

June 29, 2017

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

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

Dear Ms. Sauls:

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

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

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

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

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

Respectfully submitted,

mhon

Mark D Reider Director of Environmental Compliance

Enclosures

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



Date Prepared/Revised 06/26/2017

DEP USE ONLY

Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")		
Facility Name: Frey Farm L			
County: Lancaster C			
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name: LCSWMA			
Address: 3044 RIVE	R ROAD		
Phone No.:			
Sampling Point: Latitude: 39 c	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 micr	on)?: X Yes No		
Sample Date:(mm/dd/yy) 05/1	9/2017 Sample Collection Time: 12:00 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	06/01/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/19/2017

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

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.64	FIELD
pH-LAB (SU)	6.44	SM4500B
POTASSIUM, TOTAL	1.8	EPA 200.7
POTASSIUM, DISSOLVED	1.7	EPA 200.7
SODIUM, TOTAL	10.2	EPA 200.7
SODIUM, DISSOLVED	10	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	278	FIELD
SPEC. COND., LAB (umhos/cm)	235	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	18	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	186	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1.28	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

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



Date Prepared/Revised 06/26/2017

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Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGI	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE $^\circ$ 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.:			
	57 ' 29.85 ["] Longitude: ⁷⁶ ° 26 ' 11.45 "		
Sampling Point: Latitude:			
Casing Stick Up:	ft. Measured from: X Land Surface TOC 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) 05/1	9/2017 Sample Collection Time: 12:23 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	06/01/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	5 ND	SM20-2321
CALCIUM, TOTAL	15.5	EPA 200.7
CALCIUM, DISSOLVED	14.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	21.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11	EPA 200.7
MAGNESIUM, DISSOLVED	10.5	EPA 200.7
MANGANESE, TOTAL (ug/l)	62	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	57	EPA 200.7
NITRATE-NITROGEN	19.4	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

MILLER

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	4.81	FIELD
pH-LAB (SU)	5.72	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	1.9	EPA 200.7
SODIUM, TOTAL	7.7	EPA 200.7
SODIUM, DISSOLVED	7.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	238	FIELD
SPEC. COND., LAB (umhos/cm)	208	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	187	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.13	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

MILLER

PS

Sample Date

05/19/2017

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

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



Date Prepared/Revised 06/26/2017

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Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGI	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE $^\circ$ MM' SS.S")		
Facility Name:Frey Farm L	andfill		
County: Lancaster C	county		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name: LCSWMA			
Address: 3056 RIVER	ROAD		
Phone No.:			
	57 ' 28.44 " Longitude: 76 ° 26 ' 10.43 "		
Depth to Water Level:	ft. Measured from: X Land Surface TOC		
Casing Stick Up:	ft. Elevation of Water Level: ft./MSL		
Total Well Depth:	ft.		
Sampling Depth:	ft. Sampling Method: Pumped Bailed		
Well Purged: Yes	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No		
Sample Date:(mm/dd/yy) 05/1	9/2017 Sample Collection Time: 9:30 AM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	06/02/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
 Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	5 ND	SM20-2321
CALCIUM, TOTAL	15.6	EPA 200.7
CALCIUM, DISSOLVED	15.1	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	24.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	12.2	EPA 200.7
MAGNESIUM, DISSOLVED	12.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	52	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	52	EPA 200.7
NITRATE-NITROGEN	22.5	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	4.92	FIELD
pH-LAB (SU)	5.87	SM4500B
POTASSIUM, TOTAL	2.3	EPA 200.7
POTASSIUM, DISSOLVED	2.1	EPA 200.7
SODIUM, TOTAL	8.9	EPA 200.7
SODIUM, DISSOLVED	8.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	275	FIELD
SPEC. COND., LAB (umhos/cm)	233	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	192	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

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



Date Prepared/Revised 06/26/2017

DEP USE ONLY

Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGI	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")		
Facility Name:Frey Farm L	andfill		
County: Lancaster C	County		
Township or Municipality: MANOR TC	WNSHIP		
Landowner Name:LCSWMA			
Address: 3060 RIVER	R ROAD		
Phone No.: 39 o	57 ' 27.63 " Lonaitude: 76 ° 26 ' 10.01 "		
Depth to Water Level:	ft. Measured from: X Land Surface TOC ft. Elevation of Water Level: ft./MSL		
Casing Stick Up:			
Total Well Depth: Sampling Depth:	ftSampling Method:PumpedBailed		
Well Purged:	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No		
	9/2017 Sample Collection Time: 9:45 AM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	06/01/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	5 ND	SM20-2321
CALCIUM, TOTAL	10.9	EPA 200.7
CALCIUM, DISSOLVED	10.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	14.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11.7	EPA 200.7
MAGNESIUM, DISSOLVED	11.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	64	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	62	EPA 200.7
NITRATE-NITROGEN	17.1	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.14	FIELD
pH-LAB (SU)	5.82	SM4500B
POTASSIUM, TOTAL	3.3	EPA 200.7
POTASSIUM, DISSOLVED	3.1	EPA 200.7
SODIUM, TOTAL	9.8	EPA 200.7
SODIUM, DISSOLVED	9.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	242	FIELD
SPEC. COND., LAB (umhos/cm)	202	EPA 120.1
SULFATE	10.2	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	172	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

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



Date Prepared/Revised 06/26/2017

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Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGI	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE $^\circ$ MM' SS.S")		
Facility Name:Frey Farm L	andfill		
County: Lancaster C	ounty		
Township or Municipality: MANOR TC	WNSHIP		
Landowner Name:SENSENIC	٩		
Address: 3076 RIVER	ROAD		
Phone No.:			
	57 ' 28.2 " Longitude: 76 º 26 ' 11.1 "		
Sampling Point: Latitude:			
Casing Stick Up:	ft. Measured from: X Land Surface TOC 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) 05/1	8/2017 Sample Collection Time: 12:32 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	05/26/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
 Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

05/18/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	7	SM20-2321
CALCIUM, TOTAL	18.7	EPA 200.7
CALCIUM, DISSOLVED	16	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	51.6	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	9	EPA 200.7
MAGNESIUM, DISSOLVED	9	EPA 200.7
MANGANESE, TOTAL (ug/l)	150	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	150	EPA 200.7
NITRATE-NITROGEN	12.5	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

SENSENICH

PS

Sample Date

05/18/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.16	FIELD
pH-LAB (SU)	6.09	SM4500B
POTASSIUM, TOTAL	3.3	EPA 200.7
POTASSIUM, DISSOLVED	3.1	EPA 200.7
SODIUM, TOTAL	22.1	EPA 200.7
SODIUM, DISSOLVED	22.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	348	FIELD
SPEC. COND., LAB (umhos/cm)	264	EPA 120.1
SULFATE	10.8	EPA 300
ALKALINITY	7	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	191	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

05/18/2017

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

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



Date Prepared/Revised 06/26/2017

DEP USE ONLY

Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")		
Facility Name: Frey Farm I County: Lancaster C			
Township or Municipality: MANOR TC Landowner Name: LCSWMA Address: 3079 RIVER	WNSHIP		
Phone No.:			
Sampling Point: Latitude:	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: Sampling Depth:	ft. Sampling Method: Pumped Bailed		
Well Purged: Yes	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micr Sample Date:(mm/dd/yy) 05/1	on)?: X Yes No 9/2017 Sample Collection Time: 10:45 AM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	06/01/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	6	SM20-2321
CALCIUM, TOTAL	11.9	EPA 200.7
CALCIUM, DISSOLVED	10.8	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	35	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	5.4	EPA 200.7
MAGNESIUM, DISSOLVED	5	EPA 200.7
MANGANESE, TOTAL (ug/l)	170	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	150	EPA 200.7
NITRATE-NITROGEN	0.2 ND	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	4.99	FIELD
pH-LAB (SU)	5.73	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	1.9	EPA 200.7
SODIUM, TOTAL	11.7	EPA 200.7
SODIUM, DISSOLVED	10.8	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	198	FIELD
SPEC. COND., LAB (umhos/cm)	163	EPA 120.1
SULFATE	27.9	EPA 300
ALKALINITY	6	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	134	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

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



Date Prepared/Revised 06/26/2017

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):	101389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
Facility Name:Frey Farm I			
County: Lancaster C	County		
Township or Municipality: MANOR TO Landowner Name: WEBER			
Address: 3088 RIVE	ROAD		
Phone No.: Sampling Point: Latitude: ^{39 c}	57 ' 21 " Longitude: ⁷⁶ ° 26 ' <u>7.1</u> "		
Sampling Point: Latitude:	ft. Measured from: X Land Surface TOC		
Casing Stick Up:	ft. Elevation of Water Level: ft./MSL		
Total Well Depth: Sampling Depth: Well Purged:	ft. Sampling Method: Pumped Bailed The state of the		
Sample Field Filtered (must be 0.45 micr Sample Date:(mm/dd/yy) 05/1	on)?: X Yes No 7/2017 Sample Collection Time: 9:49 AM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	05/26/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS WEBER

Sample Date

05/17/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	166	SM20-2321
CALCIUM, TOTAL	2.5	EPA 200.7
CALCIUM, DISSOLVED	0.1 ND	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	204	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.13	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	14.2	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

WEBER

PS

Sample Date

05/17/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	6.89	FIELD
pH-LAB (SU)	7.23	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	1.4	EPA 200.7
SODIUM, TOTAL	219	EPA 200.7
SODIUM, DISSOLVED	217	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	1025	FIELD
SPEC. COND., LAB (umhos/cm)	1050	EPA 120.1
SULFATE	3.4	EPA 300
ALKALINITY	166	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	617	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

WEBER

PS

Sample Date

05/17/2017

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

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



Date Prepared/Revised 06/26/2017

DEP USE ONLY

Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
INDICATE THE LATITUDE AND LONGI	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE $^\circ$ MM' SS.S")		
Facility Name: Frey Farm L	andfill		
County: Lancaster C	County		
Township or Municipality: MANOR TO	WNSHIP		
Landowner Name: KIRCHNER			
Address: 3100 RIVER	R ROAD		
Phone No.:			
	57 ' 17.9 " Longitude: 76 ° 26 ' 6.28 "		
Sampling Point: Latitude:			
•	ft. Measured from: X Land Surface TOC ft. Elevation of Water Level: ft./MSL		
Casing Stick Up:			
Total Well Depth: Sampling Depth:	ftSampling Method:PumpedBailed		
Well Purged: Yes	X No Well Volumes Purged:		
Sample Field Filtered (must be 0.45 micro	on)?: X Yes No		
	9/2017 Sample Collection Time: 2:10 PM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	05/31/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	27	SM20-2321
CALCIUM, TOTAL	18.8	EPA 200.7
CALCIUM, DISSOLVED	18.3	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	56.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	8.8	EPA 200.7
MAGNESIUM, DISSOLVED	8.6	EPA 200.7
MANGANESE, TOTAL (ug/l)	9.5	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	10	EPA 200.7
NITRATE-NITROGEN	4.8	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

KIRCHNER

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.18	FIELD
pH-LAB (SU)	6.55	SM4500B
POTASSIUM, TOTAL	1.7	EPA 200.7
POTASSIUM, DISSOLVED	1.6	EPA 200.7
SODIUM, TOTAL	16.2	EPA 200.7
SODIUM, DISSOLVED	15.9	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	299	FIELD
SPEC. COND., LAB (umhos/cm)	259	EPA 120.1
SULFATE	6.3	EPA 300
ALKALINITY	27	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	210	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

05/19/2017

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

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



Date Prepared/Revised 06/26/2017

DEP USE ONLY

Date Received

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

General Reference: Act 101 Section	1103		
SECTION A. SITE IDENTIFIER			
Applicant/permittee:	ancaster County Solid Waste Manage		
Site Name: F	rey Farm Landfill		
Facility ID (as issued by DEP):	01389		
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION		
	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S")		
Facility Name: Frey Farm L County: Lancaster C			
County: Lancaster C Township or Municipality: MANOR TC Landowner Name: LCSWMA Address: 3106 RIVER	WNSHIP		
Phone No.:			
Sampling Point: Latitude:	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: Sampling Depth:	ftft 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) 05/1	9/2017 Sample Collection Time: 10:50 AM		
Laboratory(ies) Performing Analysis	ALS Environmental		
(include address and phone number)	34 Dogwood Lane		
	Middletown, PA 17057 (717) 944-5541		
Lab Accreditation Number(s)	22-293		
Lab Analysis Date	06/01/2017		
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.		
Comments:			

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/19/2017

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

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.47	FIELD
pH-LAB (SU)	6.38	SM4500B
POTASSIUM, TOTAL	1.5	EPA 200.7
POTASSIUM, DISSOLVED	1.5	EPA 200.7
SODIUM, TOTAL	26.3	EPA 200.7
SODIUM, DISSOLVED	25.1	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	272	FIELD
SPEC. COND., LAB (umhos/cm)	250	EPA 120.1
SULFATE	3.1	EPA 300
ALKALINITY	13	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	198	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	5.36	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

LCSWMA

PS

Sample Date

05/19/2017

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

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



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised 06/26/2017

DEP USE ONLY

Date Received

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

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

General Reference: Act 101 Section	1103
	SECTION A. SITE IDENTIFIER
Applicant/permittee:	ancaster County Solid Waste Manage
Site Name: F	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
SEC	TION B. PRIVATE WATER SUPPLY INFORMATION
INDICATE THE LATITUDE AND LONGI Facility Name: Frey Farm I	TUDE TO THE NEAREST ONE TENTH OF A SECOND (DE° MM' SS.S") _andfill
County: Lancaster C	
Township or Municipality:MANOR TOLandowner Name:BECKAddress:3125 RIVE	
Phone No.:	
Sampling Point: Latitude: 39 c	9 57 ' 11.6 " Longitude: 76 º 26 ' <u>5.4</u> "
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 ft Sampling Method: Pumped Bailed
Well Purged: Yes	X No Well Volumes Purged:
Sample Field Filtered (must be 0.45 micr Sample Date:(mm/dd/yy) 05/1	on)?: X Yes No 9/2017 Sample Collection Time: 12:12 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	34 Dogwood Lane
	Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	06/01/2017
Were any holding times exceeded?:	Yes X No If yes, please explain in comments field.
Comments:	

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS BECK

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	30	SM20-2321
CALCIUM, TOTAL	0.07	EPA 200.7
CALCIUM, DISSOLVED	0.18	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	7 ND	EPA 410.2
CHLORIDE	94.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.062	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	8.5	EPA 300

Facility I.D. Number

101389

Monitoring Point I.D. No.

BECK

PS

Sample Date

05/19/2017

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	0.2 ND	EPA 300
pH-FIELD (SU)	5.6	FIELD
pH-LAB (SU)	6.57	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	1.8	EPA 200.7
SODIUM, TOTAL	86.5	EPA 200.7
SODIUM, DISSOLVED	84	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	405	FIELD
SPEC. COND., LAB (umhos/cm)	414	EPA 120.1
SULFATE	8.4	EPA 300
ALKALINITY	30	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	252	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.1 ND	SM 2130B

Facility I.D. Number

101389

Monitoring Point I.D. No.

BECK

PS

Sample Date

05/19/2017

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

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





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

June 2, 2017

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

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER-3044	Workorder:	2231675
Purchase Order:		Workorder ID:	2ND QTR 2017-3044 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231675 2ND QTR 2017-3044 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231675 2ND QTR 2017-3044 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are 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 incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231675 2ND QTR 2017-3044 RIVER RD

Lab ID: 2231675001 Sample ID: 3044 River Re	oad, Conest	oga, PA	N			5/19/2017 12:0 5/19/2017 16:		Matrix:	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	18		mg/L	5	S2320B-97			5/21/17 19:10	MSA	С
Alkalinity, Total	18	1	mg/L	5	S2320B-97			5/21/17 19:10	MSA	С
Ammonia-N	0.197		mg/L	0.100	D6919-09			5/26/17 06:54	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	21.4		mg/L	2.0	EPA 300.0			5/20/17 19:09	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 19:09	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 14:27	PAG	I
Nitrate-N	21.4		mg/L	1.0	EPA 300.0			5/20/17 19:22	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 19:09	CHW	С
рН	6.44	2	pH_Units		S4500HB-11			5/21/17 19:10	MSA	С
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	н
Specific Conductance	235		umhos/cm	1	S2510B-97			5/21/17 19:10	MSA	С
Sulfate	ND		mg/L	2.0	EPA 300.0			5/20/17 19:09	CHW	С
Total Dissolved Solids	186	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	С
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	1.28		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	С
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		К
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		K
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		K
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		K
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37		ĸ
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 01:37		K
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:37	CJG	К
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231675 2ND QTR 2017-3044 RIVER RD

Lab ID: 2231675001 Sample ID: 3044 River Ro	ad, Conest	oga, PA			Date Collected: Date Received:			Matrix: W	'ater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichlorobenzene-d4 (S)	90.8		%	70 - 130	EPA 524.2			5/27/17 01:37	CJG	К
4-Bromofluorobenzene (S)	83.3		%	70 - 130	EPA 524.2			5/27/17 01:37	CJG	К
METALS										
Calcium, Total	19.9		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Calcium, Dissolved	19.6		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Iron, Total	0.28		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Magnesium, Total	10.5		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Magnesium, Dissolved	10.4		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Manganese, Total	0.021		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Manganese, Dissolved	0.010		mg/L	0.0050	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Potassium, Total	1.8		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Potassium, Dissolved	1.7		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
Sodium, Total	10.2		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:48	TSS	D1
Sodium, Dissolved	10		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:55	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.640		pH_Units		Field			5/19/17 12:00	BGS	Μ
Specific Conductance, Field	278	I	umhos/cm	1	Field			5/19/17 12:00	BGS	Μ
Temperature	18.30		Deg. C		Field			5/19/17 12:00	BGS	Μ

J. Scharo Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231675001	1	3044 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinit	y is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
2231675001	2	3044 River Road, Conestoga, PA	S4500HB-11	pH
			rs identified as "analyze immediately" ding time when analyzed in the laborat	
2231675001	3	3044 River Road, Conestoga, PA	S2540C-11	Total Dissolved Solids
The method blank	k associa [.]	ted with this analyte had a result of 21	mg/L. Criteria states that the method	blank should be less than 5 mg/L.
2231675001	4	3044 River Road, Conestoga, PA	EPA 524.2	Trichlorofluoromethane
		for method EPA 524.2 was outside the ontrol limits were 70 to 130.	e control limits for the analyte Trichloro	fluoromethane. The % Recovery was

ALS Environmental Laboratory Locations Across North America

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Address: 3044 River Road		Contriner	40 ml	250 ml	500 ml	40 ml	1	500 ml 5	500 ml	500 ml	2L 5	500 ml Cooler Temp:	Temp: 1 Them ID: 5/ S	
Conestoga, PA 17516		Preservative	Ŗ	H2SO4	H2SO4	오	1	H2SO4	EONH	FONH	None	None No. of Coolers:	oters: Y N	_(
Contact: Nelson L. Smith					ANA	ANALYSES/METHOD REQUESTED	THOD RE	QUESTE	_				Custody Seals Present?	_
Phone#: (717) 872-2888													(if present) Seals Intact?	
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

June 2, 2017

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

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER-3052	Workorder:	2231674
Purchase Order:		Workorder ID:	2ND QTR 2017-3052 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Landowner , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231674 2ND QTR 2017-3052 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231674 2ND QTR 2017-3052 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
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- -- 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 incurbator and the "Analyzed" value is the date/time out the incubator.

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231674 2ND QTR 2017-3052 RIVER RD

Lab ID: 2231674001 Sample ID: 3052 River Ro	oad, Conest	oga, PA	۱.			5/19/2017 12:: 5/19/2017 16::		Matrix:	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	S2320B-97			5/21/17 19:01	MSA	С
Alkalinity, Total	ND	1	mg/L	5	S2320B-97			5/21/17 19:01	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 06:35	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	21.2		mg/L	2.0	EPA 300.0			5/20/17 18:56	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 18:56	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 14:03	PAG	I
Nitrate-N	19.4		mg/L	0.20	EPA 300.0			5/20/17 18:56	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 18:56	CHW	С
рН	5.72	2	pH_Units		S4500HB-11			5/21/17 19:01	MSA	С
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	Н
Specific Conductance	208		umhos/cm	1	S2510B-97			5/21/17 19:01	MSA	С
Sulfate	ND		mg/L	2.0	EPA 300.0			5/20/17 18:56	CHW	С
Total Dissolved Solids	187	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	С
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	0.13		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	С
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13		К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13		К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13		К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13		К
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 01:13		К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 01:13	CJG	К
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231674 2ND QTR 2017-3052 RIVER RD

Lab ID: 2231674001 Sample ID: 3052 River Ro	ad, Conest	oga, PA			Date Collected: Date Received:		-	Matrix: W	'ater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichlorobenzene-d4 (S)	94.4		%	70 - 130	EPA 524.2			5/27/17 01:13	CJG	К
4-Bromofluorobenzene (S)	85.6		%	70 - 130	EPA 524.2			5/27/17 01:13	CJG	К
METALS										
Calcium, Total	15.5		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Calcium, Dissolved	14.6		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Magnesium, Total	11.0		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Magnesium, Dissolved	10.5		mg/L	0.10	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Manganese, Total	0.062		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Manganese, Dissolved	0.057		mg/L	0.0050	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Potassium, Dissolved	1.9		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
Sodium, Total	7.7		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:44	TSS	D1
Sodium, Dissolved	7.2		mg/L	0.50	EPA 200.7	5/24/17 05:40	TSS	5/25/17 00:51	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	4.810		pH_Units		Field			5/19/17 12:23	BGS	Μ
Specific Conductance, Field	238	1	umhos/cm	1	Field			5/19/17 12:23	BGS	Μ
Temperature	17.30		Deg. C		Field			5/19/17 12:23	BGS	Μ

J. Scharo Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231674001	1	3052 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalini	ty is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
2231674001	2	3052 River Road, Conestoga, PA	S4500HB-11	pH
			rs identified as "analyze immediately" ding time when analyzed in the laborat	
2231674001	3	3052 River Road, Conestoga, PA	S2540C-11	Total Dissolved Solids
The method blan	k associa [.]	ted with this analyte had a result of 21	mg/L. Criteria states that the method	blank should be less than 5 mg/L.
2231674001	4	3052 River Road, Conestoga, PA	EPA 524.2	Trichlorofluoromethane
		for method EPA 524.2 was outside the ontrol limits were 70 to 130.	e control limits for the analyte Trichloro	fluoromethane. The % Recovery was

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Client Name: LCSWMA - Gerald E. Miller, Sr.		Container		AG	AN	AN	8	1	PL	PL	Ы	ЪĻ	Ы		ng Lab)
Address: 3052 River Road		Contraine	_	40 ml 25	250 ml 5	500 ml	40 mi	19	500 ml 5(500 ml 5	500 ml	2L	500 ml Coolt	cooler Temp: Therm ID: 3/ S	
Conestoga, PA 17516		Preservative		HCI	H2SO4 H	H2SO4	Ę	Ŧ	H2SO4 H	HNO3	HNO3	None	None No. of	No. of Coolers: Y N	Initial
Contact: Gerald E. Miller, Sr.						ANAL	ANALYSES/METHOD REQUESTED	HOD RE	QUESTEL					Custody Seals Present?	\sim
Phone#: (717) 872-5117	10	-	_	-	-					-				(If present) Seals Intact?	
Project Name#: LCSWMA - Quarterly								.	4YY 1			ʻ3'1		Received on Ica?	
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(as it will appear on the lab report)	Date Time	9.	L		1	r Number	Enter Number of Containers Per Sample or Field Results Below	ers Per Sa	mple or Fi	eld Resul				Sample/COC Comments	
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June 5, 2017

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

Certificate of Analysis

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

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231672 2ND QTR 2017 3056 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231672 2ND QTR 2017 3056 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are 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 incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231672 2ND QTR 2017 3056 RIVER RD

Lab ID: 2231672001 Sample ID: 3056RIVERRE)					: 5/19/2017 09: : 5/19/2017 16:		Matrix: V	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:24	CJG	К
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	89.8		%	70 - 130	EPA 524.2			5/27/17 00:24	CJG	К
4-Bromofluorobenzene (S)	86.5		%	70 - 130	EPA 524.2			5/27/17 00:24	CJG	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	S2320B-97			5/21/17 18:43	MSA	С
Alkalinity, Total	ND	1	mg/L	5	S2320B-97			5/21/17 18:43	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 05:57	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			6/2/17 16:14	AK	В
Chloride	24.2		mg/L	2.0	EPA 300.0			5/20/17 18:30	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 18:30	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 12:15	PAG	I
Nitrate-N	22.5		mg/L	1.0	EPA 300.0			5/20/17 18:43	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 18:30	CHW	С
рН	5.87	2	pH_Units		S4500HB-11			5/21/17 18:43	MSA	С
Phenolics	ND		ng/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	н
Specific Conductance	233		umhos/cm	1	S2510B-97		-	5/21/17 18:43		C
Sulfate	ND		mg/L	2.0	EPA 300.0			5/20/17 18:30		
Total Dissolved Solids	192	3	mg/L	2.0	S2540C-11			5/24/17 16:58	-	C
	102	5	iiig/ E	5	020400-11			0,24,11 10.00	040	U U

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231672 2ND QTR 2017 3056 RIVER RD

Lab ID: 2231672001 Sample ID: 3056RIVERRD	1				Date Collected: Date Received:			Matrix: W	/ater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/30/17 10:47	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	С
METALS										
Calcium, Total	15.6		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Calcium, Dissolved	15.1		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Magnesium, Total	12.2		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Magnesium, Dissolved	12.1		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Manganese, Total	0.052		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Manganese, Dissolved	0.052		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Potassium, Total	2.3		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Potassium, Dissolved	2.1		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
Sodium, Total	8.9		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:37	TSS	D1
Sodium, Dissolved	8.5		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:37	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	4.920		pH_Units		SM4500B-11			5/19/17 09:30	CLT	М
Specific Conductance, Field	275		umhos/cm	1	S2510B-97			5/19/17 09:30	CLT	М

Susand. Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte	
2231672001	1	3056RIVERRD	S2320B-97	Alkalinity, Total	
The Total Alkalini	ty is titrate	ed to a pH of 4.5 and re	ported as mg CaCO3/L.		
2231672001	2	3056RIVERRD	S4500HB-11	рН	
			vsis. Parameters identified as "analyze immed ne method holding time when analyzed in the		
2231672001	3	3056RIVERRD	S2540C-11	Total Dissolved Solids	
The method blan	k associa	ted with this analyte had	d a result of 21 mg/L. Criteria states that the m	ethod blank should be less than 5 mg/L.	
2231672001	4	3056RIVERRD	EPA 524.2	Trichlorofluoromethane	
		for method EPA 524.2 v ontrol limits were 70 to	vas outside the control limits for the analyte Tr 130.	ichlorofluoromethane. The % Recovery was	

ALS Environmental Laboratory Locations Across North America

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34 Dog	34 Dogwood Lane Middletown, PA 1705	7			REC	REQUEST FOR	S S S	ANALYSIS	YSIS			2	۔ د#:		-
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Client Name: LCSWMA			Container	ਖ	Ч	ЪГ	AN	ЪГ	Ч	AN	AV	8	Receipt	Receipt Intomation journments	(lab)
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Contact: Mark Reider						AN	ALYSESI	ANALYSES/METHOD REQUESTED	REQUEST					Custody Seals Present?	LTT L
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

June 2, 2017

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

Certificate of Analysis

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

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231671 2ND QTR 2017-3060 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231671 2ND QTR 2017-3060 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are 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 incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231671 2ND QTR 2017-3060 RIVER RD

Lab ID: 2231671001 Sample ID: 3060RIVERRE)					5/19/2017 09: 5/19/2017 16:	-	Matrix: V	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	K
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/31/17 15:07	DD	к
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	88.8		%	70 - 130	EPA 524.2			5/31/17 15:07	DD	К
4-Bromofluorobenzene (S)	86		%	70 - 130	EPA 524.2			5/31/17 15:07	DD	К
WET CHEMISTRY										
Alkalinity, Bicarbonate	ND		mg/L	5	S2320B-97			5/21/17 18:34	MSA	С
Alkalinity, Total	ND	1	mg/L	5	S2320B-97			5/21/17 18:34	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 05:37	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	14.9		mg/L	2.0	EPA 300.0			5/20/17 16:46	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 16:46	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 11:49	PAG	I
Nitrate-N	17.1		mg/L	0.20	EPA 300.0			5/20/17 16:46	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 16:46	CHW	С
pН	5.82	2	pH_Units		S4500HB-11			5/21/17 18:34	MSA	С
' Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	Н
Specific Conductance	202		umhos/cm	1	S2510B-97			5/21/17 18:34		C
Sulfate	10.2		mg/L	2.0	EPA 300.0			5/20/17 16:46		-
Total Dissolved Solids	172	3	mg/L	2.0	S2540C-11			5/24/17 16:58		c
	112	3	mg/∟	5	020400-11			5/24/17 10.30	143	0

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231671 2ND QTR 2017-3060 RIVER RD

Lab ID: 2231671001 Sample ID: 3060RIVERRD)				5/19/2017 09:45 5/19/2017 16:51	Matrix: V	/ater
Parameters	Results I	Flag Units	RDL	Method	Prepared By	Analyzed	By Cntr
Total Organic Carbon (TOC)	ND	mg/L	0.50	S5310B-00		5/25/17 14:38	PAG F
Turbidity	ND	NTU	0.10	S2130B-01		5/20/17 04:50	MBW C
METALS							
Calcium, Total	10.9	mg/L	0.050	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:26	TSS D1
Calcium, Dissolved	10.5	mg/L	0.10	EPA 200.7	5/24/17 05:39 TSS	5/25/17 00:19	TSS E
Iron, Total	ND	mg/L	0.030	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:26	TSS D1
Iron, Dissolved	ND	mg/L	0.060	EPA 200.7	5/24/17 05:39 TSS	5/25/17 00:19	TSS E
Magnesium, Total	11.7	mg/L	0.050	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:26	TSS D1
Magnesium, Dissolved	11.2	mg/L	0.10	EPA 200.7	5/24/17 05:39 TSS	5/25/17 00:19	TSS E
Manganese, Total	0.064	mg/L	0.0025	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:26	TSS D1
Manganese, Dissolved	0.062	mg/L	0.0050	EPA 200.7	5/24/17 05:39 TSS	5/25/17 00:19	TSS E
Potassium, Total	3.3	mg/L	0.25	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:26	TSS D1
Potassium, Dissolved	3.1	mg/L	0.50	EPA 200.7	5/24/17 05:39 TSS	5/25/17 00:19	TSS E
Sodium, Total	9.8	mg/L	0.25	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:26	TSS D1
Sodium, Dissolved	9.4	mg/L	0.50	EPA 200.7	5/24/17 05:39 TSS	5/25/17 00:19	TSS E
FIELD PARAMETERS							
pH, Field (SM4500B)	5.140	pH_Units		SM4500B-11		5/19/17 09:45	CLT M
Specific Conductance, Field	242	umhos/cm	1	S2510B-97		5/19/17 09:45	CLT M

Susand. Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231671001	1	3060RIVERRD	S2320B-97	Alkalinity, Total
The Total Alkalini	ity is titrate	ed to a pH of 4.5 and repo	orted as mg CaCO3/L.	
2231671001	2	3060RIVERRD	S4500HB-11	pH
			s. Parameters identified as "analyze immed method holding time when analyzed in the	diately" require analysis within 15 minutes of laboratory.
2231671001	3	3060RIVERRD	S2540C-11	Total Dissolved Solids

The method blank associated with this analyte had a result of 21 mg/L. Criteria states that the method blank should be less than 5 mg/L.

ALS Environmental Laboratory Locations Across North America

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	Middletown, PA 17057	7			REC	UEST	REQUEST FOR ANALYSIS	ANAL	YSIS						of
(ALS) F.717-94 Environmental	44-1430		4	ALL SHA	(DED AF Sampl	keas mu .er. Ins	DED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.	OMPLET	ed By T The Bac	HE CLIE X.	INT /	ALS	10 10 10	3 1 6 7 1 *	
Client Name: LCSWMA			Container	Ы	Ч	Ρť	AN	Ч	ΡL	AN	AV	66	Indianan - 1	Receipt unformation (completed by Receiving Lab)	ceiving Lab)
Address:			Container	۴	500	500	125	500	500	250	40	40	Cooler Temp:	amp: 1 Therm ID: 3	2
			Preservative	None	None	H2SO4	H2SO4	EONH	HN03	H2SO4	НCL	HCI	No. of Coolers:	• - 	N Initial
Contact: Mark Reider						AN	ANALYSES/METHOD REQUESTED	IETHOD I	REQUEST	ED				Custody Seals Present?	73E1
				4										(If present) Seals Intact?	
Project Name讲: LCSWMA - Form 52				q1-=					вŅ					Received on Ice?	-
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Sample Description/Location	Sample) or 6 Astrix	SpC Dq2	- 1	EHN	0-0	eloT	ssiQ	XOT	201		Courier/Tracking #:	scking #:	
(as it will appear on the tab report)	Date	Time	-+			Enter Num	Enter Number of Containers Per Sample or Field Results Below	ainers Per	Sample or	Field Res	ults Below	-		Sample/COC Comments	
3060RIVER	5/19/2017	09:45	G DW	٢	+	-	1	1.	1	2	2	3	pH = 5.14	+	
				•							j		SpC= 242	0	
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

May 31, 2017

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

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER-3076	Workorder:	2231228
Purchase Order:		Workorder ID:	2ND QTR 2017-3076 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Landowner , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231228 2ND QTR 2017-3076 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231228 2ND QTR 2017-3076 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
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- refer to methods from "Standard Methods for the Examination of Water and Wastewater".
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- U Indicates that the analyte was Not Detected (ND)
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- MDL Method Detection Limit
- PQL Practical Quantitation Limit
- RDL Reporting Detection Limit
- ND Not Detected indicates that the analyte was Not Detected at the RDL
- Cntr Analysis was performed using this container
- RegLmt Regulatory Limit
- LCS Laboratory Control Sample
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- DUP Sample Duplicate
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- RPD Relative Percent Difference
- LOD DoD Limit of Detection
- LOQ DoD Limit of Quantitation
- DL DoD Detection Limit
- I Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
- (S) Surrogate Compound
- NC Not Calculated
- * Result outside of QC limits

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231228 2ND QTR 2017-3076 RIVER RD

Lab ID: 2231228001 Sample ID: 3076 River Ro	oad, Conest	oga, PA				5/18/2017 12: 5/18/2017 14:		Matrix: V	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 02:51	CJG	К
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	93.1		%	70 - 130	EPA 524.2			5/26/17 02:51	CJG	К
4-Bromofluorobenzene (S)	85.3		%	70 - 130	EPA 524.2			5/26/17 02:51	CJG	K
WET CHEMISTRY										
Alkalinity, Bicarbonate	7		mg/L	5	S2320B-97			5/20/17 07:22	MSA	А
Alkalinity, Total	7	1	mg/L	5	S2320B-97			5/20/17 07:22	MSA	А
Ammonia-N	ND		mg/L	0.100	D6919-09			5/24/17 18:49	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	51.6		mg/L	2.0	EPA 300.0			5/19/17 16:12	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/19/17 16:12	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			5/26/17 13:42	PAG	I
Nitrate-N	12.5		mg/L	0.20	EPA 300.0			5/19/17 16:12	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/19/17 16:12	CHW	С
рН	6.09	2	pH_Units		S4500HB-11			5/20/17 07:22	MSA	С
, Phenolics	ND		ng/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	Н
Specific Conductance	264		umhos/cm	1	S2510B-97			5/20/17 07:22		A
Sulfate	10.8		mg/L	2.0	EPA 300.0			5/19/17 16:12		
Total Dissolved Solids	191		mg/L	2.0	S2540C-11			5/24/17 15:33	JAS	c
	101		mg/∟	5	020700-11			0/27/17 10.00	545	0

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231228 2ND QTR 2017-3076 RIVER RD

Lab ID: 2231228001 Sample ID: 3076 River Ro	ad, Conestoga	a, PA			5/18/2017 12:32 5/18/2017 14:07	Matrix: W	'ater	
Parameters	Results F	lag Units	RDL	Method	Prepared By	Analyzed	By Cntr	
Total Organic Carbon (TOC)	ND	mg/L	0.50	S5310B-00		5/24/17 10:54	PAG F	
Turbidity	ND	NTU	0.10	S2130B-01		5/18/17 01:59	MSA C	
METALS								
Calcium, Total	18.7	mg/L	0.050	EPA 200.7	5/19/17 00:35 LXC	5/22/17 08:20	TSS D1	
Calcium, Dissolved	16.0	mg/L	0.10	EPA 200.7	5/24/17 05:37 TSS	5/26/17 00:52	TSS E	
Iron, Total	ND	mg/L	0.030	EPA 200.7	5/19/17 00:35 LXC	5/22/17 08:20	TSS D1	
Iron, Dissolved	ND	mg/L	0.060	EPA 200.7	5/24/17 05:37 TSS	5/26/17 00:52	TSS E	
Magnesium, Total	9.0	mg/L	0.050	EPA 200.7	5/19/17 00:35 LXC	5/22/17 08:20	TSS D1	
Magnesium, Dissolved	9.0	mg/L	0.10	EPA 200.7	5/24/17 05:37 TSS	5/26/17 00:52	TSS E	
Manganese, Total	0.15	mg/L	0.0025	EPA 200.7	5/19/17 00:35 LXC	5/22/17 08:20	TSS D1	
Manganese, Dissolved	0.15	mg/L	0.0050	EPA 200.7	5/24/17 05:37 TSS	5/26/17 00:52	TSS E	
Potassium, Total	3.3	mg/L	0.25	EPA 200.7	5/19/17 00:35 LXC	5/22/17 08:20	TSS D1	
Potassium, Dissolved	3.1	mg/L	0.50	EPA 200.7	5/24/17 05:37 TSS	5/26/17 00:52	TSS E	
Sodium, Total	22.1	mg/L	0.25	EPA 200.7	5/19/17 00:35 LXC	5/22/17 08:20	TSS D1	
Sodium, Dissolved	22.5	mg/L	0.50	EPA 200.7	5/24/17 05:37 TSS	5/26/17 00:52	TSS E	
FIELD PARAMETERS								
pH, Field (SM4500B)	5.160	pH_Units		Field		5/18/17 12:32	BGS N	
Specific Conductance, Field	348	umhos/cm	1	Field		5/18/17 12:32	BGS N	
Temperature	16.70	Deg. C		Field		5/18/17 12:32	BGS N	

Scharr Ms. Susan J Scherer

Project Coordinator

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231228001	1	3076 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity	y is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
2231228001	2	3076 River Road, Conestoga, PA	S4500HB-11	рН
The pH analysis is	s an "ana	lvze immediatelv" analysis. Paramete	rs identified as "analyze immediately"	require analysis within 15 minutes of

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

ALS Environmental Laboratory Locations Across North America

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Client Name: LCSWMA - Esther A. Schopf		3	Type	AG	AN	AN	8	1	Ъ	ಹ	ч	Ч	PL		
Address: 3076 Rover Road		8	Container Size	40 ml	250 ml	500 ml	40 ml	1	500 ml	500 ml	500 ml	21	500 ml Cool	Cooler Temp: 3. Liberm ID:	318
Conestoga, PA 17516		E.	Preservative	Ę	H2SO4	H2SO4	단	1	H2SO4	HNO3	HNO3	None	None No. of	No. of Coolers:	N Initial
Contact: Esther A. Schopf		_				ANAI	ANALYSES/METHOD REQUESTED	THOD RE	QUESTE	0				Custody Seals Present?	1 della
Phone#: (717) 872-2559					8					·'U				(if present) Seals Intact?	
Project Name#: LCSWMA - Quarterty										JW '61		'H' 'b'		Received on Ice?	-
Bill To: Lancaster County Solid Waste MA		Т								w 'a		os	8	COCILabels Complete/Accurate?	-
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Sample Description/Location	Sample Time	Gord	intsM'	100	(01	0-0		EM Pro	CHN	K' N	Hell			Courier/Tracking #:	
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Project Comments:	LOGGED	LOGGED BY(signature):	ature):		Ĩ	U		1100	1181	5	200 J	s	Standard	Special Processing	State Samples
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

June 2, 2017

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

Certificate of Analysis

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

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231673 2ND QTR 2017 3079 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231673 2ND QTR 2017 3079 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- 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 incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231673 2ND QTR 2017 3079 RIVER RD

Lab ID: 2231673001 Sample ID: 3079RIVERR	D					5/19/2017 10:4 5/19/2017 16:		Matrix: \	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	6		mg/L	5	S2320B-97			5/21/17 18:52	MSA	С
Alkalinity, Total	6	1	mg/L	5	S2320B-97			5/21/17 18:52	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 06:16	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	35.0		mg/L	2.0	EPA 300.0			5/20/17 16:59	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 16:59	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 12:59	PAG	I
Nitrate-N	ND		mg/L	0.20	EPA 300.0			5/20/17 16:59	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 16:59	CHW	С
рН	5.73	2	pH_Units		S4500HB-11			5/21/17 18:52	MSA	С
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	Н
Specific Conductance	163		umhos/cm	1	S2510B-97			5/21/17 18:52	MSA	С
Sulfate	27.9		mg/L	2.0	EPA 300.0			5/20/17 16:59	CHW	С
Total Dissolved Solids	134	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	С
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	С
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48		К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48		К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48		К
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 00:48	CJG	К
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231673 2ND QTR 2017 3079 RIVER RD

Lab ID: 2231673001 Sample ID: 3079RIVERR	D				Date Collected: Date Received:		-	Matrix: W	/ater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichlorobenzene-d4 (S)	92.3		%	70 - 130	EPA 524.2			5/27/17 00:48	CJG	К
4-Bromofluorobenzene (S)	83.9		%	70 - 130	EPA 524.2			5/27/17 00:48	CJG	К
METALS										
Calcium, Total	11.9		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Calcium, Dissolved	10.8		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Magnesium, Total	5.4		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Magnesium, Dissolved	5.0		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Manganese, Total	0.17		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Manganese, Dissolved	0.15		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Potassium, Dissolved	1.9		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
Sodium, Total	11.7		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:41	TSS	D1
Sodium, Dissolved	10.8		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:48	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	4.990		pH_Units		SM4500B-11			5/19/17 10:45	CLT	Μ
Specific Conductance, Field	198		umhos/cm	1	S2510B-97			5/19/17 10:45	CLT	Μ

Susand. Scharer

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte	
2231673001	1	3079RIVERRD	S2320B-97	Alkalinity, Total	
The Total Alkalini	ity is titrate	ed to a pH of 4.5 and re	ported as mg CaCO3/L.		
2231673001	2	3079RIVERRD	S4500HB-11	рН	
			vsis. Parameters identified as "analyze immed ne method holding time when analyzed in the		
2231673001	3	3079RIVERRD	S2540C-11	Total Dissolved Solids	
The method blan	k associa	ted with this analyte had	d a result of 21 mg/L. Criteria states that the n	nethod blank should be less than 5 mg/L.	
2231673001	4	3079RIVERRD	EPA 524.2	Trichlorofluoromethane	
		for method EPA 524.2 v ontrol limits were 70 to	vas outside the control limits for the analyte Tr 130.	ichlorofluoromethane. The % Recovery was	

ALS Environmental Laboratory Locations Across North America

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

May 30, 2017

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

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER-3088	Workorder:	2230903
Purchase Order:		Workorder ID:	2ND QTR 2017-3088 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Landowner , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2230903 2ND QTR 2017-3088 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2230903 2ND QTR 2017-3088 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are 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 incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2230903 2ND QTR 2017-3088 RIVER RD

Lab ID: 2230903001 Sample ID: 3088 River Ro	oad, Conest	oga PA				5/17/2017 09: 5/17/2017 16:		Matrix: V	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/24/17 17:35	DD	к
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	71.8		%	70 - 130	EPA 524.2			5/24/17 17:35	DD	K
4-Bromofluorobenzene (S)	78		%	70 - 130	EPA 524.2			5/24/17 17:35	DD	К
WET CHEMISTRY										
Alkalinity, Bicarbonate	166		mg/L	5	S2320B-97			5/19/17 23:26	MSA	С
Alkalinity, Total	166	1	mg/L	5	S2320B-97			5/19/17 23:26	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/25/17 12:26	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/25/17 14:04	AK	В
Chloride	204		mg/L	5.0	EPA 300.0			5/19/17 12:05	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/18/17 17:56	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			5/26/17 11:25	PAG	T
Nitrate-N	14.2		mg/L	0.20	EPA 300.0			5/18/17 17:56	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/18/17 17:56	CHW	С
рН	7.23	2	pH_Units		S4500HB-11			5/19/17 23:26	MSA	С
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	н
Specific Conductance	1050		umhos/cm	1	S2510B-97			5/19/17 23:26		
Sulfate	3.4		mg/L	2.0	EPA 300.0			5/18/17 17:56	CHW	
Total Dissolved Solids	617		mg/L	2.0 5	S2540C-11			5/22/17 20:32	JAS	c
			-							

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2230903 2ND QTR 2017-3088 RIVER RD

Lab ID: 2230903001 Sample ID: 3088 River Ro	ad, Conest	oga PA			Date Collected: Date Received:		-	Matrix: W	/ater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/24/17 10:54	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/18/17 01:35	MSA	С
METALS										
Calcium, Total	2.5		mg/L	0.050	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Calcium, Dissolved	ND		mg/L	0.10	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Magnesium, Total	0.13		mg/L	0.050	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Magnesium, Dissolved	ND		mg/L	0.10	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Manganese, Total	ND		mg/L	0.0025	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Manganese, Dissolved	ND		mg/L	0.0050	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Potassium, Dissolved	1.4		mg/L	0.50	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
Sodium, Total	219		mg/L	0.25	EPA 200.7	5/19/17 00:35	LXC	5/22/17 05:50	TSS	D1
Sodium, Dissolved	217		mg/L	0.50	EPA 200.7	5/24/17 05:37	TSS	5/24/17 21:28	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	6.890		pH_Units		Field			5/17/17 09:49	BGS	Μ
Specific Conductance, Field	1025	ı	umhos/cm	1	Field			5/17/17 09:49	BGS	Μ
Temperature	17.80		Deg. C		Field			5/17/17 09:49	BGS	Μ

Scharr Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2230903001	1	3088 River Road, Conestoga PA	S2320B-97	Alkalinity, Total
The Total Alkalini	ity is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
2230903001	2	3088 River Road, Conestoga PA	S4500HB-11	рН
The pH analysis	is an "ana	lvze immediatelv" analysis. Paramete	rs identified as "analyze immediately"	require analysis within 15 minutes of

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

ALS Environmental Laboratory Locations Across North America

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(ALS) Environmental		Ī	ALL S	DEDIA	AREAS		SIE COM		ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT	LIENT /		V o IV	
34 Oogwood Lane + Middletown, PA 17057 + 717 944 5541 + Fax 717 944 1430	5541 + Fax: 717.944.1430			SA	APLER.	INSTRU	AMPLER. INSTRUCTIONS ON THE BACK	ON THE	BACK.			ALO U	* 2 2 3 0 9 0 3 *
Client Name: LCSWMA - Hans Weber and Deb Kalbach	eb Kalbach	Container	AG		AN A	AN (8	- -	L PL	Ч	ಹ	ЪГ	Receipt ווווחוווופותחו לההווולווביבה הל וופרפוגנוול רמק}
Address: 3088 River Road		Container	40 ml		250 ml	100 mil	40 ml	- 500	500 ml 500 ml	nl 500 ml	#	500 ml	Cooler Temp: / < Them ID: 3/K
Conestoga, PA 17516		Preservative	HCI		H2SO4 H2		HCI	- H2S	H2SO4 HN03	GONH D	None	None	No. of Coolers: Y N Ipitial
Contact: Hans Weber and Deb Kalbach						ANALYS	ANALYSES/METHOD REQUESTED	OD REQ	JESTED				Custody Seals Present?
Phone#: (717) 419-7982			_	_	2		_	-	't	1			(if present) Scals Intact?
Project Name/#: LCSWMA - Quarterly									uM (6	;F,F,		Received on Ice?
Bill To: LCSWMA - Hans Weber and Deb Kalbach	Ibach								δ₩ '	к' и	70S		COC/Labels Complete/Accurate?
TAT X Normal-Standard TAT is 10-12 business days.	2 business days.	-							99 'EC	, nM ,	3' Cl'		Cent. In Good Cend.?
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C=Grab;	G=Grab; C=Composite **:	Matrix - Al	=Air, DW	=Drinking	Water, G	W=Groun	dwater, OI		ther Liquid	SL=Sludge	SO=Soil;	NP=Wipe; V	*Markir - Al=Air, DW=Drinking, Water, GW=Groundwater, OI=OII, OL=Other Liquid; SL=Studge; SO=Soil, WP=Wipe; WW=Wastewater
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

June 1, 2017

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

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER-3100	Workorder:	2231658
Purchase Order:		Workorder ID:	2ND QTR 2017-3100 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Landowner , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231658 2ND QTR 2017-3100 RIVER RD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231658 2ND QTR 2017-3100 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
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- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
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- refer to methods from "Standard Methods for the Examination of Water and Wastewater".
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- LCS Laboratory Control Sample
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- DUP Sample Duplicate
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- RPD Relative Percent Difference
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- LOQ DoD Limit of Quantitation
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- * Result outside of QC limits

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231658 2ND QTR 2017-3100 RIVER RD

Lab ID: 2231658001 Sample ID: 3100 River Ro	oad, Conest	oga, PA				5/19/2017 14: 5/19/2017 16:		Matrix: V	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	K
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 17:10	TMP	К
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	93.1		%	70 - 130	EPA 524.2			5/26/17 17:10	TMP	К
4-Bromofluorobenzene (S)	87.6		%	70 - 130	EPA 524.2			5/26/17 17:10	TMP	К
WET CHEMISTRY										
Alkalinity, Bicarbonate	27		mg/L	5	S2320B-97			5/21/17 16:54	MSA	С
Alkalinity, Total	27	1	mg/L	5	S2320B-97			5/21/17 16:54	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/27/17 09:44	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	56.4		mg/L	2.0	EPA 300.0			5/20/17 15:15	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 15:15	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			5/31/17 15:55	PAG	I
Nitrate-N	4.8		mg/L	0.20	EPA 300.0			5/20/17 15:15	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 15:15	CHW	С
рН	6.55	2	pH_Units		S4500HB-11			5/21/17 16:54	MSA	С
, Phenolics	ND		ng/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/31/17 11:54		н
Specific Conductance	259		umhos/cm	1	S2510B-97		-	5/21/17 16:54		C
Sulfate	6.3		mg/L	2.0	EPA 300.0			5/20/17 15:15		
Total Dissolved Solids	210		mg/L	2.0	S2540C-11			5/24/17 15:33	-	c
			g, -	5	020.00 11			3,2 10.00	0,10	-

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231658 2ND QTR 2017-3100 RIVER RD

Lab ID: 2231658001 Sample ID: 3100 River Roa	ad, Conesto	ga, PA			Date Collected: Date Received:		-	Matrix: W	/ater	
Parameters	Results	Flag l	Jnits	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Total Organic Carbon (TOC)	ND	r	mg/L	0.50	S5310B-00			5/25/17 14:38	PAG	F
Turbidity	ND	1	NTU	0.10	S2130B-01			5/20/17 04:50	MBW	С
METALS										
Calcium, Total	18.8	r	ng/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Calcium, Dissolved	18.3	r	mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Iron, Total	ND	r	mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Iron, Dissolved	ND	r	mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Magnesium, Total	8.8	r	mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Magnesium, Dissolved	8.6	r	mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Manganese, Total	0.0095	r	mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Manganese, Dissolved	0.010	r	mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Potassium, Total	1.7	r	mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Potassium, Dissolved	1.6	r	mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
Sodium, Total	16.2	r	mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:22	TSS	D1
Sodium, Dissolved	15.9	r	mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:12	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.180	pН	_Units		Field			5/19/17 14:17	BGS	М
Specific Conductance, Field	299	um	hos/cm	1	Field			5/19/17 14:17	BGS	Μ
Temperature	17.20	D	eg. C		Field			5/19/17 14:17	BGS	Μ

Scharr Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231658001	1	3100 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity	y is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
2231658001	2	3100 River Road, Conestoga, PA	S4500HB-11	рН
The pH analysis is	s an "ana	lvze immediatelv" analysis. Paramete	rs identified as "analyze immediately"	require analysis within 15 minutes of

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

ALS Environmental Laboratory Locations Across North America

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ALS) Environmental	Ø			2	REQUEST FOR	S Я	ANALYSIS	≌	8			3	of
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Client Name: LCSWMA - Larry Kirchner		Contrainer	AG	AN	AN	90	1	Ы	Ы	Ы	Ъ	PL Recei	Receipt Information (completed by Receiving Lab)
Address: 3100 River Road		Contrainer	40 ml	250 ml	500 ml	40 ml	1	500 ml	500 ml	500 ml	21 5	500 ml Cooler	Cooler Temp: 1 Therm 1D: 31 8
Conestoga, PA 17516		Preservative	HCI	H2SO4	H2SO4	Ŧ	1	H2SO4	HN03	HN03	None	None No. of Coolers:	z >
Contact: Larry Kirchner					ANA	ANALYSES/METHOD REQUESTED	ETHOD R	EQUEST					Custody Seals Present?
Phone#: (717) 584-0030									'u		-	–	(if present) Seals Intact?
Project Name#: LCSWMA - Quarterly									JW '6	B	1'E'		Received on ke?
Bill To: Lancaster County Solid Waste MA									6w 'a	к' и	7OS	COCII	COC/Labels Complete/Accurate?
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quired:	Approved By:							C	letal	,97	'70	003	Correct Sample Volumes?
Email?Y								cot	W P	(s)		он 'А	Correct Preservation?
Fax? 7. No.:			:	>	н	('N-1) :sjæ	SpC	tinili	Headspace/Volatiles?
Sample Description/Location (as it will appear on the lab report)	Sample Date Time	•G or (ют	(OT m	nter Numb	Enter Number of Containers Per Sample or Field Results Below.	iners Per	Sample or	Field Res	uts Below	'Hd		Courter/Tracking #: Sample/COC Comments
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6			10								EDDS: Format Type	mat Type-	
• G=Grab;	G=Grab; C=Composite **M	**Matrix - Al=Air, DW=Drin	ir, DW=Dr	inking Wa	ter; GW=G	roundwater	; OI=Oil; O	DL=Other L	Iquid; SL	Sludge; S(D=Soil; WP	king Water, GW=Groundwater, OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater	
	ALS EN	VIRONME	IN INT SI	DNIddi	ADDRE	PPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057	GWOOL	D LANE, I	MIDDLEI	OWN, P	A 17057		Rev 8/04

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

June 2, 2017

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

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER-3106	Workorder:	2231676
Purchase Order:		Workorder ID:	2ND QTR 2017-3106 RIVER ROAD

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231676 2ND QTR 2017-3106 RIVER ROAD

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2231676 2ND QTR 2017-3106 RIVER ROAD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are 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 incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

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

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231676 2ND QTR 2017-3106 RIVER ROAD

Lab ID: 2231676001 Sample ID: 3106 River Ro	oad, Conest	oga, P/	A			5/19/2017 10: 5/19/2017 16:		Matrix: \	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
WET CHEMISTRY										
Alkalinity, Bicarbonate	13		mg/L	5	S2320B-97			5/21/17 19:19	MSA	С
Alkalinity, Total	13	1	mg/L	5	S2320B-97			5/21/17 19:19	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/26/17 07:51	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	49.9		mg/L	2.0	EPA 300.0			5/20/17 20:01	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 20:01	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 15:04	PAG	I
Nitrate-N	9.2		mg/L	0.20	EPA 300.0			5/20/17 20:01	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 20:01	CHW	С
рН	6.38	2	pH_Units		S4500HB-11			5/21/17 19:19	MSA	С
Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/23/17 09:23	JLG	Н
Specific Conductance	250		umhos/cm	1	S2510B-97			5/21/17 19:19	MSA	С
Sulfate	3.1		mg/L	2.0	EPA 300.0			5/20/17 20:01	CHW	С
Total Dissolved Solids	198	3	mg/L	5	S2540C-11			5/24/17 16:58	JAS	С
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/26/17 10:12	PAG	F
Turbidity	5.36		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	С
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Toluene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Trichlorofluoromethane	ND	4	ug/L	0.50	EPA 524.2			5/27/17 02:02		К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/27/17 02:02	CJG	К
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2231676 2ND QTR 2017-3106 RIVER ROAD

Lab ID: 2231676001 Sample ID: 3106 River Ro	ad, Conesto	oga, PA		Date Collected: Date Received:	5/19/2017 10:50 5/19/2017 16:51	Matrix: W	/ater	
Parameters	Results	Flag Units	RDL	Method	Prepared By	Analyzed	Ву	Cntr
1,2-Dichlorobenzene-d4 (S)	92.8	%	70 - 130	EPA 524.2		5/27/17 02:02	CJG	К
4-Bromofluorobenzene (S)	87.3	%	70 - 130	EPA 524.2		5/27/17 02:02	CJG	К
METALS								
Calcium, Total	13.2	mg/L	0.050	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:52	TSS	D1
Calcium, Dissolved	12.7	mg/L	0.10	EPA 200.7	5/24/17 05:40 TSS	5/25/17 01:06	TSS	E
Iron, Total	0.65	mg/L	0.030	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:52	TSS	D1
Iron, Dissolved	0.17	mg/L	0.060	EPA 200.7	5/24/17 05:40 TSS	5/25/17 01:06	TSS	E
Magnesium, Total	8.1	mg/L	0.050	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:52	TSS	D1
Magnesium, Dissolved	7.8	mg/L	0.10	EPA 200.7	5/24/17 05:40 TSS	5/25/17 01:06	TSS	E
Manganese, Total	0.034	mg/L	0.0025	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:52	TSS	D1
Manganese, Dissolved	0.031	mg/L	0.0050	EPA 200.7	5/24/17 05:40 TSS	5/25/17 01:06	TSS	E
Potassium, Total	1.5	mg/L	0.25	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:52	TSS	D1
Potassium, Dissolved	1.5	mg/L	0.50	EPA 200.7	5/24/17 05:40 TSS	5/25/17 01:06	TSS	E
Sodium, Total	26.3	mg/L	0.25	EPA 200.7	5/23/17 23:40 LXC	5/25/17 18:52	TSS	D1
Sodium, Dissolved	25.1	mg/L	0.50	EPA 200.7	5/24/17 05:40 TSS	5/25/17 01:06	TSS	E
FIELD PARAMETERS								
pH, Field (SM4500B)	5.470	pH_Units		Field		5/19/17 11:49	BGS	М
Specific Conductance, Field	272	umhos/cm	1	Field		5/19/17 11:49	BGS	М
Temperature	17.10	Deg. C		Field		5/19/17 11:49	BGS	Μ

1. Schare Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231676001	1	3106 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalini	ty is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
2231676001	2	3106 River Road, Conestoga, PA	S4500HB-11	pH
			rs identified as "analyze immediately" ding time when analyzed in the laborat	
2231676001	3	3106 River Road, Conestoga, PA	S2540C-11	Total Dissolved Solids
The method blan	k associa	ted with this analyte had a result of 21	mg/L. Criteria states that the method	blank should be less than 5 mg/L.
2231676001	4	3106 River Road, Conestoga, PA	EPA 524.2	Trichlorofluoromethane
		for method EPA 524.2 was outside the ontrol limits were 70 to 130.	e control limits for the analyte Trichloro	fluoromethane. The % Recovery was

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V	Q	5.20		ΰ	CHAIN OF CUSTODY	FCU	STOD	X	3	Generated by ALS		COC #		-
	9		AL SHA		REQUEST FOR ANALYSIS					NT /		001		5.
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Client Name: LCSWMA - Patricia S. Hill			AG	AN	AN	8	I	Ы	Ч	Ъ	4	ы м	* 0 . 0	(del gi.
Address: 3106 River Road		Container	40 ml	250 ml	500 ml	40 ml	1	500 ml	500 ml	500 ml	21	500 ml C	Cooler Temp: / C-Therm ID: TH	-318
Conestoga, PA 17516		Preservative	HCI	H2SO4	H2SO4	Ę	1	H2SO4	HNO3	HN03	None	None No.	No. of Coolers: Y N	Initial
Contact: Patricia S. Hill	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -				ANA	ANALYSES/METHOD REQUESTED	ETHOD R	EQUEST	8				Custody Seals Present?	2 N
Phone#: (717) 872-4587									'u		1		(if present) Seals Intact?	
Project Name##: LCSWMA - Quarterly									W '6	e	t' E'		Received on ke?	_
Bill To: Lancaster County Solid Waste MA									W '8	к' и	os		COCILabets Complete/Accurate?	
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quired:	Approved By:							a	:state)	Fe, M	OS' NO	603	Correct Sample Volumes?	
_ ~								00 '	i bəv	eD :		H , Yi	Correct Preservation?	4
			00	x	но	00	V	N-EH	BN	stats	ds 'd		HeadspaceVolatiles?	
Sample Description/Location Sa (as it will appear on the lab report) [Sample Time	10 D*		1	〇 ジ 広 玉 芝 ゴ ビ ∠ 菱 Enter Number of Containers Per Sample or Field Results Below.	er of Conta	iners Per	Sample or	Lield Res	M Its Below	Hd		Courier/Tracking #: Sample/COC Comments	>
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June 2, 2017

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

Certificate of Analysis

Project Name:	CONTIGUOUS LANDOWNER-3125	Workorder:	2231666
Purchase Order:		Workorder ID:	2ND QTR 2017-3125 RIVER RD

Dear Mr. Brown:

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

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

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

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

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

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

CC: Mr. Mark Reider , Landowner , Mr. Jeff Musser

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

Scharo

Ms. Susan J Scherer Project Coordinator

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SAMPLE SUMMARY

Workorder: 2231666 2ND QTR 2017-3125 RIVER RD

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

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SAMPLE SUMMARY

Workorder: 2231666 2ND QTR 2017-3125 RIVER RD

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are 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 incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

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

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ANALYTICAL RESULTS

Workorder: 2231666 2ND QTR 2017-3125 RIVER RD

Lab ID: 2231666001 Sample ID: 3125 River R	oad, Conest	oga, PA				5/19/2017 12: 5/19/2017 16:		Matrix: V	Vater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
1,2-Dibromoethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
1,1-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
1,2-Dichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
1,1-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
cis-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
trans-1,2-Dichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Ethylbenzene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Methylene Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Tetrachloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Toluene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Total Xylenes	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
1,1,1-Trichloroethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Trichloroethene	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Trichlorofluoromethane	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	К
Vinyl Chloride	ND		ug/L	0.50	EPA 524.2			5/26/17 19:12	TMP	к
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichlorobenzene-d4 (S)	95.8		%	70 - 130	EPA 524.2			5/26/17 19:12	TMP	К
4-Bromofluorobenzene (S)	84.7		%	70 - 130	EPA 524.2			5/26/17 19:12	TMP	К
WET CHEMISTRY										
Alkalinity, Bicarbonate	30		mg/L	5	S2320B-97			5/21/17 17:03	MSA	С
Alkalinity, Total	30	1	mg/L	5	S2320B-97			5/21/17 17:03	MSA	С
Ammonia-N	ND		mg/L	0.100	D6919-09			5/27/17 10:03	TES	В
Chemical Oxygen Demand (COD)	ND		mg/L	7	EPA 410.4			5/26/17 16:46	AK	В
Chloride	94.9		mg/L	2.0	EPA 300.0			5/20/17 15:28	CHW	С
Fluoride	ND		mg/L	0.20	EPA 300.0			5/20/17 15:28	CHW	С
Halogen, Total Organic (TOX)	ND		ug/L	20.0	SW846 9020B			6/1/17 11:25	PAG	I
Nitrate-N	8.5		mg/L	0.20	EPA 300.0			5/20/17 15:28	CHW	С
Nitrite-N	ND		mg/L	0.20	EPA 300.0			5/20/17 15:28	CHW	С
рН	6.57	2	pH_Units		S4500HB-11			5/21/17 17:03	MSA	
' Phenolics	ND		mg/L	0.005	EPA 420.4	5/23/17 00:00	JLG	5/31/17 11:54	JLG	Н
Specific Conductance	414		umhos/cm	1	S2510B-97			5/21/17 17:03		
Sulfate	8.4		mg/L	2.0	EPA 300.0			5/20/17 15:28	CHW	
Total Dissolved Solids	252		mg/L	2.0 5	S2540C-11			5/24/17 16:58	JAS	c
			5							

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ANALYTICAL RESULTS

Workorder: 2231666 2ND QTR 2017-3125 RIVER RD

Lab ID: 2231666001 Sample ID: 3125 River Ro	ad, Conest	oga, PA			Date Collected: Date Received:			Matrix: W	/ater	
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
Total Organic Carbon (TOC)	ND		mg/L	0.50	S5310B-00			5/25/17 14:38	PAG	F
Turbidity	ND		NTU	0.10	S2130B-01			5/20/17 04:50	MBW	С
METALS										
Calcium, Total	0.070		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Calcium, Dissolved	0.18		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Iron, Total	ND		mg/L	0.030	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Iron, Dissolved	ND		mg/L	0.060	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Magnesium, Total	0.062		mg/L	0.050	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Magnesium, Dissolved	ND		mg/L	0.10	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Manganese, Total	ND		mg/L	0.0025	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Manganese, Dissolved	ND		mg/L	0.0050	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Potassium, Total	2.0		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Potassium, Dissolved	1.8		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
Sodium, Total	86.5		mg/L	0.25	EPA 200.7	5/23/17 23:40	LXC	5/25/17 18:33	TSS	D1
Sodium, Dissolved	84.0		mg/L	0.50	EPA 200.7	5/24/17 05:39	TSS	5/25/17 00:15	TSS	E
FIELD PARAMETERS										
pH, Field (SM4500B)	5.600		pH_Units		Field			5/19/17 12:12	BGS	М
Specific Conductance, Field	405	ı	umhos/cm	1	Field			5/19/17 12:12	BGS	М
Temperature	18.00		Deg. C		Field			5/19/17 12:12	BGS	Μ

Scharr Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America





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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2231666001	1	3125 River Road, Conestoga, PA	S2320B-97	Alkalinity, Total
The Total Alkalinity	y is titrate	ed to a pH of 4.5 and reported as mg (CaCO3/L.	
2231666001	2	3125 River Road, Conestoga, PA	S4500HB-11	рН
The pH analysis is	s an "ana	lvze immediatelv" analysis. Paramete	rs identified as "analyze immediately"	require analysis within 15 minutes of

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

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34 Dogwood Lane + Middletown, PA 17057 + 717.944.5541 + Fax: 717.944.1430	1			SAMPLE	R. INST	RUCTIO	NS ON T	SAMPLER. INSTRUCTIONS ON THE BACK			5	*	2 2 3 1 6 6 6 *	
Client Name: LCSWMA - Christian C. Beck	8	Container	AG	AN	AN	8	I	Ы	Ы	Ъ	۶Ľ	PP-1-14	עברבואו וווותווותווות לההוולהההה בזיון	éceiving Lab)
Address: 3125 River Road	8	Size	40 ml	250 ml	500 ml	40 ml	1	500 ml	500 ml	500 ml	2L	500 ml Cor	Cooler Temp: ' Therm ID:	318
Conestoga, PA 17516	æ	Presenadore	HCI	H2SO4	H2SO4	Ę	1	H2SO4	HN03	HN03	None	None No. c	No. of Coolers: Y	N Initial
Contact: Christian C. Beck				Í	ANA	YSES/M	ETHOD R	ANALYSES/METHOD REQUESTED	e				Custody Seals Present?	1254
Phone#: (717) 871-0448									·'U				(if present) Scals Intact?	2
Project Name#: LCSWMA - Quarterly		2015							1W '8	В	'H' H		Received on Ice?	-
Bill To: Lancaster County Solid Waste MA	Π								5w '	к' и	7OS	5	COCILabels Complete/Accurate?	_
TAT X Normal-Standard TAT is 10-12 business days.	si di	2							ea, Fe	'uyy '6	'IO 'EC		Cont. in Good Cond.? Correct Containers?	
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Sample Description/Location Sample (as it will appear on the lab report) Date	Time Gord	cintsM**	100	XOT R	Enter Number of Containers Per	rof Conta	iners Per	- le e	Field Res	its Below	'Hď	-	Courier/Tracking #: Sample/COC Comments	
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