From: Glander, Nick < Nick.Glander@foth.com>

Sent: Monday, April 17, 2023 2:47 PM

To: Saliares, Gwen N - DNR

Subject: 2022-23 Annual Treatment Summary for Better Brite Superfund site

Attachments: Better Brite 2022-23 Summary Packet.pdf

CAUTION: This email originated from outside the organization.

Do not click links or open attachments unless you recognize the sender and know the content is safe.

Gwen,

In total, Foth processed 35 batches in the contract year - April 2022 through March 2023. An attached Better Brite WTP Summary Packet contains the following:

- Summary Page Table provides a total volume of water treated per month in table & graph format with drum fill and analytical sample collection dates
- WTP Process Log Table provides the individual batch detail
- Sludge Generation Summary
- Analytical Results Summary Table
- September Pace Lab Report
- March Pace Lab Report

Feel free to contact me with any questions.

Thank you;

Nick Glander

Lead Environmental Scientist



Foth Infrastructure & Environment, LLC

2121 Innovation Court, Suite 300 P.O. Box 5126 De Pere, WI 54115-5126

Office: (920) 496-6758 Fax: (920) 497-8516 Cell: (920) 362-8744

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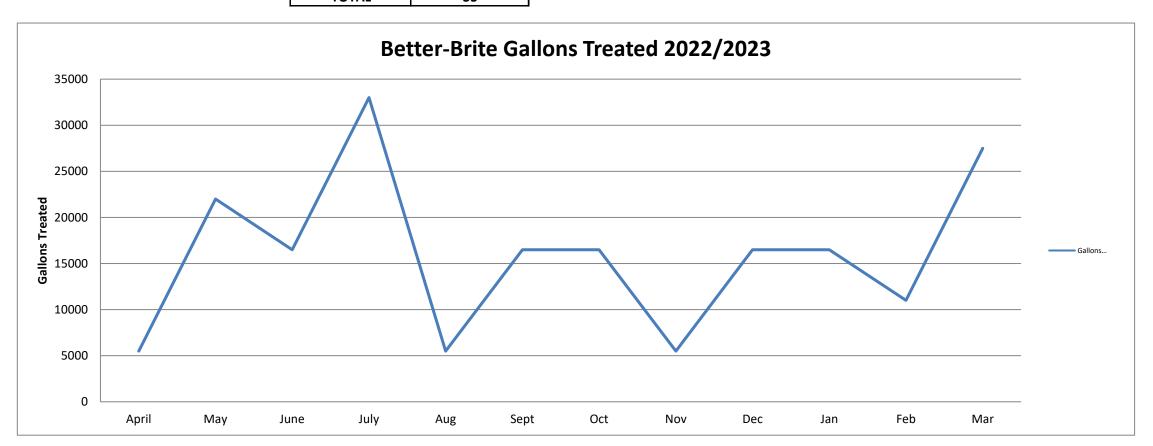
Better Brite 2022/2023 Treatment

Month	Gallons Treated	Batches Ran
April	5500	1
May	22000	4
June	16500	3
July	33000	6
Aug	5500	1
Sept	16500	3
Oct	16500	3
Nov	5500	1
Dec	16500	3
Jan	16500	3
Feb	11000	2
Mar	27500	5
	TOTAL	35

Drum #	Filled Date	Disposal Date
1	5/17/2022	8/23/2022
2		

Total Chrome Analytical Samples Collection Dates

Sample Rd	Date Collected	Date Analyzed
1	9/30/2022	10/10/2022
2	3/29/2023	4/3/2023





Better-Brite WTP Processing Log 2022/2023

22W016

Date	Operator	Batch #	Gal Processed	H2SO4 - pH reduction to (s.u.)	NaHSO3 - ORP reduction to (mv)	Mg(OH)2/NaOH - pH raised to (s.u.)	Polymer feed (sec)	Batch Test Results Cr+6	Press Run Time (min)	Recycled Water (gal)	Sludge drum fille or Press cleaned / Comments
04/28/22	NMG1	1	5500	3.32	300	8.63	30	0.00	40	350	Calibrated Sensors
05/03/22	NMG1	2	5500	3.04	299	8.67	30	0.01	43	350	
05/11/22	NMG1	3	5500	3.21	305	8.53	30	0.01	35	350	Cleaned Press / Training for Dale C.
05/17/22	NMG1 / DMC4	4	5500	3.40	303	8.58	30	0.00	37	350	
05/27/22	DMC4	5	5500	3.31	310	8.70	30	0.02	41	350	
06/02/22	DMC4	6	5500	3.21	303	8.70	30	0.00	52	350	
06/03/22	DMC4	7	5500	3.09	307	8.63	30	0.00	54	350	
06/30/22	DMC4	8	5500	3.25	313	8.61	30	0.02	60	350	
07/06/22	DMC4	9	5500	3.44	300	8.69	30	0.00	40	350	Cleaned Press / Calibrated Sensors
07/11/22	DMC4	10	5500	3.38	300	8.66	30	0.03	45	350	
07/19/22	NMG1	11	5500	3.05	303	8.52	30	0.01	50	350	
07/26/22	DMC4	12	5500	3.48	304	8.68	30	0.02	55	350	
07/28/22	DMC4	13	5500	3.30	309	8.51	30	0.00	55	350	
07/29/22	DMC4	14	5500	3.40	299	8.64	30	0.03	57	350	
08/03/22	DMC4	15	5500	3.14	306	8.54	30	0.02	55	350	
09/06/22	DMC4	16	5500	3.06	310	8.51	30	0.01	40	350	Cleaned Press / Calibrated Sensors
09/23/22	DMC4	17	5500	3.16	299	8.69	30	0.00	45	350	
09/30/22	DMC4	18	5500	3.46	294	8.58	30	0.03	50	350	Influent / Effluent Samples Collected
10/18/22	NMG1	19	5500	3.14	303	8.52	30	0.00	50	350	
10/21/22	DMC4	20	5500	3.24	300	8.69	30	0.01	55	350	
10/26/22	DMC4	21	5500	3.02	300	8.67	30	0.02	55	350	
11/09/22	NMG1	22	5500	3.21	301	8.68	30	0.02	40	350	Cleaned Press / Calibrated Sensors
12/06/22	NMG1	23	5500	3.10	300	8.61	30	0.00	45	350	
12/09/22	DMC4	24	5500	3.03	304	8.68	30	0.01	45	350	
12/13/22	NMG1	25	5500	3.09	300	8.51	30	0.02	50	350	
01/06/23	NMG1	26	5500	3.11	301	8.56	30	0.00	50	350	



Better-Brite WTP Processing Log 2022/2023

22W016

Date	Operator	Batch #	Gal Processed	H2SO4 - pH reduction to (s.u.)	NaHSO3 - ORP reduction to (mv)	Mg(OH)2/NaOH - pH raised to (s.u.)	Polymer feed (sec)	Batch Test Results Cr+6	Press Run Time (min)	Recycled Water (gal)	Sludge drum fille or Press cleaned / Comments
01/25/23	NMG1	27	5500	3.33	302	8.67	30	0.01	55	350	
01/26/23	DMC4	28	5500	3.29	298	8.54	30	0.00	60	350	Cleaned Press / Calibrated Sensors
02/01/23	DMC4	29	5500	3.02	297	8.70	30	0.00	40	350	
02/27/23	NMG1	30	5500	3.07	300	8.61	30	0.03	40	350	
03/03/23	NMG1	31	5500	3.17	301	8.53	30	0.02	45	350	
03/10/23	NMG1	32	5500	3.29	303	8.55	30	0.02	50	350	
03/15/23	NMG1	33	5500	3.14	300	8.64	30	0.01	55	350	Cleaned Press / Calibrated Sensors
03/20/23	NMG1	34	5500	3.20	300	8.70	30	0.00	45	350	
03/29/23	NMG1	35	5500	3.13	301	8.57	30	0.01	45	350	Influent / Effluent Samples Collected



MONTH	Drum(s) Filled	Date Filled	Date Transported	Small Q + 180 days
				100 0.00
January	0			
February	0			
March	0			
April	0			
May	1	5/17/2022	8/23/2022	11/13/2022
June	0			
July	0			
August	0			
September	0			
October	0			
November	0			
December	0			
TOTAL	0			

Notes -

Summary of Effluent and Influent Analytical Data Better Brite Waste Treatment Plant De Pere, WI 54115

Sample ID	Date	Total Chromium	Total Zinc	Total Cyanide	Hexavalent Chromium
		(ug/L)	(ug/L)	(mg/L)	(mg/L)
Lot Trench	11/12/2010	4,380	NS	NS	NS
Grass Trench	11/12/2010	17,100	NS	NS	NS
Influent	6/23/2011	4,520	34.0 J	0.34	4.4
Effluent	6/23/2011	231	1.8 J	0.32	< 0.0039
Influent	6/27/2011	4,810	21.2 J	0.3	4.4
Effluent	6/27/2011	974	2.5 J	0.21	< 0.0039
Influent	6/28/2011	4,460	16.9 J	0.31	4.1
Effluent	6/28/2011	1,070	<1.6	0.25	< 0.0039
Influent	6/29/2011	4,230	10.7 J	0.29	3.9
Effluent	6/29/2011	998	<1.6	0.23	< 0.039
Influent	12/23/2011	6,850	NS	NS	NS
Effluent	12/23/2011	765	NS	NS	NS
Influent	8/3/2012	7,220	NS	NS	NS
Effluent	8/3/2012	513	NS	NS	NS
Influent	2/8/2013	7,140	NS	NS	NS
Effluent	2/8/2013	876	NS	NS	NS
Influent	8/29/2013	5,810	NS	NS	NS
Effluent	8/29/2013	1,190	NS	NS	NS
Influent	3/3/2014	9,050	NS	NS	NS
Effluent	3/3/2014	901	NS	NS	NS
Influent	8/7/2014	8,190	NS	NS	NS
Effluent	8/7/2014	1,110	NS	NS	NS
Influent	3/11/2015	7,430	NS	NS	NS
Effluent	3/11/2015	900	NS	NS	NS
Influent	7/30/2015	10,300	NS	NS	NS
Effluent	7/30/2015	934	NS	NS	NS
Influent	2/3/2016	7,050	NS	NS	NS
Effluent	2/3/2016	1,310	NS	NS	NS
Influent	8/30/2016	7,580	NS	NS	NS
Effluent	8/30/2016	1,910	NS	NS	NS
Influent	3/7/2017	4,150	NS	NS	NS
Effluent	3/7/2017	727	NS	NS	NS
Influent	9/1/2017	6,980	NS	NS	NS
Effluent	9/1/2017	2,320	NS	NS	NS
Influent	2/6/2018	6,810	NS	NS	NS
Effluent	2/6/2018	1,160	NS	NS	NS
			•		

Summary of Effluent and Influent Analytical Data Better Brite Waste Treatment Plant De Pere, WI 54115

Sample ID	Date	Total Chromium	Total Zinc	Total Cyanide	Hexavalent Chromium
		(ug/L)	(ug/L)	(mg/L)	(mg/L)
Influent	10/2/2018	4,670	NS	NS	NS
Effluent	10/2/2018	1,120	NS	NS	NS
Influent	3/14/2019	5,060	NS	NS	NS
Effluent	3/14/2019	369	NS	NS	NS
Influent	9/9/2019	2,220	NS	NS	NS
Effluent	9/9/2019	1,100	NS	NS	NS
Influent	2/27/2020	3,920	NS	NS	NS
Effluent	2/27/2020	1,000	NS	NS	NS
Influent	9/3/2020	5880	NS	NS	NS
Effluent	9/3/2020	1600	NS	NS	NS
Influent	3/15/2021	4620	NS	NS	NS
Effluent	3/15/2021	1680	NS	NS	NS
Influent	8/27/2021	2310	NS	NS	2.8
Effluent	8/27/2021	677	NS	NS	0.026
Influent	3/23/2022	3430	NS	NS	2.7
Effluent	3/23/2022	560	NS	NS	< 0.0073
Influent	9/30/2022	2870	NS	NS	2.4
Effluent	9/30/2022	1190	NS	NS	< 0.0073
Influent	3/29/2023	3730	NS	NS	3.6
Effluent	3/29/2023	450	NS	NS	< 0.0073

Notes: Prepared By: NMG1
NS = No Sample Checked By: SVF

 $[\]label{eq:J} J = Estimated \ concentration \ above \ the \ adjusted \ method \ detection \ limit \ and \ below \ the \ adjusted \ reporting \ limit.$





October 17, 2022

Nick Glander Foth Infrastructure & Environment, LLC 2121 Innovation Court Suite 300 De Pere, WI 54115

RE: Project: 22WO16 BETTER BRITE Pace Project No.: 40252420

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

• Pace Analytical Services - Green Bay

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

Sincerely,

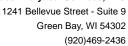
Tod Noltemeyer tod.noltemeyer@pacelabs.com (920)469-2436

Tod holteneya

Project Manager

Enclosures







CERTIFICATIONS

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Pace Analytical Services Green Bay

North Dakota Certification #: R-150

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 Virginia VELAP ID: 460263

South Carolina Certification #: 83006001 Texas Certification #: T104704529-14-1 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-16-00157 Federal Fish & Wildlife Permit #: LE51774A-0





SAMPLE SUMMARY

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40252420001	INFLUENT_202209	Water	09/30/22 10:35	10/03/22 08:42
40252420002	EFFLUENT 202209	Water	09/30/22 10:35	10/03/22 08:42



SAMPLE ANALYTE COUNT

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40252420001	INFLUENT_202209	EPA 6010D	SIS	1
		SM 3500-Cr B	SRK	1
40252420002	EFFLUENT_202209	EPA 6010D	SIS	1
		SM 3500-Cr B	SRK	1

PASI-G = Pace Analytical Services - Green Bay



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Method: EPA 6010D

Description: 6010D MET ICP

Client: FOTH INFRASTRUCTURE & ENVIRONMENT

Date: October 17, 2022

General Information:

2 samples were analyzed for EPA 6010D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:



241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Method: SM 3500-Cr B

Description: Chromium, Hexavalent

Client: FOTH INFRASTRUCTURE & ENVIRONMENT

Date: October 17, 2022

General Information:

2 samples were analyzed for SM 3500-Cr B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation was conducted outside of the recognized method holding time.

• INFLUENT_202209 (Lab ID: 40252420001)

H3: Sample was received or analysis requested beyond the recognized method holding time.

• INFLUENT_202209 (Lab ID: 40252420001)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 427972

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40251839001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2464401)
 - Chromium, Hexavalent
- MSD (Lab ID: 2464402)
 - Chromium, Hexavalent

QC Batch: 428757

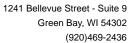
A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40252962001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2469524)
 - Chromium, Hexavalent
- MSD (Lab ID: 2469525)
 - Chromium, Hexavalent

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.





ANALYTICAL RESULTS

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Date: 10/17/2022 10:20 AM

Sample: INFLUENT_202209	Lab ID:	40252420001	Collected	d: 09/30/22	2 10:35	Received: 10/	03/22 08:42 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	,	Method: EPA 6 lytical Services			hod: E	PA 3010A			
Chromium	2870	ug/L	10.0	2.5	1	10/07/22 05:35	10/11/22 14:39	7440-47-3	
Chromium, Hexavalent	•	Method: SM 35 lytical Services		y					
Chromium, Hexavalent	2.4	mg/L	0.12	0.037	5		10/14/22 13:51		H2,H3





ANALYTICAL RESULTS

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Date: 10/17/2022 10:20 AM

Sample: EFFLUENT_202209	Lab ID:	40252420002	Collected	d: 09/30/22	10:35	Received: 10/	03/22 08:42 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	,	Method: EPA 6 lytical Services			hod: El	PA 3010A			
Chromium	1190	ug/L	10.0	2.5	1	10/07/22 05:35	10/10/22 10:04	7440-47-3	
Chromium, Hexavalent	•	Method: SM 35 lytical Services		/					
Chromium, Hexavalent	<0.0073	mg/L	0.024	0.0073	1		10/06/22 13:58		



QUALITY CONTROL DATA

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

Date: 10/17/2022 10:20 AM

QC Batch: 427979 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40252420001, 40252420002

METHOD BLANK: 2464462 Matrix: Water

Associated Lab Samples: 40252420001, 40252420002

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Chromium ug/L <2.5 10.0 10/10/22 09:32

LABORATORY CONTROL SAMPLE: 2464463

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Chromium ug/L 250 260 104 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2464464 2464465

MS MSD

40252392003 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits 105 20 Chromium ug/L 56.9 250 250 319 333 110 75-125

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

QC Batch: 427972

QC Batch Method: SM 3500-Cr B Analysis Method:

SM 3500-Cr B

Analysis Description:

Chromium, Hexavalent by 3500

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40252420002

METHOD BLANK: 2464399

Matrix: Water

Associated Lab Samples:

40252420002

Blank

Parameter Units Reporting Limit

Qualifiers

Chromium, Hexavalent < 0.0073 0.024 10/06/22 13:55 mg/L

LABORATORY CONTROL SAMPLE:

2464400

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Chromium, Hexavalent

Chromium, Hexavalent

Date: 10/17/2022 10:20 AM

Parameter

mg/L

<0.18

Units

0.3

Result

0.30

2464402

3.3

101

Analyzed

90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

2464401

MSD

40251839001 Parameter Units Result

mg/L

MS Spike Spike Conc. Conc.

7.5

MS Result

7.5

MSD Result

3.2

MS % Rec

44

MSD % Rec

90-110

42

% Rec Max **RPD** RPD Limits

Qual 20 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

QC Batch: 428757

Date: 10/17/2022 10:20 AM

QC Batch Method: SM 3500-Cr B

Analysis Method: SM 3500-Cr B

Analysis Description: Chromium, Hexavalent by 3500

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40252420001

METHOD BLANK: 2469522 Matrix: Water

Associated Lab Samples: 40252420001

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Chromium, Hexavalent mg/L <0.0073 0.024 10/14/22 13:46

LABORATORY CONTROL SAMPLE: 2469523

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Chromium, Hexavalent mg/L 0.3 0.30 100 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2469524 2469525

MS MSD

40252962001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec **RPD** RPD Qual Result % Rec Limits Chromium, Hexavalent < 0.0073 0.018J mg/L 0.3 0.3 0.012J 90-110 20 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 10/17/2022 10:20 AM

H2 Extraction or preparation was conducted outside of the recognized method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.



Green Bay, WI 54302 (920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 22WO16 BETTER BRITE

Pace Project No.: 40252420

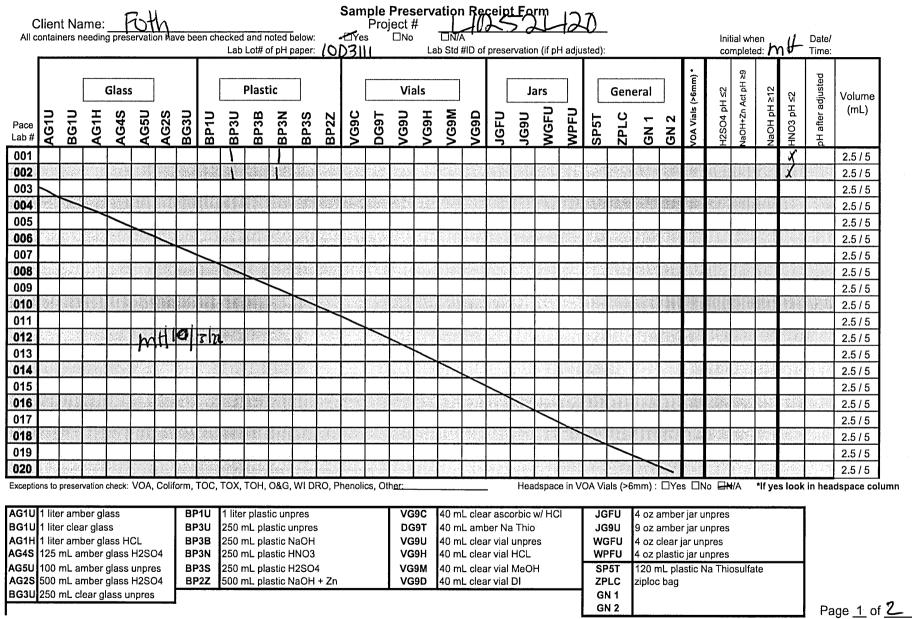
Date: 10/17/2022 10:20 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40252420001 40252420002	INFLUENT_202209 EFFLUENT_202209	EPA 3010A EPA 3010A	427979 427979	EPA 6010D EPA 6010D	428208 428208
40252420001	INFLUENT_202209	SM 3500-Cr B	428757		
40252420002	EFFLUENT_202209	SM 3500-Cr B	427972		

Version 6.0 06/14/06

DC#_Title: ENV-FRM-GBAY-0035 v03_Sample Preservation Receipt Form

Effective Date: 8/16/2022



DC#_Title: ENV-FRM-GBAY-0014 v03_SCUR

Effective Date: 8/17/2022

Sample Condition Upon Receipt Form (SCUR)

Client Name: FOH			WO#:40252420
Courier: CS Logistics Fed Ex Spee	dee Taups	- 	
Client Pace Other:	J 01 0	Brazili	
Tracking #:	·		40252420
Custody Seal on Cooler/Box Present	no Seals	intact:	yes ☐ no
Custody Seal on Samples Present: Yes	. Y		yes no
Packing Material: 🔲 Bubble Wrap 🔟 Bul	عر bble Bags	None	Other
Thermometer Used SR - 20		Web	Blue Dry None Meltwater Only
Cooler Temperature Uncorr: 4 /Corr.		·	Person examining contents:
Temp Blank Present: Syes Ino	Biolo	gical T	issue is Frozen: yes no Date: 03 22 /Initials: H
Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C if shipped on	Dry Ice.		Labeled By Initials:
Chain of Custody Present:	Yes 🗆 No	□n/a	1.
Chain of Custody Filled Out:	√ Yes □ No	□n/a	2.
Chain of Custody Relinquished:	√Yes □No	□n/a	3.
Sampler Name & Signature en COC:	□Yes ÆNo	□n/a	4.
Samples Arrived within Hold Time:	→ Yes □No		5.
- DI VOA Samples frozen upon receipt	□Yes □No		Date/Time:
Short Hold Time Analysis (<72hr):	.⊒res □no		6.
Rush Turn Around Time Requested:	□Yes □No		7.
Sufficient Volume:			8.
For Analysis: ՔYes □No MS/MS	D: □Yes □No	√∐N/A	
Correct Containers Used:	✓ Yes □No		9.
Correct Type: Pace Green Bay, Pace IR, Non-Pa	ice		
Containers Intact:			10.
Filtered volume received for Dissolved tests	□Yes □No	-∐N/A	11.
Sample Labels match COC:	-⊠Yes □No	□n/a	12.
-Includes date/time/ID/Analysis Matrix:	\mathcal{W}_{\perp}		
Trip Blank Present:	□Yes □No	AINIA	13.
Trip Blank Custody Seals Present	□Yes □No	□ ₩7A	
Pace Trip Blank Lot # (if purchased):			
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:		_Date/	If checked, see attached form for additional comments Time:
PM Review is documented electronically in LI	Ms. By releasi	ng the	project, the PM acknowledges they have reviewed the sample log





April 13, 2023

Nick Glander Foth Infrastructure & Environment, LLC 2121 Innovation Court Suite 300 De Pere, WI 54115

RE: Project: 22W016 BETTER BRITE Pace Project No.: 40260064

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

Pace Analytical Services - Green Bay

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

Sincerely,

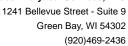
Tod Noltemeyer tod.noltemeyer@pacelabs.com

Tod holteneya

(920)469-2436 Project Manager

Enclosures







CERTIFICATIONS

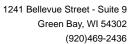
Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150

South Carolina Certification #: 83006001 Texas Certification #: T104704529-21-8 Virginia VELAP Certification ID: 11873 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-21-00008 Federal Fish & Wildlife Permit #: 51774A





SAMPLE SUMMARY

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40260064001	EFFLUENT_202303	Water	03/29/23 19:25	03/30/23 16:47
40260064002	INFLUENT 202303	Water	03/29/23 19:15	03/30/23 16:47



SAMPLE ANALYTE COUNT

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Lab ID Sample ID		Method	Analysts	Analytes Reported
40260064001	EFFLUENT_202303	EPA 6010D	SIS	1
		SM 3500-Cr B	HNT	1
40260064002	INFLUENT_202303	EPA 6010D	SIS	1
		SM 3500-Cr B	HNT	1

PASI-G = Pace Analytical Services - Green Bay





PROJECT NARRATIVE

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Method: **EPA 6010D** Description: 6010D MET ICP

Client: FOTH INFRASTRUCTURE & ENVIRONMENT

Date: April 13, 2023

General Information:

2 samples were analyzed for EPA 6010D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

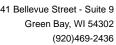
Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:





PROJECT NARRATIVE

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Method: SM 3500-Cr B

Description: Chromium, Hexavalent

Client: FOTH INFRASTRUCTURE & ENVIRONMENT

Date: April 13, 2023

General Information:

2 samples were analyzed for SM 3500-Cr B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 442280

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40260074002

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2539243)
 - · Chromium, Hexavalent
- MSD (Lab ID: 2539244)
 - Chromium, Hexavalent

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436



ANALYTICAL RESULTS

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Date: 04/13/2023 01:46 PM

Sample: EFFLUENT_202303	Lab ID: 40260064001		Collected	d: 03/29/23	3 19:25	Received: 03/	30/23 16:47 Ma	Matrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
6010D MET ICP	,	Method: EPA 6 lytical Services			hod: El	PA 3010A				
Chromium	453	ug/L	10.0	2.5	1	04/03/23 06:01	04/03/23 16:33	7440-47-3		
Chromium, Hexavalent	,	Method: SM 35 lytical Services		y						
Chromium, Hexavalent	<0.0073	mg/L	0.024	0.0073	1		04/13/23 11:45			





ANALYTICAL RESULTS

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Date: 04/13/2023 01:46 PM

Sample: INFLUENT_202303	Lab ID: 40260064002		Collecte	d: 03/29/23	3 19:15	Received: 03/	30/23 16:47 M	Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual			
6010D MET ICP	,	Method: EPA 6 lytical Services			hod: E	PA 3010A						
Chromium	3730	ug/L	10.0	2.5	1	04/03/23 06:01	04/03/23 16:41	7440-47-3				
Chromium, Hexavalent	•	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay										
Chromium, Hexavalent	3.6	mg/L	0.61	0.18	25		04/13/23 11:46					



QUALITY CONTROL DATA

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

QC Batch: 441345 QC Batch Method: **EPA 3010A** Analysis Method:

EPA 6010D

Analysis Description: Laboratory:

6010D MET Pace Analytical Services - Green Bay

40260064001, 40260064002 Associated Lab Samples:

METHOD BLANK:

Matrix: Water

Associated Lab Samples:

40260064001, 40260064002

Parameter

Blank Result Reporting Limit

Qualifiers Analyzed

Chromium

Chromium

Units ug/L

<2.5

10.0 04/03/23 16:29

LABORATORY CONTROL SAMPLE: 2534520

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Chromium

Parameter

Date: 04/13/2023 01:46 PM

Parameter

Units ug/L

40260064001

Result

453

Units

ug/L

250

251

100

80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

2534521

250

MSD

MS

2534522

721

MSD

MSD

% Rec

Max **RPD**

RPD

MS

Spike Conc.

250

Spike Conc.

Result

Result 719 % Rec 107

MS

% Rec 107

Limits

75-125

Qual 20 0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Date: 04/13/2023 01:46 PM

QC Batch: 442280

QC Batch Method: SM 3500-Cr B

Analysis Method: SM 3500-Cr B

Analysis Description: Chromium, Hexavalent by 3500

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40260064001, 40260064002

METHOD BLANK: 2539241 Matrix: Water

Associated Lab Samples: 40260064001, 40260064002

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Chromium, Hexavalent mg/L <0.0073 0.024 04/13/23 11:44

LABORATORY CONTROL SAMPLE: 2539242

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Chromium, Hexavalent mg/L 0.3 0.29 98 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2539243 2539244

MS MSD

40260074002 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec **RPD** RPD Qual Result % Rec Limits Chromium, Hexavalent <0.024 0.21 20 M0 mg/L 0.3 0.3 0.21 65 64 90-110

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

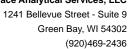
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 04/13/2023 01:46 PM

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 22W016 BETTER BRITE

Pace Project No.: 40260064

Date: 04/13/2023 01:46 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40260064001 40260064002	EFFLUENT_202303 INFLUENT_202303	EPA 3010A EPA 3010A	441345 441345	EPA 6010D EPA 6010D	441433 441433
40260064001 40260064002	EFFLUENT_202303 INFLUENT_202303	SM 3500-Cr B SM 3500-Cr B	442280 442280		

<i>(2)</i>	CHAIN-	-OF-CU	STODY A	Analyti	cal Req	uest Do	cume	nt			LAE	USE C	NLY- A	Affix W				Here or Lis mber Here	t Pace Workorder Number or	
Pace Analytical*	Chain-	of-Custody	is a LEGAL I		T - Complet	te all releve	nt fields												60064	
Company: FotH			Billing Info	rmation:									ALL	SHA	DED	AREA	AS ar	e for LA	AB USE ONLY	ŧ
Address: DE PERE	;								-	TO	Cor	ntainer	Prese	rvative	Type *	*		Lab Proje	ct Manager:	
Report To: Nick Glai	dek		Email To:	voicis	e Foi	H. CO	m												odium hydroxide, (5) zinc acetate, bic acid, (B) ammonium sulfate,	
Copy To:			1Set	ter !	Seite	1315	5.6	7h 51	(C) a	ammoni	um hyd	droxide,	(D) TSP Analy		oreserve	ed, (O) O	ther	Lab Profile	- e/Line:	
Customer Project Name/Number:	ter B	2.te	State:	County/Ci		me Zone Co PT[]MT		[] ET	,										mple Receipt Checklist:	/
Phone: 920/362-8744 Email: Wick, Glander Gott	Site/Facility ID Bell	#: BR	ite		Compliane	ce Monitori No							,					Custod Collect Bottle		N NA NA N NA
	Purchase Orde Quote #:	er #:			DW PWS DW Locat													Suffic	eient Volume Y	N NA N NA N NA
Collected By (signature):	Turnaround D	ate Require	ed:	7.00	Immediate Yes	ely Packed ([] No	on Ice:		2	1	, .								Headspace Arceptable Y	NA NA NA NA NA
Sample Disposal: Dispose as appropriate [] Return [] Archive: [] Hold:	[] 2 Day [Field Filte [] Yes Analysis:	red (ıf appli	cable):		Ol. don	Theore								Cl str Sample pH Str	al chorine Pesent Y	N NA N NA
* Matrıx Codes (Insert in Matrix box Product (P), Soıl/Solıd (SL), Oıl (OL									ì										cetate Strips	
Customer Sample ID	Matrix *	Comp / Grab	Collect Compos Date	ed (or ite Start) Time	Compo	site End	Res Cl	# of Ctns	1	1/2								Lab S	mple (*) Comments:	
EFF/Lut-202303	aw	Grab	3/29/23	1929				2	X	X								00	,	
Int /went - 202303	6W	GNAS	Ÿ		<u> </u>	ļ		2	X	X	-				_	-	-	00.	<u></u>	
				m	20											` .				
				3/1	701													4,6		,
									_	\vdash		H	\dashv	\dashv	_		+			
										_				-			 			
Customer Remarks / Special Condition	ons / Possible i	l Hazards:	Type of Ice	Used:	Wet)	l Blue Dr	y No	ne	<u> </u>	SHO	RT HC	LDS PF	RESENT	(<72 h	ours):	(Y) N	N/A	L	Lab Sample Temperature Info:	1
			Packing M	aterial Use	ed:					Lab	Tracki	ng #:		26	97	955	5		Temp Blank Received: (Y) Therm ID#: Cooler 1 Temp Upon Receipt	
,			Radchem s	sample(s) s	creened (<	500 cpm):	Y N	NA	$\overline{)}$	1	ples re FEDE)	eceived (UI		Client	Cou	rier	Pace C	ourier	Cooler 1 Therm Corr. Factor Cooler 1 Corrected Temp:	
Relinquished by/Company: (Signatur	e) FoH	Date 3/	Time:	1647	Received b	y/Company	1)	ure)	kpc	ice.	Date/	Time:	 3 16	· :47	Table		B USE C	ONLY (1)	Comments:	v .
Relinquished by/Company: (Signatur	e)	Date	r/Time:		Received b	y/Company		ure)	•		Date/	Time:	•••		Acctnu Templ Pre	' 11 '	11	1/1/2	Trip Blank Regelived: Y	N NA
Relinquished by/Company: (Signatur	re)	Date	/Time:		Received b	y/Company	/: (Signat	ure)			Date/	Time:			PM:)b*	J *		ge 13 of 15

DC#_Title: ENV-FRM-GBAY-0035 v03_Sample Preservation Receipt Form Effective Date: 8/16/2022 Sample Preservation Receipt Form Client Name: Project # Initial when Date/completed Dime. All containers needing preservation have been checked and noted below Lab Lot# of pH paper. Lab Std #ID of preservation (if pH adjusted) S) 'OA Vials (>6mm) after adjusted aOH+Zn Act pH Vials Plastic Glass Jars General 12SO4 pH s2 pH <2 Volume WGFU (mL) WPFU AG1H AG2S BG3U VG9C VG9U VG9H VG9M BP1U VG9D AG1U **BP3U BP3B BP3N BP3S** DG9T JGFU JG9U BP2Z **ZPLC** SP5T 7 HN03 Pace GN S C S Lab# 001 2.5 / 5 002 2.5/5 003 2.5/5 004 2.5/5 005 2.5/5 006 2.5 / 5 007 2.5 / 5 008 2.5 / 5 009 2.5/5 010 2.5 / 5 011 2.5 / 5 012 2.5/5 013 2.5/5 014 2.5/5 015 2.5 / 5 016 2.5/5 017 2.5/5 018 2.5 / 5 019 2.5 / 5 020 25/5 Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: Headspace in VOA Vials (>6mm) ☐Yes ☐No MN/A *If yes look in headspace column AG1U 1 liter amber glass BP1U 1 liter plastic unpres VG9C 40 mL clear ascorbic w/ HCI **JGFU** 4 oz amber jar unpres BG1U 1 liter clear glass BP3U 250 mL plastic unpres DG9T 40 mL amber Na Thio JG9U 9 oz amber jar unpres AG1H 1 liter amber glass HCL BP3B 250 mL plastic NaOH WGFU VG9U 40 mL clear vial unpres 4 oz clear iar unpres AG4S 125 mL amber glass H2SO4 **BP3N** 250 mL plastic HNO3 VG9H 40 mL clear vial HCL WPFU 4 oz plastic jar unpres AG5U 100 mL amber glass unpres BP3S 250 mL plastic H2SO4 VG9M 40 mL clear vial MeOH SP5T 120 mL plastic Na Thiosulfate

Qualtrax ID: 41307

AG2S 500 mL amber glass H2SO4

BG3U 250 mL clear glass unpres

BP2Z

500 mL plastic NaOH + Zn

40 mL clear vial DI

ZPLC

GN 1

GN₂

ziploc baq

VG9D

Page 1 of 2

DC#_Title: ENV-FRM-GBAY-0014 v03_SCUR Effective Date: 8/17/2022

Sample Condition Upon Receipt Form (SCUR)

Client Name:					1
Courter: [_]/Co Logistics [Fed Ex [Speei	 -			WO#: 40260064	
-	dee ∐ l	JPS	□W	altco	
Tracking #:	_/			40260064	ĺ
Custody Seal on Cooler/Box Present: yes	7-			yes no]
Custody Seal on Samples Present: 🔲 yes 🛚	-	- 4	/	yes no	
Packing Material: Bubble Wrap Bub	_				-
Thermometer Used SR - SR	~ ~	ice:	(VV et)	Blue Dry None Meltwater Only Person examining contents:	1
Cooler Temperature Uncorr: U, 5 /Corr		Riolo	aical T	issue is Frozen: ☐ yes☐ no Date: 13/30/3 mitials: Mills	
Temp Blank Present: ☐ yes ☐ no			gicai i	Date: D/30/Minitials: 100/30	-
Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C if shipped on l	Dry Ice.			Labeled By Initials: K	
Chain of Custody Present:	Yes [□No	□n/a	1. 2. 3. 4. Someone obliterated the samplers name. Its. 5. Date/Time 6. 7.	
Chain of Custody Filled Out:	M∏Yes [JNo	□n/a	2.	
Chain of Custody Relinquished:	MYes [وγ⊏	□n/a	3.	
Sampler Name & Signature on COC:	□Yes [No	□n/a	4. Someone oblighted the samplers name. In) NE
Samples Arrived within Hold Time	⊻ Yes [JNo		5.	<u> </u>
- DI VOA Samples frozen upon receipt	□Yes [□No		Date/Time	8
Short Hold Time Analysis (<72hr):	M Yes [□No		6.	ĮĘ
Rush Turn Around Time Requested:	□Yes Î	No		7.	ن
Sufficient Volume		_		8.	
For Analysis: MYes □No MS/MS	D: □yes Î	No	□n/a		
Correct Containers Used:	Mayes [□No		9.	
Correct Type: Pace Green Bay, Pace IR, Non-Pa	ce /				
Containers Intact:	Yes [□No	1	10.	
Filtered volume received for Dissolved tests	□Yes [∃No	M N/A	11.]
Sample Labels match COC:	□Yes (Î	No	□n/a	12. Times petwernthe sample points 00 and 002	1
-Includes date/time/ID/Analysis Matrix:	W			ore 11:08d. MV & 03/30/2023 00 on Oc 19:25 mid 0020 19:15 sunde 001:19:5 and	ns.
Trip Blank Present:	□Yes [□No	™ N/A	· ·	FF:
Trip Blank Custody Seals Present	□Yes [N/A		
Pace Trip Blank Lot # (if purchased):			·		
Client Notification/ Resolution:				If checked, see attached form for additional comments	1
Person Contacted:Comments/ Resolution:			Date/	ime:	-
					-
				, , , , , , , , , , , , , , , , , , ,	-
				A COLOR OF THE COL	-