

Lauridsen, Keld B - DNR

From: Lauridsen, Keld B - DNR
Sent: Friday, April 17, 2015 4:41 PM
To: 'Glander, Nick'
Cc: Kozicki, Sharon V F (Sharon.Kozicki@Foth.com)
Subject: RE: Better Brite WTP End of Year Documentation

Follow Up Flag: Follow up
Flag Status: Flagged

Nick,

Thanks for the update and the new data tables.

I am aware of the redevelopment activities next to Better Brite. In fact, I have approved a soil management plan for the project. The contractor should be fully aware of the Better Brite situation.

The soil contained in the drums was generated when the soils on the resale store property were being assessed for the presence of chromium contamination. This soil can be utilized on the property as fill under impervious surface covers.

Have a nice weekend,

-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) 662-5420
Keld.Lauridsen@wisconsin.gov

From: Glander, Nick [<mailto:Nick.Glander@foth.com>]
Sent: Friday, April 17, 2015 10:06 AM
To: Lauridsen, Keld B - DNR
Cc: Kozicki, Sharon V F
Subject: FW: Better Brite WTP End of Year Documentation

Hello Keld;

In total, Foth processed 40 batches in the contract year - April 2014 through March 2015. An attached Better Brite WTP Summary Packet contains the following:

- ♦ A summary page showing the total volume of water treated per month in table & graph format with drum fill and analytical sample collection dates
- ♦ The tabulated WTP Process Log provides the individual batch detail
- ♦ Table showing when drums were filled and disposed of
- ♦ Summary table of the analytical results.

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

In addition, there are a couple of items I wanted to make you aware of:

- ♦ Initial construction activities have commenced for the De Pere Christian Thrift Shop next door. The grass field has been scrapped/excavated to set the foundation for the parking lot, and their lot has been scrapped for the building expansion. Is there any potential hazards I should pass along that they need to be aware of? I assume direct contact contaminated soils have been previously removed.
- ♦ There are still two soil drum onsite from when the City of De Pere and WPS installed new gas pipelines. Are we responsible for those? Do you want me to contact the City of De Pere/WPS to get the drums removed? After sitting through winter, any original labels are no longer visible on the drums anymore. I wrote soil cuttings on the side for now.

Thank you;

Nick Glander, Project 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>

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Better-Brite WTP Processing Log 2014/2015

14W005

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 file or Press cleaned / Comments
04/04/14	NMG	1	5500	3.29	297	8.62	30	0.02	38	350	
04/07/14	NMG	2	5500	3.32	294	8.53	30	0.00	38	350	
04/10/14	NMG	3	5500	3.13	288	8.59	30	0.00	40	350	
04/23/14	NMG	4	5500	3.21	294	8.64	30	0.02	40	350	Calibrated pH and ORP sensor, Chemical Delivery
04/24/14	NMG	5	5500	3.10	299	8.69	30	0.01	39	350	
05/02/14	NMG	6	5500	3.30	300	8.59	30	0.02	40	350	Calibrated pH and ORP sensor,
05/09/14	NMG	7	5500	3.26	297	8.62	30	0.02	35	350	Cleaned Press
05/14/14	NMG	8	5500	3.43	299	8.51	30	0.01	37	350	
05/22/14	NMG	9	5500	3.24	300	8.68	30	0.00	36	350	
05/27/14	NMG	10	5500	3.17	291	8.64	30	0.01	38	350	
05/29/14	NMG	11	5500	3.23	299	8.68	30	0.00	36	350	Cleaned Press
05/30/14	NMG	12	5500	3.41	295	8.69	30	0.00	37	350	
06/04/14	NMG	13	5500	3.48	300	8.58	30	0.00	37	350	
06/09/14	NMG	14	5500	3.28	290	8.62	30	0.00	38	350	
06/11/14	NMG	15	5500	3.14	300	8.66	30	0.00	37	350	
06/13/14	NMG	16	5500	3.04	300	8.64	30	0.00	39	350	
06/26/14	NMG	17	5500	3.23	297	8.52	30	0.01	40	350	
07/03/14	NMG	18	5500	3.32	300	8.57	30	0.00	34	350	Cleaned Press & Calibrated pH & ORP Sensors
08/07/14	NMG	19	5500	3.11	288	8.52	30	0.02	38	350	T. Chrome samples collected
08/08/14	NMG	20	5500	3.32	291	8.57	30	0.01	39	350	
08/21/14	NMG	21	5500	3.04	300	8.70	30	0.02	30	350	Cleaned Press & Calibrated pH & ORP Sensors
08/29/14	NMG	22	5500	3.10	293	8.66	30	0.02	35	350	
09/05/14	NMG	23	5500	3.06	300	8.64	30	0.01	35	350	
09/12/14	NMG	24	5500	3.42	300	8.67	30	0.00	37	350	
09/19/14	NMG	25	5500	3.15	294	8.62	30	0.02	38	350	
10/01/14	NMG	26	5500	3.02	298	8.54	30	0.01	24	350	
10/10/14	AJP	27	5500	3.16	299	8.59	30	0.01	25	350	Cleaned Press & Calibrated pH & ORP Sensors
10/24/14	AJP	28	5500	3.07	301	8.51	30	0.00	24	350	



Better-Brite WTP Processing Log 2014/2015

14W005

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
10/28/14	AJP	29	5500	3.33	396	8.65	30	0.00	28	350	
11/10/14	AJP	30	5500	3.21	300	8.56	30	0.01	16	350	Cleaned Press & Calibrated pH & ORP Sensors
11/25/14	AJP	31	5500	3.05	302	8.69	30	0.00	15	350	
12/04/14	AJP	32	5500	3.09	300	8.58	30	0.00	15	350	
12/15/14	AJP	33	5500	3.18	301	8.63	30	0.00	16	350	Chemicals Delivered
12/26/14	AJP	34	5500	3.12	300	8.52	30	0.00	16	350	
12/31/14	AJP	35	5500	3.22	301	8.66	30	0.00	16	350	
01/02/15	AJP	36	5500	3.21	300	8.65	30	0.00	18	350	
01/09/15	AJP	37	5500	3.04	300	8.53	30	0.00	20	350	
01/31/15	AJP	38	5500	3.28	300	8.57	30	0.00	17	350	Cleaned Press & Calibrated pH & ORP Sensors
03/11/15	AJP	39	5500	3.07	301	8.65	30	0.01	18	350	T, Chrome samples collected
03/30/15	NMG	40	5500	3.10	300	8.57	30	0.01	20	350	

Notes:

NMG: Nick Glander (Foth)
AJP: Andrew Pierre

s.u Standard Unit
mv: millivolts

Cr⁺⁶ Hexavalent Chromium
sec: seconds

min: minutes
gal: gallons

Prepared By: NMG1
Checked By: SVF

Better-Brite Sludge Generation Data
Calendar Year 2014

MONTH	Drum(s) Filled	Date Filled	Date Transported	Small Q + 180 days
January	0			
February	0			
March	1	3/3/2014		8/30/2014
April	0			
May	0			
June	0			
July	0			
August	1	8/25/2014	8/26/2014	2/21/2015
September	0			
October	0			
November	0			
December	0			
TOTAL	2			

Notes - Both Drums (filled date 3/3/2014 and 8/25/2014) were transported for disposal on 8/26/2014.

Prepared By: NMG1
Checked By: SVF

**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

Prepared By: NMG1
Checked By: SVF

Notes:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

NS = No Sample

ug/L = micrograms per Liter

mg/L = milligrams per Liter

March 16, 2015

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

RE: Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on March 11, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334

North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40111522001	INFLUENT_201503	Water	03/11/15 15:25	03/11/15 15:58
40111522002	EFFLUENT_201503	Water	03/11/15 15:20	03/11/15 15:58

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SAMPLE ANALYTE COUNT

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40111522001	INFLUENT_201503	EPA 6010	DLB	1	PASI-G
40111522002	EFFLUENT_201503	EPA 6010	DLB	1	PASI-G

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SUMMARY OF DETECTION

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40111522001 EPA 6010	INFLUENT_201503 Chromium	7430	ug/L	5.0	03/12/15 18:23	
40111522002 EPA 6010	EFFLUENT_201503 Chromium	900	ug/L	5.0	03/12/15 18:26	

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PROJECT NARRATIVE

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Method: EPA 6010
Description: 6010 MET ICP
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 16, 2015

General Information:

2 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

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.

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ANALYTICAL RESULTS

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Sample: INFLUENT_201503 Lab ID: 40111522001 Collected: 03/11/15 15:25 Received: 03/11/15 15:58 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Chromium	7430	ug/L	5.0	1.5	1	03/12/15 10:15	03/12/15 18:23	7440-47-3	

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ANALYTICAL RESULTS

Project: 14W005 BETTER BRITE

Pace Project No.: 40111522

Sample: EFFLUENT_201503 Lab ID: 40111522002 Collected: 03/11/15 15:20 Received: 03/11/15 15:58 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Chromium	900	ug/L	5.0	1.5	1	03/12/15 10:15	03/12/15 18:26	7440-47-3	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

QC Batch: MPRP/11569 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 40111522001, 40111522002

METHOD BLANK: 1126521 Matrix: Water
Associated Lab Samples: 40111522001, 40111522002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<1.5	5.0	03/12/15 17:30	

LABORATORY CONTROL SAMPLE: 1126522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	480	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1126523 1126524

Parameter	Units	1126523		1126524		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual	
		40111378001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						MSD Result
Chromium	ug/L	1.9J	500	500	481	476	96	95	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

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QUALIFIERS

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

LABORATORIES

PASI-G . Pace Analytical Services - Green Bay

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 14W005 BETTER BRITE
Pace Project No.: 40111522

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40111522001	INFLUENT_201503	EPA 3010	MPRP/11569	EPA 6010	ICP/10275
40111522002	EFFLUENT_201503	EPA 3010	MPRP/11569	EPA 6010	ICP/10275

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name: **Foth**
 Branch/Location: **De Pere**
 Project Contact: **Nick Glander**
 Phone: **920-362-8744**
 Project Number: **14W005**
 Project Name: **Better Brite**
 Project State: **Wisconsin**
 Sampled By (Print): **Andy Pierre**
 Sampled By (Sign): *Andy Pierre*
 PO #: _____ Regulatory Program: _____



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

Page 1 of 1
 40111522
 COC No. 029586

CHAIN OF CUSTODY

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

FILTERED? (YES/NO)
 PRESERVATION (CODE)*

Y/N	Pick Letter	Analyses Requested	Matrix	DATE	TIME	MATRIX
N	D	Total Cr				
X			W	3/11/15	1525	
X			W	3/11/15	1520	

Quote #: _____
 Mail To Contact: **Nick Glander**
 Mail To Company: **Foth**
 Mail To Address: **2121 Innovation Ct. De Pere, WI 54115**
 Invoice To Contact: "Same As Above"
 Invoice To Company: "
 Invoice To Address: "
 Invoice To Phone: **920-362-8744**
 CLIENT COMMENTS: _____
 LAB COMMENTS (Lab Use Only): _____
 Profile #: _____

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 = Wasta Water
 Sl = Sludge WP = Wipa

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX
		DATE	TIME	
001	Influent - 201503	3/11/15	1525	W
002	Effluent - 201503	3/11/15	1520	W

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)
 Date Needed: _____
 Relinquished By: *Andy Pierre* Date/Time: **3-11-15 3:58**
 Received By: *Andy Pierre* Date/Time: **3/11/15 1558**
 Transmit Prelim Rush Results by (complete what you want): _____
 Email #1: _____ Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____
 Email #2: _____ Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____
 Telephone: _____ Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____
 Fax: _____ Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____
 Samples on HOLD are subject to special pricing and release of liability

PACE Project No. **40111522**
 Receipt Temp = **20** °C
 Sample Receipt pH **OK/Adjusted**
 Cooler Custody Seal Present / Not Present Intact / Not Intact



Sample Condition Upon Receipt

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

Project #

WO#: 40111522

Client Name: Foth



Courier: Fed Ex UPS Client Pace Other:

Tracking #: PNT

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: NT Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature: Uncorr: /Corr: NB Biological Tissue is Frozen: yes

Temp Blank Present: yes no

Temp should be above freezing to 6°C for all sample except Biota.

Frozen Biota Samples should be received ≤ 0°C.

Comments:

Person examining contents:
Date: 3/11/15
Initials: LS

Table with 15 rows for checklist items: Chain of Custody Present, Chain of Custody Filled Out, Chain of Custody Relinquished, Sampler Name & Signature on COC, Samples Arrived within Hold Time, Short Hold Time Analysis (<72hr), Rush Turn Around Time Requested, Sufficient Volume, Correct Containers Used, Containers Intact, Filtered volume received for Dissolved tests, Sample Labels match COC, All containers needing preservation have been checked, Headspace in VOA Vials (>6mm), Trip Blank Present.

Client Notification/ Resolution: If checked, see attached form for additional comments
Person Contacted: Date/Time:
Comments/ Resolution:

Project Manager Review: [Signature] Date: 3/11/15

August 13, 2014

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

RE: Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on August 08, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Brian Basten for
Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334

New York Certification #: 11888
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40101230001	INFLUENT_201408	Water	08/07/14 14:45	08/08/14 13:45
40101230002	EFFLUENT_201408	Water	08/07/14 16:00	08/08/14 13:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40101230001	INFLUENT_201408	EPA 6010	DLB	1	PASI-G
40101230002	EFFLUENT_201408	EPA 6010	DLB	1	PASI-G

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SUMMARY OF DETECTION

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40101230001 EPA 6010	INFLUENT_201408 Chromium	8190	ug/L	5.0	08/12/14 11:11	
40101230002 EPA 6010	EFFLUENT_201408 Chromium	1110	ug/L	5.0	08/12/14 11:14	

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PROJECT NARRATIVE

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

Method: EPA 6010
Description: 6010 MET ICP
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 13, 2014

General Information:

2 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

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.

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ANALYTICAL RESULTS

Project: 14W005 BETTER BRITE

Pace Project No.: 40101230

Sample: INFLUENT_201408 Lab ID: 40101230001 Collected: 08/07/14 14:45 Received: 08/08/14 13:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Chromium	8190	ug/L	5.0	1.5	1	08/11/14 10:48	08/12/14 11:11	7440-47-3	

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ANALYTICAL RESULTS

Project: 14W005 BETTER BRITE

Pace Project No.: 40101230

Sample: EFFLUENT_201408 Lab ID: 40101230002 Collected: 08/07/14 16:00 Received: 08/08/14 13:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Chromium	1110	ug/L	5.0	1.5	1	08/11/14 10:48	08/12/14 11:14	7440-47-3	

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QUALITY CONTROL DATA

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

QC Batch: MPRP/10640 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 40101230001, 40101230002

METHOD BLANK: 1022977 Matrix: Water
Associated Lab Samples: 40101230001, 40101230002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<1.5	5.0	08/12/14 09:52	

LABORATORY CONTROL SAMPLE: 1022978

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	515	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1022979 1022980

Parameter	Units	1022979		1022980		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Chromium	ug/L	<1.5	500	507	501	101	100	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

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QUALIFIERS

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LOD - Limit of Detection.

LOQ - Limit of Quantitation.

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 14W005 BETTER BRITE
Pace Project No.: 40101230

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40101230001	INFLUENT_201408	EPA 3010	MPRP/10640	EPA 6010	ICP/9414
40101230002	EFFLUENT_201408	EPA 3010	MPRP/10640	EPA 6010	ICP/9414

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name: **FOTH**
 Branch/Location: **DE PERE**
 Project Contact: **Nick GLANDER**
 Phone: **920/362-8744**
 Project Number: **1461005**
 Project Name: **BETTER Brite**
 Project State: **WI**
 Sampled By (Print): **Nick Glander**
 Sampled By (Sign): *[Signature]*
 PO #: _____ Regulatory Program: _____



OFFER LIMITED REGION
 MN: 612-607-1700 WI: 920-469-2436

COC No. **40101230** ⁰³¹⁴²⁸

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	

FILTERED?
(YES/NO)

 PRESERVATION
(CODE)*

Pick Letter	Analyses Requested																			
		1	2	3	4	5	6	7	8	9	10									
A	Total Cr	X																		

Quote #: _____
 Mail To Contact: **Nick GLANDER**
 Mail To Company: **FOTH**
 Mail To Address: **2121 INNOVATION CT DE PERE WI 5415**
 Invoice To Contact: **JAMES AS**
 Invoice To Company: **ABOVE**
 Invoice To Address: **ABOVE**
 Invoice To Phone: _____
 CLIENT COMMENTS: _____
 LAB COMMENTS: **1-250mlp^o**
 Profile #: _____

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

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX	Analyses Requested
		DATE	TIME		
001	Influent_201408	8/8/14	1445	GW	X
002	Effluent_201408	8/7/14	1600	GW	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: *[Signature]* Date/Time: **8/8/14 900**
 Relinquished By: *[Signature]* Date/Time: **8/8/14 1315**
 Relinquished By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____

Received By: *[Signature]* Date/Time: **8/8/14 0923**
 Received By: **Sarah Weyers** Date/Time: **8/8/14 1315**
 Received By: _____ Date/Time: _____
 Received By: _____ Date/Time: _____


PACE Project No. **40101230**
 Receipt Temp = **1.0** °C
 Sample Receipt pH **OK/ Adjusted**
 Cooler Custody Seal **Present / Not Present Intact / Not Intact**

Sample Condition Upon Receipt

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

Pace Analytical
Client Name: Foth

Project # **WO# : 40101230**



40101230

Courier: Fed Ex UPS 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-49 Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun
Cooler Temperature Uncorr: 1.5 / Corr: 1.0 Biological Tissue is Frozen: yes no
Temp Blank Present: yes no

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 8/8/14
Initials: SPW

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input checked="" type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH + ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4, NaOH+ZnAct ≥ 9, NaOH ≥ 12)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed: <u>SPW</u> Lab Std #ID of preservative: _____ Date/Time: _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: _____

Project Manager Review: JJ for TN Date: 8/8/14

Better Brite Waste Treatment Facility Summary Page

Better Brite 2014/2015 Treatment

Month	Gallons Treated	Batches Ran
April	27500	5
May	38500	7
June	27500	5
July	5500	1
Aug	22000	4
Sept	16500	3
Oct	22000	4
Nov	11000	2
Dec	22000	4
Jan	16500	3
Feb	0	0
Mar	11,000	2
TOTAL		40

Drum #	Date Filled
1	3/3/2014
2	8/25/2014

* 2 drums picked up on 26 Aug 2014

Total Chrome Analytical Samples Collection Dates

Sample Rd	Date Collected
1	8/7/2014
2	3/11/2015

