

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared, 01/29/20	
DEP USE O	NLY
Date Rece	ived

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

General Reference: Act 101 Section 1103			
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SEC ⁻	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	ounty		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name: LCSWMA			
Address: 3044 RIVEF	ROAD		
Phone No.:			
Sampling Point: Latitude: 39 o	57 ' 30.58 " Longitude: 76 ° 26 ' 11.25 "		
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No		
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 11:25 AM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	12/29/2020		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 01/29/2021
DEP USE ONLY

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

General Reference: Act 101 Section 1103		
SECTION A. SITE IDENTIFIER		
Applicant/permittee:	ancaster County Solid Waste Manage	
Site Name: F	rey Farm Landfill	
Facility ID (as issued by DEP): 1	01389	
SEC ⁻	TION B. PRIVATE WATER SUPPLY INFORMATION	
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")	
Facility Name: Frey Farm L	andfill	
County: Lancaster C	ounty	
Township or Municipality: MANOR TO	WNSHIP	
Landowner Name:MILLER		
Address: 3052 RIVER	ROAD	
Phone No.:		
Sampling Point: Latitude: 39 o	57 ' 29.85 " Longitude: 76 ° 26 ' 11.45 "	
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:	
Sample Field Filtered (must be 0.45 micro		
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 11:37 AM	
Laboratory(ies) Performing Analysis	ALS Environmental	
(include address and phone number)	34 Dogwood Lane	
	Middletown, PA 17057 (717) 944-5541	
Lab Accreditation Number(s)	22-293	
Lab Analysis Date	12/29/2020	
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.	
Comments:		

Facility I.D. Number
101389

Monitoring Point I.D. No.
PS MILLER

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number
101389

Monitoring Point I.D. No.

PS MILLER

12/14/2020

Sample Date

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared, 01/29/20	
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FORM 52 MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

General Reference: Act 101 Section 1103		
	SECTION A. SITE IDENTIFIER	
Applicant/permittee:	ancaster County Solid Waste Manage	
Site Name: F	rey Farm Landfill	
Facility ID (as issued by DEP):	01389	
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION	
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")	
Facility Name: Frey Farm L	andfill	
County: Lancaster C	ounty	
Township or Municipality: MANOR TO	WNSHIP	
Landowner Name:LCSWMA		
Address: 3056 RIVER	R ROAD	
Phone No.:		
Sampling Point: Latitude: 39 o	57 ' 28.44 " Longitude: 76 ° 26 ' 10.43 "	
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:	
Sample Field Filtered (must be 0.45 micr		
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 11:52 AM	
Laboratory(ies) Performing Analysis	ALS Environmental	
(include address and phone number)	34 Dogwood Lane	
	Middletown, PA 17057 (717) 944-5541	
Lab Accreditation Number(s)	22-293	
Lab Analysis Date	12/27/2020	
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.	
Comments:		

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

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Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

	Date Prepared/Revised 01/29/2021
DEP USE ONLY	

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SEC ⁻	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	ounty		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name:LCSWMA			
Address: 3060 RIVEF	RROAD		
Phone No.:			
Sampling Point: Latitude: 39 o	57 ' 27.63 " Longitude: 76 ° 26 ' 10.01 "		
Depth to Water Level:	ft. Measured from: X Land Surface TOC		
Casing Stick Up:	ft. Elevation of Water Level: ft./MSL		
Total Well Depth:			
Sampling Depth:	ft. Sampling Method: Pumped Bailed		
Well Purged: Yes	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No		
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 12:05 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	12/27/2020		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

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Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

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Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared, 01/29/20	
DEP USE O	NLY
Date Rece	ived

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

General Reference: Act 101 Section	1103	
SECTION A. SITE IDENTIFIER		
Applicant/permittee:	ancaster County Solid Waste Manage	
Site Name: F	rey Farm Landfill	
Facility ID (as issued by DEP):	01389	
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION	
INDICATE THE LATITUDE AND LONGIT	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")	
Facility Name: Frey Farm L	andfill	
County: Lancaster C	ounty	
Township or Municipality: MANOR TO	WNSHIP	
Landowner Name: SENSENICI	1	
Address: 3076 RIVER	R ROAD	
Phone No.:		
Sampling Point: Latitude: 39 o	57 28.2 Longitude: 76° 26 11.1 "	
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:	
Sample Field Filtered (must be 0.45 micr		
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 12:23 PM	
Laboratory(ies) Performing Analysis	ALS Environmental	
(include address and phone number)	34 Dogwood Lane	
	Middletown, PA 17057 (717) 944-5541	
Lab Accreditation Number(s)	22-293	
Lab Analysis Date	12/28/2020	
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.	
Comments:		

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 01/29/2021
DEP USE ONLY

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

General Reference: Act 101 Section	1103
	SECTION A. SITE IDENTIFIER
Applicant/permittee:	ancaster County Solid Waste Manage
Site Name: F	rey Farm Landfill
Facility ID (as issued by DEP): 1	01389
SEC ⁻	TION B. PRIVATE WATER SUPPLY INFORMATION
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")
Facility Name: Frey Farm L	andfill
County: Lancaster C	ounty
Township or Municipality: MANOR TO	WNSHIP
Landowner Name:LCSWMA	
Address: 3079 RIVEF	ROAD
Phone No.:	
Sampling Point: Latitude: 39 o	57 ' 21.99 " Longitude: 76 ° 26 ' 10.58 "
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 3:27 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	34 Dogwood Lane
	Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	12/28/2020
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.
Comments:	

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 01/29/2021	
DEP USE ONLY	
Date Received	

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

General Reference: Act 101 Section	1103
	SECTION A. SITE IDENTIFIER
Applicant/permittee:	ancaster County Solid Waste Manage
Site Name: F	rey Farm Landfill
Facility ID (as issued by DEP): 1	01389
SEC ⁻	TION B. PRIVATE WATER SUPPLY INFORMATION
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")
Facility Name: Frey Farm L	andfill
County: Lancaster C	ounty
Township or Municipality: MANOR TO	WNSHIP
Landowner Name:WEBER	
Address: 3088 RIVER	ROAD
Phone No.:	
Sampling Point: Latitude: 39 o	57 ' 21 " Longitude: 76 ° 26 ' 7.1 "
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 12:41 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	34 Dogwood Lane
	Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	12/27/2020
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.
Comments:	

Facility I.D. Number
101389

Monitoring Point I.D. No.
PS WEBER

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS WEBER

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number
101389

Monitoring Point I.D. No.

WEBER
Sample Date

PS

12/14/2020

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 01/29/2021	
DEP USE ONLY	
Date Received	

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGIT	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	county		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name: KIRCHNER			
Address: 3100 RIVER	ROAD		
Phone No.:			
Sampling Point: Latitude: 39 o	57 17.9 Longitude: 76° 26 6.28 "		
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micr			
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 12:56 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	12/27/2020		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 01/29/2021		
DEP USE ONLY		
Date Received		

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	Lancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SEC.	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	ounty		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name:FRY			
Address: 3106 RIVER	ROAD		
Phone No.:			
Sampling Point: Latitude: 39 o	57 ' 17.27 " Longitude: 76 ° 26 ' 5.6 "		
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No		
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 1:16 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	12/27/2020		
Were any holding times exceeded?:	re any holding times exceeded?: Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS FRY

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS FRY

Sample Date

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number
101389

Monitoring Point I.D. No.

Sample Date

FRY

PS

12/14/2020

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

T Please indicate detection limit if analyte is not detected.

2540-FM-BWM0060 Rev. 6/2005



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared, 01/29/20					
DEP USE ONLY					
Date Rece	ived				

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:	ancaster County Solid Waste Manage					
Site Name: Frey Farm Landfill						
Facility ID (as issued by DEP): 1	01389					
SEC.	TION B. PRIVATE WATER SUPPLY INFORMATION					
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S")					
Facility Name: Frey Farm L	andfill					
County: Lancaster C	ounty					
Township or Municipality: MANOR TO	WNSHIP					
Landowner Name:BECK						
Address: 3125 RIVEF	ROAD					
Phone No.:						
Sampling Point: Latitude: 39 o	57 ' 11.6 " Longitude: 76 ° 26 ' 5.4 "					
Depth to Water Level:	ft. Measured from: X 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	X No Well Volumes Purged:					
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No					
Sample Date:(mm/dd/yy) 12/1	4/2020 Sample Collection Time: 2:00 PM					
Laboratory(ies) Performing Analysis	ALS Environmental					
(include address and phone number)	34 Dogwood Lane					
	Middletown, PA 17057 (717) 944-5541					
Lab Accreditation Number(s)	22-293					
Lab Analysis Date	12/27/2020					
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.					
Comments:						

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

	Facility I.D. Number	
	101389	
	Monitoring Point I.D. No.	
PS	BECK	

Sample Date

12/14/2020

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

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

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS BECK

Sample Date

12/14/2020

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

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

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS BECK

Sample Date

12/14/2020

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

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

T Please indicate detection limit if analyte is not detected.





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

December 29, 2020

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

Certificate of Analysis

Project Name: CONTIGUOUS LANDOWNER- Workorder:

3100 RIVER RD

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020-3100 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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

3146767

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

SAMPLE SUMMARY

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

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

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Report ID: 3146767 - 12/29/2020 Page 2 of 9





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

SAMPLE SUMMARY

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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
- LOQ DoD Limit of Quantit
 DL DoD Detection Limit
 - I Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
- (S) Surrogate Compound
- NC Not Calculated
- Result outside of QC limits

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ANALYTICAL RESULTS

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

Lab ID: 3146767001 Date Collected: 12/14/2020 12:56 Matrix: Water

Sample ID: 3100 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										,
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 00:53	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:53	PDK	J
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	97.6		%	62 - 133	SW846 8260B			12/17/20 00:53	PDK	J
4-Bromofluorobenzene (S)	89.9		%	79 - 114	SW846 8260B			12/17/20 00:53	PDK	J
Dibromofluoromethane (S)	89.4		%	78 - 116	SW846 8260B			12/17/20 00:53	PDK	J
Toluene-d8 (S)	93.1		%	76 - 127	SW846 8260B			12/17/20 00:53	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	19		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	С
Alkalinity, Total	19	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	Α
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 17:11	JXL	В
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	В
Chloride	43.7		mg/L	2.0	EPA 300.0			12/15/20 07:06	MBW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 07:06	MBW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/18/20 15:53	PAG	1
Nitrate-N	3.0		mg/L	0.20	EPA 300.0			12/15/20 07:06	MBW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 07:06		
pH	6.03	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	С
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	Н
Specific Conductance	222		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	С
Sulfate	9.6		mg/L	2.0	EPA 300.0			12/15/20 07:06		_
Cunato	5.0		mg/L	2.0	LI A 300.0			12/10/20 07:00	141D44	J

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ANALYTICAL RESULTS

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

Lab ID: 3146767001 Date Collected: 12/14/2020 12:56 Matrix: Water

Sample ID: 3100 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator

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Report ID: 3146767 - 12/29/2020





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ANALYTICAL RESULTS

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

PA	RAN	IETER	QUAL	IFIERS
----	-----	-------	------	--------

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

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146767 4TH QTR 2020-3100 RIVER RD

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

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State Samples (de) ☐Rental_Equipment Collected In Initial -Labor Æ 2 3 z □Pickup Sample/COC Comments Lab X I nerm IU: Special Processing Sample Disposal USACE Navy Special Custody Seals Present? COC/Labels Complete/Accurate? Correct Sample Volumes? **Readspace/Votatiles?** (if present) Seals Intact? Received on Ice? Cont. in Good Cond.? Correct Containers? Correct Preservation? Composite_Sampling ALS Field Services: Courier/Tracking #: "Matrix - Al=Air, DW=Drinking Water, GW=Groundwater, Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soll; WP=Wipe; WW=Wastewater Cooler Temp: No. of Coolers: DOther Reportable to PADEP? Standard CLP-like USACE COC #: EDDS: Format Type-ALS QU 500 ml None Alkalinity, HCO3 ٩ PWSID # ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057 Kes 500 ml Tb, SpC Deliverables None 屲 pH, TDS, NO2, NO3, CI, SO4, F, eted. Generated by ALS 125 ml HN03 Time ? Metals: Ca, Fe, Mg, Mn, K, Na 겁 ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT 24420 125 ml HN03 K, Na Date 런 ANALYSES/METHOD REQUESTED Dissolved Metals: Ca, Fe, Mg, Mn, SAMPLER. INSTRUCTIONS ON THE BACK H2S04 250 ml REQUEST FOR ANALYSIS Sample 4 NH3-N° COD CHAIN OF CUSTODY of Containers Per Received By / Company Name W. 49 H 90 오 2M846-8260 VOCs Enter Number H2S04 250 ml ş XOT 2 125 ml H2S04 ¥ HO-O 49 E 오 AG Q COL 2 REVIEWED BY(signature): Š Preservative Container xinteM' OGGED BY(signature): Time Container **ジャヤシのこっ** O 10 0 G 34 Dogwood Lans • Middletown, PA 17057 • 717,944,5541 • Fax; 717,944,1430 1256 (Z) Time Date Rush-Subject to ALS approval and surcharges. X Normal-Standard TAT is 10-12 business days. G=Grab; C=Composite Approved By: 12/14/20 Cognised Lare a Weditterin, in 1795 a Physic 713 des SA1 a No. 713-118-1190 a rome displacables Sample Date Selinquished Byyl Company Name 3ill To: Lancaster County Solid Waste MA lient Name: LCSWMA - Larry Kirchner roject Name#: LCSWMA - Quarterly Sample Description/Location (as it will appear on the lab report) Conestoga, PA 17516 ALS) Environmental Address: 3100 River Road (717) 584-0030 Larry Kirchner ·Y No. 13100RIVERRD Project Comments: >-Date Required: confact: hone#: ΤĀΤ Email? Fax?



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

Condition of Sample Receipt Form

Client:		Work Order #: Initials:	Date:		
	LCSWMA		TS	1215	20
 1. Were	airbills / tracking numbers prese	ent and recorded?		YES	NO
	-	Tracking number:	_		
2 4 0	ustadu Caale on chianiaa cantair	ners intact?	NONE	YES	NO
2. Are C	ustody Saals on sample contains	ers intact?	(NONE	YES	NO -
a le +b-	re a COC (Chain-of-Custody) are	sent?		ÆS	NO
		te, legible and in agreement?			NO
		cations?			NO
عادات	oes the COC contain sample loc	ime of sample collection for all samples?		AES.	NO .
		llectors name?			NO -
5C. L	loes the COC contain sample col	preservation for all bottles?		(B)	NO
50. L	loss the COC note the symbol of	of bottles submitted for each sample?		25	NO
		mple, composite or grab?			NO
2ich	oes the COC note the matrix of	the sample(s)?		05	NO
5 Are 2	Il aqueous samples requiring ore	eservation preserved correctly? ¹	N/A	(E)	NO
7 Wars	all samples placed in the proper	r containers for the requested analyses, with sufficient volume?			NO
		for the requested analyses?			NO
		ntact and headspace free when required? (not broken, leaking, frozen,			NO
IO DIA	we receive trip blanks (applies)	only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	(N7A)	YES	NO
		only for methods and on the second		AYES,	NO
		d at 0.0-6.0°C			NO
		fill out Reportable Drinking Water questions below			NO
13.	Are the samples required for SC	DWA compliance reporting?	N/A	YES	NO
		PWS ID#?		YES	NO
		OWA samples pH 5-9?		YES	NO
		A sample location ID/Description?		YES	NO
13e.	Did the client provide the SDWA	A sample type (D, E, R, C, P, S)?	N/A	YES	NO
					.01
	Cooler #:			W.	
	Temperature (°C):				
	Thermometer ID: 309				

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



Radiological (µCi):

To the

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

Rev 1/20/2020





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

December 29, 2020

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

Certificate of Analysis

Project Name: CONTIGUOUS LANDOWNER- Workorder: 3146769

3088 RIVER RD

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020-3088 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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: 3146769 4TH QTR 2020-3088 RIVER RD

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

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

SAMPLE SUMMARY

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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: 3146769 4TH QTR 2020-3088 RIVER RD

Lab ID: 3146769001 Date Collected: 12/14/2020 12:41 Matrix: Water

Sample ID: 3088 River Road, Conestoga PA Date Received: 12/14/2020 17:40

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

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ANALYTICAL RESULTS

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

Lab ID: 3146769001 Date Collected: 12/14/2020 12:41 Matrix: Water

Sample ID: 3088 River Road, Conestoga PA Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

PARAMETER	QUALIFIERS
------------------	------------

Lab ID	#	Sample ID	Analytical Method	Analyte
3146769001	1	3088 River Road, Conestoga PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity is	s titrate	d to a pH of 4.5 and reported as mg C	CaCO3/L.	
3146769001	2	3088 River Road, Conestoga PA	S4500HB-11	рН
The pH analysis is a	n "anal	yze immediately" analysis. Parameter	rs identified as "analyze immediately" i	require analysis within 15 minutes of

collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

3146769001 3 3088 River Road, Conestoga PA SW846 8260B Trichlorofluoromethane

The QC sample type MS for method SW846 8260B was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 124 and the control limits were 38 to 123.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146769 4TH QTR 2020-3088 RIVER RD

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

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34 Dogwood Lane + Middletown, PA 17057 + 717.944.5541 + Fax: 717.944.1430	541 • Fax: 717.944.1430	ŀ	Į	SA	MPLER	INST	SUCTIO	NOSN	SAMPLER. INSTRUCTIONS ON THE BACK	÷		'		* 696	
Client Name: LCSWMA - Hans Weber and Deb Kalbach	b Kalbach	Container	, AG		N N	¥.	ဗ	1	చ	చ	占	4	я	2 1 4 0 .	ving Lab)
Address: 3088 River Road		Container	40 ml	100	125 ml 2	250 ml	40 ml	ı	250 ml	125 ml	125 ml	500 ml	500 ml Cooler	Cooler Temp: Therm ID:	
Conestoga, PA 17516		Preservativo	E.	-	H2SO4 H	H2SO4	호	1	H2S04	HNO3	HNO3	None	None No. of Coolers:		Initial
Contact: Hans Weber and Deb Kalbach						ANAL	YSES/M	E S	ANALYSES/METHOD REQUESTED	<u>.</u>			Γ	Custody Seals Present?	
Phone#: (717) 419-7982			L	L		-	Г			٠,				(if present) Seals Intact?	
Project Name/#: LCSWMA - Quarterly		_								nM ,	E	, Е,		Received on Ice?	
Bill To: LCSWMA - Hans Weber and Deb Kalbach	ach									6M ,	; <' N	tos	200	COC/Labets Complete/Accurate?	
TAT X Normal-Standard TAT is 10-12 business days.	business days.									9J, F	l ,nM	'cı':		Cont. In Good Cond.?	
Rush-Subject to ALS approval and surcharges	and surcharges.						SOC	•		als: C	, PM ,	EON	3	Correct Containers?	
Date Required: Appro	Approved By:						7 09Z		do	slaM t	;9-j ,6;	'ZON	нсо	Correct Sample Volumes?	
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5	-	O to O	001		0-0	XOT :	BMS S	EM	ЕНИ	K' N	Met	,Hq		Courter/Tracking #:	
1 3088RIVER RD	12/14/20 12/14	-	\ \frac{\circ}{2}	\vdash		Number	or Contai	ners Per	Enter Number of Containers Per Sample or Field Kesuits Below.	- Field Kes	ults Belov	, -	-	Sample/COC Comments	
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C=Grab; C	* G=Grab; C=Composite ALS EN		=Air; DW	=Drinkin	g Water;	GW=Gro	undwater 3: 34 DO	GWOOF	LANE.	AlDDLE	Sludge, S	O=Soll; WF	"."Matrix - Al-Air; DW-Eninking Water; GW-Groundwater; Ol-Oil; OL-Other Liquid; SL-Studge; SO-Soil; WP-Wipe; WW-Wastewater ENVIRONIMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE MIDDLETOWN, PA 17057	ssewater	Rev 8/04



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

Condition of Sample Receipt Form

Client: Work Order #: 0 1.1. 0 Initials: Da	ate:		
CCSWMA WORK OTHER # 3144769 TS		1215.	20
1. Were airbills / tracking numbers present and recorded?	FONE	YES	NO
	IONIE	YES	NO
2. Are Custody Seals on shipping containers intact?		YES	4NO. ≤
3. Are Custody Seals on sample containers intact?		ÆS	NO
4. Is there a COC (Chain-of-Custody) present?			
5. Are the COC and bottle labels complete, legible and in agreement?			NO
5a. Does the COC contain sample locations?		1	NO
- *5b. Does the COC contain date and time of sample collection for all samples?		E	NO .
5c. Does the COC contain sample collectors name?		E	NO .
5d. Does the COC note the type(s) of preservation for all bottles?			NO
Se. Does the COC note the number of bottles submitted for each sample?		E	NO
5fr Does the COC note the type of sample, composite or grab?		25	NO
5g. Does the COC note the matrix of the sample(s)?		0	NO
o. Are an address samples requiring presentation presentation	N/A	(E)	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		(B)	NO
8. Are all samples within holding times for the requested analyses?		0	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		E S	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?		YES	NO
11. Were the samples received on ice?		Æ5	NO
12. Were sample temperatures measured at 0.0-6.0°C		Ø555	NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below		B	NO
13a. Are the samples required for SDWA compliance reporting?		YES	®
13b. Did the client provide a SDWA PWS ID#?		YES	NO
The Are an additional ampression and additional additional and additional ad	N/A	YES	NO
13d. Did the click provide the 35 W. Sample location to present pro-	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO
Cooler #:		5.0	
Temperature (°C):			
Thermometer ID: 309	-		
Radiological (µCi):			
COMMENTS (Required for all NO responses above and any sample non-conforma	nce).		

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

Rev 1/20/2020





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December 30, 2020

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

Certificate of Analysis

Project Name: FREY FARM Workorder: 3146765

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020 3079 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

Ms. Susan J Scherer Project Coordinator

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SAMPLE SUMMARY

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

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- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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

ANALYTICAL RESULTS

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

Lab ID: 3146765001 Date Collected: 12/14/2020 15:27 Matrix: Water

Sample ID: 3079RIVERRD Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 00:08	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:08	PDK	J
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	98.7		%	62 - 133	SW846 8260B			12/17/20 00:08	PDK	J
4-Bromofluorobenzene (S)	91.1		%	79 - 114	SW846 8260B			12/17/20 00:08	PDK	J
Dibromofluoromethane (S)	91.2		%	78 - 116	SW846 8260B			12/17/20 00:08	PDK	J
Toluene-d8 (S)	95.7		%	76 - 127	SW846 8260B			12/17/20 00:08	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	36		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	С
Alkalinity, Total	36	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	Α
Ammonia-N	0.103		mg/L	0.100	ASTM D6919-09			12/24/20 16:16	JXL	В
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/28/20 23:35	JAM	В
Chloride	33.2		mg/L	2.0	EPA 300.0			12/16/20 11:17	MBW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			12/16/20 11:17	MBW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/18/20 14:59	PAG	1
Nitrate-N	ND		mg/L	0.20	EPA 300.0			12/16/20 11:17	MBW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/16/20 11:17	MBW	С
pН	6.33	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	С
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	Н
Specific Conductance	198		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	С
Sulfate	12.6		mg/L	2.0	EPA 300.0			12/16/20 11:17		_
Sanato	12.0		mg/L	2.0	L1 /1 000.0			12/10/20 11.17	۷۷ ک.۰۰	5

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

ANALYTICAL RESULTS

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

Lab ID: 3146765001 Date Collected: 12/14/2020 15:27 Matrix: Water

Sample ID: 3079RIVERRD Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator

Report ID: 3146765 - 12/30/2020





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ANALYTICAL RESULTS

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

PA	RAN	IETER	QUAL	IFIERS
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Lab ID	#	Sample ID	Analytical Method	Analyte	
3146765001	1	3079RIVERRD	SM2320B-2011	Alkalinity, Total	
The Total Alkalini	ty is titrate	ed to a pH of 4.5 and repo	orted as mg CaCO3/L.		
3146765001	2	3079RIVERRD	S4500HB-11	На	

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146765 4TH QTR 2020 3079 RIVER RD

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

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State Samples DRental_Equipment Rev 8/04 Collected in Receipt information (completed by Receiving Lab) Initial -Labor 2 A ₹ × z □Pickup Sample/COC Comments rap × Therm ID: Special Processing Sample Disposal Headspace/Volatiles? USACE Navy Special Custody Seals Present? Correct Preservation? (if present) Seals Intact? Received on Ice? COC/Labels Complete/Accurate? Cont. In Good Cond.? Correct Containers? Correct Sample Volumes? Composite_Sampling ALS Field Services: Courier/Tracking #: **Matrix - At=Air, DW=Drinking Water, GW=Groundwater, OI=Oir, OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater Cooler Temp: No. of Coolers: Other: Reportable to PADEP? Standard CLP-like USACE EDDS: Format Type-500 ml ၁၀၁ ALS None ದ Alkalinity, HCO3 # OISMd ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057 Yes 500 ml None Tb, SpC Deliverables 굽 Data ph, TDS, NO2, NO3, CI, SO4, F, Generated by ALS or Field Results Belov 125 ml 25 HN03 Time 굷 Netals: Ca, Fe, Mg, Mn, K, Na ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT 125 ml 220 HN03 Date EN ,X 컶 Dissolved Metals: Ca, Fe, Mg, Mn, ANALYSES/METHOD REQUESTED SAMPLER. INSTRUCTIONS ON THE BACK H2S04 REQUEST FOR ANALYSIS 250 ml of Containers Per Sample инз-и' сор CHAIN OF CUSTODY/ Received By Company Name ĿΨ 3 40 ml 8 오 2M846-8260 VOCs Enter Number 250 ml H2S04 콯 2 XOT 125 ml H2S04 ¥ HO-O 40 ml 오 PG. 100 2 9 REVIEWED BY(signature): š Container Type Container Size Preservative *Matrix .OGGED BY(signature): Time かいかいか J 10 D. တ 301 Fulling Mill Road * Middletown, PA 17057 + 717,944.5541 + Fex; 717,944.1430 Time 1527 Date Rush-Subject to ALS approval and surcharges. X Normal-Standard TAT is 10-12 business days. G=Grab; C=Composite Approved By: H Copused Late a Medicines, As 17867 - Plane 11/944 Stall - Let 311/14-1139 - some Anglebalane Sample 12/14/20 Date Client Name: Lancaster County Solid Waste MA roject Name/#: LCSWMA - Quarterly Fire Co. Address: 1299 Harrisburg Pike, P.O. Box 4424 Religgdished By / Company Name Bill To: Lancaster County Solid Waste MA Sample Description/Location (as it will appear on the lab report) 1. ... Lancaster, PA 17604 ALS) Environmental Phone#: (717) 735-0193 -Y No.: Dan Brown 3079RIVERRD roject Comments: ate Required: Contact: Ι¥ Email? ax?



301 Fulling Mill Road Middletown, PA 17057

P: (717) 944-5541 F: (717) 944-1430

Condition of Sample Receipt Form

Client: Work Order #: 3146765 Initials: 75	Date:		
CCSWMA 3146+65 TS		1215	20
Were airbills / tracking numbers present and recorded? Tracking number:	MONE	YES	NO
Are Custody Seals on shipping containers intact?	NAME	YES	NO
3. Are Custody Seals on sample containers intact?	/	YES	NO .
4. Is there a COC (Chain-of-Custody) present?		ÆS	NO
5. Are the COC and bottle labels complete, legible and in agreement?		_	NO
5a. Does the COC contain sample locations?			NO
5b. Does the COC contain date and time of sample collection for all samples?		-	NO
Sc. Does the COC contain sample collectors name?		\sim	NO
Sd. Does the COC note the type(s) of preservation for all bottles?		~ _	··NO
5e. Does the COC note the number of bottles submitted for each sample?			NO
Sf. Does the COC note the type of sample, composite or grab?		_	NO
5g. Does the COC note the matrix of the sample(s)?		æs	NO I
6. Are all aqueous samples requiring preservation preserved correctly?1	N/A	(PES)	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		AE3	NO
8. Are all samples within holding times for the requested analyses?		1	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)	· · · · · · · · · · · · · · · · · · ·		NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?		YES	NO
11. Were the samples received on ice?		ATES.	NO
12. Were sample temperatures measured at 0.0-6.0°C		₹ 25 5	NO
13. Are the samples DW matrix:? If YES, fill out Reportable Drinking Water questions below		(ES)	NO
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	(NO)
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO
Cooler #:			
Temperature (°C):			
Thermometer ID: 309			
Radiological (μCi):			
COMMENTS (Decription of the plant)			

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

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

Rev 1/20/2020





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

December 30, 2020

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

Certificate of Analysis

3146770

Project Name: CONTIGUOUS LANDOWNER- Workorder:

3076 RIVER RD

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020-3076 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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

Ms. Susan J Scherer Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

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

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SAMPLE SUMMARY

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

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 preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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- 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: 3146770 4TH QTR 2020-3076 RIVER RD

Lab ID: 3146770001 Date Collected: 12/14/2020 12:23 Matrix: Water

Sample ID: 3076 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

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

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ANALYTICAL RESULTS

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

Lab ID: 3146770001 Date Collected: 12/14/2020 12:23 Matrix: Water

Sample ID: 3076 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator

Report ID: 3146770 - 12/30/2020





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ANALYTICAL RESULTS

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

PARAMETER QUALIFIER	S
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Lab ID	#	Sample ID	Analytical Method	Analyte
3146770001	1	3076 River Road, Conestoga, PA	SM2320B-2011	Alkalinity, Total
The Total Alkalinity	is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
3146770001	2	3076 River Road, Conestoga, PA	S4500HB-11	рН

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146770 4TH QTR 2020-3076 RIVER RD

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

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State Samples Rev 8/04 (qr) ☐Rental_Equipment Collected In Initial Æ 2 È 3 □Pickup Sample/COC Comments herm IU: Special Processing Sample Disposal g USACE Naw COCiLabels Complete/Accurate? Headspace/Volatiles? Special Custody Seals Present? (if present) Seals Intact? Received on Ice? Cont. In Good Cond.? Correct Containers? Correct Preservation? Correct Sample Volumes? Composite_Sampling ALS Field Services: Courier/Tracking #: No. of Coolers: "Matrix - Al-Air, DW-Drinking Water, GW-Groundwater, Ol-Other Liquid: SL-Sludge; SO-Soll; WP-Wipe; WW-Wastewater Cooler Temp: DOther: Reportable to PADEP? Standard CLP-like USACE EDDS: Format Type-**COC** #: ALS Q 500 m None Alkalinity, HCO3 ದ PWSID # Yes ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057 500 ml Deliverables None Tb, SpC ♂ Data pH, TDS, NO2, NO3, CI, SO4, F, Generated by ALS 125 ml HN03 Time 컶 Metals: Ca, Fe, Mg, Mn, K, Na ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT Field Res 174.50 125 ml HNO3 K' Ng Date చ Dissolved Metals: Ca, Fe, Mg, Mn, ANALYSES/METHOD REQUESTED SAMPLER. INSTRUCTIONS ON THE BACK H2S04 250 ml REQUEST FOR ANALYSIS of Containers Per Sample ᇫ NH3-N' COD CHAIN OF CUSTODY/ Received By / Company Name 1 ŁW. 40 ml 8 오 2M846-8260 VOCs Enter Number H2SO4 250 m Ä . XOT H2S04 125 ml Ā HO-O 40 m 오 AG COC 2 REVIEWED BY(signature): š Preservative .OGGED BY(signature): 17/6 Container wintsM* Time 825 J 10 9, ပ でから 301 Fulling Mill Road + Middletown, PA 17057 + 717,944,5541 + Fax: 717,944,1430 1223 Date Time Rush-Subject to ALS approval and surcharges. X Normal-Standard TAT is 10-12 business days. · G=Grab; C=Composite Approved By: 12/14/20 HOSpinod Lare a Modernes, PA 1797 a Plane, 719 044 5 Feb 717-11 110 a way a graduate Sample Date Relinquished By Company Name Client Name: LCSWMA - Brian Sensenich Project Name/#: LCSWMA - Quarterly Sample Description/Location LCSWMA - Brian Sensenich (as it will appear on the lab report) Conestoga, PA 17516 ALS) Environmental Address: 3076 Rover Road Brian Sensenich Phone#: (717) 676-5779 .Y No.: 3076RIVERRD Project Comments: Date Required: :ontact: Bill To: TAT Email? ax



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

Condition of Sample Receipt Form

(LIII(\ X \ X \ X \ X \ X \ X \ X \ X \ X \		7.0	
CCSWMA 5140110	5	1215	20
Were airbills / tracking numbers present and recorded?	NONE	YES	NO
Were airbills / tracking numbers present and recorded:			
· V · · · · · · · · · · · · · · · · · ·	- NATE	VEC	NO
Are Custody Seals on shipping containers intact?	NONE	YES	NO .
Are Custody Seals on sample containers intact?	(NONE	_	
Is there a COC (Chain-of-Custody) present?		ES)	NO
Are the COC and bottle labels complete, legible and in agreement?			NO
5a. Does the COC contain sample locations?			NO
5b. Does the COC contain date and time of sample collection for all samples?			NO .
Sc. Does the COC contain sample collectors name?		8	NO .
5d. Does the COC note the type(s) of preservation for all bottles?		ES.	NO
5e. Does the COC note the number of bottles submitted for each sample?			МО
5f-Does the COC note the type of sample, composite or grab?		£5	NO
5g. Does the COC note the matrix of the sample(s)?		05	NO
Are all aqueous samples requiring preservation preserved correctly?	. N/A	(E)	NO
Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		/ES	NO
Are all samples within holding times for the requested analyses?			NO
Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc			NO
Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	(N/A)	YES	NO
. Were the samples received on ice?		MES	NO
. Were sample temperatures measured at 0.0-6.0°C			NO
3. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below		E	NO
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	NO
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO
13e. Did the client provide the 3DWA sample type to tel strain and a provide the sample type to tel strain and the sample type type to tel strain and the sample type type type type type type type typ			
Cooler #:			
Temperature (°C):			
Temperature (C).		. 2	
Thermometer ID: 309			
· · · · · · · · · · · · · · · · · · ·			
Radiological (µCi):			
OMMENTS (Required for all NO responses above and any sample non-confo	ormance)	:	

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

Rev 1/20/2020





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December 29, 2020

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

Certificate of Analysis

Project Name: FREY FARM Workorder: 3146771

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020 3060 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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

Ms. Susan J Scherer Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

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

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SAMPLE SUMMARY

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

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

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ANALYTICAL RESULTS

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Lab ID: 3146771001 Date Collected: 12/14/2020 12:05 Matrix: Water

Sample ID: **3060RIVERRD** Date Received: 12/14/2020 17:40

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

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ANALYTICAL RESULTS

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Lab ID: 3146771001 Date Collected: 12/14/2020 12:05 Matrix: Water

Sample ID: 3060RIVERRD Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator





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

ANALYTICAL RESULTS

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

Lab ID	#	Sample ID	Analytical Method	Analyte
3146771001	1	3060RIVERRD	SM2320B-2011	Alkalinity, Total
The Total Alkalinity	is titrate	ed to a pH of 4.5 and reported as mg	CaCO3/L.	
21/6771001	2	3060DI\/EDDD	\$4500HR 11	nμ

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146771 4TH QTR 2020 3060 RIVER RD

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

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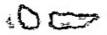
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3 Daymeline - McChim, PA 1751 - Part 312 Mests : - Fan 21241 1199 - renufstablise	www.Prijetalcom		ALL	ALL SHADE	D ARE/	S MUS	OED AREAS MUST BE COMPLETED BY	PLETE	BY THE	THE CLIENT	11	Q.	AL.		-
301 Fulling Mill Road + Middletown, PA 17057 + 717.944.5541 + Fax: 717.944.1430	4.5541 • Fax: 717.94		Container		H H	S INS	SAMPLER, INSTRUCTIONS ON THE BACK	SONTH	-			-			
Citent name: Lancaster County Solid waste MA	MA	Type	-	S S	A.	S.	8	ı	7	۲	7	2	o-1	*	ceiving Lab)
Address: 1299 Harrisburg Pike, P.O. Box 4424	4	Container	-	40 ml	125 ml	250 ml	40 ml	- 2	250 ml 12	125 ml 1	125 ml	500 ml	500 ml Coole	Cooler Temp: Therm ID:	
Lancaster, PA 17604		Proser	Preservative	모	H2S04	H2S04	HG.	1	H2SO4 H	HN03	HNO3	None	None No. of		Initial
Confact: Dan Brown						ANAL	ANALYSES/METHOD REQUESTED	HOD RE	DUESTED				Γ	by Seals Present?	
Phone#: (717) 735-0193			H	r	Г	F			H		r	r	Γ	(if present) Seals Intact?	
Project Name/#: LCSWMA - Quarterly		Г						- 23	υM.	810	-	٠,,		Received on Ico?	
Bill To: Lancaster County Solid Waste MA									οM		_	'b05	90	COC/Labels Complete/Accurate?	
TAT X Normal-Standard TAT is 10-12 business days.	business days.						s		,93 ,6C		Mn, K	3' CI' 3	_	Cont. in Good Cond.?	
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Sample Description/Location	Sample	6 01 0	xintsM'	201	0-0	XOT	Meta Dissi NH3	EW S	EHN SesiO	K' N	Meta	Tb, S		Courier/Tracking #:	
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6		-	9								_	EDDS: Format Type-	mat Type-		9886
· G=Grab;	* G=Grab; C=Composite	- Matrix -	Al=Air, C	W=Drink	ing Water	GW=Gro	undwater, (4=0ii; OL=	Other Liqu	ld; SL=Si	udge; SO	Soil, WP	"Matrix - Al=Air, DW=Drinking Water, GW=Groundwater, OI=Oither Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater		
	ALS I	2	NIVIEN	שרוים אל	400		500 45	TOOM.	ANE, MIL	JULE IS	WIN. PA	1,057			Rev 8/04



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

Condition of Sample Receipt Form

1. Were airbills / tracking numbers present and recorded?	lient:	Work Order #: 1 111 0.00 Initials:	Date:	-	
Tracking number: 2. Are Custody Seals on shipping containers intact?		CCSWMA STAUTTI	5	1215	20
PARE Custody Seals on shipping containers intact? Are Custody Seals on sample tontainers intact? Are Custody Seals on sample tontainers intact? As Are Custody Seals on sample tontainers intact? As Is there a COC (Chain-of-Custody) present? So. Are the COC and bottle labels complete, legible and in agreement? So. Does the COC contain sample locations? So. Does the COC contain date and time of sample collection for all samples? So. Does the COC contain sample collectors name? So. Does the COC contain sample collectors name? So. Does the COC note the type(s) of preservation for all bottles? So. Does the COC note the number of bottles submitted for each sample? So. Does the COC note the type of sample, composite or grab? So. Does the COC note the matrix of the sample(s)? Are all aqueous samples requiring preservation preserved correctly? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples within holding times for the requested analyses, with sufficient volume? Are all samples	. Were a		NONE	YES	NO
8. Are Custody Seals on sample containers intact?		Tracking number:	170		
4. Is there a COC (Chain-of-Custody) present?	. Are Cu	tody Seals on shipping containers intact?	NONE	YES	NO
5a. Does the COC and bottle labels complete, legible and in agreement?	. Are Cu	tody Seals on sample containers intact?	(NONE		NO.
Sa. Does the COC contain sample locations?	. Is there	a COC (Chain-of-Custody) present?		(ES)	NO
**Sb. Does the COC contain date and time of sample collection for all samples?					МО
Sc. Does the COC contain sample collectors name? 5d. Does the COC note the type(s) of preservation for all bottles? 5e. Does the COC note the number of bottles submitted for each sample? 5f. Does the COC note the type of sample, composite or grab? 5g. Does the COC note the type of sample, composite or grab? 5g. Does the COC note the matrix of the sample(s)? 6. Are all aqueous samples requiring preservation preserved correctly? 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? 8. Are all samples within holding times for the requested analyses? 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)? 11. Were the samples received on ice? 12. Were sample temperatures measured at 0.0-6.0°C 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below 13a. Are the samples required for SDWA compliance reporting? 13b. Did the client provide a SDWA PWS ID#? 13c. Are all aqueous unpreserved SDWA samples pH 5-9? 13d. Did the client provide the SDWA sample location ID/Description? N/A YES 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? N/A YES	5a. Do	es the COC contain sample locations?		MES	NO
5d. Does the COC note the type(s) of preservation for all bottles? 5e. Does the COC note the number of bottles submitted for each sample? 5g. Does the COC note the type of sample, composite or grab? 5g. Does the COC note the matrix of the sample(s)? 5g. Does the COC note the matrix of the sample(s)? 6. Are all aqueous samples requiring preservation preserved correctly? 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? 8. Are all samples within holding times for the requested analyses? 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)? 11. Were the samples received on ice? 12. Were sample temperatures measured at 0.0-6.0°C 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below 13a. Are the samples required for SDWA compliance reporting? 13b. Did the client provide a SDWA PWS ID#? 13c. Are all aqueous unpreserved SDWA samples pH 5-9? 13d. Did the client provide the SDWA sample location ID/Description? N/A YES 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? N/A YES	~Sb. Do	es the COC contain date and time of sample collection for all samples?	5	E	NO.
5d. Does the COC note the type(s) of preservation for all bottles? 5e. Does the COC note the number of bottles submitted for each sample? 5g. Does the COC note the type of sample, composite or grab? 5g. Does the COC note the matrix of the sample(s)? 5g. Does the COC note the matrix of the sample(s)? 6. Are all aqueous samples requiring preservation preserved correctly? 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? 8. Are all samples within holding times for the requested analyses? 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)? 11. Were the samples received on ice? 12. Were sample temperatures measured at 0.0-6.0°C 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below 13a. Are the samples required for SDWA compliance reporting? 13b. Did the client provide a SDWA PWS ID#? 13c. Are all aqueous unpreserved SDWA samples pH 5-9? 13d. Did the client provide the SDWA sample location ID/Description? N/A YES 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? N/A YES	~Sc. Do	es the COC contain sample collectors name?		0	NO.
5e. Does the COC note the number of bottles submitted for each sample? 5f. Does the COC note the type of sample, composite or grab? 5g. Does the COC note the matrix of the sample(s)? 5g. Does the COC note the matrix of the sample(s)? 6. Are all aqueous samples requiring preservation preserved correctly? 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? 8. Are all samples within holding times for the requested analyses? 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)? 11. Were the samples received on ice? 12. Were sample temperatures measured at 0.0-6.0°C 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below 13a. Are the samples required for SDWA compliance reporting? 13b. Did the client provide a SDWA PWS ID#? 13c. Are all aqueous unpreserved SDWA samples pH 5-9? 13d. Did the client provide the SDWA sample location ID/Description? N/A YES 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? N/A YES	5d. Do	es the COC note the type(s) of preservation for all bottles?		CES	NO
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5g. Does the COC note the matrix of the sample(s)?	5f: Do	s the COC note the type of sample, composite or grab?		25	NO
5. Are all aqueous samples requiring preservation preserved correctly? N/A 7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? 8. Are all samples within holding times for the requested analyses? 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)? 11. Were the samples received on ice? 12. Were sample temperatures measured at 0.0-6.0°C 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below 13a. Are the samples required for SDWA compliance reporting? 13b. Did the client provide a SDWA PWS ID#? 13c. Are all aqueous unpreserved SDWA samples pH 5-9? 13d. Did the client provide the SDWA sample location ID/Description? N/A YES 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? N/A YES N/A YES	5g. Do	es the COC note the matrix of the sample(s)?		05	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume? 8. Are all samples within holding times for the requested analyses? 9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.) 10. Did we receive trip blanks (applies only for methods EPA S04, EPA 524.2 and 1631E (LL Hg)? 11. Were the samples received on ice? 12. Were sample temperatures measured at 0.0-6.0°C 13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below. 13a. Are the samples required for SDWA compliance reporting? 13b. Did the client provide a SDWA PWS ID#? 13c. Are all aqueous unpreserved SDWA samples pH 5-9? 13d. Did the client provide the SDWA sample location ID/Description? N/A YES 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)? N/A YES N/A YES	. Are all	aqueous samples requiring preservation preserved correctly?1	N/A .		NO
3. Are all samples within holding times for the requested analyses?	. Were a	I samples placed in the proper containers for the requested analyses, with sufficient volume?		NE3	NO
Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.). O. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?. YES 11. Were the samples received on ice?	. Are all	samples within holding times for the requested analyses?		ES	NO
YES 10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	. Were a	I sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.	ć.)	TES	NO
11. Were the samples received on ice?					NO
12. Were sample temperatures measured at 0.0-6.0°C				MES	NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below. 13a. Are the samples required for SDWA compliance reporting?					NO
13a. Are the samples required for SDWA compliance reporting?	3. Are th	e samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		(3)	NO
13b. Did the client provide a SDWA PWS ID#?	13a. A	re the samples required for SDWA compliance reporting?	N/A		NO
1 3c. Are all aqueous unpreserved SDWA samples pH 5-9?	13b. D	id the client provide a SDWA PWS ID#?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	13c. A	re all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	13d. D	id the client provide the SDWA sample location ID/Description?	N/A	YES	NO
Conlect	13e. C	id the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO
Cooler #.		Cooler #:			
Temperature (°C):		Temperature (°C):	-		
Thermometer ID: 309		Thermometer ID: 309			
Radiological (µCi):					





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

Rev 1/20/2020





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December 29, 2020

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

Certificate of Analysis

Project Name: FREY FARM Workorder: 3146772

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020 3056 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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

Ms. Susan J Scherer Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

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

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

SAMPLE SUMMARY

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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

ANALYTICAL RESULTS

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

Lab ID: 3146772001 Date Collected: 12/14/2020 11:52 Matrix: Water

Sample ID: **3056RIVERRD** Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 02:46	PDK	K
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 02:46	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	102		%	62 - 133	SW846 8260B			12/17/20 02:46	PDK	K
4-Bromofluorobenzene (S)	92.4		%	79 - 114	SW846 8260B			12/17/20 02:46	PDK	K
Dibromofluoromethane (S)	93.9		%	78 - 116	SW846 8260B			12/17/20 02:46	PDK	K
Toluene-d8 (S)	96.1		%	76 - 127	SW846 8260B			12/17/20 02:46	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	С
Alkalinity, Total	ND	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	Α
Ammonia-N	0.116		mg/L	0.100	ASTM D6919-09			12/24/20 18:19	JXL	В
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	В
Chloride	26.5		mg/L	2.0	EPA 300.0			12/15/20 10:09	MBW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 10:09	MBW	С
Halogen, Total Organic (TOX)	64.0		ug/L	20.0	SW846 9020B			12/22/20 12:51	PAG	1
Nitrate-N	19.0		mg/L	0.20	EPA 300.0			12/15/20 10:09	MBW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 10:09	MBW	С
рН	5.44	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	С
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	Н
Specific Conductance	242		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	С
Sulfate	ND		mg/L	2.0	EPA 300.0			12/15/20 10:09		_
			9, =	0				, 10,20 10.00		•

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ANALYTICAL RESULTS

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

Lab ID: 3146772001 Date Collected: 12/14/2020 11:52 Matrix: Water

Sample ID: 3056RIVERRD Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

PARAMETER	QUALIFIERS
------------------	------------

Lab ID	#	Sample ID	Analytical Method	Analyte
3146772001	1	3056RIVERRD	SM2320B-2011	Alkalinity, Total
The Total Alkalinity	is titrate	ed to a pH of 4.5 and reported as mg	CaCO3/L.	
21/6772001	2	3056DI\/EDDD	\$4500HR 11	nμ

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146772 4TH QTR 2020 3056 RIVER RD

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

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(ALS) Environmental	١.	4	ALL SHA	DED AR	EASINUS	ADED AREAS MUST BE COMPLETED BY THE CLIENT	MPLET	DBYT	HECLE	NT /		ALS OF			-
301 Fulling Will Road • Middlelown, PA 17057 • 717,944,5541 • Fex; 717,944,1430	+ Fox: 717,944,143			SAMPLI	ER. INST	SAMPLER. INSTRUCTIONS ON THE BACK	NS ON 1	HE BAC	Ä.		.1				
Client Name: Lancaster County Solid Waste MA			AG	AN	NA	93	1	Ы	PL	Ч	చ	균	* 3 1 4 0 .	k N	Lab)
Address: 1299 Harrisburg Pike, P.O. Box 4424		Container Size	40 ml	125 ml	250 ml	40 ml	ı	250 ml	125 ml	125 ml	500 ml	500 ml	Cooler Temp: Therm ID:	I	
Lancaster, PA 17604		Presorvativa	당	H2S04	H2S04	오	i	H2S04	HNO3	HNO3	None	None No.	No. of Coolers:	z	Initial
Contact: Dan Brown			100		ANA	ANALYSES/METHOD REQUESTED	ETHOD R	EQUEST	8				Custody Seals Present?		1
Phone#: (717) 735-0193									٠,		_		(if present) Seals Intact?		
Project Name/#: LCSWMA - Quarterly									ıW 'f	e	'e'		Received on Ice?		
Bill To: Lancaster County Solid Waste MA									βW '	K' M	POS	_	COC/Labels Complete/Accurate?		
X Normal-Standard TAT is 10-12 business days.	less days.					- 1			93, Fe	'uM	, CI,		Cont. in Good Cond.?		
Rush-Subject to ALS approval and surcharges.	surcharges.					soc			:c:	'6W	EON	8	Correct Containers?		
Date Required: Approved By:	By:					Λ 09		gc	Metal	, Fe,	'ZON	нсоз	Correct Sample Volumes?		
Endill C		200			3530.259	28-91		N' C		s: Cs		,Ųin	Correct Preservation?	1	
			00	но-	хо	-8W	W	H3-1	ossi sN ,	leta!	IS '9		Headspace/Volatiles?	Ⅎ	
(as it will appear on the lab report) Date	Time	.e o	ц	- 1	nter Numb	Enter Number of Containers Per Sample or Field Results Below.	iners Per	Sample or	Field Res	M See	d	7	Counter I racking #: Sample/COC Comments	ınts	
1 3056RIVERRD 12/14/20	20 1152	G DW	2	-	2	24	×	-		-	-	-			3 3
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	REVIEWED BY(signature):	3Y(signature	#					JIW0		_	sta Stable]CLP-like	□ NSACE □	₩	Collected In
Relingueshed Bay Company Name	Date	Time		Recei	weg By / (Received By I Company Name	Name		Date	Time		JUSACE	Navy	Ž	>
TAPLINGE TO SHES	12143	17.7	2	V	\bigvee			(2)	02h	1740	٥		-		2
3 50 5			4								Reporta	Reportable to PADEP?	Sample Disposa	×	PA A
9			9								Yes		Lab		NC
7											# QISMA		Special	₫	
6			9								EDDS: F	EDDS: Format Type-		_	
. G=Grab; C=Composite	ALS	"Matrix - Al=Aér, DW= ALS ENVIRONMENTAL	Air, DW=D	rinking Wa	ADDRE	Drinking Water; GW=Groundwater, Ol=Oit, OL=Other Liquid; SL=Sludge; SO=Soit; W SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057	COIEOII; COIEO	Laner I	iquid; SL=	Sludge; S	0=Soil; W	=Wipe; WM	"Matrix - Al-Air, DW=Drinking Water, GW=Groundwater, OI=OI): OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater EnvironMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057	-	Rev 8/04



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

Condition of Sample Receipt Form

Client:	Work Order #:	0 .	Initials:	Date:		
LCSWMA		3HU772	7	5	12-15	20
				MANE	YES	NO
. Were airbills / tracking numbers p					163	NO
	1070	ber:				
2. Are Custody Seals on shipping cor	ntainers intact?			NOME	YES	NO
3. Are Custody Seals on sample cont	ainers intact?			(NONE	YES	NO.
4. Is there a COC (Chain-of-Custody)	present?				(ES)	NO
5. Are the COC and bottle labels con	nplete, legible and in a	greement?			EYES	NO
5a. Does the COC contain sample	locations?				PES	NO
5b. Does the COC contain date ar	nd time of sample colle	ection for all samples?		7	ES	NO.
"5c. Does the COC contain sample	collectors name?			······································	0	NO.
5d. Does the COC note the type(s	s) of preservation for a	II bottles?			CES .	NO
Se. Does the COC note the numb	er of bottles submitted	d for each sample?			XES	NO
5f-Does the COC note the type o	of sample, composite of	r grab?			25	NO
5g. Does the COC note the matrix	x of the sample(s)?	***************************************		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	NO.
5. Are all aqueous samples requiring	preservation preserve	ed correctly?1		N/A	(E)	NO
7. Were all samples placed in the pro	oper containers for the	requested analyses, with s	sufficient volume?		/ES	NO
3. Are all samples within holding tim	nes for the requested a	nalyses?			CES	NO
9. Were all sample containers receive	ed intact and headspace	ce free when required? (not	broken, leaking, frozen, et	c.)	CHES	NO
10. Did we receive trip blanks (appl	ies only for methods E	PA 504, EPA 524.2 and 163	1E (LL Hg)?	(NTA)	YES	NO
11. Were the samples received on ic	e?				MES	NO
12. Were sample temperatures meas	sured at 0.0-6.0°C				25	NO
13. Are the samples DW matrix? If Y	YES, fill out Reportable	Drinking Water questions h	oelow		E	NO
13a. Are the samples required fo	or SDWA compliance re	porting?		N/A	YES	NO
13b. Did the client provide a SDV	VA PWS 1D#?			N/A	YE\$	NO
13c. Are all aqueous unpreserved	d SDWA samples pH 5-	9?		N/A	YES	NO
13d. Did the client provide the SI	DWA sample location II	D/Description?		N/A	YES	NO
13e. Did the client provide the SI	DWA sample type (D, E	, R, C, P, S)?		N/A	YES	NO
Cooler #:					3	
Temperature (°C):	<u> </u>			· <u> </u>		
Thermometer ID: 3	09	<u> </u>				
0_0040400_00440 _	· partir Table		(5)			
Radiological (µCi):	_	<u> </u>				
COLUMN TO (December of for	- all NO respon	sees above and an	sample non-confe	rmance)		
COMMENTS (Required fo	or all NO respon	ises above and an	y sample non-com	Jilliance)	•	

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

Rev 1/20/2020





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December 30, 2020

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

Certificate of Analysis

Project Name: CONTIGUOUS LANDOWNER- Workorder: 3146773

3052 RIVER RD

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020-3052 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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

Ms. Susan J Scherer Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

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

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SAMPLE SUMMARY

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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

ANALYTICAL RESULTS

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

Lab ID: 3146773001 Date Collected: 12/14/2020 11:37 Matrix: Water

Sample ID: 3052 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 03:09	PDK	K
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:09	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	101		%	62 - 133	SW846 8260B			12/17/20 03:09	PDK	K
4-Bromofluorobenzene (S)	92.5		%	79 - 114	SW846 8260B			12/17/20 03:09	PDK	K
Dibromofluoromethane (S)	93.1		%	78 - 116	SW846 8260B			12/17/20 03:09	PDK	K
Toluene-d8 (S)	93.8		%	76 - 127	SW846 8260B			12/17/20 03:09	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	С
Alkalinity, Total	ND	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	Α
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 18:33	JXL	В
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/29/20 01:35	JAM	В
Chloride	23.1		mg/L	2.0	EPA 300.0			12/15/20 10:29	MBW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 10:29	MBW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/22/20 14:52	PAG	1
Nitrate-N	17.8		mg/L	0.20	EPA 300.0			12/15/20 10:29	MBW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 10:29	MBW	С
рН	5.64	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	С
Phenolics	ND		mg/L	0.005	EPA 420.4	12/23/20 15:00) VXF	12/23/20 16:43	VXF	Н
Specific Conductance	226		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	С
Sulfate	ND		mg/L	2.0	EPA 300.0			12/15/20 10:29		-
			∌, ⊏	0				, .0,_0 10.20	٧٧	-

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

ANALYTICAL RESULTS

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

Lab ID: 3146773001 Date Collected: 12/14/2020 11:37 Matrix: Water

Sample ID: 3052 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator

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

ANALYTICAL RESULTS

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

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

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146773 4TH QTR 2020-3052 RIVER RD

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

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State Samples ☐Rental_Equipment Collected In Rev 8/04 Initial OLabor A Z 2 □ Pickup Sample/COC Comments Lab X rnerm ID: Special Processing Sample Disposal USACE Navy Special COC/Labels Complete/Accurate? Cont. In Good Cond.? Correct Sample Volumes? Headspace/Volatiles? Custody Seals Present? (if present) Seals Intact? Received on Ice? Correct Containers? Correct Preservation? Composite_Sampling ALS Field Services: Courier/Tracking #: "Mairix - Al-Air, DW-Drinking Water; GW=Groundwater, Ol=Oil; OL=Other Liquid; SL=Siudge; SO=Soil; WP=Wipe; Ww=Wastewater Cooler remp: No. of Coolers: Dother Reportable to PADEP? Rec ALS Quo Standard CLP-like COC #: USACE EDDS: Format Type-500 ml None പ Alkalinity, HCO3 PWSID # Yes ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057 500 ml Tb, SpC Deliverables None 겁 Data ph. TDS, NO2, NO3, CI, SO4, F, Generated by ALS Field Results Below Time 125 ml HN03 Metals: Ca, Fe, Mg, Mn, K, Na చ ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT 125 ml ES H Date K, Na 宀 Dissolved Metals: Ca, Fe, Mg, Mn, ANALYSES/METHOD REQUESTED SAMPLER. INSTRUCTIONS ON THE BACK of Containers Per Sample or 250 ml H2S04 REQUEST FOR ANALYSIS ᆸ инз-и' сор CHAIN OF CUSTODY Received By / Company Name M3 40 m ဗ္ဗ 오 2M846-8260 VOCs Enter Number 250 ml H2S04 ş LOX N 125 ml H2\$04 ₹ HO-0 40 ml 오 AG TOC (EVIEWED BY(signature): Ã Container Type Container Preservative OGGED BY(signature): winteM. Time Size O to D O 301 Fulling Will Road • Middletown, PA 17057 • 717,944,5541 • Fax: 717,944,1430 1137 Date Time Rush-Subject to ALS approval and surcharges. X Normal-Standard TAT is 10-12 business days. G=Grab; C=Composite Approved By: 12/14/20 Sample A Organisation a Maddeland, Pa 1707 a. Present 20 See 1541 a. 120, 713-110-7405 a. www.doglobide Date nquished By / Company Name Client Name: LCSWMA - Gerald E. Miller, Sr. Bill To: Lancaster County Solid Waste MA V W K Project Name/#: LCSWMA - Quarterly Sample Description/Location (as it will appear on the lab report) Conestoga, PA 17516 Gerald E. Miller, Sr. ALS) Environmental ddress: 3052 River Road Phone#: (717) 872-5117 -Y No.: 3052RIVERRD ۲ roject Comments: Jate Required: Contact: TAT Email? ax3



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

Condition of Sample Receipt Form

Client: CCSWMA Work Order #: 3146773 Initials: Date:	/) ,,	- - -
CCSWMA SIHUTTS 75	12-15	n
1. Were airbills / tracking numbers present and recorded?	YES	NO
Tracking number:		
2. Are Custody Seals on shipping containers intact?	YES	NO
3. Are Custody Seals on sample containers intact?	YES	NO -
4. Is there a COC (Chain-of-Custody) present?	ÆS	NO
5. Are the COC and bottle labels complete, legible and in agreement?	2YES	NO
5a. Does the COC contain sample locations?	PESO	NO
- 5b. Does the COC contain date and time of sample collection for all samples?	ÆS.	NO 🔩
5c. Does the COC contain sample collectors name?	CES	NO.,
5d. Does the COC note the type(s) of preservation for all bottles?		NO
5e. Does the COC note the number of bottles submitted for each sample?	25	NO
Sf: Does the COC note the type of sample, composite or grab?	£5	NO
5g. Does the COC note the matrix of the sample(s)?	05	NO
6. Are all aqueous samples requiring preservation preserved correctly?1	(E)	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?	AB .	NO
8. Are all samples within holding times for the requested analyses?	CES	NO
9. Were all sample containers received intacr and headspace free when required? (not broken, leaking, frozen, etc.)	CES	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	YES	NO
11. Were the samples received on ice?	CES .	NO
12. Were sample temperatures measured at 0.0-6.0°C	XES	ΝО
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below	(ES)	NO
13a. Are the samples required for SDWA compliance reporting?	YES	NO
13b. Did the client provide a SDWA PWS ID#?	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	YES	NO.
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	YES	NO
Cooler #:		
Temperature (°C):		
Thermometer ID: 309		
Radiological (µCi):		
COMMENTS (Required for all NO responses above and any sample non-conformance):		



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

Rev 1/20/2020





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

December 30, 2020

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

Certificate of Analysis

Project Name: CONTIGUOUS LANDOWNER- Workorder: 3146774

3044 RIVER RD

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020-3044 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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

Ms. Susan J Scherer Project Coordinator

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

SAMPLE SUMMARY

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

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

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SAMPLE SUMMARY

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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

ANALYTICAL RESULTS

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

Lab ID: 3146774001 Date Collected: 12/14/2020 11:25 Matrix: Water

Sample ID: 3044 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 03:31	PDK	K
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 03:31	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	100		%	62 - 133	SW846 8260B			12/17/20 03:31	PDK	K
4-Bromofluorobenzene (S)	92.3		%	79 - 114	SW846 8260B			12/17/20 03:31	PDK	K
Dibromofluoromethane (S)	92.7		%	78 - 116	SW846 8260B			12/17/20 03:31	PDK	K
Toluene-d8 (S)	93.8		%	76 - 127	SW846 8260B			12/17/20 03:31	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	11		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	С
Alkalinity, Total	11	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	Α
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 18:47	JXL	В
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/29/20 01:35	JAM	В
Chloride	22.8		mg/L	2.0	EPA 300.0			12/15/20 10:50	MBW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 10:50	MBW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/22/20 15:17	PAG	1
Nitrate-N	18.9		mg/L	0.20	EPA 300.0			12/15/20 10:50	MBW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 10:50	MBW	С
pН	5.96	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	С
Phenolics	ND		mg/L	0.005	EPA 420.4	12/23/20 15:00	VXF	12/23/20 16:43	VXF	Н
Specific Conductance	238		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	С
Sulfate	ND		mg/L	2.0	EPA 300.0			12/15/20 10:50		_
Canaco	110		111g/ L	2.0	2171000.0			12,10,20 10.00	.7.077	•

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

ANALYTICAL RESULTS

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

Lab ID: 3146774001 Date Collected: 12/14/2020 11:25 Matrix: Water

Sample ID: 3044 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator





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

ANALYTICAL RESULTS

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

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

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146774 4TH QTR 2020-3044 RIVER RD

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

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(ALS) Environmental	9			~		STF	SR A	REQUEST FOR ANALYSIS							ō
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301 Fulling Mill Rood + Adddletown, PA 17057 + 717,944,5541 + Fax: 717,944,1430	+ Fax: 717,944,14	90	ŀ		IPLER.	NSTR	CTIONS	SAMPLER. INSTRUCTIONS ON THE BACK	BACK			,	ľ		
Client Name: Lancaster County Solid Waste MA		Type	- AG		AN	NA.	ဗ	1	۳	굾	곡	곱	R * 3	146774	ving Lab)
Address: 1299 Harrisburg Pike, P.O. Box 4424		Container	40 m	-	125 ml 25	250 ml 4	40 ml	1 28	250 ml 1	125 ml	125 ml	500 ml	500 mh - Cooler Lemos		
Lancaster, PA 17604		Preservative	웃	\vdash	H2SO4 H2	H2S04	모	1	H2SO4 H	HNO3	ENG3	None	None No of Coolers		Initial
Contact: Dan Brown			-		\mathbf{I}	ANALY	SES/MET	ANALYSES/METHOD REQUESTED	UESTEC				_	the Spale Persons	_
Phone#: (717) 735-0193			L	F	H	H	H	-	-	r	r		Τ	Of present! Seate Interes	
Project Name/#: LCSWMA - Quarterly		_							nM			۳.		Bereived on Ican	
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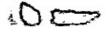


301 Fulling Mill Road Middletown, PA 17057 P: (717) 944-5541 F: (717) 944-1430

Condition of Sample Receipt Form

lient: Work Order #: Ol. 1. Initials:	Date:		
icswaa Work Order * 3144774	T5	1215	20
Were airbills / tracking numbers present and recorded?	(NE)	YES	NO
Tracking number:			
Are Custody Seals on shipping containers intact?	NONE	YES	NO
Are Custody Seals on sample containers intact?		YES	NO
Is there a COC (Chain-of-Custody) present?		€S)	NO
Are the COC and bottle labels complete, legible and in agreement?		EYES	NO
5a. Does the COC contain sample locations?		PES	NO
5b. Does the COC contain date and time of sample collection for all samples?	#:	E	NO
5c. Does the COC contain sample collectors name?		25	NO
5d. Does the COC note the type(s)-of preservation for all bottles?		CES.	·NO
5e. Does the COC note the number of bottles submitted for each sample?		XES	NO
_5f_Does the COC note the type of sample, composite or grab?		ES	NÒ
5g. Does the COC note the matrix of the sample(s)?		0	NO
Are all aqueous samples requiring preservation preserved correctly?1	N/A	PED	NO
Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		/ES	NO
Are all samples within holding times for the requested analyses?		MES	NO
Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen,	etc.)	CES	NO
Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?		YES	NO
. Were the samples received on ice?		CES	NO
. Were sample temperatures measured at 0.0-6.0°C		DES	NO
. Are the samples DW matrix'? If YES, fill out Reportable Drinking Water questions below		(3)	NO
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	NO
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO
Cooler #:	-		8
Temperature (°C):	·		
Thermometer ID: 309			
Radiological (µCi):			

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





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

Rev 1/20/2020





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

December 29, 2020

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

Certificate of Analysis

Project Name: CONTIGUOUS LANDOWNER- Workorder: 3146768

3125 RIVER RD

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020-3125 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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: 3146768 4TH QTR 2020-3125 RIVER RD

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

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SAMPLE SUMMARY

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

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

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ANALYTICAL RESULTS

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

Lab ID: 3146768001 Date Collected: 12/14/2020 14:00 Matrix: Water

Sample ID: 3125 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										,
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 01:16	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 01:16	PDK	J
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	101		%	62 - 133	SW846 8260B			12/17/20 01:16	PDK	J
4-Bromofluorobenzene (S)	93.6		%	79 - 114	SW846 8260B			12/17/20 01:16	PDK	J
Dibromofluoromethane (S)	92.5		%	78 - 116	SW846 8260B			12/17/20 01:16	PDK	J
Toluene-d8 (S)	95.9		%	76 - 127	SW846 8260B			12/17/20 01:16	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	128		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	С
Alkalinity, Total	128	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	Α
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 17:24	JXL	В
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	В
Chloride	82.3		mg/L	2.0	EPA 300.0			12/15/20 06:25	MBW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 06:25	MBW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/21/20 16:34	PAG	I
Nitrate-N	5.2		mg/L	0.20	EPA 300.0			12/15/20 06:25	MBW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 06:25	MBW	C
На	7.09	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	С
Phenolics	ND	_	mg/L	0.005	EPA 420.4	12/22/20 16:00	VXF	12/22/20 16:18	VXF	Н
Specific Conductance	553		umhos/cm	1	SM2510B-2011			12/19/20 12:31	R2B	C
Sulfate	10.9		mg/L	2.0	EPA 300.0			12/15/20 06:25		_
Junate	10.9		mg/L	2.0	EFA 300.0			12/13/20 00.25	אאפואו	O

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

ANALYTICAL RESULTS

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

Lab ID: 3146768001 Date Collected: 12/14/2020 14:00 Matrix: Water

Sample ID: 3125 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

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

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

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

The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146768 4TH QTR 2020-3125 RIVER RD

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

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<				_	CHAIN	CHAIN OF CUSTODY/	USTC) DA		Generated by ALS	y ALS	COC #:	#:
ALS) Environmental				씸	SES		Ž	REQUEST FOR ANALYSIS					
oli Opposed Laro - Americana, M. 1707 - Praint, Til Ose (M.) - Ing. P. 1744 i 170 - very styckhalana. "All Fulling Mill Road - Littedischous. DA 17077 - 717 544 6541 + Favr 717 644 1430	44 5541 + FAV: 717 944	1430	ALL SHA	_	PLER IN	STRUC		OBED AREAS MUST BE COMPLETED BY THE SAMPLER. INSTRUCTIONS ON THE BACK	THE CLIENT	ENI		ALS Que	ă
lient Name: LCSWMA - Christian C. Beck		Container	er AG		₹	8	_	4	Ч	ద	굽	4	F * 3 7 4 6 7 6 8 * .ab)
Address: 3125 River Road	100	Container	or 40 ml	nl 125 ml	nl 250 ml	n 40 ml	-	250 ml	125 mi	125 ml	1 500 ml	500 ml	Cooler Temp: Therm ID:
Conestoga, PA 17516		Presenctive	the HCI	1 H2SO4	N H2SO4	고 단	i	H2S04	HNO3	HNO3	None	None	
contact: Christian C. Beck						NALYSE	SYMETHO	ANALYSES/METHOD REQUESTED	STED				Custody Seals Present?
hone#: (717) 871-0448									,		_		(if present) Seals intact?
roject Name/#: LCSWMA - Quarterly					<u>188</u>				nM∙,	E	,я,		Received on Ice?
iil To: Lancaster County Solid Waste MA		П							βW.	'' N	POS		COC/Labels Complete/Accurate?
TAT X Normal-Standard TAT is 10-12 business days. Rush-Subject to ALS approval and surcharges.	2 business days.					so			93 ,£3	g, Mn, l	03' CI'		Cont in Good Cond.?
] हैं [Approved By:					OA 09		ac	Wetals:	M ,93 ,	105° N	1003	Correct Sample Volumes?
ax? Y No.:				-		Z8-91⁄		-N, CC				l ,Ųlini	Correct Preservation?
Sample Description/Location (as it will appear on the lab report)	Sample Time) 10 9°	cintel/**	0-0	XOT S	aber of SW8	MT LTW	Enter Number of Containers Per Sample or Field Results Below	SSIO SS	esults B. Meta	,Hq	_	CourierTracking #: Sample/COC Comments
3125RIVERRD	12/14/20 1400	g	DW 2	_	2	2	×	<u> </u> -	Ŀ	-	-	Ŀ	
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	REVIEW	REVIEWED BY(signature):	ure):					3140		391	ita rable	CLP-like	USACE
Rehinquished By / Company Name	a Date	Time		100	peived By	Received By / Company Name	ny Name		Date	E S		USACE	CE Navy NY
AND CHANGE IN	8 1244	02-11 סצינויה בנו	02	0			,	'	211/12	1	b		2
			4							7 U	Rep.	Reportable to PADEP?	Sample Disposal X
			۵								Yes	<u></u>	Lab X NC
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		\dashv	9								EDDS	EDDS: Format Type-	pe-
. G=Grab;	G=Grab; C=Composite	- Matrix - A	I=Air; DW	SHIPPII	Water, GW	ESS: 34	DOGWC	OD LAN	er Liquid;	ETOWN	, PA 170	WP=Wlpe	"Matrix - A=Arr, 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



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

Condition of Sample Receipt Form

lient: Work Order #: 211102100 Initials:			
CCSWMA DIAUTUS	75	1215	20
Were airbills / tracking numbers present and recorded?		YES	NO
Tracking number:			
Are Custody Seals on shipping containers intact?		YES	NO
Are Custody Seals on sample containers intact?		YES	NO.
Is there a COC (Chain-of-Custody) present?		(ES)	NO
Are the COC and bottle labels complete, legible and in agreement?		,	NO
5a. Does the COC contain sample locations?			NO
5b. Does the COC contain date and time of sample collection for all samples?			NO
Sc. Does the COC contain sample collectors name?		(5)	NO -
Sd. Does the COC note the type(s) of preservation for all bottles?		CES .	^NO
Se. Does the COC note the number of bottles submitted for each sample?			NO
5f-Does the COC note the type of sample, composite or grab?			NO
5g. Does the COC note the matrix of the sample(s)?		0	NO
Are all aqueous samples requiring preservation preserved correctly?1	N/A	(E)	NO
Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		NES	NO
Are all samples within holding times for the requested analyses?		25	NO
Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen,	etc.)	CES	NO
). Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?		YES	NO
1. Were the samples received on ice?		MES	NO
2. Were sample temperatures measured at 0.0-6.0°C		DES	NO
3. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below		E	NO
13a. Are the samples required for SDWA compliance reporting?		YES	NO
13b. Did the client provide a SDWA PWS ID#?		YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?		YES	NO
13d. Did the client provide the SDWA sample location ID/Description?		YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?		YES	NO
Cooler #:			
Temperature (°C):			
Thermometer ID: 309			
Radiological (µCi):			
OMMENTS (Required for all NO responses above and any sample non-con			

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

Rev 1/20/2020





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December 29, 2020

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

Certificate of Analysis

Project Name: CONTIGUOUS LANDOWNER- Workorder: 3146766

3106 RIVER RD

Purchase Order: PO-1000091 Workorder ID: 4TH QTR 2020-3106 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

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

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

Ms. Susan J Scherer Project Coordinator

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SAMPLE SUMMARY

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

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

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SAMPLE SUMMARY

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- -- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

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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Date Received: 12/14/2020 17:40

ANALYTICAL RESULTS

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

Lab ID: 3146766001 Date Collected: 12/14/2020 13:16 Matrix: Water

Sample ID: 3106 River Road, Conestoga, PA

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Toluene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Total Xylenes	ND		ug/L	3.0	SW846 8260B			12/17/20 00:30	PDK	J
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Trichloroethene	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Trichlorofluoromethane	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			12/17/20 00:30	PDK	J
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	100		%	62 - 133	SW846 8260B			12/17/20 00:30	PDK	J
4-Bromofluorobenzene (S)	93.1		%	79 - 114	SW846 8260B			12/17/20 00:30	PDK	J
Dibromofluoromethane (S)	92.1		%	78 - 116	SW846 8260B			12/17/20 00:30	PDK	J
Toluene-d8 (S)	95.3		%	76 - 127	SW846 8260B			12/17/20 00:30	PDK	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	12		mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	С
Alkalinity, Total	12	1	mg/L	5	SM2320B-2011			12/19/20 12:31	R2B	Α
Ammonia-N	ND		mg/L	0.100	ASTM D6919-09			12/24/20 16:29	JXL	В
Chemical Oxygen Demand (COD)	ND		mg/L	15	EPA 410.4			12/27/20 21:43	JAM	В
Chloride	107		mg/L	2.0	EPA 300.0			12/15/20 06:45	MBW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			12/15/20 06:45	MBW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			12/18/20 15:26	PAG	1
Nitrate-N	10.8		mg/L	0.20	EPA 300.0			12/15/20 06:45	MBW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			12/15/20 06:45	MBW	С
рН	5.91	2	pH_Units		S4500HB-11			12/19/20 12:31	R2B	С
Phenolics	ND		mg/L	0.005	EPA 420.4	12/22/20 16:00) VXF		VXF	Н
Specific Conductance	472		umhos/cm	1	SM2510B-2011		•	12/19/20 12:31	R2B	C
Sulfate	5.4		mg/L	2.0	EPA 300.0			12/15/20 06:45		_
Janato	JT		1119/L	2.0	_1 /1 000.0			12, 10,20 00.40	۷۷ ص	•

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ANALYTICAL RESULTS

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

Lab ID: 3146766001 Date Collected: 12/14/2020 13:16 Matrix: Water

Sample ID: 3106 River Road, Conestoga, PA Date Received: 12/14/2020 17:40

<u> </u>	D 1:			DDI	NA - th d	5 .				0.4
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Total Dissolved Solids	252		mg/L	25	S2540C-11			12/16/20 11:27	KXH	С
Total Organic Carbon (TOC)	ND		mg/L	0.50	SM5310B-2011			12/22/20 01:28	PAG	F
Turbidity	0.14		NTU	0.10	SM2130B-2011			12/15/20 10:49	R2B	С
METALS										
Calcium, Total	19.7		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Calcium, Dissolved	21.8		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Magnesium, Total	13.7		mg/L	0.050	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Magnesium, Dissolved	14.8		mg/L	0.10	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Manganese, Total	0.049		mg/L	0.0025	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Manganese, Dissolved	0.055		mg/L	0.0050	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Potassium, Total	2.2		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Potassium, Dissolved	2.4		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
Sodium, Total	44.4		mg/L	0.25	EPA 200.7	12/20/20 16:20	SXC	12/21/20 14:38	SRT	D1
Sodium, Dissolved	44.7		mg/L	0.50	EPA 200.7	12/18/20 07:38	SRT	12/18/20 18:27	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	6.03		pH_Units		Field			12/14/20 13:16	BGS	L
Specific Conductance, Field	438	ι	umhos/cm	1	Field			12/14/20 13:16	BGS	L
Temperature	14.90		Deg. C		Field			12/14/20 13:16	BGS	L

Ms. Susan J Scherer Project Coordinator

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

ANALYTICAL RESULTS

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

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

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.

ALS Environmental Laboratory Locations Across North America

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

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3146766 4TH QTR 2020-3106 RIVER RD

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

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<		0			S	CHAIN OF CUSTODY/	F CUS	TODY	_	Gen	Generated by ALS		# 202		-
(ALS) Environmental			İ		REQ	REQUEST FOR ANALYSIS	OR A	VALY	Sis						ō
21 Deprecá Lette - Medichieres, Pá 1700 - Prema 212-044 Cást - Far: 213-621 1/19	· www.bightiens		- AL	ALL SHA	ED ARE	ADED AREAS MUST BE COMPLETED BY THE CLIENT	BE CON	PLETED	BY THE	CLIEN	1/	_	ALS Q		-
301 Fulling Mil Road • Middletown, PA 17057 • 717,944,5541 • Fax: 717,944,1430	44.5541 + Fax: 717				SAMPLE	SAMPLER. INSTRUCTIONS ON THE BACK	NCTION	SONTH	E BACK			_			
Slient Name: LCSWMA - Aaron Fry			Continuer	y Ye	A	AN	ខ	1	4	8	교	చ	۲	*3146766*	(Tab)
Address: 3106 River Road			Container	40 ml	125 ml	250 ml	40 ml	1	250 ml 1;	125 ml	125 ml	500 mi	500 ml Co	Cooler Temp: Therm ID:	ļ
Conestoga, PA 17516			Preservative	모	HZSO4	H2S04	오	1	H2S04 H	HNO3	HNO3	None	None No.		Initial
Contact: Aaron Fry						ANAL	ANALYSES/METHOD REQUESTED	HOD REC	NESTE		1		$\overline{}$	dv Seals Present?	
hone#: (717) 669-6831						r	-	\vdash	-				T	of present) Seals Intact?	T
Project Name/#: LCSWMA - Quarterly		Γ							uW			.4		Received on Ice?	T
3ill To: LCSWMA - Aaron Fry									OM	·6		'bOs	-	COC/Labels Complete/Accurate?	
Normal-Standard TAT is 10-12 business days.	2 business day	s.							93	10.11		cı, s	0 	Cont. in Good Cond.?	
Rush-Subject to ALS approval and surcharges.	al and surchan	ges.					soc		e:) .s		-	103		Correct Containers?	
quired:	Approved By:					-	OA 09		Q Vetals		Fe, 1	02,1	1003	Correct Sample Volumes?	
man:		T				_	928-9		, co				H 'Æ	Correct Preservation?	
.axr -1 No.:		Ť		0	н	X	948	_		el			inile	Headspace/Volatiles?	
Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	10 O'	ют	>-o □	Enter Number of Containers Per Sample or Flield Results Below	of Contain	Ers Per Sar	HN E	K, N	ts Met	,dT		Courier/Tracking #: Sample(COC Comments	
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			10	0.								EDDS: Fo	EDDS: Format Type-		
G=Grab;	G=Grab; C=Composite	Matr	IX - Al=Air	DW=Drir	king Wate	CW=Grot	Indwater, O	=0ii: 0f=	Other Liqu	id; SL=S	udge: SO	=Soil; WP	"Mairix - Al=Air, DW=Drinking Water, GW=Groundwater, Ol=Oit, OL=Other Liquid; SL=Sludge; SO=Soit, WP=Wipe; WW=Wastewater		
	₹	S ENVI	CONMEN	AL SH	PPING	ODRESS	: 34 DOG	7000V	ANE. MII	OCET C	WN. PA	17057			Rev 8/04

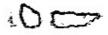


301 Fulling Mill Road Middletown, PA 17057 P: (717) 944-5541 F: (717) 944-1430

Condition of Sample Receipt Form

Client: Work Order #: O 1. 14 O 4 Initials:	Date:		
CCSWMA WORK Order # 31410766	75	1215	20
. Were airbills / tracking numbers present and recorded?		YES	NO
. Are Custody Seals on shipping containers intact?		YES	NO
3. Are Custody Seals on sample containers intact?	NONE	YES	JNO.
Is there a COC (Chain-of-Custody) present?		. ÆS	NO
. Are the COC and bottle labels complete, legible and in agreement?			NO
5a. Does the COC contain sample locations?			NO
*5b. Does the COC contain date and time of sample collection for all samples?			NO .
5c. Does the COC contain sample collectors name?			NO.
5d. Does the COC note the type(s) of preservation for all bottles?		TES	··NO
Se. Does the COC note the number of bottles submitted for each sample?			NO
			NO
5g. Does the COC note the matrix of the sample(s)?		03	NO
. Are all aqueous samples requiring preservation preserved correctly?1	N/A	E	NO
. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		. /B	NO
Are all samples within holding times for the requested analyses?		. KES	NO
. Were all sample containers received intact and headspace free when required? (not broken, leaking, froz	en, etc.)	· ATES	NO
0. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?		YES	NO
1. Were the samples received on ice?		CYES	NO
2. Were sample temperatures measured at 0.0-6.0°C			NO
3. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below			NO
13a. Are the samples required for SDWA compliance reporting?		YES	NO
13b. Did the client provide a SDWA PWS ID#?		YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?		YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?		YES	NO
Cooler #:		-8	
Temperature (°C):	_	- 1	
Thermometer ID: 309	_	-	

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





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

Rev 1/20/2020