

ANALYTICAL REPORT

PREPARED FOR

Attn: Ian St. John
St. John Environmental Consulting
5515 Grace Ave.
Saint Louis, Missouri 63116

Generated 4/1/2024 8:16:15 AM

JOB DESCRIPTION

Francis Howell School District - FH Union High

JOB NUMBER

810-98456-1

Eurofins Eaton Analytical South Bend

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: St. John Environmental Consulting
Project: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Job ID: 810-98456-1

Eurofins Eaton Analytical South Bend

Job Narrative 810-98456-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/27/2024 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Eaton Analytical South Bend

Detection Summary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Client Sample ID: FHUH-1 Sink

Lab Sample ID: 810-98456-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.96		0.50		ug/L	1		200.8	Total/NA

Client Sample ID: FHUH-2 ICE

Lab Sample ID: 810-98456-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.63		0.50		ug/L	1		200.8	Total/NA

Client Sample ID: FHUH-3 WF

Lab Sample ID: 810-98456-3

No Detections.

Client Sample ID: FHUH-4 WF

Lab Sample ID: 810-98456-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.64		0.50		ug/L	1		200.8	Total/NA

Client Sample ID: FHUH-5 Sink

Lab Sample ID: 810-98456-5

No Detections.

Client Sample ID: FHUH-6 WF

Lab Sample ID: 810-98456-6

No Detections.

Client Sample ID: FHUH-7 WF

Lab Sample ID: 810-98456-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: St. John Environmental Consulting
 Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Client Sample ID: FHUH-1 Sink

Lab Sample ID: 810-98456-1

Date Collected: 03/26/24 08:00

Matrix: Drinking Water

Date Received: 03/27/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.96		0.50		ug/L			03/28/24 11:46	1

Client Sample ID: FHUH-2 ICE

Lab Sample ID: 810-98456-2

Date Collected: 03/26/24 08:00

Matrix: Drinking Water

Date Received: 03/27/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.63		0.50		ug/L			03/28/24 11:48	1

Client Sample ID: FHUH-3 WF

Lab Sample ID: 810-98456-3

Date Collected: 03/26/24 08:00

Matrix: Drinking Water

Date Received: 03/27/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50		ug/L			03/28/24 11:50	1

Client Sample ID: FHUH-4 WF

Lab Sample ID: 810-98456-4

Date Collected: 03/26/24 08:00

Matrix: Drinking Water

Date Received: 03/27/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.64		0.50		ug/L			03/28/24 11:51	1

Client Sample ID: FHUH-5 Sink

Lab Sample ID: 810-98456-5

Date Collected: 03/26/24 08:00

Matrix: Drinking Water

Date Received: 03/27/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50		ug/L			03/28/24 11:56	1

Client Sample ID: FHUH-6 WF

Lab Sample ID: 810-98456-6

Date Collected: 03/26/24 08:00

Matrix: Drinking Water

Date Received: 03/27/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50		ug/L			03/28/24 11:58	1

Client Sample ID: FHUH-7 WF

Lab Sample ID: 810-98456-7

Date Collected: 03/26/24 08:00

Matrix: Drinking Water

Date Received: 03/27/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50		ug/L			03/28/24 12:00	1

QC Sample Results

Client: St. John Environmental Consulting
 Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 810-93742/11
Matrix: Drinking Water
Analysis Batch: 93742

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50		ug/L			03/28/24 11:30	1

Lab Sample ID: LCS 810-93742/12
Matrix: Drinking Water
Analysis Batch: 93742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	50.0	53.6		ug/L		107	85 - 115

Lab Sample ID: LLCS 810-93742/10
Matrix: Drinking Water
Analysis Batch: 93742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.300	0.300	J	ug/L		100	50 - 150

QC Association Summary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Metals

Analysis Batch: 93742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-98456-1	FHUH-1 Sink	Total/NA	Drinking Water	200.8	
810-98456-2	FHUH-2 ICE	Total/NA	Drinking Water	200.8	
810-98456-3	FHUH-3 WF	Total/NA	Drinking Water	200.8	
810-98456-4	FHUH-4 WF	Total/NA	Drinking Water	200.8	
810-98456-5	FHUH-5 Sink	Total/NA	Drinking Water	200.8	
810-98456-6	FHUH-6 WF	Total/NA	Drinking Water	200.8	
810-98456-7	FHUH-7 WF	Total/NA	Drinking Water	200.8	
MB 810-93742/11	Method Blank	Total/NA	Drinking Water	200.8	
LCS 810-93742/12	Lab Control Sample	Total/NA	Drinking Water	200.8	
LLCS 810-93742/10	Lab Control Sample	Total/NA	Drinking Water	200.8	



Lab Chronicle

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Client Sample ID: FHUH-1 Sink

Date Collected: 03/26/24 08:00

Date Received: 03/27/24 09:15

Lab Sample ID: 810-98456-1

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	93742	CA	EA SB	03/28/24 11:46

Client Sample ID: FHUH-2 ICE

Date Collected: 03/26/24 08:00

Date Received: 03/27/24 09:15

Lab Sample ID: 810-98456-2

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	93742	CA	EA SB	03/28/24 11:48

Client Sample ID: FHUH-3 WF

Date Collected: 03/26/24 08:00

Date Received: 03/27/24 09:15

Lab Sample ID: 810-98456-3

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	93742	CA	EA SB	03/28/24 11:50

Client Sample ID: FHUH-4 WF

Date Collected: 03/26/24 08:00

Date Received: 03/27/24 09:15

Lab Sample ID: 810-98456-4

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	93742	CA	EA SB	03/28/24 11:51

Client Sample ID: FHUH-5 Sink

Date Collected: 03/26/24 08:00

Date Received: 03/27/24 09:15

Lab Sample ID: 810-98456-5

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	93742	CA	EA SB	03/28/24 11:56

Client Sample ID: FHUH-6 WF

Date Collected: 03/26/24 08:00

Date Received: 03/27/24 09:15

Lab Sample ID: 810-98456-6

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	93742	CA	EA SB	03/28/24 11:58

Client Sample ID: FHUH-7 WF

Date Collected: 03/26/24 08:00

Date Received: 03/27/24 09:15

Lab Sample ID: 810-98456-7

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	93742	CA	EA SB	03/28/24 12:00

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Eurofins Eaton Analytical South Bend

Accreditation/Certification Summary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Laboratory: Eurofins Eaton Analytical South Bend

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Missouri	State	880	09-30-24

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Method Summary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	EA SB

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777



Sample Summary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - FH Union High

Job ID: 810-98456-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-98456-1	FHUH-1 Sink	Drinking Water	03/26/24 08:00	03/27/24 09:15
810-98456-2	FHUH-2 ICE	Drinking Water	03/26/24 08:00	03/27/24 09:15
810-98456-3	FHUH-3 WF	Drinking Water	03/26/24 08:00	03/27/24 09:15
810-98456-4	FHUH-4 WF	Drinking Water	03/26/24 08:00	03/27/24 09:15
810-98456-5	FHUH-5 Sink	Drinking Water	03/26/24 08:00	03/27/24 09:15
810-98456-6	FHUH-6 WF	Drinking Water	03/26/24 08:00	03/27/24 09:15
810-98456-7	FHUH-7 WF	Drinking Water	03/26/24 08:00	03/27/24 09:15

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Chain of Custody Record

12/18/20

Client Information Client Contact: <u>Deal Allison</u> Company: <u>Francis Howell School Dist.</u> Address: <u>4606 Central School Road</u> City: <u>St. Charles</u> State, Zip: <u>MO</u> Phone: <u>636-851-6176</u> Email: <u>Don.Allison@FHSschools.org</u> Project Name: <u>Francis Howell School Dist</u> Site: <u>FH Union High</u>		Sampler: <u>Travis St. John</u> Phone: <u>(314) 853-4668</u> E-Mail: <u>ina@stjohnenv.com</u> Lab P/N: <u>MO</u> State of Origin: <u>MO</u> Analysis Requested:		Due Date Requested: TAT Requested (days): <u>Standard</u> Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: WO #: Project #: SSOW #:		Sample Identification <table border="1"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=soil, L=leaves, A=air)</th> <th>Preservation Code:</th> </tr> </thead> <tbody> <tr> <td>FH44-1</td> <td>3/29/24</td> <td>0800</td> <td>G</td> <td>W</td> <td></td> </tr> <tr> <td>FH44-2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-4</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-5</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-6</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-7</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-8</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-9</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-10</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FH44-11</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, L=leaves, A=air)	Preservation Code:	FH44-1	3/29/24	0800	G	W		FH44-2						FH44-3						FH44-4						FH44-5						FH44-6						FH44-7						FH44-8						FH44-9						FH44-10						FH44-11						Special Instructions/Note: <p>pH verified <2 <u>200.8 + kw 3/27/24</u></p> <p>Cross Diff on COC by Client</p>	
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, L=leaves, A=air)	Preservation Code:																																																																												
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Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Method of Shipment:																																																																													
Received by: <u>Don A. John</u> Date/Time: <u>3/26/24</u> Company:		Received by: <u>Kammer-Williams</u> Date/Time: <u>3/27/24 0915</u> Company: <u>EEA-SB</u>		Received by: Date/Time: Company:																																																																													
Empty Kit Relinquished by:		Relinquished by:		Relinquished by:																																																																													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>Ambient</u>																																																																													

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Login Sample Receipt Checklist

Client: St. John Environmental Consulting

Job Number: 810-98456-1

Login Number: 98456

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Williams, Kameron

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	False	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	