 3044 River Road

Conestoga, PA 17516

Contact: Nelson L. Smith

Phone#: (717) 872-2888

Project Name#: LCSWMA - Quarterly

Bill To: Lancaster County Solid Waste MA

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

Date Required: ☐ Rush-Subject to ALS approval and surcharges.

Approved By: _____

Email? ☐ -Y

Fax? ☐ -Y No: _____

Sample Description/Location (as it will appear on the lab report)

Sample Date

Time

1 3044RIVERRD

5-19-17

1200

G DW

Matrix

LOGGED BY (signature):

REVIEWED BY (signature):

Date

Time

5-19-17

1657

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Relinquished By / Company Name

Received By / Company Name

Date

Time

5/19/17

1657

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Project Comments:

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June 2, 2017

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	Workorder:	2231674
Purchase Order:		Workorder ID:	2ND QTR 2017-3052 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

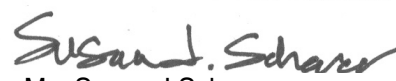
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2231674 2ND QTR 2017-3052 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231674001	3052 River Road, Conestoga, PA	Water	5/19/2017 12:23	5/19/2017 16:51	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 2231674 2ND QTR 2017-3052 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.

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: 2231674 2ND QTR 2017-3052 RIVER RD

Lab ID: **2231674001** Date Collected: 5/19/2017 12:23 Matrix: Water
Sample ID: **3052 River Road, Conestoga, PA** Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	S2320B-97			5/21/17 19:01	MSA	C
Alkalinity, Total	ND	1	mg/L	5	S2320B-97			5/21/17 19:01	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 06:35	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	21.2		mg/L	2.0	EPA 300.0			5/20/17 18:56	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 18:56	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 14:03	PAG	I
Nitrate-N	19.4		mg/L	0.20	EPA 300.0			5/20/17 18:56	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 18:56	CHW	C
pH	5.72	2	pH_Units		S4500HB-11			5/21/17 19:01	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	208		umhos/cm	1	S2510B-97			5/21/17 19:01	MSA	C
Sulfate	ND		mg/L	2.0	EPA 300.0			5/20/17 18:56	CHW	C
Total Dissolved Solids	187	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	0.13		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

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ANALYTICAL RESULTS

Workorder: 2231674 2ND QTR 2017-3052 RIVER RD

Lab ID: **2231674001**

Date Collected: 5/19/2017 12:23

Matrix: Water

Sample ID: **3052 River Road, Conestoga, PA**

Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	94.4		%	70 - 130	EPA 524.2			5/27/17 01:13	CJG	K
4-Bromofluorobenzene (S)	85.6		%	70 - 130	EPA 524.2			5/27/17 01:13	CJG	K
METALS										
Calcium, Total	15.5		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Calcium, Dissolved	14.6		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Magnesium, Total	11.0		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Magnesium, Dissolved	10.5		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Manganese, Total	0.062		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Manganese, Dissolved	0.057		mg/L	0.0050	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Potassium, Dissolved	1.9		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Sodium, Total	7.7		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Sodium, Dissolved	7.2		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	4.810		pH_Units		Field			5/19/17 12:23	BGS	M
Specific Conductance, Field	238		umhos/cm	1	Field			5/19/17 12:23	BGS	M
Temperature	17.30		Deg. C		Field			5/19/17 12:23	BGS	M



Ms. Susan J Scherer

Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231674001	1	3052 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231674001	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.				
2231674001	3	3052 River Road, Conestoga, PA	S2540C-11	Total Dissolved Solids
The method blank associated with this analyte had a result of 21 mg/L. Criteria states that the method blank should be less than 5 mg/L.				
2231674001	4	3052 River Road, Conestoga, PA	EPA 524.2	Trichlorofluoromethane
The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 69.7 and the control limits were 70 to 130.				

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June 5, 2017

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

Certificate of Analysis

Project Name: 2017-FREY FARM	Workorder: 2231672
Purchase Order:	Workorder ID: 2ND QTR 2017 3056 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

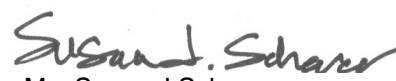
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2231672 2ND QTR 2017 3056 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231672001	3056RIVERRD	Water	5/19/2017 09:30	5/19/2017 16:51	Mr. Jeff Musser

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SAMPLE SUMMARY

Workorder: 2231672 2ND QTR 2017 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.

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: 2231672 2ND QTR 2017 3056 RIVER RD

Lab ID: **2231672001**
Sample ID: **3056RIVERRD**

Date Collected: 5/19/2017 09:30 Matrix: Water
Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	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-Dichlorobenzene-d4 (S)	89.8		%	70 - 130	EPA 524.2			5/27/17 00:24	CJG	K
4-Bromofluorobenzene (S)	86.5		%	70 - 130	EPA 524.2			5/27/17 00:24	CJG	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	S2320B-97			5/21/17 18:43	MSA	C
Alkalinity, Total	ND	1	mg/L	5	S2320B-97			5/21/17 18:43	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 05:57	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			6/2/17 16:14	AK	B
Chloride	24.2		mg/L	2.0	EPA 300.0			5/20/17 18:30	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 18:30	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 12:15	PAG	I
Nitrate-N	22.5		mg/L	1.0	EPA 300.0			5/20/17 18:43	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 18:30	CHW	C
pH	5.87	2	pH_Units		S4500HB-11			5/21/17 18:43	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	233		umhos/cm	1	S2510B-97			5/21/17 18:43	MSA	C
Sulfate	ND		mg/L	2.0	EPA 300.0			5/20/17 18:30	CHW	C
Total Dissolved Solids	192	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	C

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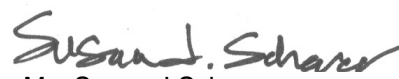
ANALYTICAL RESULTS

Workorder: 2231672 2ND QTR 2017 3056 RIVER RD

Lab ID: **2231672001**
Sample ID: **3056RIVERRD**

Date Collected: 5/19/2017 09:30 Matrix: Water
Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/30/17 10:47	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
METALS										
Calcium, Total	15.6		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Calcium, Dissolved	15.1		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Magnesium, Total	12.2		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Magnesium, Dissolved	12.1		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Manganese, Total	0.052		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Manganese, Dissolved	0.052		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Potassium, Total	2.3		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Potassium, Dissolved	2.1		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Sodium, Total	8.9		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Sodium, Dissolved	8.5		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	4.920		pH_Units		SM4500B-11			5/19/17 09:30	CLT	M
Specific Conductance, Field	275		umhos/cm	1	S2510B-97			5/19/17 09:30	CLT	M


Ms. Susan J Scherer
Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231672001	1	3056RIVERRD	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231672001	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.				
2231672001	3	3056RIVERRD	S2540C-11	Total Dissolved Solids
The method blank associated with this analyte had a result of 21 mg/L. Criteria states that the method blank should be less than 5 mg/L.				
2231672001	4	3056RIVERRD	EPA 524.2	Trichlorofluoromethane
The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 69.7 and the control limits were 70 to 130.				

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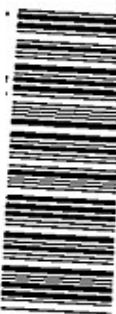
34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

Environmental

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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

COC #:
ALS Q



Client Name: LCSWMA		Container Type	PL	PL	AN	PL	PL	AN	AV	CG	Receipt Information (Company Use Only)		
Address:		Container Size	1L	500	500	125	500	500	250	40	Cooler Temp: 1 Therm ID: 318		
Contact: Mark Reider		Preservative	None	None	H2SO4	H2SO4	HNO3	HNO3	H2SO4	HCL	No. of Coolers: Y N Initial		
Phone#:		ANALYSES/METHOD REQUESTED											
Project Name#: LCSWMA - Form 52		Enter Number of Containers Per Sample or Field Results Below.											
Bill To:		524.2-Form 52											
TAT <input type="checkbox"/> Normal-Standard TAT is 10-12 business days. <input type="checkbox"/> Rush-Subject to ALS approval and surcharges.		pH = 4.92											
Date Required: <input type="checkbox"/> -Y <input type="checkbox"/> -Y No.:		SpC=275											
Email? <input type="checkbox"/> -Y <input type="checkbox"/> -Y No.:		ALS Field Services: <input type="checkbox"/> Pickup <input type="checkbox"/> Labor <input type="checkbox"/> Composite Sampling <input type="checkbox"/> Rental Equipment <input type="checkbox"/> Other:											
Fax? <input type="checkbox"/> -Y <input type="checkbox"/> -Y No.:		ALS Field Services: <input type="checkbox"/> Pickup <input type="checkbox"/> Labor <input type="checkbox"/> Composite Sampling <input type="checkbox"/> Rental Equipment <input type="checkbox"/> Other:											
Sample Description/Location (as it will appear on the lab report)		Sample Date	Time	Special Processing								State Samples Collected In	
3056RIVERRD		5/19/2017	09:30	USACE <input type="checkbox"/> Navy <input type="checkbox"/> PA <input type="checkbox"/> NC <input type="checkbox"/>								USACE <input type="checkbox"/> Navy <input type="checkbox"/> PA <input type="checkbox"/> NC <input type="checkbox"/>	
6				Standard <input type="checkbox"/> CLP-like <input type="checkbox"/> USACE <input type="checkbox"/>								Standard <input type="checkbox"/> CLP-like <input type="checkbox"/> USACE <input type="checkbox"/>	
7				Reportable to PADEP? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>								Reportable to PADEP? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	
8				PWSID # <input type="checkbox"/>								PWSID # <input type="checkbox"/>	
9				EDDS: Formal Type <input type="checkbox"/>								EDDS: Formal Type <input type="checkbox"/>	
10				LOGGED BY (signature): <input type="checkbox"/>								LOGGED BY (signature): <input type="checkbox"/>	
Project Comments:		REVIEWED BY (signature): <input type="checkbox"/>										REVIEWED BY (signature): <input type="checkbox"/>	
Relinquished By / Company Name		Date	Time	Resigned By / Company Name								Resigned By / Company Name	
1		5/19/2017	13:04	2								5/19/2017	
3		5/19/2017	13:04	4								5/19/2017	
5		5/19/2017	13:04	6								5/19/2017	
7				8									
9				10									

June 2, 2017

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

Certificate of Analysis

Project Name: 2017-FREY FARM	Workorder: 2231671
Purchase Order:	Workorder ID: 2ND QTR 2017-3060 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

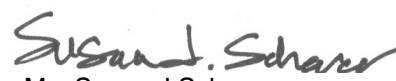
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2231671 2ND QTR 2017-3060 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231671001	3060RIVERRD	Water	5/19/2017 09:45	5/19/2017 16:51	Mr. Jeff Musser

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SAMPLE SUMMARY

Workorder: 2231671 2ND QTR 2017-3060 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.

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: 2231671 2ND QTR 2017-3060 RIVER RD

Lab ID: **2231671001**
Sample ID: **3060RIVERRD**

Date Collected: 5/19/2017 09:45 Matrix: Water
Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	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-Dichlorobenzene-d4 (S)	88.8		%	70 - 130	EPA 524.2			5/31/17 15:07	DD	K
4-Bromofluorobenzene (S)	86		%	70 - 130	EPA 524.2			5/31/17 15:07	DD	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	S2320B-97			5/21/17 18:34	MSA	C
Alkalinity, Total	ND	1	mg/L	5	S2320B-97			5/21/17 18:34	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 05:37	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	14.9		mg/L	2.0	EPA 300.0			5/20/17 16:46	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 16:46	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 11:49	PAG	I
Nitrate-N	17.1		mg/L	0.20	EPA 300.0			5/20/17 16:46	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 16:46	CHW	C
pH	5.82	2	pH_Units		S4500HB-11			5/21/17 18:34	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	202		umhos/cm	1	S2510B-97			5/21/17 18:34	MSA	C
Sulfate	10.2		mg/L	2.0	EPA 300.0			5/20/17 16:46	CHW	C
Total Dissolved Solids	172	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	C

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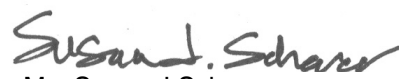
ANALYTICAL RESULTS

Workorder: 2231671 2ND QTR 2017-3060 RIVER RD

Lab ID: **2231671001**
Sample ID: **3060RIVERRD**

Date Collected: 5/19/2017 09:45 Matrix: Water
Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/25/17 14:38	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
METALS										
Calcium, Total	10.9		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:26	TSS	D1
Calcium, Dissolved	10.5		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:19	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:26	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:19	TSS	E
Magnesium, Total	11.7		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:26	TSS	D1
Magnesium, Dissolved	11.2		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:19	TSS	E
Manganese, Total	0.064		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:26	TSS	D1
Manganese, Dissolved	0.062		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:19	TSS	E
Potassium, Total	3.3		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:26	TSS	D1
Potassium, Dissolved	3.1		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:19	TSS	E
Sodium, Total	9.8		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:26	TSS	D1
Sodium, Dissolved	9.4		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:19	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.140		pH_Units		SM4500B-11			5/19/17 09:45	CLT	M
Specific Conductance, Field	242		umhos/cm	1	S2510B-97			5/19/17 09:45	CLT	M


Ms. Susan J Scherer
Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231671001	1	3060RIVERRD	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231671001	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.				
2231671001	3	3060RIVERRD	S2540C-11	Total Dissolved Solids
The method blank associated with this analyte had a result of 21 mg/L. Criteria states that the method blank should be less than 5 mg/L.				

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May 31, 2017

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	Workorder:	2231228
Purchase Order:		Workorder ID:	2ND QTR 2017-3076 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Thursday, May 18, 2017.

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.

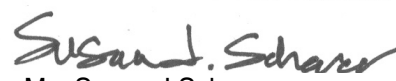
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , Landowner , Mr. Jeff Musser

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Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 2231228 2ND QTR 2017-3076 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231228001	3076 River Road, Conestoga, PA	Water	5/18/2017 12:32	5/18/2017 14:07	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 2231228 2ND QTR 2017-3076 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.

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: 2231228 2ND QTR 2017-3076 RIVER RD

Lab ID: **2231228001**

Date Collected: 5/18/2017 12:32

Matrix: Water

Sample ID: **3076 River Road, Conestoga, PA**

Date Received: 5/18/2017 14:07

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	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-Dichlorobenzene-d4 (S)	93.1		%	70 - 130	EPA 524.2			5/26/17 02:51	CJG	K
4-Bromofluorobenzene (S)	85.3		%	70 - 130	EPA 524.2			5/26/17 02:51	CJG	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	7		mg/L	5	S2320B-97			5/20/17 07:22	MSA	A
Alkalinity, Total	7	1	mg/L	5	S2320B-97			5/20/17 07:22	MSA	A
Ammonia-N	ND		mg/L	0.100	D6919-09			5/24/17 18:49	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	51.6		mg/L	2.0	EPA 300.0			5/19/17 16:12	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/19/17 16:12	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			5/26/17 13:42	PAG	I
Nitrate-N	12.5		mg/L	0.20	EPA 300.0			5/19/17 16:12	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/19/17 16:12	CHW	C
pH	6.09	2	pH_Units		S4500HB-11			5/20/17 07:22	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	264		umhos/cm	1	S2510B-97			5/20/17 07:22	MSA	A
Sulfate	10.8		mg/L	2.0	EPA 300.0			5/19/17 16:12	CHW	C
Total Dissolved Solids	191		mg/L	5	S2540C-11			5/24/17 15:33	JAS	C

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ANALYTICAL RESULTS

Workorder: 2231228 2ND QTR 2017-3076 RIVER RD

Lab ID: **2231228001**

Date Collected: 5/18/2017 12:32

Matrix: Water

Sample ID: **3076 River Road, Conestoga, PA**

Date Received: 5/18/2017 14:07

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/24/17 10:54	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/18/17 01:59	MSA	C
METALS										
Calcium, Total	18.7		mg/L	0.050	EPA 200.7	5/19/17 00:35	LXC	5/22/17 08:20	TSS	D1
Calcium, Dissolved	16.0		mg/L	0.10	EPA 200.7	5/24/17 05:37	TSS	5/26/17 00:52	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/19/17 00:35	LXC	5/22/17 08:20	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:37	TSS	5/26/17 00:52	TSS	E
Magnesium, Total	9.0		mg/L	0.050	EPA 200.7	5/19/17 00:35	LXC	5/22/17 08:20	TSS	D1
Magnesium, Dissolved	9.0		mg/L	0.10	EPA 200.7	5/24/17 05:37	TSS	5/26/17 00:52	TSS	E
Manganese, Total	0.15		mg/L	0.0025	EPA 200.7	5/19/17 00:35	LXC	5/22/17 08:20	TSS	D1
Manganese, Dissolved	0.15		mg/L	0.0050	EPA 200.7	5/24/17 05:37	TSS	5/26/17 00:52	TSS	E
Potassium, Total	3.3		mg/L	0.25	EPA 200.7	5/19/17 00:35	LXC	5/22/17 08:20	TSS	D1
Potassium, Dissolved	3.1		mg/L	0.50	EPA 200.7	5/24/17 05:37	TSS	5/26/17 00:52	TSS	E
Sodium, Total	22.1		mg/L	0.25	EPA 200.7	5/19/17 00:35	LXC	5/22/17 08:20	TSS	D1
Sodium, Dissolved	22.5		mg/L	0.50	EPA 200.7	5/24/17 05:37	TSS	5/26/17 00:52	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.160		pH_Units		Field			5/18/17 12:32	BGS	N
Specific Conductance, Field	348		umhos/cm	1	Field			5/18/17 12:32	BGS	N
Temperature	16.70		Deg. C		Field			5/18/17 12:32	BGS	N



Ms. Susan J Scherer

Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231228001	1	3076 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231228001	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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34 Dogwood Lane • Middletown, PA 17057 • Phone: 717-944-1301 • Fax: 717-944-1302 • www.alsenv.com

Client Name: LCSWMA - Esther A. Schopf

Address: 3076 Rover Road

Conestoga, PA 17516

Contact: Esther A. Schopf

Phone#: (717) 872-2559

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: _____

Sample Description/Location
 (as it will appear on the lab report)

Sample Date Time

1 3076RIVERRD 5-18-17 12:22

2

3

4

5

6

7

8

9

10

Project Comments:

Relinquished By/Company Name

1 ~~3076RIVERRD~~ ALS

3

5

7

9

Date Time

5-18-17 14:07 2

4

6

8

10

Received By/Company Name

5/18/17 3:07

DATE

DATE

DATE

DATE

LOGGED BY (signature):

REVIEWED BY (signature):

DATE

DATE

DATE

DATE

DATE

DATE

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

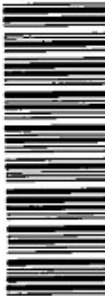
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

Generated by ALS

CO

AL

1 of 1



* 2 2 3 1 2 2 8 *

Netting Lab)

Cooler Temp: 32C Inerm ID: 318

No. of Coolers: Y N Initial

Custody Seals Present? (if present) Seals Intact?

Received on Ice?

COC Labels Completed/Accurate?

Cont. in Good Cond.?

Correct Containers?

Correct Sample Volumes?

Correct Preservation?

Headspace/Volatiles?

Courier/Tracking #:

Sample/COC Comments

Enter Number of Containers Per Sample or Field Results Below.

Matrix

TOC

TOX

O-H

VOC

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, T_h, SpC

Alkalinity, HCO₃

ALS Field Services: ☐ Pickup ☐ Labor

☐ Composite Sampling ☐ Rental Equipment

☐ Other:

Standard ☐ CLP-like ☐ USACE

Special Processing ☐ USACE ☐ Navy ☐ USACE

State Samples Collected In ☐ NY ☐ NJ ☒ PA ☐ NC

Reportable to PADEP? Yes ☐ No ☒ Lab ☒ Special ☐

PWSID #

EDDS: Format Type

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

Rev 8/04

Wednesday, May 31, 2017 7:41:00 AM

Page 7 of 7

ALS

June 2, 2017

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

Certificate of Analysis

Project Name: 2017-FREY FARM	Workorder: 2231673
Purchase Order:	Workorder ID: 2ND QTR 2017 3079 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

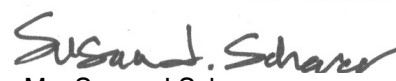
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2231673 2ND QTR 2017 3079 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231673001	3079RIVERRD	Water	5/19/2017 10:45	5/19/2017 16:51	Mr. Jeff Musser

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SAMPLE SUMMARY

Workorder: 2231673 2ND QTR 2017 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.
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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.

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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
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(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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ANALYTICAL RESULTS

Workorder: 2231673 2ND QTR 2017 3079 RIVER RD

Lab ID: **2231673001**
Sample ID: **3079RIVERRD**

Date Collected: 5/19/2017 10:45 Matrix: Water
Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	6		mg/L	5	S2320B-97			5/21/17 18:52	MSA	C
Alkalinity, Total	6	1	mg/L	5	S2320B-97			5/21/17 18:52	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 06:16	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	35.0		mg/L	2.0	EPA 300.0			5/20/17 16:59	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 16:59	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 12:59	PAG	I
Nitrate-N	ND		mg/L	0.20	EPA 300.0			5/20/17 16:59	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 16:59	CHW	C
pH	5.73	2	pH_Units		S4500HB-11			5/21/17 18:52	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	163		umhos/cm	1	S2510B-97			5/21/17 18:52	MSA	C
Sulfate	27.9		mg/L	2.0	EPA 300.0			5/20/17 16:59	CHW	C
Total Dissolved Solids	134	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

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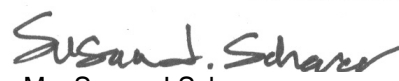
ANALYTICAL RESULTS

Workorder: 2231673 2ND QTR 2017 3079 RIVER RD

Lab ID: **2231673001**
Sample ID: **3079RIVERRD**

Date Collected: 5/19/2017 10:45 Matrix: Water
Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	92.3		%	70 - 130	EPA 524.2			5/27/17 00:48	CJG	K
4-Bromofluorobenzene (S)	83.9		%	70 - 130	EPA 524.2			5/27/17 00:48	CJG	K
METALS										
Calcium, Total	11.9		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Calcium, Dissolved	10.8		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Magnesium, Total	5.4		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Magnesium, Dissolved	5.0		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Manganese, Total	0.17		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Manganese, Dissolved	0.15		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Potassium, Dissolved	1.9		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Sodium, Total	11.7		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Sodium, Dissolved	10.8		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	4.990		pH_Units		SM4500B-11			5/19/17 10:45	CLT	M
Specific Conductance, Field	198		umhos/cm	1	S2510B-97			5/19/17 10:45	CLT	M


Ms. Susan J Scherer
Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231673001	1	3079RIVERRD	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231673001	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.				
2231673001	3	3079RIVERRD	S2540C-11	Total Dissolved Solids
The method blank associated with this analyte had a result of 21 mg/L. Criteria states that the method blank should be less than 5 mg/L.				
2231673001	4	3079RIVERRD	EPA 524.2	Trichlorofluoromethane
The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 69.7 and the control limits were 70 to 130.				

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May 30, 2017

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	Workorder:	2230903
Purchase Order:		Workorder ID:	2ND QTR 2017-3088 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Wednesday, May 17, 2017.

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.

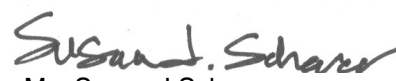
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2230903 2ND QTR 2017-3088 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2230903001	3088 River Road, Conestoga PA	Water	5/17/2017 09:49	5/17/2017 16:59	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 2230903 2ND QTR 2017-3088 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.

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: 2230903 2ND QTR 2017-3088 RIVER RD

Lab ID: **2230903001**

Date Collected: 5/17/2017 09:49

Matrix: Water

Sample ID: **3088 River Road, Conestoga PA**

Date Received: 5/17/2017 16:59

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	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-Dichlorobenzene-d4 (S)	71.8		%	70 - 130	EPA 524.2			5/24/17 17:35	DD	K
4-Bromofluorobenzene (S)	78		%	70 - 130	EPA 524.2			5/24/17 17:35	DD	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	166		mg/L	5	S2320B-97			5/19/17 23:26	MSA	C
Alkalinity, Total	166	1	mg/L	5	S2320B-97			5/19/17 23:26	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/25/17 12:26	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/25/17 14:04	AK	B
Chloride	204		mg/L	5.0	EPA 300.0			5/19/17 12:05	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/18/17 17:56	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			5/26/17 11:25	PAG	I
Nitrate-N	14.2		mg/L	0.20	EPA 300.0			5/18/17 17:56	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/18/17 17:56	CHW	C
pH	7.23	2	pH_Units		S4500HB-11			5/19/17 23:26	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	1050		umhos/cm	1	S2510B-97			5/19/17 23:26	MSA	C
Sulfate	3.4		mg/L	2.0	EPA 300.0			5/18/17 17:56	CHW	C
Total Dissolved Solids	617		mg/L	5	S2540C-11			5/22/17 20:32	JAS	C

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ANALYTICAL RESULTS

Workorder: 2230903 2ND QTR 2017-3088 RIVER RD

Lab ID: **2230903001**

Date Collected: 5/17/2017 09:49

Matrix: Water

Sample ID: **3088 River Road, Conestoga PA**

Date Received: 5/17/2017 16:59

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/24/17 10:54	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/18/17 01:35	MSA	C
METALS										
Calcium, Total	2.5		mg/L	0.050	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Calcium, Dissolved	ND		mg/L	0.10	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Magnesium, Total	0.13		mg/L	0.050	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Magnesium, Dissolved	ND		mg/L	0.10	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Manganese, Total	ND		mg/L	0.0025	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Manganese, Dissolved	ND		mg/L	0.0050	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Potassium, Dissolved	1.4		mg/L	0.50	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Sodium, Total	219		mg/L	0.25	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Sodium, Dissolved	217		mg/L	0.50	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	6.890		pH_Units		Field			5/17/17 09:49	BGS	M
Specific Conductance, Field	1025		umhos/cm	1	Field			5/17/17 09:49	BGS	M
Temperature	17.80		Deg. C		Field			5/17/17 09:49	BGS	M



Ms. Susan J Scherer

Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2230903001	1	3088 River Road, Conestoga PA	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2230903001	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.				

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June 1, 2017

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	Workorder:	2231658
Purchase Order:		Workorder ID:	2ND QTR 2017-3100 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

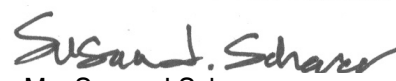
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , Landowner , Mr. Jeff Musser

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Ms. Susan J Scherer
Project Coordinator

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SAMPLE SUMMARY

Workorder: 2231658 2ND QTR 2017-3100 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231658001	3100 River Road, Conestoga, PA	Water	5/19/2017 14:10	5/19/2017 16:51	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 2231658 2ND QTR 2017-3100 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.

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: 2231658 2ND QTR 2017-3100 RIVER RD

Lab ID: **2231658001**

Date Collected: 5/19/2017 14:10

Matrix: Water

Sample ID: **3100 River Road, Conestoga, PA**

Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	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-Dichlorobenzene-d4 (S)	93.1		%	70 - 130	EPA 524.2			5/26/17 17:10	TMP	K
4-Bromofluorobenzene (S)	87.6		%	70 - 130	EPA 524.2			5/26/17 17:10	TMP	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	27		mg/L	5	S2320B-97			5/21/17 16:54	MSA	C
Alkalinity, Total	27	1	mg/L	5	S2320B-97			5/21/17 16:54	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/27/17 09:44	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	56.4		mg/L	2.0	EPA 300.0			5/20/17 15:15	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 15:15	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			5/31/17 15:55	PAG	I
Nitrate-N	4.8		mg/L	0.20	EPA 300.0			5/20/17 15:15	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 15:15	CHW	C
pH	6.55	2	pH_Units		S4500HB-11			5/21/17 16:54	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/31/17 11:54	JLG	H
Specific Conductance	259		umhos/cm	1	S2510B-97			5/21/17 16:54	MSA	C
Sulfate	6.3		mg/L	2.0	EPA 300.0			5/20/17 15:15	CHW	C
Total Dissolved Solids	210		mg/L	5	S2540C-11			5/24/17 15:33	JAS	C

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ANALYTICAL RESULTS

Workorder: 2231658 2ND QTR 2017-3100 RIVER RD

Lab ID: **2231658001**

Date Collected: 5/19/2017 14:10

Matrix: Water

Sample ID: **3100 River Road, Conestoga, PA**

Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/25/17 14:38	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
METALS										
Calcium, Total	18.8		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Calcium, Dissolved	18.3		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Magnesium, Total	8.8		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Magnesium, Dissolved	8.6		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Manganese, Total	0.0095		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Manganese, Dissolved	0.010		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Potassium, Total	1.7		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Potassium, Dissolved	1.6		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Sodium, Total	16.2		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Sodium, Dissolved	15.9		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.180		pH_Units		Field			5/19/17 14:17	BGS	M
Specific Conductance, Field	299		umhos/cm	1	Field			5/19/17 14:17	BGS	M
Temperature	17.20		Deg. C		Field			5/19/17 14:17	BGS	M



Ms. Susan J Scherer

Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231658001	1	3100 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231658001	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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**CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS**

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

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COC 1 of 1

ALS 2 3 1 6 5 8 *

34 Dogwood Lane • Middletown, PA 17057 • Phone: 717-944-5541 • Fax: 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 ☐ -N

Fax? ☐ -Y ☐ -N

Sample Description/Location
(as it will appear on the lab report)

1 **3400RIVERRD**

5-19-17 1410

2

3

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10

Project Comments:

Relinquished By / Company Name

1 **2300WALL** **ALS**

3

5

7

9

Date Time

5-19-17 1657

2

4

6

8

10

Received By / Company Name

[Signature]

5/19/17

1657

LOGGED BY (signature):

REVIEWED BY (signature):

Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL	PL	PL	PL
Container Size	40 ml	250 ml	500 ml	40 ml	500 ml	500 ml	500 ml	500 ml	500 ml	500 ml	500 ml	500 ml
Preservative	HCl	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	HNO3	HNO3	HNO3	HNO3	HNO3

ANALYSES/METHOD REQUESTED

TOC	TOX	O-H	VOC	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, TP, Spc	Alkalinity, HCO3

Enter Number of Containers Per Sample or Field Results Below.

G or C	Matrix	2	2	1	2	1	1	1	1
1	G DW				X				

Receipt Information (completed by Receiving Lab)

Cooler Temp: 1 Therm ID: 318

No. of Coolers: Y N Initial SES

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: _____

Standard	CLP-like	USACE	Special Processing	State Samples Collected In
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	USACE <input type="checkbox"/> Navy <input type="checkbox"/>	<input type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/> PA <input type="checkbox"/> NC <input type="checkbox"/>

Reportable to PADEP? ☐ Yes ☐ No ☐ PWSID # _____

Sample Disposal: Lab ☒ Special ☐

EDDS: Format Type: _____

* 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

Rev 8/04

June 2, 2017

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	Workorder:	2231676
Purchase Order:		Workorder ID:	2ND QTR 2017-3106 RIVER ROAD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

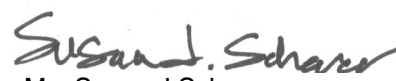
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2231676 2ND QTR 2017-3106 RIVER ROAD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231676001	3106 River Road, Conestoga, PA	Water	5/19/2017 10:50	5/19/2017 16:51	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 2231676 2ND QTR 2017-3106 RIVER ROAD

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.

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: 2231676 2ND QTR 2017-3106 RIVER ROAD

Lab ID: **2231676001**

Date Collected: 5/19/2017 10:50

Matrix: Water

Sample ID: **3106 River Road, Conestoga, PA**

Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	13		mg/L	5	S2320B-97			5/21/17 19:19	MSA	C
Alkalinity, Total	13	1	mg/L	5	S2320B-97			5/21/17 19:19	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 07:51	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	49.9		mg/L	2.0	EPA 300.0			5/20/17 20:01	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 20:01	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 15:04	PAG	I
Nitrate-N	9.2		mg/L	0.20	EPA 300.0			5/20/17 20:01	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 20:01	CHW	C
pH	6.38	2	pH_Units		S4500HB-11			5/21/17 19:19	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	H
Specific Conductance	250		umhos/cm	1	S2510B-97			5/21/17 19:19	MSA	C
Sulfate	3.1		mg/L	2.0	EPA 300.0			5/20/17 20:01	CHW	C
Total Dissolved Solids	198	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	C
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	5.36		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

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ANALYTICAL RESULTS

Workorder: 2231676 2ND QTR 2017-3106 RIVER ROAD

Lab ID: **2231676001**


Date Collected: 5/19/2017 10:50

Matrix: Water

Sample ID: **3106 River Road, Conestoga, PA**

Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	92.8		%	70 - 130	EPA 524.2			5/27/17 02:02	CJG	K
4-Bromofluorobenzene (S)	87.3		%	70 - 130	EPA 524.2			5/27/17 02:02	CJG	K
METALS										
Calcium, Total	13.2		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:52	TSS	D1
Calcium, Dissolved	12.7		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 01:06	TSS	E
Iron, Total	0.65		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:52	TSS	D1
Iron, Dissolved	0.17		mg/L	0.060	EPA 200.7	5/24/17 05:40	TSS	5/25/17 01:06	TSS	E
Magnesium, Total	8.1		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:52	TSS	D1
Magnesium, Dissolved	7.8		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 01:06	TSS	E
Manganese, Total	0.034		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:52	TSS	D1
Manganese, Dissolved	0.031		mg/L	0.0050	EPA 200.7	5/24/17 05:40	TSS	5/25/17 01:06	TSS	E
Potassium, Total	1.5		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:52	TSS	D1
Potassium, Dissolved	1.5		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 01:06	TSS	E
Sodium, Total	26.3		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:52	TSS	D1
Sodium, Dissolved	25.1		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 01:06	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.470		pH_Units		Field			5/19/17 11:49	BGS	M
Specific Conductance, Field	272		umhos/cm	1	Field			5/19/17 11:49	BGS	M
Temperature	17.10		Deg. C		Field			5/19/17 11:49	BGS	M



Ms. Susan J Scherer

Project Coordinator

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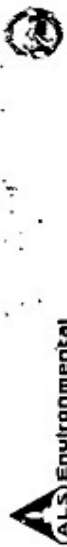
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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231676001	1	3106 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231676001	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.				
2231676001	3	3106 River Road, Conestoga, PA	S2540C-11	Total Dissolved Solids
The method blank associated with this analyte had a result of 21 mg/L. Criteria states that the method blank should be less than 5 mg/L.				
2231676001	4	3106 River Road, Conestoga, PA	EPA 524.2	Trichlorofluoromethane
The QC sample type LCS for method EPA 524.2 was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 69.7 and the control limits were 70 to 130.				

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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 # **ALSQ**

1 of 1

Client Name: LCSWMA - Patricia S. Hill		Container Type	AG	AN	AN	CG	PL	PL	PL	PL	PL	PL
Address: 3106 River Road		Container Size	40 ml	250 ml	500 ml	40 ml	500 ml	500 ml	500 ml	500 ml	2 L	500 ml
Contact: Patricia S. Hill		Preservative	HCl	H2SO4	H2SO4	HCl	H2SO4	HNO3	HNO3	HNO3	None	None
Project Name#: LCSWMA - Quarterly												
Bill To: Lancaster County Solid Waste MA												
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.												
Date Required: <input type="checkbox"/> Rush-Subject to ALS approval and surcharges.												
Approved By: _____												
Email? <input type="checkbox"/> -Y												
Fax? <input type="checkbox"/> -Y No.:												
Sample Description/Location (as it will appear on the lab report)		Sample Date	Time									
13106RIVERRD		5/19/19	1050	G	DW	2	2	1	2	X	1	1
2												
3												
4												
5												
6												
7												
8												
9												
10												
Project Comments:		LOGGED BY (signature): <u>[Signature]</u> 5/19/19										
		REVIEWED BY (signature): <u>[Signature]</u> 5/19/19										
Relinquished By / Company Name		Date	Time	Received By / Company Name								
1 B. SHADE		5/19/19	1050	[Signature] 5/19/19								
3												
5												
7												
9												
State Samples Collected In		Special Processing										
NY		USACE										
NJ		Navy										
PA		Sample Disposal										
NC		Lab X										
		Special										
Reportable to PADEP?		Yes										
PWSID #		EDDS: Format Type										

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ALS Environmental

Friday, June 02, 2017 7:55:34 AM

Page 7 of 7

Rev 8/04

June 2, 2017

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	Workorder:	2231666
Purchase Order:		Workorder ID:	2ND QTR 2017-3125 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, May 19, 2017.

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.

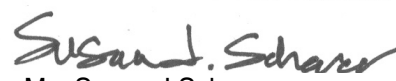
Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications 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: Mr. Mark Reider , 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: 2231666 2ND QTR 2017-3125 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2231666001	3125 River Road, Conestoga, PA	Water	5/19/2017 12:12	5/19/2017 16:51	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 2231666 2ND QTR 2017-3125 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.

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: 2231666 2ND QTR 2017-3125 RIVER RD

Lab ID: **2231666001** Date Collected: 5/19/2017 12:12 Matrix: Water
Sample ID: **3125 River Road, Conestoga, PA** Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Toluene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	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-Dichlorobenzene-d4 (S)	95.8		%	70 - 130	EPA 524.2			5/26/17 19:12	TMP	K
4-Bromofluorobenzene (S)	84.7		%	70 - 130	EPA 524.2			5/26/17 19:12	TMP	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	30		mg/L	5	S2320B-97			5/21/17 17:03	MSA	C
Alkalinity, Total	30	1	mg/L	5	S2320B-97			5/21/17 17:03	MSA	C
Ammonia-N	ND		mg/L	0.100	D6919-09			5/27/17 10:03	TES	B
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	B
Chloride	94.9		mg/L	2.0	EPA 300.0			5/20/17 15:28	CHW	C
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 15:28	CHW	C
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 11:25	PAG	I
Nitrate-N	8.5		mg/L	0.20	EPA 300.0			5/20/17 15:28	CHW	C
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 15:28	CHW	C
pH	6.57	2	pH_Units		S4500HB-11			5/21/17 17:03	MSA	C
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/31/17 11:54	JLG	H
Specific Conductance	414		umhos/cm	1	S2510B-97			5/21/17 17:03	MSA	C
Sulfate	8.4		mg/L	2.0	EPA 300.0			5/20/17 15:28	CHW	C
Total Dissolved Solids	252		mg/L	5	S2540C-11			5/24/17 16:58	JAS	C

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ANALYTICAL RESULTS

Workorder: 2231666 2ND QTR 2017-3125 RIVER RD

Lab ID: **2231666001**

Date Collected: 5/19/2017 12:12

Matrix: Water

Sample ID: **3125 River Road, Conestoga, PA**

Date Received: 5/19/2017 16:51

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/25/17 14:38	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	C
METALS										
Calcium, Total	0.070		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Calcium, Dissolved	0.18		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Magnesium, Total	0.062		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Magnesium, Dissolved	ND		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Manganese, Total	ND		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Manganese, Dissolved	ND		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Potassium, Total	2.0		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Potassium, Dissolved	1.8		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Sodium, Total	86.5		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Sodium, Dissolved	84.0		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.600		pH_Units		Field			5/19/17 12:12	BGS	M
Specific Conductance, Field	405		umhos/cm	1	Field			5/19/17 12:12	BGS	M
Temperature	18.00		Deg. C		Field			5/19/17 12:12	BGS	M



Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America

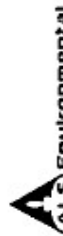
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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231666001	1	3125 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO ₃ /L.				
2231666001	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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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALS

CC
AL

1 of 1

* 2 2 3 1 6 6 *

Client Name: LCSWMA - Christian C. Beck

Address: 3125 River Road

Conestoga, 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

Fax? ☐ -Y No.:

Sample Description/Location
(as it will appear on the lab report)

Sample Date Time

1 3125RIVERRD 5-19-17 12:12

2

3

4

5

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7

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9

10

Project Comments:

Relinquished By: Company Name

1 3125RIVERRD

3

5

7

9

Date Time

5-19-17 16:51

2

4

6

8

10

Received By: Company Name

5/19/17 9:17

DATE

TIME

DATE

TIME

LOGGED BY (signature):

REVIEWED BY (signature):

Container Type

Container Size

Preservatives

AG AN AN CG PL PL PL PL

40 ml 250 ml 500 ml 500 ml 500 ml 500 ml

HCl H2SO4 H2SO4 HCl HNO3 HNO3

None None

COOL Temp: 1 Therm ID: 318

No. of Coolers: Y N Initial

Custody Seals Present?

(if present) Seals Intact?

Received on Ice?

COGLabels Completed/Accurate?

Cont. in Good Cond.?

Correct Containers?

Correct Sample Volumes?

Correct Preservation?

Headspace/Volatiles?

Courier/Tracking #:

Sample/COC Comments

Enter Number of Containers Per Sample or Field Results Below.

TOC

TOX

O-H

VOC

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, Tb, Spc

Alkalinity, HCO3

ALS Field Services: ☐ Pickup ☐ Labor

☐ Composite Sampling ☐ Rental Equipment

☐ Other:

Special Processing

USACE ☐ Navy ☐ NY ☐ NJ ☐ PA ☐ NC ☐

State Samples Collected In

Reportable to PADEP? Yes ☐ No ☐

Sample Disposal Lab ☐ X ☐ Special ☐

PWSID #

EDDS: Format Type

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

* G=Grab; C=Composite

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