

December 10, 2022

City of Bridgeport
City of Bridgeport
1013 Jefferson Ave.
Bridgeport, WA 98813

RE: Weekly - Week #3
Associated Work Orders: YCK0664

Enclosed are the results of analyses for samples received at the laboratory on 11/30/2022. Sample analysis was performed according to Eurofins-Cascade Analytical's quality assurance program.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle Johnson For Kaylee Troth
Chemist

Eurofins-Cascade Analytical uses procedures established by EPA, AOAC, APHA, ASTM, and AWWA. Eurofins-Cascade Analytical makes no warranty of any kind. The client assumes all risk and liability from the use of these results. Results relate only to the items tested and the sample(s) received by the laboratory. This analytical report must be reproduced in its entirety. Please review your data in a timely manner. Data gaps or errors will not be the responsibility of the laboratory. Though we do keep all analytical data for several years, samples are disposed of after six weeks.

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Cascade Analytical

1008 W. Ahtanum Rd.
Union Gap, WA 98903
(509) 452-7707
Fax: (509) 452-7773

3019 G.S. Center Rd.
Wenatchee, WA 98801
(509) 662-1888
Fax: (509) 662-8183

City of Bridgeport
1013 Jefferson Ave.
Bridgeport, WA 98813

Project: Weekly - Week #3
Project Number:
Project Manager: City of Bridgeport

Reported:
12/10/2022 10:23

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
YCK0664-01	Effluent-Week 3	Water	11/30/2022	11/30/2022
YCK0664-02	Influent	Water	11/30/2022	11/30/2022

City of Bridgeport
1013 Jefferson Ave.
Bridgeport, WA 98813

Project: Weekly - Week #3
Project Number:
Project Manager: City of Bridgeport

Reported:
12/10/2022 10:23

Sample Results

Sample: Effluent-Week 3
YCK0664-01 (Water)

Sample Date/Time: 11/30/2022 09:55

Analyte	Result Qual	Reporting Limit	Units	Date Analyzed	Analyst Initials	Method
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Microbiology

Fecal Coliform	3 H	1	CFU/100mL	11/30/2022	QX3E	SM 9222 D
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City of Bridgeport
1013 Jefferson Ave.
Bridgeport, WA 98813

Project: Weekly - Week #3
Project Number:
Project Manager: City of Bridgeport

Reported:
12/10/2022 10:23

Certified Analyses included in this Report

Analyte	CAS #	Certifications
SM 9222 D in Water		
Fecal Coliform		Y_ISO,Y_WA

List of Certifications

Code	Description	Number	Expires
Y_ISO	ISO 17025:2017 + AOAC	L21-299	07/31/2023
W_ISO	ISO 17025:2017 + AOAC	L21-299	07/31/2023
Y_WA	WA State DOE	WA01194/C858-21	05/28/2022
W_WA	WA State DOE	WA00077/C564-21	08/28/2022

Subcontracted Analyses

Eurofins Test America - Seattle

Solids-TSS
BOD
Solids-TSS
BOD

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.

ANALYTICAL REPORT

PREPARED FOR

Attn: Brianna Buschbach
Cascade Analytical Inc
3019 GS Center Road
Wenatchee, Washington 98801

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JOB DESCRIPTION

YCK0664

JOB NUMBER

580-120601-1

Eurofins Seattle

Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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 Environment Testing Northwest, LLC Project Manager.

Authorization



Authorized for release by
Pauline Matlock, Project Manager
Pauline.Matlock@et.eurofinsus.com
(253)922-2310

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Case Narrative

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

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11

Job ID: 580-120601-1

Laboratory: Eurofins Seattle

Narrative
Job Narrative 580-120601-1

Receipt

The samples were received on 12/1/2022 12:06 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C

General Chemistry

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

Definitions/Glossary

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

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

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

Client Sample ID: YCK0664-01

Lab Sample ID: 580-120601-1

Date Collected: 11/30/22 09:45

Matrix: Water

Date Received: 12/01/22 12:06

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	1.2		1.2	1.2	mg/L			12/07/22 15:35	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0	2.0	mg/L			12/01/22 13:42	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

Client Sample ID: YCK0664-02

Lab Sample ID: 580-120601-2

Date Collected: 11/30/22 09:50

Matrix: Water

Date Received: 12/01/22 12:06

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	130		2.0	2.0	mg/L			12/07/22 15:35	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0	2.0	mg/L			12/01/22 14:00	1

QC Sample Results

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 580-412250/1

Matrix: Water

Analysis Batch: 412250

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		0.40	0.40	mg/L			12/07/22 15:35	1

Lab Sample ID: LCS 580-412250/2

Matrix: Water

Analysis Batch: 412250

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	500	422		mg/L		84	80 - 120

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 580-411552/1

Matrix: Water

Analysis Batch: 411552

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			12/01/22 09:55	1

Lab Chronicle

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

Client Sample ID: YCK0664-01
Date Collected: 11/30/22 09:45
Date Received: 12/01/22 12:06

Lab Sample ID: 580-120601-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540D		1	412250	AUA	EET SEA	12/07/22 15:35
Total/NA	Analysis	SM 5210B		1	411552	NJ	EET SEA	12/01/22 13:42

Client Sample ID: YCK0664-02
Date Collected: 11/30/22 09:50
Date Received: 12/01/22 12:06

Lab Sample ID: 580-120601-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540D		1	412250	AUA	EET SEA	12/07/22 15:35
Total/NA	Analysis	SM 5210B		1	411552	NJ	EET SEA	12/01/22 14:00

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

Laboratory: Eurofins Seattle

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-23

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Cascade Analytical Inc
Project/Site: YCK0664

Job ID: 580-120601-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-120601-1	YCK0664-01	Water	11/30/22 09:45	12/01/22 12:06
580-120601-2	YCK0664-02	Water	11/30/22 09:50	12/01/22 12:06

1

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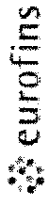
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Cascade Analytical

SUBCONTRACT ORDER

Sending Laboratory:

Eurofins Cascade Analytical- Yakima
1008 W Ahtanum Road
Union Gap, WA 98903
Phone: 509-452-7707
Fax: 509-452-7773

Project Manager: Kaylee Troth
kayleetroth@eurofinsus.com

Subcontracted Laboratory:

Eurofins Test America - Seattle
5755 8th St East
Tacoma, WA 98424
Phone: (253) 922-2310

Work Order: YCK0664

Analysis

Comments

Lab Sample ID: YCK0664-01 Water Sampled: 11/30/2022 09:45

BOD SM 5210 B
Solids-TSS SM 2540 D

Containers Supplied:
P 1000mL (C)

Analysis

Comments

Lab Sample ID: YCK0664-02 Water Sampled: 11/30/2022 09:50

BOD SM 5210 B
Solids-TSS SM 2540 D

Containers Supplied:
P 1000mL (A)

HOLD
TIME



530-120601 Chain of Custody

Therm. ID: 4.20 Cor: 4.3 Unc: 4.4
Cooler Desc: -C
Packing: -C FedEx:
Cust. Seal: Yes No UPS:
Blue Ice: Wet, Dry, None Lab Cour:
Other:

HS

Released By

11/30/22

Date

AS

Received By

12/1/22

Date

1204

Login Sample Receipt Checklist

Client: Cascade Analytical Inc

Job Number: 580-120601-1

Login Number: 120601

List Source: Eurofins Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
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	
Is the Field Sampler's name present on COC?	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	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

WATER ANALYSIS ORDER FORM



Cascade Analytical



YCK0664

Batch#	SAMPLE #				
SEND RESULTS TO	1	2	3	4	5
1) Client 2) Billing 3) Both	X				
SAMPLE REPRESENTS					
1) Irrigation 2) Waste Water 3) Other		X			
SAMPLE BY					
1) Client 2) Quality Control 3) Cascade 4) Other	X				

New Acct. #

(see legend on back)

SAMPLE #

IRRIGATION WATER		1	2	3	4	5
Standard						
GENERAL CHEMISTRY						
1135	pH					
1140	Conductivity					
1200	Solids-Dis. (TDS)					
1230	Solids-Susp. (TSS)	X	X			
1240	Tot. Phosphorus					
1250	Orthophosphate					
1260	Kjeldahl Nitrogen (TKN)					
1170	Nitrate+Nitrite					
1265	NO ₃ (As N)					
1280	Ammonia					
1300	Biol. Oxy. Demand	X	X			
1310	Chem. Oxy. Demand					
1190	Sulfate (SO ₄)					
1180	Chloride (Cl)					
1150	Turbidity					
1320	Hexane Ext. Mat.					
1340	Alkalinity					
217	Total N Pkg					
MICROBIOLOGY						
10040	Total Coliform MF					
10010	Fecal Coliform MF					
10041	Total Coliform MPN					
10011	Fecal Coliform MPN	X				
METALS - TOTAL OR DISSOLVED						
1391	Antimony (Sb)					
1011	Arsenic (As)					
1025	Barium (Ba)					
1405	Beryllium (Be)					
1031	Cadmium (Cd)					
1045	Chromium (Cr)					
1215	Copper (Cu)					
1065	Iron (Fe)					
1075	Manganese (Mn)					
1081	Mercury (Hg)					
1435	Molybdenum (Mo)					
1051	Lead (Pb)					
1335	Nickel (Ni)					
1091	Selenium (Se)					
1105	Silver (Ag)					
1381	Thallium (Tl)					
1225	Zinc (Zn)					
MINERALS						
1120	Calcium (Ca)					
1130	Magnesium (Mg)					
1115	Potassium (K)					

CLIENT NAME/ADDRESS
 City of Bridgeport
 1013 Jefferson Ave.
 Bridgeport, Wa 98813
 SAMPLER'S NAME
 Martin Landin
 E-mail bptsewer@nwi.net

BILLING NAME/ADDRESS
 City of Bridgeport
 P-O-Box 640
 Bridgeport, Wa 98813
 PHONE
 1 509 449-4041
 CEC
 E-mail 1 509-449-5212

FORM MUST BE COMPLETED BEFORE ANALYSIS WILL BE PERFORMED.

	SAMPLE DATE	SAMPLE TIME
YCK0664-01 EFF -	11/30	9:55 - 9:45
YCK0664-02 In F -	11/30	9:50
3		
4		
5		
6		
7		
8		
9		
10		
11		

*METALS - circle type of analysis - T=total or D=dissolved

Total N package = TKN, NO₃, NO₂, NH₃
 Sample container received by client was sealed Yes ☒ No ☐
 Sample container received by laboratory was sealed Yes ☐ No ☐

Disclaimer:

Cascade Analytical, Inc., makes no warranty of any kind, expressed or implied, and customer assumes all risk and liability from the use of Cascade's test results. Cascade neither assumes nor authorizes any person to assume for Cascade any other liability in connection with the testing done by Cascade Analytical, Inc., and there are no other oral agreements or warranties collateral to or affecting this agreement.

Cascade Analytical Inc.'s liability to customer as a result of customers use of Cascade's test results shall be limited to a sum equal to the fees paid by customer to Cascade Analytical, Inc. for the testing work.

Customer Signature:

Date 11/30/22

This form also serves as "Chain of Custody."

CAICOF - 03

REV. 1/22

RECEIVED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE	RECEIVED FOR LAB BY: (Signature)	DATE
(Printed)	TIME	(Printed)	TIME	(Printed)	TIME



Sample Receipt Form

Date Received: 11/30/22 Time Received: 13:45 Initials: KB

Client Name: City of Bridgeport Project Name: WW

Temperature of cooler upon receipt: 12 °C Thermometer ID: #4

Custody seals: Intact Broken None N/A

Chain of Custody Completed:

Client name, address, and phone number;	<u>Yes</u>	No
Date and time of sampling;	<u>Yes</u>	No
Test requests clear;	<u>Yes</u>	No
Completed in ink;	<u>Yes</u>	No
Signed by client;	<u>Yes</u>	No

All samples received: Yes No

All samples intact: Yes No

Sample ID's match COC form: Yes No

Appropriate containers used: Yes No

Sufficient amount of sample for analysis: Yes No

Correct preservative verified: N/A Yes No

Air bubbles in VOC, TTHM, or HAA5 samples: N/A Yes No

Sample(s) exceed hold time: Yes No

Type of coolant: Ice Blue Ice None Other Comment: _____

Shipping Method: FedEx UPS USPS Brett & Sons Hand Delivered CAI Sampled RC-De1

Shipping Container: E-CA Cooler E-CA Cooler Box Client's Cooler None Other _____

Samples accepted for analysis: Yes No

Reason for Rejection: _____

Name of Person Contacted: _____ Date Contacted: _____

Comments: _____