



Date Prepared/Revised 01/20/2025
<b>DEP USE ONLY</b>
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	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 11:51 AM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	15	SM20-2321
CALCIUM, TOTAL	14.3	EPA 200.7
CALCIUM, DISSOLVED	15	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	19	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	10.3	EPA 200.7
MAGNESIUM, DISSOLVED	10.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	13	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	13	EPA 200.7
NITRATE-NITROGEN	18.2	EPA 300

T Please indicate detection limit if analyte is not detected.

**FORM 52**  
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**PRIVATE WATER SUPPLY**  
**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

11/08/2024

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)	7.37	SM4500B
POTASSIUM, TOTAL	1.7	EPA 200.7
POTASSIUM, DISSOLVED	1.7	EPA 200.7
SODIUM, TOTAL	8.7	EPA 200.7
SODIUM, DISSOLVED	8.6	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	197	FIELD
SPEC. COND., LAB (umhos/cm)	236	EPA 120.1
SULFATE	2	EPA 300
ALKALINITY	15	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	150	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.3 ND	SM 2130B

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**FORM 52**  
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**PRIVATE WATER SUPPLY**  
**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

11/08/2024

## 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

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General Reference: Act 101 Section 1103	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 12:00 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	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	8	SM20-2321
CALCIUM, TOTAL	14.2	EPA 200.7
CALCIUM, DISSOLVED	15	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	18.6	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	9.4	EPA 200.7
MAGNESIUM, DISSOLVED	10	EPA 200.7
MANGANESE, TOTAL (ug/l)	35	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	37	EPA 200.7
NITRATE-NITROGEN	16.6	EPA 300

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**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

101389
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Monitoring Point I.D. No.

PS	MILLER
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Sample Date

11/08/2024
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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)	6.87	FIELD
pH-LAB (SU)	6.95	SM4500B
POTASSIUM, TOTAL	1.8	EPA 200.7
POTASSIUM, DISSOLVED	1.8	EPA 200.7
SODIUM, TOTAL	7.6	EPA 200.7
SODIUM, DISSOLVED	7.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	294	FIELD
SPEC. COND., LAB (umhos/cm)	225	EPA 120.1
SULFATE	3.2	EPA 300
ALKALINITY	8	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	146	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.3	SM 2130B

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**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

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Monitoring Point I.D. No.

PS MILLER

Sample Date

11/08/2024

## 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

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General Reference: Act 101 Section 1103	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 12:11 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, please explain in comments field.
Comments:	

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**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

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Monitoring Point I.D. No.

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Sample Date

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	6	SM20-2321
CALCIUM, TOTAL	9.9	EPA 200.7
CALCIUM, DISSOLVED	10.4	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	23.6	EPA 300
FLUORIDE	0.45	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	12	EPA 200.7
MAGNESIUM, DISSOLVED	12.5	EPA 200.7
MANGANESE, TOTAL (ug/l)	85	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	80	EPA 200.7
NITRATE-NITROGEN	17.5	EPA 300

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Facility I.D. Number

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Monitoring Point I.D. No.

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Sample Date

11/08/2024

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)	6.79	FIELD
pH-LAB (SU)	6.83	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	2	EPA 200.7
SODIUM, TOTAL	8.5	EPA 200.7
SODIUM, DISSOLVED	8.3	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	306	FIELD
SPEC. COND., LAB (umhos/cm)	230	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	6	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	170	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	2.4	SM 2130B

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## 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

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Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
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INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 12:21 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, please explain in comments field.
Comments:	

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Sample Date

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	6	SM20-2321
CALCIUM, TOTAL	9.9	EPA 200.7
CALCIUM, DISSOLVED	10.2	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	17.7	EPA 300
FLUORIDE	0.43	EPA 300
IRON, TOTAL (ug/l)	31	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11	EPA 200.7
MAGNESIUM, DISSOLVED	11.4	EPA 200.7
MANGANESE, TOTAL (ug/l)	110	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	99	EPA 200.7
NITRATE-NITROGEN	15.3	EPA 300

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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)	6.37	FIELD
pH-LAB (SU)	6.4	SM4500B
POTASSIUM, TOTAL	2.6	EPA 200.7
POTASSIUM, DISSOLVED	2.5	EPA 200.7
SODIUM, TOTAL	8.8	EPA 200.7
SODIUM, DISSOLVED	8.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	364	FIELD
SPEC. COND., LAB (umhos/cm)	219	EPA 120.1
SULFATE	9.2	EPA 300
ALKALINITY	6	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	140	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.3 ND	SM 2130B

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Sample Date

11/08/2024

## 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

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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	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 12:35 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	12	SM20-2321
CALCIUM, TOTAL	14.6	EPA 200.7
CALCIUM, DISSOLVED	13.7	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	54.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	8.9	EPA 200.7
MAGNESIUM, DISSOLVED	9	EPA 200.7
MANGANESE, TOTAL (ug/l)	170	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	160	EPA 200.7
NITRATE-NITROGEN	8.6	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 SENSENICH

Sample Date

11/08/2024

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)	7.09	FIELD
pH-LAB (SU)	7.04	SM4500B
POTASSIUM, TOTAL	3.4	EPA 200.7
POTASSIUM, DISSOLVED	3.2	EPA 200.7
SODIUM, TOTAL	25.7	EPA 200.7
SODIUM, DISSOLVED	24.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	247	FIELD
SPEC. COND., LAB (umhos/cm)	303	EPA 120.1
SULFATE	13	EPA 300
ALKALINITY	12	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	160	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.75	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

11/08/2024

## 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 01/20/2025
<b>DEP USE ONLY</b>
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	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 2:25 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	27	SM20-2321
CALCIUM, TOTAL	9.8	EPA 200.7
CALCIUM, DISSOLVED	9.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	29.8	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	5.7	EPA 200.7
MAGNESIUM, DISSOLVED	5.9	EPA 200.7
MANGANESE, TOTAL (ug/l)	21	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	21	EPA 200.7
NITRATE-NITROGEN	1.2	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

11/08/2024

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)	7.61	FIELD
pH-LAB (SU)	7.53	SM4500B
POTASSIUM, TOTAL	1.9	EPA 200.7
POTASSIUM, DISSOLVED	1.8	EPA 200.7
SODIUM, TOTAL	13.5	EPA 200.7
SODIUM, DISSOLVED	13	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	256	FIELD
SPEC. COND., LAB (umhos/cm)	172	EPA 120.1
SULFATE	9.3	EPA 300
ALKALINITY	27	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	101	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.4	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

11/08/2024

## 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 01/20/2025
<b>DEP USE ONLY</b>
Date Received

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

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General Reference: Act 101 Section 1103	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 1:00 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	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	159	SM20-2321
CALCIUM, TOTAL	22.5	EPA 200.7
CALCIUM, DISSOLVED	21.9	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	249	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11	EPA 200.7
MAGNESIUM, DISSOLVED	11.6	EPA 200.7
MANGANESE, TOTAL (ug/l)	26	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	26	EPA 200.7
NITRATE-NITROGEN	4.1	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
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Monitoring Point I.D. No.

PS	WEBER
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Sample Date

11/08/2024
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1. Inorganics, continued (Enter all data in mg/l except as noted)

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	2.5 ND	EPA 300
pH-FIELD (SU)	8.07	FIELD
pH-LAB (SU)	8.19	SM4500B
POTASSIUM, TOTAL	14.4	EPA 200.7
POTASSIUM, DISSOLVED	12.6	EPA 200.7
SODIUM, TOTAL	175	EPA 200.7
SODIUM, DISSOLVED	181	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	419	FIELD
SPEC. COND., LAB (umhos/cm)	1080	EPA 120.1
SULFATE	5 ND	EPA 300
ALKALINITY	159	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	540	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.3	SM 2130B

T Please indicate detection limit if analyte is not detected.

**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

11/08/2024

## 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 01/20/2025
<b>DEP USE ONLY</b>
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	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 1:21 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	22	SM20-2321
CALCIUM, TOTAL	15.1	EPA 200.7
CALCIUM, DISSOLVED	14.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	55.2	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	7.8	EPA 200.7
MAGNESIUM, DISSOLVED	8.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	13	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	13	EPA 200.7
NITRATE-NITROGEN	3.4	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 KIRCHNER

Sample Date

11/08/2024

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)	7.2	SM4500B
POTASSIUM, TOTAL	1.6	EPA 200.7
POTASSIUM, DISSOLVED	1.6	EPA 200.7
SODIUM, TOTAL	19.4	EPA 200.7
SODIUM, DISSOLVED	18.7	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	527	FIELD
SPEC. COND., LAB (umhos/cm)	260	EPA 120.1
SULFATE	7.5	EPA 300
ALKALINITY	22	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	153	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.6	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

11/08/2024

## 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 01/20/2025
<b>DEP USE ONLY</b>
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	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft.
Sampling Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Well Volumes Purged: _____
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 1:40 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	15	SM20-2321
CALCIUM, TOTAL	24.4	EPA 200.7
CALCIUM, DISSOLVED	24.9	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	138	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	15.9	EPA 200.7
MAGNESIUM, DISSOLVED	17.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	46	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	44	EPA 200.7
NITRATE-NITROGEN	10.2	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

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	2.5 ND	EPA 300
pH-FIELD (SU)	7.1	FIELD
pH-LAB (SU)	7.15	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	1.9	EPA 200.7
SODIUM, TOTAL	49.1	EPA 200.7
SODIUM, DISSOLVED	46.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	776	FIELD
SPEC. COND., LAB (umhos/cm)	546	EPA 120.1
SULFATE	9.6	EPA 300
ALKALINITY	15	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	294	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.3 ND	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS FRY

Sample Date

11/08/2024

## 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 01/20/2025
<b>DEP USE ONLY</b>
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	
<b>SECTION A. SITE IDENTIFIER</b>	
Applicant/permittee:	Lancaster County Solid Waste Manage
Site Name:	Frey Farm Landfill
Facility ID (as issued by DEP):	101389
<b>SECTION B. PRIVATE WATER SUPPLY INFORMATION</b>	
INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° 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: <input checked="" type="checkbox"/> Land Surface <input type="checkbox"/> TOC
Casing Stick Up:	ft. Elevation of Water Level: _____ ft./MSL
Total Well Depth:	ft. Sampling Method: <input type="checkbox"/> Pumped <input type="checkbox"/> Bailed
Sampling Depth:	ft. Well Volumes Purged: _____
Well Purged:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Sample Field Filtered (must be 0.45 micron)?:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Date:(mm/dd/yy)	11/08/2024 Sample Collection Time: 1:53 PM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	11/25/2024
Were any holding times exceeded?:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, please explain in comments field.
Comments:	

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS      BECK

Sample Date

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	170	SM20-2321
CALCIUM, TOTAL	4.8	EPA 200.7
CALCIUM, DISSOLVED	4.8	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	84.8	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.82	EPA 200.7
MAGNESIUM, DISSOLVED	0.89	EPA 200.7
MANGANESE, TOTAL (ug/l)	8.9	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5.2	EPA 200.7
NITRATE-NITROGEN	4.6	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      BECK

Sample Date

11/08/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	2.5 ND	EPA 300
pH-FIELD (SU)	8.26	FIELD
pH-LAB (SU)	8.24	SM4500B
POTASSIUM, TOTAL	1.8	EPA 200.7
POTASSIUM, DISSOLVED	1.9	EPA 200.7
SODIUM, TOTAL	133	EPA 200.7
SODIUM, DISSOLVED	129	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	329	FIELD
SPEC. COND., LAB (umhos/cm)	613	EPA 120.1
SULFATE	12.3	EPA 300
ALKALINITY	170	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	322	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.3	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS BECK

Sample Date

11/08/2024

## 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.



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024 3044 RIVER RD  
 Workorder 3386892  
 Report ID 369702 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://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):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386892001	3044RIVERRD	Water	11/08/2024 11:51	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:  
EPA 300.1 Rev. 1.0-1997  
EPA 300.0 Rev. 2.1-1993  
EPA 353.2 Rev. 2.0-1993  
EPA 410.4 Rev. 1.0-1993  
EPA 420.4 Rev. 1.0-1993  
EPA 365.1 Rev. 2.0-1993  
EPA 200.7 Rev. 4.4-1994  
EPA 200.8 Rev. 5.4-1994  
EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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** 4TH QTR 2024 3044 RIVER RD  
**Workorder** 3386892

**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	3044RIVERRD	Collected	11/08/2024 11:51
Lab Sample ID	3386892001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.29	pH_Units		Field	#
Specific Conductance, Field	197	umhos/cm	1	Field	#
Temperature	15.47	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	15.0	mg/L	0.10	EPA 200.7	#
Calcium, Total	14.3	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	10.8	mg/L	0.10	EPA 200.7	#
Magnesium, Total	10.3	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.013	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.013	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.7	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.7	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.6	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.7	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	15	mg/L	5	SM2320B-2011	#
Alkalinity, Total	15	mg/L	5	SM2320B-2011	#
Chloride	19.0	mg/L	2.0	EPA 300.0	#
Nitrate-N	18.2	mg/L	1.0	EPA 300.0	#
pH	7.37	pH_Units		S4500HB-11	#
Specific Conductance	236	umhos/cm	5	SM2510B-2011	#
Sulfate	2.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	150	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3044RIVERRD	Collected	11/08/2024 11:51
Lab Sample ID	3386892001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.29		pH_Units		Field	1	11/08/2024 11:51	BGS	P
Specific Conductance, Field	197		umhos/cm	1	Field	1	11/08/2024 11:51	BGS	P
Temperature	15.47		Deg. C		Field	1	11/08/2024 11:51	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	15.0		mg/L	0.10	EPA 200.7	1	11/13/2024 16:19	MSY	F1
Calcium, Total	14.3		mg/L	0.050	EPA 200.7	1	11/20/2024 13:32	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:19	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/20/2024 13:32	MSY	D1
Magnesium, Dissolved	10.8		mg/L	0.10	EPA 200.7	1	11/13/2024 16:19	MSY	F1
Magnesium, Total	10.3		mg/L	0.050	EPA 200.7	1	11/20/2024 13:32	MSY	D1
Manganese, Dissolved	0.013		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:19	MSY	F1
Manganese, Total	0.013		mg/L	0.0025	EPA 200.7	1	11/20/2024 13:32	MSY	D1
Potassium, Dissolved	1.7		mg/L	0.50	EPA 200.7	1	11/13/2024 16:19	MSY	F1
Potassium, Total	1.7		mg/L	0.25	EPA 200.7	1	11/20/2024 13:32	MSY	D1
Sodium, Dissolved	8.6		mg/L	0.50	EPA 200.7	1	11/13/2024 16:19	MSY	F1
Sodium, Total	8.7		mg/L	0.25	EPA 200.7	1	11/20/2024 13:32	MSY	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	11/19/2024 00:41	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:41	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90.6%	70 - 130	11/19/2024 00:41	

### WET CHEMISTRY



## Results

Client Sample ID	3044RIVERRD	Collected	11/08/2024 11:51
Lab Sample ID	3386892001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	15		mg/L	5	SM2320B-2011	1	11/15/2024 04:28	KMV	A
Alkalinity, Total	15	1	mg/L	5	SM2320B-2011	1	11/15/2024 04:28	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 15:30	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	19.0		mg/L	2.0	EPA 300.0	2	11/09/2024 19:14	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	11/09/2024 19:14	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/19/2024 17:39	PAG	K
Nitrate-N	18.2		mg/L	1.0	EPA 300.0	2	11/09/2024 19:14	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	11/09/2024 19:14	GMM	A
pH	7.37	2	pH_Units		S4500HB-11	1	11/15/2024 04:28	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 15:45	AKH	J
Specific Conductance	236		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	2.0		mg/L	2.0	EPA 300.0	2	11/09/2024 19:14	GMM	A
Total Dissolved Solids	150		mg/L	25	SM2540C-15	1	11/12/2024 14:57	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386892001	3044RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386892001	3044RIVERRD	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1332172	11/14/2024 09:00	AXW	EPA 200.7	1336195
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334688
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331489
		N/A	N/A	N/A		SM5310B-14	1331249
		N/A	N/A	N/A		SW846 9020B	1335284



301 Fulling Mill Rd, Suite A  
Middletown, PA 17057  
P: 717-944-5541

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

3386892

Logged By: DIG  
PH: SJB



COC #: \_\_\_\_\_  
ALS Quote \_\_\_\_\_

Client Name: Lancaster County Solid Waste MA		Container Type	AG	AN	AN	CG	P	P	P	P	P	P	P	P	Temp Taken By: _____				
Address: 1299 Harrisburg Pike PO Box 4424		Container Size	40ml	250ml	125ml	40ml	250ml	125ml	125ml	1L	500ml	Receipt info completed by: _____			Temp By: _____				
Lancaster Pa 17604		Preservative	HCL	H2SO4	H2SO4	ASCHL	H2SO4	HNO3	HNO3	UNP	UNP	Cooler Custody Seal Intact			WO Temp. (°C) _____				
Contact: Dan Brown		Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No											Temp ID: <u>567</u>						
Phone#: 717-735-0193		ANALYSIS / METHOD REQUESTED											DPB: Y N N NA						
Project Name#: LCSWMA Quarterly		Enter Number of Containers Per Sample or Field Results Below.											Y N N NA						
Bill To: LCSWMA		EPA 524.2 Form 52											Y N N NA						
Purchase Order #: _____		O-H											Y N N NA						
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		TOX											Y N N NA						
Rush-Subject to ALS approval and surcharges.		TM											Y N N NA						
Date Required: _____ Approved? _____		NH3-N, COD											Y N N NA						
Email? <input type="checkbox"/>		Disolved Metals Ca,Fe,Mg,Mn,K,Na											Y N N NA						
Sample Description/Location		Metals Ca,Fe,Mg,Mn,K,Na											Y N N NA						
(as it will appear on the lab report)		PH,TDS,NO2,NO3,Cl,SO4,F,SPC,Tp											Y N N NA						
1	3044RIVERRD	Date Collected	mm/dd/yy	11/8/24	Time	hh:mm	1151	SDWA Sample Type (see key)	G	DW	2	3	1	2	2	1	1	Sample(s) for Radiation testing	_____
2	Trip Blank	11/8/24	1610	G	DI	2		**Matrix (See bottom of COC)										Reportable SDWA Sample(s)	_____
3																		SDWA State of Origin?	_____
4																		PWSID	_____
5																		PWS Contact	_____
6																		PWS Phone #	_____
7																		SDWA Compliance	_____
8																		PWSID	_____
9																		WV Containers 0-6°C	_____
10																		WV Containers 0-6°C	_____
Circle Sample Collector: ALS Tech / Client		Received By / Company Name											State Samples Collected in						
Name: <u>Michael</u> ID: _____		DAGI AS											NY <input type="checkbox"/>						
Date: <u>11/24/2010</u>		2											NJ <input type="checkbox"/>						
		4											PA <input checked="" type="checkbox"/>						
		6											WV <input type="checkbox"/>						
		8											FL <input type="checkbox"/>						
		10											other <input type="checkbox"/>						
Comments:		EDS: _____											Sample Disposal						
		EPA 524.2 Form 52											Lab <input checked="" type="checkbox"/>						
		TOX											Special <input type="checkbox"/>						
		TM											Excel Summary						
		NH3-N, COD											Sample Disposal						
		Disolved Metals Ca,Fe,Mg,Mn,K,Na											Lab <input checked="" type="checkbox"/>						
		Metals Ca,Fe,Mg,Mn,K,Na											Special <input type="checkbox"/>						
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		Disolved Metals Ca,Fe,Mg,Mn,K,Na											Special <input type="checkbox"/>						
		Metals Ca,Fe,Mg,Mn,K,Na											Excel Summary						





Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024 3052 RIVER RD  
 Workorder 3386893  
 Report ID 369715 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://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):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



### 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>
3386893001	3052RIVERRD	Water	11/08/2024 12:00	11/08/2024 16:10	BGS	Analytical Laboratory Service





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## Reference

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### 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, including but not limited to the following EPA Method reference revisions:  
EPA 300.1 Rev. 1.0-1997  
EPA 300.0 Rev. 2.1-1993  
EPA 353.2 Rev. 2.0-1993  
EPA 410.4 Rev. 1.0-1993  
EPA 420.4 Rev. 1.0-1993  
EPA 365.1 Rev. 2.0-1993  
EPA 200.7 Rev. 4.4-1994  
EPA 200.8 Rev. 5.4-1994  
EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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.

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### 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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** 4TH QTR 2024 3052 RIVER RD  
**Workorder** 3386893

**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	3052RIVERRD	Collected	11/08/2024 12:00
Lab Sample ID	3386893001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	6.87	pH_Units		Field	#
Specific Conductance, Field	294	umhos/cm	1	Field	#
Temperature	17.54	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	15.0	mg/L	0.10	EPA 200.7	#
Calcium, Total	14.2	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	10.0	mg/L	0.10	EPA 200.7	#
Magnesium, Total	9.4	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.037	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.035	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.8	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.8	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	7.4	mg/L	0.50	EPA 200.7	#
Sodium, Total	7.6	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	8	mg/L	5	SM2320B-2011	#
Alkalinity, Total	8	mg/L	5	SM2320B-2011	#
Chloride	18.6	mg/L	2.0	EPA 300.0	#
Nitrate-N	16.6	mg/L	1.0	EPA 300.0	#
pH	6.95	pH_Units		S4500HB-11	#
Specific Conductance	225	umhos/cm	5	SM2510B-2011	#
Sulfate	3.2	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	146	mg/L	25	SM2540C-15	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3052RIVERRD	Collected	11/08/2024 12:00
Lab Sample ID	3386893001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.87		pH_Units		Field	1	11/08/2024 12:00	BGS	P
Specific Conductance, Field	294		umhos/cm	1	Field	1	11/08/2024 12:00	BGS	P
Temperature	17.54		Deg. C		Field	1	11/08/2024 12:00	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	15.0		mg/L	0.10	EPA 200.7	1	11/13/2024 16:22	MSY	F1
Calcium, Total	14.2		mg/L	0.050	EPA 200.7	1	11/20/2024 14:03	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:22	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/20/2024 14:03	MSY	D1
Magnesium, Dissolved	10.0		mg/L	0.10	EPA 200.7	1	11/13/2024 16:22	MSY	F1
Magnesium, Total	9.4		mg/L	0.050	EPA 200.7	1	11/20/2024 14:03	MSY	D1
Manganese, Dissolved	0.037		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:22	MSY	F1
Manganese, Total	0.035		mg/L	0.0025	EPA 200.7	1	11/20/2024 14:03	MSY	D1
Potassium, Dissolved	1.8		mg/L	0.50	EPA 200.7	1	11/13/2024 16:22	MSY	F1
Potassium, Total	1.8		mg/L	0.25	EPA 200.7	1	11/20/2024 14:03	MSY	D1
Sodium, Dissolved	7.4		mg/L	0.50	EPA 200.7	1	11/13/2024 16:22	MSY	F1
Sodium, Total	7.6		mg/L	0.25	EPA 200.7	1	11/20/2024 14:03	MSY	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	11/19/2024 01:06	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:06	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	87.9%	70 - 130	11/19/2024 01:06	

### WET CHEMISTRY



## Results

Client Sample ID	3052RIVERRD	Collected	11/08/2024 12:00
Lab Sample ID	3386893001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	8		mg/L	5	SM2320B-2011	1	11/15/2024 04:41	KMV	A
Alkalinity, Total	8	1	mg/L	5	SM2320B-2011	1	11/15/2024 04:41	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 15:45	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	18.6		mg/L	2.0	EPA 300.0	2	11/09/2024 19:27	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	11/09/2024 19:27	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/19/2024 17:39	PAG	K
Nitrate-N	16.6		mg/L	1.0	EPA 300.0	2	11/09/2024 19:27	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	11/09/2024 19:27	GMM	A
pH	6.95	2	pH_Units		S4500HB-11	1	11/15/2024 04:41	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 15:41	AKH	J
Specific Conductance	225		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	3.2		mg/L	2.0	EPA 300.0	2	11/09/2024 19:27	GMM	A
Total Dissolved Solids	146		mg/L	25	SM2540C-15	1	11/12/2024 14:57	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386893001	3052RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386893001	3052RIVERRD	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1332172	11/14/2024 09:00	AXW	EPA 200.7	1336195
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334688
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331489
		N/A	N/A	N/A		SM5310B-14	1331249
		N/A	N/A	N/A		SW846 9020B	1335284









Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024-3056 RIVER RD  
 Workorder 3386963  
 Report ID 369713 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads).

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

Recipient(s):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386963001	3056RIVERRD	Water	11/08/2024 12:11	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:
  - EPA 300.1 Rev. 1.0-1997
  - EPA 300.0 Rev. 2.1-1993
  - EPA 353.2 Rev. 2.0-1993
  - EPA 410.4 Rev. 1.0-1993
  - EPA 420.4 Rev. 1.0-1993
  - EPA 365.1 Rev. 2.0-1993
  - EPA 200.7 Rev. 4.4-1994
  - EPA 200.8 Rev. 5.4-1994
  - EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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 SW846 9066 was outside the control limits for the analyte Phenolics. The % Recovery was reported as 133 and the control limits were 90 to 110.   |



### Detected Results Summary

Client Sample ID	3056RIVERRD	Collected	11/08/2024 12:11
Lab Sample ID	3386963001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	6.79	pH_Units		Field	#
Specific Conductance, Field	306	umhos/cm	1	Field	#
Temperature	17.67	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	10.4	mg/L	0.10	EPA 200.7	#
Calcium, Total	9.9	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	12.5	mg/L	0.10	EPA 200.7	#
Magnesium, Total	12.0	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.080	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.085	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.0	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.1	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.3	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.5	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	6	mg/L	5	SM2320B-2011	#
Alkalinity, Total	6	mg/L	5	SM2320B-2011	#
Chloride	23.6	mg/L	2.0	EPA 300.0	#
Fluoride	0.45	mg/L	0.20	EPA 300.0	#
Nitrate-N	17.5	mg/L	1.0	EPA 300.0	#
pH	6.83	pH_Units		S4500HB-11	#
Specific Conductance	230	umhos/cm	5	SM2510B-2011	#
Total Dissolved Solids	170	mg/L	25	SM2540C-15	#
Turbidity	2.4	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3056RIVERRD	Collected	11/08/2024 12:11
Lab Sample ID	3386963001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.79		pH_Units		Field	1	11/08/2024 12:11	BGS	P
Specific Conductance, Field	306		umhos/cm	1	Field	1	11/08/2024 12:11	BGS	P
Temperature	17.67		Deg. C		Field	1	11/08/2024 12:11	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	10.4		mg/L	0.10	EPA 200.7	1	11/13/2024 16:24	MSY	F1
Calcium, Total	9.9		mg/L	0.050	EPA 200.7	1	11/20/2024 14:02	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:24	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/20/2024 14:02	MSY	D1
Magnesium, Dissolved	12.5		mg/L	0.10	EPA 200.7	1	11/13/2024 16:24	MSY	F1
Magnesium, Total	12.0		mg/L	0.050	EPA 200.7	1	11/20/2024 14:02	MSY	D1
Manganese, Dissolved	0.080		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:24	MSY	F1
Manganese, Total	0.085		mg/L	0.0025	EPA 200.7	1	11/20/2024 14:02	MSY	D1
Potassium, Dissolved	2.0		mg/L	0.50	EPA 200.7	1	11/13/2024 16:24	MSY	F1
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	1	11/20/2024 14:02	MSY	D1
Sodium, Dissolved	8.3		mg/L	0.50	EPA 200.7	1	11/13/2024 16:24	MSY	F1
Sodium, Total	8.5		mg/L	0.25	EPA 200.7	1	11/20/2024 14:02	MSY	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	11/19/2024 03:37	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 03:37	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	88.5%	70 - 130	11/19/2024 03:37	

### WET CHEMISTRY



## Results

Client Sample ID	3056RIVERRD	Collected	11/08/2024 12:11						
Lab Sample ID	3386963001	Lab Receipt	11/08/2024 16:10						
Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	6		mg/L	5	SM2320B-2011	1	11/15/2024 05:45	KMV	A
Alkalinity, Total	6	1	mg/L	5	SM2320B-2011	1	11/15/2024 05:45	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/15/2024 16:11	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/13/2024 12:07	KMS	C
Chloride	23.6		mg/L	2.0	EPA 300.0	2	11/09/2024 20:19	GMM	A
Fluoride	0.45		mg/L	0.20	EPA 300.0	2	11/09/2024 20:19	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/20/2024 16:55	PAG	K
Nitrate-N	17.5		mg/L	1.0	EPA 300.0	2	11/09/2024 20:19	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	11/09/2024 20:19	GMM	A
pH	6.83	2	pH_Units		S4500HB-11	1	11/15/2024 05:45	KMV	A
Phenolics	ND	ND,3	mg/L	0.005	EPA 420.4	1	11/21/2024 15:55	AKH	J
Specific Conductance	230		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	11/09/2024 20:19	GMM	A
Total Dissolved Solids	170		mg/L	25	SM2540C-15	1	11/12/2024 16:15	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	2.4		NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386963001	3056RIVERRD	Field	N/A	
		EPA 200.7	EPA ACID	
		EPA 200.7	EPA TRMD	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386963001	3056RIVERRD	N/A	N/A	N/A		Field	1332842
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		EPA TRMD	1332172	11/14/2024 09:00	AXW	EPA 200.7	1336195
		N/A	N/A	N/A		EPA 524.2	1334688
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331757
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331870
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331490
		N/A	N/A	N/A		SM5310B-14	1331249
		N/A	N/A	N/A		SW846 9020B	1335984

301 Fulling Mill Rd, Suite A  
Middletown, PA 17057  
P. 717-944-5541

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

3386963  
Logged By: SLS  
PM: SJB

of

Client Name: Lancaster County Solid Waste MA  
Address: 1299 Harrisburg pike PO Box 4424  
Lancaster PA 17604  
Contact: Dan Brown  
Phone#: 717-735-0193  
Project Name#: LCSWMA Quarterly  
Bill To: LCSWMA  
Purchase Order #: \_\_\_\_\_  
TAT  Normal-Standard TAT is 10-12 business days.  
 Rush-Subject to ALS approval and surcharges.  
Date Required: \_\_\_\_\_ Approved?  
Email?

Container Type	AG	AN	AN	CG	P	P	P	P	P
Container Size	40ml	125ml	125ml	40ml	250ml	125ml	125ml	1L	500ml
Preservative	HCL	H2SO4	H2SO4	ASCHCL	H2SO4	HNO3	HNO3	UNP	UNP
Orthophosphate Filtered?	Yes	No	Hexavalent Chromium Filtered?	Yes	No	Yes	No	Yes	No

SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	TOX	O-OH	EPA 524.2 Form 52	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, Sp, C, T, B	Alkalinity, HCO3
1	G	DW	2	2	1	3	X	1	2	2	1	1
2	G	DI				2						
3												
4												
5												
6												
7												
8												
9												
10												

Sample Description/Location (as it will appear on the lab report)  
Date Collected (mm/dd/yy)  
Time (hr:mm)

Circle Sample Collector: ALS Tech / Client ID: \_\_\_\_\_  
Name: *KS Mad*  
Date: *11-8-24 16:10*  
Relinquished By / Company Name: *DAG LALS*

Standard Lvl 1	Standard Lvl 2	Standard Lvl 3	Standard Lvl 4	Excel Summary	Equis	Custom	Format Type
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other

Contains Short Hold Testing YES NO  
Internal Use: if less than 48 hours - notify lab upon receipt

Receipt Info Completed By: \_\_\_\_\_ Temp By: \_\_\_\_\_ WO Temp (°C) \_\_\_\_\_  
Cooler Custody Seal Intact \_\_\_\_\_  
Sample Custody Seal Intact \_\_\_\_\_  
Received on Ice \_\_\_\_\_  
Coolers & Samples Intact \_\_\_\_\_  
Correct Containers Provided \_\_\_\_\_  
Sample Label/COC Agree \_\_\_\_\_  
Adequate Sample Volumes \_\_\_\_\_  
VOA only: Trip Blank \_\_\_\_\_  
NJ ≤ 4 days? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_  
Counter/Tracking # \_\_\_\_\_  
Sample(s) for Radiation testing \_\_\_\_\_  
Reportable SDWA Sample(s): \_\_\_\_\_  
SDWA State of Origin? \_\_\_\_\_  
PWSID # \_\_\_\_\_  
PWS Contact: \_\_\_\_\_ PWS Phone #: \_\_\_\_\_  
SDWA Sample Type Key: D=Distribution E=Entry Point  
R=Raw P=Plant C=Check S=Special A=Annual Startup  
Sample/COC Remarks \_\_\_\_\_



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024-3060 RIVER RD  
 Workorder 3386964  
 Report ID 369711 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://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):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



### 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>
3386964001	3060RIVERRD	Water	11/08/2024 12:21	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:  
EPA 300.1 Rev. 1.0-1997  
EPA 300.0 Rev. 2.1-1993  
EPA 353.2 Rev. 2.0-1993  
EPA 410.4 Rev. 1.0-1993  
EPA 420.4 Rev. 1.0-1993  
EPA 365.1 Rev. 2.0-1993  
EPA 200.7 Rev. 4.4-1994  
EPA 200.8 Rev. 5.4-1994  
EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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	11/08/2024 12:21
Lab Sample ID	3386964001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	6.37	pH_Units		Field	#
Specific Conductance, Field	364	umhos/cm	1	Field	#
Temperature	17.59	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	10.2	mg/L	0.10	EPA 200.7	#
Calcium, Total	9.9	mg/L	0.050	EPA 200.7	#
Iron, Total	0.031	mg/L	0.030	EPA 200.7	#
Magnesium, Dissolved	11.4	mg/L	0.10	EPA 200.7	#
Magnesium, Total	11.0	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.099	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.11	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.5	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.6	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.5	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.8	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	6	mg/L	5	SM2320B-2011	#
Alkalinity, Total	6	mg/L	5	SM2320B-2011	#
Chloride	17.7	mg/L	2.0	EPA 300.0	#
Fluoride	0.43	mg/L	0.20	EPA 300.0	#
Nitrate-N	15.3	mg/L	1.0	EPA 300.0	#
pH	6.40	pH_Units		S4500HB-11	#
Specific Conductance	219	umhos/cm	5	SM2510B-2011	#
Sulfate	9.2	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	140	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3060RIVERRD	Collected	11/08/2024 12:21
Lab Sample ID	3386964001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.37		pH_Units		Field	1	11/08/2024 12:21	BGS	P
Specific Conductance, Field	364		umhos/cm	1	Field	1	11/08/2024 12:21	BGS	P
Temperature	17.59		Deg. C		Field	1	11/08/2024 12:21	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	10.2		mg/L	0.10	EPA 200.7	1	11/13/2024 16:23	MSY	F1
Calcium, Total	9.9		mg/L	0.050	EPA 200.7	1	11/20/2024 12:56	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:23	MSY	F1
Iron, Total	0.031		mg/L	0.030	EPA 200.7	1	11/20/2024 12:56	MSY	D1
Magnesium, Dissolved	11.4		mg/L	0.10	EPA 200.7	1	11/13/2024 16:23	MSY	F1
Magnesium, Total	11.0		mg/L	0.050	EPA 200.7	1	11/20/2024 12:56	MSY	D1
Manganese, Dissolved	0.099		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:23	MSY	F1
Manganese, Total	0.11		mg/L	0.0025	EPA 200.7	1	11/20/2024 12:56	MSY	D1
Potassium, Dissolved	2.5		mg/L	0.50	EPA 200.7	1	11/13/2024 16:23	MSY	F1
Potassium, Total	2.6		mg/L	0.25	EPA 200.7	1	11/20/2024 12:56	MSY	D1
Sodium, Dissolved	8.5		mg/L	0.50	EPA 200.7	1	11/13/2024 16:23	MSY	F1
Sodium, Total	8.8		mg/L	0.25	EPA 200.7	1	11/20/2024 12:56	MSY	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	11/19/2024 04:02	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 04:02	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	88.9%	70 - 130	11/19/2024 04:02	

### WET CHEMISTRY





## Results

Client Sample ID	3060RIVERRD	Collected	11/08/2024 12:21
Lab Sample ID	3386964001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	6		mg/L	5	SM2320B-2011	1	11/15/2024 07:05	KMV	A
Alkalinity, Total	6	1	mg/L	5	SM2320B-2011	1	11/15/2024 07:05	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/15/2024 16:08	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/13/2024 12:07	KMS	C
Chloride	17.7		mg/L	2.0	EPA 300.0	2	11/09/2024 20:32	GMM	A
Fluoride	0.43		mg/L	0.20	EPA 300.0	2	11/09/2024 20:32	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/20/2024 16:55	PAG	K
Nitrate-N	15.3		mg/L	1.0	EPA 300.0	2	11/09/2024 20:32	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	11/09/2024 20:32	GMM	A
pH	6.40	2	pH_Units		S4500HB-11	1	11/15/2024 07:05	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 16:02	AKH	J
Specific Conductance	219		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	9.2		mg/L	2.0	EPA 300.0	2	11/09/2024 20:32	GMM	A
Total Dissolved Solids	140		mg/L	25	SM2540C-15	1	11/12/2024 16:15	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 19:37	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386964001	3060RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386964001	3060RIVERRD	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1332172	11/14/2024 09:00	AXW	EPA 200.7	1336195
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334688
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331757
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331870
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331490
		N/A	N/A	N/A		SM5310B-14	1331566
		N/A	N/A	N/A		SW846 9020B	1335984

301 Fulling Mill Rd, Suite A  
Middletown, PA 17057  
P. 717-944-5541



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

3386964

Logged By: SLS  
PH: SJB



Client Name: Lancaster County Solid Waste MA  
Address: 1299 Harrisburg pike PO Box 4424  
Lancaster PA 17604

Contact: Dan Brown  
Phone#: 717-735-0193  
Project Name#: LCSWMA Quarterly  
Bill To: LCSWMA  
Purchase Order #:  
TAT  Normal-Standard TAT is 10-12 business days.  
 Rush-Subject to ALS approval and surcharges.  
Date Required: \_\_\_\_\_ Approved?  
Email?

Container Type: AG AN AN CG P P P P P  
Container Size: 40ml 125ml 250ml 250ml 125ml 125ml 1L 500ml  
Preservative: HCL H2SO4 H2SO4 H2SO4 HNO3 HNO3 UNP UNP  
Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED										
SDWA Sample Type (see key)	*G or C	TOC	TOX	O-OH	EPA 524.2 Form 52	Dissolved Metals Ca, Fe, Mg, Mn, K, Na	Metals Ca, Fe, Mg, Mn, K, Na	PH, TDS, NO2, NO3, Cl, SO4, F, Spc, Tp	Alkalinity, HCO3	
1	G DW	2	2	1	3	X	1	2	2	1
2	G DI				2					
3										
4										
5										
6										
7										
8										
9										
10										

Sample Description/Location (as it will appear on the lab report)  
Date Collected (mm/dd/yy)  
Time (hr:mm)

Circle Sample Collector: ALS Tech / Client Name: *[Signature]* ID: *[Signature]*  
Date: 11/24/1610  
Relinquished By / Company Name: *[Signature]*

Receipt Info completed by: *[Signature]* Temp By: *[Signature]* WO Temp (°C) *[Signature]*  
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 only: Trip Blank  
NJ ≤ 4 days? Y N  
Courier/Tracking #  
Samples for Radiation testing  
Reportable SDWA Sample(s)  
SDWA State of Origin?  
PWSID #  
PWS Contact: PWS Phone #  
SDWA Sample Type Key: D=Distribution E=Entry Point  
R=Raw P=Plant C=Check S=Special A=Annual Startup

Contains Short Hold Testing YES NO  
Internal Use: if less than 48 hours - notify lab upon receipt

Standard Lvl 1	CLP-like	HSCA	State Samples Collected in
Standard Lvl 2	DOD	Landfill	NY
Standard Lvl 3	NJ RED	NJ GW	NJ
Standard Lvl 4	NJ Full		PA
Excel Summary	Sample Disposal		WV
Equis	Lab	X	FL
Custom	Special		other
EDDS: Formal Type			

\* G=Grab; C=Composite \*\*Matrix: A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WIP=Pipe; WW=Wastewater  
ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057  
11/26/2024 1:06 PM  
10 of 10  
Rev 07.06.2023



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024-3076 RIVER RD  
 Workorder 3386895  
 Report ID 369708 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://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):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386895001	3076RIVERRD	Water	11/08/2024 12:35	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:
  - EPA 300.1 Rev. 1.0-1997
  - EPA 300.0 Rev. 2.1-1993
  - EPA 353.2 Rev. 2.0-1993
  - EPA 410.4 Rev. 1.0-1993
  - EPA 420.4 Rev. 1.0-1993
  - EPA 365.1 Rev. 2.0-1993
  - EPA 200.7 Rev. 4.4-1994
  - EPA 200.8 Rev. 5.4-1994
  - EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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 CaCO <sub>3</sub> /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	3076RIVERRD	Collected	11/08/2024 12:35
Lab Sample ID	3386895001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.09	pH_Units		Field	#
Specific Conductance, Field	247	umhos/cm	1	Field	#
Temperature	17.21	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	13.7	mg/L	0.10	EPA 200.7	#
Calcium, Total	14.6	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	9.0	mg/L	0.10	EPA 200.7	#
Magnesium, Total	8.9	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	3.2	mg/L	0.50	EPA 200.7	#
Potassium, Total	3.4	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	24.2	mg/L	0.50	EPA 200.7	#
Sodium, Total	25.7	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	12	mg/L	5	SM2320B-2011	#
Alkalinity, Total	12	mg/L	5	SM2320B-2011	#
Chloride	54.9	mg/L	2.0	EPA 300.0	#
Nitrate-N	8.6	mg/L	1.0	EPA 300.0	#
pH	7.04	pH_Units		S4500HB-11	#
Specific Conductance	303	umhos/cm	5	SM2510B-2011	#
Sulfate	13.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	160	mg/L	25	SM2540C-15	#
Turbidity	0.75	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3076RIVERRD	Collected	11/08/2024 12:35
Lab Sample ID	3386895001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.09		pH_Units		Field	1	11/08/2024 12:35	BGS	P
Specific Conductance, Field	247		umhos/cm	1	Field	1	11/08/2024 12:35	BGS	P
Temperature	17.21		Deg. C		Field	1	11/08/2024 12:35	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	13.7		mg/L	0.10	EPA 200.7	1	11/13/2024 16:20	MSY	F1
Calcium, Total	14.6		mg/L	0.050	EPA 200.7	1	11/18/2024 17:42	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:20	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/18/2024 17:42	MSY	D1
Magnesium, Dissolved	9.0		mg/L	0.10	EPA 200.7	1	11/13/2024 16:20	MSY	F1
Magnesium, Total	8.9		mg/L	0.050	EPA 200.7	1	11/18/2024 17:42	MSY	D1
Manganese, Dissolved	0.16		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:20	MSY	F1
Manganese, Total	0.17		mg/L	0.0025	EPA 200.7	1	11/18/2024 17:42	MSY	D1
Potassium, Dissolved	3.2		mg/L	0.50	EPA 200.7	1	11/13/2024 16:20	MSY	F1
Potassium, Total	3.4		mg/L	0.25	EPA 200.7	1	11/18/2024 17:42	MSY	D1
Sodium, Dissolved	24.2		mg/L	0.50	EPA 200.7	1	11/13/2024 16:20	MSY	F1
Sodium, Total	25.7		mg/L	0.25	EPA 200.7	1	11/18/2024 17:42	MSY	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	11/19/2024 01:31	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 01:31	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90.3%	70 - 130	11/19/2024 01:31	

### WET CHEMISTRY



## Results

Client Sample ID	3076RIVERRD	Collected	11/08/2024 12:35
Lab Sample ID	3386895001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	12		mg/L	5	SM2320B-2011	1	11/15/2024 05:30	KMV	A
Alkalinity, Total	12	1	mg/L	5	SM2320B-2011	1	11/15/2024 05:30	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 15:27	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	54.9		mg/L	2.0	EPA 300.0	2	11/09/2024 19:40	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	11/09/2024 19:40	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/20/2024 16:55	PAG	K
Nitrate-N	8.6		mg/L	1.0	EPA 300.0	2	11/09/2024 19:40	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	11/09/2024 19:40	GMM	A
pH	7.04	2	pH_Units		S4500HB-11	1	11/15/2024 05:30	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 16:06	AKH	J
Specific Conductance	303		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	13.0		mg/L	2.0	EPA 300.0	2	11/09/2024 19:40	GMM	A
Total Dissolved Solids	160		mg/L	25	SM2540C-15	1	11/12/2024 14:57	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	0.75		NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386895001	3076RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386895001	3076RIVERRD	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1331485	11/12/2024 09:20	AXW	EPA 200.7	1334592
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334688
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331489
		N/A	N/A	N/A		SM5310B-14	1331249
		N/A	N/A	N/A		SW846 9020B	1335984

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

3386895

Logged By: DIG  
PM: SJB



COC #: \_\_\_\_\_  
ALS Quote

Client Name: LCSWMA Brian Sensenich		Temp Taken By: _____	Temp By: _____	WO Temp (°C): _____	Therm ID: <u>569</u>
Address: 3076 River Rd		Receipt Info Completed By: _____	Receipt Info Completed By: _____		
Conestoga PA 17516		Cooler Custody Seal Intact	Cooler Custody Seal Intact		
Contact: Brian Sensenich		Sample Custody Seal Intact	Sample Custody Seal Intact		
Phone#: 717-676-5779		Received on Ice	Received on Ice		
Project Name#: LCSWMA Quarterly		Coolers & Samples Intact	Coolers & Samples Intact		
Bill To: LCSWMA Brian Sensenich		Correct Containers Provided	Correct Containers Provided		
Purchase Order #:		Sample Label/COC Agree	Sample Label/COC Agree		
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		Adequate Sample Volumes	Adequate Sample Volumes		
Rush-Subject to ALS approval and surcharges.		VOA only: Trip Blank	VOA only: Trip Blank		
Date Required: _____		NJ ≤ 4 days? Y N	NJ ≤ 4 days? Y N		
Email? <input type="checkbox"/>		Courier/Tracking #	Courier/Tracking #		
Sample Description/Location (as it will appear on the lab report)		Sample(s) for Radiation testir	Sample(s) for Radiation testir		
Date Collected		Reportable SDWA Sample(s)	Reportable SDWA Sample(s)		
Time		SDWA State of Origin?	SDWA State of Origin?		
1 3076RIVERRD		PWSID #	PWSID #		
2 Trip Blank		PWS Contact:	PWS Contact:		
3		SDWA Sample Type Key: D=Distribution E=Entry Point	SDWA Sample Type Key: D=Distribution E=Entry Point		
4		R=Raw P=Plant C=Check S=Special A=Annual Startup	R=Raw P=Plant C=Check S=Special A=Annual Startup		
5		Sample/COC Remarks	Sample/COC Remarks		
6					
7					
8					
9					
10					
Circle Sample Collector: ALS Tech / Client		Internal Use: If less than 48 hours - notify lab upon receipt			
Name: _____ ID: _____		Contains Short Hold Testing YES NO			
Date: 11/24/2024		Standard Lvl 1 <input type="checkbox"/> CLP-like <input type="checkbox"/> HSCA <input type="checkbox"/>			
Time: 1610		Standard Lvl 2 <input type="checkbox"/> DOD <input type="checkbox"/> Landfill <input type="checkbox"/>			
1		Standard Lvl 3 <input type="checkbox"/> NJ RED <input type="checkbox"/> NJ GW <input type="checkbox"/>			
3		Standard Lvl 4 <input type="checkbox"/> NJ Full <input type="checkbox"/>			
5		Excel Summary			
7		Equis Lab <input checked="" type="checkbox"/>			
9		Custom Special <input type="checkbox"/>			
Requisitioned By / Company Name		EDDS: _____			
1 11/24/2024		Format Type			
3		Data Deliverables			
5		State Samples Collected In			
7		NY <input type="checkbox"/>			
9		NJ <input type="checkbox"/>			
		PA <input checked="" type="checkbox"/>			
		WV <input type="checkbox"/>			
		FL <input type="checkbox"/>			
		other <input type="checkbox"/>			





Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024-3079 RIVER RD  
 Workorder 3386867  
 Report ID 369700 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://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):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386867001	3079RIVERRD	Water	11/08/2024 14:25	11/08/2024 16:10	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).
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 EPA 410.4 Rev. 1.0-1993  
 EPA 420.4 Rev. 1.0-1993  
 EPA 365.1 Rev. 2.0-1993  
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N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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	11/08/2024 14:25
Lab Sample ID	3386867001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.61	pH_Units		Field	#
Specific Conductance, Field	256	umhos/cm	1	Field	#
Temperature	17.24	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	9.5	mg/L	0.10	EPA 200.7	#
Calcium, Total	9.8	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	5.9	mg/L	0.10	EPA 200.7	#
Magnesium, Total	5.7	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.021	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.021	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.8	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.9	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	13.0	mg/L	0.50	EPA 200.7	#
Sodium, Total	13.5	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	27	mg/L	5	SM2320B-2011	#
Alkalinity, Total	27	mg/L	5	SM2320B-2011	#
Chloride	29.8	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.2	mg/L	1.0	EPA 300.0	#
pH	7.53	pH_Units		S4500HB-11	#
Specific Conductance	172	umhos/cm	5	SM2510B-2011	#
Sulfate	9.3	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	101	mg/L	25	SM2540C-15	#
Turbidity	0.40	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3079RIVERRD	Collected	11/08/2024 14:25
Lab Sample ID	3386867001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.61		pH_Units		Field	1	11/08/2024 14:25	BGS	P
Specific Conductance, Field	256		umhos/cm	1	Field	1	11/08/2024 14:25	BGS	P
Temperature	17.24		Deg. C		Field	1	11/08/2024 14:25	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	9.5		mg/L	0.10	EPA 200.7	1	11/13/2024 16:12	MSY	F1
Calcium, Total	9.8		mg/L	0.050	EPA 200.7	1	11/18/2024 17:00	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:12	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/18/2024 17:00	MSY	D1
Magnesium, Dissolved	5.9		mg/L	0.10	EPA 200.7	1	11/13/2024 16:12	MSY	F1
Magnesium, Total	5.7		mg/L	0.050	EPA 200.7	1	11/18/2024 17:00	MSY	D1
Manganese, Dissolved	0.021		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:12	MSY	F1
Manganese, Total	0.021		mg/L	0.0025	EPA 200.7	1	11/18/2024 17:00	MSY	D1
Potassium, Dissolved	1.8		mg/L	0.50	EPA 200.7	1	11/13/2024 16:12	MSY	F1
Potassium, Total	1.9		mg/L	0.25	EPA 200.7	1	11/18/2024 17:00	MSY	D1
Sodium, Dissolved	13.0		mg/L	0.50	EPA 200.7	1	11/13/2024 16:12	MSY	F1
Sodium, Total	13.5		mg/L	0.25	EPA 200.7	1	11/18/2024 17:00	MSY	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	11/18/2024 17:48	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 17:48	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	86.6%	70 - 130	11/18/2024 17:48	

### WET CHEMISTRY



## Results

Client Sample ID	3079RIVERRD	Collected	11/08/2024 14:25
Lab Sample ID	3386867001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	27		mg/L	5	SM2320B-2011	1	11/15/2024 02:06	KMV	A
Alkalinity, Total	27	1	mg/L	5	SM2320B-2011	1	11/15/2024 02:06	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 17:03	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	29.8		mg/L	2.0	EPA 300.0	2	11/09/2024 16:01	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	11/09/2024 16:01	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/19/2024 17:39	PAG	K
Nitrate-N	1.2		mg/L	1.0	EPA 300.0	2	11/09/2024 16:01	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	11/09/2024 16:01	GMM	A
pH	7.53	2	pH_Units		S4500HB-11	1	11/15/2024 02:06	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 14:58	AKH	J
Specific Conductance	172		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	9.3		mg/L	2.0	EPA 300.0	2	11/09/2024 16:01	GMM	A
Total Dissolved Solids	101		mg/L	25	SM2540C-15	1	11/11/2024 17:45	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	0.40		NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386867001	3079RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386867001	3079RIVERRD	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1331485	11/12/2024 09:20	AXW	EPA 200.7	1334592
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334453
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331179
		N/A	N/A	N/A		SM5310B-14	1331246
		N/A	N/A	N/A		SW846 9020B	1335284



301 Fulling Mill Rd, Suite A  
Middletown, PA 17057  
P. 717-944-5541

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

3386867

Logged By: SLS  
PH: SJB



7 of

Client Name: Lancaster County Solid Waste MA		Container Type	AG	AN	AN	CG	P	P	P	P	P	P		
Address: 1299 Harrisburg Pike PO Box 4424 Lancaster Pa 17604		Container Size	40ml	250ml	125ml	40ml	250ml	125ml	125ml	1L	500ml	UNP		
Contact: Dan Brown Phone#: 717-735-0193		Preservative	HCL	H2SO4	H2SO4	ASCHCL	H2SO4	HNO3	HNO3	UNP	UNP	UNP		
Project Name#: LCSWMA Quarterly		Orthophosphate Filtered?		Yes		No		Hexavalent Chromium Filtered?		Yes		No		
Bill To: LCSWMA		<b>ANALYSIS / METHOD REQUESTED</b>												
Purchase Order #:		SDWA Sample Type (see key)	TOC	TOX	O-OH	EPA 524.2 Form 52	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, Spc, Tb		Alkalinity, HCO3	
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days. <input type="checkbox"/> Rush-Subject to ALS approval and surcharges.		Enter Number of Containers Per Sample or Field Results Below.												
Date Required: _____ Approved? <input type="checkbox"/>		SDWA Matrix (See bottom of COC)	G	DW	2	1	3	x	1	2	2	1	1	
Email? <input type="checkbox"/>		Date Collected	mm/dd/yy	Time	hh:mm	11/8/24	1425							
Sample Description/Location (as it will appear on the lab report)		1	3079RIVERRD	11/8/24	1425									
		2	Trip Blank	11/8/24	1610									
		3												
		4												
		5												
		6												
		7												
		8												
		9												
		10												
Circle Sample Collector ALS Tech / Client Name: <i>AS Staal</i> ID: _____		Comments:												
Date: 11-8-24 16:10		Requisitioner By / Company Name: <i>AS Staal</i>		Received By / Company Name: <i>[Signature]</i>		Data Deliverables							State Samples Collected In	
						Standard Lvl 1 <input type="checkbox"/> CLP-like <input type="checkbox"/> HSCA <input type="checkbox"/> Standard Lvl 2 <input type="checkbox"/> DOD <input type="checkbox"/> Landfill <input type="checkbox"/> Standard Lvl 3 <input type="checkbox"/> NJ RED <input type="checkbox"/> NJ GW <input type="checkbox"/> Standard Lvl 4 <input type="checkbox"/> NJ Full <input type="checkbox"/>							NY <input type="checkbox"/> NJ <input type="checkbox"/> PA <input checked="" type="checkbox"/> WV <input type="checkbox"/> FL <input type="checkbox"/> other <input type="checkbox"/>	
						Excel Summary <input type="checkbox"/> Equis <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Custom <input type="checkbox"/> Special <input type="checkbox"/>							Sample Disposal Lab <input checked="" type="checkbox"/> Special <input type="checkbox"/>	
						EDDS: _____							Format Type _____	

11/26/2024 12:30 PM  
ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057  
Rev 07.06.2023





Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618  
 State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024-3088 RIVERRD  
 Workorder 3386868  
 Report ID 369701 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads).

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

Recipient(s):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386868001	3088 River Road, Conestoga PA	Water	11/08/2024 13:00	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:  
 EPA 300.1 Rev. 1.0-1997  
 EPA 300.0 Rev. 2.1-1993  
 EPA 353.2 Rev. 2.0-1993  
 EPA 410.4 Rev. 1.0-1993  
 EPA 420.4 Rev. 1.0-1993  
 EPA 365.1 Rev. 2.0-1993  
 EPA 200.7 Rev. 4.4-1994  
 EPA 200.8 Rev. 5.4-1994  
 EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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 CaCO <sub>3</sub> /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 concentration of this analyte was greater than 4 times the concentration of the spike added to the matrix spike. According to protocol, the calculation for percent recovery of the matrix spike is not valid.                                    |



### Detected Results Summary

Client Sample ID	3088 River Road, Conestoga PA	Collected	11/08/2024 13:00
Lab Sample ID	3386868001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	8.07	pH_Units		Field	#
Specific Conductance, Field	419	umhos/cm	1	Field	#
Temperature	17.54	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	21.9	mg/L	0.10	EPA 200.7	#
Calcium, Total	22.5	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	11.6	mg/L	0.10	EPA 200.7	#
Magnesium, Total	11.0	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.026	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.026	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	12.6	mg/L	0.50	EPA 200.7	#
Potassium, Total	14.4	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	181	mg/L	0.50	EPA 200.7	#
Sodium, Total	175	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	159	mg/L	5	SM2320B-2011	#
Alkalinity, Total	159	mg/L	5	SM2320B-2011	#
Chloride	249	mg/L	5.0	EPA 300.0	#
Nitrate-N	4.1	mg/L	2.5	EPA 300.0	#
pH	8.19	pH_Units		S4500HB-11	#
Specific Conductance	1080	umhos/cm	5	SM2510B-2011	#
Total Dissolved Solids	540	mg/L	25	SM2540C-15	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3088 River Road, Conestoga PA	Collected	11/08/2024 13:00
Lab Sample ID	3386868001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	8.07		pH_Units		Field	1	11/08/2024 13:00	BGS	P
Specific Conductance, Field	419		umhos/cm	1	Field	1	11/08/2024 13:00	BGS	P
Temperature	17.54		Deg. C		Field	1	11/08/2024 13:00	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	21.9		mg/L	0.10	EPA 200.7	1	11/13/2024 16:17	MSY	F1
Calcium, Total	22.5	3	mg/L	0.050	EPA 200.7	1	11/18/2024 16:55	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:17	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/18/2024 16:55	MSY	D1
Magnesium, Dissolved	11.6		mg/L	0.10	EPA 200.7	1	11/13/2024 16:17	MSY	F1
Magnesium, Total	11.0	3	mg/L	0.050	EPA 200.7	1	11/18/2024 16:55	MSY	D1
Manganese, Dissolved	0.026		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:17	MSY	F1
Manganese, Total	0.026		mg/L	0.0025	EPA 200.7	1	11/18/2024 16:55	MSY	D1
Potassium, Dissolved	12.6		mg/L	0.50	EPA 200.7	1	11/13/2024 16:17	MSY	F1
Potassium, Total	14.4		mg/L	0.25	EPA 200.7	1	11/18/2024 16:55	MSY	D1
Sodium, Dissolved	181		mg/L	0.50	EPA 200.7	1	11/13/2024 16:17	MSY	F1
Sodium, Total	175		mg/L	0.25	EPA 200.7	1	11/18/2024 16:55	MSY	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	11/18/2024 18:13	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:13	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	88%	70 - 130	11/18/2024 18:13	

### WET CHEMISTRY



## Results

Client Sample ID	3088 River Road, Conestoga PA	Collected	11/08/2024 13:00
Lab Sample ID	3386868001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	159		mg/L	5	SM2320B-2011	1	11/15/2024 02:18	KMV	A
Alkalinity, Total	159	1	mg/L	5	SM2320B-2011	1	11/15/2024 02:18	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 15:48	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	249		mg/L	5.0	EPA 300.0	5	11/09/2024 16:14	GMM	A
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	11/09/2024 16:14	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/19/2024 17:39	PAG	K
Nitrate-N	4.1		mg/L	2.5	EPA 300.0	5	11/09/2024 16:14	GMM	A
Nitrite-N	ND	ND	mg/L	2.5	EPA 300.0	5	11/09/2024 16:14	GMM	A
pH	8.19	2	pH_Units		S4500HB-11	1	11/15/2024 02:18	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 14:55	AKH	J
Specific Conductance	1080		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	ND	ND	mg/L	5.0	EPA 300.0	5	11/09/2024 16:14	GMM	A
Total Dissolved Solids	540		mg/L	25	SM2540C-15	1	11/11/2024 17:45	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386868001	3088 River Road, Conestoga PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386868001	3088 River Road, Conestoga PA	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1331485	11/12/2024 09:20	AXW	EPA 200.7	1334592
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334453
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331179
		N/A	N/A	N/A		SM5310B-14	1331246
		N/A	N/A	N/A		SW846 9020B	1335284

301 Fulling Mill Rd, Suite A  
Middletown, PA 17057  
P: 717-944-5541

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

3386868

Logged By: SLS  
PH: SJB



Client Name: LCSWMA Hans Weber and Deb Kalbach		AG	AN	AN	CG	P	P	P	P	P	P	P
Address: 3088 River Rd		Container Type	40ml	250ml	125ml	40ml	250ml	125ml	125ml	1L	500ml	
Conestoga Pa 17516		Container Size	HCL	H2SO4	H2SO4	ASCHCL	H2SO4	HNO3	HNO3	UNP	UNP	
Contact: Hans Weber and Deb Kalbach		Preservative										
Phone#: 717-419-7982		Orthophosphate Filtered?	Yes	No	Hexavalent Chromium Filtered?	Yes	No	Temp Taken By:	Therm ID: <u>6</u>			
Project Name#: LCSWMA Quarterly		Receipt Info Completed By: <u>DPB</u>										
Bill To: LCSWMA Hans Weber and Deb Kalbach		Cooler Custody Seal Intact <u>Y</u> N NA										
Purchase Order #:		Sample Custody Seal Intact <u>Y</u> N NA										
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		Received on Ice <u>Y</u> N NA										
Rush-Subject to ALS approval and surcharges.		Cooler & Samples Intact <u>Y</u> N NA										
Date Required: <input type="checkbox"/> Approved?		Correct Containers Provided <u>Y</u> N NA										
Email: <input type="checkbox"/>		Sample Label/COC Agree <u>Y</u> N NA										
Sample Description/Location		Adequate Sample Volumes <u>Y</u> N NA										
Date Collected		VOA only: Trip Blank <u>Y</u> N										
Time		NJ ≤ 4 days? <u>Y</u> N										
1 3088RIVERRD 11/8/24 1300		Courier/Tracking # <u>Y</u> N NA										
2 Trip Blank 11/8/24 1610		Sample(s) for Radiation testing <u>Y</u> N NA										
		Reportable SDWA Sample(s)? <u>Y</u> N NA										
		SDWA State of Origin? <u>Y</u> N NA										
		PWSID # <u>Y</u> N NA										
		PWS Contact: <u>Y</u> N NA										
		SDWA Compliance <u>Y</u> N NA										
		PWSID <u>Y</u> N NA										
		WV Containers 0-6°C <u>Y</u> N NA										
		SDWA Sample Type Key: D=Distribution E=Entry Point										
		R=Raw P=Plant C=Check S=Special A=Annual Startup										
		Sample/COC Remarks										
		Contains Short Hold Testing YES NO										
		Internal Use: If less than 48 hours - notify lab upon receipt										
Circle Sample Collector ALS Tech / Client		Standard Lvl 1 <input type="checkbox"/> CLP-like <input type="checkbox"/> HSCA <input type="checkbox"/>										
Name: <u>AS Shaw</u> ID: <u>1610</u>		Standard Lvl 2 <input type="checkbox"/> DOD <input type="checkbox"/> Landfill <input type="checkbox"/>										
Date: <u>11-8-24 1610</u>		Standard Lvl 3 <input type="checkbox"/> NJ RED <input type="checkbox"/> NJ GW <input type="checkbox"/>										
		Standard Lvl 4 <input type="checkbox"/> NJ Full <input type="checkbox"/>										
		Excel Summary <input type="checkbox"/>										
		Equis <input type="checkbox"/> Lab <input checked="" type="checkbox"/>										
		Custom <input type="checkbox"/> Special <input type="checkbox"/>										
		Format Type <input type="checkbox"/>										
		EDDS: <input type="checkbox"/>										
		Data Deliverables										
		State Samples Collected In										
		NY <input type="checkbox"/>										
		NJ <input type="checkbox"/>										
		PA <input checked="" type="checkbox"/>										
		WV <input type="checkbox"/>										
		FL <input type="checkbox"/>										
		other <input type="checkbox"/>										



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR-2024 3100 RIVER RD  
 Workorder 3386870  
 Report ID 369706 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://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):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386870001	3100 River Road, Conestoga, PA	Water	11/08/2024 13:21	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:  
 EPA 300.1 Rev. 1.0-1997  
 EPA 300.0 Rev. 2.1-1993  
 EPA 353.2 Rev. 2.0-1993  
 EPA 410.4 Rev. 1.0-1993  
 EPA 420.4 Rev. 1.0-1993  
 EPA 365.1 Rev. 2.0-1993  
 EPA 200.7 Rev. 4.4-1994  
 EPA 200.8 Rev. 5.4-1994  
 EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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 QC sample type MS for method EPA 350.1 was outside the control limits for the analyte Ammonia-N, Low Level. The % Recovery was reported as 76.1 and the control limits were 80 to 120.  |
| 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	3100 River Road, Conestoga, PA	Collected	11/08/2024 13:21
Lab Sample ID	3386870001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.24	pH_Units		Field	#
Specific Conductance, Field	527	umhos/cm	1	Field	#
Temperature	17.27	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	14.5	mg/L	0.10	EPA 200.7	#
Calcium, Total	15.1	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	8.2	mg/L	0.10	EPA 200.7	#
Magnesium, Total	7.8	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.013	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.013	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.6	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.6	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	18.7	mg/L	0.50	EPA 200.7	#
Sodium, Total	19.4	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	22	mg/L	5	SM2320B-2011	#
Alkalinity, Total	22	mg/L	5	SM2320B-2011	#
Chloride	55.2	mg/L	2.0	EPA 300.0	#
Nitrate-N	3.4	mg/L	1.0	EPA 300.0	#
pH	7.20	pH_Units		S4500HB-11	#
Specific Conductance	260	umhos/cm	5	SM2510B-2011	#
Sulfate	7.5	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	153	mg/L	25	SM2540C-15	#
Turbidity	0.60	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3100 River Road, Conestoga, PA	Collected	11/08/2024 13:21
Lab Sample ID	3386870001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.24		pH_Units		Field	1	11/08/2024 13:21	BGS	P
Specific Conductance, Field	527		umhos/cm	1	Field	1	11/08/2024 13:21	BGS	P
Temperature	17.27		Deg. C		Field	1	11/08/2024 13:21	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	14.5		mg/L	0.10	EPA 200.7	1	11/13/2024 16:18	MSY	F1
Calcium, Total	15.1		mg/L	0.050	EPA 200.7	1	11/18/2024 17:01	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:18	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/18/2024 17:01	MSY	D1
Magnesium, Dissolved	8.2		mg/L	0.10	EPA 200.7	1	11/13/2024 16:18	MSY	F1
Magnesium, Total	7.8		mg/L	0.050	EPA 200.7	1	11/18/2024 17:01	MSY	D1
Manganese, Dissolved	0.013		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:18	MSY	F1
Manganese, Total	0.013		mg/L	0.0025	EPA 200.7	1	11/18/2024 17:01	MSY	D1
Potassium, Dissolved	1.6		mg/L	0.50	EPA 200.7	1	11/13/2024 16:18	MSY	F1
Potassium, Total	1.6		mg/L	0.25	EPA 200.7	1	11/18/2024 17:01	MSY	D1
Sodium, Dissolved	18.7		mg/L	0.50	EPA 200.7	1	11/13/2024 16:18	MSY	F1
Sodium, Total	19.4		mg/L	0.25	EPA 200.7	1	11/18/2024 17:01	MSY	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	11/18/2024 18:37	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 18:37	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	85.2%	70 - 130	11/18/2024 18:37	

### WET CHEMISTRY





## Results

Client Sample ID	3100 River Road, Conestoga, PA	Collected	11/08/2024 13:21
Lab Sample ID	3386870001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	22		mg/L	5	SM2320B-2011	1	11/15/2024 02:30	KMV	A
Alkalinity, Total	22	1	mg/L	5	SM2320B-2011	1	11/15/2024 02:30	KMV	A
Ammonia-N, Low Level	ND	ND,2	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 13:24	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	55.2		mg/L	2.0	EPA 300.0	2	11/09/2024 16:27	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	11/09/2024 16:27	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/19/2024 17:39	PAG	K
Nitrate-N	3.4		mg/L	1.0	EPA 300.0	2	11/09/2024 16:27	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	11/09/2024 16:27	GMM	A
pH	7.20	3	pH_Units		S4500HB-11	1	11/15/2024 02:30	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 15:18	AKH	J
Specific Conductance	260		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	7.5		mg/L	2.0	EPA 300.0	2	11/09/2024 16:27	GMM	A
Total Dissolved Solids	153		mg/L	25	SM2540C-15	1	11/11/2024 17:45	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	0.60		NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386870001	3100 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386870001	3100 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1331485	11/12/2024 09:20	AXW	EPA 200.7	1334592
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334453
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331179
		N/A	N/A	N/A		SM5310B-14	1331249
		N/A	N/A	N/A		SW846 9020B	1335284





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 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024-3106 RIVER RD  
 Workorder 3386871  
 Report ID 369710 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads).

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

Recipient(s):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386871001	3106 River Road, Conestoga, PA	Water	11/08/2024 13:40	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:  
 EPA 300.1 Rev. 1.0-1997  
 EPA 300.0 Rev. 2.1-1993  
 EPA 353.2 Rev. 2.0-1993  
 EPA 410.4 Rev. 1.0-1993  
 EPA 420.4 Rev. 1.0-1993  
 EPA 365.1 Rev. 2.0-1993  
 EPA 200.7 Rev. 4.4-1994  
 EPA 200.8 Rev. 5.4-1994  
 EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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** 4TH QTR 2024-3106 RIVER RD  
**Workorder** 3386871

**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	3106 River Road, Conestoga, PA	Collected	11/08/2024 13:40
Lab Sample ID	3386871001	Lab Receipt	11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.10	pH_Units		Field	#
Specific Conductance, Field	776	umhos/cm	1	Field	#
Temperature	17.18	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	24.9	mg/L	0.10	EPA 200.7	#
Calcium, Total	24.4	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	17.1	mg/L	0.10	EPA 200.7	#
Magnesium, Total	15.9	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.044	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.046	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.9	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.0	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	46.4	mg/L	0.50	EPA 200.7	#
Sodium, Total	49.1	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	15	mg/L	5	SM2320B-2011	#
Alkalinity, Total	15	mg/L	5	SM2320B-2011	#
Chloride	138	mg/L	5.0	EPA 300.0	#
Nitrate-N	10.2	mg/L	2.5	EPA 300.0	#
pH	7.15	pH_Units		S4500HB-11	#
Specific Conductance	546	umhos/cm	5	SM2510B-2011	#
Sulfate	9.6	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	294	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	11/08/2024 13:40
Lab Sample ID	3386871001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.10		pH_Units		Field	1	11/08/2024 13:40	BGS	P
Specific Conductance, Field	776		umhos/cm	1	Field	1	11/08/2024 13:40	BGS	P
Temperature	17.18		Deg. C		Field	1	11/08/2024 13:40	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	24.9		mg/L	0.10	EPA 200.7	1	11/13/2024 16:11	MSY	F1
Calcium, Total	24.4		mg/L	0.050	EPA 200.7	1	11/18/2024 16:45	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:11	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/18/2024 16:45	MSY	D1
Magnesium, Dissolved	17.1		mg/L	0.10	EPA 200.7	1	11/13/2024 16:11	MSY	F1
Magnesium, Total	15.9		mg/L	0.050	EPA 200.7	1	11/18/2024 16:45	MSY	D1
Manganese, Dissolved	0.044		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:11	MSY	F1
Manganese, Total	0.046		mg/L	0.0025	EPA 200.7	1	11/18/2024 16:45	MSY	D1
Potassium, Dissolved	1.9		mg/L	0.50	EPA 200.7	1	11/13/2024 16:11	MSY	F1
Potassium, Total	2.0		mg/L	0.25	EPA 200.7	1	11/18/2024 16:45	MSY	D1
Sodium, Dissolved	46.4		mg/L	0.50	EPA 200.7	1	11/13/2024 16:11	MSY	F1
Sodium, Total	49.1		mg/L	0.25	EPA 200.7	1	11/18/2024 16:45	MSY	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	11/18/2024 19:02	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 19:02	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	87.8%	70 - 130	11/18/2024 19:02	

### WET CHEMISTRY



## Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	11/08/2024 13:40
Lab Sample ID	3386871001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	15		mg/L	5	SM2320B-2011	1	11/15/2024 02:43	KMV	A
Alkalinity, Total	15	1	mg/L	5	SM2320B-2011	1	11/15/2024 02:43	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 16:15	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	138		mg/L	5.0	EPA 300.0	5	11/09/2024 16:39	GMM	A
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	11/09/2024 16:39	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/19/2024 17:39	PAG	K
Nitrate-N	10.2		mg/L	2.5	EPA 300.0	5	11/09/2024 16:39	GMM	A
Nitrite-N	ND	ND	mg/L	2.5	EPA 300.0	5	11/09/2024 16:39	GMM	A
pH	7.15	2	pH_Units		S4500HB-11	1	11/15/2024 02:43	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 17:35	AKH	J
Specific Conductance	546		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	9.6		mg/L	5.0	EPA 300.0	5	11/09/2024 16:39	GMM	A
Total Dissolved Solids	294		mg/L	25	SM2540C-15	1	11/11/2024 17:45	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386871001	3106 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	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
3386871001	3106 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1331476	11/12/2024 09:20	AXW	EPA 200.7	1334591
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334453
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331179
		N/A	N/A	N/A		SM5310B-14	1331249
		N/A	N/A	N/A		SW846 9020B	1335284





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 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

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, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**  
 Project 4TH QTR 2024-3125 RIVER RD  
 Workorder 3386872  
 Report ID 369712 on 11/26/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 08, 2024.

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](http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads).

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

Recipient(s):  
 Jordan Bigler - Lancaster County Solid Waste Authority  
 Ashley Gichuki - Lancaster County Solid Waste Authority  
 Daniel Brown - Lancaster County Solid Waste Authority  
 Jeff Musser - Lancaster County Solid Waste Authority

*Susan Scherer*

**Susan Scherer**  
 Project Coordinator

(ALS Digital Signature)

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



## 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>
3386872001	3125 River Road, Conestoga, PA	Water	11/08/2024 13:53	11/08/2024 16:10	BGS	Analytical Laboratory Service
3386872002	Trip Blank	Water	11/08/2024 16:10	11/08/2024 16:10	BGS	Analytical Laboratory Service
3386872003	Field Blank	Water	11/08/2024 15:10	11/08/2024 16:10	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, including but not limited to the following EPA Method reference revisions:  
EPA 300.1 Rev. 1.0-1997  
EPA 300.0 Rev. 2.1-1993  
EPA 353.2 Rev. 2.0-1993  
EPA 410.4 Rev. 1.0-1993  
EPA 420.4 Rev. 1.0-1993  
EPA 365.1 Rev. 2.0-1993  
EPA 200.7 Rev. 4.4-1994  
EPA 200.8 Rev. 5.4-1994  
EPA 245.1 Rev. 3.0-1994
- 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 performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- 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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
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 CaCO <sub>3</sub> /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 11/08/2024 13:53  
 Lab Sample ID 3386872001 Lab Receipt 11/08/2024 16:10

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	8.26	pH_Units		Field	#
Specific Conductance, Field	329	umhos/cm	1	Field	#
Temperature	17.06	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	4.8	mg/L	0.10	EPA 200.7	#
Calcium, Total	4.8	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	0.89	mg/L	0.10	EPA 200.7	#
Magnesium, Total	0.82	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.0052	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.0089	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.9	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.8	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	129	mg/L	0.50	EPA 200.7	#
Sodium, Total	133	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	170	mg/L	5	SM2320B-2011	#
Alkalinity, Total	170	mg/L	5	SM2320B-2011	#
Chloride	84.8	mg/L	5.0	EPA 300.0	#
Nitrate-N	4.6	mg/L	2.5	EPA 300.0	#
pH	8.24	pH_Units		S4500HB-11	#
Specific Conductance	613	umhos/cm	5	SM2510B-2011	#
Sulfate	12.3	mg/L	5.0	EPA 300.0	#
Total Dissolved Solids	322	mg/L	25	SM2540C-15	#
Turbidity	0.30	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	11/08/2024 13:53
Lab Sample ID	3386872001	Lab Receipt	11/08/2024 16:10

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	8.26		pH_Units		Field	1	11/08/2024 13:53	BGS	P
Specific Conductance, Field	329		umhos/cm	1	Field	1	11/08/2024 13:53	BGS	P
Temperature	17.06		Deg. C		Field	1	11/08/2024 13:53	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	4.8		mg/L	0.10	EPA 200.7	1	11/13/2024 16:08	MSY	F1
Calcium, Total	4.8		mg/L	0.050	EPA 200.7	1	11/18/2024 16:46	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	11/13/2024 16:08	MSY	F1
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	11/18/2024 16:46	MSY	D1
Magnesium, Dissolved	0.89		mg/L	0.10	EPA 200.7	1	11/13/2024 16:08	MSY	F1
Magnesium, Total	0.82		mg/L	0.050	EPA 200.7	1	11/18/2024 16:46	MSY	D1
Manganese, Dissolved	0.0052		mg/L	0.0050	EPA 200.7	1	11/13/2024 16:08	MSY	F1
Manganese, Total	0.0089		mg/L	0.0025	EPA 200.7	1	11/18/2024 16:46	MSY	D1
Potassium, Dissolved	1.9		mg/L	0.50	EPA 200.7	1	11/13/2024 16:08	MSY	F1
Potassium, Total	1.8		mg/L	0.25	EPA 200.7	1	11/18/2024 16:46	MSY	D1
Sodium, Dissolved	129		mg/L	0.50	EPA 200.7	1	11/13/2024 16:08	MSY	F1
Sodium, Total	133		mg/L	0.25	EPA 200.7	1	11/18/2024 16:46	MSY	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	11/19/2024 00:16	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/19/2024 00:16	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	89.5%	70 - 130	11/19/2024 00:16	

### WET CHEMISTRY



## Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	11/08/2024 13:53
Lab Sample ID	3386872001	Lab Receipt	11/08/2024 16:10

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	170		mg/L	5	SM2320B-2011	1	11/15/2024 02:55	KMV	A
Alkalinity, Total	170	1	mg/L	5	SM2320B-2011	1	11/15/2024 02:55	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	11/12/2024 16:18	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	11/12/2024 11:50	KMS	C
Chloride	84.8		mg/L	5.0	EPA 300.0	5	11/09/2024 16:52	GMM	A
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	11/09/2024 16:52	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	11/19/2024 17:39	PAG	K
Nitrate-N	4.6		mg/L	2.5	EPA 300.0	5	11/09/2024 16:52	GMM	A
Nitrite-N	ND	ND	mg/L	2.5	EPA 300.0	5	11/09/2024 16:52	GMM	A
pH	8.24	2	pH_Units		S4500HB-11	1	11/15/2024 02:55	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	11/21/2024 15:11	AKH	J
Specific Conductance	613		umhos/cm	5	SM2510B-2011	1	11/25/2024 15:32	KMV	A
Sulfate	12.3		mg/L	5.0	EPA 300.0	5	11/09/2024 16:52	GMM	A
Total Dissolved Solids	322		mg/L	25	SM2540C-15	1	11/11/2024 17:45	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	11/12/2024 00:09	PAG	H
Turbidity	0.30		NTU	0.30	SM2130B-2011	1	11/09/2024 11:16	NPF	A



## Results

Client Sample ID	Trip Blank	Collected	11/08/2024 16:10
Lab Sample ID	3386872002	Lab Receipt	11/08/2024 16:10

### 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	11/18/2024 23:25	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:25	PDK	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	91.4%	70 - 130	11/18/2024 23:25	



## Results

Client Sample ID	Field Blank	Collected	11/08/2024 15:10
Lab Sample ID	3386872003	Lab Receipt	11/08/2024 16:10

### 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	11/18/2024 23:51	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	11/18/2024 23:51	PDK	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	86.3%	70 - 130	11/18/2024 23:51	



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3386872001	3125 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		EPA 524.2	N/A	
		EPA 300.0	N/A	
		EPA 410.4	N/A	
		EPA 420.4	SW846 9066	
		S4500HB-11	N/A	
		SM 4500-NH3G	N/A	
		SM2130B-2011	N/A	
		SM2320B-2011	N/A	
		SM2510B-2011	N/A	
		SM2540C-15	N/A	
		SM5310B-14	N/A	
		SW846 9020B	N/A	
3386872002	Trip Blank	EPA 524.2	N/A	
3386872003	Field 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
3386872001	3125 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1332842
		EPA TRMD	1331476	11/12/2024 09:20	AXW	EPA 200.7	1334591
		EPA ACID	1331852	11/13/2024 14:55	MSY	EPA 200.7	1331891
		N/A	N/A	N/A		EPA 524.2	1334688
		N/A	N/A	N/A		EPA 300.0	1330545
		N/A	N/A	N/A		EPA 410.4	1331472
		SW846 9066	1336553	11/21/2024 10:45	AKH	EPA 420.4	1336557
		N/A	N/A	N/A		S4500HB-11	1332226
		N/A	N/A	N/A		SM 4500-NH3G	1331474
		N/A	N/A	N/A		SM2130B-2011	1330544
		N/A	N/A	N/A		SM2320B-2011	1332226
		N/A	N/A	N/A		SM2510B-2011	1338189
		N/A	N/A	N/A		SM2540C-15	1331179
		N/A	N/A	N/A		SM5310B-14	1331249
		N/A	N/A	N/A		SW846 9020B	1335284
3386872002	Trip Blank	N/A	N/A	N/A		EPA 524.2	1334688
3386872003	Field Blank	N/A	N/A	N/A		EPA 524.2	1334688

