

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Francis Howell School District - Westwood Heritage

JOB NUMBER

810-89707-1

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: Francis Howell School District - Westwood
Heritage

Job ID: 810-89707-1

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 - Westwood Heritage

Job ID: 810-89707-1

Job ID: 810-89707-1

Eurofins Eaton Analytical South Bend

Job Narrative 810-89707-1

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 1/5/2024 9:00 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.

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Detection Summary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - Westwood
Heritage

Job ID: 810-89707-1

Client Sample ID: FHWH- ICE

Lab Sample ID: 810-89707-1

No Detections.

Client Sample ID: FHWH-2 Sink

Lab Sample ID: 810-89707-2

No Detections.

Client Sample ID: FHWH-3 WF

Lab Sample ID: 810-89707-3

No Detections.

Client Sample ID: FHWH-4 BF

Lab Sample ID: 810-89707-4

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - Westwood
Heritage

Job ID: 810-89707-1

Client Sample ID: FHWH- ICE

Lab Sample ID: 810-89707-1

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

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			01/12/24 11:21	1

Client Sample ID: FHWH-2 Sink

Lab Sample ID: 810-89707-2

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

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			01/12/24 11:23	1

Client Sample ID: FHWH-3 WF

Lab Sample ID: 810-89707-3

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

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			01/12/24 12:34	1

Client Sample ID: FHWH-4 BF

Lab Sample ID: 810-89707-4

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

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			01/12/24 12:36	1

QC Sample Results

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - Westwood
Heritage

Job ID: 810-89707-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 810-85526/11

Matrix: Drinking Water

Analysis Batch: 85526

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			01/12/24 08:58	1

Lab Sample ID: MB 810-85526/71

Matrix: Drinking Water

Analysis Batch: 85526

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			01/12/24 10:37	1

Lab Sample ID: LCS 810-85526/72

Matrix: Drinking Water

Analysis Batch: 85526

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	49.4		ug/L		99	85 - 115

Lab Sample ID: LLCS 810-85526/10

Matrix: Drinking Water

Analysis Batch: 85526

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	0.368	J	ug/L		123	50 - 150

Lab Sample ID: MB 810-85538/12

Matrix: Drinking Water

Analysis Batch: 85538

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			01/12/24 11:52	1

Lab Sample ID: LCS 810-85538/13

Matrix: Drinking Water

Analysis Batch: 85538

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	51.1		ug/L		102	85 - 115

Lab Sample ID: LLCS 810-85538/11

Matrix: Drinking Water

Analysis Batch: 85538

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	0.374	J	ug/L		125	50 - 150

QC Association Summary

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - Westwood
Heritage

Job ID: 810-89707-1

Metals

Analysis Batch: 85526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-89707-1	FHWH- ICE	Total/NA	Drinking Water	200.8	
810-89707-2	FHWH-2 Sink	Total/NA	Drinking Water	200.8	
MB 810-85526/11	Method Blank	Total/NA	Drinking Water	200.8	
MB 810-85526/71	Method Blank	Total/NA	Drinking Water	200.8	
LCS 810-85526/72	Lab Control Sample	Total/NA	Drinking Water	200.8	
LLCS 810-85526/10	Lab Control Sample	Total/NA	Drinking Water	200.8	

Analysis Batch: 85538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-89707-3	FHWH-3 WF	Total/NA	Drinking Water	200.8	
810-89707-4	FHWH-4 BF	Total/NA	Drinking Water	200.8	
MB 810-85538/12	Method Blank	Total/NA	Drinking Water	200.8	
LCS 810-85538/13	Lab Control Sample	Total/NA	Drinking Water	200.8	
LLCS 810-85538/11	Lab Control Sample	Total/NA	Drinking Water	200.8	

Lab Chronicle

Client: St. John Environmental Consulting
Project/Site: Francis Howell School District - Westwood
Heritage

Job ID: 810-89707-1

Client Sample ID: FHW- ICE

Lab Sample ID: 810-89707-1

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	85526	CA	EA SB	01/12/24 11:21

Client Sample ID: FHW-2 Sink

Lab Sample ID: 810-89707-2

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	85526	CA	EA SB	01/12/24 11:23

Client Sample ID: FHW-3 WF

Lab Sample ID: 810-89707-3

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	85538	NB	EA SB	01/12/24 12:34

Client Sample ID: FHW-4 BF

Lab Sample ID: 810-89707-4

Date Collected: 01/04/24 08:30

Matrix: Drinking Water

Date Received: 01/05/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.8		1	85538	NB	EA SB	01/12/24 12:36

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: Francis Howell School District - Westwood
Heritage

Job ID: 810-89707-1

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 - Westwood
Heritage

Job ID: 810-89707-1

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 - Westwood
Heritage

Job ID: 810-89707-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-89707-1	FHWH- ICE	Drinking Water	01/04/24 08:30	01/05/24 09:00
810-89707-2	FHWH-2 Sink	Drinking Water	01/04/24 08:30	01/05/24 09:00
810-89707-3	FHWH-3 WF	Drinking Water	01/04/24 08:30	01/05/24 09:00
810-89707-4	FHWH-4 BF	Drinking Water	01/04/24 08:30	01/05/24 09:00



Chain of Custody Record

[illegible]

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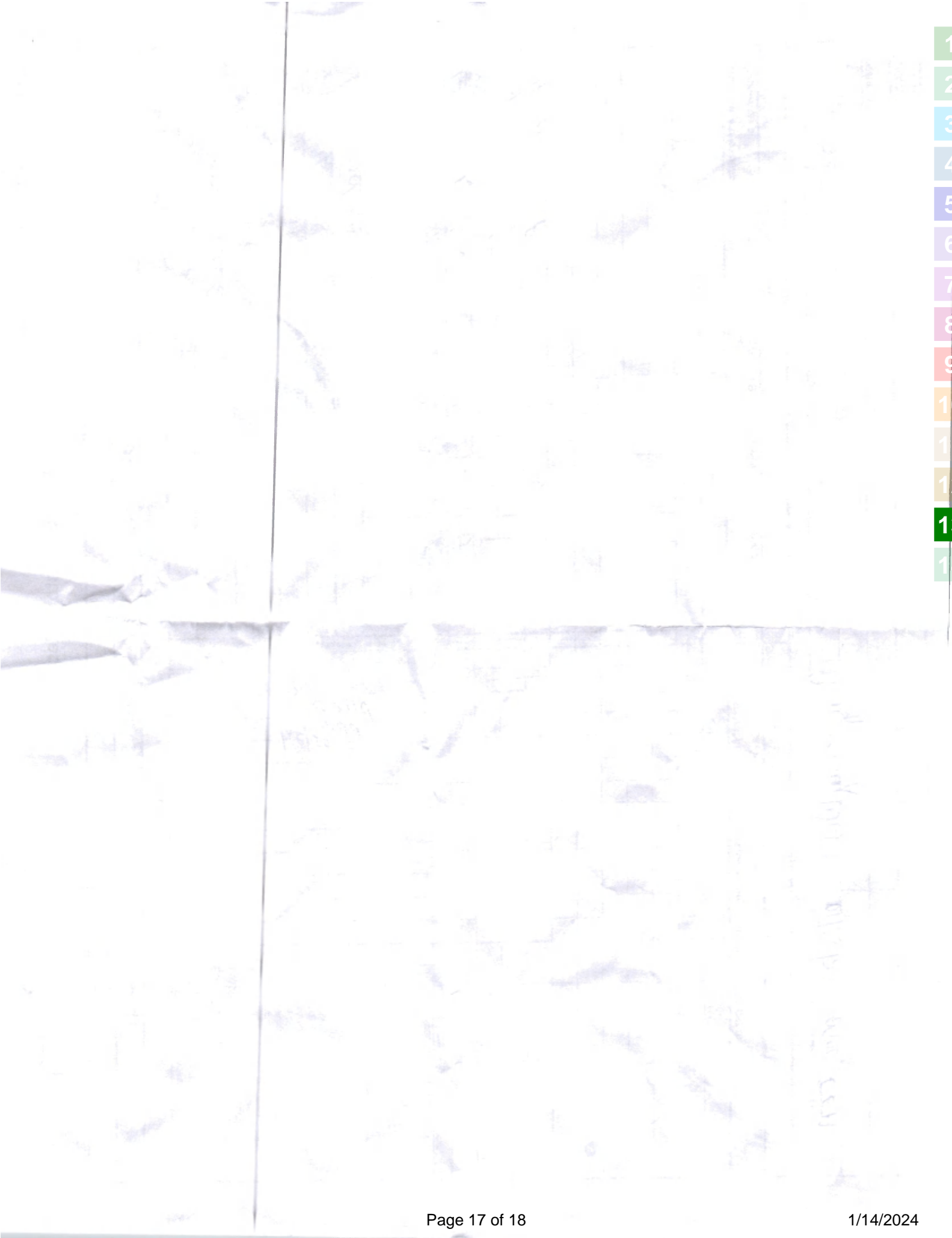
Chain of Custody Record



810-89707 Chain of Custody

Company: Francis Howell School District		Lab Pk: 1		Carrier Tracking No(s):		COC No: 0500									
Address: 4545 Central School Rd		Phone: 314-853-4668		E-Mail: ron.stiglmayr@cmo		Page: 1 of 1									
City: St. Charles, MO		Due Date Requested:		State of Origin: MO		Job #:									
State Zip: MO 63304-7113		TAT Requested (days): Standard		Analysis Requested											
Phone: 314-220-2758		Compliance Project: Δ Yes Δ No		Preservation Codes:											
Email: Don.Allison@fhsd.schools.mo.gov		MO #: 0000000000000000		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anhydrous H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA M - Hexane N - None O - AsHClO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)											
Project Name: Francis Howell School District		Project #:		Other:											
Site: Westwood Hallway		SSONM:		Total Number of containers											
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=Water, S=Solid, O=Overstock, B=Trasma, A=Ad)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Special Instructions/Note:	
EHWH-1 ICE		12/4/23		0850		G		W		✓		✓		Pb Water (Drinking)	
EHWH-2 Sink		↓		↓		↓		↓		✓		✓		pH 2	
EHWH-3 Wf		↓		↓		↓		↓		✓		✓		new	
EHWH-4 BF		↓		↓		↓		↓		✓		✓		01/05/24	
Possible Hazard Identification		Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months		Special Instructions/QC Requirements:		Empty Kit Relinquished by: 12/4/23		Date:	
Relinquished by: Don Allison		Date/Time: 12/4/23		Company:		Received by: Rony Pinsky		Date/Time: 01/05/23		Company: EEA		Relinquished by: Don Allison		Date/Time: 01/05/23	
Relinquished by: Don Allison		Date/Time: 12/4/23		Company:		Received by: Rony Pinsky		Date/Time: 01/05/23		Company: EEA		Relinquished by: Don Allison		Date/Time: 01/05/23	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:	

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Login Sample Receipt Checklist

Client: St. John Environmental Consulting

Job Number: 810-89707-1

Login Number: 89707

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: Pehling-Wright, Penny

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.	True	
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	