

Gage, Hannah

From: Johnson, Lindsay
Sent: Thursday, February 16, 2017 10:50 AM
To: Gage, Hannah
Subject: FW: AR0021580_Rea Wire ARP00020 Early March 2017 semi annual Pretreatment report_20170216
Attachments: Algonquin Sept 2016 - Feb 2017 Waste Water Report.pdf

I forgot to Cc you in this. 😊

From: Johnson, Lindsay
Sent: Thursday, February 16, 2017 10:49 AM
To: 'jrausch@reawire.com'
Cc: Yates, Adam; Leamons, Bryan; McWilliams, Carrie
Subject: AR0021580_Rea Wire ARP00020 Early March 2017 semi annual Pretreatment report_20170216

Good Morning,

Rea Wire's March 2017 semi-annual Pretreatment report was received early, reviewed, and deemed complete and compliant with the reporting requirements in 40 CFR 403.12(e) and with the Aluminum Forming operations in 40 CFR 467.35.

It has been recorded that the plant has permanently ceased operations on November 6, 2016, therefore no further actions are required.

Thank you,

*Lindsay Johnson
NPDES Staff Engineer
ADEQ-Office of Water Quality
(501)682-0045*



Rea Magnet Wire Company, Inc.
Algonquin Industries Division
1800 U.S Hwy 61 South
Osceola, AR 72370

February 8, 2017

Mr. Allen Gilliam
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

**Re: Semi-Annual Wastewater Monitoring Report
Rea Magnet Wire Company Inc. — Algonquin Industries Division
Osceola, Arkansas Plant**

Dear Mr. Gilliam:

Please find enclosed the semi-annual wastewater monitoring report for the September 2016 — February 2017 monitoring period including a flow schematic, a copy of the analytical results of the sampling¹, and a process description for the facility. A spreadsheet containing updated limitation calculations for the discharges from the facility will accompany the electronic submittal of this report.

Additionally, please note that the final industrial wastewater discharge from Rea Magnet Wire Company Inc. — Algonquin Industries Division occurred on October 30, 2016 and production at the facility permanently ceased on November 6, 2016; therefore, the facility does not anticipate the need for any future reporting related to wastewater monitoring.

If you need any additional information, please contact me at (260) 421-7440 or by email at ltutton@reawire.com.

Sincerely,

A handwritten signature in black ink that reads "Lewis A. Tutton".

By: Lewis A. Tutton
*Corporate Environmental Manager
Rea Magnet Wire Company Inc.*

Enclosures

cc: James Carlock, Superintendent
Osceola Water Department
PO Box 443
Osceola, Arkansas 72370

¹ At the time of the sampling event, Rea Magnet Wire Company Inc. — Algonquin Industries Division had not determined whether the non-contact cooling water pond would be discharged to the City of Osceola or pumped out by a contractor and shipped offsite; therefore, a sample from the pond (identified as "POND" in the analytical sampling results report) was taken. However, the water in the pond was ultimately pumped out and shipped offsite, so there are no discharges from the pond reported during this monitoring period.

SEMI-ANNUAL REPORT FOR USERS REGULATED BY THE Al & Cu FORMING CATEGORIES

ATTN: Water Div/NPDES Pretreatment

(1) IDENTIFYING INFORMATION

<p>A. LEGAL NAME & MAILING ADDRESS</p> <p>Rea – Algonquin Industries Division 1800 Highway 61 South Osceola, AR 72370</p>	<p>B. FACILITY & LOCATION ADDRESS</p> <p>Rea – Algonquin Industries Division 1800 Highway 61 South Osceola, AR 72370</p>
--	---

<p>C. FACILITY CONTACT: Lew Tutton (ltutton@reawire.com)</p>	<p>TELEPHONE NUMBER: 260-421-7440</p>
---	--

<p>(2) REPORTING PERIOD--FISCAL YEAR</p>	<p>2016 & 2017</p>
---	------------------------

<p>A. MONTHS WHICH REPORTS ARE DUE</p> <p>September & March</p>	<p>B. PERIOD COVERED BY THIS REPORT</p> <p>FROM: September 1, 2016 – February 28, 2017</p>
--	---

(3) DESCRIPTION OF OPERATION

<p>A. Regulated Processes per 40 CFR Part 467 (Aluminum) Subpart A & C and 40 CFR Part 468 (Copper) Subpart A</p> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">PROCESS</th> <th style="text-align: center;">PRODUCTION-OFF/LB</th> <th style="text-align: center;">PRODUCTION DAYS</th> </tr> </thead> <tbody> <tr> <td>Extruded Aluminum (§467.35 Core Die Cleaning)</td> <td style="text-align: center;">154,313</td> <td style="text-align: center;">9/1/2016-11/6/2016 67 days</td> </tr> </tbody> </table>	PROCESS	PRODUCTION-OFF/LB	PRODUCTION DAYS	Extruded Aluminum (§467.35 Core Die Cleaning)	154,313	9/1/2016-11/6/2016 67 days	<p>B. CHANGES: SUMMARIZE ANY CHANGES IN THE REGULATED PROCESSES SINCE THE LAST REPORT. ATTACH AN ADDITIONAL SHEET IF THE SPACE BELOW IS INADEQUATE. PROVIDE A NEW SCHEMATIC IF APPROPRIATE.</p>
PROCESS	PRODUCTION-OFF/LB	PRODUCTION DAYS					
Extruded Aluminum (§467.35 Core Die Cleaning)	154,313	9/1/2016-11/6/2016 67 days					

<p>C. Number of Regular Employees at this Facility: 4 (as of 12/16/2016)</p>	<p>D. [Reserved]</p>
---	-----------------------------

(4) FLOW MEASUREMENT

B. INDIVIDUAL PROCESS WASTESTREAMS DISCHARGED TO POTW

Operation	Average Flow Rate (gpd)	Number of Discharge Days	Batch Discharge Volume	Type of Discharge
Process:				
§467.35 Core-Die Cleaner (Aluminum Extrusion)	5 (estimate)	9 (estimate)	Estimated discharge rate of 5 gallons per die cleaning event and estimated frequency of one die cleaning event per week	Intermittent
§403.6(e) Unregulated:				
Air compressor condensate blowdown	10 (estimate)	67	NA	Intermittent
Steam clean forklift wash area	5 (estimate)	67	NA	Intermittent
§403.6(e) Dilute:				
Sanitary	6,000 (estimate)	67	NA	Continuous

(5) MEASUREMENT OF POLLUTANTS

<p>A. TYPE OF TREATMENT SYSTEM CHECK EACH APPLICABLE BLOCK</p> <p><input type="checkbox"/> Neutralization</p> <p><input type="checkbox"/> Chemical Precipitation and Sedimentation</p> <p><input type="checkbox"/> Chromium Reduction</p> <p><input type="checkbox"/> Cyanide Destruction</p> <p><input type="checkbox"/> Other _____</p> <p><input checked="" type="checkbox"/> None</p>	<p>B. COMMENTS ON TREATMENT SYSTEM</p>
---	--

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS ON THE EFFLUENT FROM ALL REGULATED PROCESSES--CORE & ANCILLARY--(AFTER TREATMENT, IF APPLICABLE). ATTACH THE LAB ANALYSIS, WHICH SHOWS A MAXIMUM, TABULATE ALL THE ANALYTICAL DATA COLLECTED DURING THE REPORT PERIOD IN THE SPACE PROVIDED BELOW. ZERO CONCENTRATIONS ARE NOT ACCEPTABLE; LIST THE DETECTION LIMIT IF CONCENTRATION WAS BELOW DETECTION LIMIT.

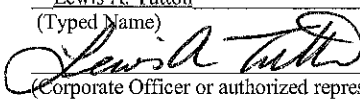
Concentrations (mg/l)	Cr		Cu	Pb	Ni	Zn		TTO	O&G		CN	
Die Cleaning Allowable Concentrations ¹	9.1	3.7	NA	NA	NA	29.8	12.8	NA	1094	535	6.0	2.4
Die Cleaning Measured Concentrations	<0.01		NA	NA	NA	0.340		NA	<6.67		<0.005	

40CFR136 Preservation and Analytical Methods Use: Yes No

(6) CERTIFICATION

A. CHECK ONE: CYANIDE ANALYSIS ATTACHED CYANIDE CERTIFICATION PROVIDED BELOW (September SAR Only)

In accordance with §467.03(a), based on my inquiry of the person or persons directly responsible for managing compliance with pretreatment standards, I certify that to the best of my knowledge, cyanide has not been used or generated and will not be used or generated in our processes which are regulated by the Aluminum Forming (40 CFR 467.35) categorical pretreatment standards since analyzing the first wastewater sample in January, February, or March of this calendar year; and that the results of the first analysis contained less than 0.07 mg/l cyanide.

Lewis A. Tutton
 (Typed Name)

 (Corporate Officer or authorized representative)
 Date of Signature 2/8/2017

B. CHECK ONE: REQUIRED TOXIC ORGANIC ANALYSIS ATTACHED O&G ANALYSIS ATTACHED

In accordance with §467.03(b) & §468.03(b), as an alternative monitoring procedure for pretreatment, the POTW user may measure and limit oil and grease to the levels shown in Section 5.C in lieu of measuring and regulating total toxic organics (TTO).

CORPORATE ACKNOWLEDGEMENT (Optional)

STATE OF ARKANSAS
 COUNTY OF MISSISSIPPI

Before me, the undersigned authority, on this day personally appeared _____ of _____, a corporation, known to me to be the person whose name is subscribed to the foregoing instrument(s), and acknowledged to me that he executed the same for purposes and considerations therein expressed, in the capacity therein stated and as the act and deed of said corporation.

Given under my hand and seal of office on this _____ day of _____, 199__.

 Notary Public in and for _____
 County, Arkansas

My commission expires _____

¹ Listed as daily maximum and monthly average respectively

(7) POLLUTION PREVENTION ACT OF 1990 [42 U.S.C. 13101 et seq.]

§6602 [42 U.S.C. 13101] Findings and Policy para (b) Policy – The Congress hereby declares to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

The User may list any new or ongoing Pollution Prevention practices:

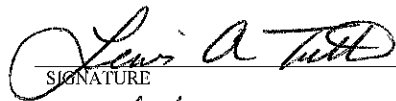
(8) GENERAL COMMENTS

(9) SIGNATORY REQUIREMENTS [40CFR403.12(i)]

I certify under penalty of law that I have personally examined and am familiar with the information in this semi-annual compliance report and all attachments, and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the report, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Lewis A Tutton
NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

Corporate Environmental Manager
OFFICIAL TITLE

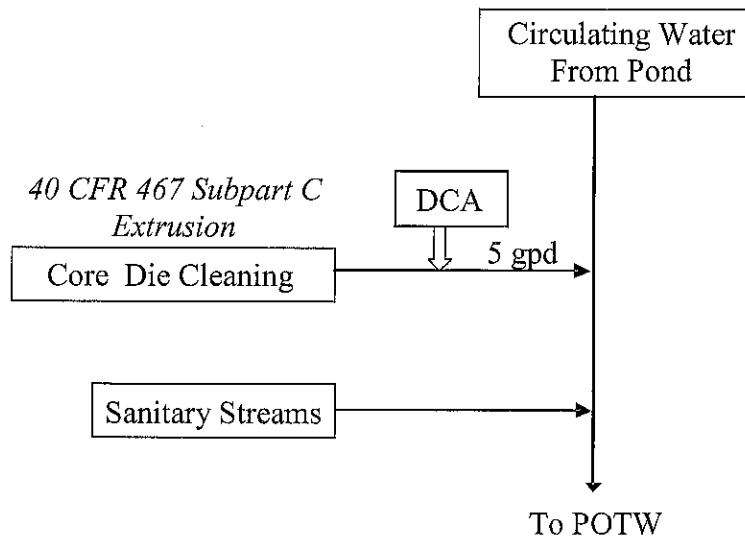

SIGNATURE

2/8/2017
DATE SIGNED

ATTACHMENT 1

Flow Schematics

Algonquin Industries Osceola, Arkansas February 2017



Sampling Points => ↓

§403.6(e) Nonregulated Streams
Not Present

If a stream is not present, show NOT PRESENT or N/P. If a stream is present, the wastewater can enter the POTW but currently has no flow, show 0.0 gpd. If a stream is present but the wastewater cannot enter the POTW, show Zero Discharge or Z/D. If an unregulated stream is present but the User has decided not to declare it at this time, show N/P.

Signature of §403.12(b) Professional

Date

I certify under penalty of law that I have personally examined and am familiar with the information in this document and that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

2/8/2017

Plant Manager or the authorized §403.12(l) official

Date

AGQ Diagram (February 2017)

ATTACHMENT 2

Sampling and Analysis Results

October 20, 2016

ENSAFE - Memphis

Sample Delivery Group: L865640
Samples Received: 10/13/2016
Project Number: 0888819302/003
Description: Osceola, AR










Report To: Eric Tidquist
5724 Summer Trees Drive
Memphis, TN 38134

Entire Report Reviewed By:



Pam Langford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

¹ Cp: Cover Page	1	
² Tc: Table of Contents	2	
³ Ss: Sample Summary	3	
⁴ Cn: Case Narrative	4	
⁵ Sr: Sample Results	5	
DCA L865640-01	5	
POND L865640-02	6	
POND L865640-03	7	
⁶ Qc: Quality Control Summary	8	
Wet Chemistry by Method 1664A	8	
Wet Chemistry by Method 7196A	9	
Wet Chemistry by Method 9012B	10	
Metals (ICP) by Method 6010B	11	
⁷ Gl: Glossary of Terms	12	
⁸ Al: Accreditations & Locations	13	
⁹ Sc: Chain of Custody	14	

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



DCA L865640-01 GW

Collected by
Eric Tidquist
Collected date/time
10/12/16 14:00
Received date/time
10/13/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG918362	1	10/20/16 07:53	10/20/16 10:53	CCE
Wet Chemistry by Method 1664A	WG918080	1	10/18/16 07:54	10/18/16 13:50	SHG
Wet Chemistry by Method 7196A	WG916868	1	10/13/16 12:07	10/13/16 12:07	JJL
Wet Chemistry by Method 9012B	WG918146	1	10/18/16 14:57	10/20/16 13:09	DR

1 Cp

2 Tc

3 Ss

4 Cn

POND L865640-02 GW

Collected by
Eric Tidquist
Collected date/time
10/12/16 13:45
Received date/time
10/13/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG918362	1	10/20/16 07:53	10/20/16 10:56	CCE
Wet Chemistry by Method 1664A	WG918080	1	10/18/16 07:54	10/18/16 13:50	SHG
Wet Chemistry by Method 7196A	WG916868	1	10/13/16 12:08	10/13/16 12:08	JJL
Wet Chemistry by Method 9012B	WG918146	1	10/18/16 14:57	10/20/16 13:10	DR

5 Sr

6 Qc

7 Gl

POND L865640-03 GW

Collected by
Eric Tidquist
Collected date/time
10/12/16 13:45
Received date/time
10/13/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG918362	1	10/20/16 07:53	10/20/16 10:59	CCE

8 Al

9 Sc



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.

Pam Langford
Technical Service Representative

Sample Handling and Receiving

The following analysis were performed from an unpreserved, insufficiently or inadequately preserved sample.

<u>ESC Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L865640-01	DCA	1664A

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Extr)	ND		6.67	1	10/18/2016 13:50	WG918080

1 Cp

2 Tc

Wet Chemistry by Method 7196A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		0.0100	1	10/13/2016 12:07	WG916868

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Cyanide	ND		0.00500	1	10/20/2016 13:09	WG918146

5 Sr

6 Qc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Zinc	0.340		0.0500	1	10/20/2016 10:53	WG918362

7 Gl

8 Al

9 Sc

POND

Collected date/time: 10/12/16 13:45

SAMPLE RESULTS - 02

L865640

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Oil & Grease (Hexane Extr)	ND		6.25	1	10/18/2016 13:50	WG918080

1 Cp

2 Tc

Wet Chemistry by Method 7196A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chromium,Hexavalent	ND		0.0100	1	10/13/2016 12:08	WG916868

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	10/20/2016 13:10	WG918146

5 Sr

6 Qc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Zinc	ND		0.0500	1	10/20/2016 10:56	WG918362

7 Gl

8 Al

9 Sc

POND

Collected date/time: 10/12/16 13:45

SAMPLE RESULTS - 03

L865640

ONE LAB. NATIONWIDE.



Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Copper	0.0111		0.0100	1	10/20/2016 10:59	WG918362
Lead	ND		0.00500	1	10/20/2016 10:59	WG918362
Nickel	ND		0.0100	1	10/20/2016 10:59	WG918362

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3171329-1 10/18/16 13:46

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) R3171329-2 10/18/16 13:47 • (LCSD) R3171329-3 10/18/16 13:47

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	41.7	41.8	104	105	78.0-114			0.240	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3170317-1 10/13/16 12:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chromium,Hexavalent	U		0.00300	0.0100

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

3 Al

9 Sc

L865640-02 Original Sample (OS) • Duplicate (DUP)

(OS) L865640-02 10/13/16 12:08 • (DUP) R3170317-4 10/13/16 12:08

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

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

(LCS) R3170317-2 10/13/16 12:06 • (LCSD) R3170317-3 10/13/16 12:06

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Chromium,Hexavalent	0.600	0.618	0.640	103	107	80.0-120			3.00	20

L865640-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865640-02 10/13/16 12:08 • (MS) R3170317-5 10/13/16 12:08 • (MSD) R3170317-6 10/13/16 12:08

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	%	%		%			%	%
Chromium,Hexavalent	0.500	ND	0.428	0.448	86.0	90.0	1	85.0-115			5.00	20



Method Blank (MB)

(MB) R3172061-1 10/20/16 12:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Cyanide	U		0.00180	0.00500

1 Cp

2 Tc

3 Ss

L865640-02 Original Sample (OS) • Duplicate (DUP)

(OS) L865640-02 10/20/16 13:10 • (DUP) R3172061-4 10/20/16 13:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Cyanide	ND	ND	1	0.000		20

4 Cn

5 Sr

L865993-02 Original Sample (OS) • Duplicate (DUP)

(OS) L865993-02 10/20/16 13:25 • (DUP) R3172061-7 10/20/16 13:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Cyanide	ND	ND	1	0.000		20

6 Qc

7 GI

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

(LCS) R3172061-2 10/20/16 12:57 • (LCSD) R3172061-3 10/20/16 12:58

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Cyanide	0.100	0.0956	0.0995	96.0	100	85.0-115			4.00	20

8 Al

9 Sc

L865682-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865682-02 10/20/16 13:14 • (MS) R3172061-5 10/20/16 13:15 • (MSD) R3172061-6 10/20/16 13:17

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Cyanide	0.200	ND	0.204	0.163	102	82.0	1	75.0-125	E	J3	22.0	20



Method Blank (MB)

(MB) R3172042-1 10/20/16 10:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Copper	U		0.0053	0.0100
Lead	U		0.0019	0.00500
Nickel	U		0.0049	0.0100
Zinc	U		0.0059	0.0500

1 Cp

2 Tc

3 Ss

4 Cn

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

(LCS) R3172042-2 10/20/16 10:38 • (LCSD) R3172042-3 10/20/16 10:40

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 %
Copper	1.00	1.01	1.02	101	102	80-120			0	20
Lead	1.00	1.02	1.02	102	102	80-120			0	20
Nickel	1.00	1.02	1.02	102	102	80-120			0	20
Zinc	1.00	1.01	1.01	101	101	80-120			0	20

5 Sr

6 Qc

7 Gl

L866594-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L866594-02 10/20/16 10:43 • (MS) R3172042-5 10/20/16 10:48 • (MSD) R3172042-6 10/20/16 10:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Copper	1.00	ND	1.06	1.04	105	103	1	75-125			2	20
Lead	1.00	ND	1.03	1.02	103	101	1	75-125			1	20
Nickel	1.00	ND	1.05	1.03	105	103	1	75-125			2	20
Zinc	1.00	ND	0.996	0.985	99	98	1	75-125			1	20

8 Al

9 Sc

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
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.
Rec.	Recovery.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J3	The associated batch QC was outside the established quality control range for precision.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.



State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey-NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio-VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ^{1,4}	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

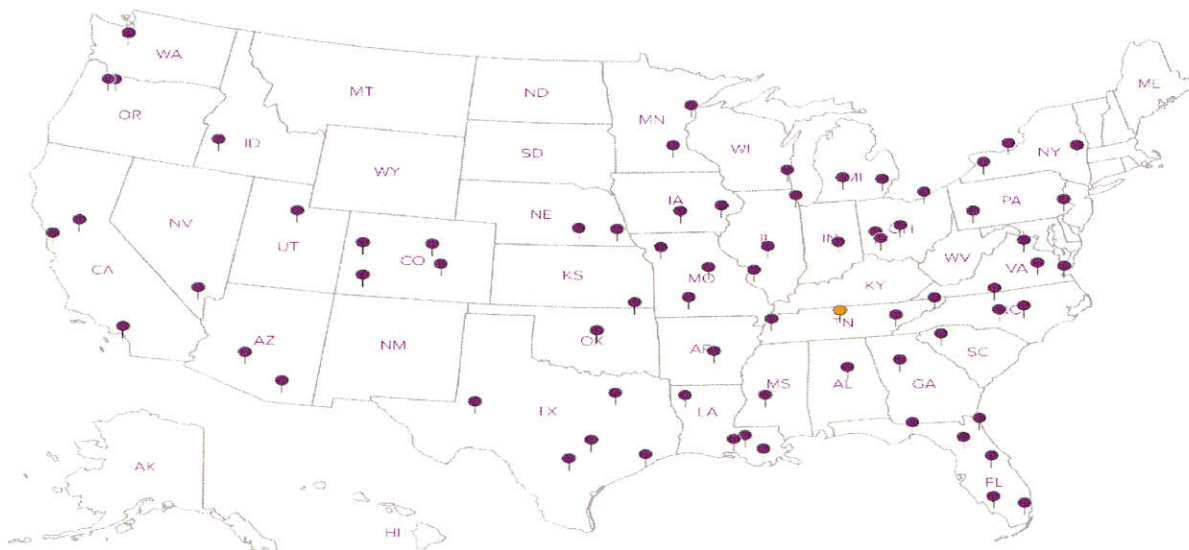
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



ENSAFE - Memphis

5724 Summer Trees Drive
Memphis, TN 38134

Billing Information & Quote Number:

Attn: Buyer
5724 Summer Trees Drive
Memphis, TN 38134

Report to:
Eric Tidquist

Email To: etidquist@ensafe.com

Project
Description: Osceola, AR

City/State
Collected: Osceola, AR

Phone: 901-372-7962
Fax: 901-386-4628

Client Project #
0888819302/003

Lab Project #
ENSAFE-OSCEOLA

Collected by (print):
Eric Tidquist

Site/Facility ID #

P.O. #

Collected by (signature):
E. Tidquist

Rush? (Lab MUST Be Notified)

Date Results Needed

Immediately
Packed on Ice N Y

Same Day200%
 Next Day100%
 Two Day50%
 Three Day25%

Email? No Yes

FAX? No Yes

No. of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CN 250mlHDPEAmb-NaOH	CR6 250mlHDPE-NoPres	Metals 250mlHDPE-HNO3	OGHEX 1L-Clr-Add HCl	ZNICP 250mlHDPE-HNO3							
DCA	G	GW	N/A	10/12/16	14:00	4	X	X		X	X							
POND	G	GW	N/A	10/12/16	13:45	4	X	X		X	X							
POND	G	GW	N/A	10/12/16	13:45	1			X									

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

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

L# 1815640
J094

Acctnum: ENSAFE
Template: T116658
Prelogin: P572190
TSR: 633 - Pam Langford
PB: 10-7-16

Shipped Via: **FedEX Ground**

Rem./Contaminant	Sample # (lab only)
	-01
	02
	03

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

Remarks: pH _____ Temp _____ 7006 918 9494
Flow _____ Other _____

Relinquished by: (Signature) <i>E. Tidquist</i>	Date: 10/12/16	Time: 15:45	Received by: (Signature) <i>[Signature]</i>	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Hold #
Relinquished by: (Signature) <i>[Signature]</i>	Date:	Time:	Received by: (Signature) <i>[Signature]</i>	Temp: 3.1 °C Bottles Received: 9	Condition: (lab use only) <i>GW</i>
Relinquished by: (Signature) <i>[Signature]</i>	Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>	Date: 10-13-16 Time: 9:00	COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA pH Checked: <2.712 NCF:

Input Values For Determining Effluent Guideline Limits for REA /Algonquin Industries Division for Aluminum Die Cleaning Wastestream

To calculate concentrations:	
Die Cleaning Flow Rate, gpd	5
To calculate cumulative limit:	
Beginning date of period of semiannual report	8/31/2016
End date of period of semiannual report	2/28/2017
Date Sample taken:	10/12/2016
Days from beginning of semi annual report through sample date	42

Summary of Calculated Equivalent Concentration Limits for Caustic Soda Rinse of Extrusion Die Discharge, mg/L		
Parameter	Daily Maximum	Monthly Average
Chromium	9	3.7
Cyanide	6	2.4
Zinc	30	12.8
TTOal *	NA	NA
Oil and Grease	1094	534.6

* Oil and Grease limitations are to be used in place of TTO limitations

extruded aluminum off lb = production + 10% scrap = production x 110%				
2016	Extruded Aluminum (All lines) Production			
	Operational days prior to sample date	Aluminum Produced (lbs)	Aluminum passed through (prorated for month) (off lbs)	Calculated Daily Production (off-lb/day)
Sep-16	30	69,095	76,005	2,533
Oct-16	12	71,399	30,402	2,534
Nov-16	NA	13,819	NA	NA
Dec-16	NA	0	NA	NA
Jan-17	NA	0	NA	NA
Feb-17	NA	0	NA	NA
Mar-17	NA	0	NA	NA
Apr-17	NA	0	NA	NA
May-17	NA	0	NA	NA
Jun-17	NA	0	NA	NA
Jul-17	NA	0	NA	NA
Aug-17	NA	0	NA	NA
Totals	42	154,313	106,407	2,533

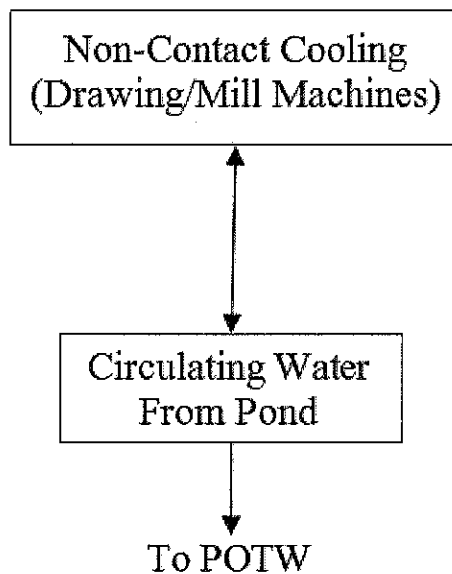
Semi-Annual Wastewater Monitoring Report Wastewater Process Description

Please note that the final industrial wastewater discharge from Rea – Algonquin Industries Division occurred on October 30, 2016 and production at the facility permanently ceased on November 6, 2016. The information presented below is included to provide background related to the nature of industrial wastewater generated by the facility prior to October 30, 2016.

At its Osceola, Arkansas plant, Rea – Algonquin Industries Division manufactured specialty aluminum and copper wire products.

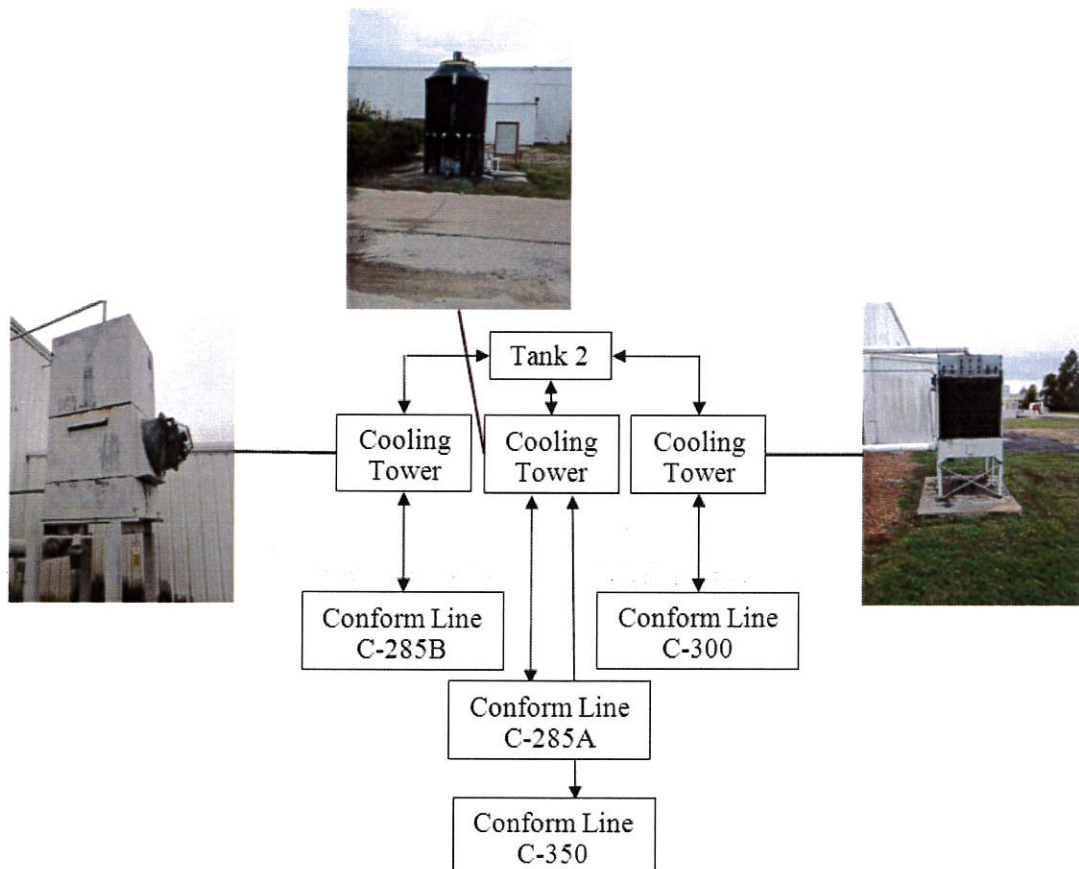
Drawing and Milling

Non-contact cooling water was used in the drawing and milling processes at the facility. The non-contact cooling water was recirculated to the pond. It was possible for the pond to discharge to the City of Osceola Publicly Owned Treatment Works (POTW), but this was typically only necessary when the pond or associated recirculation equipment required maintenance.



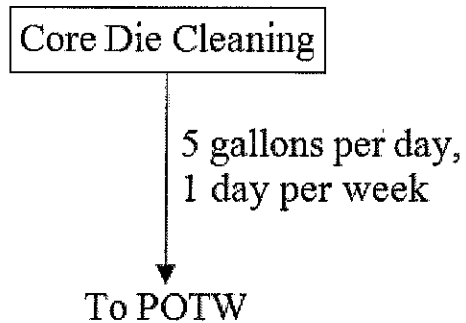
Copper and Aluminum Conform Processes

The copper and aluminum conform lines (C-285A, C-285B, C-300, and C-350) generated wastewater, which recirculated between the conform process equipment and three cooling towers as shown below. Each wastewater line could be pumped into Tank 2, which was periodically pumped out by a waste contractor who shipped the wastewater offsite. Wastewater from the copper and aluminum conform lines was not discharged to the City of Osceola POTW.



Die Cleaning Process

Dies were periodically soaked in caustic solution for cleaning. When they were done soaking, they were rinsed off using clean tap water over a sink. The rinse water was discharged to the City of Osceola POTW. The estimated discharge flow rate was five gallons per die cleaning event, and the estimated frequency of die cleaning events was once per week.



Other Wastewater Streams

Other wastewater streams that discharged to the City of Osceola POTW included:

- Sanitary waste;
- Air compressor condensate blowdown; and
- Water from the steam clean forklift wash area