COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revi 02/11/2022	sed
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: La	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SECT	TON B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	ounty		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name:LCSWMA			
Address: 3044 RIVER	ROAD		
Phone No.:			
Sampling Point: Latitude: 39 °	57 ' 30.58 " Longitude: 76 ° 26 ' 11.25 "		
Depth to Water Level:	ft. Measured from: 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) 11/0	5/2021 Sample Collection Time: 10:25 AM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	301 Fulling Mill Road		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	12/03/2021		
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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	27	SM20-2321
CALCIUM, TOTAL	18	EPA 200.7
CALCIUM, DISSOLVED	18.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	21.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	10.4	EPA 200.7
MAGNESIUM, DISSOLVED	11.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	11	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	10	EPA 200.7
NITRATE-NITROGEN	17.6	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	7.29	FIELD
pH-LAB (SU)	7.35	SM4500B
POTASSIUM, TOTAL	2.4	EPA 200.7
POTASSIUM, DISSOLVED	2.3	EPA 200.7
SODIUM, TOTAL	8.3	EPA 200.7
SODIUM, DISSOLVED	8.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	298	FIELD
SPEC. COND., LAB (umhos/cm)	342	EPA 120.1
SULFATE	2.6	EPA 300
ALKALINITY	27	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	200	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.31	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

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 02/11/2022
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: L	ancaster County Solid Waste Manage	
Site Name: F	rey Farm Landfill	
Facility ID (as issued by DEP): 1	01389	
SECT	TION B. PRIVATE WATER SUPPLY INFORMATION	
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DE° 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	on)?: X Yes No	
Sample Date:(mm/dd/yy) 11/0	5/2021 Sample Collection Time: 10:50 AM	
Laboratory(ies) Performing Analysis	ALS Environmental	
(include address and phone number)	301 Fulling Mill Road	
	Middletown, PA 17057 (717) 944-5541	
Lab Accreditation Number(s)	22-293	
Lab Analysis Date	11/21/2021	
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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	11	SM20-2321
CALCIUM, TOTAL	15.4	EPA 200.7
CALCIUM, DISSOLVED	15.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	23.8	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	8.3	EPA 200.7
MAGNESIUM, DISSOLVED	8.3	EPA 200.7
MANGANESE, TOTAL (ug/l)	27	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	27	EPA 200.7
NITRATE-NITROGEN	19.7	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	6.69	FIELD
pH-LAB (SU)	6.64	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	2	EPA 200.7
SODIUM, TOTAL	7.5	EPA 200.7
SODIUM, DISSOLVED	7.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	273	FIELD
SPEC. COND., LAB (umhos/cm)	329	EPA 120.1
SULFATE	3.3	EPA 300
ALKALINITY	11	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	178	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.3	SM 2130B

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 02/11/2022
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: La	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SECT	TON B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DE° 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	ROAD		
Phone No.:			
Sampling Point: Latitude: 39 °	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:			
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) 11/0	5/2021 Sample Collection Time: 3:37 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	301 Fulling Mill Road		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	11/18/2021		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.12	SM4500D
BICARBONATE ALKALINITY	14	SM20-2321
CALCIUM, TOTAL	10.4	EPA 200.7
CALCIUM, DISSOLVED	10.9	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	29.5	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	11.6	EPA 200.7
MAGNESIUM, DISSOLVED	11.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	140	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	140	EPA 200.7
NITRATE-NITROGEN	16.6	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.32	EPA 300
pH-FIELD (SU)	6.84	FIELD
pH-LAB (SU)	6.7	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	2.3	EPA 200.7
SODIUM, TOTAL	8.3	EPA 200.7
SODIUM, DISSOLVED	8.6	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	316	FIELD
SPEC. COND., LAB (umhos/cm)	303	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	14	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	90	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.71	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

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 02/11/2022	
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	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	ounty		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name:LCSWMA			
Address: 3060 RIVER	ROAD		
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:	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) 11/0	5/2021 Sample Collection Time: 1:30 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	301 Fulling Mill Road		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	12/03/2021		
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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	32	SM20-2321
CALCIUM, TOTAL	10.2	EPA 200.7
CALCIUM, DISSOLVED	10.2	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	33.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	10.9	EPA 200.7
MAGNESIUM, DISSOLVED	11.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	110	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	99	EPA 200.7
NITRATE-NITROGEN	7.4	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	7.3	FIELD
pH-LAB (SU)	7.23	SM4500B
POTASSIUM, TOTAL	2.9	EPA 200.7
POTASSIUM, DISSOLVED	2.6	EPA 200.7
SODIUM, TOTAL	8.6	EPA 200.7
SODIUM, DISSOLVED	8.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	276	FIELD
SPEC. COND., LAB (umhos/cm)	372	EPA 120.1
SULFATE	28.4	EPA 300
ALKALINITY	32	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	188	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.11	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

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

	Date Prepared/Revised 02/11/2022
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: La	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SECT	ION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	bunty		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name: SENSENICH	l		
Address: 3076 RIVER	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 micro	n)?: X Yes No		
Sample Date:(mm/dd/yy) 11/09	5/2021 Sample Collection Time: 1:35 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	301 Fulling Mill Road		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	11/18/2021		
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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	11	SM20-2321
CALCIUM, TOTAL	12.5	EPA 200.7
CALCIUM, DISSOLVED	12.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	58.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	57	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	7.8	EPA 200.7
MAGNESIUM, DISSOLVED	7.9	EPA 200.7
MANGANESE, TOTAL (ug/l)	160	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	160	EPA 200.7
NITRATE-NITROGEN	8.7	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	6.47	FIELD
pH-LAB (SU)	6.52	SM4500B
POTASSIUM, TOTAL	3.4	EPA 200.7
POTASSIUM, DISSOLVED	3.4	EPA 200.7
SODIUM, TOTAL	23.5	EPA 200.7
SODIUM, DISSOLVED	23.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	337	FIELD
SPEC. COND., LAB (umhos/cm)	418	EPA 120.1
SULFATE	12.5	EPA 300
ALKALINITY	11	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	210	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.14	SM 2130B

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.
SENSENICH

PS

Sample Date

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 02/11/2022	
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: L	ancaster County Solid Waste Manage
Site Name: F	rey Farm Landfill
Facility ID (as issued by DEP): 1	01389
SECT	TION B. PRIVATE WATER SUPPLY INFORMATION
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")
Facility Name: Frey Farm L	andfill
County: Lancaster C	ounty
Township or Municipality: MANOR TO	WNSHIP
Landowner Name:LCSWMA	
Address: 3079 RIVER	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) 11/0	5/2021 Sample Collection Time: 9:10 AM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road
	Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/18/2021
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.
Comments:	

Facility I.D. Number

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	33	SM20-2321
CALCIUM, TOTAL	9.3	EPA 200.7
CALCIUM, DISSOLVED	10.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	34.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	5.6	EPA 200.7
MAGNESIUM, DISSOLVED	6.4	EPA 200.7
MANGANESE, TOTAL (ug/l)	38	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	41	EPA 200.7
NITRATE-NITROGEN	0.22	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.3	EPA 300
pH-FIELD (SU)	7.24	FIELD
pH-LAB (SU)	7.1	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	2.1	EPA 200.7
SODIUM, TOTAL	12.8	EPA 200.7
SODIUM, DISSOLVED	13.6	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	237	FIELD
SPEC. COND., LAB (umhos/cm)	266	EPA 120.1
SULFATE	10.4	EPA 300
ALKALINITY	33	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	134	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

	Date Prepared/Revised 02/11/2022
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: La	ancaster County Solid Waste Manage
Site Name: F	rey Farm Landfill
Facility ID (as issued by DEP): 1	01389
SECT	TON B. PRIVATE WATER SUPPLY INFORMATION
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")
Facility Name: Frey Farm L	andfill
County: Lancaster C	
Township or Municipality: MANOR TO	WNSHIP
Landowner Name: WEBER	
Address: 3088 RIVER	ROAD
Phone No.:	
Sampling Point: Latitude: 39 °	57 ' 21 " Longitude: 76° 26 ' 7.1 "
Depth to Water Level:	ft. Measured from: 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) 11/09	5/2021 Sample Collection Time: 1:53 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road
	Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	12/03/2021
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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	164	SM20-2321
CALCIUM, TOTAL	0.15	EPA 200.7
CALCIUM, DISSOLVED	0.15	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	255 E	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	0.07	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	7.7	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	8.26	FIELD
pH-LAB (SU)	8.17	SM4500B
POTASSIUM, TOTAL	2.5	EPA 200.7
POTASSIUM, DISSOLVED	2.3	EPA 200.7
SODIUM, TOTAL	249	EPA 200.7
SODIUM, DISSOLVED	261	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	349	FIELD
SPEC. COND., LAB (umhos/cm)	1580	EPA 120.1
SULFATE	2.8	EPA 300
ALKALINITY	164	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	688	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.

PS WEBER

Sample Date

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 02/11/2022	
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: L	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SECT	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")			
Facility Name: Frey Farm L	andfill		
County: Lancaster C	ounty		
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 micro			
Sample Date:(mm/dd/yy) 11/0	5/2021 Sample Collection Time: 12:07 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	301 Fulling Mill Road		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	12/03/2021		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	21	SM20-2321
CALCIUM, TOTAL	12.7	EPA 200.7
CALCIUM, DISSOLVED	12.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	39.7	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	5.7	EPA 200.7
MAGNESIUM, DISSOLVED	5.9	EPA 200.7
MANGANESE, TOTAL (ug/l)	8.1	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	8	EPA 200.7
NITRATE-NITROGEN	4.2	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)		FIELD
pH-LAB (SU)	6.88	SM4500B
POTASSIUM, TOTAL	1.6	EPA 200.7
POTASSIUM, DISSOLVED	1.4	EPA 200.7
SODIUM, TOTAL	16.1	EPA 200.7
SODIUM, DISSOLVED	15.3	EPA 200.7
SPEC. COND., FIELD (umhos/cm)		FIELD
SPEC. COND., LAB (umhos/cm)	286	EPA 120.1
SULFATE	8.6	EPA 300
ALKALINITY	21	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	156	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.17	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

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

	Date Prepared/Revised 02/11/2022	
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: L	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP): 1	01389		
SECT	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")			
Facility Name: Frey Farm 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 °	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			
Sample Date:(mm/dd/yy) 11/0	5/2021 Sample Collection Time: 12:34 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	301 Fulling Mill Road		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	11/18/2021		
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 FRY

Sample Date

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	100	SM20-2321
CALCIUM, TOTAL	46.7	EPA 200.7
CALCIUM, DISSOLVED	59.7	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	105	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	16.8	EPA 200.7
MAGNESIUM, DISSOLVED	21.6	EPA 200.7
MANGANESE, TOTAL (ug/l)	61	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	52	EPA 200.7
NITRATE-NITROGEN	11.1	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

11/05/2021

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	8.06	FIELD
pH-LAB (SU)	7.97	SM4500B
POTASSIUM, TOTAL	2.3	EPA 200.7
POTASSIUM, DISSOLVED	2.3	EPA 200.7
SODIUM, TOTAL	39.9	EPA 200.7
SODIUM, DISSOLVED	41.9	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	473	FIELD
SPEC. COND., LAB (umhos/cm)	887	EPA 120.1
SULFATE	5.4	EPA 300
ALKALINITY	100	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	390	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

Monitoring Point I.D. No.

PS FRY

Sample Date

11/05/2021

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

T Please indicate detection limit if analyte is not detected.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 02/11/2022
DEP USE ONLY
Date Received

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

All information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 52, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Act 101 Section	1103
	SECTION A. SITE IDENTIFIER
Applicant/permittee: La	ancaster County Solid Waste Manage
Site Name: F	rey Farm Landfill
Facility ID (as issued by DEP): 1	01389
SECT	TON B. PRIVATE WATER SUPPLY INFORMATION
INDICATE THE LATITUDE AND LONGIT	UDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")
Facility Name: Frey Farm L	andfill
County: Lancaster C	
Township or Municipality: MANOR TO	WNSHIP
Landowner Name: BECK	
Address: 3125 RIVER	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) 11/09	5/2021 Sample Collection Time: 12:49 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road
	Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/21/2021
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

11/05/2021

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	165	SM20-2321
CALCIUM, TOTAL	0.25	EPA 200.7
CALCIUM, DISSOLVED	0.25	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	108	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	88	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.058	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	5.4	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number 101389

Monitoring Point I.D. No.

PS BECK

Sample Date

11/05/2021

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)	7.88	FIELD
pH-LAB (SU)	8.06	SM4500B
POTASSIUM, TOTAL	3.4	EPA 200.7
POTASSIUM, DISSOLVED	3.3	EPA 200.7
SODIUM, TOTAL	148	EPA 200.7
SODIUM, DISSOLVED	152	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	502	FIELD
SPEC. COND., LAB (umhos/cm)	916	EPA 120.1
SULFATE	15.5	EPA 300
ALKALINITY	165	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	426	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1	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

11/05/2021

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

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

T Please indicate detection limit if analyte is not detected.





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December 1, 2021

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-

PO-1000371

DOWNER- Workorder:

3106 RIVER RD

Workorder ID: 4TH QTR 2021-3106 RIVER RD

3210967

Purchase Order:
Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3210967 4TH QTR 2021-3106 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3210967001	3106 River Road, Conestoga, PA	Water	11/5/2021 12:34	11/5/2021 17:10	Mr. Brian G Shade
3210967002	Trip Blank	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3210967 4TH QTR 2021-3106 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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Sample Type: FLDQC

PROJECT SUMMARY

Workorder: 3210967 4TH QTR 2021-3106 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3210967002 Sample ID: Trip Blank

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3210967 4TH QTR 2021-3106 RIVER RD

Lab ID: 3210967001 Date Collected: 11/5/2021 12:34 Matrix: Water

Sample ID: 3106 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:36	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	86.1	С	%	70 - 130	EPA 524.2			11/12/21 01:36	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	100	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	100	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/18/21 08:30	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 09:05	ALK	В
Chloride	105	С	mg/L	2.0	EPA 300.0			11/6/21 17:46	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			11/6/21 17:46	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/16/21 15:53	PAG	1
Nitrate-N	11.1	С	mg/L	0.20	EPA 300.0			11/6/21 17:46	GJB	С
Nitrite-N	ND	С	mg/L	0.20	EPA 300.0			11/6/21 17:46	GJB	С
рН	7.97	C,2	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	C	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	887	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	5.4	С	mg/L	2.0	EPA 300.0			11/6/21 17:46	GJB	С
Total Dissolved Solids	390	С	mg/L	25	S2540C-11			11/12/21 11:11	AKH	С
Total Organic Carbon (TOC)	ND	С	mg/L	0.50	SM5310B-2011			11/11/21 02:54	PAG	F

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ANALYTICAL RESULTS

Workorder: 3210967 4TH QTR 2021-3106 RIVER RD

Lab ID: 3210967001 Date Collected: 11/5/2021 12:34 Matrix: Water

Sample ID: 3106 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.26	С	NTU	0.10	SM2130B-2011	· · · · · · · · · · · · · · · · · · ·		11/6/21 10:51	LXZ	С
METALS										
Calcium, Total	46.7	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:51	SRT	D
Calcium, Dissolved	59.7	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:32	SRT	Ε
Iron, Total	ND	С	mg/L	0.030	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:51	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:32	SRT	E
Magnesium, Total	16.8	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:51	SRT	D
Magnesium, Dissolved	21.6	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	3 SRT	11/17/21 14:32	SRT	E
Manganese, Total	0.061	С	mg/L	0.0025	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:51	SRT	D
Manganese, Dissolved	0.052	С	mg/L	0.0050	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:32	SRT	E
Potassium, Total	2.3	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:51	SRT	D
Potassium, Dissolved	2.3	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:32	SRT	E
Sodium, Total	39.9	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:51	SRT	D
Sodium, Dissolved	41.9	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:32	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	8.06	С	pH_Units		Field			11/5/21 12:34	BGS	N
Specific Conductance, Field	473	С	umhos/cm	1	Field			11/5/21 12:34	BGS	Ν
Temperature	14.50	С	Deg. C		Field			11/5/21 12:34	BGS	N

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210967 4TH QTR 2021-3106 RIVER RD

Lab ID: 3210967002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: Trip Blank Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By *Cntr*

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/15/21 09:04 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210967 4TH QTR 2021-3106 RIVER RD

PARAMETER QUALIFIER	S
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Lab ID	#	Sample ID	Analytical Method	Analyte
3210967001	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.	
3210967001	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.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3210967 4TH QTR 2021-3106 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3210967001	3106 River Road, Conestoga, PA	ASTM D6919-09		
3210967001	3106 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3210967001	3106 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3210967001	3106 River Road, Conestoga, PA	EPA 300.0		
3210967001	3106 River Road, Conestoga, PA	EPA 410.4		
3210967001	3106 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3210967001	3106 River Road, Conestoga, PA	EPA 524.2		
3210967001	3106 River Road, Conestoga, PA	Field		
3210967001	3106 River Road, Conestoga, PA	S2540C-11		
3210967001	3106 River Road, Conestoga, PA	S4500HB-11		
3210967001	3106 River Road, Conestoga, PA	SM2130B-2011		
3210967001	3106 River Road, Conestoga, PA	SM2320B-2011		
3210967001	3106 River Road, Conestoga, PA	SM2510B-2011		
3210967001	3106 River Road, Conestoga, PA	SM5310B-2011		
3210967001	3106 River Road, Conestoga, PA	SW846 9020B		

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ALL STANDER ALL	ALS) Enuironmental					REO	REQUEST FOR ANALYSIS	FOR /	NAL	SIS					
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Control Cont	Client Name: LCSW/MA - Aaron Fry			Container	AG	AN	1000	99		님		Ы	100		eceiving Lab)
Consisting PA 1756	Address: 3106 River Road	Table 1	=	Container	40 ml	125.ml	250 ml	40 ml	1		1	1000	916	-	מאת
Total Flower Py	Conestoga, PA 17516			Preservative	당	H2S04	-	AscHCI	1		0000	-	+)	Initial v
Total	Contact: Aaron Fry						ANA	YSES/MI	THOD R	FOUESTE	30000	20	100	5	× [
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	Project Name/#: LCSWMA - Quarterly				7) //-					'uW			(in present) Seals Intact	
TAY	Bill To: LCSWMA - Aaron Fry										'бw	4 =	'+0	COC/Labels Complete/Accurate?	
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Sample Description/Location Sample Date Time Sample Date Date Time Sample Date D		1986		_		Н	,	NOC			S Olved		Ods		
Trip Blank	Sample Description/Location (se it will appear on the lab report)	Sample Date	Time		001		TOX TOX			SHN ample or 1	K' N'	3	3,41	Courier/Trackin	1
Trip Blank 11062021118 11062021118 11062021118 11062021118 ALS Field Services: Phickup and reported by Company Name 11062021118 11062021118 ALS Field Services: Phickup and reported by Company Name 11067mposite Services: Phickup and reported By Company Name 11062021118 Sample Date Image: Processing and reported By Company Name Image: Phickup and Phickup an	13106RIVERRD	11/05/21	1234	G DW		-	2				-	-		STUBLING TOTAL	,
Control Cont	2. Trip Blank	11/05/21	0171	S. WG	10)			100						700000	
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ALS Field Services: Pickur	4														
October Company Name	3														
Composite Sampling Composi	9														
Composite Services: Pickun	1			1.00		2				委		Table 1	相		
Composite Sampling Review Company Name Date Time Received By / Company Name Date Time Received By / Company Name Date Time Received By / Company Name Date Time Reportable to PADEP? Sample Disposal Cab X Cab Cab X	# - W - 8			i a						1000	- To				
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11 S S 1714 2	Relinquished By/ Company Nam		Date	Time		Receiv	ed By / Co	mpany N	ame		-	1	elive		ÀN
Reportable to PADEP? Sample Disposal X	11	8	100007		2		}			Ξ	=		⊒a		2
Yes Lab X	3	1			4	4							Reportabl	Sample Dispose	<u>₹</u>
8 PWSID # 10 EDDS: Format Type-	2				و	1							Yes		2
												ď	# CISA		
					19							ш	DDS: For	nat Type-	



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:	124	
1. Were airbills / tracking	numbers present and recorded?			YES	NO
	Tracking number:		$-1 \wedge$		
2. Are Custody Seals on s	hipping containers intact?		NONE	YES	NO
3. Are Custody Seals on s	ample containers intact?		NONE	YES	NO
4. Is there a COC (Chain-o	f-Custody) present?			KED	NO
5. Are the COC and bottle	labels complete, legible and in agreement?		*****************	YES	NO
5a. Does the COC cont	ain sample locations?			YES	NO
5b. Does the COC cont	tain date and time of sample collection for all sa	amples?		YES	NO
5c. Does the COC cont	ain sample collectors name?	***************************************		YES	NO
5d. Does the COC note	the type(s) of preservation for all bottles?	****		YES	NO
5e. Does the COC note	the number of bottles submitted for each samp	ple?		YES	NO
5f. Does the COC note	the type of sample, composite or grab?			VES	NO
5g. Does the COC note	the matrix of the sample(s)?			YES	NO
6. Are all aqueous sample	s requiring preservation preserved correctly?	**************************************	N/A	YES	NO
7. Were all samples placed	In the proper containers for the requested ana	lyses, with sufficient volume?		YES	NO
8. Are all samples within h	olding times for the requested analyses?			YES	NO
9. Were all sample contain	ers received intact and headspace free when rec	quired? (not broken, leaking, frozen, etc)	YES	NO
10. Did we receive trip bla	inks (applies only for methods EPA 504, EPA 52	4.2 and 1631E (LL Hg)7	N/A	XE	NO
11. Were the samples rece	lived on ice?	***************************************	***************************************	YES	NO
	ures measured at 0.0-6.0°C			YES	NO
	natrix ? If YES, fill out Reportable Drinking Water			YES	NO
	equired for SDWA compliance reporting?			YES	(NO)
	vide a SDWA PWS ID#?		and the same of th	YES	NO
	preserved SDWA samples pH 5-97			YES	NO
	vide the SDWA sample location ID/Description?		1.	YES	NO
	vide the SDWA sample type (D, E, R, C, P, S)?			YES	NO
Cool Temperature Thermomete Radiological ((°C): 0				

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





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December 11, 2021

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: 3211110

3100 RIVER RD

Purchase Order: PO-1000371 Workorder ID: 4TH QTR 2021-3100 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3211110 4TH QTR 2021-3100 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3211110001	3100 River Road, Conestoga, PA	Water	11/5/2021 12:07	11/5/2021 17:10	Mr. Brian G Shade
3211110002	TRIP BLANK	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3211110 4TH QTR 2021-3100 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3211110 4TH QTR 2021-3100 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3211110001 **Sample ID:** 3100 River Road,

Sample ID: 3100 River Road, Sample Type: SAMPLE Conestoga, PA

This sample was filtered in the laboratory.

Lab ID: 3211110002 Sample ID: TRIP BLANK Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3211110 4TH QTR 2021-3100 RIVER RD

Lab ID: 321110001 Date Collected: 11/5/2021 12:07 Matrix: Water

Sample ID: 3100 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:55	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	85.2	С	%	70 - 130	EPA 524.2			11/12/21 06:55	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	21	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	21	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/19/21 09:28	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 08:45	ALK	В
Chloride	39.7	С	mg/L	2.0	EPA 300.0			12/3/21 20:16	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			12/3/21 20:16	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/17/21 12:11	PAG	I
Nitrate-N	4.2	C,2	mg/L	0.20	EPA 300.0			12/3/21 20:16	GJB	С
Nitrite-N	ND	C,3	mg/L	0.20	EPA 300.0			12/3/21 20:16	GJB	С
рН	6.88	C,4	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	С	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	286	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	8.6	С	mg/L	2.0	EPA 300.0			12/3/21 20:16	GJB	С
Total Dissolved Solids	156	C	mg/L	25	S2540C-11			11/12/21 11:34		С
		_	····ə, –	_5	0_0.00			,, _ 1 11.55		_

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ANALYTICAL RESULTS

Workorder: 3211110 4TH QTR 2021-3100 RIVER RD

Lab ID: 321110001 Date Collected: 11/5/2021 12:07 Matrix: Water

Sample ID: 3100 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.17	C,5	NTU	0.10	SM2130B-2011			12/1/21 13:02	BXD	С
METALS										
Calcium, Total	12.7	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:57	SRT	D
Calcium, Dissolved	12.6	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:46	SRT	Е
Iron, Total	ND	С	mg/L	0.030	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:57	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:46	SRT	Е
Magnesium, Total	5.7	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:57	SRT	D
Magnesium, Dissolved	5.9	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:46	SRT	Е
Manganese, Total	0.0081	С	mg/L	0.0025	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:57	SRT	D
Manganese, Dissolved	0.0080	С	mg/L	0.0050	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:46	SRT	Е
Potassium, Total	1.6	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:57	SRT	D
Potassium, Dissolved	1.4	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:46	SRT	Е
Sodium, Total	16.1	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:57	SRT	D
Sodium, Dissolved	15.3	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:46	SRT	Е

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211110 4TH QTR 2021-3100 RIVER RD

Lab ID: 321110002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: TRIP BLANK Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/15/21 09:09 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211110 4TH QTR 2021-3100 RIVER RD

PARAMETER QUA	LIFIER	S		
Lab ID	#	Sample ID	Analytical Method	Analyte
3211110001	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 0	CaCO3/L.	
3211110001	2	3100 River Road, Conestoga, PA	EPA 300.0	Nitrate-N
Analyte was analyz	ed past	the 48 hour holding time.		
3211110001	3	3100 River Road, Conestoga, PA	EPA 300.0	Nitrite-N
Analyte was analyz	ed past	the 48 hour holding time.		
3211110001	4	3100 River Road, Conestoga, PA	S4500HB-11	рН
			rs identified as "analyze immediately" r ding time when analyzed in the laborate	

3211110001 5 3100 River Road, Conestoga, PA SM2130B-2011 Turbidity

This sample was analyzed after the 48 hour holding time for Turbidity as required by the method.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3211110 4TH QTR 2021-3100 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3211110001	3100 River Road, Conestoga, PA	ASTM D6919-09		
3211110001	3100 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3211110001	3100 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3211110001	3100 River Road, Conestoga, PA	EPA 300.0		
3211110001	3100 River Road, Conestoga, PA	EPA 410.4		
3211110001	3100 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3211110001	3100 River Road, Conestoga, PA	EPA 524.2		
3211110001	3100 River Road, Conestoga, PA	S2540C-11		
3211110001	3100 River Road, Conestoga, PA	S4500HB-11		
3211110001	3100 River Road, Conestoga, PA	SM2130B-2011		
3211110001	3100 River Road, Conestoga, PA	SM2320B-2011		
3211110001	3100 River Road, Conestoga, PA	SM2510B-2011		
3211110001	3100 River Road, Conestoga, PA	SM5310B-2011		
3211110001	3100 River Road, Conestoga, PA	SW846 9020B		

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ame: LCSWMA-Larry Kirchner S: 3100 River Road Conestoga, PA 17516 Larry Kirchner (717) 584-0030 Namel#: LCSWMA-Quarterly Lancaster County Solid Waste MA X Normal-Standard TAT is 10-12 business Rush-Subject to ALS approval and surce quited: A Normal-Standard TAT is 10-12 business X Normal-Standard TAT is 10-12 business A Normal-Standard TAT is 10-12 business X Normal-Subject to ALS approval and surce quited: A Normal-Standard TAT is 10-12 business X Normal-Standard TAT is 10-12 business A Normal-Standard TAT is	A	A Soutramental		476		ď	CHA	INOF	CUS	CHAIN OF CUSTODY	SIS.	Gen	Generated by ALS		ŏ	
Activity	Substitute Control C	M. Dogwood Leve - Friedderwa, PA 17022 - Peace 737 449-5547 - No. 11 Part 1430 -	sweezingsbakese.	Ī	ALL S	19	AREA	MUST	BE CO			E CI IE	11	163	35	
17 18 18 18 18 18 18 18	The control of the	34 Dogwood Lane + Middletown, PA 17057 + 717,944.	5541 • Fax 717.944.14	-			APLER.	INSTR	UCTION	SONT		7		-1	źn.	
177 September 178	25-100 New Road 15-01 25	Client Name: LCSWMA - Lamy Kirchner		Contain	- 4	TO B	N	N.	99	1	님	10000	1	.P.	Miles I	
Concession Fig. Conc	Concession PA 1756 Page Page	Address: 3100 River Road		Contain			-	11000	lm 0	1	1000	20000	+	-	10	[] Therm ID:
Company Name Comp	Company Name Comp	Conestoga, PA 17516		Preserva	Sec.		-	_	CHC	1		1000	HNO3	None	1	*
11/05/21 12/07 1	March School March Mar	Contact: Lany Kirchner	1121					ANALY	SESIME	THOD RE	QUESTE	0			0.	dv Seals Present?
Manual Standard VI No. 10 to The Local Manual Manual Standard VI No. 10 to The Local Manual		Phone#: (717) 584-0030						100		O die	1888		305			(if present) Seale Intact?
Normalistic County Solid Wash MA Normalistic County May Normalistic County May Normalistic County May Normalistic County May Normalistic County Solid May Normalistic County May Normalistic May Normalist	All the state of	Project Name/#: LCSWMA - Quarterly		1200		nd"	1					'uw'	and it	y	i.	Received on Ice?
Numen Sandard TAT is 10-12 business days. Approved By: Appro	Normal-Standard Aff is 10-12 business days. Approved By: A business days. A busin	3III To: Lancaster County Solid Waste MA		755					201			бм		' Þ09		COC/Labels Complete/Accurate?
Refrictive by Company Name Date Time	The control of the	×	2 business days.	fis.								'9-J 'E		' CI' 8	上	Cont. In Good Cond.?
1	1	Rush-Subject to ALS approva	al and surcharges.				-					eo :sii		EON	3	Correct Containers?
The control of the		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	proved by.	1	- 3		100					etelm	40	'ZON	100	Correct Sample Volumes?
11/05/21 17/05 1	### Supplied By Company Name			_		-	- 1		NOC		-		i.	bc Da'v	ł "Ytini	Correct Preservation?
11(05/21 1207 G DW 2 1 2 3 X 1 1 1 1 1 1 1 1 1	11/05/21 1207 G DW 2 1 2 3 X 1 1 1 1 1 1 1 1 1 3 C C C C C C C C C		-	J 10 E			Con all	XOI	254				200	T ,Hq S ,dT	-79	Headspace/Volatiles? Lurier/Tracking #:
11/05/21 1207 G DW 2 1 2 3 X 1 1 1 1 1 1 1 1 1	11/05/21 1207 G DW 2 1 2 3 X 1 1 1 1 1 1 1 1 1	las it wit appear on the tab report)	5000)+	1	1	Enter	Number	Contain		al	ield Resu				Sample/COC Comments
11/05/21 1746 G DW 2 3 3 5 5 1 1 1 1 1 1 1 1	11/05/27 CTAG C DW 2 C DW	-		တ				2	-		-	÷	1	,	_	
Dissoluted by Company Name Date Time Composite_Sampling Rent Composite_Sampling Rent Company Name Date Time Special Processing Reportable to PADEP? Sample Disposal Vise Lab X Cab	Coccop BY Company Name		of the control	G D	N				2		1					Piver
Control Cont	Company Name		-					4								Polls
COGED BY (signature): COMPANY COMPAN	COGGED BY (signature):					* 1						1				VPC0
Composite Sampling Composi	Concept BY Company Name Date Time Received By I Company Name Date Time Reportable to PADEP2 Sample Disposal							14					4			18
COGED BY/signature: Standard Shecial Processing	Control of the cont			Test												
Court Cour	Composite Pickul Pickul	All the second					2				1					
Confection Composite Com	Composite Sampling Revires: Pickur															
COGGED BY(signature):	COGGED BY (signature): EVIEWED BY (signa			i ii	522											□Pickup
COGGED BY (signature):	COGGED BY(signature):	0														
Navy Special	REVIEWED BY/signature : Received By / Company Name Date Time Received By / Company Name Date Time Reportable to PADEP? Sample Disposal Ves Lab X Special Lab X Speci	roject Comments:	COGGED	3Y (signature	#				1	3TAO		-361		1	Standar	Special Processing
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		Relinguighed By / Company Name				S.	beeived	3y / Com	pany Na	me		-	1		USACE	Navy
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Yes	Special Spec				4	4							1988	Reporta	ole to PAD	Sample Disposal X
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10 EDDS: Format Type-	* G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WV=Wipe; WW=Wastewater				00								Ь	# QISM		Special
The rate of the late of the la	G=Grab; C=Composite "Matrix - Al=Arr, DW=Drinking Water; GW=Groundwater; Ol=Olil: OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater	***************************************			9								1000	EDDS: F	rmat Type-	S



301 Fulling Mill Road Middletown, PA 17057

P: (717) 044 EE41

F: (71

3211110

Condition of Sample Receipt Form

Client:	Lancaster County Solid Waste Authority	Initials: ASC	Date:	10/2	1
1. Were airbills / trackin	ng numbers present and recorded:		NONE) YES	NO
	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		-		
	shipping containers intact?			YES	NO
	sample containers intact?			YES	NO
	n-of-Custody) present?			(YES)	NO
5. Are the COC and bot	tle labels complete, legible and in agreement?	***************************************		YES	NO
5a. Does the COC co	ontain sample locations?				NO
5b. Does the COC co	ontain date and time of sample collection for all sar	mples?		(YES)	NO
Sc. Does the COC co	ontain sample collectors name?	0000		(ES)	NO
5d, Does the COC n	ote the type(s) of preservation for all bottles?	noicean	W	YES	(NO
	ote the number of bottles submitted for each samp			(YES)	NO
5f. Does the COC no	ote the type of sample, composite or grab?			YES	NO
5g. Does the COC n	ote the matrix of the sample(s)?			YES	NO
6. Are all aqueous samp	oles requiring preservation preserved correctly?	7.14.4)	N/A	YES	NO
	ced in the proper containers for the requested anal			(YES)	NO
and the second s	n holding times for the requested analyses?				NO
A trade to a firm of the trade of the trade of a capacity	ainers received intact and headspace free when req				NO
the same of the sa	blanks (applies only for methods EPA 504, EPA 524			YES	NO
	eceived on ice?	to the state of th		YES	NO
12. Were sample tempe	ratures measured at 0.0-6.0°C	ASC III	0/21_	A B	NO
	V matrix ? If YES, fill out Reportable Drinking Water			(YES)	NO
	s required for SDWA compliance reporting?			YES	(NO
	provide a SDWA PWS ID#?		0.745	YES	NO
1986 800 300 300 300 30	s unpreserved SDWA samples pH 5-9?			YES	NO
	provide the SDWA sample location ID/Description?			YES	NO
The state of the s	provide the SDWA sample location iD/Descriptions provide the SDWA sample type (D, E, R, C, P, S)?			YES	NO
Temperati	ooler #:				

same day collection

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 16, 2021

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

Certificate of Analysis

3211109

Project Name: CONTIGUOUS LANDOWNER- Workorder:

3088 RIVER RD

Purchase Order: PO-1000371 Workorder ID: 4TH QTR 2021-3088 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3211109 4TH QTR 2021-3088 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3211109001	3088 River Road, Conestoga PA	Water	11/5/2021 13:53	11/5/2021 17:10	Mr. Brian G Shade
3211109002	TRIP BLANK	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3211109 4TH QTR 2021-3088 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3211109 4TH QTR 2021-3088 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3211109002 Sample ID: TRIP BLANK Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3211109 4TH QTR 2021-3088 RIVER RD

Lab ID: 3211109001 Date Collected: 11/5/2021 13:53 Matrix: Water

Sample ID: 3088 River Road, Conestoga PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:29	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	90.9	С	%	70 - 130	EPA 524.2			11/12/21 06:29	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	164	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	164	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/19/21 09:58	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 08:45	ALK	В
Chloride	255	C,E	mg/L	2.0	EPA 300.0			12/3/21 20:02	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			12/3/21 20:02	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/17/21 11:44	PAG	1
Nitrate-N	7.7	C,2	mg/L	0.20	EPA 300.0			12/3/21 20:02	GJB	С
Nitrite-N	ND	C,3	mg/L	0.20	EPA 300.0			12/3/21 20:02	GJB	С
рН	8.17	C,4	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	C	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	1580	С	umhos/cm	2	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	2.8	С	mg/L	2.0	EPA 300.0			12/3/21 20:02	GJB	С
Total Dissolved Solids	688	C	mg/L	25	S2540C-11			11/12/21 11:34		С
Total Organic Carbon (TOC)	ND	C	mg/L	0.50	SM5310B-2011			11/11/21 22:12		F

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ANALYTICAL RESULTS

Workorder: 3211109 4TH QTR 2021-3088 RIVER RD

Lab ID: 3211109001 Date Collected: 11/5/2021 13:53 Matrix: Water

Sample ID: 3088 River Road, Conestoga PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.14	C,5	NTU	0.10	SM2130B-2011			12/1/21 13:02	BXD	С
METALS										
Calcium, Total	0.15	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:39	SRT	D
Calcium, Dissolved	0.15	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:42	SRT	Ε
Iron, Total	ND	С	mg/L	0.030	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:39	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:42	SRT	Ε
Magnesium, Total	0.070	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:39	SRT	D
Magnesium, Dissolved	ND	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:42	SRT	Ε
Manganese, Total	ND	С	mg/L	0.0025	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:39	SRT	D
Manganese, Dissolved	ND	С	mg/L	0.0050	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:42	SRT	Ε
Potassium, Total	2.5	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:39	SRT	D
Potassium, Dissolved	2.3	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:42	SRT	Ε
Sodium, Total	249	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:39	SRT	D
Sodium, Dissolved	261	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:42	SRT	Ε
FIELD PARAMETERS										
pH, Field (SM4500B)	8.26	С	pH_Units		Field			11/5/21 13:53	BGS	Ν
Specific Conductance, Field	349	С	umhos/cm	1	Field			11/5/21 13:53	BGS	Ν
Temperature	17.20	С	Deg. C		Field			11/5/21 13:53	BGS	Ν

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211109 4TH QTR 2021-3088 RIVER RD

Lab ID: 3211109002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: TRIP BLANK Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/15/21 09:08 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211109 4TH QTR 2021-3088 RIVER RD

PARAMETER Q	UALIFIER	es .		
Lab ID	#	Sample ID	Analytical Method	Analyte
3211109001	1	3088 River Road, Conestoga PA	SM2320B-2011	Alkalinity, Total
The Total Alkalin	ity is titrate	ed to a pH of 4.5 and reported as mg	CaCO3/L.	
3211109001	2	3088 River Road, Conestoga PA	EPA 300.0	Nitrate-N
Analyte was ana	lyzed pas	t the 48 hour holding time.		
3211109001	3	3088 River Road, Conestoga PA	EPA 300.0	Nitrite-N
Analyte was ana	lyzed pas	t the 48 hour holding time.		
3211109001	4	3088 River Road, Conestoga PA	S4500HB-11	pH
		alyze immediately" analysis. Paramete re analyzed outside of the method hol		
3211109001	5	3088 River Road, Conestoga PA	SM2130B-2011	Turbidity
This sample was	s analyzed	after the 48 hour holding time for Tur	bidity as required by the method.	
3211109001	Е	3088 River Road, Conestoga PA	EPA 300.0	Chloride
Result reported	exceeds ir	nstrument calibration		

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3211109 4TH QTR 2021-3088 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3211109001	3088 River Road, Conestoga PA	ASTM D6919-09		
3211109001	3088 River Road, Conestoga PA	EPA 200.7	EPA ACID	
3211109001	3088 River Road, Conestoga PA	EPA 200.7	EPA TRMD	
3211109001	3088 River Road, Conestoga PA	EPA 300.0		
3211109001	3088 River Road, Conestoga PA	EPA 410.4		
3211109001	3088 River Road, Conestoga PA	EPA 420.4	420.4/9066	
3211109001	3088 River Road, Conestoga PA	EPA 524.2		
3211109001	3088 River Road, Conestoga PA	Field		
3211109001	3088 River Road, Conestoga PA	S2540C-11		
3211109001	3088 River Road, Conestoga PA	S4500HB-11		
3211109001	3088 River Road, Conestoga PA	SM2130B-2011		
3211109001	3088 River Road, Conestoga PA	SM2320B-2011		
3211109001	3088 River Road, Conestoga PA	SM2510B-2011		
3211109001	3088 River Road, Conestoga PA	SM5310B-2011		
3211109001	3088 River Road, Conestoga PA	SW846 9020B		

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Application Company Name Compa	\				SP	CHAIN OF CUSTODY		STOC	XIS.	3	Generated by ALS		COC 4		- 5
The control of the	Copesid Loss a Mediatrons, 76 (703) • Prison 717-bas (54) • Res 717-bas (18) • correspond	Webs	4		DED AF	EAS MU	ST BE CO	OMPLET		HE CLE	/ IN			긐	-
15. Commonts: Commonts: Commonts: Commonts: Commonts Commonts: C	24 Degreed Larm - Middletown, PA 17057 - 717 944:5541 - Fa lient Name: LCSWMA - Hans Weber and Deb Kalbe	ax. 717.944.1430 ach	Container	AG	SAMP	AN AN	99	NO SNO	Pl BA		ā	ā	۵		ide i or
Commenter Comm	ddress: 3088 River Road		Container	40 ml	125ml	250 ml	40 ml	1	250 mi	125 ml	125 ml	500 ml	00 100	=	277
The strict Notice and Deb Kelbach			Preservative	103	H2S04	100	_	1	H2SO4	HNO3	HNO3	None	7	‡	
## (1714-19-19-19-19-19-19-19-19-19-19-19-19-19-	ontact: Hans Weber and Deb Kalbach			Name of the last			ALYSESIA	METHOD	REQUEST			100	100	Custody Seals Present?	-
Comments	hone#: (717) 419-7982			the second			1		Condition of		200			(if present) Seals Intact?	
Comments Comment Com	roject Name/#: LCSWMA - Quarterly									nM.		,H.	41	Received on Ice?	
The control of the	ill To: LCSWMA - Hans Weber and Deb Kalbach			11						·βW ·	eN ,)	*os	8	OCILabels Complete/Accurate?	
The first state of the first s	×	less days.								,e7, Fe,	y 'uW'	3' Cl' 8		Cont. in Good Cond.?	
The content of the	Rush-Subject to ALS approval and state Required:	surcharges. Rv:				*				als: C	:БW 16	ON '	50	Correct Containers?	
3mmple Description Sample Counter Sample Counter Counter Sample Counter Counter Sample Sample		 							go:	JəM I	a, Fe	ZON	нсс	Correct Sample Volumes?	
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Yes Lab X				4	7		/	١	ī			Report	able to PADE	Sample Disposa	
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10				80				7				# QISMd	- Pi	Special	
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301 Fulling Mill Road Middletown, F

P: (717) 94 F: (717) 94

3211109

Condition of Sample Receipt Form

Lancaster County Solid Waste Authority

Client: Initials:	Date:	loi	21
Were airbills / tracking numbers present and recorded?	NONE-	YES	NO
Tracking number:	-		
2. Are Custody Seals on shipping containers intact?	. NONE	YES	NO
3. Are Custody Seals on sample containers intact?		YES	NO
4. Is there a COC (Chain-of-Custody) present?		_	NO
5. Are the COC and bottle labels complete, legible and in agreement?			(NO)
Sa. Does the COC contain sample locations?			NO
56. Does the COC contain date and time of sample collection for all samples?		YES	NO
Sc. Does the COC contain sample collectors name?		(YES)	NO
5d. Does the COC note the type(s) of preservation for all bottles?		YES	(NO)
Se. Does the COC note the number of bottles submitted for each sample?		MES	NO
Sf. Does the COC note the type of sample, composite or grab?	***************************************	YES	NO
Sg. Does the COC note the matrix of the sample(s)?		. /	NO
6. Are all aqueous samples requiring preservation preserved correctly? ¹	N/A	YES	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?			NO
8. Are all samples within holding times for the requested analyses?		_	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		(AB)	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?		MEST	NO
		YES	NO
11. Were the samples received on ice?	nort	YES	(NO)
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	NO
13a. Are the samples required for SDWA compliance reporting?		YES	(NO)
13b. Did the client provide a SDWA PWS ID#?	2	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?	1919	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?		YES	NO
Cooler #: Temperature (°C): 11 Thermometer ID: 514			
memorineter io. 3 1-1			
Radiological (µCi):			
COMMENTS (Paguinal for all NO seconds about 1			

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





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December 1, 2021

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: 3210970

Purchase Order: PO-1000371 Workorder ID: 4TH QTR 20213079 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3210970 4TH QTR 20213079 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3210970001	3079RIVERRD	Water	11/5/2021 09:10	11/5/2021 17:10	Mr. Brian G Shade
3210970002	TRIP BLANK	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3210970 4TH QTR 20213079 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3210970 4TH QTR 20213079 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3210970002

Sample ID: TRIP BLANK

Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3210970 4TH QTR 20213079 RIVER RD

Lab ID: 3210970001 Date Collected: 11/5/2021 09:10 Matrix: Water

Sample ID: 3079RIVERRD Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 02:56	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	88.2	С	%	70 - 130	EPA 524.2			11/12/21 02:56	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	33	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	33	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/18/21 07:13	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 09:05	ALK	В
Chloride	34.2	С	mg/L	2.0	EPA 300.0			11/6/21 16:23	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			11/6/21 16:23	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/16/21 16:31	PAG	1
Nitrate-N	0.22	С	mg/L	0.20	EPA 300.0			11/6/21 16:23	GJB	С
Nitrite-N	0.30	С	mg/L	0.20	EPA 300.0			11/6/21 16:23	GJB	С
рН	7.10	C,2	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	Ċ	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	266	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	10.4	C	mg/L	2.0	EPA 300.0			11/6/21 16:23	GJB	С
Total Dissolved Solids	134	C	mg/L	25	S2540C-11			11/12/21 11:11	AKH	C
iolai Diocolvoa Collac	. 0 -	_	1119/ -	20	320-00 11			, 12/21 11.11	7 (1 (1)	•

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ANALYTICAL RESULTS

Workorder: 3210970 4TH QTR 20213079 RIVER RD

Lab ID: 3210970001 Date Collected: 11/5/2021 09:10 Matrix: Water

Sample ID: 3079RIVERRD Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	Ву	Cntr
	recounts	i iag	Office	NDL	Wiethed	1 Toparea	Dy .	7 trialy 200		Ona
Turbidity	ND	С	NTU	0.10	SM2130B-2011			11/6/21 10:51	LXZ	С
METALS										
Calcium, Total	9.3	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 13:55	SRT	D
Calcium, Dissolved	10.5	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:35	SRT	Ε
Iron, Total	ND	С	mg/L	0.030	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:55	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/16/21 12:28	3 SRT	11/17/21 14:35	SRT	Е
Magnesium, Total	5.6	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 13:55	SRT	D
Magnesium, Dissolved	6.4	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	3 SRT	11/17/21 14:35	SRT	Е
Manganese, Total	0.038	С	mg/L	0.0025	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:55	SRT	D
Manganese, Dissolved	0.041	С	mg/L	0.0050	EPA 200.7	11/16/21 12:28	3 SRT	11/17/21 14:35	SRT	Е
Potassium, Total	2.1	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:55	SRT	D
Potassium, Dissolved	2.1	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	3 SRT	11/17/21 14:35	SRT	Е
Sodium, Total	12.8	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:55	SRT	D
Sodium, Dissolved	13.6	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	3 SRT	11/17/21 14:35	SRT	Е
FIELD PARAMETERS										
pH, Field (SM4500B)	7.24	С	pH_Units		Field			11/5/21 09:10	BGS	Ν
Specific Conductance, Field	237	С	umhos/cm	1	Field			11/5/21 09:10	BGS	Ν
Temperature	14.90	С	Deg. C		Field			11/5/21 09:10	BGS	Ν

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210970 4TH QTR 20213079 RIVER RD

Lab ID: 3210970002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: TRIP BLANK Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/15/21 09:05 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210970 4TH QTR 20213079 RIVER RD

Lab ID	#	Sample ID	Analytical Method	Analyte	
3210970001	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.		
3210970001	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: 3210970 4TH QTR 20213079 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3210970001	3079RIVERRD	ASTM D6919-09		
3210970001	3079RIVERRD	EPA 200.7	EPA ACID	
3210970001	3079RIVERRD	EPA 200.7	EPA TRMD	
3210970001	3079RIVERRD	EPA 300.0		
3210970001	3079RIVERRD	EPA 410.4		
3210970001	3079RIVERRD	EPA 420.4	420.4/9066	
3210970001	3079RIVERRD	EPA 524.2		
3210970001	3079RIVERRD	Field		
3210970001	3079RIVERRD	S2540C-11		
3210970001	3079RIVERRD	S4500HB-11		
3210970001	3079RIVERRD	SM2130B-2011		
3210970001	3079RIVERRD	SM2320B-2011		
3210970001	3079RIVERRD	SM2510B-2011		
3210970001	3079RIVERRD	SM5310B-2011		
3210970001	3079RIVERRD	SW846 9020B		

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Control Cont	AREAS MUST BE COMPLETED BY THE CLIENT / MPLER. INSTRUCTIONS ON THE BACK.		
Selection Sample Name Solid Wester NA Solid Wester N	IL LEN. INSTRUCTIONS ON THE BACK.	ALS C	
Part		1	-11
Size 1971			(de lab)
Control Cont	250 ml 40 ml — 250 ml 125 ml 125 ml	500 ml 500 ml L	1165
COMMAN	H2SO4 AscHCI - H2SO4 HNO3 HNO3	None No second	7
Control Cont		No. of Coo	N Initial
The By I Company Name Date Time Date Time Date Time By I Company Name Date I Company	THE PROPERTY OF THE PROPERTY O	Custody Seals Present?	
Schouly Solid Waste MA The Subject to ALS approval and surchanges. Approved By: App		(if present) Seals Intact?	
Sample of the second TAT is 10-72 business days. Approved By: Approved	вИ		
No:	/g, Mn, K,	SC Collabels Complete/Accurate?	
No:	OD Metal	В НСОЗ	
11/05/21 17/05 1	e: Cs	Oc I, Vhir	
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		Yes Lab X	§][
	PW	PWSID# Special	
10 EDDS: Format Type-	9	EDDS: Format Type-	100



301 Fulling Mill Road Middletown, PA 17057 P: (717) 944-9541 F: (717) 944-1430

Condition of Sample Receipt Form

Client:	Work Order #:	Initials:	Date:	-17:	u
1. Were airbills / tracking nu	mbers present and recorded?		1	YES	NO -
	Tracking number:		-1()		
2. Are Custody Seals on ship	ping containers intact?	· · · · · · · · · · · · · · · · · · ·	NONE	YES	NO
3. Are Custody Seals on sam	ple containers intact?		NONE	YES	NO
4. Is there a COC (Chain-of-C	ustody) present?			XTE	NO
5. Are the COC and bottle lal	bels complete, legible and in agreement?			445	NO
5a. Does the COC contain	sample locations?			YES	NO
5b. Does the COC contain	date and time of sample collection for all sam	nples?	(YES	NO
5c. Does the COC contain	sample collectors name?	·		YES	NO
5d. Does the COC note th	e type(s) of preservation for all bottles?			YES	NO
Se. Does the COC note th	e number of bottles submitted for each samp	le?		YES	NO
5f. Does the COC note the	e type of sample, composite or grab?		imimimi	YES	NO
5g. Does the COC note th	e matrix of the sample(s)?			YES	NO
6. Are all aqueous samples re	equiring preservation preserved correctly?		N/A	YES	NO
7. Were all samples placed in	the proper containers for the requested analy	yses, with sufficient volume?		YES	NO -
8. Are all samples within hold	ding times for the requested analyses?			YES.	NO
9. Were all sample containers	received intact and headspace free when req	uired? (not broken, leaking, frozen, etc.)		YES	NO
the second secon	s (applies only for methods EPA 504, EPA 524			MA	NO
	ed on ice?			YES	NO
	es measured at 0.0-6.0°C			YES	NO
13. Are the samples DW mate	rix ? If YES, fill out Reportable Drinking Water	questions below		YES	NO
13a. Are the samples requ	lired for SDWA compliance reporting?		N/A	YES	CNO
	e a SDWA PWS ID#?			YES	NO
13c. Are all aqueous unpr	eserved SDWA samples pH 5-9?	***************************************	NA	YES	NO
	e the SDWA sample location ID/Description?			YES	NO
13e. Did the client provide	e the SDWA sample type (D, E, R, C, P, S)?		NA	YES	NO
Cooler :	#:		1		
Temperature (°C	D: 6				
Thermometer II	<u> </u>		_		
Radiological (µC	0:				

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





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December 1, 2021

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:

3076 RIVER RD

PO-1000371

Workorder ID: 4TH QTR 2021-3076 RIVER RD

3210963

Purchase Order:
Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3210963 4TH QTR 2021-3076 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3210963001	3076 River Road, Conestoga, PA	Water	11/5/2021 13:35	11/5/2021 17:10	Mr. Brian G Shade
3210963002	Trip Blank	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3210963 4TH QTR 2021-3076 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.

Standard Acronyms/Flags

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3210963 4TH QTR 2021-3076 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3210963002

Sample ID: Trip Blank

Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3210963 4TH QTR 2021-3076 RIVER RD

Lab ID: 3210963001 Date Collected: 11/5/2021 13:35 Matrix: Water

Sample ID: 3076 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared I	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/11/21 21:15	TMP	J
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	88.1	С	%	70 - 130	EPA 524.2			11/11/21 21:15	TMP	J
WET CHEMISTRY										
Alkalinity, Bicarbonate	11	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	11	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/18/21 09:34	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 09:05	ALK	В
Chloride	58.9	С	mg/L	2.0	EPA 300.0			11/6/21 17:04	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			11/6/21 17:04	GJB	С
Halogen, Total Organic (TOX)	38.7	С	ug/L	20.0	SW846 9020B			11/16/21 13:07	PAG	1
Nitrate-N	8.7	С	mg/L	0.20	EPA 300.0			11/6/21 17:04	GJB	С
Nitrite-N	ND	С	mg/L	0.20	EPA 300.0			11/6/21 17:04	GJB	С
рН	6.52	C,2	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	C	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	418	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	12.5	C	mg/L	2.0	EPA 300.0			11/6/21 17:04	GJB	C
Total Dissolved Solids	210	C	mg/L	25	S2540C-11			11/12/21 11:11	AKH	C
Total Organic Carbon (TOC)	ND	С	mg/L	0.50	SM5310B-2011			11/11/21 02:54	PAG	F
Total Organic Carbon (100)	ND	C	mg/L	0.50	GIVIOO 1010-2011			11/11/21 02.04	1 70	1

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ANALYTICAL RESULTS

Workorder: 3210963 4TH QTR 2021-3076 RIVER RD

Lab ID: 3210963001 Date Collected: 11/5/2021 13:35 Matrix: Water

Sample ID: 3076 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.14	С	NTU	0.10	SM2130B-2011			11/6/21 10:51	LXZ	С
METALS										
Calcium, Total	12.5	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:45	SRT	D
Calcium, Dissolved	12.5	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:41	SRT	Е
Iron, Total	0.057	С	mg/L	0.030	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:45	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:41	SRT	E
Magnesium, Total	7.8	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:45	SRT	D
Magnesium, Dissolved	7.9	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:41	SRT	Е
Manganese, Total	0.16	С	mg/L	0.0025	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:45	SRT	D
Manganese, Dissolved	0.16	С	mg/L	0.0050	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:41	SRT	Е
Potassium, Total	3.4	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:45	SRT	D
Potassium, Dissolved	3.4	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:41	SRT	E
Sodium, Total	23.5	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:45	SRT	D
Sodium, Dissolved	23.4	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:41	SRT	Е
FIELD PARAMETERS										
pH, Field (SM4500B)	6.47	С	pH_Units		Field			11/5/21 13:35	BGS	М
Specific Conductance, Field	337	С	umhos/cm	1	Field			11/5/21 13:35	BGS	М
Temperature	14.00	С	Deg. C		Field			11/5/21 13:35	BGS	М

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210963 4TH QTR 2021-3076 RIVER RD

Lab ID: 3210963002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: Trip Blank Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/12/21 09:17 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210963 4TH QTR 2021-3076 RIVER RD

PARAMETER QUALIFI

Lab ID	#	Sample ID	Analytical Method	Analyte
3210963001	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.	
3210963001	2	3076 River Road, Conestoga, PA	S4500HB-11	pH

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

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3210963 4TH QTR 2021-3076 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3210963001	3076 River Road, Conestoga, PA	ASTM D6919-09		
3210963001	3076 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3210963001	3076 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3210963001	3076 River Road, Conestoga, PA	EPA 300.0		
3210963001	3076 River Road, Conestoga, PA	EPA 410.4		
3210963001	3076 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3210963001	3076 River Road, Conestoga, PA	EPA 524.2		
3210963001	3076 River Road, Conestoga, PA	Field		
3210963001	3076 River Road, Conestoga, PA	S2540C-11		
3210963001	3076 River Road, Conestoga, PA	S4500HB-11		
3210963001	3076 River Road, Conestoga, PA	SM2130B-2011		
3210963001	3076 River Road, Conestoga, PA	SM2320B-2011		
3210963001	3076 River Road, Conestoga, PA	SM2510B-2011		
3210963001	3076 River Road, Conestoga, PA	SM5310B-2011		
3210963001	3076 River Road, Conestoga, PA	SW846 9020B		

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24 Cognosof Letter - Middeborne, Pa. 12557 - Printer, 717 Asia - Staff - Nov. 717 Asia (1410) - Went Jangsbasson			-	1		5	のにはないこうこうがはい	200				
301 Fulling Mill Road + Middletown, PA 17057 + 717.944.5541 + Fax: 717.944.1430	FBX: 717.944.1	1	ALL SHA	DED AR	AS MUST	T BE CO	ADED AREAS MUST BE COMPLETED BY THE CLIENT SAMPLER INSTRUCTIONS ON THE PACK	D BY TH	E CLIEN	11	ALS	Que 3210963
Client Name: LCSWMA - Brian Sensenich		Container	AG	AN	AN	8		PL PL	ъ	a.	PL PI	Receipt minimum
Į.		Container	40 ml	125 ml	250 ml	40 ml	1	250 ml 1	125 ml	E	500 ml 500 ml)y
7516		Preservative	HCI	H2SO4	H2SO4	AscHCI	1	H2SO4	100	HNO3	None	cooler remp: C mem ID: C
Contact: Brian Sensenich				The second second	ANA	VSEC/ME	ANALYSES/METHOD BEOLIESTED	Oliceter	3	359	00	No. of Coc
Phone#: (717) 676-5779	*			1000	VIIIV	- OF OF INTERNATION O	A COULT	MOESIE		Service of Service	180	Custody Seals Present?
Project Name/#: LCSW/MA - Quarterly						10		uy)	*LUIA			(if present) Seals Intact?
Bill To: LCSWMA - Brian Sensenich	藍、			li.				. "	ı '6ı	-	聖明	Received on loe?
TAT X Normal-Standard TAT is 10-12 business days.	ess days.			ļ,				3 6	8, Fe, N	1' 01' 80 W ^u ' K'		COC/Labels Complete/Accurate? Cont. In Good Cond.?
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Email?								This	ALAN E	185	965	Contract December 1
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(as if will appear on the lab report) Date	Тіте	*G or	OT	W. C.	Enter Number	of Contain	524 K. Weise Of Containers Per Sample or Field Results Be	MH3	K, N	3	Tb, S	Courier/Tracking #:
3076RIVERRD 11/05/21	1 1335	S DW	6		0	×			-			Sample/COC Comments
Trip Blank					,				-			
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roject Comments:	LOGGED BY(signature):	(signature):					31140		Sheri	-		Special Droppesing
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			10							EDI	EDDS: Format Type-	10 EDDS: Format Type-



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

Condition of Sample Receipt Form

W (-	YES YES YES YES YES	NO NO NO NO
NONE	YES YES YES YES	NO NO NO
VONE	YES YES	NO NO
VONE	YES YES	NO NO
	YES	NO NO
	YES	NO

***************************************		NO
	VEC	140
	100	NO
	YES	NO
	YES	NO
	YES	NO
***************************************	YES	NO
	YES	NO
N/A	YES	NO
ent volume?	YES	NO
	YES	NO
	100	NO
		NO
	YES	NO
	YES	NO
		NO
		1
		NO
7.75.47.47.47.47.44.44.44.44.44.44.44.44.44.	100	NO
		NO
1	YES	NO
	n, leaking, frozen, etc.)	YES YES N/A PES N/A YES PES PES PES PES PES PES PES

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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 11, 2021

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: 3211103

Purchase Order: PO-1000371 Workorder ID: 4TH QTR 2021 3060 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3211103 4TH QTR 2021 3060 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3211103001	3060RIVERRD	Water	11/5/2021 13:30	11/5/2021 17:10	Mr. Brian G Shade
3211103002	TRIP BLANK	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3211103 4TH QTR 2021 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3211103 4TH QTR 2021 3060 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3211103002 Sample ID: TRIP BLANK Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3211103 4TH QTR 2021 3060 RIVER RD

Lab ID: 3211103001 Date Collected: 11/5/2021 13:30 Matrix: Water

Sample ID: **3060RIVERRD** Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 06:02	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	85.3	С	%	70 - 130	EPA 524.2			11/12/21 06:02	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	32	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	32	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/16/21 14:57	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 08:45	ALK	В
Chloride	33.4	С	mg/L	2.0	EPA 300.0			12/3/21 19:34	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			12/3/21 19:34	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/16/21 16:57	PAG	1
Nitrate-N	7.4	C,2	mg/L	0.20	EPA 300.0			12/3/21 19:34	GJB	С
Nitrite-N	ND	C,3	mg/L	0.20	EPA 300.0			12/3/21 19:34	GJB	С
рН	7.23	C,4	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	C	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	372	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	28.4	С	mg/L	2.0	EPA 300.0			12/3/21 19:34	GJB	C
Total Dissolved Solids	188	C	mg/L	25	S2540C-11			11/12/21 11:34		C
								,,		-

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ANALYTICAL RESULTS

Workorder: 3211103 4TH QTR 2021 3060 RIVER RD

Lab ID: 3211103001 Date Collected: 11/5/2021 13:30 Matrix: Water

Sample ID: 3060RIVERRD Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.11	C,5	NTU	0.10	SM2130B-2011			12/1/21 13:02	BXD	С
METALS										
Calcium, Total	10.2	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	3 SXC	11/12/21 13:30	SRT	D
Calcium, Dissolved	10.2	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:39	SRT	E
Iron, Total	ND	С	mg/L	0.030	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:30	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:39	SRT	Е
Magnesium, Total	10.9	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:30	SRT	D
Magnesium, Dissolved	11.2	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:39	SRT	E
Manganese, Total	0.11	С	mg/L	0.0025	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:30	SRT	D
Manganese, Dissolved	0.099	С	mg/L	0.0050	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:39	SRT	E
Potassium, Total	2.9	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:30	SRT	D
Potassium, Dissolved	2.6	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:39	SRT	E
Sodium, Total	8.6	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 13:30	SRT	D
Sodium, Dissolved	8.4	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 14:39	SRT	E
FIELD PARAMETERS										
pH, Field (SM4500B)	7.30	С	pH_Units		Field			11/5/21 13:30	BGS	N
Specific Conductance, Field	276	С	umhos/cm	1	Field			11/5/21 13:30	BGS	N
Temperature	14.60	С	Deg. C		Field			11/5/21 13:30	BGS	N

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211103 4TH QTR 2021 3060 RIVER RD

Lab ID: 3211103002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: TRIP BLANK Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/15/21 09:07 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211103 4TH QTR 2021 3060 RIVER RD

PARAMETER QU	ALIFIER	RS		
Lab ID	#	Sample ID	Analytical Method	Analyte
3211103001	1	3060RIVERRD	SM2320B-2011	Alkalinity, Total
The Total Alkalinity	is titrat	ed to a pH of 4.5 and reported as mg	CaCO3/L.	
3211103001	2	3060RIVERRD	EPA 300.0	Nitrate-N
Analyte was analy	zed pas	t the 48 hour holding time.		
3211103001	3	3060RIVERRD	EPA 300.0	Nitrite-N
Analyte was analy	zed pas	t the 48 hour holding time.		
3211103001	4	3060RIVERRD	S4500HB-11	рН
		, ,	ers identified as "analyze immediately"	

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

3211103001 5 3060RIVERRD SM2130B-2011 Turbidity

This sample was analyzed after the 48 hour holding time for Turbidity as required by the method.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3211103 4TH QTR 2021 3060 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3211103001	3060RIVERRD	ASTM D6919-09		
3211103001	3060RIVERRD	EPA 200.7	EPA ACID	
3211103001	3060RIVERRD	EPA 200.7	EPA TRMD	
3211103001	3060RIVERRD	EPA 300.0		
3211103001	3060RIVERRD	EPA 410.4		
3211103001	3060RIVERRD	EPA 420.4	420.4/9066	
3211103001	3060RIVERRD	EPA 524.2		
3211103001	3060RIVERRD	Field		
3211103001	3060RIVERRD	S2540C-11		
3211103001	3060RIVERRD	S4500HB-11		
3211103001	3060RIVERRD	SM2130B-2011		
3211103001	3060RIVERRD	SM2320B-2011		
3211103001	3060RIVERRD	SM2510B-2011		
3211103001	3060RIVERRD	SM5310B-2011		
3211103001	3060RIVERRD	SW846 9020B		

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301 Fulling Mill Road + Middletown, PA 17057 + 717,944 5541 + Fax: 717.944 1430	ax: 717.944.14		ą	SAMPL	ER. INST	RUCTIO	NO SN	SAMPLER. INSTRUCTIONS ON THE BACK	Ж.			35 	211103	
Client Name: Lancaster County Solid Waste MA		Container	AG	AN	AN	8	.	굽	굽	ద	占	ā		eiving Lab)
Address: 1299 Harrisburg Pike, P.O. Box 4424		Container	40 ml	125 ml	250 ₪	40 ml	1	250 ml	125 ml	125 ml	500 ml	500 ml	Cooler Temp: Therm ID:	574
Lancaster, PA 17604		Preservative	H	H2S04	H2SO4	AscHCI	1	H2S04	HNO3	HN03	None	None	No. of Coolers:	N Initial
Contact: Dan Brown					ANA	LYSES/N	ETHOD	ANALYSES/METHOD REQUESTED					Custody Seals Present?	
Phone#: (717)735-0193									4		C. IA		(if present) Seals Intact?	
Project Name/#: LCSWMA - Quarterly	lile.								nΜ,	e	,A,	0000	Received on Ice?	
Bill To: Lancaster County Solid Waste MA						- 1			βW .	3N '>	₩OS		COCILabels Complete/Accurate?	
TAT Normal-Standard TAT is 10-12 business days.	ss days.							98	Ca, Fe	('uW '6	'lo" (ci	1	Cont. in Good Cond.?	
Date Required: Approved By:	y:							- 4)	:slete	M '9:)S' N	803	Correct Sample Volumes?	
i _m i.								doc	ew p	1 ,sC		ЭН (Correct Preservation?	
		_	0	НС	X	000) 'N-€) :slet	SpC	Ytinilie	Headspace/Volatiles?	
Sample Description/Location Sample (as it wil appear on the lab report) Date	Time	*G or	001	o-o	OT Numb	er of Cont	준 ainers Per	Enter Number of Containers Per Sample or Field Results Below	Pield Res	Met ults Belo	'Hd		Courier/Tracking #: Sample/COC Comments	nts
1 3060RIVERRD 11/05/21	1 1330	G DW	2	+	2	3	×	1	,		*	+		
2. Trip Blank 11/05/21	120	G DW				2	2005 	done						
8										100				
4														
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9	Nand.										Total Control			
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8														
6	1							- T				#	L	up Cleabor
10													Other:	Likental_Equipment
Project Comments:	LOGGED BY	LOGGED BY(signature):						-311AG		3/11	Si	Standard	rd Special Processing	State Samples
	REVIEWED	REVIEWED BY(signature):	::		H			SUVO		341	sta rable	CLP-like	e USACE	Collected In
Relinquished By / Company Name	Date	Time		Recei	ved By / (Received By / Company Name	Name		Date	Time		USACE	Navy	ž
1 SIGNINGER ALS	11.5-21	1710	\mathbb{Z}	(١			181	1710	a			⊋
3)4								Report	Reportable to PADEP?	DEP? Sample Disposal	× A
O.			9)							Yes		(¥)	<u>2</u>
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• G=Grab; C=Composite	osite ***	Aatrix - Al=,	Air; DW=[Orinking Wa	ter; GW=G	sroundwate	ir, Ol=Oil;	OL=Other	Liquid; SL	-Sludge;	SO=Soil; W	P=Wipe; V	** **Matrix - Al=Air, DW=Drinking Water, GW=Groundwater, Ol=Oil; OL=Other Liquid, SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater	POIN OUN



301 Fulling Mill Road Middletown, PA 17057

P: (717) 944 F: (717) 944

3211103

Condition of Sample Receipt Form

Client:	Lancaster County Solid Waste Authority	Initials:	Date:	101	21
1. Were airbills / tracking n	umbers present and recorded?	***************************************	(ONE	YES	NO
A 10	Tracking number:		_		
	pping containers intact?			YES	NO
3. Are Custody Seals on san	nple containers intact?		NONE	YES	NO
4. Is there a COC (Chain-of-	Custody) present?	······	***************************************	(YES)	NO
5. Are the COC and bottle la	abels complete, legible and in agreement?	***************************************		YES	NO
5a. Does the COC contai	n sample locations?		***************************************	YES,	NO
5b. Does the COC contai	in date and time of sample collection for all sai	mples?		(YES)	NO
5c. Does the COC contain	n sample collectors name?	derivate desirativativativate en		MES	NO.
5d. Does the COC note to	he type(s) of preservation for all bottles?	***************************************			80
5e. Does the COC note to	he number of bottles submitted for each samp	le?		MEST	NO
	ne type of sample, composite or grab?				NO
	he matrix of the sample(s)?				NO
	requiring preservation preserved correctly?			YES	NO
the second secon	n the proper containers for the requested anal		1.0	_	NO
	Iding times for the requested analyses?				NO
	rs received intact and headspace free when req				NO
	ks (applies only for methods EPA 504, EPA 524			(YES)	NO
					NO
12. Were sample temperatur	res measured at 0.0-5.0°C	no day collo	017700	(ES)	1.00
13 Are the samples DW mat	trix ? If YES, fill out Reportable Drinking Water	mastine below	201	YES	0
	juired for SDWA compliance reporting?				NO
the second of th	사이트 (YES	(NO)
A second	de a SDWA PWS ID#?		Secretary Transfer	YES	NO
	reserved SDWA samples pH 5-9?			YES	NO
	de the SDWA sample location ID/Description?			YES	NO
13e. Did the client provid	de the SDWA sample type (D, E, R, C, P, S)?		NA	YES	NO
Cooler	#:				
	11				
Temperature (°	C):	·			
Thermometer I	me 74				
memorial i				ė.	
Radiological (µC	zI):				
COMMENTS (Requir	red for all NO responses above	and any sample non-con	formance)		

³Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease

Rev 1/20/2020

is made in the analytical department at the time of or following the analysis





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 1, 2021

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: 3210944

Purchase Order: PO-1000371 Workorder ID: 4TH QTR 20213056 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3210944 4TH QTR 20213056 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3210944001	3056RIVERRD	Water	11/5/2021 15:37	11/5/2021 17:10	Mr. Brian G Shade
3210944002	TRIP BLANK	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3210944 4TH QTR 20213056 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3210944 4TH QTR 20213056 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3210944002

Sample ID: TRIP BLANK

Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3210944 4TH QTR 20213056 RIVER RD

Lab ID: 3210944001 Date Collected: 11/5/2021 15:37 Matrix: Water

Sample ID: 3056RIVERRD Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared I	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:22	TMP	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	86.4	С	%	70 - 130	EPA 524.2			11/11/21 20:22	TMP	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	14	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	14	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	0.120	С	mg/L	0.100	ASTM D6919-09			11/18/21 07:00	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 09:05	ALK	В
Chloride	29.5	С	mg/L	2.0	EPA 300.0			11/6/21 16:37	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			11/6/21 16:37	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/16/21 12:06	PAG	1
Nitrate-N	16.6	С	mg/L	0.20	EPA 300.0			11/6/21 16:37	GJB	С
Nitrite-N	0.32	С	mg/L	0.20	EPA 300.0			11/6/21 16:37	GJB	С
рН	6.70	C,2	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	C	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	303	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	ND	С	mg/L	2.0	EPA 300.0			11/6/21 16:37	GJB	C
Total Dissolved Solids	90	C	mg/L	25	S2540C-11			11/12/21 11:11	AKH	C
Total Organic Carbon (TOC)	ND	С	mg/L	0.50	SM5310B-2011			11/11/21 02:54	PAG	F
iotal Organic Galbon (100)	ואט	C	mg/L	0.50	514100 TOD 2011			11/11/21 02.04	1 70	•

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ANALYTICAL RESULTS

Workorder: 3210944 4TH QTR 20213056 RIVER RD

Lab ID: 3210944001 Date Collected: 11/5/2021 15:37 Matrix: Water

Sample ID: 3056RIVERRD Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	Ву	Cntr
- dramotoro	results	ı iag	Offits	NDL	Wietiloa	Ттератеа	Dy	7 thaty20a		Ona
Turbidity	0.71	С	NTU	0.10	SM2130B-2011			11/6/21 10:51	LXZ	С
METALS										
Calcium, Total	10.4	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 12:03	SRT	D
Calcium, Dissolved	10.9	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:34	SRT	Е
Iron, Total	ND	С	mg/L	0.030	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 12:03	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:34	SRT	Е
Magnesium, Total	11.6	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 12:03	SRT	D
Magnesium, Dissolved	11.8	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:34	SRT	Е
Manganese, Total	0.14	С	mg/L	0.0025	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 12:03	SRT	D
Manganese, Dissolved	0.14	С	mg/L	0.0050	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:34	SRT	Е
Potassium, Total	2.1	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 12:03	SRT	D
Potassium, Dissolved	2.3	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:34	SRT	Е
Sodium, Total	8.3	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 12:03	SRT	D
Sodium, Dissolved	8.6	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:34	SRT	Е
FIELD PARAMETERS										
pH, Field (SM4500B)	6.84	С	pH_Units		Field			11/5/21 15:37	BGS	N
Specific Conductance, Field	316	С	umhos/cm	1	Field			11/5/21 15:37	BGS	N
Temperature	14.20	С	Deg. C		Field			11/5/21 15:37	BGS	N

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210944 4TH QTR 20213056 RIVER RD

Lab ID: 3210944002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: TRIP BLANK Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/12/21 09:16 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210944 4TH QTR 20213056 RIVER RD

Lab ID	#	Sample ID	Analytical Method	Analyte	
3210944001	1	3056RIVERRD	SM2320B-2011	Alkalinity, Total	
The Total Alkalinit	ty is titrate	ed to a pH of 4.5 and repo	orted as mg CaCO3/L.		
32100//001	2	3056PI\/EPPD	S/1500HR-11	nΗ	

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: 3210944 4TH QTR 20213056 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3210944001	3056RIVERRD	ASTM D6919-09		
3210944001	3056RIVERRD	EPA 200.7	EPA ACID	
3210944001	3056RIVERRD	EPA 200.7	EPA TRMD	
3210944001	3056RIVERRD	EPA 300.0		
3210944001	3056RIVERRD	EPA 410.4		
3210944001	3056RIVERRD	EPA 420.4	420.4/9066	
3210944001	3056RIVERRD	EPA 524.2		
3210944001	3056RIVERRD	Field		
3210944001	3056RIVERRD	S2540C-11		
3210944001	3056RIVERRD	S4500HB-11		
3210944001	3056RIVERRD	SM2130B-2011		
3210944001	3056RIVERRD	SM2320B-2011		
3210944001	3056RIVERRD	SM2510B-2011		
3210944001	3056RIVERRD	SM5310B-2011		
3210944001	3056RIVERRD	SW846 9020B		

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usiness and surch wed By:	ALS GLOB ALSO ALS					SH	HAIN	CHAIN OF CUSTODY	STO	IXC	වි	Generaled by ALS		COC #:	
## 24	Control Cont	(ACC) (CITO) (CI			LL SHA	DED A	REAS MI	IST BE C	OMPLE	ED BY	HE CLE	NT/		ALS Q	11
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The control of the	The control of the	THE COURT WIND STREET THE COURT OF THE COURT		Container	2	Ē,	-	(B)(4) (C)		4		2	1	4	Rossian
Processing Main M	Presented But Presented Bu	daress: 1299 Hamsburg Pike, P.O. Box 4424	36	Stre	8 E	125 m	200	-	4	250 ml	125 ml	125 ml	500 ml	2000	0
Companies stays. Companies s	Comparison of the company Name C	Lancaster, PA 17604		Preservative	1000	H2SO4	_		1	H2S04	HNO3	HNO3	None		N >
The bis lines of the state of the black of	County Sold (National American Standard MT for 10-12 business days. County Sold (National American Mark) County Sold (National	ontact: Dan Brown					AN	ALYSES/I	METHOD	REQUEST	9				Custody Seals Present?
12 basiness days.	17 Date Time Control Surple Surple Control Su	hone#: (717)735-0193													(if present) Seals Intact?
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Moist 10-12 business days, Country 10-12 business days,	No.	III To: Lancaster County Solid Waste MA									бм.	'. N	₽OS	-	COC/Labels Complete/Accurate?
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11/05/21 15/27 G DW 2 1 2 3 X 1 1 1 1 1 1 1 1 1 1 1	11/05/21 1537 G DW 2 1 2 3 X 1 1 1 1 1 1 1 1 1		-	_	DOT	10-0	XOT	254 /	МH	NH3-		staM	T ,Hq S ,dT	-20	HeadspacerVolatiles?
11/05/21 17/0 G DW 2 1 2 3 x 1 1 1 1 1 1 1 1 1	11/05/21 1537 G DW 2 1 2 3 x 1 1 1 1 1 1 1 1 1 1		Time				Enter Num	ber of Con	tainers Pe	Sample	r Field Res	ults Belov	۲.		Sample/COC Comments
1105/21 1700 G DW 2 11062021114	11/05/21 17/00 G DW 2 11/05/211144 11/05/211444 11/05/211444 11/05/211444 11/05/211444 11/05/211444 11/05/211444 11/05/211444 11/05/214444 11/05/214444 11/05/214444 11/05/214444 11/05/214444 11/05/				120	+	2	3	×	+	÷	-	-	-	
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A	A	Shoull	11-3-21	MI	C)	4			1	I	1631	17	a		
FWSID # Special	6				4								Report	able to PA	Sample Disposal X
8 PWSID# 10 EDDS: Formal Type-	PWSID # Special			1	و								Yes		×
10 EDDS: Format Type-	10 "Matrix - Al=Air, DW=Drinking Water, GW=Groundwater, Ol=Oil: OL=Olher Liquid: SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater				60						ĺ		# QISMA		
	"Matrix - Al=Air, DW=Drinking Water, GW=Groundwater, Ol=Oiher Liquid; SL=Sludge; SO=Soll; WP=Wipe, WW=Wastewater				10			١					EDDS:	ormat Type	



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:	17:10	
			un ii	109	
1. Were airbills / tracking :	numbers present and recorded?		NONE	YES	NO
	Tracking number:		- 1/ \		
2. Are Custody Seals on sh	nipping containers intact?		NONE	YES	NO
the traffic and the state of th	imple containers intact?		- 11	YES	NO
	f-Custody) present?		1 /	FF	NO
	labels complete, legible and in agreement?			YES	NO
	ain sample locations?			YES	NO
	ain date and time of sample collection for all sa				NO
5c. Does the COC contr	ain sample collectors name?		anangagaga-	YES	NO
	the type(s) of preservation for all bottles?			ES	NO
5e. Does the COC note	the number of bottles submitted for each samp	ile?		YES	NO
5f. Does the COC note	the type of sample, composite or grab?			YES	NO
5g. Does the COC note	the matrix of the sample(s)?			YES	NO
6. Are all aqueous samples	s requiring preservation preserved correctly?"		. N/A	YES	NO
7. Were all samples placed	in the proper containers for the requested ana	lyses, with sufficient volume?		YES	NO
	olding times for the requested analyses?			YES	NO
	ers received intact and headspace free when rec			YES	NO
	nks (applies only for methods EPA 504, EPA 52			MES	NO
11. Were the samples rece	ived on ice?			YES	NO
	ures measured at 0.0-6.0°C			(YES)	NO
	atrix ? If YES, fill out Reportable Drinking Water			YES	NO
all and the second seco	equired for SDWA compliance reporting?			YES	(NO)
	vide a SDWA PWS ID#?			YES	NO
	preserved SDWA samples pH 5-9?			YES	NO
	vide the SDWA sample location ID/Description?.			YES	NO
	vide the SDWA sample type (D, E, R, C, P, S)?			YES	NO
Cool	or #:		<u> </u>		
500					
Temperature	(°C):_6				
Thermomete	er ID: <u>574</u>				
Radiological (μCi):				
	ired for all NO responses above	and our side of a series	uma mar are N		

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 1, 2021

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

Certificate of Analysis

3210966

Project Name: CONTIGUOUS LANDOWNER- Workorder:

3052 RIVER RD

Purchase Order: PO-1000371 Workorder ID: 4TH QTR 2021-3052 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3210966 4TH QTR 2021-3052 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3210966001	3052 River Road, Conestoga, PA	Water	11/5/2021 10:50	11/5/2021 17:10	Mr. Brian G Shade
3210966002	Trip Blank	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3210966 4TH QTR 2021-3052 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3210966 4TH QTR 2021-3052 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3210966002 Sample ID: Trip Blank

This sample was cancelled per project specifications.

Sample Type: FLDQC

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ANALYTICAL RESULTS

Workorder: 3210966 4TH QTR 2021-3052 RIVER RD

Lab ID: 3210966001 Date Collected: 11/5/2021 10:50 Matrix: Water

Sample ID: 3052 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 01:09	PDK	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	87.9	С	%	70 - 130	EPA 524.2			11/12/21 01:09	PDK	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	11	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	11	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/18/21 04:52	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/21/21 09:00	ALK	В
Chloride	23.8	С	mg/L	2.0	EPA 300.0			11/6/21 17:18	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			11/6/21 17:18	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/16/21 15:06	PAG	1
Nitrate-N	19.7	С	mg/L	0.20	EPA 300.0			11/6/21 17:18	GJB	С
Nitrite-N	ND	С	mg/L	0.20	EPA 300.0			11/6/21 17:18	GJB	С
рН	6.64	C,2	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	C	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	329	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	3.3	C	mg/L	2.0	EPA 300.0			11/6/21 17:18	GJB	C
Total Dissolved Solids	178	C	mg/L	25	S2540C-11			11/12/21 11:11		C
	ND	С	_	_	SM5310B-2011			11/11/21 02:54		F
Total Organic Carbon (TOC)	ND	C	mg/L	0.50	SIVI5310B-2011			11/11/21 02:54	PAG	F

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ANALYTICAL RESULTS

Workorder: 3210966 4TH QTR 2021-3052 RIVER RD

Lab ID: 3210966001 Date Collected: 11/5/2021 10:50 Matrix: Water

Sample ID: 3052 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.30	С	NTU	0.10	SM2130B-2011			11/6/21 10:51	LXZ	С
METALS										
Calcium, Total	15.4	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:48	SRT	D
Calcium, Dissolved	15.6	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:44	SRT	Е
Iron, Total	0.037	С	mg/L	0.030	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:48	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:44	SRT	Е
Magnesium, Total	8.3	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:48	SRT	D
Magnesium, Dissolved	8.3	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:44	SRT	Е
Manganese, Total	0.027	С	mg/L	0.0025	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:48	SRT	D
Manganese, Dissolved	0.027	С	mg/L	0.0050	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:44	SRT	Е
Potassium, Total	2.0	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:48	SRT	D
Potassium, Dissolved	2.0	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:44	SRT	Е
Sodium, Total	7.5	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:48	SRT	D
Sodium, Dissolved	7.2	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:44	SRT	Е
FIELD PARAMETERS										
pH, Field (SM4500B)	6.69	С	pH_Units		Field			11/5/21 10:50	BGS	Ν
Specific Conductance, Field	273	С	umhos/cm	1	Field			11/5/21 10:50	BGS	Ν
Temperature	14.70	С	Deg. C		Field			11/5/21 10:50	BGS	Ν

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210966 4TH QTR 2021-3052 RIVER RD

Lab ID: 3210966002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: Trip Blank Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By *Cntr*

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/15/21 09:03 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210966 4TH QTR 2021-3052 RIVER RD

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3210966001	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.	
3210966001	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: 3210966 4TH QTR 2021-3052 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3210966001	3052 River Road, Conestoga, PA	ASTM D6919-09		
3210966001	3052 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3210966001	3052 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3210966001	3052 River Road, Conestoga, PA	EPA 300.0		
3210966001	3052 River Road, Conestoga, PA	EPA 410.4		
3210966001	3052 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3210966001	3052 River Road, Conestoga, PA	EPA 524.2		
3210966001	3052 River Road, Conestoga, PA	Field		
3210966001	3052 River Road, Conestoga, PA	S2540C-11		
3210966001	3052 River Road, Conestoga, PA	S4500HB-11		
3210966001	3052 River Road, Conestoga, PA	SM2130B-2011		
3210966001	3052 River Road, Conestoga, PA	SM2320B-2011		
3210966001	3052 River Road, Conestoga, PA	SM2510B-2011		
3210966001	3052 River Road, Conestoga, PA	SM5310B-2011		
3210966001	3052 River Road, Conestoga, PA	SW846 9020B		

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Stopwelline a suddenin in 1901 - Press, 117 de SK1 - Ks. 717 det SS4 is Francisch SA (1804) 1430 301 Fulling Mill Road - Middletown, PA 17057 - 717 944,8541 - Fax. 717,944,1430 Client Marray - Focuman - Communication - Film - Film - Film - Focuman - Focuma			-	3	NEGOES! FOR ANALYSIS	5	INAL	200		3			
301 Fulling Mill Road • Middletown, PA 17057 • 717 344,554 • F	Steller	1	A I SHA	CW VE							1		
Client Name - County County - con	Fax: 717.944.14	7		SAMPLE INSTRUCTIONS ON THE CLIENT	EAS MOST BE COMPLETED BY TH	DECO	MFLE F	DBYT	E CLE	/ I/		ALS Quot	3219966
CONTINUE COSMINIA - CEISIN E. IMILIER, ST.		Container	PAG	AN	AN	200	NO CA	0 0				1	
Address: 3052 River Road		Container	40 ml	(OK m)	1-030				1000			1000	Rece
Conestions PA 17516		Ste	2	1107	III nez	E-04	1	250 ml	125 ml	125 ml	500 ml	500 ml Coc	Cooler Temp: () Therm ID: ()
Contact: Gorald E Miles Oc		Preservative		H2SO4	H2S04 /	Ascitici	1	H2S04	HNO3	HN03	None	None No.	7
	· 香 · 唇				ANAL	ANALYSES/METHOD REQUESTED	THOD RE	COUESTE	0	and the second		521	or cooleis.
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Bill To: Lancaster County Solid Waste MA	ON.			师	7- 3				'би	1	l'tr		Received on Ice?
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ush-Subject to ALS app	urcharges.			新言	III III				'en	policies.) '00		Conf. in Good Cond.?
Late Required: Approved By:).ie		\$. \$.				165		Signa		N '7/	203	Correct Sample Volumes?
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Sample Description/Location Sample (as it will appear on the lab report) Date	a II	G or C	201	HO-O	хот	254 V	MH		K, Na	aleteM at Ho	at, Hq q2, dT	Alkalini S	Headspace/Volatiles?
0.00	100	_			Enter Number of Containers Per Sample or	of Contain	ers Per Sa	ample or F	Field Results Below	's Below.			Sample/COC Comments
17/00/17	_	OM O	2	-	2	3	13	-	-			1	
4. Trip blank 11/05/21	17.00	G DW	,			6	(i)	2	100				
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Relinquished By / Company Name	Date	Time		Received	Received By / Company Name	neN vuen	1	۴	4	Dat	Vera	I ICAOL	
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		9)								Yes		
		80								PW	# QISMA		
September 1	100	10						1	1	E	EDDS: Format Type-	10 EDDS: Format Type	UK.



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

Condition of Sample Receipt Form

Client:	Work Order #:	Initials: Da	te:	1
A management of the second	description of the second			1
1. Were airbills / tracking nu	mbers present and recorded?	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ONE YES	NO
Land Assert	Tracking number:	((1	
	ping containers intact?		ONE YES	NO
	ple containers intact?		ONE YES	NO
	ustody) present?		1	NO
	bels complete, legible and in agreement?		YES	NO
	sample locations?			NO
	date and time of sample collection for all sam			NO
Sc. Does the COC contain	sample collectors name?	***************************************	YES	NO
5d. Does the COC note th	e type(s) of preservation for all bottles?	**************************************	YES	NO
5e. Does the COC note th	e number of bottles submitted for each sampl	e?	YES	NO
5f. Does the COC note the	e type of sample, composite or grab?		YES	NO
	e matrix of the sample(s)?			NO
6. Are all aqueous samples re	equiring preservation preserved correctly?1	······································	/A YES	NO
7. Were all samples placed in	the proper containers for the requested analy	rses, with sufficient volume?	YES	NO
	ding times for the requested analyses?			NO
	received intact and headspace free when requ			NO
	s (applies only for methods EPA 504, EPA 524			NO
	d on ice?			NO
	es measured at 0.0-6.0°C			NO
	ix ? If YES, fill out Reportable Drinking Water o			NO
	ired for SDWA compliance reporting?		A YES	(NO)
	e a SDWA PWS ID#?		A YES	NO
	eserved SDWA samples pH 5-9?		1	NO
	e the SDWA sample location ID/Description?		A YES	NO
	the SDWA sample type (D, E, R, C, P, 5)?			NO
Cooler #	*:			-
Temperature (°C			_	
	1.42 - A. 1		_	
Thermometer ID	<u> </u>			
Radiological (µCl)):			

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 11, 2021

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

Certificate of Analysis

3211116

Project Name: CONTIGUOUS LANDOWNER- Workorder:

3044 RIVER RD

Purchase Order: PO-1000371 Workorder ID: 4TH QTR 2021-3044 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3211116 4TH QTR 2021-3044 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3211116001	3044 River Road, Conestoga, PA	Water	11/5/2021 10:25	11/5/2021 17:10	Mr. Brian G Shade
3211116002	TRIP BLANK	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade
3211116003	FIELD BLANK	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3211116 4TH QTR 2021-3044 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

- С Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte J
- U Indicates that the analyte was Not Detected (ND)
- Indicates presumptive evidence of the presence of a compound Ν
- MDI 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
- Regulatory Limit RegLmt
- 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
- 1 Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
- Surrogate Compound (S)
- Not Calculated NC
- Result outside of QC limits

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PROJECT SUMMARY

Workorder: 3211116 4TH QTR 2021-3044 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

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ANALYTICAL RESULTS

Workorder: 3211116 4TH QTR 2021-3044 RIVER RD

Lab ID: 321116001 Date Collected: 11/5/2021 10:25 Matrix: Water

Sample ID: 3044 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:53	TMP	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	84.9	С	%	70 - 130	EPA 524.2			11/12/21 13:53	TMP	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	27	С	mg/L	5	SM2320B-2011			11/18/21 23:57	JXM	С
Alkalinity, Total	27	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/16/21 17:25	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/12/21 08:45	ALK	В
Chloride	21.4	С	mg/L	2.0	EPA 300.0			12/3/21 20:58	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			12/3/21 20:58	GJB	С
Halogen, Total Organic (TOX)	ND	С	ug/L	20.0	SW846 9020B			11/17/21 12:37	PAG	1
Nitrate-N	17.6	С	mg/L	0.20	EPA 300.0			12/3/21 20:58	GJB	С
Nitrite-N	ND	С	mg/L	0.20	EPA 300.0			12/3/21 20:58	GJB	С
рН	7.35	C,2	pH_Units		S4500HB-11			11/18/21 23:57	JXM	С
Phenolics	ND	С	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	342	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	2.6	С	mg/L	2.0	EPA 300.0			12/3/21 20:58	GJB	С
Total Dissolved Solids	200	C	mg/L	25	S2540C-11			11/12/21 11:34	AKH	C
		-	····g- =		3-0.00					-

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ANALYTICAL RESULTS

Workorder: 3211116 4TH QTR 2021-3044 RIVER RD

Lab ID: 3211116001 Date Collected: 11/5/2021 10:25 Matrix: Water

Sample ID: 3044 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.31	C,3	NTU	0.10	SM2130B-2011			12/1/21 13:02	BXD	С
METALS										
Calcium, Total	18.0	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	SXC	11/12/21 14:03	SRT	D
Calcium, Dissolved	18.5	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 15:06	SRT	Ε
Iron, Total	ND	С	mg/L	0.030	EPA 200.7	11/11/21 16:13	SXC	11/12/21 14:03	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/16/21 12:28	SRT	11/17/21 15:06	SRT	Е
Magnesium, Total	10.4	С	mg/L	0.050	EPA 200.7	11/11/21 16:13	SXC	11/12/21 14:03	SRT	D
Magnesium, Dissolved	11.2	С	mg/L	0.10	EPA 200.7	11/16/21 12:28	SRT	11/17/21 15:06	SRT	Е
Manganese, Total	0.011	С	mg/L	0.0025	EPA 200.7	11/11/21 16:13	SXC	11/12/21 14:03	SRT	D
Manganese, Dissolved	0.010	С	mg/L	0.0050	EPA 200.7	11/16/21 12:28	SRT	11/17/21 15:06	SRT	Е
Potassium, Total	2.4	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 14:03	SRT	D
Potassium, Dissolved	2.3	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 15:06	SRT	Е
Sodium, Total	8.3	С	mg/L	0.25	EPA 200.7	11/11/21 16:13	SXC	11/12/21 14:03	SRT	D
Sodium, Dissolved	8.2	С	mg/L	0.50	EPA 200.7	11/16/21 12:28	SRT	11/17/21 15:06	SRT	Ε
FIELD PARAMETERS										
pH, Field (SM4500B)	7.29	С	pH_Units		Field			11/5/21 10:25	BGS	Ν
Specific Conductance, Field	298	С	umhos/cm	1	Field			11/5/21 10:25	BGS	Ν
Temperature	14.50	С	Deg. C		Field			11/5/21 10:25	BGS	Ν

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211116 4TH QTR 2021-3044 RIVER RD

Lab ID: 321116002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: TRIP BLANK Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:00	TMP	Α
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	87.5	С	%	70 - 130	EPA 524.2			11/12/21 13:00	TMP	Α

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211116 4TH QTR 2021-3044 RIVER RD

Lab ID: 321116003 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: FIELD BLANK Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Methylene Chloride	2.8	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/12/21 13:26	TMP	Α
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	89.3	С	%	70 - 130	EPA 524.2			11/12/21 13:26	TMP	Α

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3211116 4TH QTR 2021-3044 RIVER RD

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

Lab ID	#	Sample ID	Analytical Method	Analyte
3211116001	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.	
3211116001	2	3044 River Road, Conestoga, PA	S4500HB-11	pH

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

3211116001 3 3044 River Road, Conestoga, PA SM2130B-2011 Turbidity

This sample was analyzed after the 48 hour holding time for Turbidity as required by the method.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3211116 4TH QTR 2021-3044 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3211116001	3044 River Road, Conestoga, PA	ASTM D6919-09		
3211116001	3044 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3211116001	3044 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3211116001	3044 River Road, Conestoga, PA	EPA 300.0		
3211116001	3044 River Road, Conestoga, PA	EPA 410.4		
3211116001	3044 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3211116001	3044 River Road, Conestoga, PA	EPA 524.2		
3211116001	3044 River Road, Conestoga, PA	Field		
3211116001	3044 River Road, Conestoga, PA	S2540C-11		
3211116001	3044 River Road, Conestoga, PA	S4500HB-11		
3211116001	3044 River Road, Conestoga, PA	SM2130B-2011		
3211116001	3044 River Road, Conestoga, PA	SM2320B-2011		
3211116001	3044 River Road, Conestoga, PA	SM2510B-2011		
3211116001	3044 River Road, Conestoga, PA	SM5310B-2011		
3211116001	3044 River Road, Conestoga, PA	SW846 9020B		
3211116002	TRIP BLANK	EPA 524.2		
3211116003	FIELD BLANK	EPA 524.2		

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(ALS) Environmental	-		N I I	KEQUESI FOR ANALYSIS	CES	RECOUNT FOR ANALYSIS	WA		2			I		ğ
301 Fulling Will Road + Middletown, PA 17057 + 717,944,5541 + Fax: 717,944,1430	944.5541 • Fax: 717.9		5	SAMPLER.	ER. INS	INSTRUCTIONS ON THE BACK	NS ON T		CK.	110		A 32	11116	- 8
Client Name: Lancaster County Solid Waste MA	MA	Container	AG	AN	AN	8	1	చ	占	굺	占		1000	ceiving Lab)
Address: 1299 Harrisburg Pike, P.O. Box 4424	24	Container	40 ml	125 ml	250 ml	40 ml	ı	250 ml	125 ml	125 ml	500 ml	500 ml	Cooler Temp: 11 Therm ID:	272
Lancaster, PA 17604		Preservative	PC HC	H2S04	H2SO4	AscHCI		H2SO4	HNO3	HNO3	None	None	4	leikial u
Sontact: Dan Brown	*				AN/	ANALYSES/METHOD	ETHOD R	REQUESTED	9				Circledo Soale Drocont?	Г
Phone#: (717) 735-0193			10							July N			Of precent Seals Interto	
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Sample Description/Location (as it will appear on the lab report)	Sample Date Time	5 or •	ют	0-0	(OT S	Enter Number of Containers Per Sample or	L M	EHN Sample or	Diss K, N Bets Mets Person	Net S			Courier/Tracking #;	
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G=Grab,	G=Grab; C=Composite	Matrix - Al=Air, DW=Drinking Water, GW=Groundwater, Ol=Oir, OL=Other Liquid; SL=Sludge; Al S ENVIDONMENTAL SHIDDING ADDESC: 34 DOCKNOOD LAND MIDDING ADDESCS: 34 DOCKNOOD LAND	Air, DW=C	rinking War	er; GW=Gr	oundwater,	OI=0II; OI	=Other Lic	Jud. SL=S	ludge; SC	=Soll; WF	=Wipe; WM	SO=Soll, WP=Wipe; WW=Wastewater	
	2	1	1	2		3	2000	S	200	TAL MAN	100/1			Bay S/04



301 Fulling Mill Road Middletown, PA 17057

P: (717) 944 F: (717) 944 3211116

'ondition of Sample Receipt Form

Client:	Lancaster County Solid Waste Authority	Initials:	Date:	4.0	_
		ASC	11.11	1210	
1. Were airbills / tracking numbe	rs present and recorded? Tracking number:			YES N	ю
2. Are Custody Seals on shipping	containers intact?		NONE	YES N	10
3. Are Custody Seals on sample of	containers intact?		NONE	YES N	10
4. Is there a COC (Chain-of-Custo	ody) present?			YES N	10
5. Are the COC and bottle labels	complete, legible and in agreement?			YES N	10
5a. Does the COC contain san	nple locations?	***************************************		YES N	Ю
5b. Does the COC contain dat	te and time of sample collection for all sai	mples?		YES N	10
Sc. Does the COC contain san	nple collectors name?			YES N	10
5d. Does the COC note the ty	pe(s) of preservation for all bottles?			YES N	10
5e. Does the COC note the nu	imber of bottles submitted for each samp	le?		YES N	10
5f. Does the COC note the typ	oe of sample, composite or grab?	***************************************		YES N	10
5g. Does the COC note the m.	atrix of the sample(s)?			YES N	10
6. Are all aqueous samples requi	ring preservation preserved correctly?"	**************************************	N/A	YES N	10
7. Were all samples placed in the	proper containers for the requested analy	yses, with sufficient volume?	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	YES N	io
8. Are all samples within holding	times for the requested analyses?			YES N	io
9. Were all sample containers rec	eived intact and headspace free when req	uired? (not broken, leaking, frozen, e	tc.)	YES N	10
10. Did we receive trip blanks (a	pplies only for methods EPA 504, EPA 524	4.2 and 1631E (LL Hg)?	N/A	YEL N	10
11. Were the samples received or	n ice7			(YES) N	0
12. Were sample temperatures m	neasured at 0.0-6.0°C	same any	collectio	VES CN	50
13. Are the samples DW matrix ?	If YES, fill out Reportable Drinking Water	questions below	The second secon		10
13a. Are the samples required	for SDWA compliance reporting?		N/A	YES (N	0
13b. Did the client provide a :	SDWA PWS ID#?		N/A	CONTRACTOR OF THE PARTY OF THE	10
	rved SDWA samples pH 5-97			YES N	10
13d. Did the client provide th	e SDWA sample location ID/Description?	()	N/A	YES N	10
	e SDWA sample type (D, E, R, C, P, S)?			YES N	10
Cooler #:					
Temperature (°C):	11		_		
Thermometer ID:	574				:
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





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December 1, 2021

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

Certificate of Analysis

Project Name: **CONTIGUOUS LANDOWNER-**

3125 RIVER RD

Workorder:

3210962

Purchase Order:

PO-1000371

Workorder ID: 4TH QTR 2020-3125 RIVER RD

Dear Mr. Brown:

Enclosed are the analytical results for samples received by the laboratory on Friday, November 5, 2021.

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: 3210962 4TH QTR 2020-3125 RIVER RD

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3210962001	3125 River Road, Conestoga, PA	Water	11/5/2021 12:49	11/5/2021 17:10	Mr. Brian G Shade
3210962002	Trip Blank	Water	11/5/2021 17:10	11/5/2021 17:10	Mr. Brian G Shade

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SAMPLE SUMMARY

Workorder: 3210962 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

- C Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
- 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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PROJECT SUMMARY

Workorder: 3210962 4TH QTR 2020-3125 RIVER RD

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

Sample Comments

Lab ID: 3210962002 Sample ID: Trip Blank

Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 3210962 4TH QTR 2020-3125 RIVER RD

Lab ID: 3210962001 Date Collected: 11/5/2021 12:49 Matrix: Water

Sample ID: 3125 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
1,2-Dibromoethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
1,1-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
1,2-Dichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
1,1-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
cis-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
trans-1,2-Dichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Ethylbenzene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Methylene Chloride	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Tetrachloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Toluene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Total Xylenes	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
1,1,1-Trichloroethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Trichloroethene	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Trichlorofluoromethane	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Vinyl Chloride	ND	С	ug/L	0.50	EPA 524.2			11/11/21 20:48	TMP	K
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
4-Bromofluorobenzene (S)	85	С	%	70 - 130	EPA 524.2			11/11/21 20:48	TMP	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	165	С	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	С
Alkalinity, Total	165	C,1	mg/L	5	SM2320B-2011			11/16/21 23:51	JXM	Α
Ammonia-N	ND	С	mg/L	0.100	ASTM D6919-09			11/17/21 23:18	ALK	В
Chemical Oxygen Demand (COD)	ND	С	mg/L	15	EPA 410.4			11/21/21 09:00	ALK	В
Chloride	108	С	mg/L	2.0	EPA 300.0			11/6/21 16:51	GJB	С
Fluoride	ND	С	mg/L	0.20	EPA 300.0			11/6/21 16:51	GJB	С
Halogen, Total Organic (TOX)	23.7	С	ug/L	20.0	SW846 9020B			11/16/21 12:38	PAG	1
Nitrate-N	5.4	С	mg/L	0.20	EPA 300.0			11/6/21 16:51	GJB	С
Nitrite-N	ND	С	mg/L	0.20	EPA 300.0			11/6/21 16:51	GJB	С
рН	8.06	C,2	pH_Units		S4500HB-11			11/16/21 23:51	JXM	С
Phenolics	ND	C	mg/L	0.005	EPA 420.4	11/10/21 16:13	MXF	11/12/21 12:41	MXF	Н
Specific Conductance	916	С	umhos/cm	1	SM2510B-2011			11/16/21 19:18	MBS	С
Sulfate	15.5	С	mg/L	2.0	EPA 300.0			11/6/21 16:51	GJB	С
Total Dissolved Solids	426	C	mg/L	25	S2540C-11			11/12/21 11:11	AKH	C
Total Organic Carbon (TOC)	ND	С	mg/L	0.50	SM5310B-2011			11/11/21 02:54	PAG	F
.c.a. crgamo carbon (100)	. 10	O	9, =	0.50	200102 2011			,, בו סב.ס		•

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ANALYTICAL RESULTS

Workorder: 3210962 4TH QTR 2020-3125 RIVER RD

Lab ID: 3210962001 Date Collected: 11/5/2021 12:49 Matrix: Water

Sample ID: 3125 River Road, Conestoga, PA Date Received: 11/5/2021 17:10

Daramotoro	Bosulto	Floa	Lloito	PDI	Method	Dranarad	D _V	Analyzad	D _V	Cntr
Parameters	Results	Flag	Units	RDL	Metriod	Prepared	Ву	Analyzed	Ву	Cntr
Turbidity	0.10	С	NTU	0.10	SM2130B-2011			11/6/21 10:51	LXZ	С
METALS										
Calcium, Total	0.25	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 13:41	SRT	D
Calcium, Dissolved	0.25	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:37	SRT	E
Iron, Total	0.088	С	mg/L	0.030	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 13:41	SRT	D
Iron, Dissolved	ND	С	mg/L	0.060	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:37	SRT	Е
Magnesium, Total	0.058	С	mg/L	0.050	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:41	SRT	D
Magnesium, Dissolved	ND	С	mg/L	0.10	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:37	SRT	Е
Manganese, Total	ND	С	mg/L	0.0025	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 13:41	SRT	D
Manganese, Dissolved	ND	С	mg/L	0.0050	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:37	SRT	Е
Potassium, Total	3.4	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	SXC	11/11/21 13:41	SRT	D
Potassium, Dissolved	3.3	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:37	SRT	Е
Sodium, Total	148	С	mg/L	0.25	EPA 200.7	11/10/21 16:35	5 SXC	11/11/21 13:41	SRT	D
Sodium, Dissolved	152	С	mg/L	0.50	EPA 200.7	11/9/21 07:08	SRT	11/11/21 09:37	SRT	Е
FIELD PARAMETERS										
pH, Field (SM4500B)	7.88	С	pH_Units		Field			11/5/21 12:49	BGS	N
Specific Conductance, Field	502	С	umhos/cm	1	Field			11/5/21 12:49	BGS	N
Temperature	14.30	С	Deg. C		Field			11/5/21 12:49	BGS	N

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210962 4TH QTR 2020-3125 RIVER RD

Lab ID: 3210962002 Date Collected: 11/5/2021 17:10 Matrix: Water

Sample ID: Trip Blank Date Received: 11/5/2021 17:10

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

ADMINISTRATIVE

Sample Cancelled CANCEL C 11/12/21 09:17 CPK

Ms. Susan J Scherer Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3210962 4TH QTR 2020-3125 RIVER RD

Lab ID	#	Sample ID	Analytical Method	Analyte
3210962001	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.	
3210962001	2	3125 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: 3210962 4TH QTR 2020-3125 RIVER RD

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3210962001	3125 River Road, Conestoga, PA	ASTM D6919-09		
3210962001	3125 River Road, Conestoga, PA	EPA 200.7	EPA ACID	
3210962001	3125 River Road, Conestoga, PA	EPA 200.7	EPA TRMD	
3210962001	3125 River Road, Conestoga, PA	EPA 300.0		
3210962001	3125 River Road, Conestoga, PA	EPA 410.4		
3210962001	3125 River Road, Conestoga, PA	EPA 420.4	420.4/9066	
3210962001	3125 River Road, Conestoga, PA	EPA 524.2		
3210962001	3125 River Road, Conestoga, PA	Field		
3210962001	3125 River Road, Conestoga, PA	S2540C-11		
3210962001	3125 River Road, Conestoga, PA	S4500HB-11		
3210962001	3125 River Road, Conestoga, PA	SM2130B-2011		
3210962001	3125 River Road, Conestoga, PA	SM2320B-2011		
3210962001	3125 River Road, Conestoga, PA	SM2510B-2011		
3210962001	3125 River Road, Conestoga, PA	SM5310B-2011		
3210962001	3125 River Road, Conestoga, PA	SW846 9020B		

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The first of the control of the co	S Construction		e3.			CHAIN	INO	OF CUSTODY/ T FOR ANALYS	TODY	- 5	Gene	Generated by ALS	0	COC #:	
The content of the	Toponotone and between the state of the object of the state of the sta	Angelou con 544 • Env. 747 644	25	ALL		D AREA	SMUST	BE CON	PLETE	BYTH	E CLIEN	11		LS Quo	
Consequence Float Consequence Conseq	lient Name: LGSWMA - Christian C. Beck	i i	Contr		1	ΑN	AN	8		P.	F .	₽.	P.		annami fa par
Consisting P. N. 175(6) November 1982 No	ddress: 3125 River Road		Cont			-		E Q	1	2000	A CONTRACT	1000	1 1 1 1 1	-	Therm ID: <
Marrie County Sould Water Marrie	Conestoga, PA 17516	1	Preser		Call (-	-	scHCI	T	1	100000	FN03	500	_ Z	>
	ontact: Christian C. Beck						ANAL	SESIME	THOD RE	QUESTE					Custody Seals Present?
Normalistic Control Wilson Normalistic Co	hone#: (717) 871-0448										31		-		(if present) Seals Intact?
Normal-Standard Tark is the 2 business days. Normal-Standard Tark is	roject Namel#: LCSWMA - Quarterly				Silver .						ו6' נאנע		'4 'b(Received on Ice?
Rush-Subject to ALS approved and surcharges. Correct Containers Co	TaT X Normal-Standard TAT is 10-12 bu	usiness days.		ļ.,							re, n	SHOWING.	כו' פנ	8	Cont. in Good Cond.?
Control Simple Cont	Rush-Subject to ALS approval ar	d surcharges		L	le d			-,			P∩ 'S		'EON	1	Correct Containers?
Content Cont	quired:	red By:									iejaw	-	'ZON	нсоз	Correct Sample Volumes?
11/05/21 Time Date Date Time Date Da	BX?		0			н	>	λοα			B)			ı 'Ajıuli	Correct Preservation? Headspace/Volatiles?
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ALS Field Sarvices: Composite Sampling Compos		-	9	5				7		T				1	1062021115
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ALS Field Services: Composite_Sampling Composit			- 86	-			(50E)								
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Navy Special	oject Comments:	TOGGE	BY(signati	rre):					alvo		301		S	Standard	
Date Time Received By / Company Name Date Time Second		REVIEW	ED BY(sign	ature):					31/40		1M1			JCLP-like	
	Relinquished By / Company Name	Date	-	a e		Received	By / Cor	npany Na	me	-		900		JUSACE	
A	Ē	541	-	W2(1		11	N	())	L a		
Yes Lab X				4		\neg					Н		Reportal	le to PADE	Sample Disposal X
8 PWSID# 10 EDDS: Format Type-		1	-	9	7						Ħ		Yes		×
10 EDDS: Format Type							П					۵.	WSID#	73	Special Special
The party of the p	C. C. day O. C.		_	9									EDDS: Fo	mat Type-	



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:	E 11	
			WIT	211	
1. Were airbills / tracking nu	umbers present and recorded?		. NONE	YES	NO
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Tracking number:		-11		
2. Are Custody Seals on ship	oping containers intact?		(NONE)	YES	NO
	ple containers intact?			YES	NO
4. Is there a COC (Chain-of-C	Custody) present?			PE	NO
5. Are the COC and bottle la	bels complete, legible and in agreement?			YES	NO
	n sample locations?			YES	NO
5b. Does the COC contain	n date and time of sample collection for all sam	ples?		YES	NO
Sc. Does the COC contain	n sample collectors name?			YES	NO
	he type(s) of preservation for all bottles?			YES	NO
	he number of bottles submitted for each sample			YES	NO
	ne type of sample, composite or grab?			YES	NO
	he matrix of the sample(s)?			YES	NO
6. Are all aqueous samples r	requiring preservation preserved correctly?1	EUROS DESTRUCTOR CONTRACTOR DE LA CONTRA	N/A	YES	NO
	n the proper containers for the requested analy			YES	NO
the street of th	Iding times for the requested analyses?			YES	NO
	rs received intact and headspace free when requ			YES	NO
	ks (applies only for methods EPA 504, EPA 524.			YES	NO
	ed on ice?			YES	NO
	res measured at 0.0-6.0°C			YES	NO
	trix ? If YES, fill out Reportable Drinking Water g			YES	NO
The state of the s	quired for SDWA compliance reporting?			YES	NO
	de a SDWA PWS ID#?			YES	NO
	preserved SDWA samples pH 5-9?			YES	NO
	de the SDWA sample location ID/Description?			YES	NO
	de the SDWA sample type (D, E, R, C, P, S)?			YES	NO
Cooler	r#:				
	-				
Temperature (°	'C):		_		
Thermometer	10: 574		_		
Radiological (µC	Ci):				
COMMENTS (Requi	red for all NO responses above	and any sample non-confo	mance)	:	

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