

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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Attn: Ian St. John St. John Environmental Consulting 5515 Grace Ave. Saint Louis, Missouri 63116 Generated 8/13/2024 12:00:12 AM

JOB DESCRIPTION

St. Joseph School District - Pershing

JOB NUMBER

810-114296-1

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





Eurofins Eaton Analytical South Bend

Job Notes

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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 Pamela Brown, Project Manager <u>Pamela.Brown@et.eurofinsus.com</u> (574)233-4777

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

Qualifiers

Qualifiers		3
Metals	Qualifier Description	4
Qualifier J	Qualifier Description Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
5		5
Glossary		5
Abbreviation	These commonly used abbreviations may or may not be present in this report.	6
¤	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	0
CNF	Contains No Free Liquid	0
DER	Duplicate Error Ratio (normalized absolute difference)	0
Dil Fac	Dilution Factor	9
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

Job ID: 810-114296-1

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Job Narrative 810-114296-1

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.

Detection Summary

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

Job ID: 810-114296-1

lient Sample ID: SJI	PER - 3 Ice					La	b Sa	ample ID:	810-114296-1
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.89		0.50		ug/L	1		200.8	Total/NA
lient Sample ID: SJI	PER - 6 Bubbler					Lal	b Sa	ample ID:	810-114296-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.9		0.50		ug/L	1	_	200.8	Total/NA
lient Sample ID: SJI	PER - 10 Sink					Lal	b Sa	ample ID:	810-114296-3
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	1.6		0.50		ug/L	1	_	200.8	Total/NA
lient Sample ID: SJI	PER - 14 Bubbler					Lal	b Sa	ample ID:	810-114296-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.8		0.50		ug/L	1	_	200.8	Total/NA
lient Sample ID: SJI	PER - 20 Bubbler					La	b Sa	ample ID:	810-114296-5
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.2		0.50		ug/L	1	_	200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: St. John Environmental Consulting Project/Site: St. Joseph School District - Pershing Job ID: 810-114296-1

Client Sample ID: SJPER - 3 Io	e						Lab Sam	ple ID: 810-11	4296-1
Date Collected: 08/01/24 08:00								Matrix: Drinkin	ig Watei
Date Received: 08/06/24 09:15									
_ Method: EPA 200.8 - Metals (ICP/MS	`								
Analyte	·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.89		0.50		ug/L			08/12/24 17:00	1
	. la la la su				-		1	- I- ID- 040 44	4000.0
Client Sample ID: SJPER - 6 Bu	ubbier						Lab Sam	ple ID: 810-11	
Date Collected: 08/01/24 08:00								Matrix: Drinkin	ig Water
Date Received: 08/06/24 09:15									
)								
Analyte	-	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.9		0.50		ug/L			08/12/24 17:02	1
Client Sample ID: SJPER - 10 S	SINK						Lab Sam	ple ID: 810-11	
Date Collected: 08/01/24 08:00								Matrix: Drinkin	ig Watei
Date Received: 08/06/24 09:15									
	`								
Analyte	·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.6		0.50		ug/L			08/12/24 17:04	1
					5				
Client Sample ID: SJPER - 14 E	Bubbler						Lab Sam	ple ID: 810-11	4296-4
Date Collected: 08/01/24 08:00								Matrix: Drinkin	ig Water
Date Received: 08/06/24 09:15									
- Nathadi EDA 200 0 - Matala (IOD/NO									
Method: EPA 200.8 - Metals (ICP/MS Analyte	·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzod	Dil Fac
Lead	2.8	Quaimer	0.50		ug/L	<u> </u>	Frepareu	Analyzed 08/12/24 17:06	1
	2.0		0.50		ug/L			00/12/24 17:00	I
Client Sample ID: SJPER - 20 E	Bubbler						Lab Sam	ple ID: 810-11	4296-5
Date Collected: 08/01/24 08:00								Matrix: Drinkin	ig Water
Date Conected. 00/01/24 00.00									
Date Received: 08/06/24 09:15	<u> </u>								
Date Received: 08/06/24 09:15 	·	Qualifier	Ы	МП	Unit		Bronarad	Analyzad	
Date Received: 08/06/24 09:15	·	Qualifier	RL	MDL	Unit ug/L	<u>D</u>	Prepared	Analyzed	Dil Fac

Job ID: 810-114296-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 810-109645/1	1										Cli	ient S	ample ID: N		
Matrix: Drinking Water Analysis Batch: 109645													Prep Ty	pe: n	otal/NA
Analysis Batch. 109045		мв	мв												
Analyte	Re		Qualifier		RL		MDL	Unit		D	Prep	ared	Analyze	d	Dil Fac
Lead		0.50			0.50			ug/L					08/12/24 1		1
	~										0				Disale
Lab Sample ID: MB 810-109645/13	32										CI	ient S	ample ID: N		
Matrix: Drinking Water Analysis Batch: 109645													Prep Ty	pe. n	otal/INA
Allalysis Batch. 109045		мв	MB												
Analyte	Re		Qualifier		RL		MDL	Unit		D	Prep	ared	Analyze	d	Dil Fac
Lead	<	0.50			0.50			ug/L					08/12/24 1	6:19	1
Lab Sample ID: MB 810-109645/10	62										CI	iont S	ample ID: N	lethor	l Blank
Matrix: Drinking Water													Prep Ty		
Analysis Batch: 109645													i i cp i j	рс. п	
		мв	мв												
Analyte	Re		Qualifier		RL		MDL	Unit		D	Prep	ared	Analyze	d	Dil Fac
Lead	<	0.50			0.50			ug/L					08/12/24 1	7:15	1
_ Lab Sample ID: LCS 810-109645/′	133									Clie	nt Sa	mnle	ID: Lab Co	ntrol	Samnlo
Matrix: Drinking Water										one		mpic	Prep Ty		
Analysis Batch: 109645															
· ·····, ··· · ··· · · · · · · · · · ·				Spike		LCS	LCS						%Rec		
Analyte				Added		Result	Qual	ifier	Unit	I	D %	Rec	Limits		
Lead				50.0		52.0			ug/L			104	85 - 115		
- Lab Sample ID: LCS 810-109645/′	163									Clie	ent Sa	ample	ID: Lab Co	ntrol S	Sample
Matrix: Drinking Water													Prep Ty		
Analysis Batch: 109645															
-				Spike		LCS	LCS						%Rec		
Analyte				Added		Result	Qual	ifier	Unit	I	D %	Rec	Limits		
Lead				50.0		52.2			ug/L			104	85 - 115		
Lab Sample ID: LLCS 810-109645	/10									Clie	ent Sa	ample	ID: Lab Co	ntrol S	Sample
Matrix: Drinking Water													Prep Ty		-
Analysis Batch: 109645															
				Spike		LLCS	LLC	S					%Rec		
Analyte				Added		Result	Qua	ifier	Unit		D_%	Rec	Limits		
Lead				0.300		0.321	J		ug/L			107	50 - 150		
Lab Sample ID: 810-114296-4 MS										Clie	nt Sa	mple	ID: SJPER	- 14 B	Bubbler
Matrix: Drinking Water													Prep Ty	/pe: To	otal/NA
Analysis Batch: 109645															
	Sample	-		Spike			MS						%Rec		
Analyte	Result	Quali	fier	Added		Result	Qua	ifier	Unit		D_%	Rec	Limits		
Lead	2.8			50.0		60.4			ug/L			115	70 - 130		
Lab Sample ID: 810-114296-4 MS	D									Clie	nt Sa	mple	ID: SJPER	- 14 B	Bubbler
Matrix: Drinking Water													Prep Ty	pe: To	otal/NA
Analysis Batch: 109645															
	Sample	Samp	ole	Spike		MSD	MSD						%Rec		RPD
Analyte	Result	Quali	fier	Added		Result	Qual	ifier	Unit	[D_%	Rec	Limits	RPD	Limit
	2.8			50.0		60.1						115	70 - 130	1	20

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Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: 810-114296-5 MS Matrix: Drinking Water Analysis Batch: 109645							Client	Sample	ID: SJPEF Prep	R - 20 B Type: To	
Analysis Batch. 109045	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Lead	2.2		50.0	60.7		ug/L		117	70 - 130		
Lab Sample ID: 810-114296-5 MSD Matrix: Drinking Water Analysis Batch: 109645							Client	Sample	ID: SJPEF Prep	R - 20 В Гуре: То	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lead	2.2		50.0	60.3		ug/L		116	70 - 130	1	20

Client: St. John Environmental Consulting Project/Site: St. Joseph School District - Pershing Job ID: 810-114296-1

Metals

Analysis Batch: 109645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
810-114296-1	SJPER - 3 Ice	Total/NA	Drinking Water	200.8	
810-114296-2	SJPER - 6 Bubbler	Total/NA	Drinking Water	200.8	
810-114296-3	SJPER - 10 Sink	Total/NA	Drinking Water	200.8	
810-114296-4	SJPER - 14 Bubbler	Total/NA	Drinking Water	200.8	
310-114296-5	SJPER - 20 Bubbler	Total/NA	Drinking Water	200.8	
MB 810-109645/11	Method Blank	Total/NA	Drinking Water	200.8	
MB 810-109645/132	Method Blank	Total/NA	Drinking Water	200.8	
MB 810-109645/162	Method Blank	Total/NA	Drinking Water	200.8	
LCS 810-109645/133	Lab Control Sample	Total/NA	Drinking Water	200.8	
LCS 810-109645/163	Lab Control Sample	Total/NA	Drinking Water	200.8	
LLCS 810-109645/10	Lab Control Sample	Total/NA	Drinking Water	200.8	
310-114296-4 MS	SJPER - 14 Bubbler	Total/NA	Drinking Water	200.8	
810-114296-4 MSD	SJPER - 14 Bubbler	Total/NA	Drinking Water	200.8	
310-114296-5 MS	SJPER - 20 Bubbler	Total/NA	Drinking Water	200.8	
310-114296-5 MSD	SJPER - 20 Bubbler	Total/NA	Drinking Water	200.8	

Date Collected	le ID: SJPEF : 08/01/24 08:0	0						Lab Sample ID: 810-114296-1 Matrix: Drinking Wate
Prep Type	: 08/06/24 09:1 Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	109645	-	EA SB	08/12/24 17:00
lient Samp	le ID: SJPEF	R - 6 Bubbler						Lab Sample ID: 810-114296-2
	: 08/01/24 08:0							Matrix: Drinking Wate
ate Received	: 08/06/24 09:1	5						-
-	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	200.8		1	109645	NB	EA SB	08/12/24 17:02
Date Collected	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1	0						Lab Sample ID: 810-114296- Matrix: Drinking Wate
-	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analvst	Lab	or Analyzed
					109645	NB	EA SB	•
Total/NA	Analysis	200.8		1	109045			08/12/24 17:04
Client Samp	le ID: SJPEF : 08/01/24 08:0	R - 14 Bubbler 0		1	109043			Lab Sample ID: 810-114296-4
Client Samp	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1	R - 14 Bubbler ⁰ 5						Lab Sample ID: 810-114296-4 Matrix: Drinking Wate
Client Samp Date Collected Date Received	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1 Batch	R - 14 Bubbler 0 5 Batch	Run	Dilution	Batch	Analyst		Lab Sample ID: 810-114296-4 Matrix: Drinking Wate Prepared
Client Samp	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1	R - 14 Bubbler ⁰ 5	Run			Analyst NB	- Lab EA SB	Lab Sample ID: 810-114296-4 Matrix: Drinking Wate
Client Samp Date Collected Date Received Prep Type Total/NA	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1 Batch Type Analysis	R - 14 Bubbler 0 5 Batch <u>Method</u> 200.8	Run	Dilution Factor	Batch Number		Lab	Lab Sample ID: 810-114296-4 Matrix: Drinking Wate
Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1 Batch Type Analysis	R - 14 Bubbler 0 5 Batch Method 200.8 R - 20 Bubbler 0	Run	Dilution Factor	Batch Number		Lab	Lab Sample ID: 810-114296-4 Matrix: Drinking Wate Prepared or Analyzed 08/12/24 17:06 Lab Sample ID: 810-114296-5
Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1 Batch Type Analysis le ID: SJPEF : 08/01/24 08:0	R - 14 Bubbler 0 5 Batch Method 200.8 R - 20 Bubbler 0	Run	Dilution Factor	Batch Number		Lab	Lab Sample ID: 810-114296-4 Matrix: Drinking Water Prepared or Analyzed 08/12/24 17:06 Lab Sample ID: 810-114296-5 Matrix: Drinking Water
Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected	le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1 Batch Type Analysis le ID: SJPEF : 08/01/24 08:0 : 08/06/24 09:1	R - 14 Bubbler 5 Batch Method 200.8 R - 20 Bubbler 5	Run Run	Dilution Factor 1	Batch Number 109645		Lab	Lab Sample ID: 810-114296-4 Matrix: Drinking Water Prepared or Analyzed

Laboratory References:

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

Laboratory: Eurofins Eaton Analytical South Bend

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

AuthorityProgramIdentification NumberExpiration DateMissouriState88009-30-24

Eurofins Eaton Analytical South Bend

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

Job ID: 810-114296-1

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

8/13/2024

Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-114296-1	SJPER - 3 Ice	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114296-2	SJPER - 6 Bubbler	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114296-3	SJPER - 10 Sink	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114296-4	SJPER - 14 Bubbler	Drinking Water	08/01/24 08:00	08/06/24 09:15
810-114296-5	SJPER - 20 Bubbler	Drinking Water	08/01/24 08:00	08/06/24 09:15

Cilient Information Contout Casev Housman				een
antonat. Casey Houseman	Sampler: an-StJohn	Leb PM:	Carrier Tracking No(s):	COC NC
	Phone: 314-853-4668	E-Mait: ian@stjohnenv.com	Stats of Origin: MO	Page: Page 1 of
Campany: St. Joseph School District	PWSID:	Analysis Requested	equested	1# 000
Address: 1415 North 26th Street	Due Date Requested:	A CONTRACTOR	Varifian	
^{cly:} St. Joseph	TAT Requested (days): Standard	D		B - NBOH C - Zh Acetate D - Nitric Acid
^{state, zp.} Missouri 64506	Compliance Project: A Yes A No	+ 1		
Phone: 816-671-4000	PO #:	72		G - Amothior T - TSP Dodecahydrate H - Ascorbic Actd U - Acetone
Email: CaseyHousman@sjsd.k12.mo.us	#OM			J - DI Wetter K - EDTA
Project Name: St. Joseph School District	Project #:			
stie: Pershina	SSOW#:			
	Sample	Matrix		edmuk
	Sample (leid Fi		Special Instructions/Note:
Sample Identification	Sample Date Time G=grab)	Itton Code: X		
STPER-3 ice	8/1/24/0900 G			
SJ PER-10 hubbler				
R-10				
PER-14		810-114296 Chain of Custody	tody	
ST PER-20 bubbler				
t.				
42				
\$J				
ST				
85		\rightarrow		shoul forwar then 1 month
ble Hazard Identification	C Prison B Muntinown Reditototical		Disposal By Lab	richive For Months
/, Other (specify)			tents:	
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	1 10 Company
Redition by the Carl	11/24)	7/245 8.5. c	SH PUS
Relinquished by:		Company Badativad by:	// T Dete/Time:	company
Relinquished by:	Date/Time:	Company Received by:	Date/Time:	company
Custody Seats Intact: Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	- Remerks:	
		1 1 1	7 8 9	345

Login Sample Receipt Checklist

Client: St. John Environmental Consulting

Login Number: 114296 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	

List Source: Eurofins Eaton Analytical South Bend

Job Number: 810-114296-1