



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

Address: 3044 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 10:12 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s) 22-293

Lab Analysis Date 05/17/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	18	SM20-2321
CALCIUM, TOTAL	13.7	EPA 200.7
CALCIUM, DISSOLVED	13.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	16.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	10.1	EPA 200.7
MAGNESIUM, DISSOLVED	10.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	22	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	20	EPA 200.7
NITRATE-NITROGEN	18.3	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	6.84	FIELD
pH-LAB (SU)	7	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	2.2	EPA 200.7
SODIUM, TOTAL	9.6	EPA 200.7
SODIUM, DISSOLVED	9.7	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	261	FIELD
SPEC. COND., LAB (umhos/cm)	258	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	18	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	161	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.25	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: MILLER

Address: 3052 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 10:21 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/17/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.178	SM4500D
BICARBONATE ALKALINITY	6	SM20-2321
CALCIUM, TOTAL	15.8	EPA 200.7
CALCIUM, DISSOLVED	15.3	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	17.7	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	9	EPA 200.7
MAGNESIUM, DISSOLVED	8.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	33	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	31	EPA 200.7
NITRATE-NITROGEN	17.6	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS

MILLER

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	6.48	FIELD
pH-LAB (SU)	6.53	SM4500B
POTASSIUM, TOTAL	2.2	EPA 200.7
POTASSIUM, DISSOLVED	2.4	EPA 200.7
SODIUM, TOTAL	8.5	EPA 200.7
SODIUM, DISSOLVED	8.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	237	FIELD
SPEC. COND., LAB (umhos/cm)	242	EPA 120.1
SULFATE	2.3	EPA 300
ALKALINITY	6	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	146	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.52	SM20-5310B
TOTAL PHENOLICS (ug/l)	13	EPA 420.4
TURBIDITY (NTU)	0.38	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

Address: 3056 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 10:28 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/18/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.195	SM4500D
BICARBONATE ALKALINITY	28	SM20-2321
CALCIUM, TOTAL	11.5	EPA 200.7
CALCIUM, DISSOLVED	11.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	21.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	34	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11.4	EPA 200.7
MAGNESIUM, DISSOLVED	11.9	EPA 200.7
MANGANESE, TOTAL (ug/l)	97	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	100	EPA 200.7
NITRATE-NITROGEN	11.8	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	7.29	FIELD
pH-LAB (SU)	7.34	SM4500B
POTASSIUM, TOTAL	2.6	EPA 200.7
POTASSIUM, DISSOLVED	2.8	EPA 200.7
SODIUM, TOTAL	8.9	EPA 200.7
SODIUM, DISSOLVED	9.1	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	243	FIELD
SPEC. COND., LAB (umhos/cm)	236	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	28	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	127	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.6	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.46	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

Address: 3060 RIVER ROAD

Phone No.:

Sampling Point: Latitude: 39° 57' 27.63" Longitude: 76° 26' 10.01"

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 10:40 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/18/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.485	SM4500D
BICARBONATE ALKALINITY	16	SM20-2321
CALCIUM, TOTAL	10.1	EPA 200.7
CALCIUM, DISSOLVED	10.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	16.7	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	64	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	10.2	EPA 200.7
MAGNESIUM, DISSOLVED	10.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	110	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	26	EPA 200.7
NITRATE-NITROGEN	13.2	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	6.84	FIELD
pH-LAB (SU)	6.94	SM4500B
POTASSIUM, TOTAL	2.7	EPA 200.7
POTASSIUM, DISSOLVED	3	EPA 200.7
SODIUM, TOTAL	8.6	EPA 200.7
SODIUM, DISSOLVED	9	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	231	FIELD
SPEC. COND., LAB (umhos/cm)	227	EPA 120.1
SULFATE	7.3	EPA 300
ALKALINITY	16	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	121	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.33	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: SENSENICH

Address: 3076 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 11:00 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/17/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.21	SM4500D
BICARBONATE ALKALINITY	7	SM20-2321
CALCIUM, TOTAL	14.2	EPA 200.7
CALCIUM, DISSOLVED	13.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	52	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	8.4	EPA 200.7
MAGNESIUM, DISSOLVED	8.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	170	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	160	EPA 200.7
NITRATE-NITROGEN	9.3	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	6.52	FIELD
pH-LAB (SU)	6.46	SM4500B
POTASSIUM, TOTAL	3.9	EPA 200.7
POTASSIUM, DISSOLVED	4	EPA 200.7
SODIUM, TOTAL	26.6	EPA 200.7
SODIUM, DISSOLVED	26.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	307	FIELD
SPEC. COND., LAB (umhos/cm)	311	EPA 120.1
SULFATE	9.8	EPA 300
ALKALINITY	7	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	165	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.38	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS SENSENICH

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: LCSWMA

Address: 3079 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 3:07 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/18/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.236	SM4500D
BICARBONATE ALKALINITY	31	SM20-2321
CALCIUM, TOTAL	11	EPA 200.7
CALCIUM, DISSOLVED	10.9	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	32.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	5.7	EPA 200.7
MAGNESIUM, DISSOLVED	5.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	39	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	37	EPA 200.7
NITRATE-NITROGEN	1 ND	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	7.11	FIELD
pH-LAB (SU)	7.15	SM4500B
POTASSIUM, TOTAL	2.3	EPA 200.7
POTASSIUM, DISSOLVED	2.4	EPA 200.7
SODIUM, TOTAL	14.3	EPA 200.7
SODIUM, DISSOLVED	14.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	201	FIELD
SPEC. COND., LAB (umhos/cm)	198	EPA 120.1
SULFATE	5.9	EPA 300
ALKALINITY	31	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	104	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.1	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

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

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: WEBER

Address: 3088 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 11:30 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/17/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS WEBER

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.223	SM4500D
BICARBONATE ALKALINITY	172	SM20-2321
CALCIUM, TOTAL	0.13	EPA 200.7
CALCIUM, DISSOLVED	0.11	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	234	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	0.056	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	5.3	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS WEBER

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	8.05	FIELD
pH-LAB (SU)	7.97	SM4500B
POTASSIUM, TOTAL	2.8	EPA 200.7
POTASSIUM, DISSOLVED	2.9	EPA 200.7
SODIUM, TOTAL	223	EPA 200.7
SODIUM, DISSOLVED	231	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	836	FIELD
SPEC. COND., LAB (umhos/cm)	1150	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	172	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	550	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	9	EPA 420.4
TURBIDITY (NTU)	0.34	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS WEBER

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: KIRCHNER

Address: 3100 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 11:45 AM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/18/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	55	SM20-2321
CALCIUM, TOTAL	14.1	EPA 200.7
CALCIUM, DISSOLVED	14	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	31.1	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	6.5	EPA 200.7
MAGNESIUM, DISSOLVED	6.5	EPA 200.7
MANGANESE, TOTAL (ug/l)	55	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	52	EPA 200.7
NITRATE-NITROGEN	1 ND	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	7.24	FIELD
pH-LAB (SU)	7.47	SM4500B
POTASSIUM, TOTAL	1.9	EPA 200.7
POTASSIUM, DISSOLVED	2.1	EPA 200.7
SODIUM, TOTAL	17.2	EPA 200.7
SODIUM, DISSOLVED	17.6	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	217	FIELD
SPEC. COND., LAB (umhos/cm)	220	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	55	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	103	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.16	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS KIRCHNER

Sample Date

05/06/2022

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

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

T Please indicate detection limit if analyte is not detected.



Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

FORM 52

MUNICIPAL WASTE LANDFILL PRIVATE WATER SUPPLY QUARTERLY WATER QUALITY ANALYSES

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: FRY

Address: 3106 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/17/2022

Sample Collection Time: 3:00 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/23/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS FRY

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.23	SM4500D
BICARBONATE ALKALINITY	152	SM20-2321
CALCIUM, TOTAL	0.32	EPA 200.7
CALCIUM, DISSOLVED	0.3	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	88.7	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.05 ND	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	5.2	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS

FRY

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	7.81	FIELD
pH-LAB (SU)	7.93	SM4500B
POTASSIUM, TOTAL	3.1	EPA 200.7
POTASSIUM, DISSOLVED	3.2	EPA 200.7
SODIUM, TOTAL	155	EPA 200.7
SODIUM, DISSOLVED	162	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	637	FIELD
SPEC. COND., LAB (umhos/cm)	664	EPA 120.1
SULFATE	11.8	EPA 300
ALKALINITY	152	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	352	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.69	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.81	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS

FRY

Sample Date

05/17/2022

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

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

T Please indicate detection limit if analyte is not detected.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/05/2022

DEP USE ONLY

Date Received

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

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

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

Facility Name: Frey Farm Landfill

County: Lancaster County

Township or Municipality: MANOR TOWNSHIP

Landowner Name: BECK

Address: 3125 RIVER ROAD

Phone No.:

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

Depth to Water Level: ft.

Measured from: ☒ Land Surface ☐ TOC

Casing Stick Up: ft.

Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft.

Sampling Method: ☐ Pumped ☐ Bailed

Well Purged: ☐ Yes ☒ No

Well Volumes Purged:

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

Sample Date:(mm/dd/yy) 05/06/2022

Sample Collection Time: 3:00 PM

Laboratory(ies) Performing Analysis ALS Environmental

(include address and phone number)

301 Fulling Mill Road

Middletown, PA 17057

(717) 944-5541

Lab Accreditation Number(s)

22-293

Lab Analysis Date

05/18/2022

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

Comments:

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS BECK

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.181	SM4500D
BICARBONATE ALKALINITY	108	SM20-2321
CALCIUM, TOTAL	54.5	EPA 200.7
CALCIUM, DISSOLVED	52.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	90.8	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	18.6	EPA 200.7
MAGNESIUM, DISSOLVED	17.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	25	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	25	EPA 200.7
NITRATE-NITROGEN	9.4	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS

BECK

Sample Date

05/06/2022

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	1 ND	EPA 300
pH-FIELD (SU)	7.87	FIELD
pH-LAB (SU)	7.95	SM4500B
POTASSIUM, TOTAL	2.5	EPA 200.7
POTASSIUM, DISSOLVED	2.6	EPA 200.7
SODIUM, TOTAL	41.7	EPA 200.7
SODIUM, DISSOLVED	41.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	624	FIELD
SPEC. COND., LAB (umhos/cm)	613	EPA 120.1
SULFATE	4.8	EPA 300
ALKALINITY	108	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	304	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.61	SM20-5310B
TOTAL PHENOLICS (ug/l)	4 ND	EPA 420.4
TURBIDITY (NTU)	0.31	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS

BECK

Sample Date

05/17/2022

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

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

T Please indicate detection limit if analyte is not detected.



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022-3106 RIVER RD

Workorder 3241432

Report ID 172014 on 5/31/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241432001	3106 River Road, Conestoga, PA	Water	05/06/2022 12:01	05/06/2022 17:05	BGS	Analytical Laboratory Service
3241432003	3106 River Road, Conestoga, PA	Water	05/17/2022 15:00	05/17/2022 16:50	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

P1 VOLATILE ORGANICS EPA 524.2 was resampled due to the trip blank sample not being received in the original submission. SJS
05/20/22

Sample Notations

Lab ID Sample ID

Result Notations

Notation Ref.

- 1The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
- 2The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.



Detected Results Summary

Client Sample ID	3106 River Road, Conestoga, PA			Collected	05/06/2022 12:01
Lab Sample ID	3241432001			Lab Receipt	05/06/2022 17:05
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	7.81	pH_Units		Field	#
Specific Conductance, Field	637	umhos/cm	1	Field	#
Temperature	14.20	Deg. C		Field	#
METALS					
Calcium, Dissolved	0.30	mg/L	0.10	EPA 200.7	#
Calcium, Total	0.32	mg/L	0.050	EPA 200.7	#
Potassium, Dissolved	3.2	mg/L	0.50	EPA 200.7	#
Potassium, Total	3.1	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	162	mg/L	0.50	EPA 200.7	#
Sodium, Total	155	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	152	mg/L	5	SM2320B-2011	#
Alkalinity, Total	152	mg/L	5	SM2320B-2011	#
Ammonia-N	0.230	mg/L	0.100	ASTM D6919-09	#
Chloride	88.7	mg/L	2.0	EPA 300.0	#
Nitrate-N	5.2	mg/L	1.0	EPA 300.0	#
pH	7.93	pH_Units		S4500HB-11	#
Specific Conductance	664	umhos/cm	1	SM2510B-2011	#
Sulfate	11.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	352	mg/L	25	S2540C-11	#
Total Organic Carbon (TOC)	0.69	mg/L	0.50	SM5310B-2011	#
Turbidity	0.81	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	05/06/2022 12:01
Lab Sample ID	3241432001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.81	P1	pH_Units		Field	1	05/06/2022 12:01	BGS	N
Specific Conductance, Field	637	P1	umhos/cm	1	Field	1	05/06/2022 12:01	BGS	N
Temperature	14.20	P1	Deg. C		Field	1	05/06/2022 12:01	BGS	N

METALS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	0.30	P1	mg/L	0.10	EPA 200.7	1	05/10/2022 19:26	SRT	E
Calcium, Total	0.32	P1	mg/L	0.050	EPA 200.7	1	05/10/2022 16:00	SRT	D1
Iron, Dissolved	ND	ND,P1	mg/L	0.060	EPA 200.7	1	05/10/2022 19:26	SRT	E
Iron, Total	ND	ND,P1	mg/L	0.030	EPA 200.7	1	05/10/2022 16:00	SRT	D1
Magnesium, Dissolved	ND	ND,P1	mg/L	0.10	EPA 200.7	1	05/10/2022 19:26	SRT	E
Magnesium, Total	ND	ND,P1	mg/L	0.050	EPA 200.7	1	05/10/2022 16:00	SRT	D1
Manganese, Dissolved	ND	ND,P1	mg/L	0.0050	EPA 200.7	1	05/10/2022 19:26	SRT	E
Manganese, Total	ND	ND,P1	mg/L	0.0025	EPA 200.7	1	05/10/2022 16:00	SRT	D1
Potassium, Dissolved	3.2	P1	mg/L	0.50	EPA 200.7	1	05/10/2022 19:26	SRT	E
Potassium, Total	3.1	P1	mg/L	0.25	EPA 200.7	1	05/10/2022 16:00	SRT	D1
Sodium, Dissolved	162	P1	mg/L	0.50	EPA 200.7	1	05/10/2022 19:26	SRT	E
Sodium, Total	155	P1	mg/L	0.25	EPA 200.7	1	05/10/2022 16:00	SRT	D1

WET CHEMISTRY

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	152	P1	mg/L	5	SM2320B-2011	1	05/13/2022 02:27	BXD	A
Alkalinity, Total	152	1,P1	mg/L	5	SM2320B-2011	1	05/13/2022 02:27	BXD	A
Ammonia-N	0.230	P1	mg/L	0.100	ASTM D6919-09	10	05/13/2022 14:09	ALK	C
Chemical Oxygen Demand (COD)	ND	ND,P1	mg/L	15	EPA 410.4	1	05/11/2022 17:48	ALK	C
Chloride	88.7	P1	mg/L	2.0	EPA 300.0	2	05/07/2022 11:32	MSA	A
Fluoride	ND	ND,P1	mg/L	0.20	EPA 300.0	2	05/07/2022 11:32	MSA	A
Halogen, Total Organic (TOX)	ND	ND,P1	ug/L	20.0	SW846 9020B	1	05/18/2022 11:36	PAG	I
Nitrate-N	5.2	P1	mg/L	1.0	EPA 300.0	2	05/07/2022 11:32	MSA	A
Nitrite-N	ND	ND,P1	mg/L	1.0	EPA 300.0	2	05/07/2022 11:32	MSA	A
pH	7.93	2,P1	pH_Units		S4500HB-11	1	05/13/2022 02:27	BXD	A
Phenolics	ND	ND,P1	mg/L	0.004	EPA 420.4	1	05/17/2022 15:12	AKH	H
Specific Conductance	664	P1	umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	11.8	P1	mg/L	2.0	EPA 300.0	2	05/07/2022 11:32	MSA	A
Total Dissolved Solids	352	P1	mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	0.69	P1	mg/L	0.50	SM5310B-2011	1	05/09/2022 20:16	PAG	F
Turbidity	0.81	P1	NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	05/17/2022 15:00
Lab Sample ID	3241432003	Lab Receipt	05/17/2022 16:50

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
1,1-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
1,1-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
1,2-Dibromoethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
1,2-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Benzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
cis-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Ethylbenzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Methylene Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Tetrachloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Toluene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Total Xylenes	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
trans-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Trichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Trichlorofluoromethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A
Vinyl Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:16	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90.8%	70 – 130	05/23/2022 15:16	



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241432001	3106 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	
3241432003	3106 River Road, Conestoga, PA	EPA 524.2	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241432001	3106 River Road, Conestoga, PA	N/A	N/A	N/A		Field	847947
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		N/A	N/A	N/A		ASTM D6919-09	846563
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846551
		420.4/9066	847926	05/17/2022 08:07	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846125
		N/A	N/A	N/A		SW846 9020B	848311
3241432003	3106 River Road, Conestoga, PA	N/A	N/A	N/A		EPA 524.2	849156



314 Englewood Lane • Middletown, PA 17057 • Phone: 717-944-5541 • Fax: 717-944-1430 • www.alsglobal.com

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALS

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

COC #: 3241432 pg 2 of 1
ALS Quote #: 1

Client Name: LCSWMA - Aaron Fry

Address: 3106 River Road

Conestoga, PA 17516

Contact: Aaron Fry

Phone#: (717) 669-6831

Project Name#: LCSWMA - Quarterly

Bill To: LCSWMA - Aaron Fry

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

☐ Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved By: _____

Email? ☐ -Y

Fax? ☐ -Y No: _____

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

Sample Date Time

1 3106RIVERRD 05/17/22 1500

2. Trip Blank 05/17/22 1650

3

4

5

6

7

8

9

10

Project Comments:

LOGGED BY (signature):

REVIEWED BY (signature):

Relinquished By / Company Name

Date Time

Received By / Company Name

Date Time

1 3106RIVERRD BY ALS 5/17/22 1650

3

5

7

9

* G=Grab; C=Composite

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

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

Rev 8/04

Receipt Information (completed by Receiving Lab)

Cooler Temp: 6 Therm ID: 570

No. of Coolers: Y N Initial

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

Courier/Tracking #:

Sample/COC Comments

Enter Number of Containers Per Sample or Field Results Below.

Matrix	524 VOC
G or C	

ALS Field Services: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment ☐ Other:

Standard Deliverables: ☐ CLP-like ☐ USACE

Special Processing: ☐ USACE ☐ Navy

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

Reportable to PADEP? ☐ Yes ☐ No

Sample Disposal: ☐ Lab ☐ Special

PWSID #

EDDS: Format Type-



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022-3100 RIVER RD

Workorder 3241431

Report ID 169800 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241431001	3100 River Road, Conestoga, PA	Water	05/06/2022 11:45	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.



Detected Results Summary

Client Sample ID	3100 River Road, Conestoga, PA			Collected	05/06/2022 11:45
Lab Sample ID	3241431001			Lab Receipt	05/06/2022 17:05
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	7.24	pH_Units		Field	#
Specific Conductance, Field	217	umhos/cm	1	Field	#
Temperature	14.40	Deg. C		Field	#
METALS					
Calcium, Dissolved	14.0	mg/L	0.10	EPA 200.7	#
Calcium, Total	14.1	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	6.5	mg/L	0.10	EPA 200.7	#
Magnesium, Total	6.5	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.052	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.055	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.1	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.9	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	17.6	mg/L	0.50	EPA 200.7	#
Sodium, Total	17.2	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	55	mg/L	5	SM2320B-2011	#
Alkalinity, Total	55	mg/L	5	SM2320B-2011	#
Chloride	31.1	mg/L	2.0	EPA 300.0	#
pH	7.47	pH_Units		S4500HB-11	#
Specific Conductance	220	umhos/cm	1	SM2510B-2011	#
Total Dissolved Solids	103	mg/L	25	S2540C-11	#
Turbidity	0.16	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3100 River Road, Conestoga, PA	Collected	05/06/2022 11:45
Lab Sample ID	3241431001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.24		pH_Units		Field	1	05/06/2022 11:45	BGS	N
Specific Conductance, Field	217		umhos/cm	1	Field	1	05/06/2022 11:45	BGS	N
Temperature	14.40		Deg. C		Field	1	05/06/2022 11:45	BGS	N

METALS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	14.0		mg/L	0.10	EPA 200.7	1	05/10/2022 19:22	SRT	E
Calcium, Total	14.1		mg/L	0.050	EPA 200.7	1	05/10/2022 15:57	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:22	SRT	E
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/10/2022 15:57	SRT	D1
Magnesium, Dissolved	6.5		mg/L	0.10	EPA 200.7	1	05/10/2022 19:22	SRT	E
Magnesium, Total	6.5		mg/L	0.050	EPA 200.7	1	05/10/2022 15:57	SRT	D1
Manganese, Dissolved	0.052		mg/L	0.0050	EPA 200.7	1	05/10/2022 19:22	SRT	E
Manganese, Total	0.055		mg/L	0.0025	EPA 200.7	1	05/10/2022 15:57	SRT	D1
Potassium, Dissolved	2.1		mg/L	0.50	EPA 200.7	1	05/10/2022 19:22	SRT	E
Potassium, Total	1.9		mg/L	0.25	EPA 200.7	1	05/10/2022 15:57	SRT	D1
Sodium, Dissolved	17.6		mg/L	0.50	EPA 200.7	1	05/10/2022 19:22	SRT	E
Sodium, Total	17.2		mg/L	0.25	EPA 200.7	1	05/10/2022 15:57	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 01:05	PDK	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	101 %	70 - 130	05/13/2022 01:05	

WET CHEMISTRY



Results

Client Sample ID	3100 River Road, Conestoga, PA					Collected	05/06/2022 11:45		
Lab Sample ID	3241431001					Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	55		mg/L	5	SM2320B-2011	1	05/13/2022 02:17	BXD	A
Alkalinity, Total	55	1	mg/L	5	SM2320B-2011	1	05/13/2022 02:17	BXD	A
Ammonia-N	ND	ND	mg/L	0.100	ASTM D6919-09	10	05/13/2022 08:40	ALK	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:39	ALK	C
Chloride	31.1		mg/L	2.0	EPA 300.0	2	05/07/2022 11:22	MSA	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 11:22	MSA	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/18/2022 11:10	PAG	I
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 11:22	MSA	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 11:22	MSA	A
pH	7.47	2	pH_Units		S4500HB-11	1	05/13/2022 02:17	BXD	A
Phenolics	ND	ND	mg/L	0.004	EPA 420.4	1	05/17/2022 15:25	AKH	H
Specific Conductance	220		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	05/07/2022 11:22	MSA	A
Total Dissolved Solids	103		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-2011	1	05/09/2022 20:16	PAG	F
Turbidity	0.16		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241431001	3100 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241431001	3100 River Road, Conestoga, PA	N/A	N/A	N/A		Field	847947
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		N/A	N/A	N/A		EPA 524.2	847437
		N/A	N/A	N/A		ASTM D6919-09	846561
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846548
		420.4/9066	847926	05/17/2022 08:07	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846125
		N/A	N/A	N/A		SW846 9020B	848311



ALS Environmental

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

Client Name: LCSWMA - Ann Kirchner

Address: 3100 River Road

Conestoga, PA 17516

Contact: Ann Kirchner

Phone#: (717) 584-0030

Project Name#: LCSWMA - Quarterly

Bill To: Lancaster County Solid Waste MA

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

☐ Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved By: _____

Email? ☐ -Y

Fax? ☐ -Y No.:

Sample Description/Location

(as it will appear on the lab report)

Sample Date

Time

1 3100RIVERRD

05/06/22

1145

2. Trip Blank

05/06/22

1705

3

4

5

6

7

8

9

10

Project Comments:

Relinquished By / Company Name

5-6-22 1705

Received By / Company Name

5-6-22 1705

4

6

8

10

**Matrix - G=Grab; C=Composite

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

Rev 8/04

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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

Generated by ALS

COC #:

3241431

Logged By: KSB

PM: SJB



ALS Qu

Receipt Information (completed by Receiving Lab)

Cooler Temp: 1 Therm ID: 570

No. of Coolers: Y N Initial

Custody Seals Present?

(if present) Seals Intact?

Received on Ice?

COC/Labels Complete/Accurate?

Cont. in Good Cond.?

Temp Taken By:

WO Temp (°C)

Therm ID:

Receipt Info Completed By:

Cooler Custody Seal Intact

Sample Custody Seal Intact

Received on Ice

Cooler & Samples Intact

Correct Containers Provided

Sample Label/COC Agree

Adequate Sample Volumes

VOA Headspace Present

Voa Trip Blank

NIS 4 Days?

Rad Screen (uCi)

Courier/Tracking #:

SDWA Compliance

PWSID

ALS Field Services: ☐ Pickup ☐ Labor

☐ Composite Sampling ☐ Rental Equipment

☐ Other:

Standard

CLP-like

USACE

Deliverables

USACE

Navy

Special Processing

USACE

State Samples

Collected In

NY

NJ

PA

NC

Reportable to PADEP?

Yes ☐

Lab ☒

Special ☐

PWSID #

EDDS: Format Type-

WP=Sludge; SO=Other Liquid; SL=Sludge; WW=Wastewater



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022-3088 RIVER RD

Workorder 3241430

Report ID 169789 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241430001	3088 River Road, Conestoga PA	Water	05/06/2022 11:30	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.

- 1

The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
- 2

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



Detected Results Summary

Client Sample ID	3088 River Road, Conestoga PA			Collected	05/06/2022 11:30
Lab Sample ID	3241430001			Lab Receipt	05/06/2022 17:05
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	8.05	pH_Units		Field	#
Specific Conductance, Field	836	umhos/cm	1	Field	#
Temperature	14.50	Deg. C		Field	#
METALS					
Calcium, Dissolved	0.11	mg/L	0.10	EPA 200.7	#
Calcium, Total	0.13	mg/L	0.050	EPA 200.7	#
Magnesium, Total	0.056	mg/L	0.050	EPA 200.7	#
Potassium, Dissolved	2.9	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.8	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	231	mg/L	0.50	EPA 200.7	#
Sodium, Total	223	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	172	mg/L	5	SM2320B-2011	#
Alkalinity, Total	172	mg/L	5	SM2320B-2011	#
Ammonia-N	0.223	mg/L	0.100	ASTM D6919-09	#
Chloride	234	mg/L	5.0	EPA 300.0	#
Nitrate-N	5.3	mg/L	1.0	EPA 300.0	#
pH	7.97	pH_Units		S4500HB-11	#
Phenolics	0.009	mg/L	0.004	EPA 420.4	#
Specific Conductance	1150	umhos/cm	1	SM2510B-2011	#
Total Dissolved Solids	550	mg/L	25	S2540C-11	#
Turbidity	0.34	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3088 River Road, Conestoga PA	Collected	05/06/2022 11:30
Lab Sample ID	3241430001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RD L	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	8.05		pH_Units		Field	1	05/06/2022 11:30	BGS	N
Specific Conductance, Field	836		umhos/cm	1	Field	1	05/06/2022 11:30	BGS	N
Temperature	14.50		Deg. C		Field	1	05/06/2022 11:30	BGS	N

METALS

Compound	Result	Flag	Units	RD L	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	0.11		mg/L	0.10	EPA 200.7	1	05/10/2022 19:19	SRT	E
Calcium, Total	0.13		mg/L	0.050	EPA 200.7	1	05/10/2022 15:53	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:19	SRT	E
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/10/2022 15:53	SRT	D1
Magnesium, Dissolved	ND	ND	mg/L	0.10	EPA 200.7	1	05/10/2022 19:19	SRT	E
Magnesium, Total	0.056		mg/L	0.050	EPA 200.7	1	05/10/2022 15:53	SRT	D1
Manganese, Dissolved	ND	ND	mg/L	0.0050	EPA 200.7	1	05/10/2022 19:19	SRT	E
Manganese, Total	ND	ND	mg/L	0.0025	EPA 200.7	1	05/10/2022 15:53	SRT	D1
Potassium, Dissolved	2.9		mg/L	0.50	EPA 200.7	1	05/10/2022 19:19	SRT	E
Potassium, Total	2.8		mg/L	0.25	EPA 200.7	1	05/10/2022 15:53	SRT	D1
Sodium, Dissolved	231		mg/L	0.50	EPA 200.7	1	05/10/2022 19:19	SRT	E
Sodium, Total	223		mg/L	0.25	EPA 200.7	1	05/10/2022 15:53	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RD L	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 00:39	PDK	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	101 %	70 – 130	05/13/2022 00:39	

WET CHEMISTRY



Results

Client Sample ID	3088 River Road, Conestoga PA					Collected	05/06/2022 11:30		
Lab Sample ID	3241430001					Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	172		mg/L	5	SM2320B-2011	1	05/13/2022 02:08	BXD	A
Alkalinity, Total	172	1	mg/L	5	SM2320B-2011	1	05/13/2022 02:08	BXD	A
Ammonia-N	0.223		mg/L	0.100	ASTM D6919-09	10	05/13/2022 13:55	ALK	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:39	ALK	C
Chloride	234		mg/L	5.0	EPA 300.0	5	05/13/2022 17:04	MSA	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 11:11	MSA	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/17/2022 15:57	PAG	I
Nitrate-N	5.3		mg/L	1.0	EPA 300.0	2	05/07/2022 11:11	MSA	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 11:11	MSA	A
pH	7.97	2	pH_Units		S4500HB-11	1	05/13/2022 02:08	BXD	A
Phenolics	0.009		mg/L	0.004	EPA 420.4	1	05/17/2022 18:42	AKH	H
Specific Conductance	1150		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	05/07/2022 11:11	MSA	A
Total Dissolved Solids	550		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-2011	1	05/09/2022 20:16	PAG	F
Turbidity	0.34		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241430001	3088 River Road, Conestoga PA	Field	N/A	
		EPA 200.7	EPA ACID	
		EPA 200.7	EPA TRMD	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241430001	3088 River Road, Conestoga PA	N/A	N/A	N/A		Field	847947
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		N/A	N/A	N/A		EPA 524.2	847437
		N/A	N/A	N/A		ASTM D6919-09	846563
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 300.0	847472
		N/A	N/A	N/A		EPA 410.4	846548
		420.4/9066	847930	05/17/2022 08:09	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846125
		N/A	N/A	N/A		SW846 9020B	848094



34 Dogwood Lane • Middletown, PA 17057 • Phone: 717-944-5541 • Fax: 717-944-1430 • www.alsglobal.com

Client Name: LCSWMA - Hans Weber and Deb Kalbach
Address: 3088 River Road
Conestoga, PA 17516
Contact: Hans Weber and Deb Kalbach
Phone#: (717) 419-7982
Project Name#: LCSWMA - Quarterly
Bill To: LCSWMA - Hans Weber and Deb Kalbach

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

Date Required: _____ Approved By: _____

Email? ☐ -Y ☐ -N

Fax? ☐ -Y ☐ -N

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

Sample Date Time

1 3088 RIVER RD 05/06/22 1130

2 Trip Blank 05/06/22 1105

3

4

5

6

7

8

9

10

Project Comments:

LOGGED BY (signature):

REVIEWED BY (signature):

Relinquished By / Company Name

1 *[Signature]* ALS

3

5

7

9

Received By / Company Name

2 *[Signature]*

4

6

8

10

Date

5-6-22 1705

4

6

8

10

Date

5-6-22 1705

4

6

8

10

CHAIN OF CUSTODY/

REQUEST FOR ANALYSIS

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

Generated by ALS

COC

ALS

3241430

Logged By: KSB

PM: SJB



1

of

1

Receipt Information (completed by Receiving Lab)

Cooler Temp: 1 Therm ID: 510

No. of Coolers: N Initial

Custody Seals Present?

(if present) Seals Intact?

Received on Ice?

COC Labels Complete/Accurate?

Cont. in Good Cond.?

Correct Containers?

Temp Taken By:

WO Temp (°C)

Therm ID:

Receipt Info Completed By:

Cooler Custody Seal Intact

Sample Custody Seal Intact

Received on Ice

Cooler & Samples Intact

Correct Containers Provided

Sample Label/COC Agree

Adequate Sample Volumes

VOA Headspace Present

Voa Trip Blank

NJ≤ 4 Days?

Rad Screen (uCi)

Courier/Tracking #:

SDWA Compliance

PWSID

ALS Field Services: ☐ Pickup ☐ Labor

☐ Composite Sampling ☐ Rental Equipment

☐ Other:

Standard

CLP-like

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

Deliverables

Standard

CLP-like

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

USACE

Reportable to PADEP?

Yes ☐

PWSID #

EDDS: Format Type:

State Samples Collected In

USACE ☐

Navy ☐

NY ☐

NJ ☐

PA ☒

NC ☐

NC ☐

NC ☐

NC ☐

NC ☐

NC ☐

NC ☐

NC ☐

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

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

Rev 8/04



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022 3079 RIVER RD

Workorder 3241436

Report ID 169797 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241436001	3079RIVERRD	Water	05/06/2022 15:07	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.



Detected Results Summary

Client Sample ID	3079RIVERRD	Collected	05/06/2022 15:07		
Lab Sample ID	3241436001	Lab Receipt	05/06/2022 17:05		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	7.11	pH_Units		Field	#
Specific Conductance, Field	201	umhos/cm	1	Field	#
Temperature	14.60	Deg. C		Field	#
METALS					
Calcium, Dissolved	10.9	mg/L	0.10	EPA 200.7	#
Calcium, Total	11.0	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	5.7	mg/L	0.10	EPA 200.7	#
Magnesium, Total	5.7	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.037	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.039	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.4	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.3	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	14.2	mg/L	0.50	EPA 200.7	#
Sodium, Total	14.3	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	31	mg/L	5	SM2320B-2011	#
Alkalinity, Total	31	mg/L	5	SM2320B-2011	#
Ammonia-N	0.236	mg/L	0.100	ASTM D6919-09	#
Chloride	32.2	mg/L	2.0	EPA 300.0	#
pH	7.15	pH_Units		S4500HB-11	#
Specific Conductance	198	umhos/cm	1	SM2510B-2011	#
Sulfate	5.9	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	104	mg/L	25	S2540C-11	#
Turbidity	0.10	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3079RIVERRD	Collected	05/06/2022 15:07
Lab Sample ID	3241436001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.11		pH_Units		Field	1	05/06/2022 15:07	BGS	N
Specific Conductance, Field	201		umhos/cm	1	Field	1	05/06/2022 15:07	BGS	N
Temperature	14.60		Deg. C		Field	1	05/06/2022 15:07	BGS	N

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	10.9		mg/L	0.10	EPA 200.7	1	05/10/2022 19:53	SRT	E
Calcium, Total	11.0		mg/L	0.050	EPA 200.7	1	05/10/2022 16:56	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:53	SRT	E
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/10/2022 16:56	SRT	D1
Magnesium, Dissolved	5.7		mg/L	0.10	EPA 200.7	1	05/10/2022 19:53	SRT	E
Magnesium, Total	5.7		mg/L	0.050	EPA 200.7	1	05/10/2022 16:56	SRT	D1
Manganese, Dissolved	0.037		mg/L	0.0050	EPA 200.7	1	05/10/2022 19:53	SRT	E
Manganese, Total	0.039		mg/L	0.0025	EPA 200.7	1	05/10/2022 16:56	SRT	D1
Potassium, Dissolved	2.4		mg/L	0.50	EPA 200.7	1	05/10/2022 19:53	SRT	E
Potassium, Total	2.3		mg/L	0.25	EPA 200.7	1	05/10/2022 16:56	SRT	D1
Sodium, Dissolved	14.2		mg/L	0.50	EPA 200.7	1	05/10/2022 19:53	SRT	E
Sodium, Total	14.3		mg/L	0.25	EPA 200.7	1	05/10/2022 16:56	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 03:15	PDK	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	101 %	70 - 130	05/13/2022 03:15	

WET CHEMISTRY



Results

Client Sample ID	3079RIVERRD					Collected	05/06/2022 15:07		
Lab Sample ID	3241436001					Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	31		mg/L	5	SM2320B-2011	1	05/13/2022 03:07	BXD	A
Alkalinity, Total	31	1	mg/L	5	SM2320B-2011	1	05/13/2022 03:07	BXD	A
Ammonia-N	0.236		mg/L	0.100	ASTM D6919-09	10	05/13/2022 16:26	ALK	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:39	ALK	C
Chloride	32.2		mg/L	2.0	EPA 300.0	2	05/07/2022 12:22	MSA	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 12:22	MSA	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/18/2022 14:31	PAG	I
Nitrate-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 12:22	MSA	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 12:22	MSA	A
pH	7.15	2	pH_Units		S4500HB-11	1	05/13/2022 03:07	BXD	A
Phenolics	ND	ND	mg/L	0.004	EPA 420.4	1	05/17/2022 16:25	AKH	H
Specific Conductance	198		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	5.9		mg/L	2.0	EPA 300.0	2	05/07/2022 12:22	MSA	A
Total Dissolved Solids	104		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-2011	1	05/09/2022 22:02	PAG	F
Turbidity	0.10		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241436001	3079RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241436001	3079RIVERRD	N/A	N/A	N/A		Field	847947
		EPA TRMD	846149	05/09/2022 18:00	ANN	EPA 200.7	846235
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		N/A	N/A	N/A		EPA 524.2	847437
		N/A	N/A	N/A		ASTM D6919-09	846563
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846548
		420.4/9066	847928	05/17/2022 08:08	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846126
		N/A	N/A	N/A		SW846 9020B	848311



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022-3076 RIVER RD

Workorder 3241429

Report ID 169793 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241429001	3076 River Road, Conestoga, PA	Water	05/06/2022 11:00	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.

- 1

The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
- 2

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



Detected Results Summary

Client Sample ID	3076 River Road, Conestoga, PA			Collected	05/06/2022 11:00
Lab Sample ID	3241429001			Lab Receipt	05/06/2022 17:05
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	6.52	pH_Units		Field	#
Specific Conductance, Field	307	umhos/cm	1	Field	#
Temperature	14.10	Deg. C		Field	#
METALS					
Calcium, Dissolved	13.6	mg/L	0.10	EPA 200.7	#
Calcium, Total	14.2	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	8.1	mg/L	0.10	EPA 200.7	#
Magnesium, Total	8.4	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.16	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.17	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	4.0	mg/L	0.50	EPA 200.7	#
Potassium, Total	3.9	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	26.2	mg/L	0.50	EPA 200.7	#
Sodium, Total	26.6	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	7	mg/L	5	SM2320B-2011	#
Alkalinity, Total	7	mg/L	5	SM2320B-2011	#
Ammonia-N	0.210	mg/L	0.100	ASTM D6919-09	#
Chloride	52.0	mg/L	2.0	EPA 300.0	#
Nitrate-N	9.3	mg/L	1.0	EPA 300.0	#
pH	6.46	pH_Units		S4500HB-11	#
Specific Conductance	311	umhos/cm	1	SM2510B-2011	#
Sulfate	9.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	165	mg/L	25	S2540C-11	#
Turbidity	0.38	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3076 River Road, Conestoga, PA	Collected	05/06/2022 11:00
Lab Sample ID	3241429001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.52		pH_Units		Field	1	05/06/2022 11:00	BGS	N
Specific Conductance, Field	307		umhos/cm	1	Field	1	05/06/2022 11:00	BGS	N
Temperature	14.10		Deg. C		Field	1	05/06/2022 11:00	BGS	N

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	13.6		mg/L	0.10	EPA 200.7	1	05/10/2022 19:15	SRT	E
Calcium, Total	14.2		mg/L	0.050	EPA 200.7	1	05/10/2022 15:43	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:15	SRT	E
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/10/2022 15:43	SRT	D1
Magnesium, Dissolved	8.1		mg/L	0.10	EPA 200.7	1	05/10/2022 19:15	SRT	E
Magnesium, Total	8.4		mg/L	0.050	EPA 200.7	1	05/10/2022 15:43	SRT	D1
Manganese, Dissolved	0.16		mg/L	0.0050	EPA 200.7	1	05/10/2022 19:15	SRT	E
Manganese, Total	0.17		mg/L	0.0025	EPA 200.7	1	05/10/2022 15:43	SRT	D1
Potassium, Dissolved	4.0		mg/L	0.50	EPA 200.7	1	05/10/2022 19:15	SRT	E
Potassium, Total	3.9		mg/L	0.25	EPA 200.7	1	05/10/2022 15:43	SRT	D1
Sodium, Dissolved	26.2		mg/L	0.50	EPA 200.7	1	05/10/2022 19:15	SRT	E
Sodium, Total	26.6		mg/L	0.25	EPA 200.7	1	05/10/2022 15:43	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:42	TMP	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	97.2%	70 – 130	05/12/2022 19:42	

WET CHEMISTRY



Results

Client Sample ID	3076 River Road, Conestoga, PA					Collected	05/06/2022 11:00		
Lab Sample ID	3241429001					Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	7		mg/L	5	SM2320B-2011	1	05/13/2022 01:58	BXD	A
Alkalinity, Total	7	1	mg/L	5	SM2320B-2011	1	05/13/2022 01:58	BXD	A
Ammonia-N	0.210		mg/L	0.100	ASTM D6919-09	10	05/17/2022 14:50	ALK	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:39	ALK	C
Chloride	52.0		mg/L	2.0	EPA 300.0	2	05/07/2022 10:19	MSA	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 10:19	MSA	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/17/2022 15:20	PAG	I
Nitrate-N	9.3		mg/L	1.0	EPA 300.0	2	05/07/2022 10:19	MSA	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 10:19	MSA	A
pH	6.46	2	pH_Units		S4500HB-11	1	05/13/2022 01:58	BXD	A
Phenolics	ND	ND	mg/L	0.004	EPA 420.4	1	05/17/2022 16:32	AKH	H
Specific Conductance	311		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	9.8		mg/L	2.0	EPA 300.0	2	05/07/2022 10:19	MSA	A
Total Dissolved Solids	165		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-2011	1	05/09/2022 20:16	PAG	F
Turbidity	0.38		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241429001	3076 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241429001	3076 River Road, Conestoga, PA	N/A	N/A	N/A		Field	847947
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		N/A	N/A	N/A		EPA 524.2	847187
		N/A	N/A	N/A		ASTM D6919-09	846570
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846548
		420.4/9066	847928	05/17/2022 08:08	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846125
		N/A	N/A	N/A		SW846 9020B	848094



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2ND QTR 2022 3060 RIVER RD

Workorder 3241435

Report ID 169782 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241435001	3060RIVERRD	Water	05/06/2022 10:40	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.

- 1

The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
- 2

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



Detected Results Summary

Client Sample ID	3060RIVERRD	Collected	05/06/2022 10:40		
Lab Sample ID	3241435001	Lab Receipt	05/06/2022 17:05		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	6.84	pH_Units		Field	#
Specific Conductance, Field	231	umhos/cm	1	Field	#
Temperature	14.30	Deg. C		Field	#
METALS					
Calcium, Dissolved	10.5	mg/L	0.10	EPA 200.7	#
Calcium, Total	10.1	mg/L	0.050	EPA 200.7	#
Iron, Total	0.064	mg/L	0.030	EPA 200.7	#
Magnesium, Dissolved	10.7	mg/L	0.10	EPA 200.7	#
Magnesium, Total	10.2	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.026	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.11	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	3.0	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.7	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	9.0	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.6	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	16	mg/L	5	SM2320B-2011	#
Alkalinity, Total	16	mg/L	5	SM2320B-2011	#
Ammonia-N	0.485	mg/L	0.100	ASTM D6919-09	#
Chloride	16.7	mg/L	2.0	EPA 300.0	#
Nitrate-N	13.2	mg/L	1.0	EPA 300.0	#
pH	6.94	pH_Units		S4500HB-11	#
Specific Conductance	227	umhos/cm	1	SM2510B-2011	#
Sulfate	7.3	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	121	mg/L	25	S2540C-11	#
Turbidity	0.33	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3060RIVERRD	Collected	05/06/2022 10:40
Lab Sample ID	3241435001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.84		pH_Units		Field	1	05/06/2022 10:40	BGS	N
Specific Conductance, Field	231		umhos/cm	1	Field	1	05/06/2022 10:40	BGS	N
Temperature	14.30		Deg. C		Field	1	05/06/2022 10:40	BGS	N

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	10.5		mg/L	0.10	EPA 200.7	1	05/10/2022 19:49	SRT	E
Calcium, Total	10.1		mg/L	0.050	EPA 200.7	1	05/10/2022 16:10	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:49	SRT	E
Iron, Total	0.064		mg/L	0.030	EPA 200.7	1	05/10/2022 16:10	SRT	D1
Magnesium, Dissolved	10.7		mg/L	0.10	EPA 200.7	1	05/10/2022 19:49	SRT	E
Magnesium, Total	10.2		mg/L	0.050	EPA 200.7	1	05/10/2022 16:10	SRT	D1
Manganese, Dissolved	0.026		mg/L	0.0050	EPA 200.7	1	05/10/2022 19:49	SRT	E
Manganese, Total	0.11		mg/L	0.0025	EPA 200.7	1	05/10/2022 16:10	SRT	D1
Potassium, Dissolved	3.0		mg/L	0.50	EPA 200.7	1	05/10/2022 19:49	SRT	E
Potassium, Total	2.7		mg/L	0.25	EPA 200.7	1	05/10/2022 16:10	SRT	D1
Sodium, Dissolved	9.0		mg/L	0.50	EPA 200.7	1	05/10/2022 19:49	SRT	E
Sodium, Total	8.6		mg/L	0.25	EPA 200.7	1	05/10/2022 16:10	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:49	PDK	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	99.4%	70 – 130	05/13/2022 02:49	

WET CHEMISTRY



Results

Client Sample ID	3060RIVERRD					Collected	05/06/2022 10:40		
Lab Sample ID	3241435001					Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	16		mg/L	5	SM2320B-2011	1	05/13/2022 02:56	BXD	A
Alkalinity, Total	16	1	mg/L	5	SM2320B-2011	1	05/13/2022 02:56	BXD	A
Ammonia-N	0.485		mg/L	0.100	ASTM D6919-09	10	05/17/2022 15:04	ALK	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:48	ALK	C
Chloride	16.7		mg/L	2.0	EPA 300.0	2	05/07/2022 12:07	MSA	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 12:07	MSA	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/18/2022 13:39	PAG	I
Nitrate-N	13.2		mg/L	1.0	EPA 300.0	2	05/07/2022 12:07	MSA	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 12:07	MSA	A
pH	6.94	2	pH_Units		S4500HB-11	1	05/13/2022 02:56	BXD	A
Phenolics	ND	ND	mg/L	0.004	EPA 420.4	1	05/17/2022 16:19	AKH	H
Specific Conductance	227		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	7.3		mg/L	2.0	EPA 300.0	2	05/07/2022 12:07	MSA	A
Total Dissolved Solids	121		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-2011	1	05/09/2022 22:02	PAG	F
Turbidity	0.33		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241435001	3060RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241435001	3060RIVERRD	N/A	N/A	N/A		Field	847947
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		N/A	N/A	N/A		EPA 524.2	847437
		N/A	N/A	N/A		ASTM D6919-09	846570
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846551
		420.4/9066	847928	05/17/2022 08:08	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846126
		N/A	N/A	N/A		SW846 9020B	848311



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2ND QTR 2022 3056 RIVER RD

Workorder 3241434

Report ID 169806 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241434001	3056RIVERRD	Water	05/06/2022 10:28	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID Sample ID

Result Notations

Notation Ref.

- | | |
|---|---|
| 1 | The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L. |
| 2 | The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory. |
| 3 | The QC sample type MS for method 420.4/9066 was outside the control limits for the analyte Phenolics. The % Recovery was reported as 134 and the control limits were 90 to 110. |
| 4 | The QC sample type MSD for method 420.4/9066 was outside the control limits for the analyte Phenolics. The % Recovery was reported as 141 and the control limits were 90 to 110. |



Detected Results Summary

Client Sample ID	3056RIVERRD	Collected	05/06/2022 10:28		
Lab Sample ID	3241434001	Lab Receipt	05/06/2022 17:05		
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	7.29	pH_Units		Field	#
Specific Conductance, Field	243	umhos/cm	1	Field	#
Temperature	14.20	Deg. C		Field	#
METALS					
Calcium, Dissolved	11.6	mg/L	0.10	EPA 200.7	#
Calcium, Total	11.5	mg/L	0.050	EPA 200.7	#
Iron, Total	0.034	mg/L	0.030	EPA 200.7	#
Magnesium, Dissolved	11.9	mg/L	0.10	EPA 200.7	#
Magnesium, Total	11.4	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.10	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.097	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.8	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.6	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	9.1	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.9	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	28	mg/L	5	SM2320B-2011	#
Alkalinity, Total	28	mg/L	5	SM2320B-2011	#
Ammonia-N	0.195	mg/L	0.100	ASTM D6919-09	#
Chloride	21.4	mg/L	2.0	EPA 300.0	#
Nitrate-N	11.8	mg/L	1.0	EPA 300.0	#
pH	7.34	pH_Units		S4500HB-11	#
Specific Conductance	236	umhos/cm	1	SM2510B-2011	#
Total Dissolved Solids	127	mg/L	25	S2540C-11	#
Total Organic Carbon (TOC)	0.60	mg/L	0.50	SM5310B-2011	#
Turbidity	0.46	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3056RIVERRD	Collected	05/06/2022 10:28
Lab Sample ID	3241434001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.29		pH_Units		Field	1	05/06/2022 10:28	BGS	N
Specific Conductance, Field	243		umhos/cm	1	Field	1	05/06/2022 10:28	BGS	N
Temperature	14.20		Deg. C		Field	1	05/06/2022 10:28	BGS	N

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	11.6		mg/L	0.10	EPA 200.7	1	05/10/2022 19:46	SRT	E
Calcium, Total	11.5		mg/L	0.050	EPA 200.7	1	05/10/2022 16:07	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:46	SRT	E
Iron, Total	0.034		mg/L	0.030	EPA 200.7	1	05/10/2022 16:07	SRT	D1
Magnesium, Dissolved	11.9		mg/L	0.10	EPA 200.7	1	05/10/2022 19:46	SRT	E
Magnesium, Total	11.4		mg/L	0.050	EPA 200.7	1	05/10/2022 16:07	SRT	D1
Manganese, Dissolved	0.10		mg/L	0.0050	EPA 200.7	1	05/10/2022 19:46	SRT	E
Manganese, Total	0.097		mg/L	0.0025	EPA 200.7	1	05/10/2022 16:07	SRT	D1
Potassium, Dissolved	2.8		mg/L	0.50	EPA 200.7	1	05/10/2022 19:46	SRT	E
Potassium, Total	2.6		mg/L	0.25	EPA 200.7	1	05/10/2022 16:07	SRT	D1
Sodium, Dissolved	9.1		mg/L	0.50	EPA 200.7	1	05/10/2022 19:46	SRT	E
Sodium, Total	8.9		mg/L	0.25	EPA 200.7	1	05/10/2022 16:07	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/13/2022 02:23	PDK	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	101 %	70 - 130	05/13/2022 02:23	

WET CHEMISTRY



Results

Client Sample ID	3056RIVERRD					Collected	05/06/2022 10:28		
Lab Sample ID	3241434001					Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	28		mg/L	5	SM2320B-2011	1	05/13/2022 02:46	BXD	A
Alkalinity, Total	28	1	mg/L	5	SM2320B-2011	1	05/13/2022 02:46	BXD	A
Ammonia-N	0.195		mg/L	0.100	ASTM D6919-09	10	05/13/2022 11:38	ALK	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:48	ALK	C
Chloride	21.4		mg/L	2.0	EPA 300.0	2	05/07/2022 11:53	MSA	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 11:53	MSA	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/18/2022 12:34	PAG	I
Nitrate-N	11.8		mg/L	1.0	EPA 300.0	2	05/07/2022 11:53	MSA	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 11:53	MSA	A
pH	7.34	2	pH_Units		S4500HB-11	1	05/13/2022 02:46	BXD	A
Phenolics	ND	ND,3,4	mg/L	0.004	EPA 420.4	1	05/17/2022 15:58	AKH	H
Specific Conductance	236		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	05/07/2022 11:53	MSA	A
Total Dissolved Solids	127		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	0.60		mg/L	0.50	SM5310B-2011	1	05/09/2022 22:02	PAG	F
Turbidity	0.46		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241434001	3056RIVERRD	Field	N/A	
		EPA 200.7	EPA ACID	
		EPA 200.7	EPA TRMD	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241434001	3056RIVERRD	N/A	N/A	N/A		Field	847947
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		N/A	N/A	N/A		EPA 524.2	847437
		N/A	N/A	N/A		ASTM D6919-09	846561
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846551
		420.4/9066	847928	05/17/2022 08:08	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846126
		N/A	N/A	N/A		SW846 9020B	848311



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022 3052 RIVER RD

Workorder 3241428

Report ID 169805 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241428001	3052 River Road, Conestoga, PA	Water	05/06/2022 10:21	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations	
Notation Ref.	
1	The QC sample type DUP for method SM2320B-2011 was outside the control limits for the analyte Alkalinity, Total. The RPD was reported as 47.8 and the upper control limit is 20.
2	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
3	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.



Detected Results Summary

Client Sample ID	3052 River Road, Conestoga, PA			Collected	05/06/2022 10:21
Lab Sample ID	3241428001			Lab Receipt	05/06/2022 17:05
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	6.48	pH_Units		Field	#
Specific Conductance, Field	237	umhos/cm	1	Field	#
Temperature	14.10	Deg. C		Field	#
METALS					
Calcium, Dissolved	15.3	mg/L	0.10	EPA 200.7	#
Calcium, Total	15.8	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	8.8	mg/L	0.10	EPA 200.7	#
Magnesium, Total	9.0	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.031	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.033	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.4	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.2	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.5	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.5	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	6	mg/L	5	SM2320B-2011	#
Alkalinity, Total	6	mg/L	5	SM2320B-2011	#
Ammonia-N	0.178	mg/L	0.100	ASTM D6919-09	#
Chloride	17.7	mg/L	2.0	EPA 300.0	#
Nitrate-N	17.6	mg/L	1.0	EPA 300.0	#
pH	6.53	pH_Units		S4500HB-11	#
Phenolics	0.013	mg/L	0.004	EPA 420.4	#
Specific Conductance	242	umhos/cm	1	SM2510B-2011	#
Sulfate	2.3	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	146	mg/L	25	S2540C-11	#
Total Organic Carbon (TOC)	0.52	mg/L	0.50	SM5310B-2011	#
Turbidity	0.38	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3052 River Road, Conestoga, PA	Collected	05/06/2022 10:21
Lab Sample ID	3241428001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.48		pH_Units		Field	1	05/06/2022 10:21	BGS	N
Specific Conductance, Field	237		umhos/cm	1	Field	1	05/06/2022 10:21	BGS	N
Temperature	14.10		Deg. C		Field	1	05/06/2022 10:21	BGS	N

METALS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	15.3		mg/L	0.10	EPA 200.7	1	05/10/2022 19:12	SRT	E
Calcium, Total	15.8		mg/L	0.050	EPA 200.7	1	05/10/2022 15:40	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:12	SRT	E
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/10/2022 15:40	SRT	D1
Magnesium, Dissolved	8.8		mg/L	0.10	EPA 200.7	1	05/10/2022 19:12	SRT	E
Magnesium, Total	9.0		mg/L	0.050	EPA 200.7	1	05/10/2022 15:40	SRT	D1
Manganese, Dissolved	0.031		mg/L	0.0050	EPA 200.7	1	05/10/2022 19:12	SRT	E
Manganese, Total	0.033		mg/L	0.0025	EPA 200.7	1	05/10/2022 15:40	SRT	D1
Potassium, Dissolved	2.4		mg/L	0.50	EPA 200.7	1	05/10/2022 19:12	SRT	E
Potassium, Total	2.2		mg/L	0.25	EPA 200.7	1	05/10/2022 15:40	SRT	D1
Sodium, Dissolved	8.5		mg/L	0.50	EPA 200.7	1	05/10/2022 19:12	SRT	E
Sodium, Total	8.5		mg/L	0.25	EPA 200.7	1	05/10/2022 15:40	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 19:16	TMP	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	96.9%	70 – 130	05/12/2022 19:16	

WET CHEMISTRY



Results

Client Sample ID	3052 River Road, Conestoga, PA					Collected	05/06/2022 10:21		
Lab Sample ID	3241428001					Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	6		mg/L	5	SM2320B-2011	1	05/13/2022 01:13	BXD	A
Alkalinity, Total	6	1,2	mg/L	5	SM2320B-2011	1	05/13/2022 01:13	BXD	A
Ammonia-N	0.178		mg/L	0.100	ASTM D6919-09	10	05/12/2022 14:35	ALK	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:48	ALK	C
Chloride	17.7		mg/L	2.0	EPA 300.0	2	05/07/2022 10:09	MSA	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 10:09	MSA	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/17/2022 14:55	PAG	I
Nitrate-N	17.6		mg/L	1.0	EPA 300.0	2	05/07/2022 10:09	MSA	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 10:09	MSA	A
pH	6.53	3	pH_Units		S4500HB-11	1	05/13/2022 01:13	BXD	A
Phenolics	0.013		mg/L	0.004	EPA 420.4	1	05/17/2022 15:15	AKH	H
Specific Conductance	242		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	2.3		mg/L	2.0	EPA 300.0	2	05/07/2022 10:09	MSA	A
Total Dissolved Solids	146		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	0.52		mg/L	0.50	SM5310B-2011	1	05/09/2022 20:16	PAG	F
Turbidity	0.38		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241428001	3052 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA ACID	
		EPA 200.7	EPA TRMD	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241428001	3052 River Road, Conestoga, PA	N/A	N/A	N/A		Field	847947
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		N/A	N/A	N/A		EPA 524.2	847187
		N/A	N/A	N/A		ASTM D6919-09	846555
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846551
		420.4/9066	847926	05/17/2022 08:07	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846125
		N/A	N/A	N/A		SW846 9020B	848094



34 Logwood Lane • Middletown, PA 17057 • Phone: 717-944-1430 • Fax: 717-944-1430 • www.alsglobal.com

ALS Environmental

Client Name: LCSWMA - Gerald E. Miller, Sr.
Address: 3052 River Road
Conestoga, PA 17516
Contact: Gerald E. Miller, Sr.
Phone#: (717) 872-5117
Project Name#: LCSWMA - Quarterly
Bill To: Lancaster County Solid Waste MA

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

Date Required: ☐ -Y ☐ -N Approved By: _____

Email? ☐ -Y ☐ -N

Fax? ☐ -Y ☐ -N

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time
1. 3052RIVERRD	05/06/22	1021
2. Trip Blank	05/06/22	1205
3		
4		
5		
6		
7		
8		
9		
10		

Project Comments:

LOGGED BY (signature):

REVIEWED BY (signature):

Relinquished By/ Company Name	Date	Time	Received By / Company Name	Date	Time
1. <i>[Signature]</i> ALS	5/6/22	1205	<i>[Signature]</i>	5.6.22	1705
3					
5					
10					

* G=Grab, C=Composite

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

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

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS SAMPLER. INSTRUCTIONS ON THE BACK.

Generated by ALS

COC #
ALS C

3241428

Logged By: KSB
PH: SJB



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

ANALYSES/METHOD REQUESTED

TOC	O-OH	TOX	524 VOCs	FM	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	pH, TDS, NO2, NO3, Cl, SO4, F, Pb, SpC	Alkalinity, HCO3
-----	------	-----	----------	----	------------	---	-------------------------------	--	------------------

Enter Number of Containers Per Sample or Field Results Below.

* Matrix	G	DW	2	1	2	3	X	1	1	1	1	1
G												
DW												

Temp Taken By:

WO Temp (°C)

Therm ID:

Receipt Info Completed By:

Cooler Custody Seal Intact

Sample Custody Seal Intact

Received on Ice

Cooler & Samples Intact

Correct Containers Provided

Sample Label/COC Agree

Adequate Sample Volumes

VOA Headspace Present

Voa Trip Blank

NIS 4 Days?

Rad Screen (uCi)

Courier/Tracking #:

SDWA Compliance

PWSID

ALS Field Services: ☐ Pickup ☐ Labor

☐ Composite_Sampling ☐ Rental_Equipment

☐ Other:

Standard	Deliverables	Special Processing	State Samples Collected In
☐ Standard	☐ CLP-like	USACE ☐	NY ☐
☐ CLP-like	☐ USACE	Navy ☐	NJ ☐
☐ USACE	☐		PA ☒
			NC ☐

Reportable to PADEP?

Yes ☐

PWSID #

EDDS: Format Type-

Lab ☒

Special ☐



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022-3044 RIVER RD

Workorder 3241426

Report ID 169790 on 5/19/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3241426001	3044 River Road, Conestoga, PA	Water	05/06/2022 10:12	05/06/2022 17:05	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID

Result Notations

Notation Ref.

- 1

The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
- 2

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



Detected Results Summary

Client Sample ID	3044 River Road, Conestoga, PA			Collected	05/06/2022 10:12
Lab Sample ID	3241426001			Lab Receipt	05/06/2022 17:05
Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	6.84	pH_Units		Field	#
Specific Conductance, Field	261	umhos/cm	1	Field	#
Temperature	14.20	Deg. C		Field	#
METALS					
Calcium, Dissolved	13.6	mg/L	0.10	EPA 200.7	#
Calcium, Total	13.7	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	10.1	mg/L	0.10	EPA 200.7	#
Magnesium, Total	10.1	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.020	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.022	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.2	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.0	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	9.7	mg/L	0.50	EPA 200.7	#
Sodium, Total	9.6	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	18	mg/L	5	SM2320B-2011	#
Alkalinity, Total	18	mg/L	5	SM2320B-2011	#
Chloride	16.4	mg/L	2.0	EPA 300.0	#
Nitrate-N	18.3	mg/L	1.0	EPA 300.0	#
pH	7.00	pH_Units		S4500HB-11	#
Specific Conductance	258	umhos/cm	1	SM2510B-2011	#
Total Dissolved Solids	161	mg/L	25	S2540C-11	#
Turbidity	0.25	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3044 River Road, Conestoga, PA	Collected	05/06/2022 10:12
Lab Sample ID	3241426001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.84		pH_Units		Field	1	05/06/2022 10:12	BGS	N
Specific Conductance, Field	261		umhos/cm	1	Field	1	05/06/2022 10:12	BGS	N
Temperature	14.20		Deg. C		Field	1	05/06/2022 10:12	BGS	N

METALS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	13.6		mg/L	0.10	EPA 200.7	1	05/10/2022 19:09	SRT	E
Calcium, Total	13.7		mg/L	0.050	EPA 200.7	1	05/10/2022 15:33	SRT	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/10/2022 19:09	SRT	E
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/10/2022 15:33	SRT	D1
Magnesium, Dissolved	10.1		mg/L	0.10	EPA 200.7	1	05/10/2022 19:09	SRT	E
Magnesium, Total	10.1		mg/L	0.050	EPA 200.7	1	05/10/2022 15:33	SRT	D1
Manganese, Dissolved	0.020		mg/L	0.0050	EPA 200.7	1	05/10/2022 19:09	SRT	E
Manganese, Total	0.022		mg/L	0.0025	EPA 200.7	1	05/10/2022 15:33	SRT	D1
Potassium, Dissolved	2.2		mg/L	0.50	EPA 200.7	1	05/10/2022 19:09	SRT	E
Potassium, Total	2.0		mg/L	0.25	EPA 200.7	1	05/10/2022 15:33	SRT	D1
Sodium, Dissolved	9.7		mg/L	0.50	EPA 200.7	1	05/10/2022 19:09	SRT	E
Sodium, Total	9.6		mg/L	0.25	EPA 200.7	1	05/10/2022 15:33	SRT	D1

VOLATILE ORGANICS

Compound	Result	Flag	Units	RD	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2022 18:50	TMP	K

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	99.4%	70 – 130	05/12/2022 18:50	

WET CHEMISTRY



Results

Client Sample ID	3044 River Road, Conestoga, PA						Collected	05/06/2022 10:12		
Lab Sample ID	3241426001						Lab Receipt	05/06/2022 17:05		
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr	
Alkalinity, Bicarbonate	18		mg/L	5	SM2320B-2011	1	05/13/2022 01:00	BXD	A	
Alkalinity, Total	18	1	mg/L	5	SM2320B-2011	1	05/13/2022 01:00	BXD	A	
Ammonia-N	ND	ND	mg/L	0.100	ASTM D6919-09	10	05/13/2022 10:29	ALK	C	
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/11/2022 17:39	ALK	C	
Chloride	16.4		mg/L	2.0	EPA 300.0	2	05/07/2022 09:58	MSA	A	
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/07/2022 09:58	MSA	A	
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	05/17/2022 14:33	PAG	I	
Nitrate-N	18.3		mg/L	1.0	EPA 300.0	2	05/07/2022 09:58	MSA	A	
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/07/2022 09:58	MSA	A	
pH	7.00	2	pH_Units		S4500HB-11	1	05/13/2022 01:00	BXD	A	
Phenolics	ND	ND	mg/L	0.004	EPA 420.4	1	05/17/2022 15:35	AKH	H	
Specific Conductance	258		umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A	
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	05/07/2022 09:58	MSA	A	
Total Dissolved Solids	161		mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A	
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-2011	1	05/09/2022 20:16	PAG	F	
Turbidity	0.25		NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A	



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241426001	3044 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241426001	3044 River Road, Conestoga, PA	N/A	N/A	N/A		Field	847947
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		N/A	N/A	N/A		EPA 524.2	847187
		N/A	N/A	N/A		ASTM D6919-09	846561
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846548
		420.4/9066	847926	05/17/2022 08:07	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846125
		N/A	N/A	N/A		SW846 9020B	848094



301 Filling Mill Road • Middletown, PA 17057 • Phone: 717-944-5541 • Fax: 717-944-1430 • www.alsglobal.com

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALS

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

COC #
ALS C

3241426



Logged By: KSB
PH: SJB

1 of 1

Client Name: Lancaster County Solid Waste MA

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

Contact: Dan Brown

Phone#: (717) 735-0193

Project Name#: LCSWMA - Quarry

Bill To: Lancaster County Solid Waste MA

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

Date Required: _____ Approved By: _____

Email? ☐ Y ☐ N

Fax? ☐ Y ☐ N

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

Sample Date Time

1 3044RIVERRD 05/06/22 1012

2. Trip Blank 05/06/22 1705

3

4

5

6

7

8

9

10

Project Comments:

LOGGED BY (signature):

REVIEWED BY (signature):

Date Time

Received By / Company Name

Date Time

5-6-22 1705

4

6

8

10

10 of 10

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

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.	FM	NH3-N, COD	Dissolved Metals: Ca, Fe, Mg, Mn, K, Na	Metals: Ca, Fe, Mg, Mn, K, Na	pH, TDS, NO2, NO3, Cl, SO4, F, Tb, SpC	Alkalinity, HCO3
524 VOCs	1	1	1	1	1	1
TOX	2	2	2	2	2	2
O-OH	1	1	1	1	1	1
TCC	2	2	2	2	2	2

Matrix * G or C

Receipt information (completed by Receiving Lab)

Cooler Temp: 1 Therm ID: 570

No. of Coolers: Y N Initial

Custody Seals Present? (if present) Seals Intact?

Received on Ice?

COC # shall be Completed/Annotated?

Temp Taken By: WO Temp (°C)

Therm ID: Receipt Info Completed By:

Cooler Custody Seal Intact

Sample Custody Seal Intact

Received on Ice

Cooler & Samples Intact

Correct Containers Provided

Sample Label/COC Agree

Adequate Sample Volumes

VOA Headspace Present

Voa Trip Blank

NLS 4 Days?

Rad Screen (uCi)

Courier/Tracking #:

SDWA Compliance

PWSID

Y N

ALS Field Services: ☐ Pickup ☐ Labor

☐ Composite_Sampling ☐ Rental_Equipment

☐ Other:

State Samples Collected In

USACE Navy

Reportable to PADEP?

Yes ☐ No ☒

PWSID #

EDDS: Format Type-

SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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

Rev 8/04



301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

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

Analytical Results Report For

Lancaster County Solid Waste Authority

Project 2nd QTR 2022-3125 RIVER RD

Workorder 3241433

Report ID 170971 on 5/24/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 06, 2022.

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 Susan 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 Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

Ashley Gichuki - Lancaster County Solid Waste Authority
Daniel Brown - Lancaster County Solid Waste Authority
Jordan Gallagher - Lancaster County Solid Waste Authority
Jeff Musser - Lancaster County Solid Waste Authority

Susan Scherer

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

Susan Scherer
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3241433001	3125 River Road, Conestoga, PA	Water	05/06/2022 15:00	05/06/2022 17:05	BGS	Analytical Laboratory Service
3241433004	3125 River Road, Conestoga, PA	Water	05/17/2022 15:12	05/17/2022 16:50	BGS	Analytical Laboratory Service
3241433005	Field Blank	Water	05/17/2022 15:12	05/17/2022 16:50	BGS	Analytical Laboratory Service
3241433006	Trip Blank	Water	05/17/2022 16:50	05/17/2022 16:50	BGS	Analytical Laboratory Service



Reference

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

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
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
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

P1 VOLATILE ORGANICS EPA 524.2 was resampled due to the field blank sample not being received in the original submission. SJS
05/20/22

Sample Notations

Lab ID Sample ID

Result Notations

Notation Ref.

- 1 The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
- 2 The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.



Detected Results Summary

Client Sample ID	3125 River Road, Conestoga, PA	Collected	05/06/2022 15:00
Lab Sample ID	3241433001	Lab Receipt	05/06/2022 17:05

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	7.87	pH_Units		Field	#
Specific Conductance, Field	624	umhos/cm	1	Field	#
Temperature	14.50	Deg. C		Field	#
METALS					
Calcium, Dissolved	52.5	mg/L	0.10	EPA 200.7	#
Calcium, Total	54.5	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	17.8	mg/L	0.10	EPA 200.7	#
Magnesium, Total	18.6	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.025	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.025	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.6	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.5	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	41.5	mg/L	0.50	EPA 200.7	#
Sodium, Total	41.7	mg/L	0.25	EPA 200.7	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	108	mg/L	5	SM2320B-2011	#
Alkalinity, Total	108	mg/L	5	SM2320B-2011	#
Ammonia-N	0.181	mg/L	0.100	ASTM D6919-09	#
Chloride	90.8	mg/L	2.0	EPA 300.0	#
Nitrate-N	9.4	mg/L	1.0	EPA 300.0	#
pH	7.95	pH_Units		S4500HB-11	#
Specific Conductance	613	umhos/cm	1	SM2510B-2011	#
Sulfate	4.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	304	mg/L	25	S2540C-11	#
Total Organic Carbon (TOC)	0.61	mg/L	0.50	SM5310B-2011	#
Turbidity	0.31	NTU	0.10	SM2130B-2011	#



Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	05/06/2022 15:00
Lab Sample ID	3241433001	Lab Receipt	05/06/2022 17:05

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.87	P1	pH_Units		Field	1	05/06/2022 15:00	BGS	N
Specific Conductance, Field	624	P1	umhos/cm	1	Field	1	05/06/2022 15:00	BGS	N
Temperature	14.50	P1	Deg. C		Field	1	05/06/2022 15:00	BGS	N

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	52.5	P1	mg/L	0.10	EPA 200.7	1	05/10/2022 19:29	SRT	E
Calcium, Total	54.5	P1	mg/L	0.050	EPA 200.7	1	05/10/2022 16:04	SRT	D1
Iron, Dissolved	ND	ND,P1	mg/L	0.060	EPA 200.7	1	05/10/2022 19:29	SRT	E
Iron, Total	ND	ND,P1	mg/L	0.030	EPA 200.7	1	05/10/2022 16:04	SRT	D1
Magnesium, Dissolved	17.8	P1	mg/L	0.10	EPA 200.7	1	05/10/2022 19:29	SRT	E
Magnesium, Total	18.6	P1	mg/L	0.050	EPA 200.7	1	05/10/2022 16:04	SRT	D1
Manganese, Dissolved	0.025	P1	mg/L	0.0050	EPA 200.7	1	05/10/2022 19:29	SRT	E
Manganese, Total	0.025	P1	mg/L	0.0025	EPA 200.7	1	05/10/2022 16:04	SRT	D1
Potassium, Dissolved	2.6	P1	mg/L	0.50	EPA 200.7	1	05/10/2022 19:29	SRT	E
Potassium, Total	2.5	P1	mg/L	0.25	EPA 200.7	1	05/10/2022 16:04	SRT	D1
Sodium, Dissolved	41.5	P1	mg/L	0.50	EPA 200.7	1	05/10/2022 19:29	SRT	E
Sodium, Total	41.7	P1	mg/L	0.25	EPA 200.7	1	05/10/2022 16:04	SRT	D1

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	108	P1	mg/L	5	SM2320B-2011	1	05/13/2022 02:36	BXD	A
Alkalinity, Total	108	1,P1	mg/L	5	SM2320B-2011	1	05/13/2022 02:36	BXD	A
Ammonia-N	0.181	P1	mg/L	0.100	ASTM D6919-09	10	05/13/2022 11:24	ALK	C
Chemical Oxygen Demand (COD)	ND	ND,P1	mg/L	15	EPA 410.4	1	05/11/2022 17:48	ALK	C
Chloride	90.8	P1	mg/L	2.0	EPA 300.0	2	05/07/2022 11:43	MSA	A
Fluoride	ND	ND,P1	mg/L	0.20	EPA 300.0	2	05/07/2022 11:43	MSA	A
Halogen, Total Organic (TOX)	ND	ND,P1	ug/L	20.0	SW846 9020B	1	05/18/2022 12:05	PAG	I
Nitrate-N	9.4	P1	mg/L	1.0	EPA 300.0	2	05/07/2022 11:43	MSA	A
Nitrite-N	ND	ND,P1	mg/L	1.0	EPA 300.0	2	05/07/2022 11:43	MSA	A
pH	7.95	2,P1	pH_Units		S4500HB-11	1	05/13/2022 02:36	BXD	A
Phenolics	ND	ND,P1	mg/L	0.004	EPA 420.4	1	05/17/2022 17:52	AKH	H
Specific Conductance	613	P1	umhos/cm	1	SM2510B-2011	1	05/09/2022 15:43	BXD	A
Sulfate	4.8	P1	mg/L	2.0	EPA 300.0	2	05/07/2022 11:43	MSA	A
Total Dissolved Solids	304	P1	mg/L	25	S2540C-11	1	05/10/2022 08:54	SMS	A
Total Organic Carbon (TOC)	0.61	P1	mg/L	0.50	SM5310B-2011	1	05/09/2022 20:16	PAG	F
Turbidity	0.31	P1	NTU	0.10	SM2130B-2011	1	05/07/2022 07:11	LXZ	A



Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	05/17/2022 15:12
Lab Sample ID	3241433004	Lab Receipt	05/17/2022 16:50

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
1,1-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
1,1-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
1,2-Dibromoethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
1,2-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Benzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
cis-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Ethylbenzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Methylene Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Tetrachloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Toluene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Total Xylenes	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
trans-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Trichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Trichlorofluoromethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A
Vinyl Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 15:42	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90%	70 – 130	05/23/2022 15:42	



Results

Client Sample ID	Field Blank	Collected	05/17/2022 15:12
Lab Sample ID	3241433005	Lab Receipt	05/17/2022 16:50

VOLATILE ORGANICS

Compound	Result	Flag	Units	SDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
1,1-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
1,1-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
1,2-Dibromoethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
1,2-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Benzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
cis-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Ethylbenzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Methylene Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Tetrachloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Toluene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Total Xylenes	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
trans-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Trichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Trichlorofluoromethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A
Vinyl Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:32	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90.3%	70 – 130	05/23/2022 13:32	



Results

Client Sample ID	Trip Blank	Collected	05/17/2022 16:50
Lab Sample ID	3241433006	Lab Receipt	05/17/2022 16:50

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
1,1-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
1,1-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
1,2-Dibromoethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
1,2-Dichloroethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Benzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
cis-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Ethylbenzene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Methylene Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Tetrachloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Toluene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Total Xylenes	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
trans-1,2-Dichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Trichloroethene	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Trichlorofluoromethane	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A
Vinyl Chloride	ND	ND,P1	ug/L	0.50	EPA 524.2	1	05/23/2022 13:06	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90.7%	70 – 130	05/23/2022 13:06	



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3241433001	3125 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		ASTM D6919-09	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	420.4/9066	
		S2540C-11	N/A	
		S4500HB-11	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM5310B-2011	N/A	
		SW846 9020B	N/A	
3241433004	3125 River Road, Conestoga, PA	EPA 524.2	N/A	
3241433005	Field Blank	EPA 524.2	N/A	
3241433006	Trip Blank	EPA 524.2	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3241433001	3125 River Road, Conestoga, PA	N/A	N/A	N/A		Field	847947
		EPA TRMD	846088	05/09/2022 11:43	JSE	EPA 200.7	846234
		EPA ACID	846236	05/10/2022 06:25	SRT	EPA 200.7	846237
		N/A	N/A	N/A		ASTM D6919-09	846561
		N/A	N/A	N/A		EPA 300.0	845771
		N/A	N/A	N/A		EPA 410.4	846551
		420.4/9066	847928	05/17/2022 08:08	AKH	EPA 420.4	848039
		N/A	N/A	N/A		S2540C-11	846022
		N/A	N/A	N/A		S4500HB-11	847214
		N/A	N/A	N/A		SM2130B-2011	845875
		N/A	N/A	N/A		SM2320B-2011	847214
		N/A	N/A	N/A		SM2510B-2011	846096
		N/A	N/A	N/A		SM5310B-2011	846125
		N/A	N/A	N/A		SW846 9020B	848311
3241433004	3125 River Road, Conestoga, PA	N/A	N/A	N/A		EPA 524.2	849156
3241433005	Field Blank	N/A	N/A	N/A		EPA 524.2	849156
3241433006	Trip Blank	N/A	N/A	N/A		EPA 524.2	849156



34 Logwood Lane • Middletown, PA 17057 • Phone: 717 944-5541 • Fax: 717 944-1430 • www.alsglobal.com

Client Name: LCSWMA - Christian C. Beck
Address: 3125 River Road
Conestoga, PA 17516

Contact: Christian C. Beck

Phone#: (717) 871-0448

Project Name#: LCSWMA - Quarry

Bill To: Lancaster County Solid Waste MA

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

Date Required: _____ Approved By: _____

Email? ☐ -Y

Fax? ☐ -Y No.:

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

Sample Date

Time

1 3125RIVERRD 05/06/22 1500

2. Field Blank 05/06/22 1440

3. Trip Blank 05/06/22 1705

4

5

6

7

8

9

10

Project Comments:

Relinquished By / Company Name

ALS

5-6-22 1705

4

6

8

10

* G=Grab; C=Composite

**Matrix -

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

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

Rev 8/04

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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

Generated by ALS

COC #:

3241433

1

Logged By: KSB
PM: SJB

of

1



ALS Q

Receipt information (completed by receiving Lab)

Cooler Temp: 1 Therm ID: 570

No. of Coolers: Y N Initial

Custody Seals Present?

(if present) Seals Intact?

Received on Ice?

COC Labels Complete/Accurate?

Cont. in Good Cond.?

Correct Containers?

Temp Taken By: KSB

WO Temp (°C): 570

Receipt Info Completed By: 45C

Cooler Custody Seal Intact

Sample Custody Seal Intact

Received on Ice

Cooler & Samples Intact

Correct Containers Provided

Sample Label/COC Agree

Adequate Sample Volumes

VOA Headspace Present

Voa Trip Blank

NJ ≤ 4 Days?

Rad Screen (uCi)

Courier/Tracking #:

SDWA Compliance

PWSID

missing field blanks 524 recompiled

ALS Field Services: ☐ Pickup ☐ Labor

☐ Composite Sampling ☐ Rental Equipment

☐ Other:

LOGGED BY (signature):

REVIEWED BY (signature):

Date

Time

Received By / Company Name

Date

Time

5-6-22 1705

4

6

8

10

DATE

TIME

DATE

TIME

DATE

TIME

5-6-22 1705

4

6

8

10

Standard

CLP-like

USACE

Deliverables

Reportable to PADEP?

Yes

PWSID #

EDDS: Format Type-

Special Processing

USACE

Navy

State Samples

Collected In

NY

NJ

PA

NC

Lab

Special

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

34 Dogwood Lane • Middletown, PA 17057 • Phone: 717.944.5541 • Fax: 717.944.1430 • www.alsglobal.com
Client Name: LCSWMA - Christian C. Beck
Address: 3125 River Road
Conestoga, PA 17516
Contact: Christian C. Beck
Phone#: (717) 871-0448
Project Name#: LCSWMA - Quarterly
Bill To: Lancaster County Solid Waste MA

5/24/2022 2:53 PM

Container Type		CG	ANALYSES/METHOD REQUESTED	
Container Size		40 ml		
Preservative		Asc&HCl		
Matrix		524 VOC		
* G or C			Enter Number of Containers Per Sample or Field Results Below.	
Sample Description/Location (as it will appear on the lab report)		Sample Date	Sample Time	
1 3125RIVERRRD		05/17/22	15:12	
2. Field Blank		05/17/22	15:17	
3. Trip Blank		05/17/22	16:50	
4				
5				
6				
7				
8				
9				
10				
Project Comments:		LOGGED BY (signature):		
Relinquished By / Company Name		Date	Time	Received By / Company Name
1 ALS		5-17-22	16:50	
3				
5				
7				
9				
* G=Grab; C=Composite		**Matrix - A=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater		

Receipt Information (completed by Receiving Lab)	
Cooler Temp: 6	Therm ID: 570
No. of Coolers: Y	N Initial
Custody Seals Present?	
(if present) Seals Intact?	
Received on Ice?	
COC Labels Complete/Accurate?	
Cont. in Good Cond.?	
Correct Containers?	
Correct Sample Volumes?	
Correct Preservation?	
Headspace/Volatiles?	
Courier/Tracking #:	
Sample/COC Comments	
Resample	
ALS Field Services: ☐ Pickup ☐ Labor ☐ Rental Equipment	
☐ Composite Sampling ☐ Other:	

Standard	Special Processing	State Samples
☐	USACE	Collected In
CLP-like	Navy	☐ NY
USACE		☐ NJ
☐		☐ PA
Reportable to PADEP?	Sample Disposal	☐ NC
Yes ☐	Lab ☐	
PWSID #	Special	
EDDS: Format Type-		