Lauridsen, Keld B - DNR

From: Glander, Nick <Nick.Glander@foth.com>
Sent: Wednesday, April 28, 2021 7:55 AM
To: Lauridsen, Keld B - DNR
Cc: Saliares, Gwen N - DNR; Kozicki, Sharon V
Subject: Better Brite WTP - 2020-21 End of Contract Year Documentation
Attachments: Better Brite 2020-21 Summary Packet.pdf; March 2021 Better Brite Analytical Report.pdf; Sept 2020 Better Brite Analytical Report.pdf

Keld / Gwen;

In total, Foth processed 32 batches in the contract year - April 2020 through March 2021. 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
- Drum Disposal Table
- Analytical Results Summary Table

Also attached are both the September and March Pace Laboratory Analytical Reports.

Again, it has been a pleasure working on this project with you Keld. Per our last conversation, I anticipate being at Better Brite May 14th, 21st, or any day the week of the 24th to meet with Gwen and you. Let me know what date works and I will plan accordingly.

Feel free to contact me with any questions.

Thank you;

Nick Glander, Environmental Scientist
Foth Infrastructure & Environment, LLC
2121 Innovation Court, Suite 300
P.O. Box 5126
De Pere, WI 54115-5126
Ph: (920) 496-6758 / Fax (920) 497-8516
Cell: (920) 362-8744
http://www.foth.com

From: Lauridsen, Keld B - DNR <Keld.Lauridsen@wisconsin.gov>
Sent: Thursday, April 22, 2021 11:08 AM
To: Kurowski, Lori G <Lori.Kurowski@Foth.com>
Cc: Glander, Nick <Nick.Glander@foth.com>; Saliares, Gwen N - DNR <gwen.saliares@wisconsin.gov>
Subject: RE: Final Invoice for PO 37000-0000013845

Lori,

Thanks for the final Better Brite invoice for contract year 2020/21. I will route for payment.

I just talked to Nick earlier this morning and made him aware that I will no longer be the DNR PM for the Better Brite site. This will be my last invoice before Gwen Saliares (copied on this email) will take over as the new DNR PM. I will still work in the DNR R&R Program so Gwen and I will be able to work together until she is up to speed.

It has been a pleasure working with both you and Nick.

Thanks,

-Keld

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Keld B. Lauridsen
Phone: (920) 510 8294
Keld.Lauridsen@wisconsin.gov

From: Kurowski, Lori G <Lori.Kurowski@Foth.com>
Sent: Tuesday, April 20, 2021 10:42 AM
To: Lauridsen, Keld B - DNR <Keld.Lauridsen@wisconsin.gov>
Cc: Glander, Nick <Nick.Glander@foth.com>
Subject: Final Invoice for PO 37000-0000013845

Hi Keld – Attached is the final invoice for Better Brite.

If you have any questions, please let me know.

Lori

Lori Kurowski
Accounting Analyst

Foth Infrastructure & Environment, LLC
2121 Innovation Court, Suite 100
P.O. Box 5095
De Pere, WI 54115
Phone: (920) 496-6858 / Fax: (920) 497-8516
http://www.foth.com

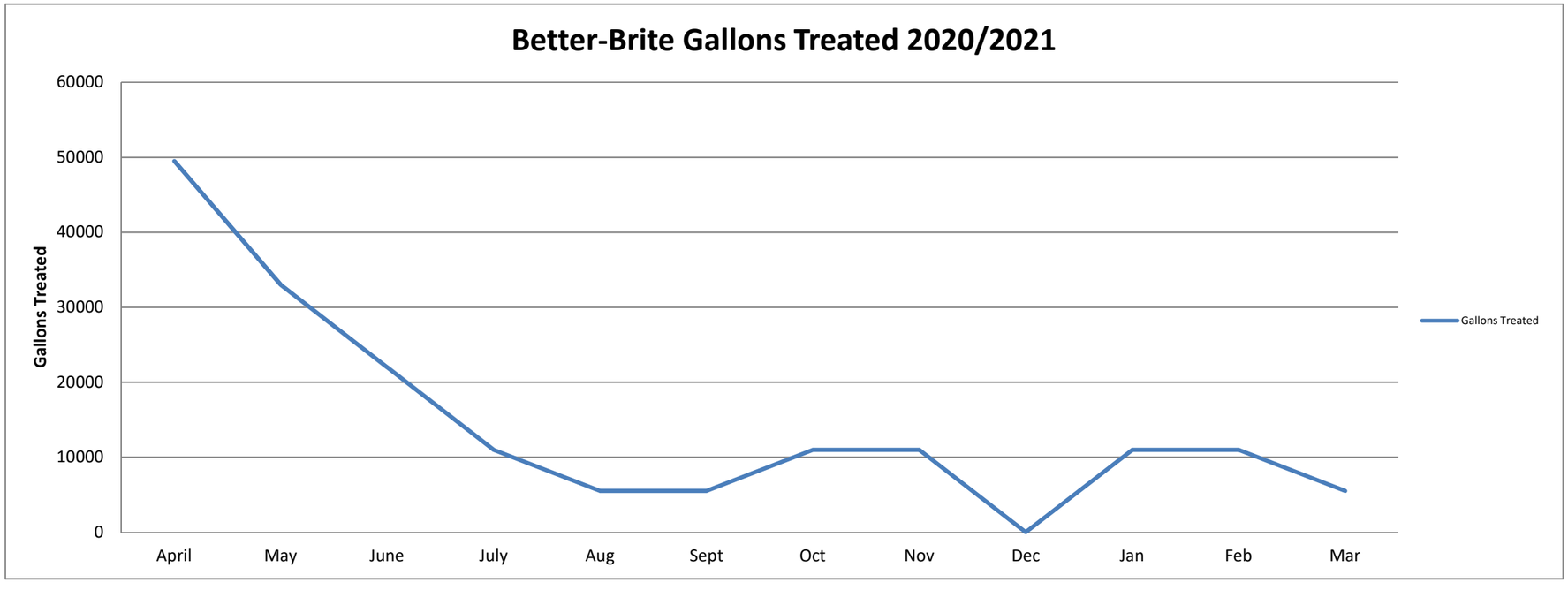
Better Brite 2020/2021 Treatment

Month	Gallons Treated	Batches Ran
April	49500	9
May	33000	6
June	22000	4
July	11000	2
Aug	5500	1
Sept	5500	1
Oct	11000	2
Nov	11000	2
Dec	0	0
Jan	11000	2
Feb	11000	2
Mar	5500	1
	TOTAL	**32**

Drum #	Filled Date	Disposal Date
1		
2		

Total Chrome Analytical Samples Collection Dates

Sample Rd	Date Collected	Date Analyzed
1	9/3/2020	9/10/2020
2	3/15/2021	3/18/2021



Foth

Better-Brite WTP Processing Log 2020/2021

20W016

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
04/01/20	AXP5	1	5500	3.04	301	8.7	30	0.00	30	350	
04/02/20	AXP5	2	5500	3.16	300	8.68	30	0.00	30	350	
04/03/20	AXP5	3	5500	3.24	301	8.61	30	0.00	30	350	cleaned pressed
04/13/20	NMG1	4	5500	3.09	304	8.53	30	0.00	30	350	filter press fixed
04/16/20	NMG1	5	5500	3.25	300	8.68	30	0.01	30	350	
04/23/20	NMG1	6	5500	3.20	295	8.51	30	0.00	30	350	
04/28/20	NMG1	7	5500	3.04	301	8.62	30	0.01	30	350	
04/29/20	AXP5	8	5500	3.10	300	8.57	30	0.00	30	350	
04/30/20	AXP5	9	5500	3.06	302	8.70	30	0.00	35	350	fixed valve
05/08/20	NMG1	10	5500	3.21	300	8.70	30	0.00	39	350	
05/11/20	AXP5	11	5500	3.10	301	8.63	30	0.00	40	350	cleaned press
05/12/20	AXP5	12	5500	3.19	300	8.70	30	0.00	30	350	
05/13/20	AXP5	13	5500	3.10	302	8.69	30	0.01	35	350	
05/21/20	NMG1	14	5500	3.00	306	8.59	30	0.00	49	350	
05/29/20	AXP5	15	5500	3.00	304	8.70	30	0.00	50	350	
06/01/20	AXP5	16	5500	3.04	301	8.68	30	0.00	52	350	
06/02/20	AXP5	17	5500	3.10	299	8.59	30	0.00	58	350	
06/04/20	AXP5	18	5500	3.09	305	8.69	30	0.00	61	350	
06/11/20	NMG1	19	5500	3.15	303	8.60	30	0.01	35	350	
07/09/20	NMG1	20	5500	3.26	300	8.51	30	0.00	40	350	cleaned press
07/17/20	NMG1	21	5500	3.30	301	8.61	30	0.00	45	350	Chemical Delivered / Probes calibrated
08/12/20	NMG1	22	5500	3.18	298	8.68	30	0.01	45	350	
09/03/20	NMG1	23	5500	3.17	300	8.60	30	0.00	45	350	T. Chrome Collected
10/06/20	NMG1	24	5500	3.30	304	8.70	30	0.00	50	350	
10/30/20	NMG1	25	5500	3.15	301	8.62	30	0.00	50	350	
11/06/20	NMG1	26	5500	3.05	302	8.53	30	0.02	50	350	
11/13/20	NMG1	27	5500	3.00	292	8.56	30	0.00	50	350	Probes Calibrated / Cleaned Press
01/08/21	NMG1	28	5500	3.01	300	8.70	30	0.00	40	350	
01/28/21	NMG1	29	5500	3.23	300	8.63	30	0.01	45	350	
02/11/21	NMG1	30	5500	3.33	300	8.55	30	0.01	50	350	
02/26/21	NMG1	31	5500	3.00	302	8.51	30	0.00	50	350	
03/15/21	NMG1	32	5500	3.40	304	8.60	30	0.01	40	350	Cleaned Press / Calibrated Sensor / T. Chrome Collected

Better-Brite Sludge Generation Data
Calendar Year 2020

MONTH	Drum(s) Filled	Date Filled	Date Transported	Small Q + 180 days
January	0			
February	0			
March	0			
April	0			
May	0			
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 (ug/L)	Total Zinc (ug/L)	Total Cyanide (mg/L)	Hexavalent Chromium (mg/L)
Lot Trench	11/12/2010	4,380	NS	NS	NS
Grass Trench	11/12/2010	17,100	NS	NS	NS
Influent	06/23/2011	4,520	34.0 J	0.34	4.4
Effluent	06/23/2011	231	1.8 J	0.32	<0.0039
Influent	06/27/2011	4,810	21.2 J	0.30	4.4
Effluent	06/27/2011	974	2.5 J	0.21	<0.0039
Influent	06/28/2011	4,460	16.9 J	0.31	4.1
Effluent	06/28/2011	1,070	<1.6	0.25	<0.0039
Influent	06/29/2011	4,230	10.7 J	0.29	3.9
Effluent	06/29/2011	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	08/03/2012	7,220	NS	NS	NS
Effluent	08/03/2012	513	NS	NS	NS
Influent	02/08/2013	7,140	NS	NS	NS
Effluent	02/08/2013	876	NS	NS	NS
Influent	08/29/2013	5,810	NS	NS	NS
Effluent	08/29/2013	1,190	NS	NS	NS
Influent	03/03/2014	9,050	NS	NS	NS
Effluent	03/03/2014	901	NS	NS	NS
Influent	08/07/2014	8,190	NS	NS	NS
Effluent	08/07/2014	1,110	NS	NS	NS
Influent	03/11/2015	7,430	NS	NS	NS
Effluent	03/11/2015	900	NS	NS	NS
Influent	07/30/2015	10,300	NS	NS	NS
Effluent	07/30/2015	934	NS	NS	NS
Influent	02/03/2016	7,050	NS	NS	NS
Effluent	02/03/2016	1,310	NS	NS	NS
Influent	08/30/2016	7,580	NS	NS	NS
Effluent	08/30/2016	1,910	NS	NS	NS
Influent	03/07/2017	4,150	NS	NS	NS
Effluent	03/07/2017	727	NS	NS	NS
Influent	09/01/2017	6,980	NS	NS	NS
Effluent	09/01/2017	2,320	NS	NS	NS
Influent	02/06/2018	6,810	NS	NS	NS
Effluent	02/06/2018	1,160	NS	NS	NS
Influent	10/02/2018	4,670	NS	NS	NS
Effluent	10/02/2018	1,120	NS	NS	NS
Influent	03/14/2019	5,060	NS	NS	NS
Effluent	03/14/2019	369	NS	NS	NS
Influent	09/09/2019	2,220	NS	NS	NS
Effluent	09/09/2019	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	43.1	NS	NS
Effluent	9/3/2020	1600	156	NS	NS
Influent	3/15/2021	4620	NS	NS	NS
Effluent	3/15/2021	1680	NS	NS	NS

Notes:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
NS = No Sample

Prepared By: NMG1
Checked By: SVF

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

September 15, 2020

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

RE: Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on September 03, 2020. 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
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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

CERTIFICATIONS

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

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
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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40214037001	**INFLUENT_202009**	Water	09/03/20 09:00	09/03/20 11:28
40214037002	**EFFLUENT_202009**	Water	09/03/20 11:00	09/03/20 11:28

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40214037001	**INFLUENT_202009**	EPA 6010	TXW	2	PASI-G
40214037002	**EFFLUENT_202009**	EPA 6010	TXW	2	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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

SUMMARY OF DETECTION

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40214037001	**INFLUENT_202009**					
EPA 6010	Chromium	5880	ug/L	10.0	09/10/20 19:22	
EPA 6010	Zinc	43.1	ug/L	40.0	09/10/20 19:22	
40214037002	**EFFLUENT_202009**					
EPA 6010	Chromium	1600	ug/L	10.0	09/10/20 19:24	
EPA 6010	Zinc	156	ug/L	40.0	09/10/20 19:24	

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Method: **EPA 6010**
Description: 6010 MET ICP
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: September 15, 2020

General Information:
2 samples were analyzed for EPA 6010 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 3010 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:

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

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Sample: INFLUENT_202009 **Lab ID: 40214037001** Collected: 09/03/20 09:00 Received: 09/03/20 11:28 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Chromium	**5880**	ug/L	10.0	2.5	1	09/04/20 07:02	09/10/20 19:22	7440-47-3	
Zinc	**43.1**	ug/L	40.0	11.6	1	09/04/20 07:02	09/10/20 19:22	7440-66-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Sample: EFFLUENT_202009 **Lab ID: 40214037002** Collected: 09/03/20 11:00 Received: 09/03/20 11:28 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Chromium	**1600**	ug/L	10.0	2.5	1	09/04/20 07:02	09/10/20 19:24	7440-47-3	
Zinc	**156**	ug/L	40.0	11.6	1	09/04/20 07:02	09/10/20 19:24	7440-66-6	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

QC Batch: 364702
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40214037001, 40214037002

METHOD BLANK: 2107496 Matrix: Water
Associated Lab Samples: 40214037001, 40214037002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<2.5	10.0	09/10/20 18:12	
Zinc	ug/L	<11.6	40.0	09/10/20 18:12	

LABORATORY CONTROL SAMPLE: 2107497

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	486	97	80-120	
Zinc	ug/L	500	479	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2107498 2107499

Parameter	Units	40213988001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	<2.5	500	500	496	503	99	101	75-125	2	20	
Zinc	ug/L	<11.6	500	500	488	488	97	97	75-125	0	20	

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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20W016 BETTER BRITE
Pace Project No.: 40214037

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40214037001	**INFLUENT_202009**	EPA 3010	364702	EPA 6010	364876
40214037002	**EFFLUENT_202009**	EPA 3010	364702	EPA 6010	364876

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 **WI:** 920-469-2436

Page 1 of 1

40214037

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	FOTH
Branch/Location:	GREEN BAY
Project Contact:	Nick Glander
Phone:	920/362-8744
Project Number:	20W016
Project Name:	Better Brite
Project State:	WI
Sampled By (Print):	Nick Glander
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Accounting
Mail To Company:	
Mail To Address:	@foth.com
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Sl = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: Total Cl2	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	Influent_202009	9/3/20	0900	GW	N	D	X			
002	Effluent_202009	9/3/20	1100	GW	N	D	X			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	9/3/20 1128	Maddie Jacobs Fedex	9-3-20 1128
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No. 40214037

Receipt Temp = 3.0 °C

Sample Receipt pH (OK) Adjusted

Cooler Custody Seal Present / Not Present

Intact / Not Intact

C019a(27Jun2006)

Version 6.0 06/14/06

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Foth Project # 40214037

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☐N/A Initial when completed: SKW Date/ Time:

Lab Lot# of pH paper: 10D4194 Lab Std #ID of preservation (if pH adjusted):

	Glass								Plastic					Vials						Jars				General							
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001												1																		X		2.5 / 5 / 10
002												1																		X		2.5 / 5 / 10
003																																2.5 / 5 / 10
004																																2.5 / 5 / 10
005																																2.5 / 5 / 10
006																																2.5 / 5 / 10
007																																2.5 / 5 / 10
008																																2.5 / 5 / 10
009																																2.5 / 5 / 10
010																																2.5 / 5 / 10
011																																2.5 / 5 / 10
012																																2.5 / 5 / 10
013																																2.5 / 5 / 10
014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																												9/3/20 SKW					2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project # WO#: 40214037

40214037

Client Name: Foth

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☒ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other _____

Thermometer Used SR - 99 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 /Corr: 3

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 9-3-20 /Initials: SCW

Labeled By Initials: SRK

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

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 on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☐No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	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: W		
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

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

March 25, 2021

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

RE: Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2021. 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
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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

CERTIFICATIONS

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

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
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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40223403001	**INFLUENT_202103**	Water	03/15/21 11:40	03/15/21 15:38
40223403002	**EFFLUENT_202103**	Water	03/15/21 15:00	03/15/21 15:38

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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40223403001	**INFLUENT_202103**	EPA 6010	TXW	1	PASI-G
40223403002	**EFFLUENT_202103**	EPA 6010	TXW	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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

SUMMARY OF DETECTION

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40223403001	**INFLUENT_202103**					
EPA 6010	Chromium	4620	ug/L	10.0	03/18/21 21:55	
40223403002	**EFFLUENT_202103**					
EPA 6010	Chromium	1680	ug/L	10.0	03/18/21 21:57	

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Method: **EPA 6010**
Description: 6010 MET ICP
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 25, 2021

General Information:
2 samples were analyzed for EPA 6010 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 3010 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:

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

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

ANALYTICAL RESULTS

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Sample: INFLUENT_202103 **Lab ID: 40223403001** Collected: 03/15/21 11:40 Received: 03/15/21 15:38 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Chromium	**4620**	ug/L	10.0	2.5	1	03/17/21 11:51	03/18/21 21:55	7440-47-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Sample: EFFLUENT_202103 **Lab ID: 40223403002** Collected: 03/15/21 15:00 Received: 03/15/21 15:38 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay								
Chromium	**1680**	ug/L	10.0	2.5	1	03/17/21 11:51	03/18/21 21:57	7440-47-3	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

QC Batch: 379988
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40223403001, 40223403002

METHOD BLANK: 2191216 Matrix: Water
Associated Lab Samples: 40223403001, 40223403002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<2.5	10.0	03/18/21 21:17	

LABORATORY CONTROL SAMPLE: 2191217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	512	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2191218 2191219

Parameter	Units	40223487025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	7.9J	500	500	509	515	100	101	75-125	1	20	

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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20W016 BETTER BRITE
Pace Project No.: 40223403

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40223403001	**INFLUENT_202103**	EPA 3010	379988	EPA 6010	380099
40223403002	**EFFLUENT_202103**	EPA 3010	379988	EPA 6010	380099

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

40223403

(Please Print Clearly)	
Company Name:	FOTH
Branch/Location:	GREEN BAY
Project Contact:	Nick Glander
Phone:	920/362-8744
Project Number:	20W016
Project Name:	Better Brite
Project State:	WI
Sampled By (Print):	Nick Glander
Sampled By (Sign):	
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	Nick, Glander@Foth.com
Mail To Company:	
Mail To Address:	
Invoice To Contact:	Accounting@Foth.com
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Sl = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: Total Cr	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	Influent_202103	3/15/20	1140	GW	N	D	X			
002	Effluent_202103	↓	1500	GW	N	D	X			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Nick Glander (Foth)	3/15/2021 1538	Susan Kluffe	3/15/21 1538

PACE Project No.
40223403 3/15/21

Receipt Temp = R01 °C 5c

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: FOTH

Project # 40223403

All containers needing preservation have been checked and noted below: ☑Yes ☐No ☐N/A

Initial when completed: AW Date/ Time:

Lab Lot# of pH paper: 10D3601 Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	Vials: VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001												1																		X		2.5 / 5 / 10
002												1																		X		2.5 / 5 / 10
003																																2.5 / 5 / 10
004																																2.5 / 5 / 10
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018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:_____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☑N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO#: 40223403

40223403

Client Name: Foth

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☒ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other _____

Thermometer Used SR-109 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 5 /Corr: 5

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 3-15-21 /Initials: SKW

Labeled By Initials: SKW

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

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 on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: TW	☑Yes ☐No ☐N/A	12.
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Page 2 of 2