

# ANALYTICAL REPORT

## PREPARED FOR

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

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## JOB DESCRIPTION

St. Joseph School District - Lake

## JOB NUMBER

810-114283-1

# 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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## Definitions/Glossary

Client: St. John Environmental Consulting  
Project/Site: St. Joseph School District - Lake

Job ID: 810-114283-1

### 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: St. Joseph School District - Lake

Job ID: 810-114283-1

**Job ID: 810-114283-1**

**Eurofins Eaton Analytical South Bend**

### **Job Narrative 810-114283-1**

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 8/5/2024 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: St. Joseph School District - Lake

Job ID: 810-114283-1

### Client Sample ID: SJLE - 9 Bubbler

Lab Sample ID: 810-114283-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.2		0.50		ug/L	1		200.8	Total/NA

### Client Sample ID: SJLE - 13 Sink

Lab Sample ID: 810-114283-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.8		0.50		ug/L	1		200.8	Total/NA

### Client Sample ID: SJLE - 14 Bubbler

Lab Sample ID: 810-114283-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.5		0.50		ug/L	1		200.8	Total/NA

### Client Sample ID: SJLE - 15 Sink

Lab Sample ID: 810-114283-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	3.1		0.50		ug/L	1		200.8	Total/NA

### Client Sample ID: SJLE - 18 Sink

Lab Sample ID: 810-114283-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.5		0.50		ug/L	1		200.8	Total/NA

### Client Sample ID: SJLE - 33 ICE

Lab Sample ID: 810-114283-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.82		0.50		ug/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend

## Client Sample Results

Client: St. John Environmental Consulting  
Project/Site: St. Joseph School District - Lake

Job ID: 810-114283-1

### Client Sample ID: SJLE - 9 Bubbler

Lab Sample ID: 810-114283-1

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

#### Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.2		0.50		ug/L			08/12/24 14:32	1

### Client Sample ID: SJLE - 13 Sink

Lab Sample ID: 810-114283-2

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

#### Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.8		0.50		ug/L			08/12/24 14:33	1

### Client Sample ID: SJLE - 14 Bubbler

Lab Sample ID: 810-114283-3

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

#### Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.5		0.50		ug/L			08/12/24 14:35	1

### Client Sample ID: SJLE - 15 Sink

Lab Sample ID: 810-114283-4

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

#### Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.1		0.50		ug/L			08/12/24 14:37	1

### Client Sample ID: SJLE - 18 Sink

Lab Sample ID: 810-114283-5

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

#### Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.5		0.50		ug/L			08/12/24 14:43	1

### Client Sample ID: SJLE - 33 ICE

Lab Sample ID: 810-114283-6

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

#### Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.82		0.50		ug/L			08/12/24 14:45	1

# QC Sample Results

Client: St. John Environmental Consulting  
Project/Site: St. Joseph School District - Lake

Job ID: 810-114283-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 810-109645/11  
Matrix: Drinking Water  
Analysis Batch: 109645

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			08/12/24 12:39	1

Lab Sample ID: MB 810-109645/71  
Matrix: Drinking Water  
Analysis Batch: 109645

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			08/12/24 14:26	1

Lab Sample ID: LCS 810-109645/72  
Matrix: Drinking Water  
Analysis Batch: 109645

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	52.0		ug/L		104	85 - 115

Lab Sample ID: LLCS 810-109645/10  
Matrix: Drinking Water  
Analysis Batch: 109645

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	0.321	J	ug/L		107	50 - 150

Lab Sample ID: 810-114283-4 MS  
Matrix: Drinking Water  
Analysis Batch: 109645

Client Sample ID: SJLE - 15 Sink  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	3.1		50.0	59.3		ug/L		112	70 - 130

Lab Sample ID: 810-114283-4 MSD  
Matrix: Drinking Water  
Analysis Batch: 109645

Client Sample ID: SJLE - 15 Sink  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	3.1		50.0	58.0		ug/L		110	70 - 130	2	20



## QC Association Summary

Client: St. John Environmental Consulting  
Project/Site: St. Joseph School District - Lake

Job ID: 810-114283-1

### Metals

#### Analysis Batch: 109645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-114283-1	SJLE - 9 Bubbler	Total/NA	Drinking Water	200.8	
810-114283-2	SJLE - 13 Sink	Total/NA	Drinking Water	200.8	
810-114283-3	SJLE - 14 Bubbler	Total/NA	Drinking Water	200.8	
810-114283-4	SJLE - 15 Sink	Total/NA	Drinking Water	200.8	
810-114283-5	SJLE - 18 Sink	Total/NA	Drinking Water	200.8	
810-114283-6	SJLE - 33 ICE	Total/NA	Drinking Water	200.8	
MB 810-109645/11	Method Blank	Total/NA	Drinking Water	200.8	
MB 810-109645/71	Method Blank	Total/NA	Drinking Water	200.8	
LCS 810-109645/72	Lab Control Sample	Total/NA	Drinking Water	200.8	
LLCS 810-109645/10	Lab Control Sample	Total/NA	Drinking Water	200.8	
810-114283-4 MS	SJLE - 15 Sink	Total/NA	Drinking Water	200.8	
810-114283-4 MSD	SJLE - 15 Sink	Total/NA	Drinking Water	200.8	

# Lab Chronicle

Client: St. John Environmental Consulting  
Project/Site: St. Joseph School District - Lake

Job ID: 810-114283-1

**Client Sample ID: SJLE - 9 Bubbler**

**Lab Sample ID: 810-114283-1**

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	109645	NB	EA SB	08/12/24 14:32

**Client Sample ID: SJLE - 13 Sink**

**Lab Sample ID: 810-114283-2**

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	109645	NB	EA SB	08/12/24 14:33

**Client Sample ID: SJLE - 14 Bubbler**

**Lab Sample ID: 810-114283-3**

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	109645	NB	EA SB	08/12/24 14:35

**Client Sample ID: SJLE - 15 Sink**

**Lab Sample ID: 810-114283-4**

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	109645	NB	EA SB	08/12/24 14:37

**Client Sample ID: SJLE - 18 Sink**

**Lab Sample ID: 810-114283-5**

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	109645	NB	EA SB	08/12/24 14:43

**Client Sample ID: SJLE - 33 ICE**

**Lab Sample ID: 810-114283-6**

Date Collected: 08/01/24 08:00

Matrix: Drinking Water

Date Received: 08/05/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	109645	NB	EA SB	08/12/24 14:45

## Laboratory References:

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

Accreditation/Certification Summary

Client: St. John Environmental Consulting  
Project/Site: St. Joseph School District - Lake

Job ID: 810-114283-1

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: St. Joseph School District - Lake

Job ID: 810-114283-1

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

1
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## Sample Summary

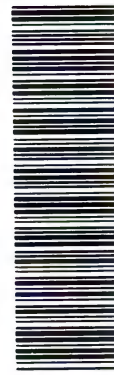
Client: St. John Environmental Consulting  
Project/Site: St. Joseph School District - Lake

Job ID: 810-114283-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-114283-1	SJLE - 9 Bubbler	Drinking Water	08/01/24 08:00	08/05/24 09:15
810-114283-2	SJLE - 13 Sink	Drinking Water	08/01/24 08:00	08/05/24 09:15
810-114283-3	SJLE - 14 Bubbler	Drinking Water	08/01/24 08:00	08/05/24 09:15
810-114283-4	SJLE - 15 Sink	Drinking Water	08/01/24 08:00	08/05/24 09:15
810-114283-5	SJLE - 18 Sink	Drinking Water	08/01/24 08:00	08/05/24 09:15
810-114283-6	SJLE - 33 ICE	Drinking Water	08/01/24 08:00	08/05/24 09:15

## Chain of Custody Record



<b>Client Information</b> Phone (574) 233-4777 Client Contact: <b>Casey Housman</b> Company: <b>St. Joseph School District</b> Address: <b>1415 North 26th Street</b> City: <b>St. Joseph</b> State, Zip: <b>Missouri 64506</b> Phone: <b>816-671-4000</b> Email: <b>CaseyHousman@sjsd.k12.mo.us</b> Project Name: <b>St. Joseph School District</b> Site: <b>Lake</b>		Sampler: <b>Ian St. John</b> Phone: <b>314-853-4668</b> E-Mail: <b>ian@sjohnenv.com</b> Lab PM: _____ Carrier Tracking No(s): _____ State of Origin: <b>MO</b> Page: _____ of _____ Job #: _____	
Due Date Requested: _____ TAT Requested (days): <b>Standard</b> Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: _____ WO #: _____ Project #: _____ SSOW#: _____		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ascorbic Acid H - Iodine I - DI Water J - pH 4-5 K - EDTA L - EDA M - Hexane N - None O - Acetic Acid P - Na2SO4 Q - Na2SO3 R - H2SO4 S - TSP Dodecahydrate T - Acetone U - MCAA V - pH 4-5 W - Tris X - other (specify) Other: _____	
<b>Sample Identification</b> Sample Date: <b>8/1/24</b> Sample Time: <b>0800</b> Sample Type: <b>G</b> Matrix: <b>W</b> Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Preservation Code: _____		Total Number of Containers: _____ Special Instructions/Note: _____	
Sample ID: <b>STLE-9 bubbler</b> <b>STLE-13 sink</b> <b>STLE-14 bubbler</b> <b>STLE-15 sink</b> <b>STLE-18 sink</b> <b>STLE-33 ice</b> <b>ST</b> <b>ST</b> <b>ST</b> <b>ST</b> <b>ST</b>		Barcode:  810-114283 Chain of Custody	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____		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: _____	
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Method of Shipment: _____ Date: <b>8/1/24</b> Date/Time: _____ Date/Time: _____ Date/Time: _____ Date/Time: _____	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: _____	

## Login Sample Receipt Checklist

Client: St. John Environmental Consulting

Job Number: 810-114283-1

Login Number: 114283

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Alfred, Robbin

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	