2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/07/2025 Sample Collection Time: 3:00 PM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/07/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.65	SM4500D
BICARBONATE ALKALINITY	49	SM20-2321
CALCIUM, TOTAL	25.3	EPA 200.7
CALCIUM, DISSOLVED	27.8	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	11.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	200	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	12.1	EPA 200.7
MAGNESIUM, DISSOLVED	13.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	10	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	7.7	EPA 200.7
NITRATE-NITROGEN	19.4	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 LCSWMA

Sample Date: 05/07/2025

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)	6.13	FIELD
pH-LAB (SU)	7.77	SM4500B
POTASSIUM, TOTAL	4.3	EPA 200.7
POTASSIUM, DISSOLVED	4.4	EPA 200.7
SODIUM, TOTAL	6	EPA 200.7
SODIUM, DISSOLVED	6.2	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	316	FIELD
SPEC. COND., LAB (umhos/cm)	309	EPA 120.1
SULFATE	11.2	EPA 300
ALKALINITY	49	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	244	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	4.6	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	10	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/07/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
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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

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/07/2025 Sample Collection Time: 3:30 PM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS MILLER

Sample Date: 05/07/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	10	SM20-2321
CALCIUM, TOTAL	15.9	EPA 200.7
CALCIUM, DISSOLVED	18.1	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	19.3	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	8	EPA 200.7
MAGNESIUM, DISSOLVED	9.2	EPA 200.7
MANGANESE, TOTAL (ug/l)	22	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	24	EPA 200.7
NITRATE-NITROGEN	17.3	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS MILLER

Sample Date: 05/07/2025

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)	5.27	FIELD
pH-LAB (SU)	6.86	SM4500B
POTASSIUM, TOTAL	1.7	EPA 200.7
POTASSIUM, DISSOLVED	1.8	EPA 200.7
SODIUM, TOTAL	7.7	EPA 200.7
SODIUM, DISSOLVED	8.1	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	231	FIELD
SPEC. COND., LAB (umhos/cm)	226	EPA 120.1
SULFATE	2.9	EPA 300
ALKALINITY	10	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)	1.7	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS MILLER

Sample Date: 05/07/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/07/2025 Sample Collection Time: 3:50 PM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/07/2025

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	12.1	EPA 200.7
CALCIUM, DISSOLVED	13.5	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	21.7	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	9.9	EPA 200.7
MAGNESIUM, DISSOLVED	11.5	EPA 200.7
MANGANESE, TOTAL (ug/l)	48	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	52	EPA 200.7
NITRATE-NITROGEN	18.5	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/07/2025

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)	4.72	FIELD
pH-LAB (SU)	6.38	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	2	EPA 200.7
SODIUM, TOTAL	8.2	EPA 200.7
SODIUM, DISSOLVED	8.4	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	242	FIELD
SPEC. COND., LAB (umhos/cm)	229	EPA 120.1
SULFATE	2 ND	EPA 300
ALKALINITY	5 ND	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	170	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1.1	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/07/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/09/2025 Sample Collection Time: 12:10 PM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/09/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	8	SM20-2321
CALCIUM, TOTAL	10.7	EPA 200.7
CALCIUM, DISSOLVED	10.1	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	15.6	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	75	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	11.4	EPA 200.7
MAGNESIUM, DISSOLVED	10.6	EPA 200.7
MANGANESE, TOTAL (ug/l)	81	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	81	EPA 200.7
NITRATE-NITROGEN	15	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/09/2025

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)	5.42	FIELD
pH-LAB (SU)	6.95	SM4500B
POTASSIUM, TOTAL	2.9	EPA 200.7
POTASSIUM, DISSOLVED	2.8	EPA 200.7
SODIUM, TOTAL	9.1	EPA 200.7
SODIUM, DISSOLVED	8.6	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	246	FIELD
SPEC. COND., LAB (umhos/cm)	215	EPA 120.1
SULFATE	8.7	EPA 300
ALKALINITY	8	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	171	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1.1	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/09/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
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PRIVATE WATER SUPPLY
QUARTERLY WATER QUALITY ANALYSES

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/09/2025 Sample Collection Time: 12:55 PM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number
101389

Monitoring Point I.D. No.
PS SENSENICH

Sample Date
05/09/2025

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	14.9	EPA 200.7
CALCIUM, DISSOLVED	13.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	59.2	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	8.8	EPA 200.7
MAGNESIUM, DISSOLVED	8.4	EPA 200.7
MANGANESE, TOTAL (ug/l)	120	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	120	EPA 200.7
NITRATE-NITROGEN	7.7	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS SENSENICH

Sample Date: 05/09/2025

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)	5.1	FIELD
pH-LAB (SU)	7.24	SM4500B
POTASSIUM, TOTAL	3.3	EPA 200.7
POTASSIUM, DISSOLVED	2.9	EPA 200.7
SODIUM, TOTAL	29.4	EPA 200.7
SODIUM, DISSOLVED	26.7	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	345	FIELD
SPEC. COND., LAB (umhos/cm)	303	EPA 120.1
SULFATE	8.6	EPA 300
ALKALINITY	9	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	222	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1.1	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS SENSENICH

Sample Date: 05/09/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/08/2025 Sample Collection Time: 2:14 PM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/08/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	21	SM20-2321
CALCIUM, TOTAL	11.4	EPA 200.7
CALCIUM, DISSOLVED	10.6	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	30.9	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	5.7	EPA 200.7
MAGNESIUM, DISSOLVED	5.7	EPA 200.7
MANGANESE, TOTAL (ug/l)	21	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	20	EPA 200.7
NITRATE-NITROGEN	2	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/08/2025

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)	5.66	FIELD
pH-LAB (SU)	7.42	SM4500B
POTASSIUM, TOTAL	1.9	EPA 200.7
POTASSIUM, DISSOLVED	1.8	EPA 200.7
SODIUM, TOTAL	14	EPA 200.7
SODIUM, DISSOLVED	13.1	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	192	FIELD
SPEC. COND., LAB (umhos/cm)	180	EPA 120.1
SULFATE	8.7	EPA 300
ALKALINITY	21	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	124	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

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS LCSWMA

Sample Date: 05/08/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/08/2025 Sample Collection Time: 2:50 PM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 06/02/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS WEBER

Sample Date: 05/08/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	144	SM20-2321
CALCIUM, TOTAL	1.9	EPA 200.7
CALCIUM, DISSOLVED	1.7	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	264	EPA 300
FLUORIDE	0.5 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	0.28	EPA 200.7
MAGNESIUM, DISSOLVED	0.25	EPA 200.7
MANGANESE, TOTAL (ug/l)	3	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	6.6	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS WEBER

Sample Date: 05/08/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
NITRITE - NITROGEN	2.5 ND	EPA 300
pH-FIELD (SU)	6.86	FIELD
pH-LAB (SU)	8.38	SM4500B
POTASSIUM, TOTAL	1.3	EPA 200.7
POTASSIUM, DISSOLVED	0.5 ND	EPA 200.7
SODIUM, TOTAL	268	EPA 200.7
SODIUM, DISSOLVED	262	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	1217	FIELD
SPEC. COND., LAB (umhos/cm)	1220	EPA 120.1
SULFATE	5 ND	EPA 300
ALKALINITY	194	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	670	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.65	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS WEBER

Sample Date: 05/08/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/09/2025 Sample Collection Time: 11:30 AM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS KIRCHNER

Sample Date: 05/09/2025

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	15	EPA 200.7
CALCIUM, DISSOLVED	14	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	52	EPA 300
FLUORIDE	0.2 ND	EPA 300
IRON, TOTAL (ug/l)	30 ND	EPA 200.7
IRON, DISSOLVED (ug/l)	60 ND	EPA 200.7
MAGNESIUM, TOTAL	8	EPA 200.7
MAGNESIUM, DISSOLVED	7.8	EPA 200.7
MANGANESE, TOTAL (ug/l)	13	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	13	EPA 200.7
NITRATE-NITROGEN	4.8	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 KIRCHNER

Sample Date: 05/09/2025

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)	5.71	FIELD
pH-LAB (SU)	7.39	SM4500B
POTASSIUM, TOTAL	1.7	EPA 200.7
POTASSIUM, DISSOLVED	1.6	EPA 200.7
SODIUM, TOTAL	20.8	EPA 200.7
SODIUM, DISSOLVED	18.8	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	266	FIELD
SPEC. COND., LAB (umhos/cm)	254	EPA 120.1
SULFATE	6.1	EPA 300
ALKALINITY	13	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	201	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	1.4	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS KIRCHNER

Sample Date: 05/09/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/09/2025 Sample Collection Time: 10:15 AM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS FRY

Sample Date: 05/09/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	15	SM20-2321
CALCIUM, TOTAL	24.3	EPA 200.7
CALCIUM, DISSOLVED	23.4	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	121	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	15.8	EPA 200.7
MAGNESIUM, DISSOLVED	15.9	EPA 200.7
MANGANESE, TOTAL (ug/l)	43	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	43	EPA 200.7
NITRATE-NITROGEN	8.2	EPA 300

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS FRY

Sample Date: 05/09/2025

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)	5.76	FIELD
pH-LAB (SU)	7.23	SM4500B
POTASSIUM, TOTAL	2	EPA 200.7
POTASSIUM, DISSOLVED	2.1	EPA 200.7
SODIUM, TOTAL	46.1	EPA 200.7
SODIUM, DISSOLVED	46.5	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	533	FIELD
SPEC. COND., LAB (umhos/cm)	515	EPA 120.1
SULFATE	6	EPA 300
ALKALINITY	15	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	392	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	0.5 ND	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	0.55	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS FRY

Sample Date: 05/09/2025

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.

2540-FM-BWM0060 Rev. 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Date Prepared/Revised
07/09/2025
DEP USE ONLY
Date Received

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

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

General Reference: Act 101 Section 1103

SECTION A. SITE IDENTIFIER

Applicant/permittee: Lancaster County Solid Waste Manage

Site Name: Frey Farm Landfill

Facility ID (as issued by DEP): 101389

SECTION B. PRIVATE WATER SUPPLY INFORMATION

INDICATE THE LATITUDE AND LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (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: [X] Land Surface [ ] TOC

Casing Stick Up: ft. Elevation of Water Level: ft./MSL

Total Well Depth: ft.

Sampling Depth: ft. Sampling Method: [ ] Pumped [ ] Bailed

Well Purged: [ ] Yes [X] No Well Volumes Purged:

Sample Field Filtered (must be 0.45 micron)?: [X] Yes [ ] No

Sample Date:(mm/dd/yy) 05/09/2025 Sample Collection Time: 10:55 AM

Laboratory(ies) Performing Analysis (include address and phone number): ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057 (717) 944-5541

Lab Accreditation Number(s): 22-293

Lab Analysis Date: 05/29/2025

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

Comments:

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS BECK

Sample Date: 05/09/2025

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

PARAMETER	VALUE	ANALYSIS METHOD NUMBER
AMMONIA-NITROGEN	0.1 ND	SM4500D
BICARBONATE ALKALINITY	136	SM20-2321
CALCIUM, TOTAL	0.11	EPA 200.7
CALCIUM, DISSOLVED	0.1 ND	EPA 200.7
COD (CHEMICAL OXYGEN DEMAND)	15 ND	EPA 410.2
CHLORIDE	55.6	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	0.05 ND	EPA 200.7
MAGNESIUM, DISSOLVED	0.1 ND	EPA 200.7
MANGANESE, TOTAL (ug/l)	2.5 ND	EPA 200.7
MANGANESE, DISSOLVED (ug/l)	5 ND	EPA 200.7
NITRATE-NITROGEN	5.9	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 BECK

Sample Date: 05/09/2025

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)	7.07	FIELD
pH-LAB (SU)	8.16	SM4500B
POTASSIUM, TOTAL	0.25 ND	EPA 200.7
POTASSIUM, DISSOLVED	0.5 ND	EPA 200.7
SODIUM, TOTAL	112	EPA 200.7
SODIUM, DISSOLVED	113	EPA 200.7
SPEC. COND., FIELD (umhos/cm)	509	FIELD
SPEC. COND., LAB (umhos/cm)	482	EPA 120.1
SULFATE	8.1	EPA 300
ALKALINITY	136	SM20-2320B
TDS (TOT. DISSOLVED SOLIDS)	318	SM20-2540C
TOC (TOTAL ORGANIC CARBON)	1.1	SM20-5310B
TOTAL PHENOLICS (ug/l)	5 ND	EPA 420.4
TURBIDITY (NTU)	2	SM 2130B

T Please indicate detection limit if analyte is not detected.

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

Facility I.D. Number: 101389

Monitoring Point I.D. No.: PS BECK

Sample Date: 05/09/2025

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

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

T Please indicate detection limit if analyte is not detected.

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025 3044 RIVER RD
Workorder 3414234
Report ID 423895 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 07, 2025.

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.

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.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414234001	3044 River Road, Conestoga, PA	Water	05/07/2025 15:00	05/07/2025 17:00	EMP	ALS Environmental-Middletown
3414234002	Trip Blank	Water	05/07/2025 15:00	05/07/2025 17:00	EMP	ALS Environmental-Middletown
3414234003	Field Blank	Water	05/07/2025 15:00	05/07/2025 17:00	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3044 River Road, Conestoga, PA	Collected	05/07/2025 15:00
Lab Sample ID	3414234001	Lab Receipt	05/07/2025 17:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	6.13	pH_Units		Field	#
Specific Conductance, Field	316	umhos/cm	1	Field	#
Temperature	14.80	Deg. C		Field	#
METALS					
Calcium, Dissolved	27.8	mg/L	0.10	EPA 200.7	#
Calcium, Total	25.3	mg/L	0.050	EPA 200.7	#
Iron, Total	0.20	mg/L	0.030	EPA 200.7	#
Magnesium, Dissolved	13.8	mg/L	0.10	EPA 200.7	#
Magnesium, Total	12.1	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.0077	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.010	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	4.4	mg/L	0.50	EPA 200.7	#
Potassium, Total	4.3	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	6.2	mg/L	0.50	EPA 200.7	#
Sodium, Total	6.0	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	49	mg/L	5	SM2320B-2011	#
Alkalinity, Total	49	mg/L	5	SM2320B-2011	#
Ammonia-N, Low Level	0.65	mg/L	0.10	SM 4500-NH3G	#
Chloride	11.2	mg/L	2.0	EPA 300.0	#
Nitrate-N	19.4	mg/L	1.0	EPA 300.0	#
pH	7.77	pH_Units		S4500HB-11	#
Specific Conductance	309	umhos/cm	5	SM2510B-2011	#
Sulfate	11.2	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	244	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	4.6	mg/L	0.50	SM5310B-14	#
Turbidity	10	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3044 River Road, Conestoga, PA	Collected	05/07/2025 15:00
Lab Sample ID	3414234001	Lab Receipt	05/07/2025 17:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.13		pH_Units		Field	1	05/07/2025 15:00	E2P	P
Specific Conductance, Field	316		umhos/cm	1	Field	1	05/07/2025 15:00	E2P	P
Temperature	14.80		Deg. C		Field	1	05/07/2025 15:00	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	27.8		mg/L	0.10	EPA 200.7	1	05/17/2025 12:26	MSY	F
Calcium, Total	25.3		mg/L	0.050	EPA 200.7	1	05/15/2025 12:16	RBP	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 12:26	MSY	F
Iron, Total	0.20		mg/L	0.030	EPA 200.7	1	05/15/2025 12:16	RBP	D1
Magnesium, Dissolved	13.8		mg/L	0.10	EPA 200.7	1	05/17/2025 12:26	MSY	F
Magnesium, Total	12.1		mg/L	0.050	EPA 200.7	1	05/15/2025 12:16	RBP	D1
Manganese, Dissolved	0.0077		mg/L	0.0050	EPA 200.7	1	05/17/2025 12:26	MSY	F
Manganese, Total	0.010		mg/L	0.0025	EPA 200.7	1	05/15/2025 12:16	RBP	D1
Potassium, Dissolved	4.4		mg/L	0.50	EPA 200.7	1	05/17/2025 12:26	MSY	F
Potassium, Total	4.3		mg/L	0.25	EPA 200.7	1	05/15/2025 12:16	RBP	D1
Sodium, Dissolved	6.2		mg/L	0.50	EPA 200.7	1	05/17/2025 12:26	MSY	F
Sodium, Total	6.0		mg/L	0.25	EPA 200.7	1	05/15/2025 12:16	RBP	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	3			Subcontract	1	06/03/2025 13:09	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 14:16	TMP	M

Results

Client Sample ID	3044 River Road, Conestoga, PA	Collected	05/07/2025 15:00
Lab Sample ID	3414234001	Lab Receipt	05/07/2025 17:00

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	104%	70 – 130	05/09/2025 14:16	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	49		mg/L	5	SM2320B-2011	1	05/18/2025 04:47	JXK	A
Alkalinity, Total	49	1	mg/L	5	SM2320B-2011	1	05/18/2025 04:47	JXK	A
Ammonia-N, Low Level	0.65		mg/L	0.10	SM 4500-NH3G	1	05/12/2025 19:00	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/09/2025 11:05	KMS	C
Chloride	11.2		mg/L	2.0	EPA 300.0	2	05/08/2025 13:57	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/08/2025 13:57	J1W	A
Nitrate-N	19.4		mg/L	1.0	EPA 300.0	2	05/08/2025 13:57	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/08/2025 13:57	J1W	A
pH	7.77	2	pH_Units		S4500HB-11	1	05/18/2025 04:47	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 17:43	AKH	J
Specific Conductance	309		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	11.2		mg/L	2.0	EPA 300.0	2	05/08/2025 13:57	J1W	A
Total Dissolved Solids	244		mg/L	25	SM2540C-15	1	05/08/2025 14:40	RAG	A
Total Organic Carbon (TOC)	4.6		mg/L	0.50	SM5310B-14	1	05/08/2025 22:55	PAG	H
Turbidity	10		NTU	0.30	SM2130B-2011	1	05/08/2025 09:44	NPF	A

Results

Client Sample ID	Trip Blank	Collected	05/07/2025 15:00
Lab Sample ID	3414234002	Lab Receipt	05/07/2025 17:00

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:00	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	84.4%	70 – 130	05/19/2025 13:00	

Results

Client Sample ID	Field Blank	Collected	05/07/2025 15:00
Lab Sample ID	3414234003	Lab Receipt	05/07/2025 17:00

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 13:23	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	80.8%	70 – 130	05/19/2025 13:23	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414234001	3044 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	
3414234002	Trip Blank	EPA 524.2	N/A	
3414234003	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
3414234001	3044 River Road, Conestoga, PA	N/A	N/A	N/A		Field	
		EPA TRMD	1431079	05/09/2025 07:28	ANN	EPA 200.7	1433974
		EPA ACID	1435749	05/17/2025 11:50	MSY	EPA 200.7	1435764
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1431102
		N/A	N/A	N/A		EPA 300.0	1430852
		N/A	N/A	N/A		EPA 410.4	1431085
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435643
		N/A	N/A	N/A		SM 4500-NH3G	1432565
		N/A	N/A	N/A		SM2130B-2011	1430857
		N/A	N/A	N/A		SM2320B-2011	1435643
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1430906
		N/A	N/A	N/A		SM5310B-14	1430956
3414234002	Trip Blank	N/A	N/A	N/A		EPA 524.2	1437591
3414234003	Field Blank	N/A	N/A	N/A		EPA 524.2	1437591

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.

3414234
Logged By: SLS
PM: SJB

of

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike, Lancaster Pa 17604

Contact: Dan Brown

Phone#: 717-553-5864

Project Name/#: LCSWMA Quarterly

Bill To: LCSWMA

Purchase Order #:

TAT [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.

Date Required: **Approved?**

Email? [ ]

Container Type	AG	AN	AN	CG	P	P	P	P	P	P
Container Size	40ml	250ml	125ml	40ml	500ml	250ml	125ml	125ml	1L	
Preservative	HCL	H2SO4	H2SO4	ASCHCL	UNP	H2SO4	HNO3	HNO3	UNP	

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	TOX	O-OH	EPA 524.2 Form 52	Alkalinity, HCO3	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	
							Enter Number of Containers Per Sample or Field Results Below.									
1	3044RIVERRD	5-7-25	1500		G	DW	2	2	1	3	1	1	2	2	1	
2	Trip Blank	5-7-25	1500		G	Di				3/2	MP 5/7/25					
3	Field blank	5-7-25	1500		G	DI				3						
4																
5																
6																
7																
8																
9																
10																

(Receiving Lab) WO Temp (°C)

*Receipt Info completed by:*_____ WV 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, llist below
Received on Ice	Y	N	NA	
Coolers & Samples Intact	Y	N		
Correct Containers Provided	Y	N		
Sample Label/COC Agree	Y	N		
Adequate Sample Volumes	Y	N		
VOA only: Trip Blank	Y	N	NA	

NJ ≤ 4 days? Y N

Courier/Tracking #

Client contact: *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

Contains Short Hold Testing YES NO

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

Circle Sample Collector: ALS Tech / Client

Name: Evan P **ID:**

Comments: PH-6.13 temp-14.8°c Spc-316

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5-7-25	1700	1	ALS	2	TMRTS
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables

[ ] Standard Lvl 1	[ ] CLP-like	[ ] HSCA	
[ ] Standard Lvl 2	[ ] DOD	[ ] Landfill	
[ ] Standard Lvl 3	[ ] NJ RED	[ ] NJ GW	
[ ] Standard Lvl 4	[ ] NJ Full	[ ] _____	

EDDs

[ ] Excel Summary	
[ ] Equis	
[ ] Custom	

Sample Disposal

Lab	[x]
Special	[ ]

EDDS: Format Type

State Samples Collected In

[ ] NY	
[ ] NJ	
[x] PA	
[ ] WV	
[ ] FL	
____ other	

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client: Lancaster County Solid Waste Workorder: 3414234

Temp °C: 3 Therm ID: 569 Ice? (Y) N N/A Initials & Date: MP 5/7/25

Fedex UPS Client (ALS) Other Tracking #:

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement		✓		
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers		✓		UC
•Composite or grab	✓			
•Matrix	↓			
Proper containers, preservation, and volume per method				
Received within hold time				
Containers intact				
Trip blanks present (EPA 504, EPA 524)				
Field blanks present (Hg 1631, PFAS)	↓			
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			↓	
OP Samples Filtered				
WV Containers 0-6°C				
SDWA compliance reporting				

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing information

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G81

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G81

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414234001
Lab Order:	G2505G81		3044 River Road, Conestoga, PA
Project:		**Sampled By:**	ALS
Lab ID:	G2505G81-001	**Collection Date:**	5/7/2025 3:00:00 PM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 5:55:05 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50		µg/L	1	05/29/25 5:00 AM	05/29/25 9:55 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025 3052 RIVER RD
Workorder 3414235
Report ID 423894 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 07, 2025.

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.

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.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414235001	3052 River Road, Conestoga, PA	Water	05/07/2025 15:30	05/07/2025 17:00	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The 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.
4	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3052 River Road, Conestoga, PA	Collected	05/07/2025 15:30
Lab Sample ID	3414235001	Lab Receipt	05/07/2025 17:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	5.27	pH_Units		Field	#
Specific Conductance, Field	231	umhos/cm	1	Field	#
Temperature	18.10	Deg. C		Field	#
METALS					
Calcium, Dissolved	18.1	mg/L	0.10	EPA 200.7	#
Calcium, Total	15.9	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	9.2	mg/L	0.10	EPA 200.7	#
Magnesium, Total	8.0	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.024	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.022	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.8	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.7	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.1	mg/L	0.50	EPA 200.7	#
Sodium, Total	7.7	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	10	mg/L	5	SM2320B-2011	#
Alkalinity, Total	10	mg/L	5	SM2320B-2011	#
Chloride	19.3	mg/L	2.0	EPA 300.0	#
Nitrate-N	17.3	mg/L	1.0	EPA 300.0	#
pH	6.86	pH_Units		S4500HB-11	#
Specific Conductance	226	umhos/cm	5	SM2510B-2011	#
Sulfate	2.9	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	157	mg/L	25	SM2540C-15	#
Turbidity	1.7	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3052 River Road, Conestoga, PA	Collected	05/07/2025 15:30
Lab Sample ID	3414235001	Lab Receipt	05/07/2025 17:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	5.27		pH_Units		Field	1	05/07/2025 15:30	E2P	P
Specific Conductance, Field	231		umhos/cm	1	Field	1	05/07/2025 15:30	E2P	P
Temperature	18.10		Deg. C		Field	1	05/07/2025 15:30	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	18.1		mg/L	0.10	EPA 200.7	1	05/17/2025 12:28	MSY	F
Calcium, Total	15.9	3	mg/L	0.050	EPA 200.7	1	05/15/2025 12:19	RBP	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 12:28	MSY	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/15/2025 12:19	RBP	D1
Magnesium, Dissolved	9.2		mg/L	0.10	EPA 200.7	1	05/17/2025 12:28	MSY	F
Magnesium, Total	8.0	3	mg/L	0.050	EPA 200.7	1	05/15/2025 12:19	RBP	D1
Manganese, Dissolved	0.024		mg/L	0.0050	EPA 200.7	1	05/17/2025 12:28	MSY	F
Manganese, Total	0.022		mg/L	0.0025	EPA 200.7	1	05/15/2025 12:19	RBP	D1
Potassium, Dissolved	1.8		mg/L	0.50	EPA 200.7	1	05/17/2025 12:28	MSY	F
Potassium, Total	1.7		mg/L	0.25	EPA 200.7	1	05/15/2025 12:19	RBP	D1
Sodium, Dissolved	8.1		mg/L	0.50	EPA 200.7	1	05/17/2025 12:28	MSY	F
Sodium, Total	7.7		mg/L	0.25	EPA 200.7	1	05/15/2025 12:19	RBP	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	4			Subcontract	1	06/03/2025 13:07	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/12/2025 14:20	TMP	M

Results

Client Sample ID	3052 River Road, Conestoga, PA	Collected	05/07/2025 15:30
Lab Sample ID	3414235001	Lab Receipt	05/07/2025 17:00

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	106%	70 – 130	05/12/2025 14:20	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	10		mg/L	5	SM2320B-2011	1	05/18/2025 05:41	JXK	A
Alkalinity, Total	10	1	mg/L	5	SM2320B-2011	1	05/18/2025 05:41	JXK	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 21:39	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/09/2025 11:05	KMS	C
Chloride	19.3		mg/L	2.0	EPA 300.0	2	05/08/2025 14:09	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/08/2025 14:09	J1W	A
Nitrate-N	17.3		mg/L	1.0	EPA 300.0	2	05/08/2025 14:09	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/08/2025 14:09	J1W	A
pH	6.86	2	pH_Units		S4500HB-11	1	05/18/2025 05:41	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 17:39	AKH	J
Specific Conductance	226		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	2.9		mg/L	2.0	EPA 300.0	2	05/08/2025 14:09	J1W	A
Total Dissolved Solids	157		mg/L	25	SM2540C-15	1	05/08/2025 15:05	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	05/08/2025 22:55	PAG	H
Turbidity	1.7		NTU	0.30	SM2130B-2011	1	05/08/2025 09:44	NPF	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414235001	3052 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3414235001	3052 River Road, Conestoga, PA	N/A	N/A	N/A		Field	
		EPA TRMD	1431079	05/09/2025 07:28	ANN	EPA 200.7	1433974
		EPA ACID	1435749	05/17/2025 11:50	MSY	EPA 200.7	1435764
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1432580
		N/A	N/A	N/A		EPA 300.0	1430852
		N/A	N/A	N/A		EPA 410.4	1431085
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435643
		N/A	N/A	N/A		SM 4500-NH3G	1432565
		N/A	N/A	N/A		SM2130B-2011	1430857
		N/A	N/A	N/A		SM2320B-2011	1435643
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1430907
		N/A	N/A	N/A		SM5310B-14	1430956

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

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

3414235
Logged By: SLS
PM: SJB

of

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

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 [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.

Date Required: **Approved?**

Email? [ ]

Container Type	AG	AN	AN	CG		P	P	P	P	
Container Size	40ml	250ml	125ml	40ml		250ml	125ml	125ml	1L	500ml
Preservative	HCL	H2SO4	H2SO4	ASCHCL		H2SO4	HNO3	HNO3	UNP	UNP

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
							Enter Number of Containers Per Sample or Field Results Below.									
1	3052RIVERRD	5-7-25	1530		G	DW	2	2	1	3	x	1	2	2	1	1
2	Trip Blank	5-7-25	1530		G	Di				2						
3																
4																
5																
6																
7																
8																
9																
10																

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV 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	
Coolers & Samples Intact	Y	N		
Correct Containers Provided	Y	N		
Sample Label/COC Agree	Y	N		
Adequate Sample Volumes	Y	N		
VOA only: Trip Blank	Y	N	NA	

NJ ≤ 4 days? Y N

Courier/Tracking #

Client contact: *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

Contains Short Hold Testing YES NO

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

Circle Sample Collector: ALS Tech / Client

Name: Evan P **ID:**

Comments: PH- 5.27 temp- 18.1°c Spc- 231

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5-7-25	1700	1	ALS	2	MPTS
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client LC SWMA Gerald Miller Workorder 3414235

Temp °C 3 Therm ID 569 Ice? (Y) N N/A Initials & Date MP 5/7/25

Fedex UPS Client (ALS) Other Tracking #

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	↓			
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method				
Received within hold time				
Containers intact				
Trip blanks present (EPA 504, EPA 524)	↓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			↓	
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C				
SDWA compliance reporting			↓	

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing information

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G79

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G79

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414235001
Lab Order:	G2505G79		3052 River Road, Conestoga, PA
Project:		**Sampled By:**	ALS
Lab ID:	G2505G79-001	**Collection Date:**	5/7/2025 3:30:00 PM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 5:48:30 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50	O4	µg/L	1	05/29/25 5:00 AM	05/29/25 8:55 AM

NOTES:
O4 - Sample was received with headspace.

I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025-3056 RIVER RD
Workorder 3414233
Report ID 423903 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 07, 2025.

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.

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

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

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414233001	3056RIVERRD	Water	05/07/2025 15:50	05/07/2025 17:00	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The 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.
4	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3056RIVERRD	Collected	05/07/2025 15:50
Lab Sample ID	3414233001	Lab Receipt	05/07/2025 17:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	4.72	pH_Units		Field	#
Specific Conductance, Field	242	umhos/cm	1	Field	#
Temperature	20.40	Deg. C		Field	#
METALS					
Calcium, Dissolved	13.5	mg/L	0.10	EPA 200.7	#
Calcium, Total	12.1	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	11.5	mg/L	0.10	EPA 200.7	#
Magnesium, Total	9.9	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.052	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.048	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.0	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.0	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.4	mg/L	0.50	EPA 200.7	#
Sodium, Total	8.2	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Chloride	21.7	mg/L	2.0	EPA 300.0	#
Nitrate-N	18.5	mg/L	1.0	EPA 300.0	#
pH	6.38	pH_Units		S4500HB-11	#
Specific Conductance	229	umhos/cm	5	SM2510B-2011	#
Total Dissolved Solids	170	mg/L	25	SM2540C-15	#
Turbidity	1.1	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3056RIVERRD	Collected	05/07/2025 15:50
Lab Sample ID	3414233001	Lab Receipt	05/07/2025 17:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	4.72		pH_Units		Field	1	05/07/2025 15:50	E2P	P
Specific Conductance, Field	242		umhos/cm	1	Field	1	05/07/2025 15:50	E2P	P
Temperature	20.40		Deg. C		Field	1	05/07/2025 15:50	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	13.5	3	mg/L	0.10	EPA 200.7	1	05/17/2025 12:33	MSY	F
Calcium, Total	12.1		mg/L	0.050	EPA 200.7	1	05/15/2025 12:26	RBP	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 12:33	MSY	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/15/2025 12:26	RBP	D1
Magnesium, Dissolved	11.5	3	mg/L	0.10	EPA 200.7	1	05/17/2025 12:33	MSY	F
Magnesium, Total	9.9		mg/L	0.050	EPA 200.7	1	05/15/2025 12:26	RBP	D1
Manganese, Dissolved	0.052		mg/L	0.0050	EPA 200.7	1	05/17/2025 12:33	MSY	F
Manganese, Total	0.048		mg/L	0.0025	EPA 200.7	1	05/15/2025 12:26	RBP	D1
Potassium, Dissolved	2.0		mg/L	0.50	EPA 200.7	1	05/17/2025 12:33	MSY	F
Potassium, Total	2.0		mg/L	0.25	EPA 200.7	1	05/15/2025 12:26	RBP	D1
Sodium, Dissolved	8.4		mg/L	0.50	EPA 200.7	1	05/17/2025 12:33	MSY	F
Sodium, Total	8.2		mg/L	0.25	EPA 200.7	1	05/15/2025 12:26	RBP	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	4			Subcontract	1	06/03/2025 13:10	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/09/2025 13:30	TMP	M

Results

Client Sample ID	3056RIVERRD	Collected	05/07/2025 15:50
Lab Sample ID	3414233001	Lab Receipt	05/07/2025 17:00

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	104%	70 – 130	05/09/2025 13:30	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	ND	ND	mg/L	5	SM2320B-2011	1	05/18/2025 04:35	JXK	A
Alkalinity, Total	ND	ND,1	mg/L	5	SM2320B-2011	1	05/18/2025 04:35	JXK	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 20:21	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/09/2025 11:05	KMS	C
Chloride	21.7		mg/L	2.0	EPA 300.0	2	05/08/2025 13:46	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/08/2025 13:46	J1W	A
Nitrate-N	18.5		mg/L	1.0	EPA 300.0	2	05/08/2025 13:46	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/08/2025 13:46	J1W	A
pH	6.38	2	pH_Units		S4500HB-11	1	05/18/2025 04:35	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 18:00	AKH	J
Specific Conductance	229		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	ND	ND	mg/L	2.0	EPA 300.0	2	05/08/2025 13:46	J1W	A
Total Dissolved Solids	170		mg/L	25	SM2540C-15	1	05/08/2025 14:40	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	05/08/2025 22:55	PAG	H
Turbidity	1.1		NTU	0.30	SM2130B-2011	1	05/08/2025 09:44	NPF	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414233001	3056RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3414233001	3056RIVERRD	N/A	N/A	N/A		Field	
		EPA TRMD	1431079	05/09/2025 07:28	ANN	EPA 200.7	1433974
		EPA ACID	1435749	05/17/2025 11:50	MSY	EPA 200.7	1435764
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1431102
		N/A	N/A	N/A		EPA 300.0	1430852
		N/A	N/A	N/A		EPA 410.4	1431085
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435643
		N/A	N/A	N/A		SM 4500-NH3G	1432565
		N/A	N/A	N/A		SM2130B-2011	1430857
		N/A	N/A	N/A		SM2320B-2011	1435643
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1430906
		N/A	N/A	N/A		SM5310B-14	1430956

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

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

3414233
Logged By: SLS
PM: SJB

3 of

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
Lancaster PA 17604

Contact: Dan Brown
Phone#: 717-553-5864
Project Name/#: LCSWMA Quarterly
Bill To: LCSWMA
Purchase Order #:
TAT [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [ ]

Container Type	AG	AN	AN	CG		P	P	P	P	
Container Size	40ml	250ml	125ml	40ml		250ml	125ml	125ml	1L	500ml
Preservative	HCL	H2SO4	H2SO4	ASCHCL		H2SO4	HNO3	HNO3	UNP	UNP

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
							Enter Number of Containers Per Sample or Field Results Below.									
1	3056RIVERRD	5-7-25	1550		G	DW	2	2	1	3	x	1	2	2	1	1
2	Trip Blank	5-7-25	1550		G	Di				2						
3																
4																
5																
6																
7																
8																
9																
10																

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

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

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

Comments: PH-4.72 temp-20.4°C SpC-242

Date:	Time	Relinquished By / Company Name		Received By / Company Name	
5-7-25	1700	1	ALS	2	Mets
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL ____ other

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client: lancaster county solid waste Workorder: 3414233

Temp °C: 3 Therm ID: 569 Ice? (Y) N N/A Initials & Date: MP 5/7/25

Fedex UPS Client (ALS) Other Tracking #

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	↓			
•Sample location				
•Date and time of sample collection				
•Type(s) of preservation				
•Number of containers				
•Composite or grab				
•Matrix				
Proper containers, preservation, and volume per method				
Received within hold time				
Containers intact				
Trip blanks present (EPA 504, EPA 524)	↓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			↓	
CR6 Samples Filtered				
OP Samples Filtered				
WV Containers 0-6°C				
SDWA compliance reporting			↓	

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing information

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G82

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G82

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414233001
Lab Order:	G2505G82		3056RIVERRD
Project:		**Sampled By:**	ALS
Lab ID:	G2505G82-001	**Collection Date:**	5/7/2025 3:50:00 PM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 5:59:07 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50	O4	µg/L	1	05/29/25 5:00 AM	05/29/25 11:03 AM

NOTES:
O4 - Sample was received with headspace.

I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025-3060 RIVER RD
Workorder 3414798
Report ID 423904 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 09, 2025.

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.

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

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

Susan Scherer
Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414798001	3060RIVERRD	Water	05/09/2025 12:10	05/09/2025 14:30	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The 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.
4	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3060RIVERRD	Collected	05/09/2025 12:10
Lab Sample ID	3414798001	Lab Receipt	05/09/2025 14:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	5.42	pH_Units		Field	#
Specific Conductance, Field	246	umhos/cm	1	Field	#
Temperature	17.10	Deg. C		Field	#
METALS					
Calcium, Dissolved	10.1	mg/L	0.10	EPA 200.7	#
Calcium, Total	10.7	mg/L	0.050	EPA 200.7	#
Iron, Total	0.075	mg/L	0.030	EPA 200.7	#
Magnesium, Dissolved	10.6	mg/L	0.10	EPA 200.7	#
Magnesium, Total	11.4	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.081	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.081	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.8	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.9	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	8.6	mg/L	0.50	EPA 200.7	#
Sodium, Total	9.1	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	8	mg/L	5	SM2320B-2011	#
Alkalinity, Total	8	mg/L	5	SM2320B-2011	#
Chloride	15.6	mg/L	2.0	EPA 300.0	#
Nitrate-N	15.0	mg/L	1.0	EPA 300.0	#
pH	6.95	pH_Units		S4500HB-11	#
Specific Conductance	215	umhos/cm	5	SM2510B-2011	#
Sulfate	8.7	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	171	mg/L	25	SM2540C-15	#
Turbidity	1.1	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3060RIVERRD	Collected	05/09/2025 12:10
Lab Sample ID	3414798001	Lab Receipt	05/09/2025 14:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	5.42		pH_Units		Field	1	05/09/2025 12:10	E2P	P
Specific Conductance, Field	246		umhos/cm	1	Field	1	05/09/2025 12:10	E2P	P
Temperature	17.10		Deg. C		Field	1	05/09/2025 12:10	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	10.1		mg/L	0.10	EPA 200.7	1	05/17/2025 13:42	MSY	F
Calcium, Total	10.7	3	mg/L	0.050	EPA 200.7	1	05/18/2025 18:14	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 13:42	MSY	F
Iron, Total	0.075		mg/L	0.030	EPA 200.7	1	05/18/2025 18:14	MSY	D1
Magnesium, Dissolved	10.6		mg/L	0.10	EPA 200.7	1	05/17/2025 13:42	MSY	F
Magnesium, Total	11.4	3	mg/L	0.050	EPA 200.7	1	05/18/2025 18:14	MSY	D1
Manganese, Dissolved	0.081		mg/L	0.0050	EPA 200.7	1	05/17/2025 13:42	MSY	F
Manganese, Total	0.081		mg/L	0.0025	EPA 200.7	1	05/18/2025 18:14	MSY	D1
Potassium, Dissolved	2.8		mg/L	0.50	EPA 200.7	1	05/17/2025 13:42	MSY	F
Potassium, Total	2.9		mg/L	0.25	EPA 200.7	1	05/18/2025 18:14	MSY	D1
Sodium, Dissolved	8.6		mg/L	0.50	EPA 200.7	1	05/17/2025 13:42	MSY	F
Sodium, Total	9.1		mg/L	0.25	EPA 200.7	1	05/18/2025 18:14	MSY	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	4			Subcontract	1	06/03/2025 13:13	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 17:11	ILY	M

Results

Client Sample ID	3060RIVERRD	Collected	05/09/2025 12:10
Lab Sample ID	3414798001	Lab Receipt	05/09/2025 14:30

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	82.3%	70 – 130	05/19/2025 17:11	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	8		mg/L	5	SM2320B-2011	1	05/19/2025 10:21	JXK	A
Alkalinity, Total	8	1	mg/L	5	SM2320B-2011	1	05/19/2025 10:21	JXK	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 22:00	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/12/2025 14:24	KMS	C
Chloride	15.6		mg/L	2.0	EPA 300.0	2	05/10/2025 10:00	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/10/2025 10:00	J1W	A
Nitrate-N	15.0		mg/L	1.0	EPA 300.0	2	05/10/2025 10:00	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/10/2025 10:00	J1W	A
pH	6.95	2	pH_Units		S4500HB-11	1	05/19/2025 10:21	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 15:04	AKH	J
Specific Conductance	215		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	8.7		mg/L	2.0	EPA 300.0	2	05/10/2025 10:00	J1W	A
Total Dissolved Solids	171		mg/L	25	SM2540C-15	1	05/12/2025 12:50	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	05/13/2025 05:10	PAG	H
Turbidity	1.1		NTU	0.30	SM2130B-2011	1	05/10/2025 10:53	NPF	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414798001	3060RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3414798001	3060RIVERRD	N/A	N/A	N/A		Field	
		EPA TRMD	1435128	05/15/2025 08:57	J1K	EPA 200.7	1435806
		EPA ACID	1435750	05/17/2025 12:40	MSY	EPA 200.7	1435765
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1437591
		N/A	N/A	N/A		EPA 300.0	1431333
		N/A	N/A	N/A		EPA 410.4	1432628
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435818
		N/A	N/A	N/A		SM 4500-NH3G	1432565
		N/A	N/A	N/A		SM2130B-2011	1431429
		N/A	N/A	N/A		SM2320B-2011	1435818
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1432559
		N/A	N/A	N/A		SM5310B-14	1432850

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.

3414798
Logged By: SLS
PM: SJB

18 of

(Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C) 1

Receipt Info completed by:_____ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Coolers & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA only: Trip Blank Y N NA
NJ ≤ 4 days? Y N
Courier/Tracking #

Deviations? NO YES
If YES, llist below:

Client contact:
Date/Tech:

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg pike
Lancaster PA 17604

Contact: Dan Brown
Phone#: 717-553-5864
Project Name/#: LCSWMA Quarterly
Bill To: LCSWMA
Purchase Order #:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [ ]

	Container Type	AG	AN	AN	CG		P	P	P	P	P
	Container Size	40ml	250ml	125ml	40ml		250ml	125ml	125ml	1L	500ml
	Preservative	HCL	H2SO4	H2SO4	ASCHCL		H2SO4	HNO3	HNO3	UNP	UNP

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
							Enter Number of Containers Per Sample or Field Results Below.									
1	3060RIVERRD	5-9-25	1210		G	DW	2	2	1	3	x	1	2	2	1	1
2	Trip Blank	5-9-25	1210		G	Di				2						
3																
4																
5																
6																
7																
8																
9																
10																

PWSID #__
PWS Contact:_____ PWS Phone #:_____

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:

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

Sample/COC Remarks

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

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

Comments: PH-5.42 temp-17.1 Spc-246

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5-9-25	1430	1	ALS	2	ALS
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [ ] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client: Lancaster County Workorder: 3414798

Temp °C: 1° Therm ID: 649 Ice? (Y) N N/A Initials & Date: 5/9/25 DB

Fedex UPS Client (ALS) Other Tracking #:

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)	✓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing inform

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G85

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G85

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414798001
Lab Order:	G2505G85		3060RIVERRD
Project:		**Sampled By:**	ALS
Lab ID:	G2505G85-001	**Collection Date:**	5/9/2025 12:10:00 PM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 6:11:28 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50		µg/L	1	05/29/25 5:00 AM	05/29/25 11:43 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2nd QTR 2025-3076 RIVER RD
Workorder 3414797
Report ID 423901 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 09, 2025.

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.

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.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414797001	3076 River Road, Conestoga, PA	Water	05/09/2025 12:55	05/09/2025 14:30	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3076 River Road, Conestoga, PA	Collected	05/09/2025 12:55
Lab Sample ID	3414797001	Lab Receipt	05/09/2025 14:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	5.10	pH_Units		Field	#
Specific Conductance, Field	345	umhos/cm	1	Field	#
Temperature	16.20	Deg. C		Field	#
METALS					
Calcium, Dissolved	13.6	mg/L	0.10	EPA 200.7	#
Calcium, Total	14.9	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	8.4	mg/L	0.10	EPA 200.7	#
Magnesium, Total	8.8	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.12	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.12	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.9	mg/L	0.50	EPA 200.7	#
Potassium, Total	3.3	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	26.7	mg/L	0.50	EPA 200.7	#
Sodium, Total	29.4	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	9	mg/L	5	SM2320B-2011	#
Alkalinity, Total	9	mg/L	5	SM2320B-2011	#
Chloride	59.2	mg/L	2.0	EPA 300.0	#
Nitrate-N	7.7	mg/L	1.0	EPA 300.0	#
pH	7.24	pH_Units		S4500HB-11	#
Specific Conductance	303	umhos/cm	5	SM2510B-2011	#
Sulfate	8.6	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	222	mg/L	25	SM2540C-15	#
Turbidity	1.1	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3076 River Road, Conestoga, PA	Collected	05/09/2025 12:55
Lab Sample ID	3414797001	Lab Receipt	05/09/2025 14:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	5.10		pH_Units		Field	1	05/09/2025 12:55	E2P	P
Specific Conductance, Field	345		umhos/cm	1	Field	1	05/09/2025 12:55	E2P	P
Temperature	16.20		Deg. C		Field	1	05/09/2025 12:55	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	13.6		mg/L	0.10	EPA 200.7	1	05/17/2025 13:40	MSY	F
Calcium, Total	14.9		mg/L	0.050	EPA 200.7	1	05/16/2025 14:35	RBP	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 13:40	MSY	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/16/2025 14:35	RBP	D1
Magnesium, Dissolved	8.4		mg/L	0.10	EPA 200.7	1	05/17/2025 13:40	MSY	F
Magnesium, Total	8.8		mg/L	0.050	EPA 200.7	1	05/16/2025 14:35	RBP	D1
Manganese, Dissolved	0.12		mg/L	0.0050	EPA 200.7	1	05/17/2025 13:40	MSY	F
Manganese, Total	0.12		mg/L	0.0025	EPA 200.7	1	05/16/2025 14:35	RBP	D1
Potassium, Dissolved	2.9		mg/L	0.50	EPA 200.7	1	05/17/2025 13:40	MSY	F
Potassium, Total	3.3		mg/L	0.25	EPA 200.7	1	05/16/2025 14:35	RBP	D1
Sodium, Dissolved	26.7		mg/L	0.50	EPA 200.7	1	05/17/2025 13:40	MSY	F
Sodium, Total	29.4		mg/L	0.25	EPA 200.7	1	05/16/2025 14:35	RBP	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	3			Subcontract	1	06/03/2025 13:14	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 16:48	ILY	M

Results

Client Sample ID	3076 River Road, Conestoga, PA	Collected	05/09/2025 12:55
Lab Sample ID	3414797001	Lab Receipt	05/09/2025 14:30

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	81.8%	70 – 130	05/19/2025 16:48	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	9		mg/L	5	SM2320B-2011	1	05/19/2025 10:10	JXK	A
Alkalinity, Total	9	1	mg/L	5	SM2320B-2011	1	05/19/2025 10:10	JXK	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 21:42	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/12/2025 14:24	KMS	C
Chloride	59.2		mg/L	2.0	EPA 300.0	2	05/10/2025 09:46	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/10/2025 09:46	J1W	A
Nitrate-N	7.7		mg/L	1.0	EPA 300.0	2	05/10/2025 09:46	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/10/2025 09:46	J1W	A
pH	7.24	2	pH_Units		S4500HB-11	1	05/19/2025 10:10	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 14:36	AKH	J
Specific Conductance	303		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	8.6		mg/L	2.0	EPA 300.0	2	05/10/2025 09:46	J1W	A
Total Dissolved Solids	222		mg/L	25	SM2540C-15	1	05/12/2025 12:50	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	05/13/2025 05:10	PAG	H
Turbidity	1.1		NTU	0.30	SM2130B-2011	1	05/10/2025 10:53	NPF	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414797001	3076 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3414797001	3076 River Road, Conestoga, PA	N/A	N/A	N/A		Field	
		EPA TRMD	1433092	05/14/2025 07:01	J1K	EPA 200.7	1435557
		EPA ACID	1435750	05/17/2025 12:40	MSY	EPA 200.7	1435765
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1437591
		N/A	N/A	N/A		EPA 300.0	1431333
		N/A	N/A	N/A		EPA 410.4	1432628
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435818
		N/A	N/A	N/A		SM 4500-NH3G	1432565
		N/A	N/A	N/A		SM2130B-2011	1431429
		N/A	N/A	N/A		SM2320B-2011	1435818
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1432559
		N/A	N/A	N/A		SM5310B-14	1432850

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.

3414797
Logged By: SLS
PM: SJB

7 of

(eceiving Lab)
WO Temp (°C) 1 cv

Client Name: LCSWMA Brian Sensenich

Address: 3076 River Rd
Conestoga PA 17516

Contact: Brian Sensenich
Phone#: 717-676-5779
Project Name/#: LCSWMA Quarterly
Bill To: LCSWMA Biran Sensenich
Purchase Order #:
TAT [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [ ]

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

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
							Enter Number of Containers Per Sample or Field Results Below.									
1	3076RIVERRD	5.9.25	1255		G	DW	2	2	1	3	x	1	2	2	1	1
2	Trip Blank	5.9.25	1255		G	Di				2						
3																
4																
5																
6																
7																
8																
9																
10																

*Receipt Info completed by:*_____ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N
Courier/Tracking #

Deviations? NO YES
If YES, llist below

Client contact:
Date/Tech

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?_____
PWSID #__

Rad Screen (uCi)_____
New Source? Y N
New Source Contact:

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

Circle Sample Collector: ALS Tech / Client
Name: Evan P **ID:**

Comments: PH- 5.10 temp 16.2 Spc.345

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5.9.25	1430	1	ALS	2	ALS
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables
[ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA
[ ] Standard Lvl 2 [ ] DOD [ ] Landfill
[ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW
[ ] Standard Lvl 4 [ ] NJ Full [ ] _____

EDDs
[ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal
Lab [x]
Special [ ]

EDDS: Format Type

State Samples Collected In
[ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client: Lc SWMA

Workorder: 3414797

Temp °C: 1° Therm ID: 649 Ice? (Y) N N/A Initials & Date: 5/9/25 DS

Fedex UPS Client (ALS) Other Tracking #:

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)	✓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing inform

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G86

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G86

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414797001
Lab Order:	G2505G86		3076 River Road, Conestoga, PA
Project:		**Sampled By:**	ALS
Lab ID:	G2505G86-001	**Collection Date:**	5/9/2025 12:55:00 PM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 6:14:36 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50		µg/L	1	05/29/25 5:00 AM	05/29/25 1:49 PM

I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025-3079 RIVER RD
Workorder 3414540
Report ID 423905 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 08, 2025.

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.

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

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

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414540001	3079RIVERRD	Water	05/08/2025 14:14	05/08/2025 16:00	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The 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.
4	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3079RIVERRD	Collected	05/08/2025 14:14
Lab Sample ID	3414540001	Lab Receipt	05/08/2025 16:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	5.66	pH_Units		Field	#
Specific Conductance, Field	192	umhos/cm	1	Field	#
Temperature	17.30	Deg. C		Field	#
METALS					
Calcium, Dissolved	10.6	mg/L	0.10	EPA 200.7	#
Calcium, Total	11.4	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	5.7	mg/L	0.10	EPA 200.7	#
Magnesium, Total	5.7	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.020	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.021	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	1.8	mg/L	0.50	EPA 200.7	#
Potassium, Total	1.9	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	13.1	mg/L	0.50	EPA 200.7	#
Sodium, Total	14.0	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	21	mg/L	5	SM2320B-2011	#
Alkalinity, Total	21	mg/L	5	SM2320B-2011	#
Chloride	30.9	mg/L	2.0	EPA 300.0	#
Nitrate-N	2.0	mg/L	1.0	EPA 300.0	#
pH	7.42	pH_Units		S4500HB-11	#
Specific Conductance	180	umhos/cm	5	SM2510B-2011	#
Sulfate	8.7	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	124	mg/L	25	SM2540C-15	#
Turbidity	0.35	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3079RIVERRD	Collected	05/08/2025 14:14
Lab Sample ID	3414540001	Lab Receipt	05/08/2025 16:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	5.66		pH_Units		Field	1	05/08/2025 14:14	E2P	P
Specific Conductance, Field	192		umhos/cm	1	Field	1	05/08/2025 14:14	E2P	P
Temperature	17.30		Deg. C		Field	1	05/08/2025 14:14	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	10.6		mg/L	0.10	EPA 200.7	1	05/17/2025 12:57	MSY	F
Calcium, Total	11.4	3	mg/L	0.050	EPA 200.7	1	05/16/2025 13:24	RBP	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 12:57	MSY	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/16/2025 13:24	RBP	D1
Magnesium, Dissolved	5.7		mg/L	0.10	EPA 200.7	1	05/17/2025 12:57	MSY	F
Magnesium, Total	5.7	3	mg/L	0.050	EPA 200.7	1	05/16/2025 13:24	RBP	D1
Manganese, Dissolved	0.020		mg/L	0.0050	EPA 200.7	1	05/17/2025 12:57	MSY	F
Manganese, Total	0.021		mg/L	0.0025	EPA 200.7	1	05/16/2025 13:24	RBP	D1
Potassium, Dissolved	1.8		mg/L	0.50	EPA 200.7	1	05/17/2025 12:57	MSY	F
Potassium, Total	1.9		mg/L	0.25	EPA 200.7	1	05/16/2025 13:24	RBP	D1
Sodium, Dissolved	13.1		mg/L	0.50	EPA 200.7	1	05/17/2025 12:57	MSY	F
Sodium, Total	14.0		mg/L	0.25	EPA 200.7	1	05/16/2025 13:24	RBP	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	4			Subcontract	1	06/03/2025 13:16	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/18/2025 23:18	PDK	M

Results

Client Sample ID	3079RIVERRD	Collected	05/08/2025 14:14
Lab Sample ID	3414540001	Lab Receipt	05/08/2025 16:00

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	81.8%	70 – 130	05/18/2025 23:18	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	21		mg/L	5	SM2320B-2011	1	05/18/2025 12:37	JXK	A
Alkalinity, Total	21	1	mg/L	5	SM2320B-2011	1	05/18/2025 12:37	JXK	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 21:48	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/12/2025 14:24	KMS	C
Chloride	30.9		mg/L	2.0	EPA 300.0	2	05/09/2025 12:49	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/09/2025 12:49	J1W	A
Nitrate-N	2.0		mg/L	1.0	EPA 300.0	2	05/09/2025 12:49	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/09/2025 12:49	J1W	A
pH	7.42	2	pH_Units		S4500HB-11	1	05/18/2025 12:37	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 15:33	AKH	J
Specific Conductance	180		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	8.7		mg/L	2.0	EPA 300.0	2	05/09/2025 12:49	J1W	A
Total Dissolved Solids	124		mg/L	25	SM2540C-15	1	05/09/2025 16:30	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	05/10/2025 00:28	PAG	H
Turbidity	0.35		NTU	0.30	SM2130B-2011	1	05/09/2025 09:20	NPF	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414540001	3079RIVERRD	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3414540001	3079RIVERRD	N/A	N/A	N/A		Field	
		EPA TRMD	1433091	05/14/2025 07:04	J1K	EPA 200.7	1435556
		EPA ACID	1435749	05/17/2025 11:50	MSY	EPA 200.7	1435764
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1435811
		N/A	N/A	N/A		EPA 300.0	1431070
		N/A	N/A	N/A		EPA 410.4	1432628
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435643
		N/A	N/A	N/A		SM 4500-NH3G	1432565
		N/A	N/A	N/A		SM2130B-2011	1431067
		N/A	N/A	N/A		SM2320B-2011	1435643
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1431118
		N/A	N/A	N/A		SM5310B-14	1431178

ALS
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.

3414540
Logged By: SLS
PM: SJB

Page of

Client Name: Lancaster County Solid Waste MA

Address: 1299 Harrisburg Pike, Lancaster Pa 17604

Contact: Dan Brown
Phone#: 717-553-5864
Project Name/#: LCSWMA Quarterly
Bill To: LCSWMA
Purchase Order #:

TAT
[x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?
Email? [ ]

Container Type	AG	AN	AN	CG		P	P	P	P	P
Container Size	40ml	250ml	125ml	40ml		250ml	125ml	125ml	1L	500ml
Preservative	HCL	H2SO4	H2SO4	ASCHCL		H2SO4	HNO3	HNO3	UNP	UNP

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
3079RIVERRD	5.8.25	1414		G	DW	2	2	1	3	x	1	2	2	1	1
Trip Blank	5.8.25			G	Di				2						

Sample Collector: ALS Tech / Client
ID:

Comments: PH-5.66 temp 17.3°C Spc-192

Relinquished By / Company Name	Time	Received By / Company Name
1 ALS	1600	2
3		4
5		6
7		8
9		10

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

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

Temp Taken By: Therm ID: WO Temp (°C) 2 (Receiving Lab)

Receipt Info completed by:			
Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA
NJ ≤ 4 days?	Y	N	

WV Containers 0-6°C Y N NA

Deviations? NO YES
If YES, list below:

Courier/Tracking #

Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?
PWSID #
PWS Contact: PWS Phone #:

Rad Screen (uCi)
New Source? Y N
New Source Contact:

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

Data Deliverables
[ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4
[ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full
[ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs
[ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal
Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In
[ ] NY [ ] NJ [x] PA [ ] WV [ ] FL

Middletown Sample Condition Form

Client Lancaster County Workorder 34114540

Temp °C 2° Therm ID 649 Ice? (Y) N N/A Initials & Date DB 5/8/25

Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)	✓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing information

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G88

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G88

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414540001
Lab Order:	G2505G88		3079RIVERRD
Project:		**Sampled By:**	ALS
Lab ID:	G2505G88-001	**Collection Date:**	5/8/2025 2:14:00 PM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 6:21:49 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50		µg/L	1	05/29/25 5:00 AM	05/29/25 12:37 PM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025-3088 RIVER RD
Workorder 3414532
Report ID 424535 on 6/4/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 08, 2025.

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.

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

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

Susan Scherer
Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414532001	3088 River Road, Conestoga PA	Water	05/08/2025 14:50	05/08/2025 16:00	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The QC sample type MS for method EPA 350.1 was outside the control limits for the analyte Ammonia-N, Low Level. The % Recovery was reported as 71.9 and the control limits were 80 to 120.
3	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
4	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.
5	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3088 River Road, Conestoga PA	Collected	05/08/2025 14:50
Lab Sample ID	3414532001	Lab Receipt	05/08/2025 16:00

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	6.86	pH_Units		Field	#
Specific Conductance, Field	1217	umhos/cm	1	Field	#
Temperature	19.60	Deg. C		Field	#
METALS					
Calcium, Dissolved	1.7	mg/L	0.10	EPA 200.7	#
Calcium, Total	1.9	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	0.25	mg/L	0.10	EPA 200.7	#
Magnesium, Total	0.28	mg/L	0.050	EPA 200.7	#
Manganese, Total	0.0030	mg/L	0.0025	EPA 200.7	#
Potassium, Total	1.3	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	262	mg/L	0.50	EPA 200.7	#
Sodium, Total	268	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	144	mg/L	5	SM2320B-2011	#
Alkalinity, Total	194	mg/L	5	SM2320B-2011	#
Chloride	264	mg/L	5.0	EPA 300.0	#
Nitrate-N	6.6	mg/L	2.5	EPA 300.0	#
pH	8.38	pH_Units		S4500HB-11	#
Specific Conductance	1220	umhos/cm	5	SM2510B-2011	#
Total Dissolved Solids	670	mg/L	25	SM2540C-15	#
Turbidity	0.65	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3088 River Road, Conestoga PA	Collected	05/08/2025 14:50
Lab Sample ID	3414532001	Lab Receipt	05/08/2025 16:00

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	6.86		pH_Units		Field	1	05/08/2025 14:50	E2P	P
Specific Conductance, Field	1217		umhos/cm	1	Field	1	05/08/2025 14:50	E2P	P
Temperature	19.60		Deg. C		Field	1	05/08/2025 14:50	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	1.7		mg/L	0.10	EPA 200.7	1	05/17/2025 12:59	MSY	F
Calcium, Total	1.9		mg/L	0.050	EPA 200.7	1	05/16/2025 14:37	RBP	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 12:59	MSY	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/16/2025 14:37	RBP	D1
Magnesium, Dissolved	0.25		mg/L	0.10	EPA 200.7	1	05/17/2025 12:59	MSY	F
Magnesium, Total	0.28		mg/L	0.050	EPA 200.7	1	05/16/2025 14:37	RBP	D1
Manganese, Dissolved	ND	ND	mg/L	0.0050	EPA 200.7	1	05/17/2025 12:59	MSY	F
Manganese, Total	0.0030		mg/L	0.0025	EPA 200.7	1	05/16/2025 14:37	RBP	D1
Potassium, Dissolved	ND	ND	mg/L	0.50	EPA 200.7	1	05/17/2025 12:59	MSY	F
Potassium, Total	1.3		mg/L	0.25	EPA 200.7	1	05/16/2025 14:37	RBP	D1
Sodium, Dissolved	262		mg/L	0.50	EPA 200.7	1	05/17/2025 12:59	MSY	F
Sodium, Total	268	4	mg/L	0.25	EPA 200.7	1	05/16/2025 14:37	RBP	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	5			Subcontract	1	06/04/2025 15:22	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/14/2025 14:46	TMP	M

Results

Client Sample ID	3088 River Road, Conestoga PA	Collected	05/08/2025 14:50
Lab Sample ID	3414532001	Lab Receipt	05/08/2025 16:00

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	80.4%	70 – 130	05/14/2025 14:46	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	144		mg/L	5	SM2320B-2011	1	05/18/2025 12:23	JXK	A
Alkalinity, Total	194	1	mg/L	5	SM2320B-2011	1	05/18/2025 12:23	JXK	A
Ammonia-N, Low Level	ND	ND,2	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 16:00	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/12/2025 14:24	KMS	C
Chloride	264		mg/L	5.0	EPA 300.0	5	05/09/2025 11:56	J1W	A
Fluoride	ND	ND	mg/L	0.50	EPA 300.0	5	05/09/2025 11:56	J1W	A
Nitrate-N	6.6		mg/L	2.5	EPA 300.0	5	05/09/2025 11:56	J1W	A
Nitrite-N	ND	ND	mg/L	2.5	EPA 300.0	5	05/09/2025 11:56	J1W	A
pH	8.38	3	pH_Units		S4500HB-11	1	05/18/2025 12:23	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 15:29	AKH	J
Specific Conductance	1220		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	ND	ND	mg/L	5.0	EPA 300.0	5	05/09/2025 11:56	J1W	A
Total Dissolved Solids	670		mg/L	25	SM2540C-15	1	05/09/2025 16:30	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	05/10/2025 00:28	PAG	H
Turbidity	0.65		NTU	0.30	SM2130B-2011	1	05/09/2025 09:20	NPF	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414532001	3088 River Road, Conestoga PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3414532001	3088 River Road, Conestoga PA	N/A	N/A	N/A		Field	
		EPA TRMD	1433092	05/14/2025 07:01	J1K	EPA 200.7	1435557
		EPA ACID	1435749	05/17/2025 11:50	MSY	EPA 200.7	1435764
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1433943
		N/A	N/A	N/A		EPA 300.0	1431070
		N/A	N/A	N/A		EPA 410.4	1432628
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435643
		N/A	N/A	N/A		SM 4500-NH3G	1432571
		N/A	N/A	N/A		SM2130B-2011	1431067
		N/A	N/A	N/A		SM2320B-2011	1435643
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1431118
		N/A	N/A	N/A		SM5310B-14	1431178

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.

3414532
Logged By: SLS
PM: SJB

of

by Receiving Lab)

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 #:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: **Approved?**
Email? [ ]

	Container Type	AG	AN	AN	CG		P	P	P	P	P
	Container Size	40ml	250ml	125ml	40ml		250ml	125ml	125ml	1L	500ml
	Preservative	HCL	H2SO4	H2SO4	ASCHCL		H2SO4	HNO3	HNO3	UNP	UNP

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
							Enter Number of Containers Per Sample or Field Results Below.									
1	3088RIVERRD	5-8-25	1450		G	DW	2	2	1	3	x	1	2	2	1	1
2	Trip Blank	5-8-25	1450		G	Di				2						
3																
4																
5																
6																
7																
8																
9																
10																

Temp Taken By: Therm ID: WO Temp (°C) 2

*Receipt Info completed by:*_____ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N
Courier/Tracking #

Deviations? NO YES
If YES, list below

Client contact:
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

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

Circle Sample Collector: ALS Tech / Client
Name: Evan P **ID:**

Comments: PH - 6.86 temp 19.6 SpC - 1217

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5-8-25	1600	1	ALS	2	
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client LCSWMA Workorder 34145332

Temp °C 2° Therm ID 649 Ice? (Y) N N/A Initials & Date PB 5/8/25

Fedex UPS Client (ALS) Other Tracking # _____

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)	✓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing inform

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Wednesday, June 4, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G89

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *04-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G89

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *04-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414532001
Lab Order:	G2505G89		3088 River Road, Conestoga, PA
Project:		**Sampled By:**	ALS
Lab ID:	G2505G89-001	**Collection Date:**	5/8/2025 2:50:00 PM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 6:24:40 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50	R2	µg/L	1	06/02/25 5:00 AM	06/02/25 9:30 AM

NOTES:
R2 - RPD above the control limit between duplicates.

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025-3106 RIVER RD
Workorder 3414803
Report ID 423900 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 09, 2025.

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.

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.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414803001	3106 River Road, Conestoga, PA	Water	05/09/2025 10:15	05/09/2025 14:30	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	The 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.
4	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3106 River Road, Conestoga, PA	Collected	05/09/2025 10:15
Lab Sample ID	3414803001	Lab Receipt	05/09/2025 14:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	5.76	pH_Units		Field	#
Specific Conductance, Field	533	umhos/cm	1	Field	#
Temperature	15.30	Deg. C		Field	#
METALS					
Calcium, Dissolved	23.4	mg/L	0.10	EPA 200.7	#
Calcium, Total	24.3	mg/L	0.050	EPA 200.7	#
Magnesium, Dissolved	15.9	mg/L	0.10	EPA 200.7	#
Magnesium, Total	15.8	mg/L	0.050	EPA 200.7	#
Manganese, Dissolved	0.043	mg/L	0.0050	EPA 200.7	#
Manganese, Total	0.043	mg/L	0.0025	EPA 200.7	#
Potassium, Dissolved	2.1	mg/L	0.50	EPA 200.7	#
Potassium, Total	2.0	mg/L	0.25	EPA 200.7	#
Sodium, Dissolved	46.5	mg/L	0.50	EPA 200.7	#
Sodium, Total	46.1	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	15	mg/L	5	SM2320B-2011	#
Alkalinity, Total	15	mg/L	5	SM2320B-2011	#
Chloride	121	mg/L	2.0	EPA 300.0	#
Nitrate-N	8.2	mg/L	1.0	EPA 300.0	#
pH	7.23	pH_Units		S4500HB-11	#
Specific Conductance	515	umhos/cm	5	SM2510B-2011	#
Sulfate	6.0	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	392	mg/L	25	SM2540C-15	#
Turbidity	0.55	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	05/09/2025 10:15
Lab Sample ID	3414803001	Lab Receipt	05/09/2025 14:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	5.76		pH_Units		Field	1	05/09/2025 10:15	E2P	P
Specific Conductance, Field	533		umhos/cm	1	Field	1	05/09/2025 10:15	E2P	P
Temperature	15.30		Deg. C		Field	1	05/09/2025 10:15	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	23.4		mg/L	0.10	EPA 200.7	1	05/17/2025 13:44	MSY	F
Calcium, Total	24.3	3	mg/L	0.050	EPA 200.7	1	05/18/2025 18:27	MSY	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 13:44	MSY	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/18/2025 18:27	MSY	D1
Magnesium, Dissolved	15.9		mg/L	0.10	EPA 200.7	1	05/17/2025 13:44	MSY	F
Magnesium, Total	15.8	3	mg/L	0.050	EPA 200.7	1	05/18/2025 18:27	MSY	D1
Manganese, Dissolved	0.043		mg/L	0.0050	EPA 200.7	1	05/17/2025 13:44	MSY	F
Manganese, Total	0.043		mg/L	0.0025	EPA 200.7	1	05/18/2025 18:27	MSY	D1
Potassium, Dissolved	2.1		mg/L	0.50	EPA 200.7	1	05/17/2025 13:44	MSY	F
Potassium, Total	2.0		mg/L	0.25	EPA 200.7	1	05/18/2025 18:27	MSY	D1
Sodium, Dissolved	46.5		mg/L	0.50	EPA 200.7	1	05/17/2025 13:44	MSY	F
Sodium, Total	46.1		mg/L	0.25	EPA 200.7	1	05/18/2025 18:27	MSY	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	4			Subcontract	1	06/03/2025 13:15	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/20/2025 00:17	PDK	M

Results

Client Sample ID	3106 River Road, Conestoga, PA	Collected	05/09/2025 10:15
Lab Sample ID	3414803001	Lab Receipt	05/09/2025 14:30

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	82.3%	70 – 130	05/20/2025 00:17	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	15		mg/L	5	SM2320B-2011	1	05/19/2025 11:44	JXK	A
Alkalinity, Total	15	1	mg/L	5	SM2320B-2011	1	05/19/2025 11:44	JXK	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 20:54	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/12/2025 14:24	KMS	C
Chloride	121		mg/L	2.0	EPA 300.0	2	05/10/2025 11:34	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/10/2025 11:34	J1W	A
Nitrate-N	8.2		mg/L	1.0	EPA 300.0	2	05/10/2025 11:34	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/10/2025 11:34	J1W	A
pH	7.23	2	pH_Units		S4500HB-11	1	05/19/2025 11:44	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 15:06	AKH	J
Specific Conductance	515		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	6.0		mg/L	2.0	EPA 300.0	2	05/10/2025 11:34	J1W	A
Total Dissolved Solids	392		mg/L	25	SM2540C-15	1	05/12/2025 12:50	RAG	A
Total Organic Carbon (TOC)	ND	ND	mg/L	0.50	SM5310B-14	1	05/13/2025 05:10	PAG	H
Turbidity	0.55		NTU	0.30	SM2130B-2011	1	05/10/2025 10:53	NPF	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414803001	3106 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3414803001	3106 River Road, Conestoga, PA	N/A	N/A	N/A		Field	
		EPA TRMD	1435128	05/15/2025 08:57	J1K	EPA 200.7	1435806
		EPA ACID	1435750	05/17/2025 12:40	MSY	EPA 200.7	1435765
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1438391
		N/A	N/A	N/A		EPA 300.0	1431333
		N/A	N/A	N/A		EPA 410.4	1432628
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435818
		N/A	N/A	N/A		SM 4500-NH3G	1432571
		N/A	N/A	N/A		SM2130B-2011	1431429
		N/A	N/A	N/A		SM2320B-2011	1435818
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1432559
		N/A	N/A	N/A		SM5310B-14	1432850

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.

3414803
Logged By: SLS
PM: SJB

2 of

(Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C) 2

Client Name: LCSWMA Aaron Fry

Address: 3106 River Rd
Conestoga Pa 17516

Contact: Aaron Fry
Phone#: 717-669-6831
Project Name/#: LCSWMA Quarterly
Bill To: LCSWMA Aaron Fry
Purchase Order #:

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [ ]

Container Type	AG	AN	AN	CG		P	P	P	P	P
Container Size	40ml	250ml	125ml	40ml		250ml	125ml	125ml	1L	500ml
Preservative	HCL	H2SO4	H2SO4	ASCHCL		H2SO4	HNO3	HNO3	UNP	UNP

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
							Enter Number of Containers Per Sample or Field Results Below.									
1	3106RIVERRD	5-9-25	1015		G	DW	2	2	1	3	x	1	2	2	1	1
2	Trip Blank	5-9-25	1015		G	Di				2						
3																
4																
5																
6																
7																
8																
9																
10																

Receipt Info completed by:_____ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N
Courier/Tracking #

Deviations? NO YES
If YES, list below:

Client contact:
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

Contains Short Hold Testing YES NO

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

Circle Sample Collector: ALS Tech / Client
Name: Evan P **ID:**

Comments: PH-5.76 temp. 15.3 SpC 533

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5-9-25	1430	1	ALS	2	ALS
		3		4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL ___ other

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client LCSWMA Workorder 3414803

Temp °C 2° Therm ID 649 Ice? (Y) N N/A Initials & Date 5/9/25 DS

Fedex UPS Client (ALS) Other Tracking #

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)	✓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

[1] *If No, provide comment*

Rad Screen (uCi)

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing inform

Review Comments:

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G87

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G87

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414803001
Lab Order:	G2505G87		3106 River Road, Conestoga, PA
Project:		**Sampled By:**	ALS
Lab ID:	G2505G87-001	**Collection Date:**	5/9/2025 10:15:00 AM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 6:19:23 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50		µg/L	1	05/29/25 5:00 AM	05/29/25 2:31 PM

I.D. 56-00306 PA DEP

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

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **Lancaster County Solid Waste Authority**

Project 2ND QTR 2025-3125 RIVER RD
Workorder 3414802
Report ID 423902 on 6/3/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 09, 2025.

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.

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

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

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3414802001	3125 River Road, Conestoga, PA	Water	05/09/2025 10:55	05/09/2025 14:30	EMP	ALS Environmental-Middletown
3414802002	Trip Blank	Water	05/09/2025 10:55	05/09/2025 14:30	EMP	ALS Environmental-Middletown
3414802003	Field Blank	Water	05/09/2025 10:55	05/09/2025 14:30	EMP	ALS Environmental-Middletown

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 preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

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

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The Total Alkalinity is titrated to a pH of 4.5 and reported as mg CaCO3/L.
2	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
3	See attached subcontract results from Geochemical Testing Labs for 9020B TOX.

Detected Results Summary

Client Sample ID	3125 River Road, Conestoga, PA	Collected	05/09/2025 10:55
Lab Sample ID	3414802001	Lab Receipt	05/09/2025 14:30

Compound	Result	Units	RDL	Method	Flag
FIELD PARAMETERS					
pH, Field (SM4500B)	7.07	pH_Units		Field	#
Specific Conductance, Field	509	umhos/cm	1	Field	#
Temperature	16.30	Deg. C		Field	#
METALS					
Calcium, Total	0.11	mg/L	0.050	EPA 200.7	#
Sodium, Dissolved	113	mg/L	0.50	EPA 200.7	#
Sodium, Total	112	mg/L	0.25	EPA 200.7	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See Attached			Subcontract	#
WET CHEMISTRY					
Alkalinity, Bicarbonate	136	mg/L	5	SM2320B-2011	#
Alkalinity, Total	136	mg/L	5	SM2320B-2011	#
Chloride	55.6	mg/L	2.0	EPA 300.0	#
Nitrate-N	5.9	mg/L	1.0	EPA 300.0	#
pH	8.16	pH_Units		S4500HB-11	#
Specific Conductance	482	umhos/cm	5	SM2510B-2011	#
Sulfate	8.1	mg/L	2.0	EPA 300.0	#
Total Dissolved Solids	318	mg/L	25	SM2540C-15	#
Total Organic Carbon (TOC)	1.1	mg/L	0.50	SM5310B-14	#
Turbidity	2.0	NTU	0.30	SM2130B-2011	#

Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	05/09/2025 10:55
Lab Sample ID	3414802001	Lab Receipt	05/09/2025 14:30

FIELD PARAMETERS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH, Field (SM4500B)	7.07		pH_Units		Field	1	05/09/2025 10:55	E2P	P
Specific Conductance, Field	509		umhos/cm	1	Field	1	05/09/2025 10:55	E2P	P
Temperature	16.30		Deg. C		Field	1	05/09/2025 10:55	E2P	P

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Calcium, Dissolved	ND	ND	mg/L	0.10	EPA 200.7	1	05/17/2025 13:46	MSY	F
Calcium, Total	0.11		mg/L	0.050	EPA 200.7	1	05/16/2025 12:56	RBP	D1
Iron, Dissolved	ND	ND	mg/L	0.060	EPA 200.7	1	05/17/2025 13:46	MSY	F
Iron, Total	ND	ND	mg/L	0.030	EPA 200.7	1	05/16/2025 12:56	RBP	D1
Magnesium, Dissolved	ND	ND	mg/L	0.10	EPA 200.7	1	05/17/2025 13:46	MSY	F
Magnesium, Total	ND	ND	mg/L	0.050	EPA 200.7	1	05/16/2025 12:56	RBP	D1
Manganese, Dissolved	ND	ND	mg/L	0.0050	EPA 200.7	1	05/17/2025 13:46	MSY	F
Manganese, Total	ND	ND	mg/L	0.0025	EPA 200.7	1	05/16/2025 12:56	RBP	D1
Potassium, Dissolved	ND	ND	mg/L	0.50	EPA 200.7	1	05/17/2025 13:46	MSY	F
Potassium, Total	ND	ND	mg/L	0.25	EPA 200.7	1	05/21/2025 11:26	MSY	D1
Sodium, Dissolved	113		mg/L	0.50	EPA 200.7	1	05/17/2025 13:46	MSY	F
Sodium, Total	112		mg/L	0.25	EPA 200.7	1	05/19/2025 21:09	RBP	D1

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See Attached	3			Subcontract	1	06/03/2025 13:11	SUB	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/19/2025 23:54	PDK	M

Results

Client Sample ID	3125 River Road, Conestoga, PA	Collected	05/09/2025 10:55
Lab Sample ID	3414802001	Lab Receipt	05/09/2025 14:30

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	81.2%	70 – 130	05/19/2025 23:54	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Alkalinity, Bicarbonate	136		mg/L	5	SM2320B-2011	1	05/19/2025 11:30	JXK	A
Alkalinity, Total	136	1	mg/L	5	SM2320B-2011	1	05/19/2025 11:30	JXK	A
Ammonia-N, Low Level	ND	ND	mg/L	0.10	SM 4500-NH3G	1	05/12/2025 20:24	AYS	C
Chemical Oxygen Demand (COD)	ND	ND	mg/L	15	EPA 410.4	1	05/12/2025 14:24	KMS	C
Chloride	55.6		mg/L	2.0	EPA 300.0	2	05/10/2025 10:26	J1W	A
Fluoride	ND	ND	mg/L	0.20	EPA 300.0	2	05/10/2025 10:26	J1W	A
Nitrate-N	5.9		mg/L	1.0	EPA 300.0	2	05/10/2025 10:26	J1W	A
Nitrite-N	ND	ND	mg/L	1.0	EPA 300.0	2	05/10/2025 10:26	J1W	A
pH	8.16	2	pH_Units		S4500HB-11	1	05/19/2025 11:30	JXK	A
Phenolics	ND	ND	mg/L	0.005	EPA 420.4	1	05/21/2025 15:16	AKH	J
Specific Conductance	482		umhos/cm	5	SM2510B-2011	1	05/19/2025 14:30	MYM	A
Sulfate	8.1		mg/L	2.0	EPA 300.0	2	05/10/2025 10:26	J1W	A
Total Dissolved Solids	318		mg/L	25	SM2540C-15	1	05/12/2025 12:50	RAG	A
Total Organic Carbon (TOC)	1.1		mg/L	0.50	SM5310B-14	1	05/13/2025 05:10	PAG	H
Turbidity	2.0		NTU	0.30	SM2130B-2011	1	05/10/2025 10:53	NPF	A

Results

Client Sample ID	Trip Blank	Collected	05/09/2025 10:55
Lab Sample ID	3414802002	Lab Receipt	05/09/2025 14:30

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:20	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	85.1%	70 – 130	05/21/2025 23:20	

Results

Client Sample ID	Field Blank	Collected	05/09/2025 10:55
Lab Sample ID	3414802003	Lab Receipt	05/09/2025 14:30

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
1,1-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
1,1-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
1,2-Dibromoethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
1,2-Dichloroethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Benzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
cis-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Ethylbenzene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Methylene Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Tetrachloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Toluene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Total Xylenes	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
trans-1,2-Dichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Trichloroethene	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Trichlorofluoromethane	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A
Vinyl Chloride	ND	ND	ug/L	0.50	EPA 524.2	1	05/21/2025 23:43	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
4-Bromofluorobenzene	460-00-4	84.1%	70 – 130	05/21/2025 23:43	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3414802001	3125 River Road, Conestoga, PA	Field	N/A	
		EPA 200.7	EPA TRMD	
		EPA 200.7	EPA ACID	
		Subcontract	N/A	
		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	
3414802002	Trip Blank	EPA 524.2	N/A	
3414802003	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
3414802001	3125 River Road, Conestoga, PA	N/A	N/A	N/A		Field	
		EPA TRMD	1433062	05/13/2025 04:25	ANN	EPA 200.7	1437994
		EPA TRMD	1433062	05/13/2025 04:25	ANN	EPA 200.7	1438806
		EPA ACID	1435750	05/17/2025 12:40	MSY	EPA 200.7	1435765
		EPA TRMD	1433062	05/13/2025 04:25	ANN	EPA 200.7	1435555
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		EPA 524.2	1438391
		N/A	N/A	N/A		EPA 300.0	1431333
		N/A	N/A	N/A		EPA 410.4	1432628
		SW846 9066	1438990	05/21/2025 10:27	AKH	EPA 420.4	1438993
		N/A	N/A	N/A		S4500HB-11	1435818
		N/A	N/A	N/A		SM 4500-NH3G	1432571
		N/A	N/A	N/A		SM2130B-2011	1431429
		N/A	N/A	N/A		SM2320B-2011	1435818
		N/A	N/A	N/A		SM2510B-2011	1435991
		N/A	N/A	N/A		SM2540C-15	1432559
		N/A	N/A	N/A		SM5310B-14	1432850
3414802002	Trip Blank	N/A	N/A	N/A		EPA 524.2	1439193
3414802003	Field Blank	N/A	N/A	N/A		EPA 524.2	1439193

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.

3414802
Logged By: SLS
PM: SJB

of

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 [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [ ]

Container Type	AG	AN	AN	CG		P	P	P	P	P
Container Size	40ml	250ml	125ml	40ml		250ml	125ml	125ml	1L	500ml
Preservative	HCL	H2SO4	H2SO4	ASCHCL		H2SO4	HNO3	HNO3	UNP	UNP

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

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	TOX	O-OH	EPA 524.2 Form 52	FM	NH3-N, COD	Dissolved Metals Ca,Fe,Mg,Mn, K,Na	Metals Ca,Fe,Mg,Mn,K,Na	pH,TDS,NO2,NO3,Cl,SO4,F, SpC,Tb	Alkalinity, HCO3
1	3125RIVERRD	5.9.25	1055		G	DW	2	2	1	3	x	1	2	2	1	1
2	Trip Blank	5.9.25	1055		G	Di				2						
3	Field Blank	5.9.25	1055		G	Di				2						
4																
5																
6																
7																
8																
9																
10																

Enter Number of Containers Per Sample or Field Results Below.

Circle Sample Collector: (ALS Tech) / Client
Name: Evan P ID:

Comments: PH- 7.07 temp- 16.3 Spc 509

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5.9.25	1430	1	ALS [signature]	2	[signature] ALS
		3		4	
		5		6	
		7		8	
		9		10	

(Completed by Receiving Lab)
Temp Taken By: Therm ID: WO Temp (°C) 2

Receipt Info completed by:______ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA
NJ ≤ 4 days?	Y	N	

Courier/Tracking #

Deviations? NO YES
If YES, list below:

Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?______
PWSID #__
PWS Contact:______ PWS Phone #:______

Rad Screen (uCi)______
New Source? Y N
New Source Contact:

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

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] ______

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [x] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL ___ other

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

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

Rev 07.06.2023

Middletown Sample Condition Form

Client LCSWMA Workorder 341480Z

Temp °C 2° Therm ID 649 Ice? (Y) N N/A Initials & Date 5/9/25 DB

Fedex UPS Client (ALS) Other Tracking #

	Yes	No[1]	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present *If not present, must contact PM/client to request name.*	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)	✓			
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C			✓	
SDWA compliance reporting			✓	

[1] *If No, provide comment*

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing inform

Review Comments:

_____

_____

_____

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, June 3, 2025

Susan Scherer
ALS ENVIRONMENTAL
301 FULLING MILL ROAD
MIDDLETOWN, PA 17057

Order No.: G2505G83

Dear Susan Scherer:

Geochemical Testing received 1 sample(s) on 5/28/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *03-Jun-25*

CLIENT: ALS ENVIRONMENTAL
Project:
Lab Order: G2505G83

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *03-Jun-25*

CLIENT:	ALS ENVIRONMENTAL	**Client Sample ID:**	3414802001
Lab Order:	G2505G83		3125 River Road, Conestoga, PA
Project:		**Sampled By:**	ALS
Lab ID:	G2505G83-001	**Collection Date:**	5/9/2025 10:55:00 AM
Matrix:	AQUEOUS	**Received Date:**	5/28/2025 6:02:43 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
INDICATOR ORGANIC PARAMETERS		Analyst: **ACW**				**EPA 9020 B**	**EPA 9020 B**
Total Organic Halogen	< 50	50		µg/L	1	05/29/25 5:00 AM	05/29/25 11:50 AM

I.D. 56-00306 PA DEP