



Date Prepared/Revised 10/16/2024
<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)	08/09/2024 Sample Collection Time: 9:25 AM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	08/23/2024
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

08/09/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	11	SM20-2321
CALCIUM, TOTAL	14.7	EPA 200.7
CALCIUM, DISSOLVED	14	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	10.4	EPA 200.7
MAGNESIUM, DISSOLVED	10.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	16	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	17	EPA 200.7
NITRATE-NITROGEN	17.2	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

08/09/2024

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)	7.08	FIELD
pH-LAB (SU)	6.93	SM4500B
POTASSIUM, TOTAL	1.8	EPA 200.7
POTASSIUM, DISSOLVED	2.2	EPA 200.7
SODIUM, TOTAL	8.5	EPA 200.7
SODIUM, DISSOLVED	8.8	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	230	FIELD
SPEC. COND., LAB (umhos/cm)	224	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	11	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	172	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.35	SM 2130B

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

Facility I.D. Number

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Monitoring Point I.D. No.

PS LCSWMA

Sample Date

08/09/2024

## 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.





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**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:	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)	08/09/2024 Sample Collection Time: 9:50 AM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	08/26/2024
Were any holding times exceeded?:	Yes <input checked="" type="checkbox"/> No <input 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

08/09/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	13	SM20-2321
CALCIUM, TOTAL	18.2	EPA 200.7
CALCIUM, DISSOLVED	18.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	19.4	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	8.3	EPA 200.7
MAGNESIUM, DISSOLVED	7.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	20	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	16	EPA 200.7
NITRATE-NITROGEN	16.9	EPA 300

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**PRIVATE WATER SUPPLY**  
**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

08/09/2024

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)	6.97	FIELD
pH-LAB (SU)	7.01	SM4500B
POTASSIUM, TOTAL	1.6	EPA 200.7
POTASSIUM, DISSOLVED	2	EPA 200.7
SODIUM, TOTAL	7.9	EPA 200.7
SODIUM, DISSOLVED	8.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	225	FIELD
SPEC. COND., LAB (umhos/cm)	230	EPA 120.1
SULFATE	2.8	EPA 300
ALKALINITY	13	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	169	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1	SM 2130B

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**PRIVATE WATER SUPPLY**  
**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS MILLER

Sample Date

08/09/2024

## 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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**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:	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)	08/09/2024 Sample Collection Time: 10:05 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	08/26/2024
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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**MUNICIPAL WASTE LANDFILL**  
**PRIVATE WATER SUPPLY**  
**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

08/09/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	5 ND	SM20-2321
CALCIUM, TOTAL	9.7	EPA 200.7
CALCIUM, DISSOLVED	9.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	25.7	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11.8	EPA 200.7
MAGNESIUM, DISSOLVED	12.1	EPA 200.7
MANGANESE, TOTAL (ug/l)	110	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	100	EPA 200.7
NITRATE-NITROGEN	16.6	EPA 300

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**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

08/09/2024

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)	5.67	FIELD
pH-LAB (SU)	5.42	SM4500B
POTASSIUM, TOTAL	2.1	EPA 200.7
POTASSIUM, DISSOLVED	2.7	EPA 200.7
SODIUM, TOTAL	9.3	EPA 200.7
SODIUM, DISSOLVED	9.6	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	241	FIELD
SPEC. COND., LAB (umhos/cm)	234	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	157	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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**QUARTERLY WATER QUALITY ANALYSES**

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PS LCSWMA

Sample Date

08/09/2024

## 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:	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)	08/09/2024 Sample Collection Time: 10:25 AM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	08/26/2024
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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**PRIVATE WATER SUPPLY**  
**QUARTERLY WATER QUALITY ANALYSES**

Facility I.D. Number	101389
Monitoring Point I.D. No.	PS LCSWMA
Sample Date	08/09/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	14	SM20-2321
CALCIUM, TOTAL	10.2	EPA 200.7
CALCIUM, DISSOLVED	10	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	18.3	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	100	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	10.6	EPA 200.7
MAGNESIUM, DISSOLVED	10.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	110	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	100	EPA 200.7
NITRATE-NITROGEN	15.7	EPA 300

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Facility I.D. Number

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Monitoring Point I.D. No.

PS LCSWMA

Sample Date

08/09/2024

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)	6.87	FIELD
pH-LAB (SU)	6.92	SM4500B
POTASSIUM, TOTAL	2.6	EPA 200.7
POTASSIUM, DISSOLVED	3	EPA 200.7
SODIUM, TOTAL	8.7	EPA 200.7
SODIUM, DISSOLVED	8.8	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	243	FIELD
SPEC. COND., LAB (umhos/cm)	238	EPA 120.1
SULFATE	8.2	EPA 300
ALKALINITY	14	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	167	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1.6	SM 2130B

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Sample Date

08/09/2024

## 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)	08/12/2024 Sample Collection Time: 9:40 AM
Laboratory(ies) Performing Analysis	ALS Environmental
(include address and phone number)	301 Fulling Mill Road Middletown, PA 17057 (717) 944-5541
Lab Accreditation Number(s)	22-293
Lab Analysis Date	08/27/2024
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

08/12/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	9	SM20-2321
CALCIUM, TOTAL	15.5	EPA 200.7
CALCIUM, DISSOLVED	13.9	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	60.8	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	9.1	EPA 200.7
MAGNESIUM, DISSOLVED	8.4	EPA 200.7
MANGANESE, TOTAL (ug/l)	210	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	190	EPA 200.7
NITRATE-NITROGEN	8.9	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

08/12/2024

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)	6.8	FIELD
pH-LAB (SU)	6.82	SM4500B
POTASSIUM, TOTAL	3.5	EPA 200.7
POTASSIUM, DISSOLVED	4.5	EPA 200.7
SODIUM, TOTAL	26.3	EPA 200.7
SODIUM, DISSOLVED	27.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	349	FIELD
SPEC. COND., LAB (umhos/cm)	327	EPA 120.1
SULFATE	13.3	EPA 300
ALKALINITY	9	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	220	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 SENSENICH

Sample Date

08/12/2024

## 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 10/16/2024
<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)	08/12/2024 Sample Collection Time: 2:10 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	08/28/2024
Were any holding times exceeded?:	Yes <input checked="" type="checkbox"/> No <input 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

08/12/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	24	SM20-2321
CALCIUM, TOTAL	9.7	EPA 200.7
CALCIUM, DISSOLVED	9.1	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	30.3	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	5.5	EPA 200.7
MAGNESIUM, DISSOLVED	5.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	19	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	16	EPA 200.7
NITRATE-NITROGEN	1.8	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS LCSWMA

Sample Date

08/12/2024

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)	7.26	FIELD
pH-LAB (SU)	7.34	SM4500B
POTASSIUM, TOTAL	1.7	EPA 200.7
POTASSIUM, DISSOLVED	2.4	EPA 200.7
SODIUM, TOTAL	13.2	EPA 200.7
SODIUM, DISSOLVED	14.3	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	177	FIELD
SPEC. COND., LAB (umhos/cm)	172	EPA 120.1
SULFATE	8.8	EPA 300
ALKALINITY	24	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	136	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 LCSWMA

Sample Date

08/12/2024

## 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 10/16/2024
<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:	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)	08/12/2024 Sample Collection Time: 10:03 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	08/26/2024
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

08/12/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	169	SM20-2321
CALCIUM, TOTAL	4.1	EPA 200.7
CALCIUM, DISSOLVED	4	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	228	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.66	EPA 200.7
MAGNESIUM, DISSOLVED	0.68	EPA 200.7
MANGANESE, TOTAL (ug/l)	7.3	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	9.2	EPA 200.7
NITRATE-NITROGEN	5.4	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS      WEBER

Sample Date

08/12/2024

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)	8.27	FIELD
pH-LAB (SU)	8.31	SM4500B
POTASSIUM, TOTAL	0.84	EPA 200.7
POTASSIUM, DISSOLVED	2.2	EPA 200.7
SODIUM, TOTAL	227	EPA 200.7
SODIUM, DISSOLVED	230	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	1110	FIELD
SPEC. COND., LAB (umhos/cm)	1120	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	196	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	610	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 WEBER

Sample Date

08/12/2024

## 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 10/16/2024
<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)	08/12/2024 Sample Collection Time: 1:10 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	08/28/2024
Were any holding times exceeded?:	Yes <input checked="" type="checkbox"/> No <input 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

08/12/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	19	SM20-2321
CALCIUM, TOTAL	13.5	EPA 200.7
CALCIUM, DISSOLVED	12.7	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	46.6	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	7.1	EPA 200.7
MAGNESIUM, DISSOLVED	6.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	11	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	12	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

08/12/2024

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)	7.25	FIELD
pH-LAB (SU)	7.31	SM4500B
POTASSIUM, TOTAL	1.5	EPA 200.7
POTASSIUM, DISSOLVED	2.1	EPA 200.7
SODIUM, TOTAL	17.4	EPA 200.7
SODIUM, DISSOLVED	18.3	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	235	FIELD
SPEC. COND., LAB (umhos/cm)	229	EPA 120.1
SULFATE	8.5	EPA 300
ALKALINITY	19	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	175	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 KIRCHNER

Sample Date

08/12/2024

## 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	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 10/16/2024
<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)	08/12/2024 Sample Collection Time: 10:35 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	08/26/2024
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

08/12/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	20	SM20-2321
CALCIUM, TOTAL	21.8	EPA 200.7
CALCIUM, DISSOLVED	20.8	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	102	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	13.1	EPA 200.7
MAGNESIUM, DISSOLVED	12.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	37	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	34	EPA 200.7
NITRATE-NITROGEN	8.8	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS      FRY

Sample Date

08/12/2024

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)	7.28	FIELD
pH-LAB (SU)	7.23	SM4500B
POTASSIUM, TOTAL	1.8	EPA 200.7
POTASSIUM, DISSOLVED	2.6	EPA 200.7
SODIUM, TOTAL	40.4	EPA 200.7
SODIUM, DISSOLVED	43.1	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	463	FIELD
SPEC. COND., LAB (umhos/cm)	458	EPA 120.1
SULFATE	8.4	EPA 300
ALKALINITY	20	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

08/12/2024

## 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 10/16/2024
<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 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)	08/12/2024 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	08/28/2024
Were any holding times exceeded?:	Yes <input checked="" type="checkbox"/> No <input 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

08/12/2024

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	157	SM20-2321
CALCIUM, TOTAL	0.23	EPA 200.7
CALCIUM, DISSOLVED	0.25	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	88.8	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	0.055	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.8	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	4.2	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number

101389

Monitoring Point I.D. No.

PS      BECK

Sample Date

08/12/2024

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)	8.31	FIELD
pH-LAB (SU)	8.36	SM4500B
POTASSIUM, TOTAL	2.3	EPA 200.7
POTASSIUM, DISSOLVED	3.7	EPA 200.7
SODIUM, TOTAL	141	EPA 200.7
SODIUM, DISSOLVED	154	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	657	FIELD
SPEC. COND., LAB (umhos/cm)	651	EPA 120.1
SULFATE	12.9	EPA 300
ALKALINITY	174	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	396	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.54	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 BECK

Sample Date

08/12/2024

## 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 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024-3125 RIVER RD  
 Workorder 3373274  
 Report ID 350015 on 8/29/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 12, 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>
3373274001	3125 River Road, Conestoga, PA	Water	08/12/2024 13:40	08/12/2024 16:05	BGS	Analytical Laboratory Service
3373274002	Trip Blank	Water	08/12/2024 16:05	08/12/2024 16:05	BGS	Analytical Laboratory Service
3373274003	Field Blank	Water	08/12/2024 14:30	08/12/2024 16:05	BGS	Analytical Laboratory Service



## Reference

### Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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 DUP for method EPA 350.1 was outside the control limits for the analyte Ammonia-N, Low Level. The RPD was reported as 94 and the upper control limit is 20.  |
| 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	3125 River Road, Conestoga, PA	Collected	08/12/2024 13:40
Lab Sample ID	3373274001	Lab Receipt	08/12/2024 16:05

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	8.31	pH_Units		Field	#
Specific Conductance, Field	657	umhos/cm	1	Field	#
Temperature	16.20	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	0.25	mg/L	0.10	EPA 200.7	#
Calcium, Total	0.23	mg/L	0.050	EPA 200.7	#
Magnesium, Total	0.055	mg/L	0.050	EPA 200.7	#
Manganese, Total	0.0028	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	3.7	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.3	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	154	mg/L	0.50	EPA 200.7	#
Sodium, Total	141	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	157	mg/L	5	SM2320B-2011	#
Alkalinity, Total	174	mg/L	5	SM2320B-2011	#
Chloride	88.8	mg/L	2.0	EPA 300.0	#
Halogen, Total Organic (TOX)	82.1	ug/L	20.0	SW846 9020B	#
Nitrate-N	4.2	mg/L	1.0	EPA 300.0	#
pH	8.36	pH_Units		S4500HB-11	#
Specific Conductance	651	umhos/cm	5	SM2510B-2011	#
Sulfate	12.9	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	396	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	0.54	mg/L	0.50	SM5310B-14	#



## Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	08/12/2024 13:40
Lab Sample ID	3373274001	Lab Receipt	08/12/2024 16:05

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	8.31		pH_Units		Field	1	08/12/2024 13:40	BGS	P
Specific Conductance, Field	657		umhos/cm	1	Field	1	08/12/2024 13:40	BGS	P
Temperature	16.20		Deg. C		Field	1	08/12/2024 13:40	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	0.25		mg/L	0.10	EPA 200.7	1	08/16/2024 10:19	SRT	F
Calcium, Total	0.23		mg/L	0.050	EPA 200.7	1	08/15/2024 09:25	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 10:19	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/15/2024 09:25	MSY	D1
Magnesium, Dissolved	ND	ND	mg/L	0.10	EPA 200.7	1	08/16/2024 10:19	SRT	F
Magnesium, Total	0.055		mg/L	0.050	EPA 200.7	1	08/15/2024 09:25	MSY	D1
Manganese, Dissolved	ND	ND	mg/L	0.0050	EPA 200.7	1	08/16/2024 10:19	SRT	F
Manganese, Total	0.0028		mg/L	0.0025	EPA 200.7	1	08/15/2024 09:25	MSY	D1
Potassium, Dissolved	3.7		mg/L	0.50	EPA 200.7	1	08/16/2024 10:19	SRT	F
Potassium, Total	2.3		mg/L	0.25	EPA 200.7	1	08/15/2024 09:25	MSY	D1
Sodium, Dissolved	154		mg/L	0.50	EPA 200.7	1	08/16/2024 10:19	SRT	F
Sodium, Total	141		mg/L	0.25	EPA 200.7	1	08/15/2024 09:25	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	08/22/2024 04:47	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 04:47	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90%	70 - 130	08/22/2024 04:47	

### WET CHEMISTRY



## Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	08/12/2024 13:40
Lab Sample ID	3373274001	Lab Receipt	08/12/2024 16:05

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	157		mg/L	5	SM2320B-2011	1	08/20/2024 20:02	KMV	A
Alkalinity, Total	174	1	mg/L	5	SM2320B-2011	1	08/20/2024 20:02	KMV	A
Ammonia-N, Low Level	ND	ND,2	mg/L	0.10	SM 4500-NH3G	1	08/14/2024 11:39	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/14/2024 11:40	KMS	C
Chloride	88.8		mg/L	2.0	EPA 300.0	2	08/13/2024 15:36	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/13/2024 15:36	J1W	A
Halogen, Total Organic (TOX)	82.1		ug/L	20.0	SW846 9020B	1	08/28/2024 17:31	PAG	K
Nitrate-N	4.2		mg/L	1.0	EPA 300.0	2	08/13/2024 15:36	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/13/2024 15:36	J1W	A
pH	8.36	3	pH_Units		S4500HB-11	1	08/15/2024 18:23	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/22/2024 16:16	AKH	J
Specific Conductance	651		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	12.9		mg/L	2.0	EPA 300.0	2	08/13/2024 15:36	J1W	A
Total Dissolved Solids	396		mg/L	25	SM2540C-15	1	08/15/2024 14:19	RAG	A
Total Organic Carbon (TOC)	0.54		mg/L	0.50	SM5310B-14	1	08/16/2024 00:33	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/13/2024 09:01	NPF	A



## Results

Client Sample ID	Trip Blank	Collected	08/12/2024 16:05
Lab Sample ID	3373274002	Lab Receipt	08/12/2024 16:05

### 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	08/21/2024 22:59	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 22:59	PDK	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	96.2%	70 - 130	08/21/2024 22:59	



## Results

Client Sample ID	Field Blank	Collected	08/12/2024 14:30
Lab Sample ID	3373274003	Lab Receipt	08/12/2024 16:05

### 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	08/22/2024 00:39	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 00:39	PDK	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	90.2%	70 - 130	08/22/2024 00:39	



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373274001	3125 River Road, Conestoga, PA	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	
3373274002	Trip Blank	EPA 524.2	N/A	
3373274003	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
3373274001	3125 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1279399
		EPA ACID	1276928	08/16/2024 06:11	SRT	EPA 200.7	1276929
		EPA TRMD	1273021	08/13/2024 07:30	MEM	EPA 200.7	1275169
		N/A	N/A	N/A		EPA 524.2	1280730
		N/A	N/A	N/A		EPA 300.0	1273012
		N/A	N/A	N/A		EPA 410.4	1274243
		SW846 9066	1280609	08/21/2024 13:45	AKH	EPA 420.4	1280635
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1274222
		N/A	N/A	N/A		SM2130B-2011	1273015
		N/A	N/A	N/A		SM2320B-2011	1279250
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1274332
		N/A	N/A	N/A		SM5310B-14	1275936
N/A	N/A	N/A		SW846 9020B	1284772		
3373274002	Trip Blank	N/A	N/A	N/A		EPA 524.2	1280730
3373274003	Field Blank	N/A	N/A	N/A		EPA 524.2	1280730



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

Client Name: LCSWMA Christian C. Beck  
 Address: 3125 River Rd  
 Conestoga Pa 17516  
 Contact: Christian C Beck  
 Phone#: 717-871-0448  
 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:  mail?  Approved?

Container Type: AG AN AN CG P P P P  
 Container Size: 40ml 125ml 250ml 40ml 125ml 125ml  
 Preservative: HCL H2SO4 H2SO4 ASCHCL H2SO4 HNO3 HNO3  
 Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No  
 ANALYSIS / METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	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
1 3125RIVERRD	8/12/24	1340	G DW	2	2	1	3	X	1	2	1	1
2 Trip Blank	8/12/24	1605	G Di	2								
3 Field Blank	8/12/24	1430	G Di	2								

Sample(s) for Radiation testing? Y N Rad Screen (uCi) \_\_\_\_\_  
 Reportable SDWA Sample(s)? Y N New Source? Y N  
 SDWA State of Origin? \_\_\_\_\_ PWSID # \_\_\_\_\_ PWS Phone # \_\_\_\_\_  
 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

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

State Samples Collected In  
 NY  NJ  PA  WV  FL  other \_\_\_\_\_

Received By / Company Name: DAGS AIS  
 EDDS: \_\_\_\_\_  
 Format Type: \_\_\_\_\_





Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024 3044 RIVER RD  
 Workorder 3373002  
 Report ID 348811 on 8/24/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 09, 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>
3373002001	3044 River Road, Conestoga, PA	Water	08/09/2024 09:25	08/09/2024 13:50	BGS	Analytical Laboratory Service



## Reference

### Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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	3044 River Road, Conestoga, PA	Collected	08/09/2024 09:25
Lab Sample ID	3373002001	Lab Receipt	08/09/2024 13:50

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.08	pH_Units		Field	#
Specific Conductance, Field	230	umhos/cm	1	Field	#
Temperature	16.50	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	14.0	mg/L	0.10	EPA 200.7	#
Calcium, Total	14.7	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	10.1	mg/L	0.10	EPA 200.7	#
Magnesium, Total	10.4	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.017	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.016	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.2	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.8	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.8	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.5	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	11	mg/L	5	SM2320B-2011	#
Alkalinity, Total	11	mg/L	5	SM2320B-2011	#
Chloride	18.6	mg/L	2.0	EPA 300.0	#
Nitrate-N	17.2	mg/L	1.0	EPA 300.0	#
pH	6.93	pH_Units		S4500HB-11	#
Specific Conductance	224	umhos/cm	5	SM2510B-2011	#
Total Dissolved Solids	172	mg/L	25	SM2540C-15	#
Turbidity	0.35	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3044 River Road, Conestoga, PA	Collected	08/09/2024 09:25
Lab Sample ID	3373002001	Lab Receipt	08/09/2024 13:50

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.08		pH_Units		Field	1	08/09/2024 09:25	BGS	P
Specific Conductance, Field	230		umhos/cm	1	Field	1	08/09/2024 09:25	BGS	P
Temperature	16.50		Deg. C		Field	1	08/09/2024 09:25	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	14.0		mg/L	0.10	EPA 200.7	1	08/16/2024 08:57	SRT	F
Calcium, Total	14.7		mg/L	0.050	EPA 200.7	1	08/19/2024 10:28	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 08:57	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/19/2024 10:28	MSY	D1
Magnesium, Dissolved	10.1		mg/L	0.10	EPA 200.7	1	08/16/2024 08:57	SRT	F
Magnesium, Total	10.4		mg/L	0.050	EPA 200.7	1	08/19/2024 10:28	MSY	D1
Manganese, Dissolved	0.017		mg/L	0.0050	EPA 200.7	1	08/16/2024 08:57	SRT	F
Manganese, Total	0.016		mg/L	0.0025	EPA 200.7	1	08/21/2024 12:19	MSY	D1
Potassium, Dissolved	2.2		mg/L	0.50	EPA 200.7	1	08/16/2024 08:57	SRT	F
Potassium, Total	1.8		mg/L	0.25	EPA 200.7	1	08/19/2024 10:28	MSY	D1
Sodium, Dissolved	8.8		mg/L	0.50	EPA 200.7	1	08/16/2024 08:57	SRT	F
Sodium, Total	8.5		mg/L	0.25	EPA 200.7	1	08/19/2024 10:28	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	08/20/2024 19:43	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:43	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	94.2%	70 - 130	08/20/2024 19:43	

### WET CHEMISTRY



## Results

Client Sample ID	3044 River Road, Conestoga, PA	Collected	08/09/2024 09:25
Lab Sample ID	3373002001	Lab Receipt	08/09/2024 13:50

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	11		mg/L	5	SM2320B-2011	1	08/15/2024 13:02	KMV	A
Alkalinity, Total	11	1	mg/L	5	SM2320B-2011	1	08/15/2024 13:02	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/13/2024 13:32	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/13/2024 11:33	KMS	C
Chloride	18.6		mg/L	2.0	EPA 300.0	2	08/10/2024 19:24	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/10/2024 19:24	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/23/2024 15:42	PAG	K
Nitrate-N	17.2		mg/L	1.0	EPA 300.0	2	08/10/2024 19:24	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/10/2024 19:24	GMM	A
pH	6.93	2	pH_Units		S4500HB-11	1	08/15/2024 13:02	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/13/2024 16:58	AKH	J
Specific Conductance	224		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	08/10/2024 19:24	GMM	A
Total Dissolved Solids	172		mg/L	25	SM2540C-15	1	08/13/2024 16:35	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/12/2024 17:40	PAG	H
Turbidity	0.35		NTU	0.30	SM2130B-2011	1	08/10/2024 09:22	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373002001	3044 River Road, Conestoga, PA	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
3373002001	3044 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1279399
		EPA ACID	1276925	08/16/2024 06:07	SRT	EPA 200.7	1276926
		EPA TRMD	1273621	08/13/2024 23:20	ANN	EPA 200.7	1278636
		EPA TRMD	1273621	08/13/2024 23:20	ANN	EPA 200.7	1280587
		N/A	N/A	N/A		EPA 524.2	1279391
		N/A	N/A	N/A		EPA 300.0	1271516
		N/A	N/A	N/A		EPA 410.4	1273023
		SW846 9066	1272493	08/12/2024 11:05	AKH	EPA 420.4	1272496
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1273048
		N/A	N/A	N/A		SM2130B-2011	1271513
		N/A	N/A	N/A		SM2320B-2011	1274526
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1273045
		N/A	N/A	N/A		SM5310B-14	1272555
		N/A	N/A	N/A		SW846 9020B	1281936



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.**

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?

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm
1 3044RIVERRD	8/9/24	0925
2 Trip Blank	8/9/24	1300
3		
4		
5		
6		
7		
8		
9		
10		

Circle Sample Collector: ALS Tech / Client ID: \_\_\_\_\_  
Name: Bobbeke  
Date: 8-9-24 1350  
Received By / Company Name: DP/ALS  
Date: 8-9-24 1350  
Comments: \_\_\_\_\_

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

SDWA Sample Type (see key)	G or C	Matrix (See bottom of COC)	TOC	TOX	OH	TM	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
	G	DW	2	2	1	3	1	2	2	1	1
	G	Di				2					

**ANALYSIS / METHOD REQUESTED**

Enter Number of Containers Per Sample or Field Results Below.	1	2	3	4	5	6	7	8	9	10
TOC										
TOX										
OH										
TM										
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										

Temp Taken By: WV  
Therm ID: 571  
Temp By: 00 | WO Temp (°C) 9  
WO Temp (°C) 4  
Deviations? NO YES  
IF YES, list below:  
JA IA IA IA

Receipt Info Completed By:  
Cooler Custody Seal Intact  
Sample Custody Seal Intact  
Received on Ice  
Cooler & Samples Intact  
Correct Containers Provided  
Sample Label/COC Agree  
Adequate Sample Volumes  
CR6 Samples Filtered  
OP Samples Filtered  
VOA Trip Blank  
NUS 4 Days?  
Rad Screen (uCi)  
Courier/Tracking #:

Client contact:  
Date/Tech  
ad Screen (uCi)  
SW Source? Y N  
SW Source Contact  
SDWA Compliance Y A  
PWSID  
WV Containers 0-6°C Y N W

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

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			WV
Equis			FL
Custom			other



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024 3052 RIVER RD  
 Workorder 3373003  
 Report ID 349196 on 8/27/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 09, 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>
3373003001	3052 River Road, Conestoga, PA	Water	08/09/2024 09:50	08/09/2024 13:50	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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	3052 River Road, Conestoga, PA	Collected	08/09/2024 09:50
Lab Sample ID	3373003001	Lab Receipt	08/09/2024 13:50

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	6.97	pH_Units		Field	#
Specific Conductance, Field	225	umhos/cm	1	Field	#
Temperature	16.80	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	18.6	mg/L	0.10	EPA 200.7	#
Calcium, Total	18.2	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	7.7	mg/L	0.10	EPA 200.7	#
Magnesium, Total	8.3	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.016	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.020	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.0	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.6	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.4	mg/L	0.50	EPA 200.7	#
Sodium, Total	7.9	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	13	mg/L	5	SM2320B-2011	#
Alkalinity, Total	13	mg/L	5	SM2320B-2011	#
Chloride	19.4	mg/L	2.0	EPA 300.0	#
Halogen, Total Organic (TOX)	35.4	ug/L	20.0	SW846 9020B	#
Nitrate-N	16.9	mg/L	1.0	EPA 300.0	#
pH	7.01	pH_Units		S4500HB-11	#
Specific Conductance	230	umhos/cm	5	SM2510B-2011	#
Sulfate	2.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	169	mg/L	25	SM2540C-15	#
Turbidity	1.0	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3052 River Road, Conestoga, PA	Collected	08/09/2024 09:50
Lab Sample ID	3373003001	Lab Receipt	08/09/2024 13:50

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.97		pH_Units		Field	1	08/09/2024 09:50	BGS	P
Specific Conductance, Field	225		umhos/cm	1	Field	1	08/09/2024 09:50	BGS	P
Temperature	16.80		Deg. C		Field	1	08/09/2024 09:50	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	18.6		mg/L	0.10	EPA 200.7	1	08/16/2024 08:44	SRT	F
Calcium, Total	18.2	3	mg/L	0.050	EPA 200.7	1	08/19/2024 10:35	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 08:44	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/19/2024 10:35	MSY	D1
Magnesium, Dissolved	7.7		mg/L	0.10	EPA 200.7	1	08/16/2024 08:44	SRT	F
Magnesium, Total	8.3		mg/L	0.050	EPA 200.7	1	08/19/2024 10:35	MSY	D1
Manganese, Dissolved	0.016		mg/L	0.0050	EPA 200.7	1	08/16/2024 08:44	SRT	F
Manganese, Total	0.020		mg/L	0.0025	EPA 200.7	1	08/21/2024 12:20	MSY	D1
Potassium, Dissolved	2.0		mg/L	0.50	EPA 200.7	1	08/16/2024 08:44	SRT	F
Potassium, Total	1.6		mg/L	0.25	EPA 200.7	1	08/19/2024 10:35	MSY	D1
Sodium, Dissolved	8.4		mg/L	0.50	EPA 200.7	1	08/16/2024 08:44	SRT	F
Sodium, Total	7.9		mg/L	0.25	EPA 200.7	1	08/19/2024 10:35	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	08/20/2024 20:08	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:08	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	91.1%	70 - 130	08/20/2024 20:08	

### WET CHEMISTRY





## Results

Client Sample ID	3052 River Road, Conestoga, PA	Collected	08/09/2024 09:50
Lab Sample ID	3373003001	Lab Receipt	08/09/2024 13:50

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	13		mg/L	5	SM2320B-2011	1	08/13/2024 00:21	KMV	A
Alkalinity, Total	13	1	mg/L	5	SM2320B-2011	1	08/13/2024 00:21	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/13/2024 13:23	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/13/2024 11:33	KMS	C
Chloride	19.4		mg/L	2.0	EPA 300.0	2	08/10/2024 19:35	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/10/2024 19:35	GMM	A
Halogen, Total Organic (TOX)	35.4		ug/L	20.0	SW846 9020B	1	08/26/2024 17:47	PAG	K
Nitrate-N	16.9		mg/L	1.0	EPA 300.0	2	08/10/2024 19:35	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/10/2024 19:35	GMM	A
pH	7.01	2	pH_Units		S4500HB-11	1	08/13/2024 00:21	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/13/2024 17:02	AKH	J
Specific Conductance	230		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	2.8		mg/L	2.0	EPA 300.0	2	08/10/2024 19:35	GMM	A
Total Dissolved Solids	169		mg/L	25	SM2540C-15	1	08/13/2024 16:35	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/12/2024 17:40	PAG	H
Turbidity	1.0		NTU	0.30	SM2130B-2011	1	08/10/2024 09:22	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373003001	3052 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
3373003001	3052 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1279399
		EPA TRMD	1273621	08/13/2024 23:20	ANN	EPA 200.7	1280587
		EPA ACID	1276925	08/16/2024 06:07	SRT	EPA 200.7	1276926
		EPA TRMD	1273621	08/13/2024 23:20	ANN	EPA 200.7	1278636
		N/A	N/A	N/A		EPA 524.2	1279391
		N/A	N/A	N/A		EPA 300.0	1271516
		N/A	N/A	N/A		EPA 410.4	1273023
		SW846 9066	1272493	08/12/2024 11:05	AKH	EPA 420.4	1272496
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1273048
		N/A	N/A	N/A		SM2130B-2011	1271513
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1273045
		N/A	N/A	N/A		SM5310B-14	1272555
		N/A	N/A	N/A		SW846 9020B	1283642



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.

3373003  
Logged By: SLS  
PM: SJB



373003 of

Client Name: LCSWMA Gerald E Miller Sr  
Address: 3052 River Rd  
Conestoga PA 17516  
Contact: Gerald E Miller Sr  
Phone#: 717-872-5117  
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?

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	ANALYSIS / METHOD REQUESTED															
			Orthophosphate Filtered?	Yes	No	Hexavalent Chromium Filtered?	Yes	No	TOC	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,C1,S04,F,SPO,TD	Alkalinity, HCO3	
1 3052RIVERRD	8/9/24	0950																
2 Trip Blank	8/9/24	1350																
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Circle Sample Collector: ALS Tech / Client ID: \_\_\_\_\_  
Name: Richard  
Date: 8/9/24  
Relinquished By / Company Name: ALS  
Received By / Company Name: DR/ALS

Time	Standard Lvl 1	Standard Lvl 2	Standard Lvl 3	Standard Lvl 4	Excel Summary	Equis	Custom	Lab	Special
1									
3									
5									
7									
9									

Circle Sample Collector: ALS Tech / Client ID: \_\_\_\_\_  
Name: Richard  
Date: 8/9/24  
Relinquished By / Company Name: ALS  
Received By / Company Name: DR/ALS

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

State Samples Collected In: NY, NJ, PA, WV, FL, other

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 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024-3056 RIVER RD  
 Workorder 3373005  
 Report ID 349180 on 8/27/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 09, 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>
3373005001	3056RIVERRD	Water	08/09/2024 10:05	08/09/2024 13:50	BGS	Analytical Laboratory Service



## Reference

### Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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** 3RD QTR 2024-3056 RIVER RD  
**Workorder** 3373005

**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	3056RIVERRD	Collected	08/09/2024 10:05
Lab Sample ID	3373005001	Lab Receipt	08/09/2024 13:50

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	5.67	pH_Units		Field	#
Specific Conductance, Field	241	umhos/cm	1	Field	#
Temperature	16.40	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	9.6	mg/L	0.10	EPA 200.7	#
Calcium, Total	9.7	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	12.1	mg/L	0.10	EPA 200.7	#
Magnesium, Total	11.8	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.10	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.11	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.7	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.1	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	9.6	mg/L	0.50	EPA 200.7	#
Sodium, Total	9.3	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Chloride	25.7	mg/L	2.0	EPA 300.0	#
Nitrate-N	16.6	mg/L	1.0	EPA 300.0	#
pH	5.42	pH_Units		S4500HB-11	#
Specific Conductance	234	umhos/cm	5	SM2510B-2011	#
Total Dissolved Solids	157	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3056RIVERRD	Collected	08/09/2024 10:05
Lab Sample ID	3373005001	Lab Receipt	08/09/2024 13:50

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	5.67		pH_Units		Field	1	08/09/2024 10:05	BGS	P
Specific Conductance, Field	241		umhos/cm	1	Field	1	08/09/2024 10:05	BGS	P
Temperature	16.40		Deg. C		Field	1	08/09/2024 10:05	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	9.6		mg/L	0.10	EPA 200.7	1	08/16/2024 08:53	SRT	F
Calcium, Total	9.7		mg/L	0.050	EPA 200.7	1	08/14/2024 17:11	AXW	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 08:53	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/14/2024 17:11	AXW	D1
Magnesium, Dissolved	12.1		mg/L	0.10	EPA 200.7	1	08/16/2024 08:53	SRT	F
Magnesium, Total	11.8		mg/L	0.050	EPA 200.7	1	08/14/2024 17:11	AXW	D1
Manganese, Dissolved	0.10		mg/L	0.0050	EPA 200.7	1	08/16/2024 08:53	SRT	F
Manganese, Total	0.11		mg/L	0.0025	EPA 200.7	1	08/14/2024 17:11	AXW	D1
Potassium, Dissolved	2.7		mg/L	0.50	EPA 200.7	1	08/16/2024 08:53	SRT	F
Potassium, Total	2.1		mg/L	0.25	EPA 200.7	1	08/14/2024 17:11	AXW	D1
Sodium, Dissolved	9.6		mg/L	0.50	EPA 200.7	1	08/16/2024 08:53	SRT	F
Sodium, Total	9.3		mg/L	0.25	EPA 200.7	1	08/14/2024 17:11	AXW	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	08/20/2024 20:57	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:57	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	92.3%	70 - 130	08/20/2024 20:57	

### WET CHEMISTRY



## Results

Client Sample ID	3056RIVERRD	Collected	08/09/2024 10:05
Lab Sample ID	3373005001	Lab Receipt	08/09/2024 13:50

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	08/15/2024 13:24	KMV	A
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	08/15/2024 13:24	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/13/2024 12:20	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/13/2024 11:33	KMS	C
Chloride	25.7		mg/L	2.0	EPA 300.0	2	08/10/2024 19:58	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/10/2024 19:58	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/26/2024 17:47	PAG	K
Nitrate-N	16.6		mg/L	1.0	EPA 300.0	2	08/10/2024 19:58	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/10/2024 19:58	GMM	A
pH	5.42	2	pH_Units		S4500HB-11	1	08/15/2024 13:24	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/13/2024 16:51	AKH	J
Specific Conductance	234		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	08/10/2024 19:58	GMM	A
Total Dissolved Solids	157		mg/L	25	SM2540C-15	1	08/13/2024 16:35	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/12/2024 17:40	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/10/2024 09:22	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373005001	3056RIVERRD	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
3373005001	3056RIVERRD	N/A	N/A	N/A		Field	1279399
		EPA TRMD	1272411	08/12/2024 07:00	MEM	EPA 200.7	1274433
		EPA ACID	1276925	08/16/2024 06:07	SRT	EPA 200.7	1276926
		N/A	N/A	N/A		EPA 524.2	1279391
		N/A	N/A	N/A		EPA 300.0	1271516
		N/A	N/A	N/A		EPA 410.4	1273023
		SW846 9066	1272493	08/12/2024 11:05	AKH	EPA 420.4	1272496
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1273048
		N/A	N/A	N/A		SM2130B-2011	1271513
		N/A	N/A	N/A		SM2320B-2011	1274526
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1273045
		N/A	N/A	N/A		SM5310B-14	1272555
		N/A	N/A	N/A		SW846 9020B	1283642

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.

3373005  
Logged By: SLS  
PM: SJB



2005  
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?  \_\_\_\_\_

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	AG	AN	CG	P	P	P	Container Type	Container Size	Preservative	Orthophosphate Filtered?	Yes	No	Hexavalent Chromium Filtered?	Yes	No
1 3056RIVERRD	8/9/24	1005							AG	40ml	H2SO4						
2 Trip Blank	8/9/24	1350							AN	125ml	HNO3						
3									AN	125ml	HNO3						
4									CG	250ml	H2SO4						
5									AN	125ml	HNO3						
6									CG	250ml	H2SO4						
7									P	125ml	HNO3						
8									P	125ml	HNO3						
9									P	125ml	HNO3						
10									P	125ml	HNO3						

**SDWA Sample Type (see key)**  
\*G or C  
\*\*Matrix (See bottom of COC)  
Enter Number of Containers Per Sample or Field Results Below.

TOC	TOX	OH	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, B	Alkalinity, HCO3
2	2	1	3	1	2	2	1	1
G	DW	2	1	1	2	2	1	1
G	Di	2	2	1	2	2	1	1

**ANALYSIS / METHOD REQUESTED**

**Temp Taken By:** DD  
**Receipt Info completed by:** \_\_\_\_\_  
**Temp By:** DD  
**WO Temp (°C):** 4  
**WO Temp (°C):** 4  
**Therm ID:** 871  
**Deviations? NO/YES:** A  
If YES, list below: A

**Client contact:** \_\_\_\_\_  
**Date/Time:** \_\_\_\_\_

**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

**State Samples Collected In:** NY  NJ  PA  WV  FL  other \_\_\_\_\_

**Sample Disposal:** Lab  Special

**EDDS:** \_\_\_\_\_

**Comments:** \_\_\_\_\_

**Circle Sample Collector:** ALS Tech / Client Name: *ALS* ID: \_\_\_\_\_

**Date:** 8/24/24  
**Relinquished By / Company Name:** *ALS*  
**Received By / Company Name:** *DD/ALS*



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024-3060 RIVER RD  
 Workorder 3373004  
 Report ID 349184 on 8/27/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 09, 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>
3373004001	3060RIVERRD	Water	08/09/2024 10:25	08/09/2024 13:50	BGS	Analytical Laboratory Service
3373004002	TRIP BLANK	Water	08/09/2024 13:50	08/09/2024 13:50	BGS	Analytical Laboratory Service
3373004003	FIELD BLANK	Water	08/09/2024 13:00	08/09/2024 13:50	BGS	Analytical Laboratory Service





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## Reference

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### Notes

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  - 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
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---

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J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
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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. |
| 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	3060RIVERRD	Collected	08/09/2024 10:25
Lab Sample ID	3373004001	Lab Receipt	08/09/2024 13:50

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	6.87	pH_Units		Field	#
Specific Conductance, Field	243	umhos/cm	1	Field	#
Temperature	16.50	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	10.0	mg/L	0.10	EPA 200.7	#
Calcium, Total	10.2	mg/L	0.050	EPA 200.7	#
Iron, Total	0.10	mg/L	0.030	EPA 200.7	#
Magnesium, Dissolved	10.8	mg/L	0.10	EPA 200.7	#
Magnesium, Total	10.6	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.10	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.11	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	3.0	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.6	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.8	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.7	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	14	mg/L	5	SM2320B-2011	#
Alkalinity, Total	14	mg/L	5	SM2320B-2011	#
Chloride	18.3	mg/L	2.0	EPA 300.0	#
Nitrate-N	15.7	mg/L	1.0	EPA 300.0	#
pH	6.92	pH_Units		S4500HB-11	#
Specific Conductance	238	umhos/cm	5	SM2510B-2011	#
Sulfate	8.2	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	167	mg/L	25	SM2540C-15	#
Turbidity	1.6	NTU	0.30	SM2130B-2011	#



## Results

Client Sample ID	3060RIVERRD	Collected	08/09/2024 10:25
Lab Sample ID	3373004001	Lab Receipt	08/09/2024 13:50

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.87		pH_Units		Field	1	08/09/2024 10:25	BGS	P
Specific Conductance, Field	243		umhos/cm	1	Field	1	08/09/2024 10:25	BGS	P
Temperature	16.50		Deg. C		Field	1	08/09/2024 10:25	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	10.0		mg/L	0.10	EPA 200.7	1	08/16/2024 08:40	SRT	F
Calcium, Total	10.2		mg/L	0.050	EPA 200.7	1	08/14/2024 17:14	AXW	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 08:40	SRT	F
Iron, Total	0.10		mg/L	0.030	EPA 200.7	1	08/14/2024 17:14	AXW	D1
Magnesium, Dissolved	10.8		mg/L	0.10	EPA 200.7	1	08/16/2024 08:40	SRT	F
Magnesium, Total	10.6	3	mg/L	0.050	EPA 200.7	1	08/14/2024 17:14	AXW	D1
Manganese, Dissolved	0.10		mg/L	0.0050	EPA 200.7	1	08/16/2024 08:40	SRT	F
Manganese, Total	0.11		mg/L	0.0025	EPA 200.7	1	08/14/2024 17:14	AXW	D1
Potassium, Dissolved	3.0		mg/L	0.50	EPA 200.7	1	08/16/2024 08:40	SRT	F
Potassium, Total	2.6		mg/L	0.25	EPA 200.7	1	08/14/2024 17:14	AXW	D1
Sodium, Dissolved	8.8		mg/L	0.50	EPA 200.7	1	08/16/2024 08:40	SRT	F
Sodium, Total	8.7		mg/L	0.25	EPA 200.7	1	08/14/2024 17:14	AXW	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	08/20/2024 20:32	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 20:32	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	94.4%	70 - 130	08/20/2024 20:32	

### WET CHEMISTRY



## Results

Client Sample ID	3060RIVERRD	Collected	08/09/2024 10:25
Lab Sample ID	3373004001	Lab Receipt	08/09/2024 13:50

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	14		mg/L	5	SM2320B-2011	1	08/13/2024 00:34	KMV	A
Alkalinity, Total	14	1	mg/L	5	SM2320B-2011	1	08/13/2024 00:34	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/13/2024 12:17	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/13/2024 11:33	KMS	C
Chloride	18.3		mg/L	2.0	EPA 300.0	2	08/10/2024 19:47	GMM	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/10/2024 19:47	GMM	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/26/2024 17:47	PAG	K
Nitrate-N	15.7		mg/L	1.0	EPA 300.0	2	08/10/2024 19:47	GMM	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/10/2024 19:47	GMM	A
pH	6.92	2	pH_Units		S4500HB-11	1	08/13/2024 00:34	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/13/2024 16:54	AKH	J
Specific Conductance	238		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	8.2		mg/L	2.0	EPA 300.0	2	08/10/2024 19:47	GMM	A
Total Dissolved Solids	167		mg/L	25	SM2540C-15	1	08/13/2024 16:35	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/12/2024 17:40	PAG	H
Turbidity	1.6		NTU	0.30	SM2130B-2011	1	08/10/2024 09:22	NPF	A



## Results

Client Sample ID	TRIP BLANK	Collected	08/09/2024 13:50
Lab Sample ID	3373004002	Lab Receipt	08/09/2024 13:50

### 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	08/20/2024 18:53	ILY	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 18:53	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	96.6%	70 - 130	08/20/2024 18:53	



## Results

Client Sample ID	FIELD BLANK	Collected	08/09/2024 13:00
Lab Sample ID	3373004003	Lab Receipt	08/09/2024 13:50

### 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	08/20/2024 19:18	ILY	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/20/2024 19:18	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	95.2%	70 - 130	08/20/2024 19:18	



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373004001	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	
3373004002	TRIP BLANK	EPA 524.2	N/A	
3373004003	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
3373004001	3060RIVERRD	N/A	N/A	N/A		Field	1279399
		EPA TRMD	1272411	08/12/2024 07:00	MEM	EPA 200.7	1274433
		EPA ACID	1276925	08/16/2024 06:07	SRT	EPA 200.7	1276926
		N/A	N/A	N/A		EPA 524.2	1279391
		N/A	N/A	N/A		EPA 300.0	1271516
		N/A	N/A	N/A		EPA 410.4	1273023
		SW846 9066	1272493	08/12/2024 11:05	AKH	EPA 420.4	1272496
		N/A	N/A	N/A		S4500HB-11	1272479
		N/A	N/A	N/A		SM 4500-NH3G	1273048
		N/A	N/A	N/A		SM2130B-2011	1271513
		N/A	N/A	N/A		SM2320B-2011	1272479
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1273045
		N/A	N/A	N/A		SM5310B-14	1272555
N/A	N/A	N/A		SW846 9020B	1283642		
3373004002	TRIP BLANK	N/A	N/A	N/A		EPA 524.2	1279391
3373004003	FIELD BLANK	N/A	N/A	N/A		EPA 524.2	1279391



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.

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?

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm
1 3060RIVERRD	8/9/24	1025
2 Trip Blank	8/9/24	1350
3 Field Blank	8/9/24	1300
4		
5		
6		
7		
8		
9		
10		

Circle Sample Collector/ALS Tech/Client Name: Bob ID: \_\_\_\_\_

Date: 8/9/24 Relinquished By/Company Name: Bob

Time	Relinquished By/Company Name
1	
3	
5	
7	
9	

Container Type	AG	AN	CG	P	P
Container Size	40ml	250ml	40ml	250ml	125ml
Preservative	HCL	H2SO4	H2SO4 ASCHCL	H2SO4	HNO3

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

**ANALYSIS METHOD REQUESTED**

SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	TOX	O-OH	F-M	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, Pb	Alkalinity, HCO3
	G	DW	2	2	1	3	X	1	2	2	1
	G	DI				2					
	G	DI				2					

Container Type	AG	AN	CG	P	P
Container Size	40ml	250ml	40ml	250ml	125ml
Preservative	HCL	H2SO4	H2SO4 ASCHCL	H2SO4	HNO3

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

**ANALYSIS METHOD REQUESTED**

SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	TOX	O-OH	F-M	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, Pb	Alkalinity, HCO3
	G	DW	2	2	1	3	X	1	2	2	1
	G	DI				2					
	G	DI				2					

Comments:

Standard Lvl 1	CLP-like	HSCA	State Samples Collected In
			NY
			NJ
			PA
			WV
			FL
			other

Standard Lvl 1	CLP-like	HSCA	State Samples Collected In
			NY
			NJ
			PA
			WV
			FL
			other

3373004  
Logged By: SLS  
PM: SJB



Receipt Info completed by: 571 WO Temp (°C) 4  
Conter. Custody Seal Intact Y N NA  
Temp By: 00 WO Temp (°C) 4

Receipt Info Completed By:  
Cooler Custody Seal Intact Y N NA  
Sample Custody Seal Intact Y N NA  
Received on Ice Y N NA  
Cooler & Samples Intact Y N NA  
Correct Containers Provided Y N NA  
Sample Label/COC Agree Y N NA  
Adequate Sample Volumes Y N NA  
CR6 Samples Filtered Y N NA  
OP Samples Filtered Y N NA  
VOA Trip Blank Y N NA  
NIS 4 Days? Y N NA  
Rad Screen (uCi) \_\_\_\_\_  
Courier/Tracking #: \_\_\_\_\_

SDWA Compliance Y N  
PWSID Y N  
WV Containers 0-6°C Y N

Client contact: \_\_\_\_\_  
Date/Tech: \_\_\_\_\_  
Lab Screen (uCi) \_\_\_\_\_  
New Source? Y N  
New Source Contact: \_\_\_\_\_

Sample/COC Remarks

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

Sample Disposal  
Lab   
Special

EDDS: \_\_\_\_\_  
Format Type: \_\_\_\_\_

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024-3076 RIVER RD  
 Workorder 3373238  
 Report ID 349496 on 8/27/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 12, 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.*

**Project** 3RD QTR 2024-3076 RIVER RD  
**Workorder** 3373238



## 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>
3373238001	3076 River Road, Conestoga, PA	Water	08/12/2024 09:40	08/12/2024 16:05	BGS	Analytical Laboratory Service



## Reference

### Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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.
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- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the 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	3076 River Road, Conestoga, PA	Collected	08/12/2024 09:40
Lab Sample ID	3373238001	Lab Receipt	08/12/2024 16:05

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	6.80	pH_Units		Field	#
Specific Conductance, Field	349	umhos/cm	1	Field	#
Temperature	16.70	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	13.9	mg/L	0.10	EPA 200.7	#
Calcium, Total	15.5	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	8.4	mg/L	0.10	EPA 200.7	#
Magnesium, Total	9.1	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.19	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.21	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	4.5	mg/L	0.50	EPA 200.7	#
Potassium, Total	3.5	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	27.5	mg/L	0.50	EPA 200.7	#
Sodium, Total	26.3	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	9	mg/L	5	SM2320B-2011	#
Alkalinity, Total	9	mg/L	5	SM2320B-2011	#
Chloride	60.8	mg/L	2.0	EPA 300.0	#
Nitrate-N	8.9	mg/L	1.0	EPA 300.0	#
pH	6.82	pH_Units		S4500HB-11	#
Specific Conductance	327	umhos/cm	5	SM2510B-2011	#
Sulfate	13.3	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	220	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3076 River Road, Conestoga, PA	Collected	08/12/2024 09:40
Lab Sample ID	3373238001	Lab Receipt	08/12/2024 16:05

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.80		pH_Units		Field	1	08/12/2024 09:40	BGS	P
Specific Conductance, Field	349		umhos/cm	1	Field	1	08/12/2024 09:40	BGS	P
Temperature	16.70		Deg. C		Field	1	08/12/2024 09:40	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	13.9		mg/L	0.10	EPA 200.7	1	08/16/2024 09:49	SRT	F
Calcium, Total	15.5		mg/L	0.050	EPA 200.7	1	08/15/2024 09:53	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 09:49	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/15/2024 09:53	MSY	D1
Magnesium, Dissolved	8.4		mg/L	0.10	EPA 200.7	1	08/16/2024 09:49	SRT	F
Magnesium, Total	9.1		mg/L	0.050	EPA 200.7	1	08/15/2024 09:53	MSY	D1
Manganese, Dissolved	0.19		mg/L	0.0050	EPA 200.7	1	08/16/2024 09:49	SRT	F
Manganese, Total	0.21		mg/L	0.0025	EPA 200.7	1	08/15/2024 09:53	MSY	D1
Potassium, Dissolved	4.5		mg/L	0.50	EPA 200.7	1	08/16/2024 09:49	SRT	F
Potassium, Total	3.5		mg/L	0.25	EPA 200.7	1	08/15/2024 09:53	MSY	D1
Sodium, Dissolved	27.5		mg/L	0.50	EPA 200.7	1	08/16/2024 09:49	SRT	F
Sodium, Total	26.3		mg/L	0.25	EPA 200.7	1	08/15/2024 09:53	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	08/21/2024 13:48	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:48	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	89.4%	70 - 130	08/21/2024 13:48	

### WET CHEMISTRY





## Results

Client Sample ID	3076 River Road, Conestoga, PA	Collected	08/12/2024 09:40
Lab Sample ID	3373238001	Lab Receipt	08/12/2024 16:05

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	9		mg/L	5	SM2320B-2011	1	08/20/2024 17:49	KMV	A
Alkalinity, Total	9	1	mg/L	5	SM2320B-2011	1	08/20/2024 17:49	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/14/2024 12:33	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/14/2024 11:40	KMS	C
Chloride	60.8		mg/L	2.0	EPA 300.0	2	08/13/2024 13:30	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/13/2024 13:30	J1W	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/27/2024 17:48	PAG	K
Nitrate-N	8.9		mg/L	1.0	EPA 300.0	2	08/13/2024 13:30	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/13/2024 13:30	J1W	A
pH	6.82	2	pH_Units		S4500HB-11	1	08/15/2024 16:04	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/22/2024 15:40	AKH	J
Specific Conductance	327		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	13.3		mg/L	2.0	EPA 300.0	2	08/13/2024 13:30	J1W	A
Total Dissolved Solids	220		mg/L	25	SM2540C-15	1	08/14/2024 16:15	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/15/2024 04:06	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/13/2024 09:01	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373238001	3076 River Road, Conestoga, PA	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
3373238001	3076 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1279399
		EPA ACID	1276925	08/16/2024 06:07	SRT	EPA 200.7	1276926
		EPA TRMD	1273021	08/13/2024 07:30	MEM	EPA 200.7	1275169
		N/A	N/A	N/A		EPA 524.2	1280570
		N/A	N/A	N/A		EPA 300.0	1273012
		N/A	N/A	N/A		EPA 410.4	1274243
		SW846 9066	1280609	08/21/2024 13:45	AKH	EPA 420.4	1280635
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1274222
		N/A	N/A	N/A		SM2130B-2011	1273015
		N/A	N/A	N/A		SM2320B-2011	1279250
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1274245
		N/A	N/A	N/A		SM5310B-14	1274530
		N/A	N/A	N/A		SW846 9020B	1283801

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.

3373238  
Logged By: SLS  
PH: SJB

of

Client Name: LCSWMA Brian Sensenich		Temp Taken By: _____		Therm ID: _____		WO Temp (°C)	
Address: 3076 River Rd		Temp By: _____		WO Temp (°C)		Deviations? NO YES	
Conestoga PA 17516		Rt _____		C _____		S _____	
Contact: Brian Sensenich		R _____		C _____		S _____	
Phone#: 717-676-5779		C _____		S _____		R _____	
Project Name#: LCSWMA Quaterly		C _____		S _____		R _____	
Bill To: LCSWMA Brian Sensenich		C _____		S _____		R _____	
Purchase Order #:		C _____		S _____		R _____	
TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days.		C _____		S _____		R _____	
Date Required: _____		C _____		S _____		R _____	
Email? <input type="checkbox"/>		C _____		S _____		R _____	
Sample Description/Location		Date Collected		Time		Matrix (See bottom of COC)	
(as it will appear on the lab report)		mm/dd/yyyy		hh:mm		*G or C	
1 3076RIVERRD		8/12/24		0940		G DW	
2 Trip Blank		8/12/24		1601		G Di	
3							
4							
5							
6							
7							
8							
9							
10							
Circle Sample Collector: ALS Tech Client		Relinquished By / Company Name		Comments:		Data Deliverables	
Name: <i>Bob Wade</i>		ID: _____		_____		Standard Lvl 1	
Date: 8-22-24		1		2		Standard Lvl 2	
		3		4		Standard Lvl 3	
		5		6		Standard Lvl 4	
		7		8		Excel Summary	
		9		10		Equis	
						Custom	
						EDDS:	
						Format Type	
						Other	
						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 _____	

\* G=Grab; C=Composite \*\*Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Solid/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater  
ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057  
8/27/2024 10:48 PM  
10 of 10  
Rev 07/06/2023



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024-3079 RIVER RD  
 Workorder 3373270  
 Report ID 350017 on 8/29/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 12, 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>
3373270001	3079RIVERRD	Water	08/12/2024 14:10	08/12/2024 16:05	BGS	Analytical Laboratory Service



## Reference

### Notes

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- 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:  
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EPA 300.0 Rev. 2.1-1993  
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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  
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.
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- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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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	3079RIVERRD	Collected	08/12/2024 14:10
Lab Sample ID	3373270001	Lab Receipt	08/12/2024 16:05

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.26	pH_Units		Field	#
Specific Conductance, Field	177	umhos/cm	1	Field	#
Temperature	16.50	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	9.1	mg/L	0.10	EPA 200.7	#
Calcium, Total	9.7	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	5.2	mg/L	0.10	EPA 200.7	#
Magnesium, Total	5.5	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.016	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.019	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.4	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.7	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	14.3	mg/L	0.50	EPA 200.7	#
Sodium, Total	13.2	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	24	mg/L	5	SM2320B-2011	#
Alkalinity, Total	24	mg/L	5	SM2320B-2011	#
Chloride	30.3	mg/L	2.0	EPA 300.0	#
Nitrate-N	1.8	mg/L	1.0	EPA 300.0	#
pH	7.34	pH_Units		S4500HB-11	#
Specific Conductance	172	umhos/cm	5	SM2510B-2011	#
Sulfate	8.8	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	136	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3079RIVERRD	Collected	08/12/2024 14:10
Lab Sample ID	3373270001	Lab Receipt	08/12/2024 16:05

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.26		pH_Units		Field	1	08/12/2024 14:10	BGS	P
Specific Conductance, Field	177		umhos/cm	1	Field	1	08/12/2024 14:10	BGS	P
Temperature	16.50		Deg. C		Field	1	08/12/2024 14:10	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	9.1		mg/L	0.10	EPA 200.7	1	08/16/2024 10:06	SRT	F
Calcium, Total	9.7		mg/L	0.050	EPA 200.7	1	08/19/2024 10:08	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 10:06	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/19/2024 10:08	MSY	D1
Magnesium, Dissolved	5.2		mg/L	0.10	EPA 200.7	1	08/16/2024 10:06	SRT	F
Magnesium, Total	5.5		mg/L	0.050	EPA 200.7	1	08/19/2024 10:08	MSY	D1
Manganese, Dissolved	0.016		mg/L	0.0050	EPA 200.7	1	08/16/2024 10:06	SRT	F
Manganese, Total	0.019		mg/L	0.0025	EPA 200.7	1	08/19/2024 10:08	MSY	D1
Potassium, Dissolved	2.4		mg/L	0.50	EPA 200.7	1	08/16/2024 10:06	SRT	F
Potassium, Total	1.7		mg/L	0.25	EPA 200.7	1	08/19/2024 10:08	MSY	D1
Sodium, Dissolved	14.3		mg/L	0.50	EPA 200.7	1	08/16/2024 10:06	SRT	F
Sodium, Total	13.2		mg/L	0.25	EPA 200.7	1	08/19/2024 10:08	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	08/21/2024 16:43	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 16:43	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	88.5%	70 - 130	08/21/2024 16:43	

### WET CHEMISTRY



## Results

Client Sample ID	3079RIVERRD	Collected	08/12/2024 14:10
Lab Sample ID	3373270001	Lab Receipt	08/12/2024 16:05

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	24		mg/L	5	SM2320B-2011	1	08/20/2024 19:32	KMV	A
Alkalinity, Total	24	1	mg/L	5	SM2320B-2011	1	08/20/2024 19:32	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/14/2024 12:36	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/14/2024 11:40	KMS	C
Chloride	30.3		mg/L	2.0	EPA 300.0	2	08/13/2024 14:27	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/13/2024 14:27	J1W	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/28/2024 17:31	PAG	K
Nitrate-N	1.8		mg/L	1.0	EPA 300.0	2	08/13/2024 14:27	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/13/2024 14:27	J1W	A
pH	7.34	2	pH_Units		S4500HB-11	1	08/15/2024 17:53	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/22/2024 16:13	AKH	J
Specific Conductance	172		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	8.8		mg/L	2.0	EPA 300.0	2	08/13/2024 14:27	J1W	A
Total Dissolved Solids	136		mg/L	25	SM2540C-15	1	08/15/2024 14:19	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/16/2024 00:33	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/13/2024 09:01	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373270001	3079RIVERRD	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
3373270001	3079RIVERRD	N/A	N/A	N/A		Field	1279399
		EPA ACID	1276928	08/16/2024 06:11	SRT	EPA 200.7	1276929
		EPA TRMD	1273016	08/13/2024 07:30	MEM	EPA 200.7	1278635
		N/A	N/A	N/A		EPA 524.2	1280570
		N/A	N/A	N/A		EPA 300.0	1273012
		N/A	N/A	N/A		EPA 410.4	1274243
		SW846 9066	1280609	08/21/2024 13:45	AKH	EPA 420.4	1280635
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1274222
		N/A	N/A	N/A		SM2130B-2011	1273015
		N/A	N/A	N/A		SM2320B-2011	1279250
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1274332
		N/A	N/A	N/A		SM5310B-14	1275936
		N/A	N/A	N/A		SW846 9020B	1284772





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.

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?

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

Date Collected  
mm/dd/yyyy

Time  
hh:mm

1 3079RIVERRD 8/12/24 1410

2 Trip Blank 8/12/24 1605

3

4

5

6

7

8

9

10

Client Sample Collector/ALS Tech/ Client ID:

Relinquished By / Company Name

2

4

6

8

10

Comments:

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

ANALYSIS / METHOD REQUESTED

SDWA Sample Type (see key)	G	DW	2	1	3	X	1	2	2	1	1
*G or C											
**Matrix (See bottom of COC)											
TOC											
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, TP											
Alkalinity, HCO3											

Temp Taken By: WAG 5:24 WO Temp (°C) 16

Receipt info completed by: DAG WY Containers 0-6°C Y N (NA)

Cooler Custody Seals Intact Y N (NA) Deviations? NO/YES

Sample Custody Seal Intact Y N (NA) If YES, list below

Received on Ice Y N (NA) Do + the size

Coolers & Samples Intact Y N (NA)

Correct Containers Provided Y N (NA)

Sample Label/COC Agree Y N (NA)

Adequate Sample Volumes Y N (NA)

VOA only: Trip Blank Y N (NA)

NJ ≤ 4 days? X N

Courier/Tracking # NA

Client contact: DAG 8/12/24

Rad Screen (uCi) Y N

New Source? Y N

New Source Contact: NA

Sample(s) for Radiation testing? Y N

Reportable SDWA Sample(s)? Y N

SDWA State of Origin? NA

PWSID # NA

PWS Contact: NA

PWS Phone #: 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

Standard Lvl 1	<input type="checkbox"/>	CLP-like	<input type="checkbox"/>	HSCA	<input type="checkbox"/>	State Samples Collected In	NY
Standard Lvl 2	<input type="checkbox"/>	DOD	<input type="checkbox"/>	Landfill	<input type="checkbox"/>		NJ
Standard Lvl 3	<input type="checkbox"/>	NJ RED	<input type="checkbox"/>	NJ GW	<input type="checkbox"/>		PA
Standard Lvl 4	<input type="checkbox"/>	NJ Full	<input type="checkbox"/>		<input type="checkbox"/>		WV

Excel Summary

Equis  Lab  Special

Custom

EDDS: Format Type



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024-3088 RIVERRD  
 Workorder 3373237  
 Report ID 349178 on 8/27/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 12, 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** (ALS Digital Signature)  
 Project Coordinator

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

**Project** 3RD QTR 2024-3088 RIVERRD

**Workorder** 3373237



## 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>
3373237001	3088 River Road, Conestoga PA	Water	08/12/2024 10:03	08/12/2024 16:05	BGS	Analytical Laboratory Service





## Reference

### Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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** 3RD QTR 2024-3088 RIVERRD  
**Workorder** 3373237

**Project Notations**

**Sample Notations**

**Lab ID**      **Sample ID**

**Result Notations**

**Notation Ref.**

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



### Detected Results Summary

Client Sample ID	3088 River Road, Conestoga PA	Collected	08/12/2024 10:03
Lab Sample ID	3373237001	Lab Receipt	08/12/2024 16:05

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	8.27	pH_Units		Field	#
Specific Conductance, Field	1110	umhos/cm	1	Field	#
Temperature	16.80	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	4.0	mg/L	0.10	EPA 200.7	#
Calcium, Total	4.1	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	0.68	mg/L	0.10	EPA 200.7	#
Magnesium, Total	0.66	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.0092	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.0073	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.2	mg/L	0.50	EPA 200.7	#
Potassium, Total	0.84	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	230	mg/L	0.50	EPA 200.7	#
Sodium, Total	227	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	169	mg/L	5	SM2320B-2011	#
Alkalinity, Total	196	mg/L	5	SM2320B-2011	#
Chloride	228	mg/L	5.0	EPA 300.0	#
Nitrate-N	5.4	mg/L	1.0	EPA 300.0	#
pH	8.31	pH_Units		S4500HB-11	#
Specific Conductance	1120	umhos/cm	5	SM2510B-2011	#
Total Dissolved Solids	610	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3088 River Road, Conestoga PA	Collected	08/12/2024 10:03
Lab Sample ID	3373237001	Lab Receipt	08/12/2024 16:05

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	8.27		pH_Units		Field	1	08/12/2024 10:03	BGS	P
Specific Conductance, Field	1110		umhos/cm	1	Field	1	08/12/2024 10:03	BGS	P
Temperature	16.80		Deg. C		Field	1	08/12/2024 10:03	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	4.0		mg/L	0.10	EPA 200.7	1	08/16/2024 09:43	SRT	F
Calcium, Total	4.1		mg/L	0.050	EPA 200.7	1	08/15/2024 09:51	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 09:43	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/15/2024 09:51	MSY	D1
Magnesium, Dissolved	0.68		mg/L	0.10	EPA 200.7	1	08/16/2024 09:43	SRT	F
Magnesium, Total	0.66		mg/L	0.050	EPA 200.7	1	08/15/2024 09:51	MSY	D1
Manganese, Dissolved	0.0092		mg/L	0.0050	EPA 200.7	1	08/16/2024 09:43	SRT	F
Manganese, Total	0.0073		mg/L	0.0025	EPA 200.7	1	08/15/2024 09:51	MSY	D1
Potassium, Dissolved	2.2		mg/L	0.50	EPA 200.7	1	08/16/2024 09:43	SRT	F
Potassium, Total	0.84		mg/L	0.25	EPA 200.7	1	08/15/2024 09:51	MSY	D1
Sodium, Dissolved	230		mg/L	0.50	EPA 200.7	1	08/16/2024 09:43	SRT	F
Sodium, Total	227		mg/L	0.25	EPA 200.7	1	08/15/2024 09:51	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	08/21/2024 13:24	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 13:24	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	93.1%	70 - 130	08/21/2024 13:24	

### WET CHEMISTRY



## Results

Client Sample ID	3088 River Road, Conestoga PA	Collected	08/12/2024 10:03
Lab Sample ID	3373237001	Lab Receipt	08/12/2024 16:05

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	169		mg/L	5	SM2320B-2011	1	08/20/2024 17:36	KMV	A
Alkalinity, Total	196	1	mg/L	5	SM2320B-2011	1	08/20/2024 17:36	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/14/2024 15:17	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/14/2024 11:40	KMS	C
Chloride	228		mg/L	5.0	EPA 300.0	5	08/16/2024 01:51	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/13/2024 13:18	J1W	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/26/2024 17:47	PAG	K
Nitrate-N	5.4		mg/L	1.0	EPA 300.0	2	08/13/2024 13:18	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/13/2024 13:18	J1W	A
pH	8.31	2	pH_Units		S4500HB-11	1	08/15/2024 15:52	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/22/2024 15:43	AKH	J
Specific Conductance	1120		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	08/13/2024 13:18	J1W	A
Total Dissolved Solids	610		mg/L	25	SM2540C-15	1	08/14/2024 16:15	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/15/2024 04:06	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/13/2024 09:01	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373237001	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 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
3373237001	3088 River Road, Conestoga PA	N/A	N/A	N/A		Field	1279399
		EPA TRMD	1273021	08/13/2024 07:30	MEM	EPA 200.7	1275169
		EPA ACID	1276925	08/16/2024 06:07	SRT	EPA 200.7	1276926
		N/A	N/A	N/A		EPA 524.2	1280570
		N/A	N/A	N/A		EPA 300.0	1275128
		N/A	N/A	N/A		EPA 300.0	1273012
		N/A	N/A	N/A		EPA 410.4	1274243
		SW846 9066	1280609	08/21/2024 13:45	AKH	EPA 420.4	1280635
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1274222
		N/A	N/A	N/A		SM2130B-2011	1273015
		N/A	N/A	N/A		SM2320B-2011	1279250
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1274245
		N/A	N/A	N/A		SM5310B-14	1274530
		N/A	N/A	N/A		SW846 9020B	1283642

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.**

3373237  
 Logged By: SLS  
 PM: SJB

of

Client Name: LCSWMA Hans Weber and Deb Kalbach  
 Address: 3088 River Rd  
 Conestoga Pa 17516

Contact: Hans Weber and Deb Kalbach  
 Phone#: 717-419-7982

Project Name#: LCSWMA Quarterly  
 Bill To: LCSWMA Hans Weber and Deb Kalbach

Purchase Order #:                       
 Normal-Standard TAT is 10-12 business days.  
 Rush-Subject to ALS approval and surcharges.

Date Required:                      Approved?  
 Email?

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yyyy	Time hh:mm	Container Type	AG	AN	AN	CG	P	P	P	P	P	P	P
1 3088RIVERRD	8/12/24	1003	G	DW	2	2	1	3	X	1	2	1	2	1
2 Trip Blank	8/12/24	1605	G	Di			2							
3														
4														
5														
6														
7														
8														
9														
10														

SDWA Sample Type (see key)                     

\*G or C                     

\*\*Matrix (See bottom of COC)                     

Enter Number of Containers Per Sample or Field Results Below.

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

TOC                     

TOX                     

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,Tp                     

Alkalinity, HCO3                     

Circle Sample Collector: ALS Tech / Client Name:                      ID:                     

Comments:                     

Date	Time	Relinquished By / Company Name
8-12-24	1605	<u>                    </u>

Received By / Company Name                     

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                     

Equis                      Lab                      WV                     

Custom                      Special                      FL                     

other                     

EDDS:                      Format Type





Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR-2024 3100 RIVER RD  
 Workorder 3373273  
 Report ID 350014 on 8/29/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 12, 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>
3373273001	3100 River Road, Conestoga, PA	Water	08/12/2024 13:10	08/12/2024 16:05	BGS	Analytical Laboratory Service
3373273002	Trip Blank	Water	08/12/2024 16:05	08/12/2024 16:05	BGS	Analytical Laboratory Service



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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	3100 River Road, Conestoga, PA	Collected	08/12/2024 13:10
Lab Sample ID	3373273001	Lab Receipt	08/12/2024 16:05

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.25	pH_Units		Field	#
Specific Conductance, Field	235	umhos/cm	1	Field	#
Temperature	16.50	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	12.7	mg/L	0.10	EPA 200.7	#
Calcium, Total	13.5	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	6.7	mg/L	0.10	EPA 200.7	#
Magnesium, Total	7.1	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.012	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.011	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.1	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.5	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	18.3	mg/L	0.50	EPA 200.7	#
Sodium, Total	17.4	mg/L	0.25	EPA 200.7	#
<b>VOLATILE ORGANICS</b>					
Methylene Chloride	0.50	ug/L	0.50	EPA 524.2	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	19	mg/L	5	SM2320B-2011	#
Alkalinity, Total	19	mg/L	5	SM2320B-2011	#
Chloride	46.6	mg/L	2.0	EPA 300.0	#
Nitrate-N	3.4	mg/L	1.0	EPA 300.0	#
pH	7.31	pH_Units		S4500HB-11	#
Specific Conductance	229	umhos/cm	5	SM2510B-2011	#
Sulfate	8.5	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	175	mg/L	25	SM2540C-15	#



## Results

Client Sample ID	3100 River Road, Conestoga, PA	Collected	08/12/2024 13:10
Lab Sample ID	3373273001	Lab Receipt	08/12/2024 16:05

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.25		pH_Units		Field	1	08/12/2024 13:10	BGS	P
Specific Conductance, Field	235		umhos/cm	1	Field	1	08/12/2024 13:10	BGS	P
Temperature	16.50		Deg. C		Field	1	08/12/2024 13:10	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	12.7		mg/L	0.10	EPA 200.7	1	08/16/2024 10:16	SRT	F
Calcium, Total	13.5		mg/L	0.050	EPA 200.7	1	08/19/2024 09:55	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 10:16	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/19/2024 09:55	MSY	D1
Magnesium, Dissolved	6.7		mg/L	0.10	EPA 200.7	1	08/16/2024 10:16	SRT	F
Magnesium, Total	7.1		mg/L	0.050	EPA 200.7	1	08/19/2024 09:55	MSY	D1
Manganese, Dissolved	0.012		mg/L	0.0050	EPA 200.7	1	08/16/2024 10:16	SRT	F
Manganese, Total	0.011		mg/L	0.0025	EPA 200.7	1	08/19/2024 09:55	MSY	D1
Potassium, Dissolved	2.1		mg/L	0.50	EPA 200.7	1	08/16/2024 10:16	SRT	F
Potassium, Total	1.5		mg/L	0.25	EPA 200.7	1	08/19/2024 09:55	MSY	D1
Sodium, Dissolved	18.3		mg/L	0.50	EPA 200.7	1	08/16/2024 10:16	SRT	F
Sodium, Total	17.4		mg/L	0.25	EPA 200.7	1	08/19/2024 09:55	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	08/22/2024 03:58	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Methylene Chloride	0.50		ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 03:58	PDK	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	93%	70 - 130	08/22/2024 03:58	

### WET CHEMISTRY



## Results

Client Sample ID	3100 River Road, Conestoga, PA	Collected	08/12/2024 13:10
Lab Sample ID	3373273001	Lab Receipt	08/12/2024 16:05

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	19		mg/L	5	SM2320B-2011	1	08/20/2024 19:45	KMV	A
Alkalinity, Total	19	1	mg/L	5	SM2320B-2011	1	08/20/2024 19:45	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/14/2024 11:48	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/14/2024 11:40	KMS	C
Chloride	46.6		mg/L	2.0	EPA 300.0	2	08/13/2024 14:39	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/13/2024 14:39	J1W	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/28/2024 17:31	PAG	K
Nitrate-N	3.4		mg/L	1.0	EPA 300.0	2	08/13/2024 14:39	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/13/2024 14:39	J1W	A
pH	7.31	2	pH_Units		S4500HB-11	1	08/15/2024 18:07	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/22/2024 16:06	AKH	J
Specific Conductance	229		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	8.5		mg/L	2.0	EPA 300.0	2	08/13/2024 14:39	J1W	A
Total Dissolved Solids	175		mg/L	25	SM2540C-15	1	08/15/2024 14:19	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/16/2024 00:33	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/13/2024 09:01	NPF	A



## Results

Client Sample ID	Trip Blank	Collected	08/12/2024 16:05
Lab Sample ID	3373273002	Lab Receipt	08/12/2024 16:05

### 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	08/22/2024 12:09	ILY	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/22/2024 12:09	ILY	A

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	96.2%	70 - 130	08/22/2024 12:09	





### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373273001	3100 River Road, Conestoga, PA	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	
3373273002	Trip Blank	EPA 524.2	N/A	



**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3373273001	3100 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1279399
		EPA ACID	1276928	08/16/2024 06:11	SRT	EPA 200.7	1276929
		EPA TRMD	1273016	08/13/2024 07:30	MEM	EPA 200.7	1278635
		N/A	N/A	N/A		EPA 524.2	1280730
		N/A	N/A	N/A		EPA 300.0	1273012
		N/A	N/A	N/A		EPA 410.4	1274243
		SW846 9066	1280609	08/21/2024 13:45	AKH	EPA 420.4	1280635
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1274222
		N/A	N/A	N/A		SM2130B-2011	1273015
		N/A	N/A	N/A		SM2320B-2011	1279250
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1274332
		N/A	N/A	N/A		SM5310B-14	1275936
		N/A	N/A	N/A		SW846 9020B	1284772
3373273002	Trip Blank	N/A	N/A	N/A		EPA 524.2	1281038



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.

3373273

Logged By: SLS  
PM: SJB



of

Client Name: LCSWMA Landowner

Address: 3100 River Rd  
Conestoga Pa 17516

Contact: Ann Kirchner  
Phone#: 717-584-0030

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?

Temp Taken By: LVS Therm ID: 525 WO Temp (°C) 4  
Receipt Info completed by: DAG VW Containers 0-6°C Y N (NA)  
Cooler Custody Seals Intact Y N (NA) Deviations? NO (YES)  
Sample Custody Seal Intact Y N (NA) If YES, list below  
Received on Ice Y N (NA) bottle size  
Coolers & Samples Intact Y N (NA)  
Correct Containers Provided Y N (NA)  
Sample Label/COC Agree Y N (NA)  
Adequate Sample Volumes Y N (NA)  
VOA only: Trip Blank Y N (NA)  
NJ ≤ 4 days? Y N  
Courier/Tracking # N  
Client contact: DAG-8/12/24  
Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi) \_\_\_\_\_  
Reportable SDWA Sample(s)? Y N New Source? Y N  
SDWA State of Origin? \_\_\_\_\_ New Source Contact: \_\_\_\_\_  
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

Time	Date Collected	mm/dd/yy	Time	hh:mm
1	8/12/24	1310		
2	8/12/24	1605		
3				
4				
5				
6				
7				
8				
9				
10				

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

Standard Lvl 1  CLP-like  HSCA  
Standard Lvl 2  DOD  Landfill  
Standard Lvl 3  NJ RED  NJ GW  
Standard Lvl 4  NJ Full   
Excel Summary  Sample Disposal  
Equis  Lab   
Custom  Special

State Samples Collected In  
NY  NJ  PA  WV  FL  other \_\_\_\_\_

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

SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	TOC	TOX	O-OH	EPA 524.2 Form 52	TM	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, Cr, Pb	Alkalinity, HCO3
G DW			2	2	1	3	X	1	2	2	1	1
G Di						2						

Time	Date Collected	mm/dd/yy	Time	hh:mm
1	8/12/24	1310		
2	8/12/24	1605		
3				
4				
5				
6				
7				
8				
9				
10				

Received By / Company Name: DAG/ALS

Comments: \_\_\_\_\_

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | [www.alsglobal.com](http://www.alsglobal.com)  
 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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 3RD QTR 2024-3106 RIVER RD  
 Workorder 3373236  
 Report ID 349190 on 8/27/2024

### Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 12, 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>
3373236001	3106 River Road, Conestoga, PA	Water	08/12/2024 10:35	08/12/2024 16:05	BGS	Analytical Laboratory Service



## Reference

### Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, 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	3106 River Road, Conestoga, PA	Collected	08/12/2024 10:35
Lab Sample ID	3373236001	Lab Receipt	08/12/2024 16:05

Compound	Result	Units	RDL	Method	Flag
<b>FIELD PARAMETERS</b>					
pH, Field (SM4500B)	7.28	pH_Units		Field	#
Specific Conductance, Field	463	umhos/cm	1	Field	#
Temperature	16.70	Deg. C		Field	#
<b>METALS</b>					
Calcium, Dissolved	20.8	mg/L	0.10	EPA 200.7	#
Calcium, Total	21.8	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	12.7	mg/L	0.10	EPA 200.7	#
Magnesium, Total	13.1	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.034	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.037	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.6	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.8	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	43.1	mg/L	0.50	EPA 200.7	#
Sodium, Total	40.4	mg/L	0.25	EPA 200.7	#
<b>WET CHEMISTRY</b>					
Alkalinity, Bicarbonate	20	mg/L	5	SM2320B-2011	#
Alkalinity, Total	20	mg/L	5	SM2320B-2011	#
Chloride	102	mg/L	2.0	EPA 300.0	#
Nitrate-N	8.8	mg/L	1.0	EPA 300.0	#
pH	7.23	pH_Units		S4500HB-11	#
Specific Conductance	458	umhos/cm	5	SM2510B-2011	#
Sulfate	8.4	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	294	mg/L	25	SM2540C-15	#





## Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	08/12/2024 10:35
Lab Sample ID	3373236001	Lab Receipt	08/12/2024 16:05

### FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.28		pH_Units		Field	1	08/12/2024 10:35	BGS	P
Specific Conductance, Field	463		umhos/cm	1	Field	1	08/12/2024 10:35	BGS	P
Temperature	16.70		Deg. C		Field	1	08/12/2024 10:35	BGS	P

### METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	20.8		mg/L	0.10	EPA 200.7	1	08/16/2024 09:46	SRT	F
Calcium, Total	21.8		mg/L	0.050	EPA 200.7	1	08/15/2024 09:40	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	08/16/2024 09:46	SRT	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	08/15/2024 09:40	MSY	D1
Magnesium, Dissolved	12.7		mg/L	0.10	EPA 200.7	1	08/16/2024 09:46	SRT	F
Magnesium, Total	13.1		mg/L	0.050	EPA 200.7	1	08/15/2024 09:40	MSY	D1
Manganese, Dissolved	0.034		mg/L	0.0050	EPA 200.7	1	08/16/2024 09:46	SRT	F
Manganese, Total	0.037		mg/L	0.0025	EPA 200.7	1	08/15/2024 09:40	MSY	D1
Potassium, Dissolved	2.6		mg/L	0.50	EPA 200.7	1	08/16/2024 09:46	SRT	F
Potassium, Total	1.8		mg/L	0.25	EPA 200.7	1	08/15/2024 09:40	MSY	D1
Sodium, Dissolved	43.1		mg/L	0.50	EPA 200.7	1	08/16/2024 09:46	SRT	F
Sodium, Total	40.4		mg/L	0.25	EPA 200.7	1	08/15/2024 09:40	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	08/21/2024 12:59	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	08/21/2024 12:59	ILY	M

### SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	88.9%	70 - 130	08/21/2024 12:59	

### WET CHEMISTRY



## Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	08/12/2024 10:35
Lab Sample ID	3373236001	Lab Receipt	08/12/2024 16:05

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	20		mg/L	5	SM2320B-2011	1	08/20/2024 17:22	KMV	A
Alkalinity, Total	20	1	mg/L	5	SM2320B-2011	1	08/20/2024 17:22	KMV	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	08/14/2024 13:27	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	08/14/2024 11:40	KMS	C
Chloride	102		mg/L	2.0	EPA 300.0	2	08/13/2024 13:07	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	08/13/2024 13:07	J1W	A
Halogen, Total Organic (TOX)	ND	ND	ug/L	20.0	SW846 9020B	1	08/26/2024 17:47	PAG	K
Nitrate-N	8.8		mg/L	1.0	EPA 300.0	2	08/13/2024 13:07	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	08/13/2024 13:07	J1W	A
pH	7.23	2	pH_Units		S4500HB-11	1	08/15/2024 15:37	KMV	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	08/22/2024 15:36	AKH	J
Specific Conductance	458		umhos/cm	5	SM2510B-2011	1	08/16/2024 10:05	KMV	A
Sulfate	8.4		mg/L	2.0	EPA 300.0	2	08/13/2024 13:07	J1W	A
Total Dissolved Solids	294		mg/L	25	SM2540C-15	1	08/14/2024 16:15	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	08/15/2024 04:06	PAG	H
Turbidity	ND	ND	NTU	0.30	SM2130B-2011	1	08/13/2024 09:01	NPF	A



### Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3373236001	3106 River Road, Conestoga, PA	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
3373236001	3106 River Road, Conestoga, PA	N/A	N/A	N/A		Field	1279399
		EPA ACID	1276925	08/16/2024 06:07	SRT	EPA 200.7	1276926
		EPA TRMD	1273021	08/13/2024 07:30	MEM	EPA 200.7	1275169
		N/A	N/A	N/A		EPA 524.2	1280570
		N/A	N/A	N/A		EPA 300.0	1273012
		N/A	N/A	N/A		EPA 410.4	1274243
		SW846 9066	1280609	08/21/2024 13:45	AKH	EPA 420.4	1280635
		N/A	N/A	N/A		S4500HB-11	1274526
		N/A	N/A	N/A		SM 4500-NH3G	1274222
		N/A	N/A	N/A		SM2130B-2011	1273015
		N/A	N/A	N/A		SM2320B-2011	1279250
		N/A	N/A	N/A		SM2510B-2011	1276734
		N/A	N/A	N/A		SM2540C-15	1274245
		N/A	N/A	N/A		SM5310B-14	1274530
N/A	N/A	N/A		SW846 9020B	1283642		

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.

3373236  
Logged By: SLS  
PM: SJB

36 of

Client Name: LCSWMA Aaron Fry		Address: 3106 River Rd Conestoga Pa 17516		Contact: Aaron Fry Phone#: 717-669-8831 Project Name#: LCSWMA Quarterly Bill To: LCSWMA Aaron Fry Purchase Order #: TAT <input checked="" type="checkbox"/> Normal-Standard TAT is 10-12 business days. <input type="checkbox"/> Rush-Subject to ALS approval and surcharges. Date Required: Approved? Email? <input type="checkbox"/>	
Container Type	AG	AN	AN	CG	P
Container Size	40ml	250ml	125ml	40ml	125ml
Preservative	HCL	H2SO4	H2SO4	ASCHCL	HNO3
Orthophosphate Filtered?		Yes	No	Hexavalent Chromium Filtered?	
SDWA Sample Type (see key)		G	DW	Enter Number of Containers Per Sample or Field Results Below.	
G or C		2	1	3	1
Matrix (See bottom of COC)		TOC	TOX	TM	Alkalinity, HCO3
Dissolved Metals Ca, Fe, Mg, Mn, K, Na		EPA 524.2 Form 52		pH, TDS, NO2, NO3, Cl, SO4, F, Sp, Cl, T, B	
Metals Ca, Fe, Mg, Mn, K, Na		NH3-N, COD		Metals Ca, Fe, Mg, Mn, K, Na	
SDWA Sample Type (see key)		G	DW	2	1
G or C		2	1	3	1
Matrix (See bottom of COC)		TOC	TOX	TM	Alkalinity, HCO3
Dissolved Metals Ca, Fe, Mg, Mn, K, Na		EPA 524.2 Form 52		pH, TDS, NO2, NO3, Cl, SO4, F, Sp, Cl, T, B	
Metals Ca, Fe, Mg, Mn, K, Na		NH3-N, COD		Metals Ca, Fe, Mg, Mn, K, Na	
SDWA Sample Type (see key)		G	DW	Enter Number of Containers Per Sample or Field Results Below.	
G or C		2	1	3	1
Matrix (See bottom of COC)		TOC	TOX	TM	Alkalinity, HCO3
Dissolved Metals Ca, Fe, Mg, Mn, K, Na		EPA 524.2 Form 52		pH, TDS, NO2, NO3, Cl, SO4, F, Sp, Cl, T, B	
Metals Ca, Fe, Mg, Mn, K, Na		NH3-N, COD		Metals Ca, Fe, Mg, Mn, K, Na	
SDWA Sample Type (see key)		G	DW	Enter Number of Containers Per Sample or Field Results Below.	
G or C		2	1	3	1
Matrix (See bottom of COC)		TOC	TOX	TM	Alkalinity, HCO3
Dissolved Metals Ca, Fe, Mg, Mn, K, Na		EPA 524.2 Form 52		pH, TDS, NO2, NO3, Cl, SO4, F, Sp, Cl, T, B	
Metals Ca, Fe, Mg, Mn, K, Na		NH3-N, COD		Metals Ca, Fe, Mg, Mn, K, Na	

Receipt Info: *mm/dd/yyyy* *hh:mm* *WO Temp (°C)* *WO Temp (°C)*

Temp By: *05* *7* *S10*

Receipt Info Completed By: *DPB*

Cooler Custody Seal Intact: *Y N N A*

Sample Custody Seal Intact: *Y N N A*

Received on Ice: *Y N N A*

Cooler & Samples Intact: *Y N N A*

Correct Containers Provided: *Y N N A*

Sample Label/COC Agree: *Y N N A*

Adequate Sample Volumes: *Y N N A*

CR6 Samples Filtered: *Y N N A*

OP Samples Filtered: *Y N N A*

VOA Trip Blank: *Y N N A*

NJ≤4 Days? *Y*

Rad Screen (uCi): *Y*

Courier/Tracking #: *Y*

SDWA Compliance: *Y N*

PWSID: *Y N*

WV Containers 0-6°C: *Y N*

ad Screen (uCi): *Y N*

SW Source?: *Y N*

SW Source Contact: *Y N*

Client contact: *Date/Tech: A*

State Samples Collected In:  NY  NJ  PA  WV  FL  other

Standard Lvl 1  CLP-like  HSCA

Standard Lvl 2  DOD  Landfill

Standard Lvl 3  NJ RED  NJ GW

Standard Lvl 4  NJ Full

Excel Summary  Lab  Special

Equis

Custom

EDDS:

Format Type

Circle Sample Collector: *ALS Tech* Client ID: *ALS*

Date: *8/12/24* *1605* Relinquished By / Company Name: *ALS*

*1* *1605*

*3*

*5*

*7*

*9*

*10*

Comments:

Internal Use: If less than 48 hours - notify lab upon receipt

Contains Short Hold Testing YES NO

Sample/COC Remarks

SDWA Sample Type Key: D=Distribution E=Entry Point  
R=Raw P=Plant C=Check S=Special A=Annual Startup

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

\*G=Grab; C=Composite \*\*Matrix: A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater