11

13

# **ANALYTICAL REPORT**

# PREPARED FOR

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

Generated 8/13/2024 6:49:04 AM

# **JOB DESCRIPTION**

St. Joseph School District - Hosea

# **JOB NUMBER**

810-114311-1

Eurofins Eaton Analytical South Bend 110 S Hill Street South Bend IN 46617



# **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**

Generated 8/13/2024 6:49:04 AM

Authorized for release by Pamela Brown, Project Manager Pamela.Brown@et.eurofinsus.com (574)233-4777

13

# **Table of Contents**

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
QC Sample Results	8
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Sample Summary	13
Chain of Custody	14
Receipt Chacklists	16

3

4

6

\_\_\_\_

9

10

12

13

### **Definitions/Glossary**

Client: St. John Environmental Consulting Project/Site: St. Joseph School District - Hosea Job ID: 810-114311-1

### **Qualifiers**

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.
¤	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

**Eurofins Eaton Analytical South Bend** 

8/13/2024

Page 4 of 16

Í

3

0

0

9

11

15

13

### **Case Narrative**

Client: St. John Environmental Consulting Project: St. Joseph School District - Hosea

Job ID: 810-114311-1

**Eurofins Eaton Analytical South Bend** 

Job ID: 810-114311-1

Job Narrative 810-114311-1

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 8/6/2024 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.

2

3

4

5

7

Ŏ

4.0

11

13

14

8/13/2024

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

Job ID: 810-114311-1

Client Sample ID: SJH - 1	0 Sink					La	b S	Sample ID:	810-114311-1
 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	5.5		0.50		ug/L	1	_	200.8	Total/NA
Client Sample ID: SJH - 1	11 Sink					La	b S	Sample ID:	810-114311-2
— Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.3		0.50		ug/L	1	_	200.8	Total/NA
Client Sample ID: SJH - 1	2 Sink					La	b S	Sample ID:	810-114311-3
– Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	77		0.50		ug/L	1	_	200.8	Total/NA
Client Sample ID: SJH - 1	4 Bubbler					La	b S	Sample ID:	810-114311-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.7		0.50		ug/L	1		200.8	Total/NA
Client Sample ID: SJH - 1	6 WF					La	b S	Sample ID:	810-114311-5
— Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.8		0.50		ug/L	1	_	200.8	Total/NA
Client Sample ID: SJH - 2	20 Sink					La	b S	Sample ID:	810-114311-6
_	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Analyte									

No Detections.

\_

3

-

7

10

12

13

14

8/13/2024

Lab	Sample	ID: 8	10-114	4311-1

Client Sample ID: SJH - 10 Sink Date Collected: 08/01/24 08:00 **Matrix: Drinking Water** 

Date Received: 08/06/24 09:15

Ana	alyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lea	ad .	5.5		0.50		ug/L			08/12/24 20:28	1

#### Lab Sample ID: 810-114311-2 Client Sample ID: SJH - 11 Sink **Matrix: Drinking Water**

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

Method: EPA 200.8 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.3		0.50		ug/L			08/12/24 20:30	1

#### Client Sample ID: SJH - 12 Sink Lab Sample ID: 810-114311-3 Matrix: Drinking Water

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

Method: EPA 200.8 - Metals (ICP/MS	<b>S</b> )								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	77		0.50		ug/L			08/12/24 20:33	1

#### Client Sample ID: SJH - 14 Bubbler Lab Sample ID: 810-114311-4 **Matrix: Drinking Water**

Date Collected: 08/01/24 08:00

Date Received: 08/06/24 09:15 Matala (ICD/MS)

Method: EPA 200.8 - Metals (ICP/M	<b>S</b> )								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.7		0.50		ug/L			08/12/24 20:36	1

Lab Sample ID: 810-114311-5 Client Sample ID: SJH - 16 WF Date Collected: 08/01/24 08:00 **Matrix: Drinking Water** 

Date Received: 08/06/24 09:15

Method: EPA 200.8 - Metals (ICP/M	S)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.8		0.50		ug/L			08/12/24 20:39	1

#### Client Sample ID: SJH - 20 Sink Lab Sample ID: 810-114311-6

Date Collected: 08/01/24 08:00	Matrix: Drinking Water
Date Received: 08/06/24 09:15	
_	

Method: EPA 200.8 - Metals (ICP/M	IS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepai	red Analyzed	Dil Fac
Lead	1.3		0.50		ug/L			08/12/24 20:42	1

ug/L Lead 1.3 Lab Sample ID: 810-114311-7 Client Sample ID: SJH - 24 Sink

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

Method: EPA 200.8 - Metals (ICP/M	IS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50		ug/L			08/12/24 20:44	1

**Matrix: Drinking Water** 

# **QC Sample Results**

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

Lead

Job ID: 810-114311-1

9

3

5

7

9

11

13

Method: 200.8 - Metals (ICP/MS)													
Lab Sample ID: MB 810-109657/13 Matrix: Drinking Water Analysis Batch: 109657											Client S	ample ID: Metho Prep Type:	
7 <b>,</b> 0.0	МВ	МВ											
Analyte	Result	Qualifier		RL		MDL	Unit		D	Pr	repared	Analyzed	Dil Fac
Lead	<0.50			0.50			ug/L					08/12/24 18:06	1
Lab Sample ID: MB 810-109657/43											Client S	sample ID: Metho	od Blank
Matrix: Drinking Water												Prep Type:	Total/NA
Analysis Batch: 109657													
	MB	MB											
Analyte	Result	Qualifier		RL		MDL	Unit		D	Pr	repared	Analyzed	Dil Fac
Lead	<0.50			0.50			ug/L					08/12/24 19:31	1
Lab Sample ID: LCS 810-109657/44									Clie	ent	Sample	ID: Lab Contro	Sample
Matrix: Drinking Water												Prep Type:	Total/NA
Analysis Batch: 109657													
			Spike		LCS	LCS						%Rec	
Analyte			Added		Result	Qua	lifier	Unit		D	%Rec	Limits	
Lead			50.0		47.7			ug/L			95	85 - 115	
Lab Sample ID: LLCS 810-109657/11									Clie	ent	Sample	ID: Lab Contro	Sample
Matrix: Drinking Water											•	Prep Type:	Total/NA
Analysis Batch: 109657													
			Spike		LLCS	LLC	S					%Rec	
Analyte			Added		Result	Qua	lifier	Unit		D	%Rec	Limits	

0.300

0.291 J

ug/L

97

50 - 150

# **QC Association Summary**

Client: St. John Environmental Consulting Project/Site: St. Joseph School District - Hosea Job ID: 810-114311-1

### **Metals**

### Analysis Batch: 109657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-114311-1	SJH - 10 Sink	Total/NA	Drinking Water	200.8	
810-114311-2	SJH - 11 Sink	Total/NA	Drinking Water	200.8	
810-114311-3	SJH - 12 Sink	Total/NA	Drinking Water	200.8	
810-114311-4	SJH - 14 Bubbler	Total/NA	Drinking Water	200.8	
810-114311-5	SJH - 16 WF	Total/NA	Drinking Water	200.8	
810-114311-6	SJH - 20 Sink	Total/NA	Drinking Water	200.8	
810-114311-7	SJH - 24 Sink	Total/NA	Drinking Water	200.8	
MB 810-109657/13	Method Blank	Total/NA	Drinking Water	200.8	
MB 810-109657/43	Method Blank	Total/NA	Drinking Water	200.8	
LCS 810-109657/44	Lab Control Sample	Total/NA	Drinking Water	200.8	
LLCS 810-109657/11	Lab Control Sample	Total/NA	Drinking Water	200.8	

4

4

5

7

8

9

4 4

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

Client Sample ID: SJH - 10 Sink

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

Lab Sample ID: 810-114311-1

**Matrix: Drinking Water** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	200.8		1	109657	NB	EA SB	08/12/24 20:28

Client Sample ID: SJH - 11 Sink Lab Sample ID: 810-114311-2

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

**Matrix: Drinking Water** 

Batch Batch Dilution Batch Prepared Prep Type Method Number Analyst or Analyzed Туре Run Factor Lab 200.8 109657 NB EA SB 08/12/24 20:30 Total/NA Analysis

Client Sample ID: SJH - 12 Sink Lab Sample ID: 810-114311-3

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

**Matrix: Drinking Water** 

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number Analyst Lab or Analyzed 200.8 109657 NB EA SB 08/12/24 20:33 Total/NA Analysis

Client Sample ID: SJH - 14 Bubbler Lab Sample ID: 810-114311-4

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

**Matrix: Drinking Water** 

**Matrix: Drinking Water** 

Matrix: Drinking Water

Dilution Batch Batch Batch Prepared Prep Type Method Run Factor Number Analyst Lab or Analyzed Type 109657 NB EA SB 08/12/24 20:36 200.8 Total/NA Analysis

Client Sample ID: SJH - 16 WF Lab Sample ID: 810-114311-5

Date Collected: 08/01/24 08:00 Date Received: 08/06/24 09:15

Dilution Batch Batch Batch Prepared **Prep Type** Type Method Run Factor Number Analyst Lab or Analyzed

Client Sample ID: SJH - 20 Sink Lab Sample ID: 810-114311-6

Date Received: 08/06/24 09:15

Analysis

200.8

Total/NA

Date Collected: 08/01/24 08:00 **Matrix: Drinking Water** 

109657

EA SB

08/12/24 20:39

Dilution Batch Batch Batch Prepared Method Prep Type Туре Run Factor Number Analyst Lab or Analyzed 08/12/24 20:42 Total/NA 200.8 109657 NB EA SB Analysis

Client Sample ID: SJH - 24 Sink Lab Sample ID: 810-114311-7

Date Collected: 08/01/24 08:00

Date Received: 08/06/24 09:15 Batch Dilution Batch Batch Prepared

Method Factor or Analyzed Prep Type Type Run Number Analyst Lab Total/NA Analysis 200.8 109657 NB EA SB 08/12/24 20:44

**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 - Hosea Job ID: 810-114311-1

### **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

## **Method Summary**

Client: St. John Environmental Consulting Project/Site: St. Joseph School District - Hosea Job ID: 810-114311-1

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

**Protocol References:** 

EPA = US Environmental Protection Agency

Laboratory References:

EASB = 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: St. Joseph School District - Hosea Job ID: 810-114311-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-114311-1	SJH - 10 Sink	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114311-2	SJH - 11 Sink	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114311-3	SJH - 12 Sink	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114311-4	SJH - 14 Bubbler	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114311-5	SJH - 16 WF	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114311-6	SJH - 20 Sink	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114311-7	SJH - 24 Sink	Drinking Water	08/01/24 08:00	08/06/24 09:15

4

10

11

12

4 /

	Sempler.	Lab PAK:	Carrier Tracking No(s):	COC NC:
Chair Contact	Bloom:	5-Welt:	State of Origin:	Page:
Casey Housman	314-853-466	ian@stjohnenv.com	MO	Page 1 of
S)		Analysis Requested	quested	
Address: 1415 North 26th Street	Due Date Requested:			200
S	TAT Requested (days): Standard	09		B-NaOH O-ANACOZ
State, Zp: Missouri 64506	Compliance Project: A Yes A No	tol		E-NaHSO4 R-Na2803
Phone: 816-671-4000	PO#:	7	2 V V V V V V V V V V V V V V V V V V V	nchior corbic Acid
Email: CaseyHousman@sisd.k12.mo.us	WO#	11.11		J-DI Water W-pH 4-5
Project Name: St. Joseph School District	Project #:			L-EDA
site: HOSCA	88OW#:			70 To
	Sample	baradii- Azili m		эфший
Sample Mantiflooden	Sample (C=Comp,	-		Special Instructions/Note:
	Preserva			X
STH- 10 SINK	811/24/0400 6	7		
·H- 11				
7H- 12				
h! -H				
87H- 16 Wf				
85 H- 20 SINK		o10-114311 Chain of Custody	of Custody	
STH- 24 SINK				
डी				
2				
ST				
ひる		<b>→</b>		bod longs than 1 month)
		Sample Disposal ( A ree may be assessed it samples are relational original man in the company of the man and the company of the man and the company of the man and the company of the comp	Disposal By Lab	chive For Months
sted: I, II, III, IV, Other (specify)	Unknown	Special Instructions/QC Requirements:	ints:	
Empty Kit Relinquished by:	Date:	Time	Method of Shipment:	111
Replicing to the Company of the Comp	11/24		15th Delatities 2.5.7	Company Company
Relinquished by:	DateTyre: 7 . 7	Company required by.		
Refinquished by:	Date/Time:	Company Received by:	Date/Time:	Company

4.6

### **Login Sample Receipt Checklist**

Client: St. John Environmental Consulting

Job Number: 810-114311-1

Login Number: 114311 List Number: 1

Creator: Alfred, Robbin

List Source: Eurofins Eaton Analytical South Bend

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	