STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
Water-Based Systems
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243-1102

PERMIT CONTACT INFORMATION

Please complete all sections. If one person serves multiple functions, please repeat this information in each section.

PERMIT NUMBER: TN0002593 **DATE:** 09/14/2021

PERMITTED FACILITY: Bonnell Aluminum, Inc. **COUNTY:** Smith

OFFICIAL PERMIT CONTACT:

(The permit signatory authority, e.g. responsible corporate officer, principle executive officer or ranking elected official)

Official Contact: Brett Burris	Title or Position: Plant Manager		
Mailing Address: P.O. Box 279	City: Carthage	State: TN	Zip: 37030
Phone number(s): (615) 683-2203	E-mail: brett.burris@bonnellaluminum.com		

PERMIT BILLING ADDRESS (where invoices should be sent):

Billing Contact: Barry Cohoon	Title or Position: Environmental Manager		
Mailing Address: P.O. Box 279	City: Carthage	State: TN	Zip: 37030
Phone number(s): (615) 683-8291	E-mail: barry.cohoon@bonnellaluminum.com		

FACILITY LOCATION (actual location of permit site and local contact for site activity):

Facility Location Contact: Barry Cohoon	Title or Position: Environmental Manager		
Facility Location (physical street address): 54 Bonnell Ln	City: Brush Creek	State: TN	Zip: 38547
Phone number(s): (615) 683-8291	E-mail: barry.cohoon@bonnellaluminum.com		

Alternate Contact (if desired):	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone number(s):	E-mail:		

FACILITY REPORTING (Discharge Monitoring Report (DMR) or other reporting):

Cognizant Official authorized for permit reporting: Brett Burris	Title or Position: Plant Manager		
Mailing Address: P.O. Box 279	City: Carthage	State: TN	Zip: 37030
Phone number(s): (615) 683-2203	E-mail: brett.burris@bonnellaluminum.com		
Fax number for reporting:	Does the facility have interest in starting electronic DMR reporting? Yes No Yes		

ANALYTICAL REPORT

July 07, 2021

Bonnell Aluminum

Sample Delivery Group:	L1369870
Samples Received:	06/23/2021
Project Number:	NPDES APPL
Description:	NPDES application
Site:	BONNELL
Report To:	Mr. Barry Cohoon Highway 53 Carthage, TN 37030

Entire Report Reviewed By:

Justin Carr
Project Manager

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

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COMPOSITE 001 L1369870-01 WW

Collected by: Barry Cohoon | Collected date/time: 06/23/21 12:30 | Received date/time: 06/23/21 13:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1695227	1	07/01/21 17:39	07/01/21 17:39	KEG	Mt. Juliet, TN
Wet Chemistry by Method 2120 B-2011	WG1693722	1	06/24/21 08:56	06/24/21 08:56	ARM	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1695723	100	06/27/21 01:34	06/27/21 01:34	ST	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1695723	1000	06/27/21 20:39	06/27/21 20:39	ST	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1695227	1	06/26/21 12:46	06/26/21 12:46	SL	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1697516	1	06/29/21 23:30	07/01/21 17:39	KEG	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1697823	1	07/03/21 23:46	07/03/21 23:46	SDL	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG1697709	1	06/29/21 23:30	06/30/21 10:45	KEG	Mt. Juliet, TN
Wet Chemistry by Method 410.4	WG1697582	1	06/30/21 09:25	06/30/21 16:13	GJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG1697503	1	06/30/21 11:42	06/30/21 11:42	BJD	Mt. Juliet, TN
Wet Chemistry by Method 5210 B-2011	WG1694321	1	06/24/21 12:03	06/29/21 09:26	KFO	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2011	WG1695690	1	06/26/21 13:59	06/26/21 13:59	MJA	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG1693725	10	06/24/21 12:20	06/24/21 15:19	ARM	Mt. Juliet, TN
Mercury by Method 245.1	WG1696627	1	06/29/21 16:58	06/30/21 13:14	ABL	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG1695645	1	06/27/21 08:58	06/27/21 22:24	EL	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG1695645	1	06/27/21 08:58	06/28/21 10:45	EL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1696538	1	06/28/21 23:24	06/30/21 02:01	JNJ	Mt. Juliet, TN

GRAB 001 L1369870-02 WW

Collected by: Barry Cohoon | Collected date/time: 06/23/21 12:30 | Received date/time: 06/23/21 13:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method 9223B-2004	WG1693924	1	06/23/21 15:15	06/23/21 15:15	MEL	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1697733	1	06/30/21 15:35	06/30/21 16:28	VRP	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2011	WG1695921	1	06/27/21 05:20	06/27/21 10:19	VRP	Mt. Juliet, TN
Wet Chemistry by Method 1664A	WG1694314	1	06/24/21 10:00	06/24/21 17:35	ERK	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1696711	1	06/30/21 11:00	07/01/21 00:12	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1697281	1	06/29/21 21:31	06/30/21 04:34	SDL	Mt. Juliet, TN
Wet Chemistry by Method 4500H+ B-2011	WG1697482	1	06/30/21 11:00	06/30/21 11:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 4500SO3 B-2011	WG1689644	1	06/28/21 11:37	06/28/21 11:37	RMR	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG1693725	10	06/24/21 12:20	06/24/21 15:20	ARM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1694160	1	06/24/21 22:57	06/24/21 22:57	ADM	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.

Justin Carr
Project Manager

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Organic Nitrogen	1.40		0.250	1	07/01/2021 17:39	WG1695227

Wet Chemistry by Method 2120 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	pcu		pcu		date / time	
Color, Apparent	5.00		1.00	1	06/24/2021 08:56	WG1693722

Sample Narrative:
L1369870-01 WG1693722: 8.04

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Bromide	ND		100	100	06/27/2021 01:34	WG1695723
Fluoride	ND		15.0	100	06/27/2021 01:34	WG1695723
Sulfate	14100		5000	1000	06/27/2021 20:39	WG1695723

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Ammonia Nitrogen	1.97		0.250	1	06/26/2021 12:46	WG1695227

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Kjeldahl Nitrogen, TKN	3.37		0.250	1	07/01/2021 17:39	WG1697516

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Nitrate-Nitrite	ND		0.100	1	07/03/2021 23:46	WG1697823

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Phosphorus,Total	0.169	B	0.100	1	06/30/2021 10:45	WG1697709

Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	93.8		20.0	1	06/30/2021 16:13	WG1697582

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Sulfide	ND	J6	0.0500	1	06/30/2021 11:42	WG1697503

Wet Chemistry by Method 5210 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
BOD	27.4	B1 J-	10.0	1	06/29/2021 09:26	WG1694321

Wet Chemistry by Method 5310 B-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	28.1		1.00	1	06/26/2021 13:59	WG1695690

Wet Chemistry by Method 5540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
MBAS	3.70		1.00	10	06/24/2021 15:19	WG1693725

Mercury by Method 245.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.000200	1	06/30/2021 13:14	WG1696627

Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum	1.61		0.200	1	06/27/2021 22:24	WG1695645
Antimony	ND		0.0100	1	06/27/2021 22:24	WG1695645
Arsenic	ND		0.0100	1	06/27/2021 22:24	WG1695645
Barium	ND		0.00500	1	06/27/2021 22:24	WG1695645
Beryllium	ND		0.00200	1	06/27/2021 22:24	WG1695645
Boron	ND		0.200	1	06/28/2021 10:45	WG1695645
Cadmium	ND		0.00200	1	06/27/2021 22:24	WG1695645
Chromium	ND		0.0100	1	06/27/2021 22:24	WG1695645
Cobalt	ND		0.0100	1	06/27/2021 22:24	WG1695645
Copper	ND		0.0100	1	06/27/2021 22:24	WG1695645
Iron	ND		0.100	1	06/27/2021 22:24	WG1695645
Lead	ND		0.00500	1	06/27/2021 22:24	WG1695645
Magnesium	5.51		1.00	1	06/27/2021 22:24	WG1695645
Manganese	0.0138		0.0100	1	06/27/2021 22:24	WG1695645
Molybdenum	0.0347		0.00500	1	06/27/2021 22:24	WG1695645
Nickel	0.0144		0.0100	1	06/27/2021 22:24	WG1695645
Selenium	ND		0.0100	1	06/27/2021 22:24	WG1695645
Silver	ND		0.00500	1	06/27/2021 22:24	WG1695645
Thallium	ND		0.0100	1	06/27/2021 22:24	WG1695645
Tin	ND		0.0500	1	06/27/2021 22:24	WG1695645
Titanium	ND		0.0500	1	06/27/2021 22:24	WG1695645
Zinc	ND		0.0500	1	06/27/2021 22:24	WG1695645

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Acenaphthylene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Anthracene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Benzidine	ND	J3	0.0100	1	06/30/2021 02:01	WG1696538
Benzo(a)anthracene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Benzo(b)fluoranthene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Benzo(k)fluoranthene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Benzo(g,h,i)perylene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Benzo(a)pyrene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Bis(2-chlorethoxy)methane	ND		0.0100	1	06/30/2021 02:01	WG1696538
Bis(2-chloroethyl)ether	ND		0.0100	1	06/30/2021 02:01	WG1696538
2,2-Oxybis(1-Chloropropane)	ND		0.0100	1	06/30/2021 02:01	WG1696538
4-Bromophenyl-phenylether	ND		0.0100	1	06/30/2021 02:01	WG1696538

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	ND		0.00100	1	06/30/2021 02:01	WG1696538
4-Chlorophenyl-phenylether	ND		0.0100	1	06/30/2021 02:01	WG1696538
Chrysene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Dibenz(a,h)anthracene	ND		0.00100	1	06/30/2021 02:01	WG1696538
3,3-Dichlorobenzidine	ND		0.0100	1	06/30/2021 02:01	WG1696538
2,4-Dinitrotoluene	ND		0.0100	1	06/30/2021 02:01	WG1696538
2,6-Dinitrotoluene	ND		0.0100	1	06/30/2021 02:01	WG1696538
1,2-Diphenylhydrazine	ND		0.0100	1	06/30/2021 02:01	WG1696538
Fluoranthene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Fluorene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Hexachlorobenzene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Hexachloro-1,3-butadiene	ND		0.0100	1	06/30/2021 02:01	WG1696538
Hexachlorocyclopentadiene	ND		0.0100	1	06/30/2021 02:01	WG1696538
Hexachloroethane	ND		0.0100	1	06/30/2021 02:01	WG1696538
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Isophorone	ND		0.0100	1	06/30/2021 02:01	WG1696538
Naphthalene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Nitrobenzene	ND		0.0100	1	06/30/2021 02:01	WG1696538
n-Nitrosodimethylamine	ND		0.0100	1	06/30/2021 02:01	WG1696538
n-Nitrosodiphenylamine	ND		0.0100	1	06/30/2021 02:01	WG1696538
n-Nitrosodi-n-propylamine	ND		0.0100	1	06/30/2021 02:01	WG1696538
Phenanthrene	ND		0.00100	1	06/30/2021 02:01	WG1696538
Benzylbutyl phthalate	ND		0.00300	1	06/30/2021 02:01	WG1696538
Bis(2-ethylhexyl)phthalate	0.0174		0.00300	1	06/30/2021 02:01	WG1696538
Di-n-butyl phthalate	ND		0.00300	1	06/30/2021 02:01	WG1696538
Diethyl phthalate	ND		0.00300	1	06/30/2021 02:01	WG1696538
Dimethyl phthalate	ND		0.00300	1	06/30/2021 02:01	WG1696538
Di-n-octyl phthalate	ND		0.00300	1	06/30/2021 02:01	WG1696538
Pyrene	ND		0.00100	1	06/30/2021 02:01	WG1696538
1,2,4-Trichlorobenzene	ND		0.0100	1	06/30/2021 02:01	WG1696538
4-Chloro-3-methylphenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
2-Chlorophenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
2,4-Dichlorophenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
2,4-Dimethylphenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
4,6-Dinitro-2-methylphenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
2,4-Dinitrophenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
2-Nitrophenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
4-Nitrophenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
Pentachlorophenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
Phenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
2,4,6-Trichlorophenol	ND		0.0100	1	06/30/2021 02:01	WG1696538
(S) 2-Fluorophenol	*25.4*		*10.0-120*		*06/30/2021 02:01*	WG1696538
(S) Phenol-d5	*19.2*		*8.00-424*		*06/30/2021 02:01*	WG1696538
(S) Nitrobenzene-d5	*38.0*		*15.0-314*		*06/30/2021 02:01*	WG1696538
(S) 2-Fluorobiphenyl	*49.6*		*22.0-127*		*06/30/2021 02:01*	WG1696538
(S) 2,4,6-Tribromophenol	*68.9*		*10.0-153*		*06/30/2021 02:01*	WG1696538
(S) p-Terphenyl-d14	*61.3*		*29.0-141*		*06/30/2021 02:01*	WG1696538

Microbiology by Method 9223B-2004

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	MPN/100ml			date / time	
E.Coli	<1		1	06/23/2021 15:15	WG1693924
Coliform,Total	>2419.6		1	06/23/2021 15:15	WG1693924

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	20300		400	1	06/30/2021 16:28	WG1697733

Gravimetric Analysis by Method 2540 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Suspended Solids	26.2	P1	5.33	1	06/27/2021 10:19	WG1695921

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Oil & Grease (Hexane Extr)	ND		5.56	1	06/24/2021 17:35	WG1694314

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	07/01/2021 00:12	WG1696711

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.0100	1	06/30/2021 04:34	WG1697281

Wet Chemistry by Method 4500H+ B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.10	T8	1	06/30/2021 11:00	WG1697482

Sample Narrative:

L1369870-02 WG1697482: 8.1 at 22.5C

Wet Chemistry by Method 4500SO3 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Sulfite	ND	T8	3.00	1	06/28/2021 11:37	WG1689644

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
MBAS	4.01		1.00	10	06/24/2021 15:20	WG1693725

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acrolein	ND		0.0500	1	06/24/2021 22:57	WG1694160
Acrylonitrile	ND		0.0100	1	06/24/2021 22:57	WG1694160
Benzene	ND		0.00100	1	06/24/2021 22:57	WG1694160
Bromodichloromethane	ND		0.00100	1	06/24/2021 22:57	WG1694160
Bromoform	ND		0.00100	1	06/24/2021 22:57	WG1694160
Bromomethane	ND		0.00500	1	06/24/2021 22:57	WG1694160
Carbon tetrachloride	ND		0.00100	1	06/24/2021 22:57	WG1694160
Chlorobenzene	ND		0.00100	1	06/24/2021 22:57	WG1694160
Chlorodibromomethane	ND		0.00100	1	06/24/2021 22:57	WG1694160
Chloroethane	ND		0.00500	1	06/24/2021 22:57	WG1694160
2-Chloroethyl vinyl ether	ND		0.0500	1	06/24/2021 22:57	WG1694160
Chloroform	ND		0.00500	1	06/24/2021 22:57	WG1694160
Chloromethane	ND		0.00250	1	06/24/2021 22:57	WG1694160
1,2-Dichlorobenzene	ND		0.00100	1	06/24/2021 22:57	WG1694160
1,3-Dichlorobenzene	ND		0.00100	1	06/24/2021 22:57	WG1694160
1,4-Dichlorobenzene	ND		0.00100	1	06/24/2021 22:57	WG1694160
Dichlorodifluoromethane	ND		0.00500	1	06/24/2021 22:57	WG1694160
1,1-Dichloroethane	ND		0.00100	1	06/24/2021 22:57	WG1694160
1,2-Dichloroethane	ND		0.00100	1	06/24/2021 22:57	WG1694160
1,1-Dichloroethene	ND		0.00100	1	06/24/2021 22:57	WG1694160
trans-1,2-Dichloroethene	ND		0.00100	1	06/24/2021 22:57	WG1694160
1,2-Dichloropropane	ND		0.00100	1	06/24/2021 22:57	WG1694160
cis-1,3-Dichloropropene	ND		0.00100	1	06/24/2021 22:57	WG1694160
trans-1,3-Dichloropropene	ND		0.00100	1	06/24/2021 22:57	WG1694160
Ethylbenzene	ND		0.00100	1	06/24/2021 22:57	WG1694160
Methylene Chloride	ND		0.00500	1	06/24/2021 22:57	WG1694160
1,1,2,2-Tetrachloroethane	ND		0.00100	1	06/24/2021 22:57	WG1694160
Tetrachloroethene	ND	J4	0.00100	1	06/24/2021 22:57	WG1694160
Toluene	ND		0.00100	1	06/24/2021 22:57	WG1694160
1,1,1-Trichloroethane	ND		0.00100	1	06/24/2021 22:57	WG1694160
1,1,2-Trichloroethane	ND		0.00100	1	06/24/2021 22:57	WG1694160
Trichloroethene	ND		0.00100	1	06/24/2021 22:57	WG1694160
Trichlorofluoromethane	ND		0.00500	1	06/24/2021 22:57	WG1694160
Vinyl chloride	ND		0.00100	1	06/24/2021 22:57	WG1694160
(S) Toluene-d8	*99.2*		*80.0-120*		*06/24/2021 22:57*	WG1694160
(S) 4-Bromofluorobenzene	*93.7*		*80.0-120*		*06/24/2021 22:57*	WG1694160
(S) 1,2-Dichloroethane-d4	*109*		*70.0-130*		*06/24/2021 22:57*	WG1694160

Method Blank (MB)

(MB) R3675076-1 06/30/21 16:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1369791-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1369791-03 06/30/21 16:28 • (DUP) R3675076-3 06/30/21 16:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	709	720	1	1.49		5

L1372318-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1372318-02 06/30/21 16:28 • (DUP) R3675076-4 06/30/21 16:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	453	458	1	1.10		5

Laboratory Control Sample (LCS)

(LCS) R3675076-2 06/30/21 16:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8840	100	77.4-123	

Method Blank (MB)

(MB) R3672855-1 06/27/21 10:19

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

L1369835-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1369835-05 06/27/21 10:19 • (DUP) R3672855-3 06/27/21 10:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Suspended Solids	37.0	38.8	1	4.75		5

L1369870-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1369870-02 06/27/21 10:19 • (DUP) R3672855-4 06/27/21 10:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Suspended Solids	26.2	18.1	1	36.5	P1	5

Laboratory Control Sample (LCS)

(LCS) R3672855-2 06/27/21 10:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Suspended Solids	773	816	106	85.7-114	

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

Method Blank (MB)

(MB) R3671728-1 06/24/21 17:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Oil & Grease (Hexane Extr)	U		1.16	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3671728-2 06/24/21 17:35 • (LCSD) R3671728-3 06/24/21 17:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Oil & Grease (Hexane Extr)	40.0	33.1	35.8	82.8	89.5	78.0-114			7.84	20

L1369646-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1369646-02 06/24/21 17:35 • (MS) R3671728-4 06/24/21 17:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Oil & Grease (Hexane Extr)	40.0	ND	22.3	55.8	1	78.0-114	J6

Original Sample (OS) • Duplicate (DUP)

(OS) • (DUP) R3671260-1 06/24/21 08:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
		pcu		%		%
Color, Apparent		1.00	1	0.000		20

Sample Narrative:

DUP: 7.40

Method Blank (MB)

(MB) R3672653-1 06/26/21 11:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Bromide	U		0.353	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1371209-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1371209-01 06/26/21 17:58 • (DUP) R3672653-3 06/26/21 18:14

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Bromide	ND	ND	1	0.000		20
Fluoride	ND	ND	1	0.000		20
Sulfate	ND	ND	1	0.583		20

L1371572-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1371572-01 06/26/21 22:50 • (DUP) R3672653-6 06/26/21 23:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Bromide	ND	ND	1	0.000		20
Fluoride	ND	ND	1	200	P1	20
Sulfate	182	182	1	0.193	E	20

L1371572-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1371572-01 06/26/21 23:40 • (DUP) R3672653-8 06/26/21 23:56

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	184	180	5	2.24		20

Laboratory Control Sample (LCS)

(LCS) R3672653-2 06/26/21 11:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromide	40.0	40.3	101	90.0-110	
Fluoride	8.00	8.08	101	90.0-110	

Laboratory Control Sample (LCS)

(LCS) R3672653-2 06/26/21 11:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40.0	41.0	103	90.0-110	

L1371209-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1371209-02 06/26/21 18:31 • (MS) R3672653-4 06/26/21 18:47 • (MSD) R3672653-5 06/26/21 19:03

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 %
Bromide	50.0	ND	49.2	49.4	98.3	98.7	1	80.0-120			0.408	20
Fluoride	5.00	ND	5.10	5.21	102	104	1	80.0-120			2.21	20
Sulfate	50.0	ND	53.6	54.1	100	101	1	80.0-120			0.975	20

L1371572-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1371572-01 06/26/21 22:50 • (MS) R3672653-7 06/26/21 23:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Bromide	50.0	ND	32.6	65.1	1	80.0-120	J6
Fluoride	5.00	ND	5.17	103	1	80.0-120	
Sulfate	50.0	182	204	44.3	1	80.0-120	E J6

Method Blank (MB)

(MB) R3672450-1 06/26/21 11:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ammonia Nitrogen	U		0.117	0.250

L1369077-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369077-01 06/26/21 11:50 • (DUP) R3672450-5 06/26/21 11:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	25.7	25.7	5	0.156		10

L1370568-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1370568-01 06/26/21 12:27 • (DUP) R3672450-7 06/26/21 12:29

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	ND	ND	1	0.000		10

Laboratory Control Sample (LCS)

(LCS) R3672450-2 06/26/21 11:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ammonia Nitrogen	7.50	7.30	97.4	90.0-110	

L1369017-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369017-02 06/26/21 11:45 • (MS) R3672450-3 06/26/21 11:47 • (MSD) R3672450-4 06/26/21 11:49

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 %
Ammonia Nitrogen	5.00	ND	4.74	4.76	94.8	95.2	1	90.0-110			0.463	10

L1370402-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1370402-03 06/26/21 12:24 • (MS) R3672450-6 06/26/21 12:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ammonia Nitrogen	5.00	ND	4.49	89.7	1	90.0-110	J6

QUALITY CONTROL SUMMARY

L1369870-01

Method Blank (MB)

(MB) R3674707-1 07/01/21 17:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Kjeldahl Nitrogen, TKN	U		0.140	0.250

L1370402-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1370402-03 07/01/21 17:43 • (DUP) R3674707-6 07/01/21 17:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Kjeldahl Nitrogen, TKN	ND	ND	1	0.000		20

L1369017-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369017-01 07/01/21 17:51 • (DUP) R3674707-7 07/01/21 17:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Kjeldahl Nitrogen, TKN	104	93.4	10	10.7		20

Laboratory Control Sample (LCS)

(LCS) R3674707-2 07/01/21 17:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Kjeldahl Nitrogen, TKN	15.2	15.3	101	75.2-121	

L1369017-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369017-02 07/01/21 17:54 • (MS) R3674707-3 07/01/21 17:29 • (MSD) R3674707-4 07/01/21 17:31

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Kjeldahl Nitrogen, TKN	5.00	1.65	7.18	6.90	111	105	1	90.0-110	J5		3.98	20

L1369077-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1369077-01 07/01/21 17:32 • (MS) R3674707-5 07/01/21 17:33

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	
Kjeldahl Nitrogen, TKN	5.00	31.2	34.2	60.0	1	90.0-110	E V

Method Blank (MB)

(MB) R3675370-1 07/03/21 23:10

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

L1366486-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1366486-02 07/03/21 23:12 • (DUP) R3675370-3 07/03/21 23:13

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	ND	ND	1	0.000		20

L1370402-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1370402-02 07/03/21 23:50 • (DUP) R3675370-6 07/03/21 23:51

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.20	1.19	1	0.837		20

Laboratory Control Sample (LCS)

(LCS) R3675370-2 07/03/21 23:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.73	109	90.0-110	

L1366664-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1366664-01 07/03/21 23:15 • (MS) R3675370-4 07/03/21 23:19 • (MSD) R3675370-5 07/03/21 23:21

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	0.120	2.45	3.13	93.2	120	1	90.0-110		J3 J5	24.4	20

L1370402-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1370402-03 07/03/21 23:52 • (MS) R3675370-7 07/03/21 23:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	1.30	4.24	118	1	90.0-110	J5

Method Blank (MB)

(MB) R3673867-1 06/30/21 09:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Phosphorus,Total	0.0584	J	0.0350	0.100

L1370402-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1370402-03 06/30/21 10:18 • (DUP) R3673867-5 06/30/21 10:20

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	ND	ND	1	0.000		20

L1369017-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369017-01 06/30/21 10:40 • (DUP) R3673867-6 06/30/21 10:41

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	12.7	11.2	5	12.6		20

Laboratory Control Sample (LCS)

(LCS) R3673867-2 06/30/21 10:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Phosphorus,Total	3.16	2.99	94.8	81.2-118	

L1369017-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369017-02 06/30/21 10:06 • (MS) R3673867-3 06/30/21 10:07 • (MSD) R3673867-4 06/30/21 10:08

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 %
Phosphorus,Total	2.50	10.2	13.4	12.9	128	108	1	90.0-110	E V	E	3.80	20

Method Blank (MB)

(MB) R3674126-1 06/30/21 16:13

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

L1369870-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369870-01 06/30/21 16:13 • (DUP) R3674126-3 06/30/21 16:14

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	93.8	96.9	1	3.28		20

L1369993-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1369993-09 06/30/21 16:25 • (DUP) R3674126-6 06/30/21 16:26

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	ND	ND	1	0.612		20

Laboratory Control Sample (LCS)

(LCS) R3674126-2 06/30/21 16:13

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
COD	500	505	101	90.0-110	

L1369913-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369913-01 06/30/21 16:15 • (MS) R3674126-4 06/30/21 16:15 • (MSD) R3674126-5 06/30/21 16:15

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	52.6	636	633	117	116	1	80.0-120			0.495	20

Method Blank (MB)

(MB) R3674248-1 06/30/21 23:46

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Total Phenol by 4AAP	U		0.00830	0.0400

L1362168-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1362168-01 06/30/21 23:48 • (DUP) R3674248-3 06/30/21 23:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	ND	ND	1	2.74		20

L1368692-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368692-01 06/30/21 23:58 • (DUP) R3674248-6 06/30/21 23:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3674248-2 06/30/21 23:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Phenol by 4AAP	0.500	0.506	101	90.0-110	

L1368683-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368683-04 06/30/21 23:50 • (MS) R3674248-4 06/30/21 23:51 • (MSD) R3674248-5 06/30/21 23:52

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 %
Total Phenol by 4AAP	1.00	ND	0.897	0.877	89.7	87.7	1	90.0-110	J6	J6	2.25	20

L1369503-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1369503-01 07/01/21 00:02 • (MS) R3674248-7 07/01/21 00:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Total Phenol by 4AAP	1.00	ND	0.896	89.6	1	90.0-110	J6

Method Blank (MB)

(MB) R3673708-1 06/30/21 04:03

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	U		0.00180	0.0100

L1369160-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1369160-02 06/30/21 04:11 • (DUP) R3673708-3 06/30/21 04:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	ND	1	0.000		20

L1369534-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1369534-04 06/30/21 04:26 • (DUP) R3673708-6 06/30/21 04:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	ND	1	51.7	P1	20

Laboratory Control Sample (LCS)

(LCS) R3673708-2 06/30/21 04:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Cyanide	0.100	0.101	101	87.1-120	

L1369185-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369185-02 06/30/21 04:19 • (MS) R3673708-4 06/30/21 04:20 • (MSD) R3673708-5 06/30/21 04:21

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 %
Cyanide	0.100	ND	0.102	0.101	94.4	93.4	1	90.0-110			0.985	20

L1369870-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369870-02 06/30/21 04:34 • (MS) R3673708-7 06/30/21 04:35 • (MSD) R3673708-8 06/30/21 04:36

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 %
Cyanide	0.100	ND	0.107	0.0974	107	97.4	1	90.0-110			9.39	20

L1369185-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1369185-02 06/30/21 11:00 • (DUP) R3673907-2 06/30/21 11:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.05	7.10	1	0.707		1

Sample Narrative:

OS: 7.05 at 22.8C

DUP: 7.1 at 23C

L1371080-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1371080-01 06/30/21 11:00 • (DUP) R3673907-3 06/30/21 11:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.19	7.22	1	0.416		1

Sample Narrative:

OS: 7.19 at 23.2C

DUP: 7.22 at 23.4C

Laboratory Control Sample (LCS)

(LCS) R3673907-1 06/30/21 11:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	10.1	101	99.0-101	

Sample Narrative:

LCS: 10.07 at 23.5C

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

Method Blank (MB)

(MB) R3673975-1 06/30/21 11:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sulfide	U		0.0250	0.0500

L1369780-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1369780-02 06/30/21 11:41 • (DUP) R3673975-3 06/30/21 11:41

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfide	ND	ND	1	0.000		20

L1370568-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1370568-01 06/30/21 11:49 • (DUP) R3673975-6 06/30/21 11:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3673975-2 06/30/21 11:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfide	0.500	0.568	114	85.0-115	

L1369870-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369870-01 06/30/21 11:42 • (MS) R3673975-4 06/30/21 11:42 • (MSD) R3673975-5 06/30/21 11:42

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 %
Sulfide	1.00	ND	0.733	0.735	73.3	73.5	1	80.0-120	J6	J6	0.272	20

Method Blank (MB)

(MB) R3672836-1 06/28/21 11:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sulfite	U		1.19	3.00

L1368661-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368661-01 06/28/21 11:37 • (DUP) R3672836-5 06/28/21 11:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfite	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3672836-2 06/28/21 11:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfite	20.0	17.8	88.8	85.0-115	

L1366664-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1366664-01 06/28/21 11:37 • (MS) R3672836-3 06/28/21 11:37 • (MSD) R3672836-4 06/28/21 11:37

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 %
Sulfite	20.0	ND	17.5	17.0	87.5	85.0	1	85.0-115			2.90	20

Method Blank (MB)

(MB) R3673481-1 06/29/21 12:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
BOD	0.260		0.200	0.200

L1369870-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369870-01 06/29/21 09:26 • (DUP) R3673481-7 06/29/21 09:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	27.4	31.3	1	13		30

L1370207-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1370207-01 06/29/21 10:21 • (DUP) R3673481-8 06/29/21 10:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	6.50	5.80	1	11		30

L1370299-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1370299-02 06/29/21 10:47 • (DUP) R3673481-9 06/29/21 10:48

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	14.4	13.2	1	8		30

L1370309-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1370309-04 06/29/21 11:04 • (DUP) R3673481-10 06/29/21 11:06

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	4.30	4.10	1	5		30

L1370359-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1370359-01 06/29/21 11:32 • (DUP) R3673481-11 06/29/21 11:33

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
BOD	ND	ND	1	0		30

L1370354-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1370354-01 06/29/21 11:55 • (DUP) R3673481-12 06/29/21 11:56

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
BOD	17.9	17.4	1	3		30

L1370567-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1370567-05 06/29/21 12:20 • (DUP) R3673481-13 06/29/21 12:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
BOD	627	568	10	10		30

Laboratory Control Sample (LCS)

(LCS) R3673481-2 06/29/21 09:20

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
BOD	198	170	85.7	84.6-115	

Laboratory Control Sample (LCS)

(LCS) R3673481-3 06/29/21 10:34

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
BOD	198	152	76.8	84.6-115	J-

Laboratory Control Sample (LCS)

(LCS) R3673481-4 06/29/21 11:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198	93.9	47.4	84.6-115	J-

Laboratory Control Sample (LCS)

(LCS) R3673481-5 06/29/21 12:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198	140	70.9	84.6-115	J-

Laboratory Control Sample (LCS)

(LCS) R3673481-6 06/29/21 12:23

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198	143	72.4	84.6-115	J-

QUALITY CONTROL SUMMARY

L1369870-01

Method Blank (MB)

(MB) R3672739-2 06/26/21 12:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TOC (Total Organic Carbon)	0.584	J	0.102	1.00

L1369705-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369705-01 06/26/21 13:17 • (DUP) R3672739-3 06/26/21 13:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	2.41	2.32	1	3.59		20

L1369932-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1369932-02 06/26/21 19:40 • (DUP) R3672739-8 06/26/21 19:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	ND	ND	1	3.97		20

Laboratory Control Sample (LCS)

(LCS) R3672739-1 06/26/21 12:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75.0	71.8	95.8	85.0-115	

L1369906-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369906-01 06/26/21 14:29 • (MS) R3672739-4 06/26/21 14:48 • (MSD) R3672739-5 06/26/21 15:06

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 %
TOC	50.0	4.84	52.8	51.6	95.9	93.5	1	80.0-120			2.32	20

L1369926-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369926-05 06/26/21 17:32 • (MS) R3672739-6 06/26/21 17:49 • (MSD) R3672739-7 06/26/21 18:08

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 %
TOC	50.0	ND	46.2	45.7	91.5	90.4	1	80.0-120			1.15	20

QUALITY CONTROL SUMMARY

L1369870-01,02

Method Blank (MB)

(MB) R3671717-1 06/24/21 15:11

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
MBAS	U		0.0190	0.100

Original Sample (OS) • Duplicate (DUP)

(OS) • (DUP) R3671717-3 06/24/21 15:18

Analyte	Original Result	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
MBAS		ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3671717-2 06/24/21 15:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
MBAS	1.00	1.03	103	85.0-115	

L1370451-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1370451-02 06/24/21 17:44 • (MS) R3671717-4 06/24/21 17:47 • (MSD) R3671717-5 06/24/21 17:47

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 %
MBAS	1.00	0.169	1.12	1.17	95.5	100	1	85.0-115			4.18	20

QUALITY CONTROL SUMMARY

L1369870-01

Method Blank (MB)

(MB) R3674025-1 06/30/21 12:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3674025-2 06/30/21 12:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00300	0.00330	110	85.0-115	

L1369185-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369185-01 06/30/21 12:21 • (MS) R3674025-3 06/30/21 12:23 • (MSD) R3674025-4 06/30/21 12:30

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 %
Mercury	0.00300	ND	0.00334	0.00322	111	107	1	70.0-130			3.74	20

L1371565-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1371565-01 06/30/21 12:32 • (MS) R3674025-5 06/30/21 12:36 • (MSD) R3674025-6 06/30/21 12:38

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 %
Mercury	0.00300	ND	0.00347	0.00319	116	106	1	70.0-130			8.42	20

Method Blank (MB)

(MB) R3672701-1 06/27/21 21:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum	U		0.0592	0.200
Antimony	U		0.00398	0.0100
Arsenic	U		0.00645	0.0100
Barium	U		0.000795	0.00500
Beryllium	U		0.000401	0.00200
Cadmium	U		0.000552	0.00200
Chromium	U		0.00163	0.0100
Cobalt	U		0.000707	0.0100
Copper	U		0.00226	0.0100
Iron	U		0.0205	0.100
Lead	U		0.00227	0.00500
Magnesium	U		0.115	1.00
Manganese	U		0.000855	0.0100
Molybdenum	U		0.000982	0.00500
Nickel	U		0.00182	0.0100
Selenium	U		0.00616	0.0100
Silver	U		0.00131	0.00500
Thallium	U		0.00460	0.0100
Tin	U		0.00323	0.0500
Titanium	U		0.00437	0.0500
Zinc	U		0.00578	0.0500

Method Blank (MB)

(MB) R3672862-1 06/28/21 10:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0396	0.200

Laboratory Control Sample (LCS)

(LCS) R3672701-2 06/27/21 21:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum	10.0	9.57	95.7	85.0-115	
Antimony	1.00	0.986	98.6	85.0-115	
Arsenic	1.00	0.973	97.3	85.0-115	
Barium	1.00	0.996	99.6	85.0-115	
Beryllium	1.00	0.997	99.7	85.0-115	

Laboratory Control Sample (LCS)

(LCS) R3672701-2 06/27/21 21:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Cadmium	1.00	0.982	98.2	85.0-115	
Chromium	1.00	0.943	94.3	85.0-115	
Cobalt	1.00	0.984	98.4	85.0-115	
Copper	1.00	0.974	97.4	85.0-115	
Iron	10.0	9.67	96.7	85.0-115	
Lead	1.00	0.983	98.3	85.0-115	
Magnesium	10.0	9.70	97.0	85.0-115	
Manganese	1.00	0.955	95.5	85.0-115	
Molybdenum	1.00	1.01	101	85.0-115	
Nickel	1.00	0.987	98.7	85.0-115	
Selenium	1.00	1.03	103	85.0-115	
Silver	0.200	0.182	91.0	85.0-115	
Thallium	1.00	1.02	102	85.0-115	
Tin	1.00	0.981	98.1	85.0-115	
Titanium	1.00	0.984	98.4	85.0-115	
Zinc	1.00	0.973	97.3	85.0-115	

Laboratory Control Sample (LCS)

(LCS) R3672862-2 06/28/21 10:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	0.953	95.3	85.0-115	

L1364300-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1364300-02 06/27/21 21:14 • (MS) R3672701-4 06/27/21 21:19 • (MSD) R3672701-5 06/27/21 21:22

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	9.77	9.67	97.7	96.7	1	70.0-130			1.09	20
Antimony	1.00	ND	1.07	1.07	107	107	1	70.0-130			0.278	20
Arsenic	1.00	0.0146	1.10	1.09	108	108	1	70.0-130			0.474	20
Barium	1.00	0.585	1.52	1.51	93.7	92.5	1	70.0-130			0.766	20
Beryllium	1.00	ND	0.993	0.984	99.3	98.4	1	70.0-130			0.889	20
Cadmium	1.00	ND	1.08	1.07	108	107	1	70.0-130			0.911	20
Chromium	1.00	ND	0.946	0.937	94.6	93.7	1	70.0-130			0.970	20
Cobalt	1.00	ND	1.05	1.04	105	104	1	70.0-130			1.09	20
Copper	1.00	ND	1.03	1.03	103	103	1	70.0-130			0.588	20
Iron	10.0	0.538	10.0	9.94	95.0	94.0	1	70.0-130			0.940	20

L1364300-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1364300-02 06/27/21 21:14 • (MS) R3672701-4 06/27/21 21:19 • (MSD) R3672701-5 06/27/21 21:22

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 %
Lead	1.00	ND	1.02	1.01	102	101	1	70.0-130			0.738	20
Magnesium	10.0	130	135	135	49.6	46.5	1	70.0-130	V	V	0.230	20
Manganese	1.00	0.346	1.28	1.27	93.4	92.4	1	70.0-130			0.770	20
Molybdenum	1.00	0.0192	1.02	1.01	100	99.6	1	70.0-130			0.863	20
Nickel	1.00	ND	1.04	1.04	104	104	1	70.0-130			0.870	20
Selenium	1.00	ND	1.13	1.12	113	112	1	70.0-130			0.804	20
Silver	0.200	ND	0.214	0.212	107	106	1	70.0-130			0.662	20
Thallium	1.00	ND	0.955	0.945	95.5	94.5	1	70.0-130			1.02	20
Tin	1.00	ND	0.934	0.927	92.7	92.0	1	70.0-130			0.791	20
Titanium	1.00	ND	1.01	1.00	99.9	99.0	1	70.0-130			0.876	20
Zinc	1.00	ND	0.973	0.960	97.3	96.0	1	70.0-130			1.36	20

L1366138-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1366138-01 06/27/21 21:25 • (MS) R3672701-6 06/27/21 21:27 • (MSD) R3672701-7 06/27/21 21:30

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	ND	9.65	9.69	96.5	96.9	1	70.0-130			0.429	20
Antimony	1.00	ND	1.02	1.03	101	102	1	70.0-130			0.941	20
Arsenic	1.00	ND	1.00	1.01	100	101	1	70.0-130			0.744	20
Barium	1.00	ND	1.01	1.01	101	101	1	70.0-130			0.102	20
Beryllium	1.00	ND	1.00	1.00	100	100	1	70.0-130			0.0717	20
Cadmium	1.00	ND	1.01	1.01	101	101	1	70.0-130			0.0139	20
Chromium	1.00	ND	0.946	0.951	94.6	95.1	1	70.0-130			0.466	20
Cobalt	1.00	ND	1.00	0.997	100	99.7	1	70.0-130			0.291	20
Copper	1.00	ND	0.982	0.988	98.2	98.8	1	70.0-130			0.640	20
Iron	10.0	ND	9.75	9.75	97.5	97.5	1	70.0-130			0.0744	20
Lead	1.00	ND	0.996	0.995	99.3	99.2	1	70.0-130			0.131	20
Magnesium	10.0	13.2	22.8	22.6	95.9	93.8	1	70.0-130			0.911	20
Manganese	1.00	ND	0.962	0.965	96.2	96.5	1	70.0-130			0.319	20
Molybdenum	1.00	ND	1.03	1.03	103	103	1	70.0-130			0.00311	20
Nickel	1.00	ND	0.999	0.997	99.9	99.7	1	70.0-130			0.205	20
Selenium	1.00	ND	1.06	1.06	106	106	1	70.0-130			0.305	20
Silver	0.200	ND	0.184	0.184	91.8	92.2	1	70.0-130			0.509	20
Thallium	1.00	ND	1.02	1.02	102	102	1	70.0-130			0.409	20
Tin	1.00	ND	0.992	0.991	99.2	99.1	1	70.0-130			0.170	20
Titanium	1.00	ND	1.00	0.998	100	99.8	1	70.0-130			0.171	20
Zinc	1.00	ND	0.983	0.978	98.3	97.8	1	70.0-130			0.493	20

L1364300-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1364300-02 06/28/21 10:25 • (MS) R3672862-4 06/28/21 10:31 • (MSD) R3672862-5 06/28/21 10:34

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 %
Boron	1.00	1.29	2.22	2.22	92.7	92.7	1	70.0-130			0.0356	20

L1366138-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1366138-01 06/28/21 10:37 • (MS) R3672862-6 06/28/21 10:39 • (MSD) R3672862-7 06/28/21 10:42

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 %
Boron	1.00	ND	0.966	0.964	96.6	96.4	1	70.0-130			0.204	20

Method Blank (MB)

(MB) R3671962-2 06/24/21 15:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
1,1-Dichloroethane	U		0.000100	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
2-Chloroethyl vinyl ether	U		0.000575	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
cis-1,3-Dichloropropene	U		0.000111	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
Ethylbenzene	U		0.000137	0.00100
Methylene Chloride	U		0.000430	0.00500
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
Vinyl chloride	U		0.000234	0.00100
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*
(S) 4-Bromofluorobenzene	*97.6*			*80.0-120*
(S) Toluene-d8	*99.8*			*80.0-120*

Laboratory Control Sample (LCS)

(LCS) R3671962-1 06/24/21 14:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,1,1-Trichloroethane	0.00500	0.00626	125	70.0-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00407	81.4	60.0-140	
1,1,2-Trichloroethane	0.00500	0.00607	121	70.0-130	
1,1-Dichloroethane	0.00500	0.00601	120	70.0-130	
1,1-Dichloroethene	0.00500	0.00545	109	50.0-150	
1,2-Dichlorobenzene	0.00500	0.00483	96.6	65.0-135	
1,2-Dichloroethane	0.00500	0.00606	121	70.0-130	
1,2-Dichloropropane	0.00500	0.00558	112	35.0-165	
1,3-Dichlorobenzene	0.00500	0.00529	106	70.0-130	
1,4-Dichlorobenzene	0.00500	0.00440	88.0	65.0-135	
2-Chloroethyl vinyl ether	0.0250	0.0294	118	0.100-225	
Acrolein	0.0250	0.0214	85.6	60.0-140	
Acrylonitrile	0.0250	0.0289	116	60.0-140	
Benzene	0.00500	0.00541	108	65.0-135	
Bromodichloromethane	0.00500	0.00564	113	65.0-135	
Bromoform	0.00500	0.00579	116	70.0-130	
Bromomethane	0.00500	0.00698	140	15.0-185	
Carbon tetrachloride	0.00500	0.00532	106	70.0-130	
Chlorobenzene	0.00500	0.00570	114	65.0-135	
Chlorodibromomethane	0.00500	0.00544	109	70.0-135	
Chloroethane	0.00500	0.00725	145	40.0-160	
Chloroform	0.00500	0.00569	114	70.0-135	
Chloromethane	0.00500	0.00528	106	0.100-205	
cis-1,3-Dichloropropene	0.00500	0.00602	120	25.0-175	
Dichlorodifluoromethane	0.00500	0.00572	114	49.0-155	
Ethylbenzene	0.00500	0.00539	108	60.0-140	
Methylene Chloride	0.00500	0.00544	109	60.0-140	
Tetrachloroethene	0.00500	0.00653	131	70.0-130	J4
Toluene	0.00500	0.00533	107	70.0-130	
trans-1,2-Dichloroethene	0.00500	0.00529	106	70.0-130	
trans-1,3-Dichloropropene	0.00500	0.00645	129	50.0-150	
Trichloroethene	0.00500	0.00577	115	65.0-135	
Trichlorofluoromethane	0.00500	0.00587	117	50.0-150	
Vinyl chloride	0.00500	0.00644	129	5.00-195	
(S) 1,2-Dichloroethane-d4			*110*	*70.0-130*	
(S) 4-Bromofluorobenzene			*102*	*80.0-120*	
(S) Toluene-d8			*102*	*80.0-120*	

Method Blank (MB)

(MB) R3673588-3 06/29/21 10:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Anthracene	U		0.0000804	0.00100
Azobenzene	U		0.000105	0.0100
Benzidine	U		0.00374	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.00100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.00100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
Naphthalene	U		0.000159	0.00100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodimethylamine	U		0.000998	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300

Method Blank (MB)

(MB) R3673588-3 06/29/21 10:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	*79.3*			*15.0-314*
(S) 2-Fluorobiphenyl	*67.7*			*22.0-127*
(S) p-Terphenyl-d14	*60.0*			*29.0-141*
(S) Phenol-d5	*26.3*			*8.00-424*
(S) 2-Fluorophenol	*38.1*			*10.0-120*
(S) 2,4,6-Tribromophenol	*48.5*			*10.0-153*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3673588-1 06/29/21 09:41 • (LCSD) R3673588-2 06/29/21 10:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.0368	0.0357	73.6	71.4	47.0-145			3.03	48
Acenaphthylene	0.0500	0.0405	0.0399	81.0	79.8	33.0-145			1.49	74
Anthracene	0.0500	0.0410	0.0406	82.0	81.2	27.0-133			0.980	66
Azobenzene	0.0500	0.0469	0.0471	93.8	94.2	37.0-125			0.426	20
Benzidine	0.100	0.0187	0.0337	18.7	33.7	1.00-120		J3	57.3	36
Benzo(a)anthracene	0.0500	0.0435	0.0439	87.0	87.8	33.0-143			0.915	53
Benzo(b)fluoranthene	0.0500	0.0436	0.0442	87.2	88.4	24.0-159			1.37	71
Benzo(k)fluoranthene	0.0500	0.0426	0.0430	85.2	86.0	11.0-162			0.935	63
Benzo(g,h,i)perylene	0.0500	0.0405	0.0415	81.0	83.0	1.00-219			2.44	97
Benzo(a)pyrene	0.0500	0.0412	0.0416	82.4	83.2	17.0-163			0.966	72
Bis(2-chlorethoxy)methane	0.0500	0.0401	0.0371	80.2	74.2	1.00-219			7.77	54
Bis(2-chloroethyl)ether	0.0500	0.0416	0.0396	83.2	79.2	33.0-185			4.93	108
2,2-Oxybis(1-Chloropropane)	0.0500	0.0366	0.0344	73.2	68.8	36.0-166			6.20	76

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3673588-1 06/29/21 09:41 • (LCSD) R3673588-2 06/29/21 10:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Bromophenyl-phenylether	0.0500	0.0372	0.0360	74.4	72.0	53.0-127			3.28	43
2-Chloronaphthalene	0.0500	0.0365	0.0361	73.0	72.2	60.0-120			1.10	24
4-Chlorophenyl-phenylether	0.0500	0.0382	0.0372	76.4	74.4	25.0-158			2.65	61
Chrysene	0.0500	0.0406	0.0419	81.2	83.8	17.0-168			3.15	87
Dibenz(a,h)anthracene	0.0500	0.0407	0.0413	81.4	82.6	1.00-227			1.46	126
3,3-Dichlorobenzidine	0.100	0.0856	0.0885	85.6	88.5	1.00-262			3.33	108
2,4-Dinitrotoluene	0.0500	0.0463	0.0455	92.6	91.0	39.0-139			1.74	42
2,6-Dinitrotoluene	0.0500	0.0425	0.0417	85.0	83.4	50.0-158			1.90	48
Fluoranthene	0.0500	0.0457	0.0446	91.4	89.2	26.0-137			2.44	66
Fluorene	0.0500	0.0409	0.0397	81.8	79.4	59.0-121			2.98	38
Hexachlorobenzene	0.0500	0.0347	0.0340	69.4	68.0	1.00-152			2.04	55
Hexachloro-1,3-butadiene	0.0500	0.0311	0.0276	62.2	55.2	24.0-120			11.9	62
Hexachlorocyclopentadiene	0.0500	0.0152	0.0142	30.4	28.4	10.0-120			6.80	31
Hexachloroethane	0.0500	0.0376	0.0351	75.2	70.2	40.0-120			6.88	52
Indeno(1,2,3-cd)pyrene	0.0500	0.0398	0.0412	79.6	82.4	1.00-171			3.46	99
Isophorone	0.0500	0.0414	0.0403	82.8	80.6	21.0-196			2.69	93
Naphthalene	0.0500	0.0335	0.0321	67.0	64.2	21.0-133			4.27	65
Nitrobenzene	0.0500	0.0395	0.0384	79.0	76.8	35.0-180			2.82	62
n-Nitrosodimethylamine	0.0500	0.0366	0.0350	73.2	70.0	10.0-120			4.47	34
n-Nitrosodiphenylamine	0.0500	0.0386	0.0396	77.2	79.2	44.0-120			2.56	21
n-Nitrosodi-n-propylamine	0.0500	0.0446	0.0430	89.2	86.0	1.00-230			3.65	87
Phenanthrene	0.0500	0.0417	0.0405	83.4	81.0	54.0-120			2.92	39
Benzylbutyl phthalate	0.0500	0.0482	0.0481	96.4	96.2	1.00-152			0.208	60
Bis(2-ethylhexyl)phthalate	0.0500	0.0471	0.0472	94.2	94.4	8.00-158			0.212	82
Di-n-butyl phthalate	0.0500	0.0495	0.0481	99.0	96.2	1.00-120			2.87	47
Diethyl phthalate	0.0500	0.0435	0.0426	87.0	85.2	1.00-120			2.09	100
Dimethyl phthalate	0.0500	0.0419	0.0412	83.8	82.4	1.00-120			1.68	183
Di-n-octyl phthalate	0.0500	0.0453	0.0456	90.6	91.2	4.00-146			0.660	69
Pyrene	0.0500	0.0427	0.0432	85.4	86.4	52.0-120			1.16	49
1,2,4-Trichlorobenzene	0.0500	0.0331	0.0310	66.2	62.0	44.0-142			6.55	50
4-Chloro-3-methylphenol	0.0500	0.0358	0.0364	71.6	72.8	22.0-147			1.66	73
2-Chlorophenol	0.0500	0.0321	0.0318	64.2	63.6	23.0-134			0.939	61
2,4-Dichlorophenol	0.0500	0.0363	0.0349	72.6	69.8	39.0-135			3.93	50
2,4-Dimethylphenol	0.0500	0.0340	0.0332	68.0	66.4	32.0-120			2.38	58
4,6-Dinitro-2-methylphenol	0.0500	0.0497	0.0524	99.4	105	1.00-181			5.29	203
2,4-Dinitrophenol	0.0500	0.0503	0.0514	101	103	1.00-191			2.16	132
2-Nitrophenol	0.0500	0.0373	0.0357	74.6	71.4	29.0-182			4.38	55
4-Nitrophenol	0.0500	0.0174	0.0187	34.8	37.4	1.00-132			7.20	131
Pentachlorophenol	0.0500	0.0400	0.0396	80.0	79.2	14.0-176			1.01	86
Phenol	0.0500	0.0168	0.0159	33.6	31.8	5.00-120			5.50	64

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3673588-1 06/29/21 09:41 • (LCSD) R3673588-2 06/29/21 10:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,4,6-Trichlorophenol	0.0500	0.0382	0.0370	76.4	74.0	37.0-144			3.19	58
(S) Nitrobenzene-d5				*78.7*	*75.9*	*15.0-314*				
(S) 2-Fluorobiphenyl				*72.1*	*70.8*	*22.0-127*				
(S) p-Terphenyl-d14				*68.1*	*69.2*	*29.0-141*				
(S) Phenol-d5				*30.2*	*29.3*	*8.00-424*				
(S) 2-Fluorophenol				*42.4*	*41.4*	*10.0-120*				
(S) 2,4,6-Tribromophenol				*63.0*	*60.5*	*10.0-153*				

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.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
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.
B1	The blank depletion was greater than the recommended maximum depletion of 0.2mg/L.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
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.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J-	The associated batch QC was outside the lower control limits; associated data has a potential negative bias.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.

GLOSSARY OF TERMS

Qualifier	Description
V	The sample concentration is too high to evaluate accurate spike recoveries.

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	LA000356
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.

Company Name/Address:
Bonnell Aluminum

Highway 53
Carthage, TN 37030

Billing Information:
Mr. Barry Cohoon
Highway 53
Carthage, TN 37030

Pres Chk

Report to:
Mr. Barry Cohoon

Email To:
barry.cohoon@bonnellaluminum.com;emilligan

Project Description:
NPDES application

City/State Collected: Carthage, TN

Please Circle: PT MT CT ET

Phone: 615-683-8291

Client Project #
NPDES Appl

Lab Project #
Bonnell Permit

Collected by (print):
Barry Cohoon

Site/Facility ID #
Bonnell

P.O. # 928630-OP-34

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ✓ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Oil/grease 1L-Clr-WT-HCl	PH 125mlHDPE-NoPres	SULFIDE 250mlAmb-S-NaOH+ZnAc	SULFITE,TDS 250mlHDPE-NoPres	TOC 250mlHDPE-HCl	TSS 1L-HDPE NoPres	Total Phenols 250mlAmb-H2SO4	V624.1TTO 40mlAmb-NoPres	TKN			
COMPOSITE 001	Comp	WW		6-23-21	1230	14	12		X		X			VOA	X			-01
GRAB 001	Grab	WW		6-23-21	1230	12	X	X		X		X	X	X				-02

Chain of Custody Page ___ of ___

Pace Analytical®

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1369870
C163

Acctnum: BONLCTN
Template: T189530
Prelogin: P854972
PM: 807 - Justin Carr
PB: 6/15/21 mb
Shipped Via: FedEX Ground

Remarks | Sample # (lab only)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	6-23-21		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: A7 29 °C
14±0=14

Bottles Received: 24

If preservation required by Login: Date/Time

Date: 6/23/21 Time: 1:25

Hold:

Condition: NCF / OK

Company Name/Address:
Bonnell Aluminum

Highway 53
Carthage, TN 37030

Billing Information:
Mr. Barry Cohoon
Highway 53
Carthage, TN 37030

Report to:
Mr. Barry Cohoon

Email To:
barry.cohoon@bonnellaluminum.com;emilligan

Project Description:
NPDES application

City/State Collected: CARTHAGE, TN

Please Circle: PT MT CT ET

Phone: **615-683-8291**

Client Project # NPDES Appl.

Lab Project # Bonnell Permit

Collected by (print): BARRY Cohoon

Site/Facility ID # Bonnell

P.O. # 928630-OP 34

Collected by (signature): By Cohoon

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ✓ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	625.1TTO 100ml Amb-NaTio	BOD 500mlHDPE-NoPres	BROMIDE, COLOR 250mlHDPE-NoPres	COD,NO2NO3,PT 250mlHDPE-H2SO4	COLILERT Microbiological	Cyanide 250mlHDPEAmb-NaOH	FLUORIDE,SULFATE 125mlHDPE-NoPres	MBAS 500mlHDPE-NoPres	Metals 250mlHDPE-HNO3	NH3 250mlHDPENaThioH2SO4	Remarks	Sample # (lab only)
										V2		7/2			V	V2		
COMPOSITE 001	Comp	WW		6-23-21	12:30p	14 9/12	X	X	X	X			X	X	X	X		-01
GRAB 001	GRAB	WW		6-23-21	12:30p	9/12					X	X		X				-02

Chain of Custody Page ___ of ___

Pace Analytical®

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1369870

Table #

Acctnum: **BONLCTN**

Template: **T189530**

Prelogin: **P854972**

PM: **807 - Justin Carr**

PB: 6/15/21 mb

Shipped Via: **FedEx Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature) By Cohoon	Date: 6-23-21	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 14 °C 14+0=14 Bottles Received: 24	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/23/21 Time: 1:25	Hold: Condition: NCF / OK

ANALYTICAL REPORT

September 09, 2021

Bonnell Aluminum

Sample Delivery Group:	L1400412
Samples Received:	09/08/2021
Project Number:	
Description:	

Report To: Mr. Barry Cohoon
Highway 53
Carthage, TN 37030

Entire Report Reviewed By:

Justin Carr
Project Manager

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

TABLE OF CONTENTS

SAMPLE SUMMARY

EFFLUENT L1400412-01 WW

Collected by: T Stinson
Collected date/time: 09/08/21 00:00
Received date/time: 09/08/21 12:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location

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.

Justin Carr
Project Manager

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	8.59	su
Res. Chlorine (On Site)	0.01	mg/l
Temperature (on-site)	25.8	Deg. C

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

SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

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	LA000356
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.

Bonnell Aluminum
Hwy 53
Carthage, TN. 37030

Billing Information:

Report to: Mr. Barry Cohoon

Email To:

Project Description:

City/State Collected:

Please Circle: PT MT CT ET

Phone: 615-683-8291

Client Project #

Lab Project #

Collected by (print): TSTINSON

Site/Facility ID #

P.O. #

Collected by (signature): Thomas Stinson

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Remarks	Sample # (lab only)
effluent							-01

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1400412

Table #

Acctnum: BONLCTN

Template:

Prelogin:

PM:

PB:

Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: Field reading residual chlorine 0.01
PM: $50 field charge

pH 8.59 Temp 25.8°C

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

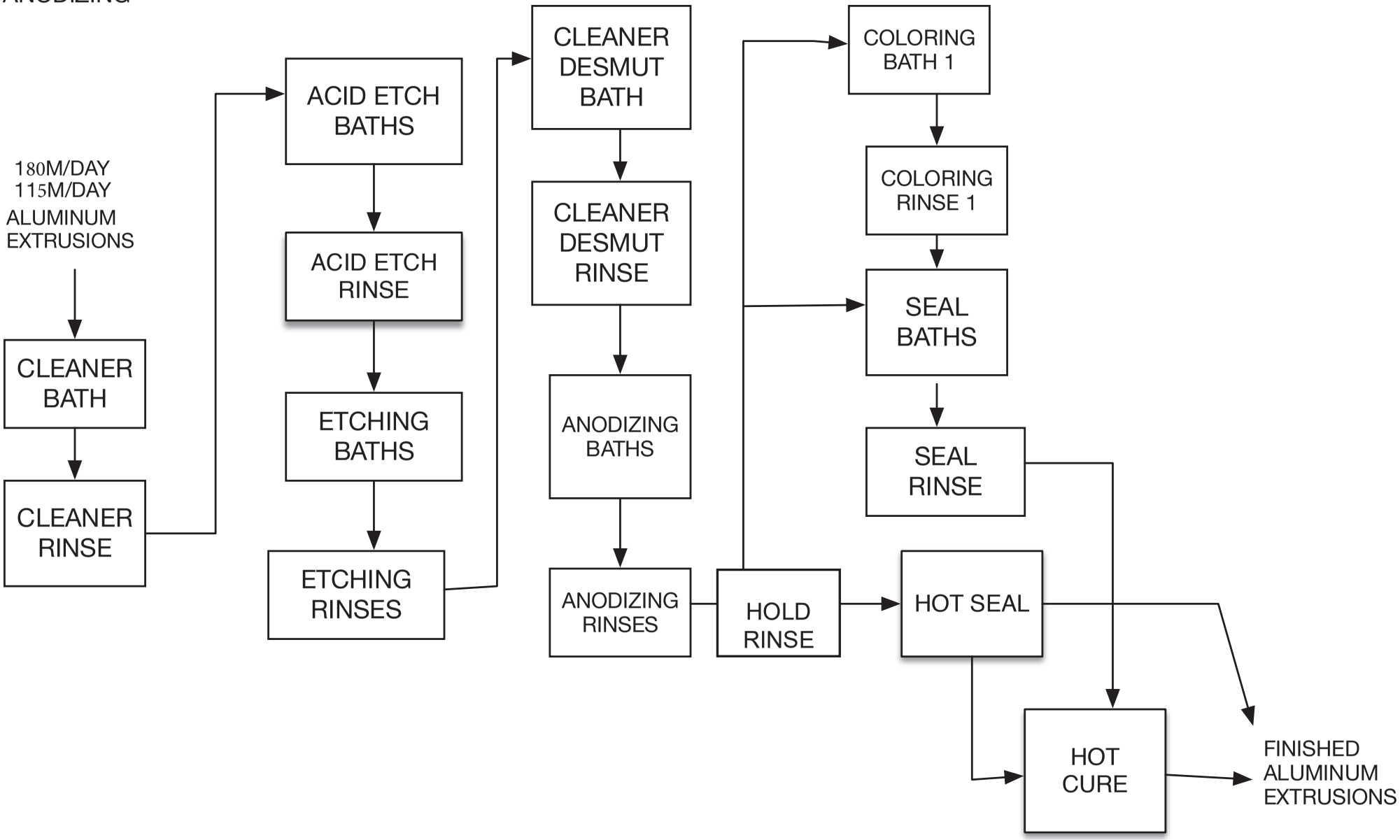
Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Thomas Stinson	9-8-21	1215		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/8/21 Time: 1215
				Hold:
				Condition: NCF / OK

EXHIBIT 3
BONNELL CARTHAGE, TN
ANODIZING

TN0002593



TOP # MAX.
BOTTOM # Average
M = 1000 pounds

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	TN0002593	Bonnell Aluminum, Inc.	

Form 1 NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

GENERAL INFORMATION

SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))

Activities Requiring an NPDES Permit

1.1 Applicants *Not Required* to Submit Form 1

1.1.1	Is the facility a new or existing **publicly owned treatment works**? If yes, STOP. Do NOT complete Form 1. Complete Form 2A. ☑ No	1.1.2	Is the facility a new or existing **treatment works treating domestic sewage**? If yes, STOP. Do NOT complete Form 1. Complete Form 2S. ☑ No

1.2 Applicants *Required* to Submit Form 1

1.2.1	Is the facility a **concentrated animal feeding operation** or a **concentrated aquatic animal production facility?** ☐ Yes ➔ Complete Form 1 ***and*** Form 2B. ☑ No	1.2.2	Is the facility an **existing** manufacturing, commercial, mining, or silvicultural **facility** that **is currently discharging process wastewater**? ☑ Yes ➔ Complete Form 1 ***and*** Form 2C. ☐ No
1.2.3	Is the facility a **new** manufacturing, commercial, mining, or silvicultural **facility** that has **not yet commenced to discharge**? ☐ Yes ➔ Complete Form 1 ***and*** Form 2D. ☑ No	1.2.4	Is the facility a **new or existing** manufacturing, commercial, mining, or silvicultural **facility** that **discharges only nonprocess wastewater**? ☐ Yes ➔ Complete Form 1 ***and*** Form 2E. ☑ No
1.2.5	Is the facility a **new or existing facility** whose discharge is composed entirely of **stormwater associated with industrial activity** or whose discharge is composed of **both stormwater and non-stormwater**? ☐ Yes ➔ Complete Form 1 ***and*** Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15). ☑ No		

SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))

Name, Mailing Address, and Location

2.1 Facility Name

Bonnell Aluminum, Inc.

2.2 EPA Identification Number

2.3 Facility Contact

Name (first and last)	Title	Phone number
Barry Cohoon	Environmental Manager	(615) 683-8291

Email address
Barry.Cohoon@bonnellaluminum.com

2.4 Facility Mailing Address

Street or P.O. box
P.O. Box 279

City or town	State	ZIP code
Carthage	TN	37030

Name, Mailing Address, and Location Continued

2.5 **Facility Location**

Street, route number, or other specific identifier
54 Bonnell Lane

County name	County code (if known)	
Smith	80	

City or town	State	ZIP code
Brush Creek	TN	38547

SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))

SIC and NAICS Codes

3.1

SIC Code(s)	**Description** (optional)
3354	Aluminum Extruded Products
3341	Secondary Smelting & Refining Non-Ferrous Metals
3471	Anodizing and Coloring
3446	Architectural & Ornamental Metal Work

3.2

NAICS Code(s)	**Description** (optional)
331318	other Aluminum Rolling, Drawing, and Extruding
331314	Secondary Smelting and Alloying of Aluminum
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring
332323	Ornamental and Architectural Metal Work Manufacturing

SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))

Operator Information

4.1 **Name of Operator**

Bonnell Aluminum, Inc.

4.2 Is the name you listed in Item 4.1 also the owner?

☐ Yes ☑ No

4.3 **Operator Status**

☐ Public—federal ☐ Public—state ☐ Other public (specify)_____

☑ Private ☐ Other (specify) _____

4.4 **Phone Number of Operator**

(615) 683-8291

Operator Information Continued

4.5 **Operator Address**

Street or P.O. Box
P.O. Box 279

City or town	State	ZIP code
Carthage	TN	37030

Email address of operator
Barry.Cohoon@bonnellaluminum.com

SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))

Indian Land

5.1 Is the facility located on Indian Land?

☐ Yes ☑ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	TN0002593	Bonnell Aluminum, Inc.	

SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

Existing Environmental Permits

6.1 **Existing Environmental Permits** (check all that apply and print or type the corresponding permit number for each)

☑ NPDES (discharges to surface water) TN0002593	☐ RCRA (hazardous wastes)	☐ UIC (underground injection of fluids)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☑ Other (specify) Title V Permit No. 571158

SECTION 7. MAP (40 CFR 122.21(f)(7))

Map

7.1 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.)

☑ Yes ☐ No ☐ CAFO—Not Applicable (See requirements in Form 2B.)

SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))

Nature of Business

8.1 Describe the nature of your business.

The Bonnell Aluminum, Inc. Carthage facility is an aluminum extrusion plant. Aluminum logs and billet are cast from one of two reverberatory furnaces, then extruded into long aluminum shapes. The extrusions can be anodized, painted, fabricated, or processed without finishing.

SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))

Cooling Water Intake Structures

9.1 Does your facility use cooling water?

☑ Yes ☐ No ➔ SKIP to Item 10.1.

9.2 Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)

city water

SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))

Variance Requests

10.1 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

☐ Fundamentally different factors (CWA Section 301(n))	☐ Water quality related effluent limitations (CWA Section 302(b)(2))
☐ Non-conventional pollutants (CWA Section 301(c) and (g))	☐ Thermal discharges (CWA Section 316(a))
☑ Not applicable	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	TN0002593	Bonnell Aluminum, Inc.	

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

11.1 In Column 1 below, mark the sections of Form 1 that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2
☑ Section 1: Activities Requiring an NPDES Permit	☐ w/ attachments
☑ Section 2: Name, Mailing Address, and Location	☐ w/ attachments
☑ Section 3: SIC Codes	☐ w/ attachments
☑ Section 4: Operator Information	☐ w/ attachments
☑ Section 5: Indian Land	☐ w/ attachments
☑ Section 6: Existing Environmental Permits	☐ w/ attachments
☑ Section 7: Map	☑ w/ topographic map ☐ w/ additional attachments
☑ Section 8: Nature of Business	☐ w/ attachments
☑ Section 9: Cooling Water Intake Structures	☐ w/ attachments
☑ Section 10: Variance Requests	☐ w/ attachments
☑ Section 11: Checklist and Certification Statement	☐ w/ attachments

11.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Brett M. Burris	Plant Manager
Signature	**Date signed**
Brett M Burris	11-1-21

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	TN0002593	Bonnell Aluminum, Inc.	

Form 2C NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below.

Outfall Number	Receiving Water Name	Latitude	Longitude
001	Caney Fork River	36° 12′ 18″ N	85° 56′ 31″ E
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″

SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))

Line Drawing

2.1 Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C–1 at end of instructions for example.)

☑ Yes ☐ No

SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))

Average Flows and Treatment

3.1 For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.

****Outfall Number**** 001

Operations Contributing to Flow

Operation	Average Flow
see Section 3.1 Attachment	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

Section 3.1 Attachment

NPDES Permit Application—Bonnell Aluminum, Inc.—Outfall 001

Please note that all flows and treatment capacities are long-term averages.

Operations Contributing to Flow—System 1

Operation	Average Flow
Maintenance and Air Compressor Blowdown	0.00048 MGD
Casting Quench	0.019 MGD
Extrusion Press	0.0030 MGD

Treatment—System 1

Description	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other than by Discharge
Oil skimmer (15 gpm)	N/A	Oil recycler
WWT (Treatment System 2)	see Treatment System 2	see Treatment System 2

Operations Contributing to Flow—System 2

Operation	Average Flow
Cleaner rinse	0.0014 MGD
Caustic etch rinse	0.0029 MGD
Anodizing rinses	0.013 MGD
Hold rinse	0.0043 MGD
Seal rinses	0.029 MGD
Polymer solution makeup	0.0086 MGD
Die burnout	0.0029 MGD

Treatment—System 2

Description	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other than by Discharge
Neutralization (81 gpm)	2-K	N/A
Flocculation (81 gpm)	1-G	N/A
Clarification (81 gpm)	1-U	N/A
Filter press (32,877 lb/da)	5-R	Nonhazardous landfill

Operations Contributing to Flow—System 3

Operation	Average Flow
Acid etch rinse	0.012 MGD
Anodizing desmut rinse	0.0029 MGD
Hot cure tank	0.0026 MGD

Treatment—System 3

Description	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other than by Discharge
Coagulation (12 gpm)	2-D	N/A
Flocculation (12 gpm)	1-G	N/A
Clarification (12 gpm)	1-U	N/A
Ammonia stripping (12 gpm)	1-A	N/A
Equalization (12 gpm)	N/A	N/A
Filter press (3,836 lb/da)	5-R	Nonhazardous landfill
WWT (Treatment System 2)	see Treatment System 2	see Treatment System 2

Operations Contributing to Flow—System 4

Operation	Average Flow
Paintline (chrome-bearing)	0.0042 MGD
Paintline (ammonia- and chrome-bearing)	0.0001 MGD

Treatment—System 4a (chrome-bearing)

Description	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other than by Discharge
Chromium reduction (2.9 gpm)	2-L	N/A
Flocculation (3 gpm)	1-G	N/A
Clarification (3 gpm)	1-U	N/A
Filter press (570 lb/da)	5-R	TSDF
Bag filters (3 gpm)	N/A	TSDF

Treatment—System 4b (ammonia- and chrome-bearing)

Description	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other than by Discharge
Ammonia treatment (0.07 gpm)	N/A	N/A
Chromium reduction (0.07 gpm)	2-L	N/A
Flocculation (3 gpm)	1-G	N/A
Clarification (3 gpm)	1-U	N/A
Filter press (570 lb/da)	5-R	TSDF
Bag filters (3 gpm)	N/A	N/A

Average Flows and Treatment Continued

3.1 cont.

****Outfall Number**** _____

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

****Outfall Number**** _____

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

System Users

3.2 Are you applying for an NPDES permit to operate a privately owned treatment works?

☐ Yes ☑ No ➔ SKIP to Section 4.

3.3 Have you attached a list that identifies each user of the treatment works?

☐ Yes ☐ No

SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

Intermittent Flows

4.1 Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal?

☑ Yes ☐ No ➔ SKIP to Section 5.

4.2 Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.

Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
		Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
001	Hot cure tank	1 days/week	12 months/year	0.0026 mgd	0.0026 mgd	1 days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days

SECTION 5. PRODUCTION (40 CFR 122.21(g)(5))

Applicable ELGs

5.1 Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility?

☑ Yes ☐ No ➔ SKIP to Section 6.

5.2 Provide the following information on applicable ELGs.

ELG Category	ELG Subcategory	Regulatory Citation
Aluminum Forming	Aluminum Extruding	40 CFR 467.32

Production-Based Limitations

5.3 Are any of the applicable ELGs expressed in terms of production (or other measure of operation)?

☑ Yes ☐ No ➔ SKIP to Section 6.

5.4 Provide an actual measure of daily production expressed in terms and units of applicable ELGs.

Outfall Number	Operation, Product, or Material	Quantity per Day	Unit of Measure
001	Extruding Aluminum	385,000	pounds
	See attached figures for other unit process mass quantities.		

SECTION 6. IMPROVEMENTS (40 CFR 122.21(g)(6))

Upgrades and Improvements

6.1 Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☑ No ➔ SKIP to Item 6.3.

6.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

6.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? *(optional item)*

☐ Yes ☑ No ☐ Not applicable

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(g)(7))

Effluent and Intake Characteristics

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

Table A. Conventional and Non-Conventional Pollutants

7.1 Are you requesting a waiver from your NPDES permitting authority for one or more of the Table A pollutants for any of your outfalls?

☐ Yes ☑ No ➔ SKIP to Item 7.3.

7.2 If yes, indicate the applicable outfalls below. Attach waiver request and other required information to the application.

Outfall Number _____ Outfall Number _____ Outfall Number _____

7.3 Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?

☑ Yes ☐ No; a waiver has been requested from my NPDES permitting authority for all pollutants at all outfalls.

Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants

7.4 Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)

☑ Yes ☐ No ➔ SKIP to Item 7.8.

7.5 Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?

☑ Yes ☐ No

7.6 List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.

Primary Industry Category	Required GC/MS Fraction(s) (Check applicable boxes.)			
331318	☑ Volatile	☑ Acid	☑ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide

Effluent and Intake Characteristics Continued

7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☑ Yes ☐ No
7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☑ Yes ☐ No
7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☑ Yes ☐ No
7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? ☐ Yes ➔ Note that you qualify at the top of Table B, then SKIP to Item 7.12. ☑ No
7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☑ Yes ☐ No
Table C. Certain Conventional and Non-Conventional Pollutants	
7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed on Table C for all outfalls? ☑ Yes ☐ No
7.13	Have you completed Table C by providing (1) quantitative data for those pollutants that are limited either directly or indirectly in an ELG and/or (2) quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☑ Yes ☐ No
Table D. Certain Hazardous Substances and Asbestos	
7.14	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☑ Yes ☐ No
7.15	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) by providing quantitative data, if available? ☐ Yes N/A ☐ No
Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)	
7.16	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes ➔ Complete Table E. ☑ No ➔ SKIP to Section 8.
7.17	Have you completed Table E by reporting *qualitative* data for TCDD? ☐ Yes ☐ No

SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(g)(9))

Used or Manufactured Toxics

8.1	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☑ Yes ☐ No ➔ SKIP to Section 9.
8.2	List the pollutants below. 1. chromium (total) 4. nickel (total) 7. 2. copper (total) 5. 8. 3. lead (total) 6. 9.

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(g)(11))

Biological Toxicity Tests

9.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) on a receiving water in relation to your discharge?

☐ Yes ☑ No ➔ SKIP to Section 10.

9.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(g)(12))

Contract Analyses

10.1 Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm?

☑ Yes ☐ No ➔ SKIP to Section 11.

10.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	PACE National		
Laboratory address	12065 Lebanon Road Mt. Juliet, TN 37122		
Phone number	(615) 773-9738		
Pollutant(s) analyzed	All analyses except pH		

SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(g)(13))

Additional Information

11.1 Has the NPDES permitting authority requested additional information?

☐ Yes ☑ No ➔ SKIP to Section 12.

11.2 List the information requested and attach it to this application.

1.	4.
2.	5.
3.	6.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	TN0002593	Bonnell Aluminum	

SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

12.1 In Column 1 below, mark the sections of Form 2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.

Column 1	Column 2	
☑ Section 1: Outfall Location	☐ w/ attachments	
☑ Section 2: Line Drawing	☑ w/ line drawing	☐ w/ additional attachments
☑ Section 3: Average Flows and Treatment	☑ w/ attachments	☐ w/ list of each user of privately owned treatment works
☑ Section 4: Intermittent Flows	☐ w/ attachments	
☑ Section 5: Production	☑ w/ attachments	
☐ Section 6: Improvements	☐ w/ attachments	☐ w/ optional additional sheets describing any additional pollution control plans
☑ Section 7: Effluent and Intake Characteristics	☐ w/ request for a waiver and supporting information ☐ w/ small business exemption request ☑ w/ Table A ☑ w/ Table C ☑ w/ Table E	☐ w/ explanation for identical outfalls ☐ w/ other attachments ☑ w/ Table B ☑ w/ Table D ☑ w/ analytical results as an attachment
☑ Section 8: Used or Manufactured Toxics	☐ w/ attachments	
☑ Section 9: Biological Toxicity Tests	☐ w/ attachments	
☑ Section 10: Contract Analyses	☐ w/ attachments	
☐ Section 11: Additional Information	☐ w/ attachments	
☑ Section 12: Checklist and Certification Statement	☐ w/ attachments	

12.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Brett M. Burris	Plant Manager
Signature	**Date signed**
Brett M. Burris	11-1-21

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	TN0002593	Bonnell Aluminum	001

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TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii)) [1]

	Pollutant	Waiver Requested (if applicable)	Units (specify)		Effluent				Intake (Optional)	
					Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you have applied to your NPDES permitting authority for a waiver for *all* of the pollutants listed on this table for the noted outfall.									
1.	Biochemical oxygen demand (BOD_5)	☐	Concentration	mg/l	27.4			1		
			Mass	lb/da	23.3			1		
2.	Chemical oxygen demand (COD)	☐	Concentration	mg/l	93.8			1		
			Mass	lb/da	79.8			1		
3.	Total organic carbon (TOC)	☐	Concentration	mg/l	28.1			1		
			Mass	lb/da	23.9			1		
4.	Total suspended solids (TSS)	☐	Concentration	mg/l	26.2			1		
			Mass	lb/da	22.3			1		
5.	Ammonia (as N)	☐	Concentration	mg/l	1.97			1		
			Mass	lb/da	1.67			1		
6.	Flow	☐	Rate	MGD	0.265		0.1125	365		
7.	Temperature (winter)	☐	°C	°C				N/A		
	Temperature (summer)	☐	°C	°C	25.8			1		
8.	pH (minimum)	☐	Standard units	s.u.	7.1			365		
	pH (maximum)	☐	Standard units	s.u.	8.9			365		

[1] 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).

NOTE: Mass calculations based upon 0.102 MGD flow on the day of sampling, June 23, 2021.

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	TN0002593	Bonnell Aluminum	001

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.											
Section 1. Toxic Metals, Cyanide, and Total Phenols												
1.1	Antimony, total (7440-36-0)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
1.2	Arsenic, total (7440-38-2)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
1.3	Beryllium, total (7440-41-7)	☑	☐	☑	Concentration	mg/l	<0.00200			1		
					Mass	lb/da	<0.0017					
1.4	Cadmium, total (7440-43-9)	☑	☐	☑	Concentration	mg/l	<0.00200			1		
					Mass	lb/da	<0.0017					
1.5	Chromium, total (7440-47-3)	☑	☑	☐	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
1.6	Copper, total (7440-50-8)	☑	☑	☐	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
1.7	Lead, total (7439-92-1)	☑	☑	☐	Concentration	mg/l	<0.00500			1		
					Mass	lb/da	<0.0042					
1.8	Mercury, total (7439-97-6)	☑	☐	☑	Concentration	mg/l	<0.000200			1		
					Mass	lb/da	<0.00017					
1.9	Nickel, total (7440-02-0)	☑	☑	☐	Concentration	mg/l	0.0144			1		
					Mass	lb/da	0.0123					
1.10	Selenium, total (7782-49-2)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
1.11	Silver, total (7440-22-4)	☑	☐	☐	Concentration	mg/l	<0.00500			1		
					Mass	lb/da	<0.0042					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
1.13	Zinc, total (7440-66-6)	☑	☐	☑	Concentration	mg/l	<0.0500			1		
					Mass	lb/da	<0.042					
1.14	Cyanide, total (57-12-5)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
1.15	Phenols, total	☑	☐	☑	Concentration	mg/l	<0.0400			1		
					Mass	lb/da	<0.034					
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☑	☐	☑	Concentration	mg/l	<0.0500			1		
					Mass	lb/da	<0.042					
2.2	Acrylonitrile (107-13-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
2.3	Benzene (71-43-2)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.4	Bromoform (75-25-2)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.5	Carbon tetrachloride (56-23-5)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.6	Chlorobenzene (108-90-7)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.7	Chlorodibromomethane (124-48-1)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.8	Chloroethane (75-00-3)	☐	☐	☑	Concentration	mg/l	<0.00500			1		
					Mass	lb/da	<0.0042					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☑	☐	☑	Concentration	mg/l	<0.0500			1		
					Mass	lb/da	<0.042					
2.10	Chloroform (67-66-3)	☑	☐	☑	Concentration	mg/l	<0.00500			1		
					Mass	lb/da	<0.0042					
2.11	Dichlorobromomethane (75-27-4)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.12	1,1-dichloroethane (75-34-3)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.13	1,2-dichloroethane (107-06-2)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.14	1,1-dichloroethylene (75-35-4)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.15	1,2-dichloropropane (78-87-5)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.16	1,3-dichloropropylene (542-75-6)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.17	Ethylbenzene (100-41-4)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.18	Methyl bromide (74-83-9)	☑	☐	☑	Concentration	mg/l	<0.00500			1		
					Mass	lb/da	<0.0042					
2.19	Methyl chloride (74-87-3)	☑	☐	☑	Concentration	mg/l	<0.00250			1		
					Mass	lb/da	<0.0021					
2.20	Methylene chloride (75-09-2)	☑	☐	☑	Concentration	mg/l	<0.00500			1		
					Mass	lb/da	<0.0042					
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☐	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☑	☐	☑	Concentration	mg/l	<0.00100	J4 qualifier		1		
					Mass	lb/da	<0.00085					
2.23	Toluene (108-88-3)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.24	1,2-trans-dichloroethylene (156-60-5)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.25	1,1,1-trichloroethane (71-55-6)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.26	1,1,2-trichloroethane (79-00-5)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.27	Trichloroethylene (79-01-6)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
2.28	Vinyl chloride (75-01-4)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.2	2,4-dichlorophenol (120-83-2)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.3	2,4-dimethylphenol (105-67-9)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.4	4,6-dinitro-o-cresol (534-52-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.5	2,4-dinitrophenol (51-28-5)	☐	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.7	4-nitrophenol (100-02-7)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.8	p-chloro-m-cresol (59-50-7)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.9	Pentachlorophenol (87-86-5)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.10	Phenol (108-95-2)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
3.11	2,4,6-trichlorophenol (88-05-2)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☑	☐	☐	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.2	Acenaphthylene (208-96-8)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.3	Anthracene (120-12-7)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.4	Benzidine (92-87-5)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.5	Benzo (a) anthracene (56-55-3)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.6	Benzo (a) pyrene (50-32-8)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.8	Benzo (ghi) perylene (191-24-2)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.9	Benzo (k) fluoranthene (207-08-9)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.11	Bis (2-chloroethyl) ether (111-44-4)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☑	☑	☐	Concentration	mg/l	0.0174			1		
					Mass	lb/da	0.0148					
4.14	4-bromophenyl phenyl ether (101-55-3)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.15	Butyl benzyl phthalate (85-68-7)	☑	☐	☑	Concentration	mg/l	<0.00300			1		
					Mass	lb/da	<0.0026					
4.16	2-chloronaphthalene (91-58-7)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.18	Chrysene (218-01-9)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.19	Dibenzo (a,h) anthracene (53-70-3)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.21	1,3-dichlorobenzene (541-73-1)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.22	1,4-dichlorobenzene (106-46-7)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.23	3,3-dichlorobenzidine (91-94-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.24	Diethyl phthalate (84-66-2)	☑	☐	☑	Concentration	mg/l	<0.00300			1		
					Mass	lb/da	<0.0026					
4.25	Dimethyl phthalate (131-11-3)	☑	☐	☑	Concentration	mg/l	<0.00300			1		
					Mass	lb/da	<0.0026					
4.26	Di-n-butyl phthalate (84-74-2)	☑	☐	☑	Concentration	mg/l	<0.00300			1		
					Mass	lb/da	<0.0026					
4.27	2,4-dinitrotoluene (121-14-2)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.28	2,6-dinitrotoluene (606-20-2)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.29	Di-n-octyl phthalate (117-84-0)	☑	☐	☑	Concentration	mg/l	<0.00300			1		
					Mass	lb/da	<0.0026					
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.31	Fluoranthene (206-44-0)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.32	Fluorene (86-73-7)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.34	Hexachlorobutadiene (87-68-3)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.35	Hexachlorocyclopentadiene (77-47-4)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.36	Hexachloroethane (67-72-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.38	Isophorone (78-59-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.39	Naphthalene (91-20-3)	☑	☐	☑	Concentration	mg/l	<0.00100			1		
					Mass	lb/da	<0.00085					
4.40	Nitrobenzene (98-95-3)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.41	N-nitrosodimethylamine (62-75-9)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.42	N-nitrosodi-n-propylamine (621-64-7)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.43	N-nitrosodiphenylamine (86-30-6)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
4.44	Phenanthrene (85-01-8)	☑	☐	☑	Concentration	mg/l	<.00100			1		
					Mass	lb/da	<0.00085					
4.45	Pyrene (129-00-0)	☑	☐	☑	Concentration	mg/l	<.00100			1		
					Mass	lb/da	<0.00085					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☑	☐	☑	Concentration	mg/l	<0.0100			1		
					Mass	lb/da	<0.0085					
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☐	☐	☑	Concentration							
					Mass							
5.2	α-BHC (319-84-6)	☐	☐	☑	Concentration							
					Mass							
5.3	β-BHC (319-85-7)	☐	☐	☑	Concentration							
					Mass							
5.4	γ-BHC (58-89-9)	☐	☐	☑	Concentration							
					Mass							
5.5	δ-BHC (319-86-8)	☐	☐	☑	Concentration							
					Mass							
5.6	Chlordane (57-74-9)	☐	☐	☑	Concentration							
					Mass							
5.7	4,4'-DDT (50-29-3)	☐	☐	☑	Concentration							
					Mass							
5.8	4,4'-DDE (72-55-9)	☐	☐	☑	Concentration							
					Mass							
5.9	4,4'-DDD (72-54-8)	☐	☐	☑	Concentration							
					Mass							
5.10	Dieldrin (60-57-1)	☐	☐	☑	Concentration							
					Mass							
5.11	α-endosulfan (115-29-7)	☐	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☐	☐	☑	Concentration							
					Mass							
5.13	Endosulfan sulfate (1031-07-8)	☐	☐	☑	Concentration							
					Mass							
5.14	Endrin (72-20-8)	☐	☐	☑	Concentration							
					Mass							
5.15	Endrin aldehyde (7421-93-4)	☐	☐	☑	Concentration							
					Mass							
5.16	Heptachlor (76-44-8)	☐	☐	☑	Concentration							
					Mass							
5.17	Heptachlor epoxide (1024-57-3)	☐	☐	☑	Concentration							
					Mass							
5.18	PCB-1242 (53469-21-9)	☐	☐	☑	Concentration							
					Mass							
5.19	PCB-1254 (11097-69-1)	☐	☐	☑	Concentration							
					Mass							
5.20	PCB-1221 (11104-28-2)	☐	☐	☑	Concentration							
					Mass							
5.21	PCB-1232 (11141-16-5)	☐	☐	☑	Concentration							
					Mass							
5.22	PCB-1248 (12672-29-6)	☐	☐	☑	Concentration							
					Mass							
5.23	PCB-1260 (11096-82-5)	☐	☐	☑	Concentration							
					Mass							
5.24	PCB-1016 (12674-11-2)	☐	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☐	☐	☑	Concentration							
					Mass							

[1] 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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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you believe all pollutants on Table C to be ***present*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
☐	Check here if you believe all pollutants on Table C to be ***absent*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
1.	Bromide (24959-67-9)	☐	☑	Concentration	mg/l	<100					
				Mass	lb/da	<85					
2.	Chlorine, total residual	☐	☑	Concentration	mg/l	0.01					
				Mass	lb/da	0.0085					
3.	Color	☑	☐	Concentration	pcu	5.00					
				Mass	N/A	N/A					
4.	Fecal coliform	☐	☑	Concentration	MPN/100ml	<1					
				Mass	N/A	N/A					
5.	Fluoride (16984-48-8)	☐	☑	Concentration	mg/l	<15.0					
				Mass	lb/da	<12.8					
6	Nitrate-nitrite	☐	☑	Concentration	mg/l	<0.100					
				Mass	lb/da	<0.085					
7.	Nitrogen, total organic (as N)	☑	☐	Concentration	mg/l	1.40					
				Mass	lb/da	1.19					
8.	Oil and grease	☐	☑	Concentration	mg/l	<5.56					
				Mass	lb/da	<4.73					
9.	Phosphorus (as P), total (7723-14-0)	☑	☐	Concentration	mg/l	0.169					
				Mass	lb/da	0.14					
10.	Sulfate (as SO_4) (14808-79-8)	☑	☐	Concentration	mg/l	14100					
				Mass	lb/da	11995					
11.	Sulfide (as S)	☐	☑	Concentration	mg/l	<0.0500					
				Mass	lb/da	<0.042					

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO_3) (14265-45-3)	☐	☑	Concentration	mg/l	<3.00			1		
				Mass	lb/da	<2.55					
13.	Surfactants	☑	☐	Concentration	mg/l	4.01		3.885	2		
				Mass	lb/da	3.41					
14.	Aluminum, total (7429-90-5)	☑	☐	Concentration	mg/l	1.61			1		
				Mass	lb/da	1.37					
15.	Barium, total (7440-39-3)	☐	☑	Concentration	mg/l	<0.00500			1		
				Mass	lb/da	<0.0042					
16.	Boron, total (7440-42-8)	☐	☑	Concentration	mg/l	<0.200			1		
				Mass	lb/da	<0.17					
17.	Cobalt, total (7440-48-4)	☐	☑	Concentration	mg/l	<0.0100			1		
				Mass	lb/da	<0.0085					
18.	Iron, total (7439-89-6)	☑	☐	Concentration	mg/l	<0.100			1		
				Mass	lb/da	<0.085					
19.	Magnesium, total (7439-95-4)	☑	☐	Concentration	mg/l	5.51			1		
				Mass	lb/da	4.69					
20.	Molybdenum, total (7439-98-7)	☑	☐	Concentration	mg/l	0.0347			1		
				Mass	lb/da	0.0295					
21.	Manganese, total (7439-96-5)	☑	☐	Concentration	mg/l	0.0138			1		
				Mass	lb/da	0.0117					
22.	Tin, total (7440-31-5)	☐	☑	Concentration	mg/l	<0.0500			1		
				Mass	lb/da	<0.042					
23.	Titanium, total (7440-32-6)	☐	☑	Concentration	mg/l	<0.0500			1		
				Mass	lb/da	<0.042					

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	TN0002593	Bonnell Aluminum	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	**Radioactivity**										
	Alpha, total	☐	☑	Concentration							
				Mass							
	Beta, total	☐	☑	Concentration							
				Mass							
	Radium, total	☐	☑	Concentration							
				Mass							
	Radium 226, total	☐	☑	Concentration							
				Mass							

[1] 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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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☑		
2.	Acetaldehyde	☐	☑		
3.	Allyl alcohol	☐	☑		
4.	Allyl chloride	☐	☑		
5.	Amyl acetate	☐	☑		
6.	Aniline	☐	☑		
7.	Benzonitrile	☐	☑		
8.	Benzyl chloride	☐	☑		
9.	Butyl acetate	☐	☑		
10.	Butylamine	☐	☑		
11.	Captan	☐	☑		
12.	Carbaryl	☐	☑		
13.	Carbofuran	☐	☑		
14.	Carbon disulfide	☐	☑		
15.	Chlorpyrifos	☐	☑		
16.	Coumaphos	☐	☑		
17.	Cresol	☐	☑		
18.	Crotonaldehyde	☐	☑		
19.	Cyclohexane	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☑		
21.	Diazinon	☐	☑		
22.	Dicamba	☐	☑		
23.	Dichlobenil	☐	☑		
24.	Dichlone	☐	☑		
25.	2,2-dichloropropionic acid	☐	☑		
26.	Dichlorvos	☐	☑		
27.	Diethyl amine	☐	☑		
28.	Dimethyl amine	☐	☑		
29.	Dintrobenzene	☐	☑		
30.	Diquat	☐	☑		
31.	Disulfoton	☐	☑		
32.	Diuron	☐	☑		
33.	Epichlorohydrin	☐	☑		
34.	Ethion	☐	☑		
35.	Ethylene diamine	☐	☑		
36.	Ethylene dibromide	☐	☑		
37.	Formaldehyde	☐	☑		
38.	Furfural	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☑		
40.	Isoprene	☐	☑		
41.	Isopropanolamine	☐	☑		
42.	Kelthane	☐	☑		
43.	Kepone	☐	☑		
44.	Malathion	☐	☑		
45.	Mercaptodimethur	☐	☑		
46.	Methoxychlor	☐	☑		
47.	Methyl mercaptan	☐	☑		
48.	Methyl methacrylate	☐	☑		
49.	Methyl parathion	☐	☑		
50.	Mevinphos	☐	☑		
51.	Mexacarbate	☐	☑		
52.	Monoethyl amine	☐	☑		
53.	Monomethyl amine	☐	☑		
54.	Naled	☐	☑		
55.	Naphthenic acid	☐	☑		
56.	Nitrotoluene	☐	☑		
57.	Parathion	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☑		
59.	Phosgene	☐	☑		
60.	Propargite	☐	☑		
61.	Propylene oxide	☐	☑		
62.	Pyrethrins	☐	☑		
63.	Quinoline	☐	☑		
64.	Resorcinol	☐	☑		
65.	Strontium	☐	☑		
66.	Strychnine	☐	☑		
67.	Styrene	☐	☑		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☑		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☑		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☑		
71.	Trichlorofon	☐	☑		
72.	Triethanolamine	☐	☑		
73.	Triethylamine	☐	☑		
74.	Trimethylamine	☐	☑		
75.	Uranium	☐	☑		
76.	Vanadium	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☑		
78.	Xylene	☐	☑		
79.	Xylenol	☐	☑		
80.	Zirconium	☐	☑		

[1] 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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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☑	

BONNELL
ALUMINUM

November 3, 2021

Tennessee Dept. of Environment and Conservation
Division of Water
Via E-mail to: Water.Permit@Tn.gov
Oscar.Montenegro@Tn.gov
Oakley.Hall@Tn.gov

Subject: **Bonnell Aluminum Inc. TN0002593**
54 Bonnell Lane (PO Box 279), Carthage, TN 37030
NPDES Permit Application

Dear Sir or Madam:

Bonnell Aluminum, Inc. (Bonnell) hereby submits the NPDES Permit Application for permit renewal. Bonnell's current permit expires May 31, 2022. Attached you will find the following documents:

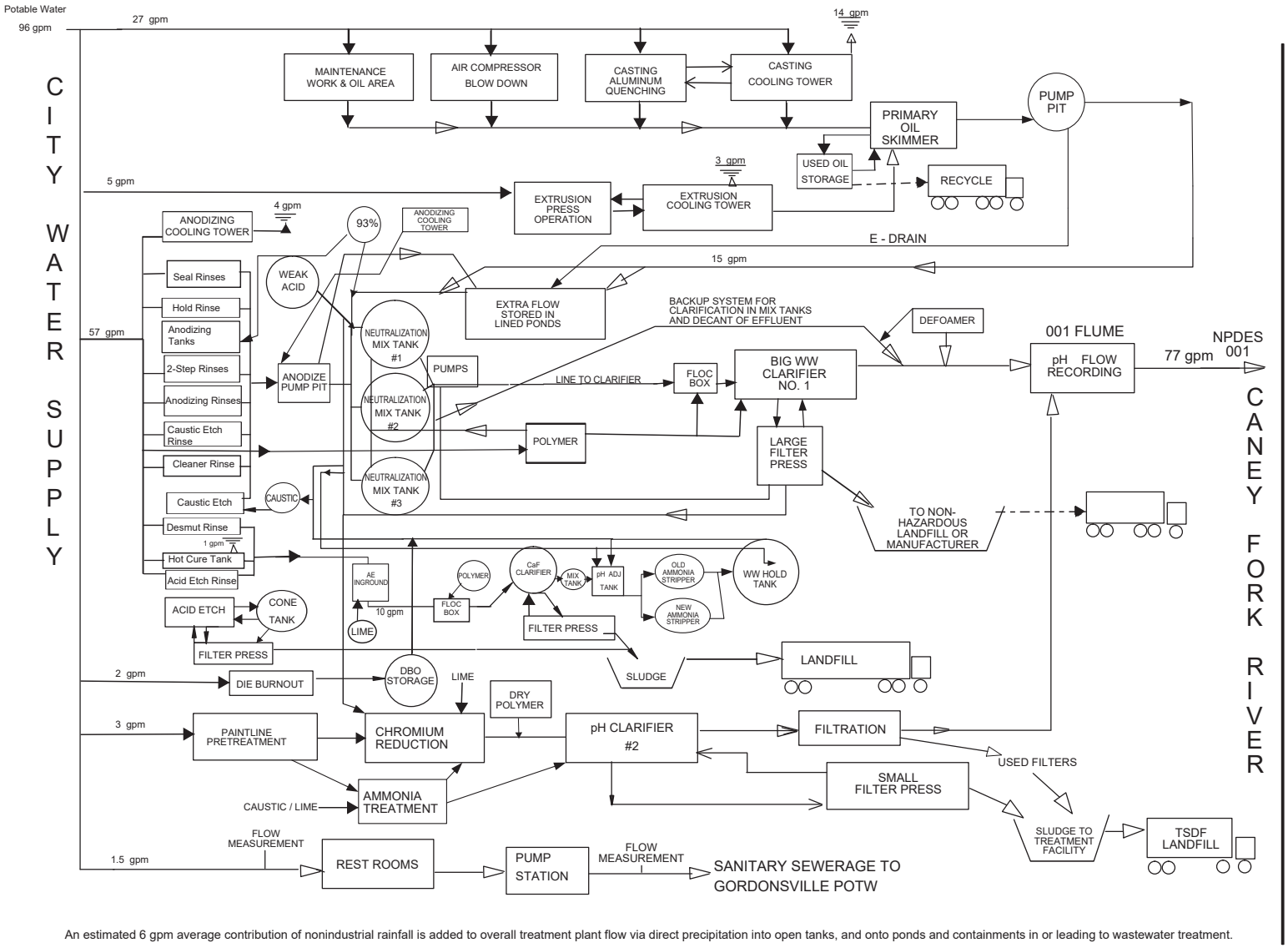
- Application Form 1 (4 pages)
- Application Form 2C (45 pages)
- Application Form CN-1090 (1 page)
- Analytical Results PACE L1369870 (46 pages)
- Analytical Results PACE L1400412 (8 pages)
- Flow Diagram WW (1 page)
- Flow Diagram Production (1 page)
- Flow Diagram Anodizing (1 page)
- Flow Diagram Paint Line (1 page)
- Map USGS Topo (1 page)

If there are any questions, please direct them to Barry Cohoon 615-683-2267 or via email at Barry.cohoon@bonnellaluminum.com.

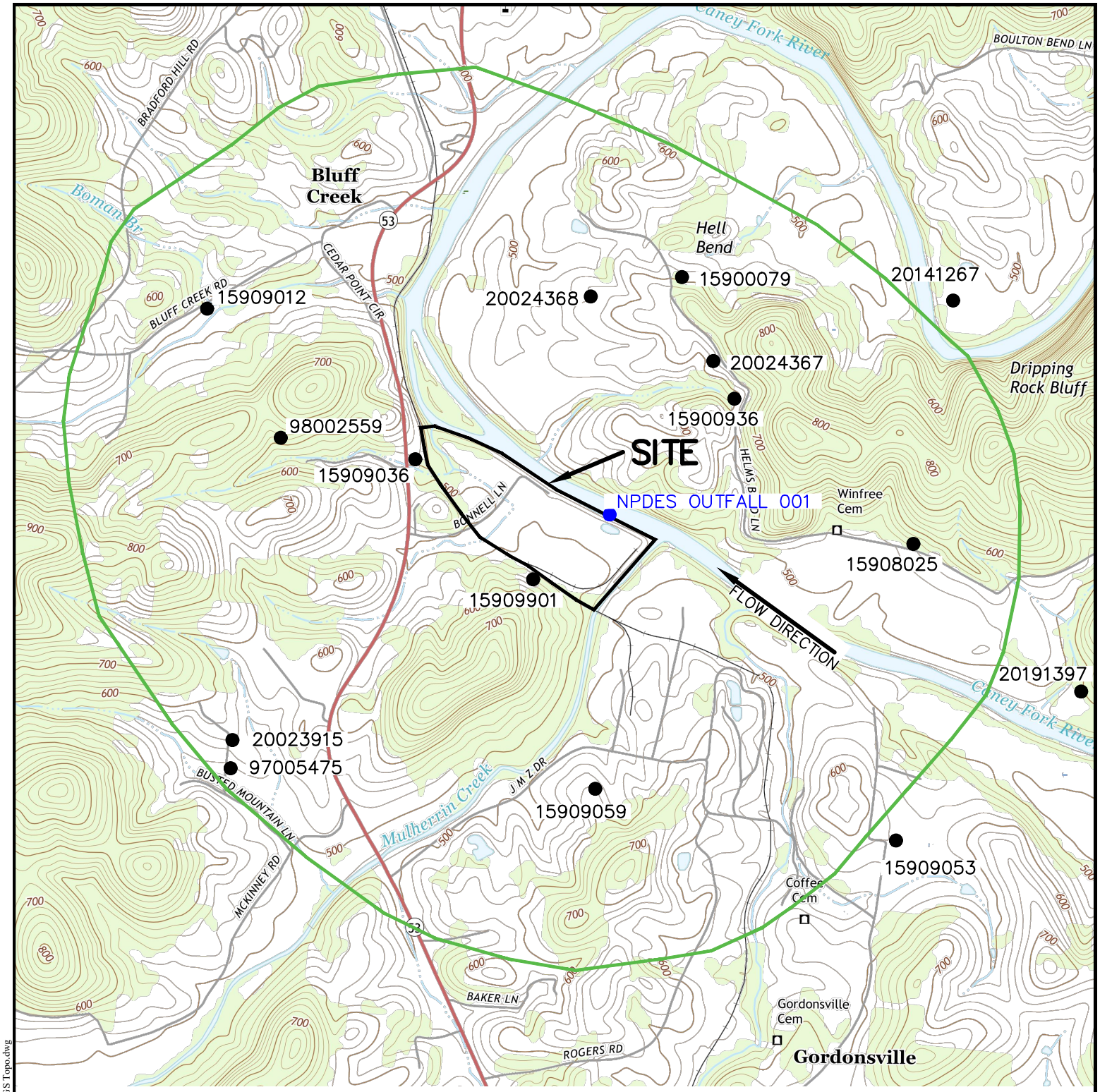
Sincerely,

Barry Cohoon
Environmental Manager

Bonnell Aluminum, Inc. - Carthage, TN ----- WWT Flow Diagram TN 0002593



An estimated 6 gpm average contribution of nonindustrial rainfall is added to overall treatment plant flow via direct precipitation into open tanks, and onto ponds and containments in or leading to wastewater treatment.



LEGEND

- GROUNDWATER WELL LOCATION (APPROX.)
- OUTFALL LOCATION 36° 12'16" North 85° 56'31" West
- PROPERTY BOUNDARY
- 1 MILE OFFSET OF PROPERTY BOUNDARY (APPROX.)

LOCATION MAP

SCALE: 1"=2000'

2000 0 2000 4000

SCALE IN FEET

N

BONNELL ALUMINUM

54 BONNELL LANE
BRUSH CREEK, TENNESSEE

SITE LOCATION MAP

ADVANCED GeoServices
A MONTROSE ENVIRONMENTAL GROUP COMPANY
1055 ANDREW DRIVE, SUITE A
WEST CHESTER, PENNSYLVANIA 19380
Tel: 610.840.9100 Fax: 610.840.9199 Web: www.advancedgeoservices.com

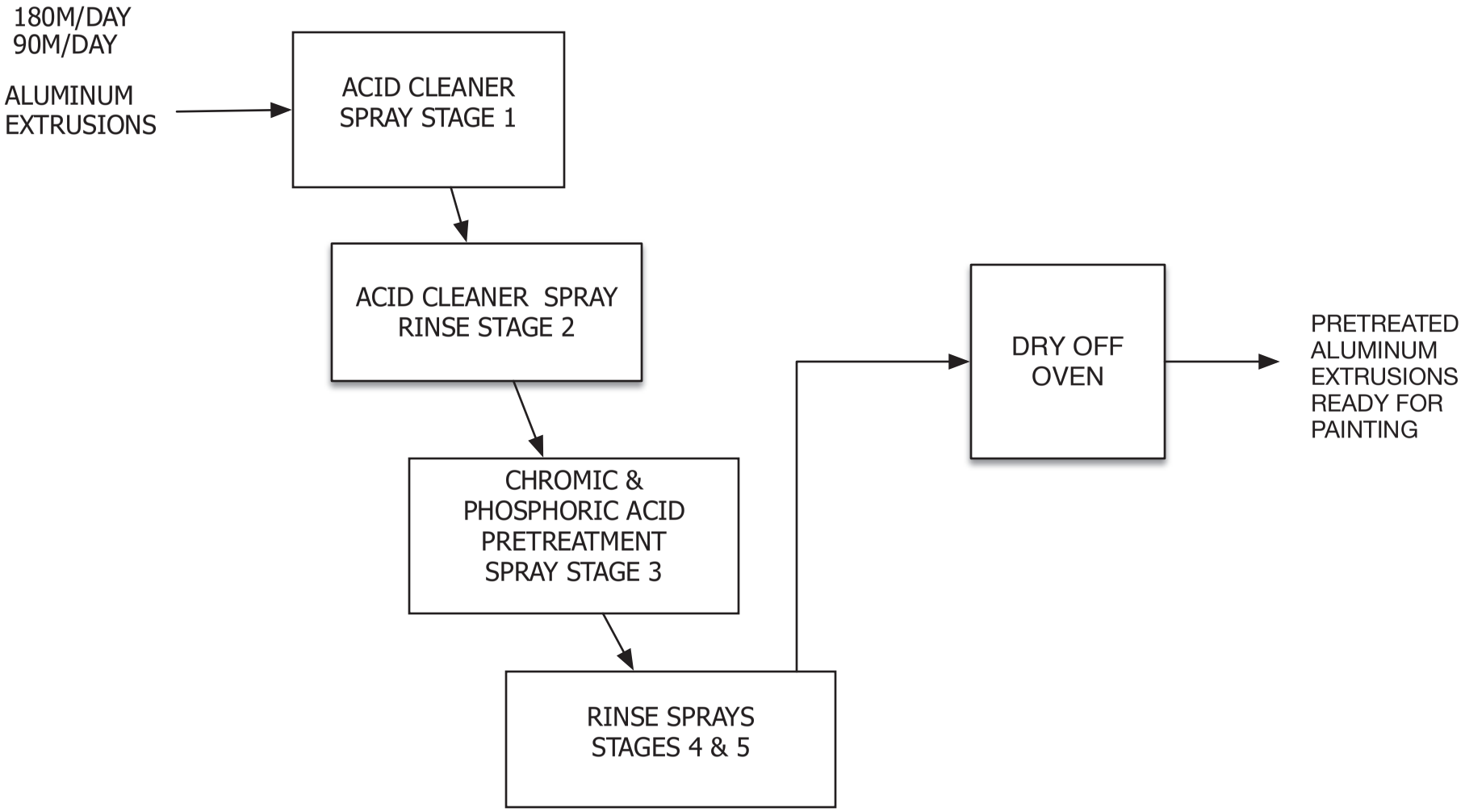
Scale:	AS SHOWN
Drawn By:	CEP
Checked By:	REB
Project Mgr.:	JWD
Originated By:	REB
Project No.:	2021-4257
Drawing Date:	SEPTEMBER 2021
Sheet No.:	0 OF 0
Revision Number:	0

FIGURE 1

G:\Projects\2021\2021425 7 - Bonnell Aluminum\CAD\DWG\SHEETS\ENV\USGS Topo.dwg

EXHIBIT 2
BONNELL CARTHAGE, TN
PAINT LINE FLOW

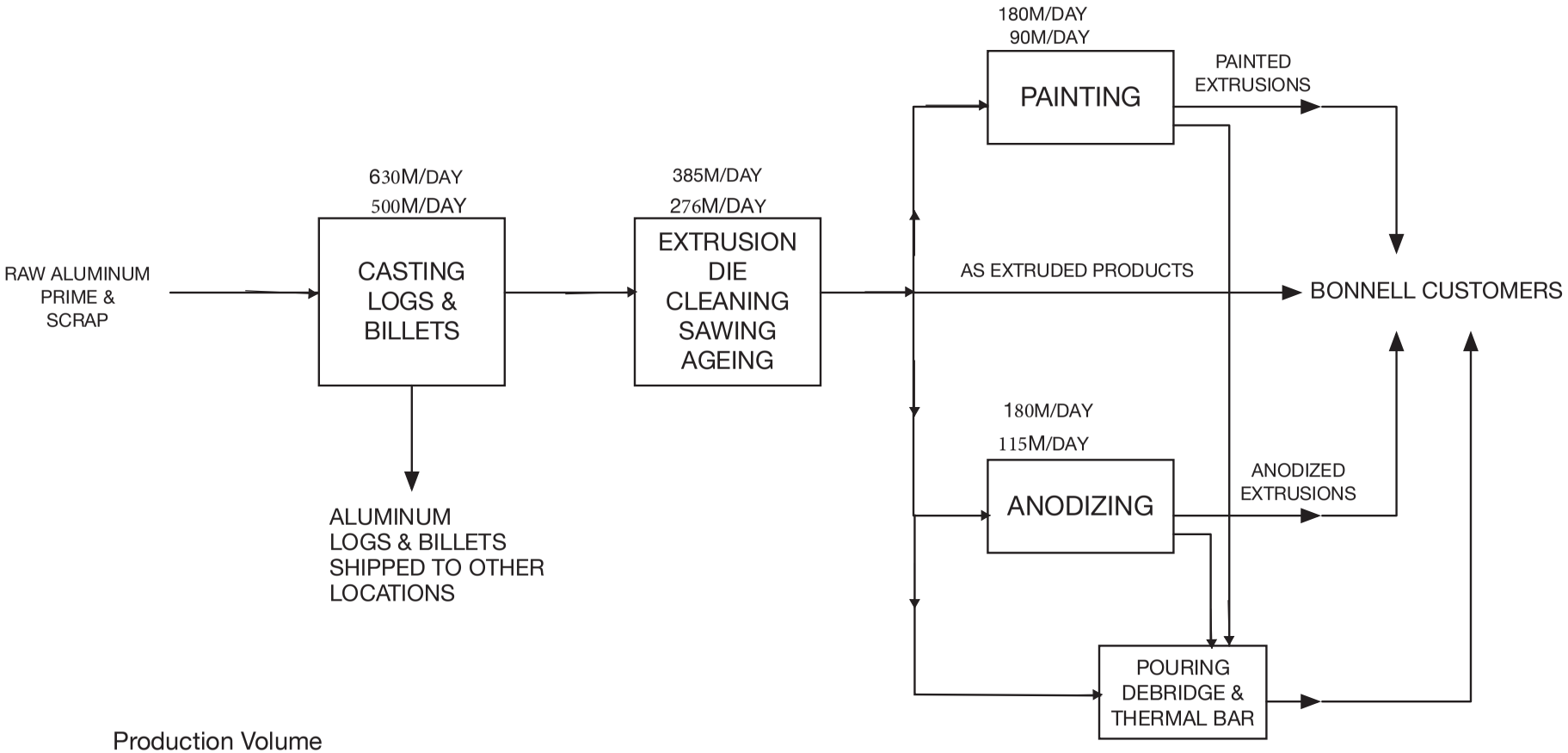
TN0002593



TOP # MAX.
BOTTOM # Average
M = 1000 pounds

EXHIBIT 1
BONNELL CARTHAGE, TN
OPERATIONS FLOW & PRODUCTION

TN0002593



Production Volume
Top # is Max.
Bottom # is Average
M = 1000 LBS