



Lead Testing in Drinking Water

Site:

Mary Miller Jr. High School
414 W. West Street
Georgetown, IL 61846

Local Education Agency:

Georgetown-Ridge Farm C.U.S.D. 4

Completion Date:

October 20, 2017



Public Act 099-0922

Public Act 099-0922, was passed into law in January 2017. The Act requires the Local Education Agency (LEA) to test for lead in all water sources used for cooking and drinking in schools built on or before January 1, 2000, where more than 10 pre-kindergarten through 5th grade children are present. The timeframe for compliance is December 31, 2017, for buildings constructed prior to January 1, 1987; and December 31, 2018, for those built between January 2, 1987 and January 1, 2000. Water samples are required to be analyzed by a method approved by the Illinois Environmental Protection Agency (IEPA) that provides a minimum reporting limit of 2 parts per billion (ppb). Notifications are required. Mitigation may be required based on test results. A Water Quality Management Plan (WQMP) is required.

Scope of Service

On October 20, 2017, Ideal Environmental Engineering (IDEAL) performed water sampling at Mary Miller Jr. High School in Georgetown, IL at the request of the LEA. The water source locations were provided to IDEAL by the LEA.

Purpose of Sampling

Based on our understanding, Mary Miller Jr. High School is not a pre-K through 5th grade facility, and pre-K through 5th grade students do not regularly use the facility. The water was tested to identify possible lead contamination using Public Act 099-0922 as guidelines.

Sampling Methodology

Prior to sampling, in order to verify that the required 8-18 hour water stagnation period had been met, school personnel provided IDEAL's water collector with the date and time the plumbing system had last been used. The date and time provided are recorded on the chain of custody (COC).

For each water source identified by the LEA, a first-draw 250 milliliter (mL) sample of cold water was collected in a bottle provided by an IEPA-approved laboratory. A first-draw sample is the first amount of water collected from a source. After the first draw was collected, the source was flushed for 30 seconds, followed by the collection of a second-draw 250 mL sample of water. This second sample is called a flush sample. If multiple faucets use the same drain, only one second-draw (flush) sample may have been collected.

Each bottle was placed in a position that allowed for the collection of all of the water. Care was taken to prevent overflow. Each bottle was labeled with a unique identifier (sample ID). The sample ID was recorded on the COC, which lists the location of the sample, source of the sample, and the date and time the sample was collected.

The water bottles were delivered—with the COC to show the relinquishment and receipt of the samples—to an IEPA-accredited laboratory for analysis. The laboratory's accreditation was reviewed by IDEAL to ensure that it was current for an IEPA-approved method of analysis for lead in drinking water.



Summary of Sampling

18 water samples were collected from 9 sources. All results are shown in Table 1.1.

Table 1.1

Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
J1	Room 116	S - Sink	First Draw	2.36 ppb
J2	Room 116	S - Sink	Flush	ND
J3	Room 120 - Lounge	S - Sink	First Draw	ND
J4	Room 120 - Lounge	S - Sink	Flush	ND
J5	Nurse Room	S - Sink	First Draw	3.29 ppb
J6	Nurse Room	S - Sink	Flush	ND
J7	West Hall - West	DF - Drinking Fountain	First Draw	ND
J8	West Hall - West	DF - Drinking Fountain	Flush	ND
J9	West Hall - East	DF - Drinking Fountain	First Draw	ND
J10	West Hall - East	DF - Drinking Fountain	Flush	ND
J11	Locker Room Hall	DF - Drinking Fountain	First Draw	2.59 ppb
J12	Locker Room Hall	DF - Drinking Fountain	Flush	2.94 ppb
J13	Kitchen - West Stainless Sink	KS - Kitchen Sink	First Draw	ND
J14	Kitchen - West Stainless Sink	KS - Kitchen Sink	Flush	ND
J15	East Hall by Men's R.R. - West	DF - Drinking Fountain	First Draw	ND
J16	East Hall by Men's R.R. - West	DF - Drinking Fountain	Flush	ND
J17	East Hall by Men's R.R. - East	DF - Drinking Fountain	First Draw	ND
J18	East Hall by Men's R.R. - East	DF - Drinking Fountain	Flush	ND
ND = None Detected				



Notifications

This building was sampled using the Act as guidelines. IDEAL recommends following parental notification requirements as outlined below, even though notification is optional:

Notification Requirements:

The Illinois Department of Public Health (IDPH) must be informed of the results. The LEA is also required to provide notification of all water testing results to parents and legal guardians of all enrolled students. Notification can be done, at a minimum, on the school's website. In addition, when any test result exceeds 5 ppb, individual written or electronic notification is required to be sent to parents and legal guardians of all enrolled students and must include the location and source exceeding 5 ppb, and the USEPA website for information about lead in drinking water: www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

Based on sample results, the following are notification options for this building:

- Submit to IDPH at dph.leadh2O@illinois.gov all sample results as shown in Table 1.1. (Since the building is not subject to the Act, IDEAL did not submit results to IDPH.)
- Provide to parents and legal guardians all sample results as shown in Table 1.1. This can be done, at a minimum, on the school's website.



Mitigation

This building was sampled using the Act as guidelines. IDEAL recommends following the mitigation requirements, even though mitigation is optional.

Mitigation Requirements:

IDPH requires mitigation when lead is found in a sample above the detection limit. They recommend the sampling source be removed from service immediately upon learning that it has tested positive for lead. Re-testing is required after mitigation unless the sampling source is taken out of service. Mitigation is to continue until subsequent testing indicates no lead is present.

Based on sample results, the following are mitigation options for this building:

- Results shown in Table 1.3 were found to contain lead at or above the 2 ppb detection limit. Mitigate all sources identified in Table 1.3, and retest after mitigation is complete.

Refer to IDPH’s website for mitigation strategies:

www.dph.illinois.gov/sites/default/files/publications/school-lead-mitigation-strategies-050917.pdf

Table 1.3 – Results over 2 ppb

Sample ID	Sample Location Description	Fixture Type	Sample Type	Concentration
J1	Room 116	S - Sink	First Draw	2.36 ppb
J5	Nurse Room	S - Sink	First Draw	3.29 ppb
J11	Locker Room Hall	DF - Drinking Fountain	First Draw	2.59 ppb
J12	Locker Room Hall	DF - Drinking Fountain	Flush	2.94 ppb



Water Quality Management Plan

For all schools subject to the Act, regardless of lead results, a Water Quality Management Plan (WQMP) must be developed and maintained.

Refer to IDPH's website for steps to an effective WQMP:

www.dph.illinois.gov/sites/default/files/publications/school-lead-mitigation-strategies-050917.pdf

General Comments

Refer to Appendix C for the complete analysis report, including chain of custody and laboratory accreditation.

This report is based strictly on Illinois Public Act 099-0922. You may also wish to refer to the EPA's *3 T's for Reducing Lead in Drinking Water* for additional guidance.

The scope of work presented in this report was based on an understanding between IDEAL and the client, whether the understanding was from verbal conversation or written document(s). The scope of work and report shall be deemed accepted by the client unless the client advises to the contrary in writing within 10 days of the receipt of this report.

Please call our office at (800)535-0964 or (309)828-4259 if you have any questions, or if we can be of further assistance with your mitigation, water retesting, the WQMP, or with other environmental services such as asbestos, indoor air quality or bleacher inspections.

Thank you for giving us the opportunity to provide this service to you. We sincerely appreciate the trust and confidence you have in our services.



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Tuesday, November 21, 2017

Central Office Staff
Ideal Environmental Engineering, Inc.
2904 Tractor Lane
Bloomington, IL 61704
TEL: (309) 828-4259
FAX: (309) 828-5735

RE: Mary Miller Jr High School

PAS WO: 17J0794

Prairie Analytical Systems, Inc. received 18 sample(s) on 10/27/2017 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (224) 253-1348.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Christina E. Pierce".

Christina E. Pierce
Project Manager

Certifications: NELAP/NELAC - IL #100323

1210 Capital Airport Drive	*	Springfield, IL 62707	*	1.217.753.1148	*	1.217.753.1152 Fax
9114 Virginia Road Suite #112	*	Lake in the Hills, IL 60156	*	1.847.651.2604	*	1.847.458.0538 Fax

Prairie Analytical Systems, Inc.

Date: 11/21/2017

LABORATORY RESULTS

Client:	Ideal Environmental Engineering, Inc.		Lab Order:	17J0794					
Project:	Mary Miller Jr High School		Lab ID:	17J0794-01					
Client Sample ID:	J1		Matrix:	Drinking Water					
Collection Date:	10/20/17 7:22								
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	2.36	2.00		µg/L	1	11/17/17 14:44	11/20/17 13:05	EPA200.8	LAH
Client Sample ID:	J2		Lab ID:	17J0794-02					
Collection Date:	10/20/17 7:22		Matrix:	Drinking Water					
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:44	11/20/17 13:14	EPA200.8	LAH
Client Sample ID:	J3		Lab ID:	17J0794-03					
Collection Date:	10/20/17 7:25		Matrix:	Drinking Water					
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:44	11/20/17 13:16	EPA200.8	LAH
Client Sample ID:	J4		Lab ID:	17J0794-04					
Collection Date:	10/20/17 7:25		Matrix:	Drinking Water					
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:22	EPA200.8	LAH
Client Sample ID:	J5		Lab ID:	17J0794-05					
Collection Date:	10/20/17 7:28		Matrix:	Drinking Water					
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	3.29	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:29	EPA200.8	LAH
Client Sample ID:	J6		Lab ID:	17J0794-06					
Collection Date:	10/20/17 7:28		Matrix:	Drinking Water					
Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:31	EPA200.8	LAH

Prairie Analytical Systems, Inc.

Date: 11/21/2017

LABORATORY RESULTS

Client: Ideal Environmental Engineering, Inc.
 Project: Mary Miller Jr High School
 Client Sample ID: J7
 Collection Date: 10/20/17 7:31

Lab Order: 17J0794
 Lab ID: 17J0794-07
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:33	EPA200.8	LAH

Client Sample ID: J8
 Collection Date: 10/20/17 7:31

Lab ID: 17J0794-08
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:44	EPA200.8	LAH

Client Sample ID: J9
 Collection Date: 10/20/17 7:32

Lab ID: 17J0794-09
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:47	EPA200.8	LAH

Client Sample ID: J10
 Collection Date: 10/20/17 7:33

Lab ID: 17J0794-10
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:49	EPA200.8	LAH

Client Sample ID: J11
 Collection Date: 10/20/17 7:38

Lab ID: 17J0794-11
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	2.59	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:51	EPA200.8	LAH

Client Sample ID: J12
 Collection Date: 10/20/17 7:38

Lab ID: 17J0794-12
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	2.94	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:53	EPA200.8	LAH

Prairie Analytical Systems, Inc.

Date: 11/21/2017

LABORATORY RESULTS

Client: Ideal Environmental Engineering, Inc.
 Project: Mary Miller Jr High School
 Client Sample ID: J13
 Collection Date: 10/20/17 7:42

Lab Order: 17J0794
 Lab ID: 17J0794-13
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:55	EPA200.8	LAH

Client Sample ID: J14
 Collection Date: 10/20/17 7:42

Lab ID: 17J0794-14
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 13:58	EPA200.8	LAH

Client Sample ID: J15
 Collection Date: 10/20/17 7:45

Lab ID: 17J0794-15
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 14:04	EPA200.8	LAH

Client Sample ID: J16
 Collection Date: 10/20/17 7:46

Lab ID: 17J0794-16
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 14:13	EPA200.8	LAH

Client Sample ID: J17
 Collection Date: 10/20/17 7:47

Lab ID: 17J0794-17
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 14:15	EPA200.8	LAH

Client Sample ID: J18
 Collection Date: 10/20/17 7:47

Lab ID: 17J0794-18
 Matrix: Drinking Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Lead	U	2.00		µg/L	1	11/17/17 14:46	11/20/17 14:17	EPA200.8	LAH

Prairie Analytical Systems, Inc.

Date: 11/21/2017

LABORATORY RESULTS

Client: Ideal Environmental Engineering, Inc.

Project: Mary Miller Jr High School

Lab Order: 17J0794

Notes and Definitions

- * NELAC certified compound.
- U Analyte not detected (i.e. less than RL or MDL).

LAB 2343/L



Prairie Analytical Systems, INCORPORATED
www.prairieanalytical.com

Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1146 - Facsimile (217) 753-1152
Chicago IL Office - 9114 Virginia Rd., Ste 112 - Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 456-9680
Central / Southern IL Contact - Phone (217) 414-7782 - Facsimile (217) 753-1152

Client / Address		Sample Location Description		Sample Location Details		Miscellaneous								
Sample ID	Date	Time	Date	Time	Source Type:	When Side by Side Fountains, etc. exist, indicate: Left (L), Right (R), Upper (UP) Lower (LO) as applicable.	Source/Single Drain=SS; Double Source/Double Drain=DD	250 ml Collected?	First Draw Sample = 1	Second Draw (30-Second Flush) = 2	# of sources / # of samples:	Date Water Last Used	Time Water Last Used:	Make / Model
J1	10/24/17	7:24	10/24/17	7:24	KS	—	SS	✓	1	1	9/18	10/21/17	9:00 AM	Minea
J2	10/24/17	7:24	10/24/17	7:24	KS	—	SS	✓	2	2				
J3	10/24/17	7:24	10/24/17	7:24	KS	—	SS	✓	1	1				
J4	10/24/17	7:24	10/24/17	7:24	KS	—	SS	✓	3	3				
J5	10/24/17	7:24	10/24/17	7:24	S	—	SS	✓	1	1				
J6	10/24/17	7:24	10/24/17	7:24	S	—	SS	✓	2	2				
J7	10/24/17	7:24	10/24/17	7:24	DF	—	SS	✓	1	1				ElKay
J8	10/24/17	7:24	10/24/17	7:24	DF	—	SS	✓	2	2				
J9	10/24/17	7:24	10/24/17	7:24	DF	—	SS	✓	1	1				
J10	10/24/17	7:24	10/24/17	7:24	DF	—	SS	✓	2	2				
J11	10/24/17	7:24	10/24/17	7:24	DF	—	SS	✓	1	1				Central
J12	10/24/17	7:24	10/24/17	7:24	DF	—	SS	✓	2	2				

Matrix: Drinking Water	Requisitioned By	Date	Time	Preservative: None	Date	Time	Received By	Date	Time	Method of Shipment
SILOCO	SILOCO	10/24/17	9:00		10/24/17	9:00	CU- PW	10/23/17		
IDEAL Lead in Water Dept., Co-p	SILOCO	10/27/17	11:00		10/27/17	13:00	SILOCO	10/27/17	13:00	18.9

Standard Rush

Turnaround Time: _____ Temperature (°C) 18.9



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
NELAP - RECOGNIZED
ENVIRONMENTAL LABORATORY ACCREDITATION



is hereby granted to

PRAIRIE ANALYTICAL SYSTEMS, INCORPORATED
1210 CAPITAL AIRPORT DRIVE
SPRINGFIELD, IL 62707-8413
NELAP ACCREDITED
ACCREDITATION NUMBER #100323



According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part 186 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part 186. Please contact the Illinois EPA Environmental Laboratory Accreditation Program (IL ELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Illinois is not an endorsement or a guarantee of validity of the data generated by the laboratory.

Celeste M. Crowley
Acting Manager
Environmental Laboratory Accreditation Program

John South
Accreditation Officer
Environmental Laboratory Accreditation Program

Certificate No.: 004184
Expiration Date: 01/31/2018
Issued On: 06/20/2017

**State of Illinois
Environmental Protection Agency
Awards the Certificate of Approval to:**

Certificate No.: 004184

Prairie Analytical Systems, Incorporated
1210 Capital Airport Drive
Springfield, IL 62707-8413

According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

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FOT Name: Drinking Water, Inorganic

Method: SM2130B,18Ed

Matrix Type: Potable Water

Turbidity

Method: SM2320B,18Ed

Matrix Type: Potable Water

Alkalinity

Method: SM2340B,18Ed

Matrix Type: Potable Water

Hardness

Method: SM4110B,18Ed

Matrix Type: Potable Water

Chloride

Fluoride

Nitrate

Nitrite

Orthophosphate as P

Sulfate

Method: SM4500CN-E,18Ed

Matrix Type: Potable Water

Cyanide

Method: SM4500H-B,18Ed

Matrix Type: Potable Water

Hydrogen ion (pH)

Method: SM5310C,20Ed

Matrix Type: Potable Water

Total Organic Carbon (TOC)

Method: USEPA150.1

Matrix Type: Potable Water

Hydrogen ion (pH)

Method: USEPA180.1

Matrix Type: Potable Water

Turbidity

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Prairie Analytical Systems, Incorporated
1210 Capital Airport Drive
Springfield, IL 62707-8413

FOT Name: Drinking Water, Inorganic

Method: USEPA200.7R4.4

Matrix Type: Potable Water

Aluminum
Barium
Cadmium
Chromium
Hardness (calc.)
Magnesium
Nickel
Sodium

Arsenic
Beryllium
Calcium
Copper
Iron
Manganese
Silver
Zinc

Method: USEPA200.8R5.4

Matrix Type: Potable Water

Aluminum
Arsenic
Beryllium
Chromium
Lead
Mercury
Nickel
Silver
Zinc

Antimony
Barium
Cadmium
Copper
Manganese
Molybdenum
Selenium
Thallium

Method: USEPA245.2

Matrix Type: Potable Water

Mercury

Method: USEPA300.0R2.1

Matrix Type: Potable Water

Chloride
Nitrate
Orthophosphate as P

Fluoride
Nitrite
Sulfate

FOT Name: Drinking Water, Organic

Method: USEPA524.2R4.1

Matrix Type: Potable Water

1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichlorobenzene

1,1,2-Trichloroethane
1,2,4-Trichlorobenzene
1,2-Dichloroethane

**State of Illinois
Environmental Protection Agency
Awards the Certificate of Approval**

Certificate No.: 004184

Prairie Analytical Systems, Incorporated
1210 Capital Airport Drive
Springfield, IL 62707-8413

FOT Name: Drinking Water, Organic

Method: USEPA524.2R4.1

Matrix Type: Potable Water

1,4-Dichlorobenzene
Bromodichloromethane
Carbon tetrachloride
Chlorodibromomethane
cis-1,2-Dichloroethene
Ethylbenzene
Naphthalene
Tetrachloroethene
Total trihalomethanes
Trichloroethylene
Xylenes (total)

1,2-Dichloropropane
Benzene
Bromoform
Chlorobenzene
Chloroform
Dichloromethane (Methylene chloride)
Methyl tert-butyl ether (MTBE)
Styrene
Toluene
trans-1,2-Dichloroethene
Vinyl chloride

FOT Name: Non Potable Water, Inorganic

Method: SM2130B,2001

Matrix Type: NPW/SCM

Turbidity

Method: SM2310B,1997

Matrix Type: NPW/SCM

Acidity

Method: SM2320B,1997

Matrix Type: NPW

Alkalinity

Method: SM2340B,1997

Matrix Type: NPW

Hardness

Method: SM2540B,1997

Matrix Type: NPW

Residue (Total)

Method: SM2540C,1997

Matrix Type: NPW

Residue (TDS)

Method: SM2540D,1997

Matrix Type: NPW

Residue (TSS)

**State of Illinois
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Certificate No.: 004184

Prairie Analytical Systems, Incorporated
1210 Capital Airport Drive
Springfield, IL 62707-8413

FOT Name: Non Potable Water, Inorganic

Method: SM3500Cr-B,2009

Matrix Type: NPW/SCM

Chromium VI

Method: SM4110B,2000

Matrix Type: NPW/SCM

Bromide

Chloride

Fluoride

Nitrate

Nitrate-Nitrite (as N)

Nitrite

Orthophosphate (as P)

Sulfate

Method: SM4500Cl-G,2000

Matrix Type: NPW

Chlorine, Total Residual

Method: SM4500CN-E,1999

Matrix Type: NPW

Cyanide

Method: SM4500H-B,2000

Matrix Type: NPW

Hydrogen Ion (pH)

Method: SM4500NH3-D,1997

Matrix Type: NPW/SCM

Ammonia

Total Kjeldahl Nitrogen

Method: SM4500NH3-G,1997

Matrix Type: NPW

Ammonia

Method: SM4500O-G,2001

Matrix Type: NPW

Oxygen - Dissolved

Method: SM4500P-E,1999

Matrix Type: NPW

Orthophosphate (as P)

Phosphorus

Method: SM4500P-F,1999

Matrix Type: NPW

Orthophosphate (as P)

Method: SM4500S2-F,2000

Matrix Type: NPW/SCM

**State of Illinois
Environmental Protection Agency
Awards the Certificate of Approval**

Certificate No.: 004184

Prairie Analytical Systems, Incorporated
1210 Capital Airport Drive
Springfield, IL 62707-8413

FOT Name: Non Potable Water, Inorganic **Method: SM4500S2-F,2000**

Matrix Type: NPW/SCM Sulfide

Method: SM5210B,2001

Matrix Type: NPW
Biochemical Oxygen Demand (BOD)

Matrix Type: NPW/SCM
Carbonaceous Biochemical Oxygen Demand (CBO)

Method: SM5220D,1997

Matrix Type: NPW
Chemical Oxygen Demand (COD)

Method: SM5310C,2000

Matrix Type: NPW
Total Organic Carbon (TOC)

Method: USEPA160.4,1971

Matrix Type: NPW
Residue (Volatile)

Method: USEPA1664A

Matrix Type: NPW
Oil and Grease

Method: USEPA180.1R2.0,1993

Matrix Type: NPW
Turbidity

Method: USEPA200.7,1994

Matrix Type: NPW/SCM	
Aluminum	Antimony
Arsenic	Barium
Beryllium	Cadmium
Calcium	Chromium
Cobalt	Copper
Iron	Lead
Magnesium	Manganese
Molybdenum	Nickel
Potassium	Selenium
Silver	Sodium
Thallium	Tin

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FOT Name: Non Potable Water, Inorganic

Method: USEPA200.7,1994

Matrix Type: NPW/SCM

Vanadium

Titanium

Zinc

Method: USEPA200.8,1994

Matrix Type: NPW/SCM

Aluminum

Arsenic

Beryllium

Cadmium

Chromium

Copper

Lead

Manganese

Nickel

Selenium

Sodium

Tin

Vanadium

Antimony

Barium

Boron

Calcium

Cobalt

Iron

Magnesium

Molybdenum

Potassium

Silver

Thallium

Titanium

Zinc

Method: USEPA245.2,1974

Matrix Type: NPW/SCM

Mercury

Method: USEPA300.0R2.1,1993

Matrix Type: NPW

Bromide

Fluoride

Nitrate-Nitrite (as N)

Orthophosphate (as P)

Chloride

Nitrate

Nitrite

Sulfate

Method: USEPA310.2,1974

Matrix Type: NPW

Alkalinity

Method: USEPA335.4R1.0,1993

Matrix Type: NPW/SCM

Cyanide

Method: USEPA350.1R2.0,1993

Matrix Type: NPW

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FOT Name: Non Potable Water, Inorganic

Method: USEPA350.1R2.0,1993

Matrix Type: NPW

Ammonia

Method: USEPA365.1R2.0,1993

Matrix Type: NPW

Orthophosphate (as P)

Method: USEPA410.4R2.0,1993

Matrix Type: NPW

Chemical Oxygen Demand (COD)

Method: USEPA420.1,1978

Matrix Type: NPW

Phenolics

Method: USEPA420.4R1.0,1993

Matrix Type: NPW

Phenolics

FOT Name: Solid and Chemical Materials, Inorganic

Method: 1010A

Matrix Type: NPW/SCM

Ignitability

Method: 1311

Matrix Type: SCM

TCLP (Organic and Inorganic)

Method: 1312

Matrix Type: SCM

Synthetic Precipitation Leaching Procedure

Method: 6010B

Matrix Type: NPW/SCM

Antimony

Arsenic

Barium

Beryllium

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead

Magnesium

Manganese

Molybdenum

Nickel

Potassium

Selenium

Silver

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FOT Name: Solid and Chemical Materials, Inorganic

Method: 6010B

Matrix Type: NPW/SCM

Strontium
Tin
Vanadium

Sodium
Thallium
Titanium
Zinc

Method: 6020A

Matrix Type: NPW/SCM

Aluminum
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Manganese
Molybdenum
Potassium
Silver
Thallium
Zinc

Antimony
Barium
Boron
Calcium
Cobalt
Iron
Magnesium
Mercury
Nickel
Selenium
Sodium
Vanadium

Method: 7196A

Matrix Type: NPW/SCM

Chromium VI

Method: 7470A

Matrix Type: NPW

Mercury

Method: 7471B

Matrix Type: SCM

Mercury

Method: 9014

Matrix Type: NPW/SCM

Cyanide

Method: 9034

Matrix Type: NPW/SCM

Sulfides

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FOT Name: Solid and Chemical Materials, Inorganic

Method: 9040B

Matrix Type: NPW

Hydrogen Ion (pH)

Method: 9040C

Matrix Type: NPW

Hydrogen Ion (pH)

Method: 9045C

Matrix Type: SCM

Hydrogen Ion (pH)

Method: 9045D

Matrix Type: SCM

Hydrogen Ion (pH)

Method: 9056A

Matrix Type: NPW/SCM

Bromide

Chloride

Fluoride

Nitrate

Nitrite

Phosphate

Sulfate

Method: 9065

Matrix Type: NPW/SCM

Phenolics

Method: 9081

Matrix Type: NPW/SCM

Cation-exchange Capacity

Method: 9095A

Matrix Type: NPW/SCM

Paint Filter

FOT Name: Solid and Chemical Materials, Organic

Method: 8015B

Matrix Type: NPW/SCM

Gasoline range organics (GRO)

Method: 8081A

Matrix Type: NPW/SCM

4,4'-DDD

4,4'-DDE

4,4'-DDT

Aldrin

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FOT Name: Solid and Chemical Materials, Organic

Method: 8081A

Matrix Type: NPW/SCM

alpha-Chlordane
Chlordane - not otherwise specified
Dieldrin
Endosulfan II
Endrin
Endrin ketone
gamma-Chlordane
Heptachlor epoxide
Toxaphene

alpha-BHC
beta-BHC
delta-BHC
Endosulfan I
Endosulfan sulfate
Endrin aldehyde
gamma-BHC (Lindane)
Heptachlor
Methoxychlor

Method: 8082

Matrix Type: NPW/SCM

PCB-1016
PCB-1232
PCB-1248
PCB-1260

PCB-1221
PCB-1242
PCB-1254

Method: 8260B

Matrix Type: NPW/SCM

1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
1,1-Dichloroethane
1,1-Dichloropropene
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,2-Dibromoethane (EDB)
1,2-Dichloroethane
1,3,5-Trimethylbenzene
1,3-Dichloropropane
2,2-Dichloropropane
2-Chloroethyl vinyl ether
2-Hexanone
4-Methyl-2-pentanone (Methyl isobutyl ketone, MIBK)
Acetonitrile
Acrylonitrile

1,1,1-Trichloroethane
1,1,2-Trichloroethane
1,1-Dichloroethene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dichlorobenzene
1,2-Dichloropropane
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2-Butanone (Methyl ethyl ketone, MEK)
2-Chlorotoluene
4-Chlorotoluene
Acetone
Acrolein (Propenal)
Benzene

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FOT Name: Solid and Chemical Materials, Organic**Method: 8260B****Matrix Type: NPW/SCM**

Bromochloromethane
 Bromoform
 Carbon disulfide
 Chlorobenzene
 Chloroethane
 Chloromethane
 cis-1,3-Dichloropropene
 Dichloromethane (Methylene chloride)
 Isopropylbenzene
 Naphthalene
 n-Propylbenzene
 sec-Butylbenzene
 tert-Butylbenzene
 Toluene
 trans-1,3-Dichloropropene
 Trichlorofluoromethane
 Vinyl chloride

Bromobenzene
 Bromodichloromethane
 Bromomethane
 Carbon tetrachloride
 Chlorodibromomethane (Dibromochloromethane)
 Chloroform
 cis-1,2-Dichloroethene
 Dichlorodifluoromethane
 Ethylbenzene
 Methyl-t-butyl ether
 n-Butylbenzene
 p-Isopropyltoluene
 Styrene
 Tetrachloroethene
 trans-1,2-Dichloroethene
 Trichloroethene
 Vinyl acetate
 Xylenes (Total)

Method: 8270C**Matrix Type: NPW/SCM**

1,2,4-Trichlorobenzene
 1,3-Dichlorobenzene
 2,2-Oxybis (1-chloropropane)
 2,4,6-Trichlorophenol
 2,4-Dimethylphenol
 2,4-Dinitrotoluene (2,4-DNT)
 2-Chloronaphthalene
 2-Methylnaphthalene
 2-Nitroaniline
 3,3'-Dichlorobenzidine
 4,6-Dinitro-2-methylphenol
 4-Chloro-3-methylphenol
 4-Chlorophenyl phenyl ether
 4-Nitroaniline
 Acenaphthene

1,2-Dichlorobenzene
 1,4-Dichlorobenzene
 2,4,5-Trichlorophenol
 2,4-Dichlorophenol
 2,4-Dinitrophenol
 2,6-Dinitrotoluene (2,6-DNT)
 2-Chlorophenol
 2-Methylphenol (o-Cresol)
 2-Nitrophenol
 3-Nitroaniline
 4-Bromophenyl phenyl ether
 4-Chloroaniline
 4-Methylphenol (p-Cresol)
 4-Nitrophenol
 Acenaphthylene

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FOT Name: Solid and Chemical Materials, Organic**Method: 8270C****Matrix Type: NPW/SCM**

Benzo(a)anthracene
 Benzo(b)fluoranthene
 Benzo(k)fluoranthene
 Bis(2-chloroethyl) ether
 Butyl benzyl phthalate
 Carbofuran (Furaden)
 Chrysene
 Dibenzofuran
 Dimethyl phthalate
 Di-n-octyl phthalate
 Fluorene
 Hexachlorobutadiene
 Hexachloroethane
 Isophorone
 Nitrobenzene
 N-Nitrosodi-n-propylamine
 o-Cresol (2-Methylphenol)
 Pentachlorophenol
 Phenol

Anthracene
 Benzo(a)pyrene
 Benzo(g,h,i)perylene
 Bis(2-chloroethoxy) methane
 Bis(2-ethylhexyl) phthalate
 Carbazole
 Chlorobenzilate
 Dibenz(a,h)anthracene
 Diethyl phthalate
 Di-n-butyl phthalate
 Fluoranthene
 Hexachlorobenzene
 Hexachlorocyclopentadiene
 Indeno(1,2,3-cd) pyrene
 Naphthalene
 N-Nitrosodimethylamine
 N-Nitrosodiphenylamine
 p-Cresol (4-Methylphenol)
 Phenanthrene
 Pyrene

Method: 8270C Mod_Farm Chemicals**Matrix Type: NPW/SCM**

Acetochlor
 Atrazine
 Chlorpyrifos
 EPTC
 Metribuzin
 Prometon
 Terbufos

Alachlor
 Butylate
 Cyanazine
 Metolachlor
 Pendimethalin
 Simazine
 Trifluralin

Method: 8321B**Matrix Type: NPW/SCM**

2,4,5-T
 2,4-D
 Aldicarb (Temik)

2,4,5-TP (Silvex)
 2,4-DB
 Carbofuran (Furaden)

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FOT Name: Solid and Chemical Materials, Organic

Method: 8321B

Matrix Type: NPW/SCM

Dicamba

MCPA

Oxamyl

Dalapon

Dinoseb

MCPP



