BONNELL
ALUMINUM

December 11, 2023

Enforcement and Compliance Section
Division of Water Resources
Cookeville EAC
1221 South Willow Ave
Cookeville, TN38506

RE: General Permit # TNR053907
Annual Storm Water Report

Enclosed is the 2023 Annual Storm Water Analytical Report for the Bon L Manufacturing Company, Inc. (Bon L). This report contains:

Outfall	Sectors	Flow	No Pages.
Storm Water Outfall SW-4	F , L	Yes	1
Storm Water Outfall SW-5	F , AA	Yes	1
Storm Water Outfall SW-6	AA	Yes	1
Storm Water Outfall SW-7	AA	Yes	1
Storm Water Outfall SW-8	P	Yes	1
PACE Analytical Report	All		18

Benchmark exceedances have been addressed with the Cookeville Field Office.

The concentrations of specific pollutants were obtained by employing methods of analysis listed in 40CFR136. They are subject to the accuracy limitations associated with those methods in the subject sample matrices at the concentrations shown.

Please contact me at 615-683-2267, if you have any questions.

Sincerely,

Barry Cohoon
Environmental Manager

Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: Bonnell Aluminum Inc.	TMSP Number: 053907
Contact Person: Barry Cohoon	Phone Number: 6156838291
This report is submitted for the following calendar year (e.g. 2015): 2023	Outfall Number: SW-04
List all TMSP sectors which apply to discharge from this outfall: F & L	Sample Date: 2-25-2023
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75	1.36
Ammonia	4.0	
Arsenic, Total	0.16854	
BOD, 5-Day	30	
Cadmium, Total	0.0159	
COD	120	27.3
Copper, Total	0.018	0.0158
Cyanide, Total	0.064	
Fluoride	1.8	
Iron, Total	5.0	0.577
Lead, Total	0.15	

Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Magnesium, Total	0.0636	
Mercury, Total	0.0024	
Nickel, Total	0.875	
Nitrate + Nitrite Nitrogen	0.68	0.405
Oil and Grease	15	
pH	5.0-9.0	
Phosphorus, Total (as P)	2.0	
Selenium, Total	0.2385	
Silver, Total	0.032	
Total Suspended Solids	150	62.7
Zinc, Total	0.395	0.266

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Barry Cohoon	Environmental Manager	B. Cohoon	12/11/23
Printed Name	Official Title	Signature	Date

Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
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Facility Name: Bonnell Aluminum Inc.	TMSP Number: 053907
Contact Person: Barry Cohoon	Phone Number: 6156838291
This report is submitted for the following calendar year (e.g. 2015): 2023	Outfall Number: SW-05
List all TMSP sectors which apply to discharge from this outfall: AA & F	Sample Date: 2-25-2023
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

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Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75	0.648
Ammonia	4.0	
Arsenic, Total	0.16854	
BOD, 5-Day	30	
Cadmium, Total	0.0159	
COD	120	34.4
Copper, Total	0.018	0.0055
Cyanide, Total	0.064	
Fluoride	1.8	
Iron, Total	5.0	0.195
Lead, Total	0.15	

Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Magnesium, Total	0.0636	
Mercury, Total	0.0024	
Nickel, Total	0.875	
Nitrate + Nitrite Nitrogen	0.68	1.25
Oil and Grease	15	
pH	5.0-9.0	
Phosphorus, Total (as P)	2.0	
Selenium, Total	0.2385	
Silver, Total	0.032	
Total Suspended Solids	150	
Zinc, Total	0.395	0.0542

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Barry Cohoon	Environmental Manager	Barry Cohoon	12/11/23
Printed Name	Official Title	Signature	Date

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Facility Name: Bonnell Aluminum Inc.	TMSP Number: 053907
Contact Person: Barry Cohoon	Phone Number: 6156838291
This report is submitted for the following calendar year (e.g. 2015): 2023	Outfall Number: SW-06
List all TMSP sectors which apply to discharge from this outfall: AA	Sample Date: 2-25-2023
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

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Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75	0.542
Ammonia	4.0	
Arsenic, Total	0.16854	
BOD, 5-Day	30	
Cadmium, Total	0.0159	
COD	120	
Copper, Total	0.018	
Cyanide, Total	0.064	
Fluoride	1.8	
Iron, Total	5.0	0.497
Lead, Total	0.15	

Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Magnesium, Total	0.0636	
Mercury, Total	0.0024	
Nickel, Total	0.875	
Nitrate + Nitrite Nitrogen	0.68	0.374
Oil and Grease	15	
pH	5.0-9.0	
Phosphorus, Total (as P)	2.0	
Selenium, Total	0.2385	
Silver, Total	0.032	
Total Suspended Solids	150	
Zinc, Total	0.395	0.236

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Facility Name: Bonnell Aluminum Inc.	TMSP Number: 053907
Contact Person: Barry Cohoon	Phone Number: 6156838291
This report is submitted for the following calendar year (e.g. 2015): 2023	Outfall Number: SW-07
List all TMSP sectors which apply to discharge from this outfall: AA	Sample Date: 2-25-2023
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

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Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75	0.993
Ammonia	4.0	
Arsenic, Total	0.16854	
BOD, 5-Day	30	
Cadmium, Total	0.0159	
COD	120	
Copper, Total	0.018	
Cyanide, Total	0.064	
Fluoride	1.8	
Iron, Total	5.0	0.373
Lead, Total	0.15	

Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Magnesium, Total	0.0636	
Mercury, Total	0.0024	
Nickel, Total	0.875	
Nitrate + Nitrite Nitrogen	0.68	0.195
Oil and Grease	15	
pH	5.0-9.0	
Phosphorus, Total (as P)	2.0	
Selenium, Total	0.2385	
Silver, Total	0.032	
Total Suspended Solids	150	
Zinc, Total	0.395	0.197

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Facility Name: Bonnell Aluminum Inc.	TMSP Number: 053907
Contact Person: Barry Cohoon	Phone Number: 6156838291
This report is submitted for the following calendar year (e.g. 2015): 2023	Outfall Number: SW-08
List all TMSP sectors which apply to discharge from this outfall: P	Sample Date: 2-25-2023
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

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Aluminum, Total	0.75	
Ammonia	4.0	
Arsenic, Total	0.16854	
BOD, 5-Day	30	
Cadmium, Total	0.0159	
COD	120	
Copper, Total	0.018	
Cyanide, Total	0.064	
Fluoride	1.8	
Iron, Total	5.0	
Lead, Total	0.15	

Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Magnesium, Total	0.0636	
Mercury, Total	0.0024	
Nickel, Total	0.875	
Nitrate + Nitrite Nitrogen	0.68	0.246
Oil and Grease	15	
pH	5.0-9.0	
Phosphorus, Total (as P)	2.0	
Selenium, Total	0.2385	
Silver, Total	0.032	
Total Suspended Solids	150	
Zinc, Total	0.395	0.126

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Barry Cohoon	Environmental Manager		12/11/23
Printed Name	Official Title	Signature	Date

ANALYTICAL REPORT

March 02, 2023

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Bonnell Aluminum

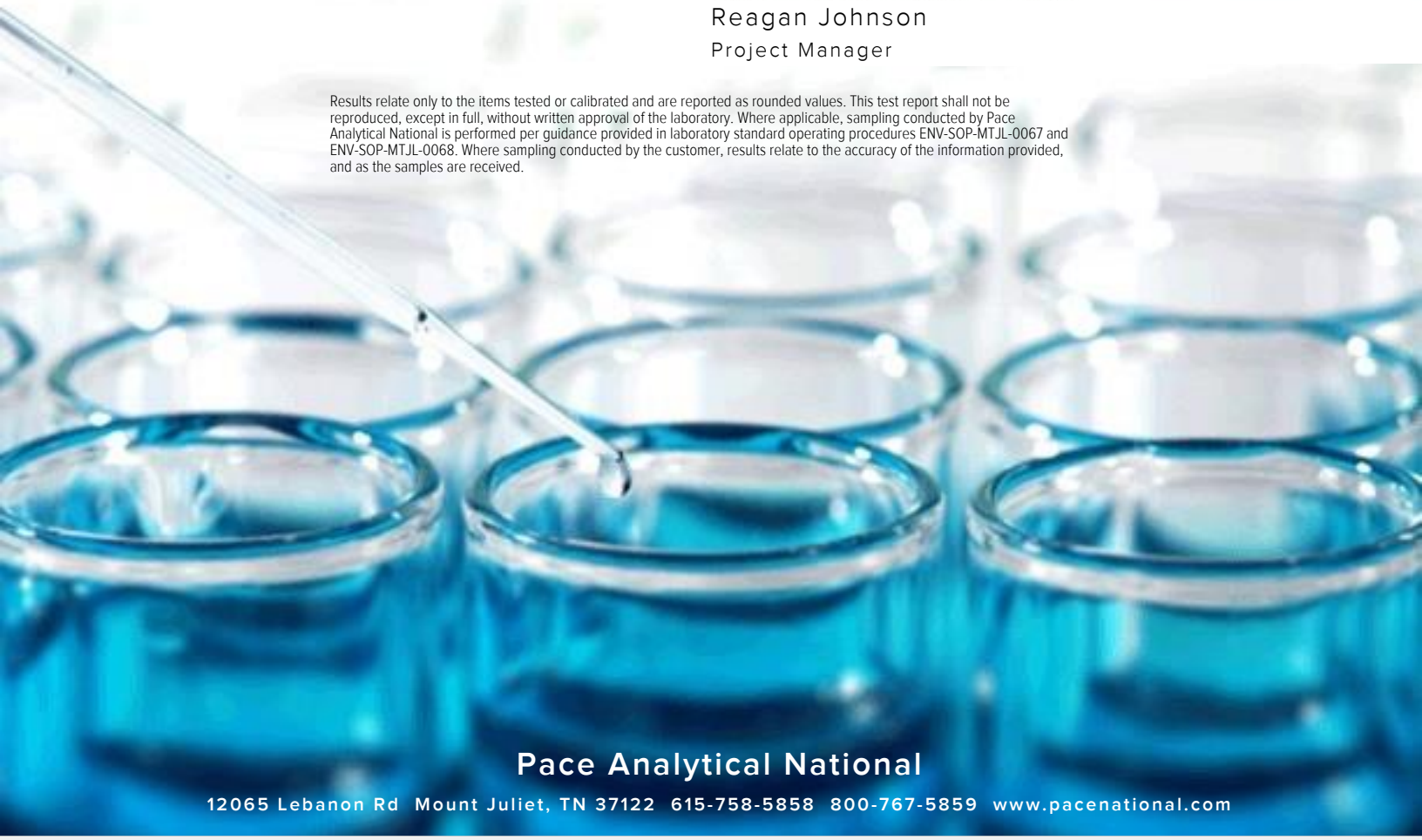
Sample Delivery Group:	L1589585
Samples Received:	02/25/2023
Project Number:	STORM WATER
Description:	Annual SW

Report To:

Mr. Barry Cohoon
Highway 53
Carthage, TN 37030

Entire Report Reviewed By:

Reagan Johnson
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SW-04 L1589585-01 WW

Collected by: Don Birdwell | Collected date/time: 02/25/23 09:10 | Received date/time: 02/25/23 11:38

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 D-2015	WG2013322	1	02/28/23 05:27	02/28/23 07:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2013636	1	03/01/23 23:26	03/01/23 23:26	JCS	Mt. Juliet, TN
Wet Chemistry by Method 410.4	WG2013123	1	02/26/23 10:00	02/26/23 13:00	CAH	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG2013356	1	02/27/23 22:46	03/01/23 00:21	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG2014048	1	02/28/23 14:05	02/28/23 20:34	JDG	Mt. Juliet, TN

SW-05 L1589585-02 WW

Collected by: Don Birdwell | Collected date/time: 02/25/23 09:20 | Received date/time: 02/25/23 11:38

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG2013636	1	03/01/23 23:31	03/01/23 23:31	JCS	Mt. Juliet, TN
Wet Chemistry by Method 410.4	WG2013123	1	02/26/23 10:00	02/26/23 13:00	CAH	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG2013356	1	02/27/23 22:46	03/01/23 00:24	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG2014048	1	02/28/23 14:05	02/28/23 20:38	JDG	Mt. Juliet, TN

SW-06 L1589585-03 WW

Collected by: Don Birdwell | Collected date/time: 02/25/23 09:15 | Received date/time: 02/25/23 11:38

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG2013636	1	03/01/23 23:36	03/01/23 23:36	JCS	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG2013356	1	02/27/23 22:46	03/01/23 00:27	ABL	Mt. Juliet, TN

SW-07 L1589585-04 WW

Collected by: Don Birdwell | Collected date/time: 02/25/23 08:55 | Received date/time: 02/25/23 11:38

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG2014532	1	03/02/23 18:32	03/02/23 18:32	JCS	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG2013356	1	02/27/23 22:46	03/01/23 00:29	ABL	Mt. Juliet, TN

SW-08 L1589585-05 WW

Collected by: Don Birdwell | Collected date/time: 02/25/23 09:00 | Received date/time: 02/25/23 11:38

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 353.2	WG2014532	1	03/02/23 18:34	03/02/23 18:34	JCS	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG2013356	1	02/27/23 22:46	03/01/23 00:32	ABL	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Reagan Johnson
Project Manager

Gravimetric Analysis by Method 2540 D-2015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Suspended Solids	62.7		8.33	1	02/28/2023 07:30	WG2013322

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Nitrate-Nitrite	0.405		0.100	1	03/01/2023 23:26	WG2013636

Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	27.3		20.0	1	02/26/2023 13:00	WG2013123

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Aluminum	1.36		0.200	1	03/01/2023 00:21	WG2013356
Iron	0.577		0.100	1	03/01/2023 00:21	WG2013356
Zinc	0.266		0.0500	1	03/01/2023 00:21	WG2013356

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Copper	0.0158		0.00100	1	02/28/2023 20:34	WG2014048

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.25		0.100	1	03/01/2023 23:31	WG2013636

Wet Chemistry by Method 410.4

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
COD	34.4		20.0	1	02/26/2023 13:00	WG2013123

Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum	0.648		0.200	1	03/01/2023 00:24	WG2013356
Iron	0.195		0.100	1	03/01/2023 00:24	WG2013356
Zinc	0.0542	B	0.0500	1	03/01/2023 00:24	WG2013356

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Copper	0.00555		0.00100	1	02/28/2023 20:38	WG2014048

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.374		0.100	1	03/01/2023 23:36	WG2013636

Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum	0.542		0.200	1	03/01/2023 00:27	WG2013356
Iron	0.497		0.100	1	03/01/2023 00:27	WG2013356
Zinc	0.236		0.0500	1	03/01/2023 00:27	WG2013356

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.195		0.100	1	03/02/2023 18:32	WG2014532

Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum	0.993		0.200	1	03/01/2023 00:29	WG2013356
Iron	0.373		0.100	1	03/01/2023 00:29	WG2013356
Zinc	0.197		0.0500	1	03/01/2023 00:29	WG2013356

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Nitrate-Nitrite	0.246		0.100	1	03/02/2023 18:34	WG2014532

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Zinc	0.126		0.0500	1	03/01/2023 00:32	WG2013356

Method Blank (MB)

(MB) R3896067-1 02/28/23 07:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Suspended Solids	U		2.50	2.50

L1587703-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1587703-01 02/28/23 07:30 • (DUP) R3896067-3 02/28/23 07:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Suspended Solids	15.3	17.7	1	14.2	P1	5

L1588580-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1588580-02 02/28/23 07:30 • (DUP) R3896067-4 02/28/23 07:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Suspended Solids	490	397	1	21.1	J3	5

Laboratory Control Sample (LCS)

(LCS) R3896067-2 02/28/23 07:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Suspended Solids	773	712	92.1	85.7-114	

Method Blank (MB)

(MB) R3896355-1 03/01/23 23:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1589585-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1589585-02 03/01/23 23:31 • (DUP) R3896355-3 03/01/23 23:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.25	1.24	1	0.803		20

L1589842-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1589842-04 03/01/23 23:49 • (DUP) R3896355-6 03/01/23 23:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	ND	ND	1	1.64		20

Laboratory Control Sample (LCS)

(LCS) R3896355-2 03/01/23 23:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.46	98.4	90.0-110	

L1589585-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1589585-02 03/01/23 23:31 • (MS) R3896355-4 03/01/23 23:34 • (MSD) R3896355-5 03/01/23 23:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	1.25	3.72	3.67	98.8	96.8	1	90.0-110			1.35	20

L1589842-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1589842-04 03/01/23 23:49 • (MS) R3896355-7 03/01/23 23:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	ND	2.44	94.1	1	90.0-110	

Method Blank (MB)

(MB) R3896763-1 03/02/23 18:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1589435-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1589435-02 03/02/23 18:21 • (DUP) R3896763-4 03/02/23 18:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.90	1.94	1	2.08		20

L1590448-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1590448-02 03/02/23 18:48 • (DUP) R3896763-7 03/02/23 18:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	3.59	3.50	1	2.54		20

Laboratory Control Sample (LCS)

(LCS) R3896763-2 03/02/23 18:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.42	96.8	90.0-110	

L1589435-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1589435-01 03/02/23 18:18 • (MS) R3896763-3 03/02/23 18:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	0.367	2.72	94.1	1	90.0-110	

L1590448-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1590448-01 03/02/23 18:40 • (MS) R3896763-5 03/02/23 18:41 • (MSD) R3896763-6 03/02/23 18:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	0.842	3.16	3.17	92.7	93.1	1	90.0-110			0.316	20

Method Blank (MB)

(MB) R3894945-1 02/26/23 12:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
COD	U		11.7	20.0

L1589034-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1589034-01 02/26/23 12:52 • (DUP) R3894945-3 02/26/23 12:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	177	188	1	6.02		20

L1589597-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1589597-01 02/26/23 13:00 • (DUP) R3894945-6 02/26/23 13:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	71.3	71.8	1	0.622		20

Laboratory Control Sample (LCS)

(LCS) R3894945-2 02/26/23 12:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
COD	500	485	97.0	90.0-110	

L1589435-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1589435-03 02/26/23 12:56 • (MS) R3894945-4 02/26/23 12:56 • (MSD) R3894945-5 02/26/23 12:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
COD	500	ND	480	472	96.1	94.4	1	80.0-120			1.75	20

Method Blank (MB)

(MB) R3896171-1 03/01/23 10:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum	U		0.0592	0.200
Iron	U		0.0205	0.100
Zinc	0.0109	J	0.00578	0.0500

Laboratory Control Sample (LCS)

(LCS) R3896171-2 03/01/23 10:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum	10.0	11.3	113	85.0-115	
Iron	10.0	11.3	113	85.0-115	
Zinc	1.00	1.10	110	85.0-115	

L1587554-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1587554-03 03/01/23 10:25 • (MS) R3896171-3 03/01/23 10:27 • (MSD) R3896171-4 03/01/23 10:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	10.0	0.540	11.6	12.2	111	116	1	70.0-130			4.92	20
Iron	10.0	0.175	11.1	11.7	109	116	1	70.0-130			5.46	20
Zinc	1.00	0.0693	1.13	1.18	106	111	1	70.0-130			4.43	20

L1589440-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1589440-01 03/01/23 10:33 • (MS) R3896171-6 03/01/23 10:38 • (MSD) R3896171-7 03/01/23 10:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	10.0	ND	12.2	11.8	122	118	1	70.0-130			3.36	20
Iron	10.0	ND	12.0	11.7	120	117	1	70.0-130			3.03	20
Zinc	1.00	ND	1.16	1.11	116	111	1	70.0-130			4.19	20

Method Blank (MB)

(MB) R3896297-1 02/28/23 19:39

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Copper	U		0.000670	0.00100

Laboratory Control Sample (LCS)

(LCS) R3896297-2 02/28/23 19:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Copper	0.500	0.440	88.0	85.0-115	

L1589404-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1589404-02 02/28/23 19:46 • (MS) R3896297-4 02/28/23 19:52 • (MSD) R3896297-5 02/28/23 19:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Copper	0.500	0.0124	0.498	0.493	97.2	96.1	1	70.0-130			1.09	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN OF CUSTODY RECORD

ESC TEMPLATE NO T85665

BON L MANUFACTURING COMPANY
Hwy 53, Bonnell Rd. Carthage, TN 37030

Billing Address:
P.O. Box 2555
Newnan, GA 30264

BONNELL ALUMINUM

PAGE: 1 OF 1

Project: Bon L Cart Storm Wate	**Project No.**	ANNUAL SW	**Bon L Project Contact**	Barry Cohoon	Phone: 615-683-2267 Cell: 615-489-7389 E-Mail: bbcohoon@bonlalum.com

Laboratory Name and Address:	**E-Mail Reports To Bon L Project Contact and:**		
PACE NATIONAL	anette Courtney (JECOURTNEY@BONLALUM.cor		
12065 Lebanon Rd.	Beth Milligan (emlligan@ngeconsulting.com)		
Mt. Juliet, TN 37122			
Laboratory Project Manager:			
Reagan Johnson **Phone** 615-773-6352			
E-Mail Reagan.Johnson@PaceLabs.cor			
Requested Turn Around Time:			
5 Business Days			
In Case Of Problems With Samples Contact:	**Send Invoice To:**	apinvoices@bonlalum.com	
Barry Cohoon (O: 615-683-2267 C: 615-489-7389	**For Approval By:**	Barry Cohoon	
Janette Courtney (O: 770-254-7665 C:	**PO # Or Billing Code:**	953293-OP	

DATE	TIME	MATRIX CODE*	COMP #GRABS	COMP #HOURS	SINGLE GRAB	LOCATION	# OF CONTAINERS	Total Suspended Solids	Total Aluminum	Total Zinc	Total Copper	Total Iron	COD	Nirtrates/Nitrites as N	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
2-25-23	9:10 Am	ST			X	SW-04	3	X	X	X	X	X	X	X		L1589585 -01
2-25-23	9:20 Am	ST			X	SW-05	2		X	X	X	X	X	X		-02
2-25-23	9:15 Am	ST			X	SW-06	2		X	X		X		X		-03
2-25-23	8:55 Am	ST			X	SW-07	2		X	X		X		X		-04
2-25-23	9:00 Am	ST			X	SW-08	2			X				X		-05
								1	1	1	1	1	1	1		
									4	4	4	4	3	3		

Preservation Used: 1= Ice 2=HCl 3=H2SO4 4=HNO3 5=NaOH 6=Other:

FOR LAB USE ONLY
LAB #:
QUOTE #:

*MATRIX CODES:

A -	AIR	PW -	PROCESS WATER
DW -	DRINKING WATER	S -	SOIL
GW -	GROUNDWATER	SD -	SOLID
L -	NON AQUEOUS LIQUID	SL -	SLUDGE
LW	L-W MIX	ST -	STORM WATER
O -	Oil	SW -	SURFACE WATER
OT -	OTHER	W -	WATER
P -	PRODUCT	WW -	WASTEWATER

B195

SAMPLED BY (PRINTED, COMPANY): Don Birdwell	SIGNATURE: Don Birdwell	SAMPLED BY (PRINTED, COMPANY):	SIGNATURE:	SAMPLED BY (PRINTED, COMPANY):	SIGNATURE:
COMPANY NAME: Bon-L		COMPANY NAME:		COMPANY NAME:	

RELINQUISHED BY PRINTED NAME: Don Birdwell	SIGNATURE: Don Birdwell	DATE/TIME: 2-25-23 11:38 Am	RECEIVED BY PRINTED NAME: Eli	SIGNATURE: Eli	DATE/TIME: 2-25-23 1135 ~~845~~	COC/CUSTODY SEAL:
COMPANY NAME: Bon-L			COMPANY NAME: Pace			
RELINQUISHED BY PRINTED NAME:	SIGNATURE:	DATE/TIME:	RECEIVED BY PRINTED NAME:	SIGNATURE:		
COMPANY NAME:			COMPANY NAME:			
RELINQUISHED BY PRINTED NAME:	SIGNATURE:	DATE/TIME:	RECEIVED BY PRINTED NAME:	SIGNATURE:		
COMPANY NAME:			COMPANY NAME:			

Sample Receipt Checklist

COC Seal Present/Intact:	✓Y N	If Applicable	
COC Signed/Accurate:	✓Y N	VOA Zero Headspace:	✓Y N
Bottles arrive intact:	✓Y N	Pres.Correct/Check:	✓Y N
Correct bottles used:	✓Y N	RRA 7 0.9	
Sufficient volume sent:	✓Y N		
RAD Screen <0.5 mR/hr:	✓Y N	6044 5472 6302	

RECEIVED BY LAB PRINTED NAME:	SIGNATURE:	DATE/TIME:	SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER:		TEMPERATURE:
CUSTODY INTACT YES NO	Savannah Log No.:	Laboratory Remarks:	AIR BILL #:	COOLER #:	SAMPLE CONDITION:
INTO LIMS:		Reviewed:			