# Attachment 1

**Outfall 019 EPA Form 2E** 

EPA	A Identification Number NPDES Permit Number Facility Name OM							OMB	No. 2040-0004			
1	NCD0031	62542	NC0004308	Bad	in Business Pai	Business Park, LLC						
FORM 2E NPDES	Q)	<b>EPA</b>	Ar MANUFACTURIN	U.S. Enviro pplication for NPE G, COMMERCIAL	U.S. Environmental Protection Agency dication for NPDES Permit to Discharge Wastewater , COMMERCIAL, MINING, AND SILVICULTURAL FACILITIES WHICH DISCHARGE ONLY NONPROCESS WASTEWATER							
SECTIO												
3LC HO	1 1	Provide inf	formation on each of the facili	// ty's outfalls in the t	ahle helow							
ų	<u></u>	Outfall						9				
cati		Number	Receiving water name	La	litude		L	ongitude				
I Lo		019	Badin Lake		35° 24′ 46.8	38″ N		80	° 6′ 16.53″ N			
ıtfal												
õ												
SECTIO			ATE (A0 CED 122 21/U)(2))									
SECTIO	N Z. DIƏ 2 1		new or existing discharger? ((	Check only one res	nonse)							
arg. te	<u> <u> </u></u>		/ discharger		Fxisti	ng discharg	er 🗲 SKIF	to Sectio	n 3			
sch Dat	2.2	Specify vo	ur anticipated discharge date									
Ō		-1,,,	5 <b>.</b>									
SECTIO	N 3. WA	STE TYPES	5 (40 CFR 122.21(H)(3))									
	<u>3.1</u>	What types	s of wastes are currently bein	g discharged if you	i are an existin	g discharge	r or will be	discharge	d if you are			
			itary wastes	.)	D Other	nonprocess	wastewate	er (describ	e/explain			
		Res	taurant or cafeteria waste	directly	y below)		(	F				
Stormwater												
Tyl	3.2	Deep the facility was expline water addition?										
'as te	<u></u>	Ves Ves SkiP to Section A										
\$	3.3	List the co	oling water additives used an	d describe their co	mposition.							
			Cooling Water Additive	es		Composi	ition of Ad	ditives				
			(list)		(if available to you)							
SECTIO	N 4. EFF	LUENT CH	ARACTERISTICS (40 CFR 1	22.21(H)(4))								
	<u>4.1</u>	Have you of the this application of the thick application of the thick application of the	completed monitoring for all p	parameters in the ta	able below at e	ach of your	outfalls an	d attached	the results			
			ication package:	No; a waiver h	as been reque	sted for one	or more p	arameters	from my			
		🗹 Yes		NPDES permit	ting authority (	attach waive	er request	and additi	onal			
	4.0	Drovido do	to an unaversited in the table h	information).		abox of Ano	haaa" aalu	wave for the				
6	<u>4.2</u>	parameter	s for which you are requesting	a waiver. (See in	structions for s	pecifics.)	lyses colu		ISE			
stic				Number of	Maximu	m Daily	Averag	e Daily	Source			
teri		Par	rameter or Pollutant	Analyses	Disch	narge	Disch	large	(use codes			
arac				reported)	Mass	Conc.	Mass	Conc.	instructions)			
t Ch		Biochemic	al oxygen demand (BOD₅)	2	0.19 #/day	9.9 mg/L	0.12 #/da	6.5 mg/l	NA			
nent		Total susp	ended solids (TSS)	3	0.43 #/day	13 mg/L	0.26 #/da	9.6 mg/l	NA			
Eff		Oil and gre	ease	2	<1.2 #/day	<4.9 mg/L	<0.6 #/da	<3.8 mg,	NA			
		Ammonia (	(as N)	1	<0.6 #/day	<2.4 mg/L			NA			
		Discharge	flow	219	0.03	MGD			NA			
		pH (report	as range)	4	6.5 - 7	.7 s.u.			NA			
		Temperatu	ure (winter)	2	11.	6 C			NA			
	Temperature (summer) 0								NA			

<sup>&</sup>lt;sup>1</sup> Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EP/	A Identifica	tion Number 162542	NPDES Permit Numb NC0004308	NPDES Permit NumberFacility NameNC0004308Badin Business Park, LLC				OMB No. 2040-0004 Expires 07/31/2026		
	4.3	Is fecal coliform	believed present, or is s	anitary waste disch	arged (or will	it be discha → SKIP to It	rged)? tem 4.5.			
	<u>4.4</u>	Provide data as Parame	ter or Pollutant	elow. <sup>1</sup> (See Instruct Number of Analyses (if actual data reported)	Maximu Discl (specif Mass	tics.) im Daily harge y units) Conc.	Average Daily Discharge (specify units) Mass Conc		Source (use codes per instructions)	
		Fecal coliform		Toportou	Mass	Cono.	Mass	00110.		
p		E. coli					1			
inue		Enterococci					1			
ont	4.5	Is chlorine used	(or will it be used)?	<u> </u>		<u></u>		<u> </u>		
cs C		🔲 Yes			🗹 No 🕂	SKIP to If	tem 4.7.			
ristic	<u>4.6</u>	Provide data as	requested in the table be	elow. <sup>2</sup> (See instruct	tions for speci	fics.)				
Character		Parame	ter or Pollutant	Number of Analyses (if actual data	Maximu Discl (specif	Im Daily harge y units)	Averag Disch (specify Mass	e Daily arge (units)	Source (use codes per instructions)	
lent		Total residual c	nlorine	Topolitoty	inass.	00110.	WI033	00110.	1.00.000.000	
Liffi L	4.7	Is non-contact cooling water discharged (or will it be discharged)?					I			
	<u></u> .	$\square$ Yes $\square$ No $\rightarrow$ SKIP to Section 5.								
	4.8	Provide data as	requested in the table be	elow.1 (See instruct	tions for speci	fics.)				
		Parame	ter or Pollutant	Number of Analyses (if actual data reported)	Maximu Discl (specif	Im Daily harge y units)	Averag Disch (specify Mass	e Daily large / units)	Source (use codes per instructions)	
		Chemical oxyge	en demand (COD)	Toportou	Muss	00110.	Muss	00110.		
		Total organic ca	arbon (TOC)							
SECTIO	N 5. FL0	OW (40 CFR 122.	21(H)(5))							
	<u>5.1</u>	<ul> <li>Except for stormwater water runoff, leaks, or spills, are any of the discharges you described in Sections 1 and 3 or this application intermittent or seasonal?</li> <li>Yes → Complete this section.</li> <li>No → SKIP to Section 6.</li> </ul>						and 3 of		
Flow	<u>5.2</u>	Briefly describe	the frequency and durat	ion of flow.						
SECTIO	N 6. TRI	EATMENT SYSTE	EM (40 CFR 122.21(H)(6							
atment System	<u>6.1</u>	Briefly describe No treatment sy	any treatment system(s) stem present.	used (or to be use	d).					

<sup>&</sup>lt;sup>2</sup> Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA	A Identificat	tion Number NPDES Permit Number	Facility Name	OMB No. 2040-0004
	NCD0031	162542 NC0004308	Badin Business Park, LLC	Expires 07/31/2026
Other Information	N 7. OTH <u>7.1</u>	<b>IER INFORMATION (40 CFR 122.21(H)(7))</b> Use the space below to expand upon any of the above the reviewer should consider in establishing permit line Semi-annual sampling for aluminum, cyanide, and flue maximum daily concentrations are 5.7 mg/L for alumi daily concentrations are 2.8 mg/L for aluminum, 0 up calculated from data collected since the permit mod parameters.	ve items. Use this space to prov mitations. Attach additional she uoride is required for this outfa ninum, 0 ug/L for cyanide, and g/L for cyanide, and 0.9 mg/L fo ification (July 2019) and include	vide any information you believe tets as needed. <i>(optional item)</i> Ill under the current permit. The 1.8 mg/L for fluoride. The average or fluoride. These results were es a total of 3 data points for all
SECTIO	N 8. CHE <u>8.1</u>	ECKLIST AND CERTIFICATION STATEMENT (40 CF In Column 1 below, mark the sections of Form 2E that For each section, specify in Column 2 any attachment that not all applicants are required to provide attachment	FR 122.22(A) AND (D)) at you have completed and are nts that you are enclosing to ale nents.	submitting with your application. ert the permitting authority. Note
		Column 1	C	olumn 2
		Section 1: Outfall Location	w/ attachments (e.g.,	responses for additional outfalls)
		Section 2: Discharge Date	w/ attachments	
		Section 3: Waste Types	w/ attachments	
ent		Section 4: Effluent Characteristics	w/ attachments	
itatem		Section 5: Flow	w/ attachments	
tion S		Section 6: Treatment System	w/ attachments	
rtifica		Section 7: Other Information	w/ attachments	
Jd Ce		Section 8: Checklist and Certification Statement	t D. w/ attachments	
ist aı	<u>8.2</u>	Certification Statement		
Checkli		I certify under penalty of law that this document and in accordance with a system designed to assure that information submitted. Based on my inquiry of the pe directly responsible for gathering the information, the belief, true, accurate, and complete. I am aware that including the possibility of fine and imprisonment for	under my direction or supervision ather and evaluate the 'he system, or those persons e best of my knowledge and for submitting false information,	
		Name (print or type first and last name)	Official title	
		Robyn Gross	Global Director, Alcoa T	Transformation
		Signature	Date signed	
		forgugiosz	2/26/2024	

# Attachment 2

Outfall 019 EPA Form 2F

	EPA Identification Number NPDE	S Permit Number	mit Number Facility Name			Jutfall Number	OMB No. 2040-0004		
	NCD003162542 Nr	C0004308	Badin Business Park, LLC		019			Expires 07/31/2026	
TAF	TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CER 122.26(C)(1)(I)(E)(3))								
You	must provide the results of at least one anal	ysis for every pollutant ir	n this table. Complete	one table for ea	ach outfall.	See instructions for ad-	ditional details and requi	irements.	
		Maximum Dai (specify	Maximum Daily Discharge			y Discharge units)	Number of Storm	Source of	
	Pollutant or Parameter	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample During F 30 Minu	e Taken First utes	Flow-Weighted Composite	Events Sampled	(new source/new dischargers only; use codes in instructions)	
1.	Oil and grease	<4.9 mg/L		<3.8 m	ng/L		2	NA	
2.	Biochemical oxygen demand (BOD <sub>5</sub> )	9.9 mg/L	NA	6.5 mg	g/L	NA	2	NA	
3.	Chemical oxygen demand (COD)	24 mg/L	NA	24 mg	ʒ/L	NA	1	NA	
4.	Total suspended solids (TSS)	13 mg/L	NA	9.6 mg	g/L	NA	3	NA	
5.	Total phosphorus	<20 mg/L	NA	<20 m	g/L	NA	1	NA	
6.	Total Kjeldahl nitrogen (TKN)	0.54 mg/L	NA	0.54 m	ıg/L	NA	1	NA	
7.	Total nitrogen (as N)	0.77 mg/L	NA	0.77 m	ıg/L	NA	1	NA	
	pH (minimum)	6.5 s.u.		6.5 s.	.u.		4	NA	
0.	pH (maximum)	7.7 s.u.		7.7 s.	.u.		4	NA	

<sup>1</sup> Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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Dollutant and CAS Number	Maximum Dai (specify	ly Discharge	Average Daily (specify	y Discharge units)	- Number of Storm	Source of Information
(if available)	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Events Sampled	(new source/new dischargers only; us codes in instructions
Fluoride	1.8 mg/L	NA	0.9 mg/L	NA	3	NA
Cyanide, Total	<6 ug/L	NA	<5.7 ug/L	NA	3	NA
Aluminum, Total	5.7 mg/L	NA	2.8 mg/L	NA	3	NA

Facility Name

Badin Business Park, LLC

Outfall Number

019

NPDES Permit Number

NC0004308

EPA Identification Number

NCD003162542

<sup>1</sup> Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

OMB No. 2040-0004 Expires 07/31/2026 This page intentionally left blank.

Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Events Sampled	(new s dischargu codes in
		.     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .       .     .	.     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .       .     .     .	···<	nnn

Facility Name

Badin Business Park, LLC

Outfall Number

019

<sup>1</sup> Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number

NCD003162542

NPDES Permit Number

NC0004308

OMB No. 2040-0004 Expires 07/31/2026 This page intentionally left blank.

EPA Identification Num NCD003162542	Number         NPDES Permit Number         F           542         NC0004308         Badin But		acility name usiness Park, LLC	ımber Ə	OMB No. 2040-0004 Expires 07/31/2026				
TABLE D. STORM EVEN	NT INFOR	MATION (40 CFR 12	2.26(C)(1)(I)(E)	(6))					
Provide data for the storn	n event(s)	that resulted in the m	aximum daily d	ischarges for t	he flow-weighted com	posite sample.			
Date of Storm Event	Duratio	on of Storm Event (in hours)	Total Rain Storm (in inc	fall During Event <sup>ches)</sup>	Number of Ho Beginning of Stor End of Previous M Eve	urs Between m Measured and /leasurable Rain nt	Maximum Flo During Rain (in gpm or spec	ow Rate Event ify units)	Total Flow from Rain Event (in gallons or specify units)
		NA	NA		N	A	NA		NA
Provide a description of the	he method	of flow measuremen	t or estimate.						

# Attachment 3

Outfall 019 Analytical Laboratory Report



**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

5

Attn: Melissa Vaught FTN Associates, Ltd. 3 Innwood Circle Suite 220 Little Rock, Arkansas 72211 Generated 1/30/2024 2:48:41 PM

## JOB DESCRIPTION

Badin Business Park - Outfall 019

## **JOB NUMBER**

410-157788-1

Eurofins Lancaster Laboratories Environment Testing, LLC 2425 New Holland Pike Lancaster PA 17601





## **Eurofins Lancaster Laboratories Environment Testing, LLC**

**Job Notes** 

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization

Generated 1/30/2024 2:48:41 PM

1

5 6 7

Authorized for release by Kelly Bauer, Project Manager Kelly.Bauer@et.eurofinsus.com (717)556-7262

## **Eurofins Lancaster Laboratories Environment Testing, LLC**

## **Compliance Statement**

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

• QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Kelly Bauer

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### Qualifiers

Qualifiers	<u>s</u> 3						
General Cher	nistry						
Qualifier	Qualifier Description						
b	Result Detected in the Unseeded Control blank (USB).						
cn	Refer to Case Narrative for further detail	5					
Н	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.						
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.						
Glossary		- 7					
Abbreviation	These commonly used abbreviations may or may not be present in this report.						
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	0					
%R	Percent Recovery	Ο					
CFL	Contains Free Liquid						
CFU	Colony Forming Unit	9					
CNF	Contains No Free Liquid						
DER	Duplicate Error Ratio (normalized absolute difference)						
Dil Fac	Dilution Factor						
DL	Detection Limit (DoD/DOE)						
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample						
DLC	Decision Level Concentration (Radiochemistry)						
EDL	Estimated Detection Limit (Dioxin)						
LOD	Limit of Detection (DoD/DOE)	13					
LOQ	Limit of Quantitation (DoD/DOE)						
MCL	EPA recommended "Maximum Contaminant Level"						

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Job ID: 410-157788-1

## **Eurofins Lancaster Laboratories Environment**

#### Job Narrative 410-157788-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The sample was received on 1/18/2024 1:55 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

#### HPLC/IC

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

#### Metals

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

#### **General Chemistry**

Method 2540D: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 7 days. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: OF019 - Grab (410-157788-1).

Method SM4500NH3\_D: The following sample was diluted due to the nature of the sample matrix: OF019 - Grab (410-157788-1). Elevated reporting limits (RLs) are provided.

Method SM5210B\_Calc: The method blank result associated with batch 410-466367 was higher than the method-required limit of 0.2 mg/L.

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

### Client: FTN Associates, Ltd. Project/Site: Badin Business Park - Outfall 019

## Client Sample ID: OF019 - Grab

 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5700		25		ug/L	1	_	6020B	Total
									Recoverable
Total Suspended Solids	22	H cn	3.0		mg/L	1		2540D-2015	Total/NA
Biochemical Oxygen Demand	2.4	H H3 b cn	2.0		mg/L	1		5210 B-2011	Total/NA

Job ID: 410-157788-1

Lab Sample ID: 410-157788-1

This Detection Summary does not include radiochemical test results.

## **Client Sample Results**

### Client: FTN Associates, Ltd. Project/Site: Badin Business Park - Outfall 019

Job ID: 410-157788-1

Matrix: Water

Lab Sample ID: 410-157788-1

Client Sample ID: OF019 - Grab	
Date Collected: 01/12/24 18:31	
Date Received: 01/18/24 13:55	

_ Method: EPA 300.0 R2.1 - Anions	, Ion Chromat	ography							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<1.0		1.0		mg/L			01/27/24 00:31	5
_ Method: SW846 6020B - Metals (I	CP/MS) - Total	Recoverable	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5700		25		ug/L		01/24/24 07:45	01/29/24 09:32	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	<4.9		4.9		mg/L			01/25/24 18:47	1
Total Suspended Solids (SM	22	H cn	3.0		mg/L			01/22/24 05:56	1
2540D-2015)									
Ammonia-N (SM 4500 NH3 D-2011)	<2.4	cn	2.4		mg/L			01/23/24 06:26	10
Biochemical Oxygen Demand (SM	2.4	H H3 b cn	2.0		mg/L			01/19/24 19:43	1
5210 B-2011)									

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-467310/41											<b>Client Sa</b>	ample ID:	Method	Blank
Matrix: Water												Prep 1	ype: To	tal/NA
Analysis Batch: 467310														
	MB	MB												
Analyte	Result	Qualifier		RL		MDL	Unit		D	Р	repared	Analyz	ed	Dil Fac
Fluoride	<0.20			0.20			mg/L					01/27/24	01:40	1
Lab Sample ID: LCS 410-467310/39									CI	ient	Sample	ID: Lab Co	ontrol S	ample
Matrix: Water												Prep 1	ype: To	tal/NA
Analysis Batch: 467310														
			Spike		LCS	LCS						%Rec		
Analyte			Added		Result	Qual	ifier	Unit		D	%Rec	Limits		
Fluoride			0.750		0.684			mg/L			91	90 - 110		
Lab Sample ID: LCSD 410-467310/40								CI	ient :	Sam	ple ID: L	ab Contro	I Samp	le Dup
Matrix: Water												Prep 1	ype: To	tal/NA
Analysis Batch: 467310														
			Spike		LCSD	LCSI	D					%Rec		RPD
Analyte			Added		Result	Qual	ifier	Unit		D	%Rec	Limits	RPD	Limit
Fluoride			0.750		0.697			mg/L		_	93	90 - 110	2	20
Method: 6020B - Metals (ICP/MS)														
Matrix: Water Analysis Batch: 467665	МВ	мв									Prep <sup>-</sup>	Type: Tota Prep I	l Recov Batch: 4	verable 165743
Analyte	Result	Qualifier		RL		MDL	Unit		D	Р	repared	Analyz	ed	Dil Fac
Aluminum	<25	. <u> </u>		25			ug/L			01/2	4/24 07:45	01/29/24	09:02	1
									0	lant	Sampla		ontrol C	omnlo
Matrix: Wator										ient	Bron	ID. Lab Co Tuno: Tota		orable
Analysis Batch: 467665											пер	Pron l	Recov	165743
Analysis Baton. 407000			Spike		LCS	LCS						%Rec	Juton	100140
Analyte			Added		Result	Qual	ifier	Unit		D	%Rec	Limits		
Aluminum			5000		5130			ug/L		_	103	87 - 119		
Lab Sample ID: 1 CSD 410 465742/2 A								CI	iont	Sam		ah Contro	l Samn	
Matrix: Water								01	ient (	Jam	Pron <sup>-1</sup>	Type: Tota		orable
Analysis Batch: 467665											Ticp	Pren l	Batch: 4	165743
			Spike		LCSD	LCSI	D					%Rec		RPD
Analyte			Added		Result	Qual	ifier	Unit		D	%Rec	Limits	RPD	Limit
Aluminum			5000		5030			ug/L		_	101	87 - 119	2	20
Method: 1664B - HEM and SGT-HE	M													
Lab Sample ID: MR 410 466802/4											Client S		Mothod	Blank
											Sherit Se	Pron 1	vne: To	
Analysis Batch: 466892												. icp i	300.10	
	МВ	МВ												
Analyte														
	Result	Qualifier		RL		MDL	Unit		D	P	repared	Analyz	ed	Dil Fac

LCS LCS

LCSD LCSD

31.4

**Result Qualifier** 

34.1

Result Qualifier

Unit

mg/L

Unit

mg/L

D

D

%Rec

%Rec

78

85

Spike

Added

40.0

Spike

Added

40.0

Lab Sample ID: LCS 410-466892/2

Lab Sample ID: LCSD 410-466892/3

Matrix: Water

HEM (Oil & Grease)

Matrix: Water

HEM (Oil & Grease)

Analyte

Analyte

Analysis Batch: 466892

Analysis Batch: 466892

Method: 1664B - HEM and SGT-HEM (Continued)

Method: 2540D-2015 - Total Suspended Solids (Dried at 103-105°C)

Prep Type: Total/NA

RPD

8

**Client Sample ID: Lab Control Sample** 

%Rec

Limits

78 - 114

%Rec

Limits

78 - 114

Client Sample ID: Lab Control Sample Dup

# Prep Type: Total/NA RPD Limit 13

Lab Sample ID: MB 410-465245/1 Matrix: Water											Client S	ample ID: Metho Prep Type:	od Blank Total/NA
Analysis Batch: 465245	МВ	МВ											
Analyte	Result	Qualifier		RL		MDL	Unit		D	Р	repared	Analyzed	Dil Fac
Total Suspended Solids	<3.0			3.0			mg/L					01/22/24 05:56	1
Lab Sample ID: LCS 410-465245/2									CI	ient	Sample	ID: Lab Control	Sample
Matrix: Water												Prep Type:	Total/NA
Analysis Batch: 465245													
			Spike		LCS	LCS						%Rec	
Analyte			Added	I	Result	Qual	ifier	Unit		D	%Rec	Limits	
Total Suspended Solids			151		147			mg/L		_	97	89 - 105	

### Method: 4500 NH3 D-2011 - Ammonia

Lab Sample ID: MB 410-465681/5 Matrix: Water Analysis Batch: 465681										(	Client S	ample ID: M Prep Ty	ethod Blank pe: Total/NA
	МВ	МВ											
Analyte	Result	Qualifier		RL		MDL U	Jnit		D	Pre	epared	Analyzeo	d Dil Fac
Ammonia-N	<0.24			0.24		r	ng/L					01/22/24 15	:00 1
Lab Sample ID: LCS 410-465681/6									Clie	ent	Sample	ID: Lab Cor	trol Sample
Matrix: Water												Prep Ty	pe: Total/NA
Analysis Batch: 465681													
-			Spike		LCS	LCS						%Rec	
Analyte			Added		Result	Qualif	ier	Unit		D	%Rec	Limits	
Ammonia-N			5.00		4.75			mg/L			95	88 - 122	

#### Method: 5210 B-2011 - BOD, 5-Day

Lab Sample ID: SCB 410-466367/13 Matrix: Water							Client S	ample ID: Metho Prep Type: 1	d Blank ſotal/NA
Analysis Batch: 466367									
	SCB	SCB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.938		0.0000010		mg/L			01/19/24 16:16	1

Cyanide, Total

Job ID: 410-157788-1

## Method: 5210 B-2011 - BOD, 5-Day (Continued)

Lab Sample ID: USB 410-466367/11										Client S	ample ID: Metho	d Blank
Matrix: Water											Prep Type:	iotal/NA
Analysis Batch: 466367												
Australia	USB Daault	USB Owellfier				1114		-	_		A	D!!
Analyte	Result	Qualifier	RL		MDL	Unit		. <u> </u>	P	repared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.343		0.0000010			mg/L					01/19/24 16:06	1
								Cli	ent	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type: <sup>•</sup>	Total/NA
Analysis Batch: 466367												
			Spike	LCS	LCS						%Rec	
Analyte			Added	Result	Qual	ifier	Unit		D	%Rec	Limits	
Biochemical Oxygen Demand			199	188			mg/L		_	95	85 - 115	
Method: D7511-12 - Total Cyanid	е											
										Client S	ample ID: Metho	d Blank
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 468157												
	МВ	МВ										
Analyte	Result	Qualifier	RL		MDL	Unit		D	Р	repared	Analyzed	Dil Fac
Cyanide, Total	<0.0060		0.0060			mg/L				-	01/25/24 10:47	1
 Lab Sample ID: LCS 410-468157/16								Cli	ont	Sample	ID: Lab Control	Sample
Matrix: Water								0.	Cint	Campic	Pren Tyne <sup>.</sup>	
Analysis Batch: 468157											i top type.	
Anarysis Daten. 400107			Spike	LCS	LCS						%Rec	
Analyte			Added	Result	Qual	ifier	Unit		п	%Rec	Limits	

0.0501

0.0528

mg/L

105

84 - 116

## **QC** Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total Recoverable

Total Recoverable

Total Recoverable

**Total Recoverable** 

#### Client: FTN Associates, Ltd. Project/Site: Badin Business Park - Outfall 019

**Client Sample ID** 

Lab Control Sample

Client Sample ID

Lab Control Sample

Lab Control Sample Dup

OF019 - Grab

Method Blank

Lab Control Sample Dup

OF019 - Grab

Method Blank

HPLC/IC

Lab Sample ID

MB 410-467310/41

LCS 410-467310/39

LCSD 410-467310/40

Prep Batch: 465743

MB 410-465743/1-A

LCS 410-465743/2-A

LCSD 410-465743/3-A

Analysis Batch: 467665

Lab Sample ID

Lab Sample ID

MB 410-465743/1-A

LCS 410-465743/2-A

LCSD 410-465743/3-A

410-157788-1

410-157788-1

410-157788-1

**Metals** 

Analysis Batch: 467310

Job ID: 410-157788-1

Prep Batch

Prep Batch

Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
OF019 - Grab	Total Recoverable	Water	6020B	465743	
Method Blank	Total Recoverable	Water	6020B	465743	
Lab Control Sample	Total Recoverable	Water	6020B	465743	13
Lab Control Sample Dup	Total Recoverable	Water	6020B	465743	

Matrix

Water

Water

Water

Water

Matrix

Water

Water

Water

Water

Method

Method

3005A

3005A

3005A

3005A

EPA 300.0 R2.1

EPA 300.0 R2.1

EPA 300.0 R2.1

EPA 300.0 R2.1

### **General Chemistry**

#### Analysis Batch: 465245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157788-1	OF019 - Grab	Total/NA	Water	2540D-2015	
MB 410-465245/1	Method Blank	Total/NA	Water	2540D-2015	
LCS 410-465245/2	Lab Control Sample	Total/NA	Water	2540D-2015	
Analysis Batch: 4656	81				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157788-1	OF019 - Grab	Total/NA	Water	4500 NH3	
				D-2011	
MB 410-465681/5	Method Blank	Total/NA	Water	4500 NH3	
				D-2011	
LCS 410-465681/6	Lab Control Sample	Total/NA	Water	4500 NH3	
				D-2011	

### Analysis Batch: 466367

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
410-157788-1	OF019 - Grab	Total/NA	Water	5210 B-2011	
SCB 410-466367/13	Method Blank	Total/NA	Water	5210 B-2011	
USB 410-466367/11	Method Blank	Total/NA	Water	5210 B-2011	
LCS 410-466367/36	Lab Control Sample	Total/NA	Water	5210 B-2011	

#### Analysis Batch: 466892

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
410-157788-1	OF019 - Grab	Total/NA	Water	1664B	
MB 410-466892/1	Method Blank	Total/NA	Water	1664B	
LCS 410-466892/2	Lab Control Sample	Total/NA	Water	1664B	
LCSD 410-466892/3	Lab Control Sample Dup	Total/NA	Water	1664B	

Client: FTN Associates, Ltd. Project/Site: Badin Business Park - Outfall 019

## **General Chemistry**

## Analysis Batch: 468157

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
410-157788-1	OF019 - Grab	Total/NA	Water	D7511-12	
MB 410-468157/15	Method Blank	Total/NA	Water	D7511-12	
LCS 410-468157/16	Lab Control Sample	Total/NA	Water	D7511-12	

Matrix: Water

Lab Sample ID: 410-157788-1

### Client Sample ID: OF019 - Grab Date Collected: 01/12/24 18:31 Date Received: 01/18/24 13:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	EPA 300.0 R2.1		5	467310	W7FX	ELLE	01/27/24 00:31
Total Recoverable	Prep	3005A			465743	NU9R	ELLE	01/24/24 07:45
Total Recoverable	Analysis	6020B		1	467665	F7JF	ELLE	01/29/24 09:32
Total/NA	Analysis	1664B		1	466892	QT6L	ELLE	01/25/24 18:47
Total/NA	Analysis	2540D-2015		1	465245	M98K	ELLE	01/22/24 05:56 - 01/23/24 06:10
Total/NA	Analysis	4500 NH3 D-2011		10	465681	UML5	ELLE	01/23/24 06:26
Total/NA	Analysis	5210 B-2011		1	466367	B6LN	ELLE	01/19/24 19:43
Total/NA	Analysis	D7511-12		1	468157	UJE2	ELLE	01/25/24 10:58

<sup>1</sup> This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

#### Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Prog	gram	Identification Number	Expiration Date
North Carolina (DW)	Stat	e	42705	07-31-24
The following analytes for which the agency d	are included in this report, bes not offer certification.	but the laboratory is not certif	ied by the governing authority. This lis	t may include analyte
Analysis Method	Prep Method	Matrix	Analyte	
1664B		Water	HEM (Oil & Grease)	
2540D-2015		Water	Total Suspended Solids	
4500 NH3 D-2011		Water	Ammonia-N	
5210 B-2011		Water	Biochemical Oxygen Dema	and
6020B	3005A	Water	Aluminum	
D7511-12		Water	Cyanide, Total	
EPA 300.0 R2.1		Water	Fluoride	
North Carolina (WW/SW)	Stat	e	521	12-31-24

### Client: FTN Associates, Ltd. Project/Site: Badin Business Park - Outfall 019

Method	Method Description	Protocol	Laboratory	
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE	-
6020B	Metals (ICP/MS)	SW846	ELLE	
1664B	HEM and SGT-HEM	1664B	ELLE	
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	ELLE	
4500 NH3 D-2011	Ammonia	SM	ELLE	
5210 B-2011	BOD, 5-Day	SM	ELLE	
D7511-12	Total Cyanide	ASTM	ELLE	
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE	
Protocol Refere	nces:			
1664B = EP	A-821-98-002			
ASTM = AS	TM International			
EPA = US E	nvironmental Protection Agency			
SM = "Stand	ard Methods For The Examination Of Water And Wastewater"			
SW846 = "Te	est Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Editio	n, November 1986 And Its Updates.		
l abaratam: Dafe				
	stences.	Preseter DA 17601 TEL (717)656 2200		ſ
ELLE - EUIC	nins Lancaster Laboratories Environment resting, LLC, 2425 New Holland Pike, La	ancaster, PA 17601, TEL (717)656-2300		

Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-157788-1	OF019 - Grab	Water	01/12/24 18:31	01/18/24 13:55



-		
	3-	
	2	
	1	

Date: Pro	oject Name			Pn	oject No.				Project N	lanager	(Print)						Τ	Page 1	of 1
1-15-29 Ba	din Business Park - Out	al) 019		06	010-180	5-001			Jon Wils	son								8	
Laboratory Name: Eurofins - Lancaster		Submi	tted by:								Parame	eters (M	ethod	Numbe	er)			ab Turn A	and Time
		Badi	n Ruci	nace E	Dark I I	I.C.			5		8	Ы		E	13		-	24 L	ound-time
		293	Highwa	nv 740		20			5	12	L2	÷		2	13			481	lours
		Badi	n. Nor	h Car	olina	28009			1.	/bu	1	75		15	2		-	No	rmal
		704-	562-61	38		20000			30	3	208	0	0	E	1		Oth	er: •	
		lon.wi	lson@al	coa.com	1				(EPA	D-D	1 (60)	ASTN	2	1.	rus 1			Due:	_!_!_
Sampler Signature(s)	h	Recon	ded By (Pr	ini) Isun					noride	(2540D	uminun	anide (/	- 23	onia	000				
0	S/	AMPLE DESCRIP	PTION						Ē	ISS	IAI	5	0	2	5				
Sample identification	Date	Time		Matrix*	-	No. of	8	G	8		ota B	otal otal	0	18	-		100		
		1 IIIIG	W	S	0	Containers	G	8			H	F	β	R	0		100	Laborato	ry Notes
OF019 - Grab	1-12-24	1831	X			7		X	X	X	X	X	14	8	7				
									S	Semi-a	nnua	1							
							1	1											
								1											
			1					1		1							-		
			-				+		<u> </u>										
							1			1			$\square$	+				N	
	<u>_</u>			1			Cont	tainer Type	P	P	P	Р							
							Pi	reservative	NO	NO	N	В							
Samples shipped on ice.			W =	Water S 0 = Oth	6 = Soil er			R	G=Glass NO=Nor pH12 Z	s P=Plas ne S=Su =Zinc ac	itic V=V Ilfuric a setate	OA vial	s H=H N=Nit	CI to p tric aci	H2 T=3 d pH2	Sodium B=NaOH	to		
Relinquished By (Signature)	Print Na		1-10	Date 24	Time	Reci	eived By (	(Signature)				Print	Name					Date	Time
Relinquished By (Signature)	Print Na	Ime	1 13	Date	Time	Reci	eived By I	Laborator	y (Signatur	ra)		Print	Name	,			7-	/ Date	Time
			+		1			~	$\mathcal{I}$			11	la	h	For	Ima	~ 1	19/24	1355
Please send results to:	C					Labo	pratory Re	marks: C	Outfall 019	complia	ince sar	nples.					1		
Please send results to: mmv@ftn-assoc.com; io	n.wilson@alcoa.com					Labo	pratory Re	emarks: C	Outfall 019	complia	ince sar	nples.							

M

R'0.30 C:0.30

Page 18 of 19

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4 5

## Login Sample Receipt Checklist

Client: FTN Associates, Ltd.

Login Number: 157788 List Number: 1

Creator: Santiago, Nathaniel

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ( =6C, not frozen).</td <td>True</td> <td></td>	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required ( =6C, not frozen).</td <td>N/A</td> <td></td>	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Job Number: 410-157788-1

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

2/1/2024



TSS

24012907-01

Client: Project:	Badin Business Park 293 Highway 740 Badin, NC 28009			Date: 06 Order ID: 24	-Feb-24 012907	
Project:	Stormwater			Collect Date:	1/27/20	24
Location:	OF019-Grab			Collect Time:	11:53:00 P	M
SAMPLE #	PARAMETER	RESULT	UNITS	METHOD	REPORTING LIMIT	ANALYSIS DATE
24012907-01	BOD	3.0	mg/L	SM5210B	2	1/29/2024

mg/L

SM2540D

2.8

6.8

# K & W Laboratories

1121 Hwy 24/27 W Midland, NC 28107

Tel: 704-888-1211 Fax: 704-888-1511

## **Chain of Custody Record**

Clien	Company: Badin Business Park						Rep	oort To:	jon.wils	on@alco	a.com;	mn	nv@	ftn	-as:	soc.	con	n			Rem	arks					N	
Addre	ess: 293 Highway 740									4																		
Ba	din, NC 28009						Cop	ру То:																				
							Bill	To: Al																				
Conta	act: Jon Wilson																											
Phon	e: 704-562-6138 Fax:						PO	# 270	6776301	RF																		
Projec	<sub>t Name:</sub> Badin Business Park	oc	ype		ers	ont	Collection		Matri WW-W	x Types: aste Water OT-	OW-Drinkin GW-Gro Other	g Wa und V	iter Vater			Type P- G	e of C Plast -Glas	iont: ic is										
Samp	ed By: Jon Wilson	ple L	ple T	×	ntain	of C	p at (		04 Hour	Composit		-	Dr	000	n/2	tivo				Ana	lyci	e Pr		octo	d		Т	
		Sam	Sam	Matri	of Co	Type	Tem	St	art	E	ind	17			T		5				iyəl	3 1.4					-	
ltem No.	Sample ID:	Inf Eff Up Down	f Grab Comp	DW WW GW OT	Number o	ΡG	°C	Date	Time	Date	Time	1	Unpreserv NA <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	NaOH	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>		BOD	TSS									Lab Log #
1	OF019 - Grab	E	G	ww	2	Р	14	1/27/24	2353			;	x					Х	x									24012907
2																												10
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																											· D	