From:	Gilliam, Allen
To:	Merwitz, David
Cc:	Burrow, Kealey; Healey, Richard; Melton, Teresa A. (TMelton@macleanfogg.com); pocawater@suddenlinkmail.com; Ayres, Abigail (AAyres@macleanfogg.com)
Subject:	AR0034835_MacLean ESNA ARP001048 late June 2015 report with corrective actions and late resample results_20150924
Date:	Thursday, September 24, 2015 1:43:59 PM
Attachments:	Analytical Results.xlsx 2015 Pretreatment Calculations Jan to June.xlsx Sept 2015 Analytical Results.pdf Training.pdf Training 2.pdf EMS WI 003 Wastewater Treatment - Weir.pdf EMS3.02.F1 Current Legal Requirements.pdf Environmental Action Items 8-28-15.docx 433.pdf 433 SEMI ANNUAL PRETREATMENT REPORT JAN-JUN 2015.pdf

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David,

Thank you for your extensive response to the late and non-compliant semi-annual report e-sent by Eric White on 8/19/15 (last attachment). Apparently it not only had an incorrect dilution factor because of a flow meter malfunction, but exceeded the Metal Finishing standards in 40 CFR 433.17 for monthly averages not to exceed for Cd, Cr, Cu, Ni and Zn. All the aforementioned parameters also exceeded the daily maximum Metal Finish standards except for Cd and Ni.

As mentioned in a previous email to you, if this was representative of the wastewater discharged to the City, those results had to be reported.

It was understood the sump at the sampling point was being cleaned out of its sludge/solids at/or near the time of sampling (would a separate baffled holding tank with sufficient detention time help eliminate the sludge/solids build-up at the sampling point?). What is the frequency of this sump's cleanout?

Within the documents you've attached and previous emails, it can reasonably be assumed the elevated levels of metals in Mr. White's report were because of the sump cleanout. Subsequent analyticals do show Maclean-ESNA is back in compliance with the Metal Finishing standards in 40 CFR 433.15 using the corrected combined wastestream (dilution) factor.

However, Maclean-ESNA remains in significant non-compliance for late reporting per 40 CFR 403.8(f)(2)(viii)(F) with its next semi-annual Pretreatment report due during the month of December 2015.

Thank you for your attention to this matter.

Sincerely,

Allen Gilliam
ADEQ State Pretreatment Coordinator
501.682.0625

ec: William Daniel, Pocahontas Wastewater Manager

E/NPDES/NPDES/Pretreatment/Reports

From: Merwitz, David [mailto:DMerwitz@macleanfogg.com]
Sent: Friday, September 04, 2015 4:39 PM
To: Gilliam, Allen
Cc: Ayres, Abigail; Healey, Richard; White, Eric; Melton, Teresa A.; Burrow, Kealey; Peltier, Hannah; pocawater@suddenlinkmail.com
Subject: RE: Semiannual Pretreatment report

Allen,

Please find attached our late submittal of the 433 report as well as the corrective action report and supporting documentation.

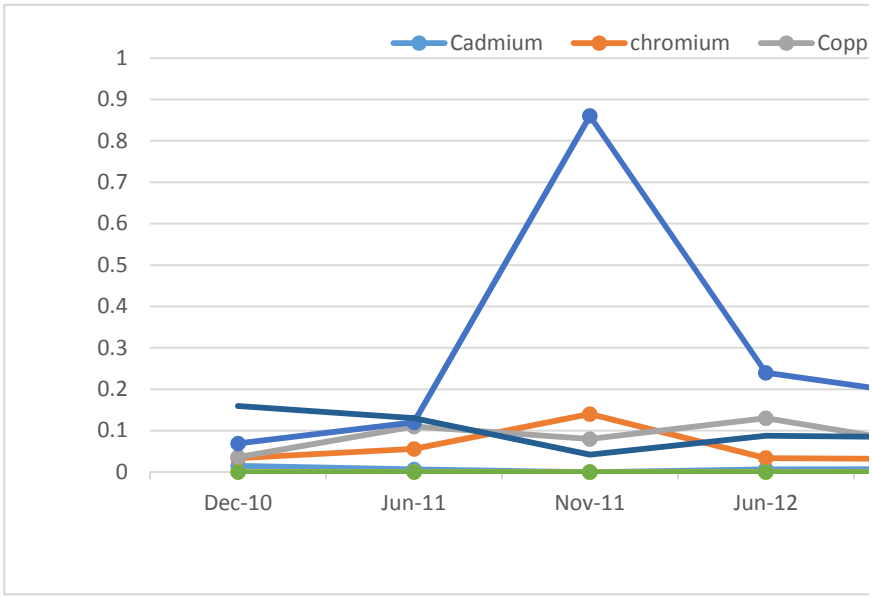
After investigation, we have found that the high metals' levels shown by the previous American Interplex lab analysis was a result of us taking the sample incorrectly which leads us to believe we have not been out of compliance regarding these limits. With that said, we have used the current lab results.

We are committed to continuous improvement and quickly resolving all non-conformance and hope that this will adequately close-out any concerns you may have with our organization. Please let us know if you have questions or further recommendations for us.

Thank You

	Dec-10	Jun-11	Nov-11	Jun-12	Nov-12	May-13	Oct-13
Cadmium	0.015	0.0065	<.004	0.0069	0.0075	0.017	0.013
chromium	0.034	0.056	0.14	0.034	0.031	0.045	0.21
Copper	0.036	0.11	0.08	0.13	0.06	0.19	0.31
Lead	<.04	<.04	<.04	<.04	<.04	<.04	<.04
Nickel	0.069	0.12	0.86	0.24	0.18	0.31	0.31
Silver	<.007	<.007	<.007	<.007	<.007	<.007	<.007
Zinc	0.16	0.13	0.042	0.088	0.084	0.39	0.31
Cyanide	<.01	<.01	<.01	<.01	0.012	<.01	<.01

Wastestream Factor*



* Wasterstream factor may change every 6 months dependent upon the inflow and outflow of water.

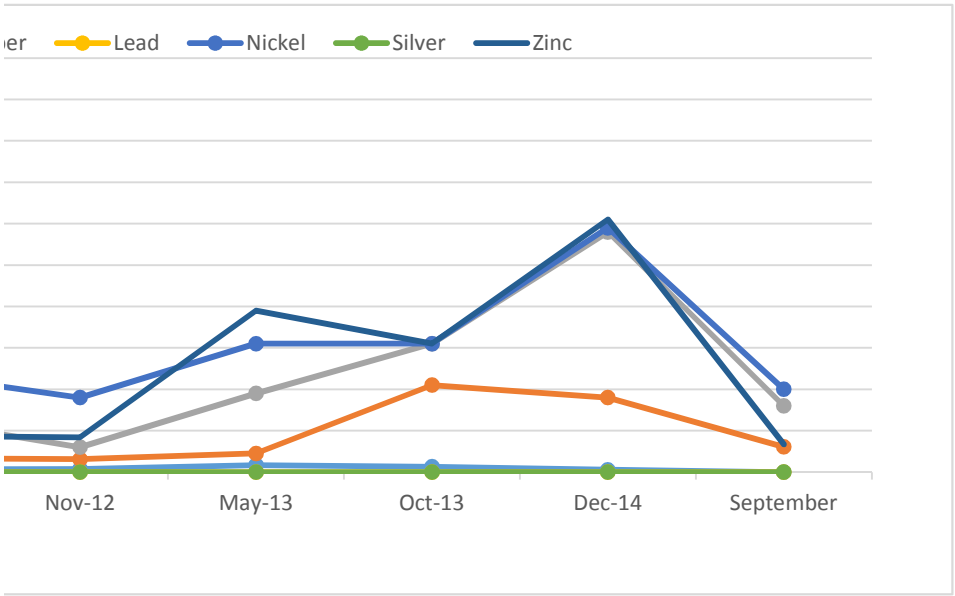
Control limits **

80% of Max Limits from Permit

40 CFR 433.15 Pollutant Limits

Dec-14	September	Max Control Limit 1 day	Max Control Limit monthly average	Maximum 1 day	Monthly average
0.0058	<.004	0.39	0.15	0.69	0.26
0.18	0.061	1.56	0.87	2.77	1.71
0.58	0.16	1.90	1.07	3.38	2.07
<.04	<.04	0.39	0.13	0.69	0.43
0.59	0.2	2.24	1.26	3.98	2.38
<.007	<.007	0.24	0.05	0.43	0.24
0.61	0.067	1.47	0.83	2.61	1.48
<.01	<.01	0.67	0.38	1.2	0.65

0.702



Note: The Weir was August 2015.

**The control limits will change as the wastestream factor changes.

Control limits are calculated using the wastestream factor times the pollutant limit from

cleaned in

40 CFR 433.15 times 80%.

Waste Stream Factor

Total flow at Sample Point to City = Total Regulated + Total Dilute Flow

Combined wastestream factor is total regulated divided
by total flow at sample point

Flow Total at Sample Point	Minus	Diluted Flow	Divided by	Flow Total at Sample Point	Equals	Waste Stream Factor
6083		1811		6083		0.702

AMERICAN INTERPLEX CORPORATION
LABORATORIES

MacLean ESNA
611 Country Club Road
Pocahontas, AR 72455

ANALYTICAL RESULTS

AIC No. 193815-1
Sample Identification: 001 28-Aug-2015 1000

Analyte		Result	RL	Units	Qualifier
Total Cyanide		**< 0.01**	0.01	**mg/l**	
SM 4500-CN C,E 1999	Prep: 02-Sep-2015 1128 by 308	Analyzed: 02-Sep-2015 1424 by 308		Batch: W53087	

AIC No. 193815-2
Sample Identification: 001 27-Aug-2015 1207

Analyte		Result	RL	Units	Qualifier
Cadmium		**< 0.004**	0.004	**mg/l**	
EPA 200.7	Prep: 02-Sep-2015 1125 by 317	Analyzed: 02-Sep-2015 1440 by 317		Batch: S39689	
Chromium		**0.061**	0.007	**mg/l**	
EPA 200.7	Prep: 02-Sep-2015 1125 by 317	Analyzed: 02-Sep-2015 1440 by 317		Batch: S39689	
Copper		**0.16**	0.006	**mg/l**	
EPA 200.7	Prep: 02-Sep-2015 1125 by 317	Analyzed: 02-Sep-2015 1440 by 317		Batch: S39689	
Lead		**< 0.04**	0.04	**mg/l**	
EPA 200.7	Prep: 02-Sep-2015 1125 by 317	Analyzed: 02-Sep-2015 1440 by 317		Batch: S39689	
Nickel		**0.20**	0.01	**mg/l**	
EPA 200.7	Prep: 02-Sep-2015 1125 by 317	Analyzed: 02-Sep-2015 1440 by 317		Batch: S39689	
Silver		**< 0.007**	0.007	**mg/l**	
EPA 200.7	Prep: 02-Sep-2015 1125 by 317	Analyzed: 02-Sep-2015 1440 by 317		Batch: S39689	
Zinc		**0.067**	0.002	**mg/l**	
EPA 200.7	Prep: 02-Sep-2015 1125 by 317	Analyzed: 02-Sep-2015 1440 by 317		Batch: S39689	

AMERICAN INTERPLEX CORPORATION
LABORATORIES

MacLean ESNA
611 Country Club Road
Pocahontas, AR 72455

LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	0.1 mg/l	97.4	85.0-115			W53087	02Sep15 1129 by 308	02Sep15 1422 by 308		
Cadmium	5 mg/l	103	85.0-115			S39689	02Sep15 1125 by 317	02Sep15 1430 by 317		
Chromium	0.5 mg/l	100	85.0-115			S39689	02Sep15 1125 by 317	02Sep15 1430 by 317		
Copper	0.5 mg/l	99.8	85.0-115			S39689	02Sep15 1125 by 317	02Sep15 1430 by 317		
Lead	5 mg/l	106	85.0-115			S39689	02Sep15 1125 by 317	02Sep15 1430 by 317		
Nickel	0.5 mg/l	97.9	85.0-115			S39689	02Sep15 1125 by 317	02Sep15 1430 by 317		
Silver	0.1 mg/l	105	85.0-115			S39689	02Sep15 1125 by 317	02Sep15 1430 by 317		
Zinc	0.5 mg/l	97.8	85.0-115			S39689	02Sep15 1125 by 317	02Sep15 1430 by 317		

MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	193815-1	0.1 mg/l	94.3	75.0-125	W53087	02Sep15 1129 by 308	02Sep15 1426 by 308		
	193815-1	0.1 mg/l	93.7	75.0-125	W53087	02Sep15 1129 by 308	02Sep15 1428 by 308		
	Relative Percent Difference:		0.636	20.0	W53087				
Cadmium	193815-2	5 mg/l	99.2	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1434 by 317		
	193815-2	5 mg/l	99.0	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1437 by 317		
	Relative Percent Difference:		0.209	20.0	S39689				
Chromium	193815-2	0.5 mg/l	98.3	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1434 by 317		
	193815-2	0.5 mg/l	99.0	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1437 by 317		
	Relative Percent Difference:		0.643	20.0	S39689				
Copper	193815-2	0.5 mg/l	98.3	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1434 by 317		
	193815-2	0.5 mg/l	98.5	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1437 by 317		
	Relative Percent Difference:		0.143	20.0	S39689				
Lead	193815-2	5 mg/l	97.5	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1434 by 317		
	193815-2	5 mg/l	97.8	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1437 by 317		
	Relative Percent Difference:		0.234	20.0	S39689				
Nickel	193815-2	0.5 mg/l	93.5	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1434 by 317		
	193815-2	0.5 mg/l	93.9	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1437 by 317		
	Relative Percent Difference:		0.364	20.0	S39689				
Silver	193815-2	0.1 mg/l	104	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1434 by 317		
	193815-2	0.1 mg/l	97.1	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1437 by 317		
	Relative Percent Difference:		6.39	20.0	S39689				
Zinc	193815-2	0.5 mg/l	96.5	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1434 by 317		
	193815-2	0.5 mg/l	96.8	75.0-125	S39689	02Sep15 1125 by 317	02Sep15 1437 by 317		
	Relative Percent Difference:		0.237	20.0	S39689				

AMERICAN INTERPLEX CORPORATION
LABORATORIES

MacLean ESNA
611 Country Club Road
Pocahontas, AR 72455

LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Total Cyanide	< 0.01 mg/l	0.01	0.01	W53087-1	02Sep15 1129 by 308	02Sep15 1420 by 308	
Cadmium	< 0.004 mg/l	0.004	0.004	S39689-1	02Sep15 1125 by 317	02Sep15 1427 by 317	
Chromium	< 0.007 mg/l	0.007	0.007	S39689-1	02Sep15 1125 by 317	02Sep15 1427 by 317	
Copper	< 0.006 mg/l	0.006	0.006	S39689-1	02Sep15 1125 by 317	02Sep15 1427 by 317	
Lead	< 0.04 mg/l	0.04	0.04	S39689-1	02Sep15 1125 by 317	02Sep15 1427 by 317	
Nickel	< 0.01 mg/l	0.01	0.01	S39689-1	02Sep15 1125 by 317	02Sep15 1427 by 317	
Silver	< 0.007 mg/l	0.007	0.007	S39689-1	02Sep15 1125 by 317	02Sep15 1427 by 317	
Zinc	< 0.002 mg/l	0.002	0.002	S39689-1	02Sep15 1125 by 317	02Sep15 1427 by 317	

AMERICAN INTERPLEX CORPORATION LABORATORIES

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: Maclean/ESNA
Project Reference:
Project Manager:
Sampled By: Eric White

PO No.

MATRIX

AIC No.	Sample Identification	Date/Time Collected	GRAB	COMP	WATER	SOIL	NO OF BOTTLES	Cyanide	Metals
1	001	8/28/15 10:00am	X		X		1	X	
2	001	8/27/15 12:07		X	X		1		X
				X					
	001	8/28/15 10:00am		X					
		Container Type						P	P
		Preservative						B	N

ANALYSES REQUESTED

AIC CONTROL NO: 193815
AIC PROPOSAL NO:
Carrier: UPS
Received Temperature C: 2.8
Remarks
Field pH calibration on _____ @ _____
Buffer:

G = Glass, NO = none; P = Plastic, S = Sulfuric acid pH2; V = VOA vials, N = Nitric acid pH2; H = HCl to pH2, B = NaOH to pH12; T = Sodium Thiosulfate, Z = Zinc acetate; A=$(NH_4)_2SO_4$, NH_4OH

Turnaround Time Requested: (Please circle)
NORMAL or (EXPEDITED) IN 1 DAYS
Expedited results requested by: Eric White
Who should AIC contact with questions: Eric White
Phone: 970-378-6766 Fax:
Report Attention to:
Report Address to:
Email Address: EWhite@Macleanbgg.com

Relinquished By:	Date/Time	Received By:	Date/Time
Eric White	8/28/15 10:40 am		
Relinquished By:	Date/Time	Received in Lab By:	Date/Time
			9/2/15 0950

Comments: UPS# 1Z 718 31 03 5295 6366

Maclean / ESNA

Metals

24 hour composite

Sample #	Date	Time	Initial
1	8/27/15	12:07pm	EWW
2	8/27/15	2:09pm	EWW
3	8/27/15	4:00pm	EWW
4	8/27/15	5:47pm	EWW
5	8/27/15	8:00pm	EWW
6	8/27/15	9:50pm	EWW
7	8/27/15	11:59pm	EWW
8	8/28/15	2:00am	EWW
9	8/28/15	4:00am	EWW
10	8/28/15	6:00am	EWW
11	8/28/15	8:05am	EWW
12	8/28/15	10:00am	EWW

TRAINING LOG

Please complete this log for all training, including, but not limited to:

1. Cross Training
2. Machine Training
3. Management Training
4. New Employee Orientation
5. On-the-Job Training
6. Quality Training
7. Safety Training
8. Team Training
9. Tooling Training

Date(s) of Training	Type of Training/ Name of Training Course	Employee Name	Length/Hours
9/3/15	EMS 5.01	Eric White	1/2 hr.
	Monitoring and Measurement		
	Rev 2		
	Especially Section		
	3.3		
		TOTAL	

To be Signed by Instructor or Supervisor Teresa McHam

This form must be submitted by the end of the last workday of each week.

Form # TR32596 Rev 3-27-98

TRAINING LOG

Please complete this log for all training, including, but not limited to:

1. Cross Training
2. Machine Training
3. Management Training
4. New Employee Orientation
5. On-the-Job Training
6. Quality Training
7. Safety Training
8. Team Training
9. Tooling Training

Date(s) of Training	Type of Training/ Name of Training Course	Employee Name	Length/Hours
9/3/15	EMS WI. 003		1 HR.
	Wastewater Treatment-		
	Weir		
	Revision 3		
	Control Limits		
	Sample Retreival		
	EMS 3.02. F1		
	Current Legal		
	Requirements	Eric Wh	
		TOTAL	

To be Signed by Instructor or Supervisor Teresa McHa

This form must be submitted by the end of the last workday of each week.

Form # TR32596 Rev 3-27-98

MACLEAN - ESNA A MacLean-Fogg Company	EMS WI.003	Page 1 of 2
EMS Work Instruction	Rev. 3	**Date:** 9/4/2015
Title: Wastewater Treatment - Weir		**Originator:** Steve Theilemier
		Reviewed By: Eric White
File Location: **X:\Common\Environmental Records\Word Docs**		**Approved By:**

1.0 Purpose

1.1 To define and control the semi-annual collection of samples of effluent outfall to city to comply with state of Arkansas Industrial Pretreatment waste discharge.

2.0 References

2.1 State of Arkansas Industrial Pretreatment Report

3.0 Responsibilities

3.1 EHS Coordinator

4.0 Instructions

4.1 During the months of May and November, an effluent 24-hour composite sample shall be taken from city discharge at the sampling point at weir.

4.2 A sample kit containing a cooler and sample containers are obtained from an outside laboratory(American Interplex)

4.3 The sample collection container and cooler with ice are taken to the weir.

4.4 Sample point water must be drained for at least one minute prior to taking first sample to ensure all buildup is cleared before sample is taken

4.5 A sample is collected every two hours for a period of 24 hours. The date and time of each sample is recorded on a log sheet.

4.6 A chain of custody/analysis request form and shipping order form is filled out. Sample containers are filled from the sample collected from the 24-hour composite and placed in cooler with ice for shipping.

4.7 The samples are shipped to American Interplex for testing

4.8 The laboratory will then send the test results and the chain of custody/analysis form back to the EHS Coordinator.

4.9 The EHS Coordinator will forward a copy of the results to the General Manager.

4.10 The EHS Coordinator will prepare the Industrial Pretreatment Report for the State of Arkansas Department of Environmental Quality.

4.11 The completed report is taken to the General Manager for review and his signature.

4.12 The EHS Coordinator will keep a copy on file and the General Manager will forward the original to State of Arkansas Department of Environmental Quality.

5.0 Records

5.1 24-hour Composite Log
5.2 Laboratory Test Results
5.3 Chain of Custody/Analysis Request Form
5.4 State of Arkansas Industrial Pretreatment Report
5.5 Water bill on the first of every month obtained from the accounting clerk
5.6 Reading from flowmeter at Weir

DRAFT

			te.ar.us/water/generalpmts.htm #IndustrialStormwater Permit ARR00A000
WASTE WATER TREATMENT WEIR: The EPA 40CFR Subchapter N Part 401 & part 433 State Regs: http://www.adeq.state.ar.us/regs/reg03.htm **Biannual Monitoring Report due in June & November each year.**	Requirements of the ADEQ & Pocahontas POTW is for reporting every 6 months, they send a reminder letter. Test for metals & Cyanide, and either Toxic Organics or submit TOMP (Toxic Organic Management Plan) Chemicals tested for are in 40CFR433 and also listed in the letter from ADEQ every 6 months. **Any analysis results above the acceptable limit must be reported to ADEQ within 24 hours and a Corrective Action must be submitted to ADEQ within 30 days.**	Send sample to lab for testing, report includes. **Biannual Monitoring Report (BMR):** Due every June 30 and Nov. 30 for previous 6 month period. Include any lab results from previous period that weren't obtained in time to include on previous report. Store records in EPA file cabinet. **Accidental Discharge Upset/Discharge Operating Upset:** If unapproved slugs occur to sewer - phone/fax **immediately** with written report and Corrective Action within **7 days.**	Addition of any toxic pollutants per ADEQ Section 307 (Ag: 0.06, Cd: 0.50, Cr: 2.60, Cu: 2.40, Ni: 2.20, Pb: 0.40 is prohibited and requires additional notifications. Nat'l Categorical Pretreatment Std 40CFR403.6(a)(2)(ii)
SANITARY SEWER DRAIN WATER: Per Pocahontas POTW Sanitary Sewer.	**Current Status**: No floor drains are piped to Sanitary sewer (the weir).	**Immediately report** to city any slugs to the sewer system (not WWT) of any non-sanitary wastes (regular kitchen, restroom or janitorial	Ordinance is not currently online. Copy may be obtained from Engineering manager.

DRAFT

Action Item #1

Finding:

Flow meter was not calibrated as required per EMS procedure 5.01 Monitoring and Measurements

Root Cause

- Immediate Corrective Action Taken
- Purchased new flow meter, get existing flow meter calibrated
- Add flow meters to calibration database
- Root Cause of Nonconformance*:*
- Flow meter was not added to calibration database therefore allowing calibration to expire
- Training was not adequate
- Impact of all Identified Causes and the Root Cause
- None, flow is consistent with previous readings
- Action to Prevent Recurrence*:*
- Have flow meter calibrated
- Have a back- up flow meter
- Add flow meters to calibration database
- Add verification of calibration to checklist during sample retrieval
- Train EHS coordinator on requirements
- Objective Evidence Attached (Include training evidence for any amended procedures or practices):
- Training records of EMS 5.01

Effective Date:

Immediate

Action Item #2

Finding:

High metals shown by American Interplex

Root Cause

- Immediate Corrective Action Taken
- Requested and received sample kit from lab. Pulled new samples and have sent out for analysis. 8/28/15 Expedited results for report on 8/31/15
- Root Cause of Nonconformance*:*
- Sample retrieval was not performed correctly
- Impact of all Identified Causes and the Root Cause
- None, subsequent sample limits are in compliance
- Action to Prevent Recurrence*:*
- Esna will establish control limits of all identified contaminates as required and will take appropriate action if the trend is upward.
- Train EHS coordinator on proper sample protocol
- Objective Evidence Attached (Include training evidence for any amended procedures or practices):

  Attached chart and control limit specifications.

  Training EHS coordinator on control limit specification and trending
- Training documents on EMS 3.02.F1 Current Legal Requirements
- Training documents on EMS WI.003

Effective Date:

Immediate

Action Item #3

Finding

Maclean Esna failed to report higher than acceptable readings within 24 hours as required by ADEQ.

Root Cause

- Immediate Corrective Action Taken

  Updated EMS 3.02.F1 to include verbiage on notification of regulatory agency of violations.

  Trained EHS coordinator
- Root Cause of Nonconformance*:*

  Lack of Training and knowledge of requirements
- Impact of all Identified Causes and the Root Cause

  None
- Action to Prevent Recurrence*:*
- Review all regulatory compliance regulations

- Objective Evidence Attached (Include training evidence for any amended procedures or practices):

  Updated EMS 3.02.F1

  Training documents

Effective Date:

Started immediately

SEMI-ANNUAL REPORT FOR INDUSTRIAL USERS REGULATED BY 40 CFR 433

Use of this form is not an ADEQ requirement, but satisfies the reporting requirements in 40 CFR 403.12(e). Attn: Water Div/NPDES Pretreatment

(1) IDENTIFYING INFORMATION and NPDES Pretreatment Tracking # _____

A. LEGAL NAME & MAILING ADDRESS	B. FACILITY & LOCATION ADDRESS
Maclean-Esna 611 Country Club Road Pocahontas, Ark 72455	Maclean-Esna 611 Country Club Road Pocahontas, Ark 72455

C. FACILITY CONTACT: Dave Merwitz TELEPHONE NUMBER: 870-892-4738 e-mail: DMerwitz@macleanfogg.com

(2) REPORTING PERIOD--FISCAL YEAR From to (Both Semi-Annual Reports must cover Fiscal Year)

A. MONTHS WHICH REPORTS ARE DUE	B. PERIOD COVERED BY THIS REPORT
_Jan ___ & ___Dec_____	FROM: Jan 2015 TO: June 2015

(3) DESCRIPTION OF OPERATION

A. REGULATED PROCESSES

CORE PROCESS(ES)

CHECK EACH APPLICABLE BLOCK

G Electroplating
G Electroless Plating
G Anodizing
X Coating (conversion)
G Chemical Etching and Milling
G Printed Circuit Board Manufacture

ANCILLARY PROCESS(ES)*

LIST BELOW EACH PROCESS USED IN THE FACILITY

___Passivate Rinse Tank_____

*SEE 40CFR433.10(a) FOR THE 40 ANCILLARY OPERATIONS

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.

C. Number of Regular Employees at this Facility
__73_____

D. [Reserved]

40 CFR 433 SEMI-ANNUAL REPORT CON'D FACILITY NAME: _____

(4) FLOW MEASUREMENT

INDIVIDUAL & TOTAL PROCESS FLOWS DISCHARGED TO POTW IN GALLONS PER DAY

Process	Average	Maximum	Type of Discharge*
Regulated (Core &	2256	2380	Continuous
Regulated (Cyanide)	N/A	N/A	N/A
'403.6(e) Unregulated'	N/A	N/A	N/A
'403.6(e) Dilute	109.8	116	Continuous
Cooling Water	1702	1798	Continuous
Sanitary	2015	3496	Continuous
Total Flow to POTW	6083	7794	**********

*If batch discharged please list the period of time of each batch discharge (300 gallons/day; 500 gallons/week, 2,000 gallons/3 months, etc). Do not normalize over that period for the average flow.
'"Unregulated" has a precise legal meaning; see 40CFR403.6(e).

(5) MEASUREMENT OF POLLUTANTS

A. TYPE OF TREATMENT SYSTEM

CHECK EACH APPLICABLE BLOCK

G Neutralization
G Chemical Precipitation and Sedimentation
G Chromium Reduction
G Cyanide Destruction
G Other _____
G None

B. COMMENTS ON TREATMENT SYSTEM

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS OF 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.

40 CFR 433.15 Pollutant(mg/l) limits	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CN	TTO*
Max for 1 day	.485	1.945	2.373	.485	2.795	.302	1.833	.843	-
Monthly Avg	.183	1.201	1.454	.302	1.671	.169	1.039	.456	--
Max Measured	<.004	.061	.16	<.04	.20	<.007	.067	<.01	*
Avg Measured**	<.004	.061	.16	<.04	.20	<.007	.067	<.01	*

Sample Location _____
Sample Type (Grab* or Composite)_____
If Grab sampled, list # of grabs over what period of time _____ and if composited by facility ____ or the certified lab _____ .
Number of Samples and Frequency Collected_____
40CFR136 Preservation and Analytical Methods Use: G Yes G No (include complete Chain of Custody)
*If a TOMP has been submitted and approved by ADEQ place N/A.
**A value here is the average of all samples taken during one (1) calendar month regardless of number of samples taken. If only one (1) sample is taken it must meet the monthly average limitation.

Indicate Combined Wastestream Factor (include calculations) if dilution streams commingle with regulated process wastestream: .702_

(6) CERTIFICATION (ONLY IF A TOMP HAS BEEN SUBMITTED/APPROVED BY ADEQ

B. CHECK ONE: G '433.11(e) TOXIC ORGANIC ANALYSIS ATTACHED G '433.12(a) TTO CERTIFICATION

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to Arkansas Department of Environmental Quality.

David D. McWitz
(Typed/Printed Name)

(Corporate Officer or authorized representative signature)

Date of Signature 9/4/2015

(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 it 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 including Best or Environmental Management Practices, Source Reduction, Waste Minimization, Lean Manufacturing, Water and/or Energy Conservaton:

1. _____
2. _____
3. _____
4. _____
5. _____

40 CFR 433 SEMI-ANNUAL REPORT CON'D FACILITY NAME: _____

(8) GENERAL COMMENTS

(9) SEMI-ANNUAL/PERIODIC REPORT CERTIFICATION STATEMENT REQUIRED UNDER 40 CFR 403.12(l)

I certify under penalty of law that I have personally examined and am familiar with the information in 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.

David D. Merwitz
NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

SIGNATURE

General Manager
OFFICIAL TITLE

9/4/2015
DATE SIGNED

SEMI-ANNUAL REPORT FOR INDUSTRIAL USERS REGULATED BY 40CFR433

Use of this form is not an EPA/ADEQ requirement. Attn: Water Div/NPDES Pretreatment

(1) IDENTIFYING INFORMATION

A. LEGAL NAME & MAILING ADDRESS

Mac-Lean ESNA
611 County Club Road
Pocahontas, AR 72455

B. FACILITY & LOCATION ADDRESS

Mac-Lean ESNA
611 County Club Road
Pocahontas, AR 72455

C. FACILITY CONTACT: Eric White TELEPHONE NUMBER: 870-892-4749 e-mail: ewhite@macleanfogg.com

(2) REPORTING PERIOD--FISCAL YEAR From 2011 to 2011 (Both Semi-Annual Reports must cover Fiscal Year)

A. MONTHS WHICH REPORTS ARE DUE

June & December

B. PERIOD COVERED BY THIS REPORT

FROM: January 2015 TO: June 2015

(3) DESCRIPTION OF OPERATION

A. REGULATED PROCESSES

CORE PROCESS(ES)

CHECK EACH APPLICABLE BLOCK

G Electroplating
G Electroless Plating
G Anodizing
X Coating
G Chemical Etching and Milling
G Printed Circuit Board Manufacture

ANCILLARY PROCESS(ES)*

LIST BELOW EACH PROCESS USED IN THE FACILITY

Passive Rinse Tank

_____

_____

_____

_____

*SEE 40CFR433.10(a) FOR 40 DIFFERENT OPERATIONS

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.

C. Number of Regular Employees at this Facility: 79

D. [Reserved]

(4) FLOW MEASUREMENT

INDIVIDUAL & TOTAL PROCESS FLOWS DISCHARGED TO POTW IN *GALLONS PER DAY*

Process	Average	Maximum	Type of Discharge
Regulated (Core & Ancillary)	10037	30749	Continuous
Regulated (Cyanide)	0	0	N/A
'403.6(e) Unregulated*	0	0	N/A
'403.6(e) Dilute	483.3	1481	Continuous
Cooling Water**	7723	23660	Continuous
Sanitary**	-7328	-30589	Continuous
Total Flow to POTW	10439	23843	**********

**8"Unregulated" has a precise legal meaning; see 40CFR403.6(e).

**Indicate if these Streams commingle with Regulated Streams BEFORE treatment

(5) MEASUREMENT OF POLLUTANTS

A. TYPE OF TREATMENT SYSTEM

B. COMMENTS ON TREATMENT SYSTEM

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS OF 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.

Pollutant(mg/l)	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CN	TTO*
Max for 1 day	0.148	0.592	0.723	0.148	0.851	0.092	0.558	0.257	0.456
Monthly Ave	0.056	0.366	0.443	0.092	0.509	0.051	0.317	0.139	--
Max Measured	0.013	0.210	0.310	<0.04	0.310	<0.007	0.310	<0.01	TOMP
Ave Measured	0.013	0.210	0.310	<0.04	0.310	<0.007	0.310	<0.01	TOMP

Sample Location: Pretreatment system effluent

Sample Type (Grab or Composite): Grab/Composite

Number of Samples and Frequency Collected: One-Semi annually

40 CFR 136 Preservation and Analytical Methods Use: X Yes G No

Indicate Combined Wastestream Factor if Dilution Streams Exist w/Regulated Streams 0.214

(6) CERTIFICATION

A. Required under 40 CFR 403.12(g)

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.

Dave Merwitz
(Typed Name)

(Corporate Officer or authorized representative)

B. CHECK ONE: G '433.11(e) TOXIC ORGANIC ANALYSIS ATTACHED G '433.12(a) TTO CERTIFICATION

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to Arkansas Department of Environmental Quality.

Dave Merwitz
(Typed Name)

(Corporate Officer or authorized representative)

Date of Signature 8/19/2015

Intentionally left blank

(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 it 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(l)]

I certify under penalty of law that I have personally examined and am familiar with the information in 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.

Dave Merwitz
NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

SIGNATURE

General Manager
OFFICIAL TITLE

8/19/2015
DATE SIGNED

Waste Stream Factor

Total flow at Sample Point to City = Total Regulated + Total Dilute Flow

Combined wastestream factor is total regulated divided
by total flow at sample point

Flow Total at Sample Point	Minus	Diluted Flow	Divided by	Flow Total at Sample Point	Equals	Waste Stream Factor
10439		8206		10439		0.214

AMERICAN INTERPLEX
CORPORATION
LABORATORIES

The documents with this transmission are only for the recipient(s) named therein, and they contain confidential information. Unauthorized disclosure, dissemination, or copying of this transmission is strictly prohibited. If received in error, please destroy.

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June 10, 2015
Control No. 191070
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AMERICAN INTERPLEX CORPORATION
LABORATORIES

MacLean ESNA
ATTN: Mr. Steve Thielemier
611 Country Club Road
Pocahontas, AR 72455

This report contains the analytical results and supporting information for samples submitted on June 3, 2015. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Laboratory Director or a qualified designee.

John Overbey
Laboratory Director

AMERICAN INTERPLEX CORPORATION LABORATORIES

MacLean ESNA
611 Country Club Road
Pocahontas, AR 72455

SAMPLE INFORMATION

Project Description:
Two (2) water sample(s) received on June 3, 2015
P.O. No. 22-448-00

Receipt Details:
A Chain of Custody was provided. The samples were delivered in one (1) ice chest.
Ice chest #1 was delivered with shipping documentation.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

Sample Identification:

Laboratory ID	Client Sample ID	Sampled Date/Time	Notes
191070-1	001	02-Jun-2015 0704	
191070-2	001	01-Jun-2015 0840	

Case Narrative:
There were no qualifiers for this data and all samples met quality control criteria.

References:
"Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
"Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
"Standard Methods for the Examination of Water and Wastewaters", (SM).
"American Society for Testing and Materials" (ASTM).
"Association of Analytical Chemists" (AOAC).

AMERICAN INTERPLEX CORPORATION
LABORATORIES

MacLean ESNA
611 Country Club Road
Pocahontas, AR 72455

ANALYTICAL RESULTS

AIC No. 191070-1
Sample Identification: 001 02-Jun-2015 0704

Analyte		Result	RL	Units	Qualifier
Total Cyanide SM 4500-CN C,E 1999	Prep: 05-Jun-2015 0826 by 308	< 0.01 Analyzed: 10-Jun-2015 1250 by 308	0.01	mg/l Batch: W52152	

AIC No. 191070-2
Sample Identification: 001 01-Jun-2015 0840

Analyte		Result	RL	Units	Qualifier
Cadmium EPA 200.7	Prep: 03-Jun-2015 1403 by 313	0.073 Analyzed: 03-Jun-2015 1700 by 235	0.004	mg/l Batch: S39073	
Chromium EPA 200.7	Prep: 03-Jun-2015 1403 by 313	2.8 Analyzed: 03-Jun-2015 1700 by 235	0.007	mg/l Batch: S39073	
Copper EPA 200.7	Prep: 03-Jun-2015 1403 by 313	4.0 Analyzed: 03-Jun-2015 1700 by 235	0.006	mg/l Batch: S39073	
Lead EPA 200.7	Prep: 03-Jun-2015 1403 by 313	0.31 Analyzed: 03-Jun-2015 1700 by 235	0.04	mg/l Batch: S39073	
Nickel EPA 200.7	Prep: 03-Jun-2015 1403 by 313	3.3 Analyzed: 03-Jun-2015 1700 by 235	0.01	mg/l Batch: S39073	
Silver EPA 200.7	Prep: 03-Jun-2015 1403 by 313	< 0.007 Analyzed: 03-Jun-2015 1700 by 235	0.007	mg/l Batch: S39073	
Zinc EPA 200.7	Prep: 03-Jun-2015 1403 by 313	3.7 Analyzed: 03-Jun-2015 1700 by 235	0.002	mg/l Batch: S39073	

AMERICAN INTERPLEX CORPORATION LABORATORIES

June 10, 2015
Control No. 191070
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MacLean ESNA
611 Country Club Road
Pocahontas, AR 72455

LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	0.1 mg/l	105	85.0-115			W52152	05Jun15 0826 by 308	10Jun15 1236 by 308		
Cadmium	5 mg/l	98.4	85.0-115			S39073	03Jun15 1019 by 313	03Jun15 1450 by 235		
Chromium	0.5 mg/l	97.0	85.0-115			S39073	03Jun15 1019 by 313	03Jun15 1450 by 235		
Copper	0.5 mg/l	97.2	85.0-115			S39073	03Jun15 1019 by 313	03Jun15 1450 by 235		
Lead	5 mg/l	96.0	85.0-115			S39073	03Jun15 1019 by 313	03Jun15 1450 by 235		
Nickel	0.5 mg/l	95.8	85.0-115			S39073	03Jun15 1019 by 313	03Jun15 1450 by 235		
Silver	0.1 mg/l	108	85.0-115			S39073	03Jun15 1019 by 313	03Jun15 1450 by 235		
Zinc	0.5 mg/l	98.6	85.0-115			S39073	03Jun15 1019 by 313	03Jun15 1450 by 235		

MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Cyanide	191116-2	0.1 mg/l	95.7	75.0-125	W52152	05Jun15 0826 by 308	10Jun15 1241 by 308		
	191116-2	0.1 mg/l	102	75.0-125	W52152	05Jun15 0826 by 308	10Jun15 1243 by 308		
	Relative Percent Difference:		6.27	20.0	W52152				
Cadmium	191055-1	5 mg/l	98.0	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1455 by 235		
	191055-1	5 mg/l	94.0	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1459 by 235		
	Relative Percent Difference:		2.11	20.0	S39073				
Chromium	191055-1	0.5 mg/l	94.7	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1455 by 235		
	191055-1	0.5 mg/l	92.9	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1459 by 235		
	Relative Percent Difference:		1.82	20.0	S39073				
Copper	191055-1	0.5 mg/l	101	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1455 by 235		
	191055-1	0.5 mg/l	100	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1459 by 235		
	Relative Percent Difference:		0.694	20.0	S39073				
Lead	191055-1	5 mg/l	93.6	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1455 by 235		
	191055-1	5 mg/l	91.4	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1459 by 235		
	Relative Percent Difference:		2.38	20.0	S39073				
Nickel	191055-1	0.5 mg/l	92.5	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1455 by 235		
	191055-1	0.5 mg/l	90.3	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1459 by 235		
	Relative Percent Difference:		2.33	20.0	S39073				
Silver	191055-1	0.1 mg/l	106	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1455 by 235		
	191055-1	0.1 mg/l	104	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1459 by 235		
	Relative Percent Difference:		1.90	20.0	S39073				
Zinc	191055-1	0.5 mg/l	94.7	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1455 by 235		
	191055-1	0.5 mg/l	91.1	75.0-125	S39073	03Jun15 1019 by 313	03Jun15 1459 by 235		
	Relative Percent Difference:		2.11	20.0	S39073				

June 10, 2015
Control No. 191070
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AMERICAN INTERPLEX CORPORATION
LABORATORIES

MacLean ESNA
611 Country Club Road
Pocahontas, AR 72455

LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Total Cyanide	< 0.01 mg/l	0.01	0.01	W52182-1	05Jun15 0825 by 305	10Jun15 1238 by 305	
Cadmium	< 0.004 mg/l	0.004	0.004	S39073-1	03Jun15 1019 by 313	03Jun15 1446 by 235	
Chromium	< 0.007 mg/l	0.007	0.007	S39073-1	03Jun15 1019 by 313	03Jun15 1446 by 235	
Copper	< 0.008 mg/l	0.008	0.008	S39073-1	03Jun15 1019 by 313	03Jun15 1446 by 235	
Lead	< 0.04 mg/l	0.04	0.04	S39073-1	03Jun15 1019 by 313	03Jun15 1446 by 235	
Nickel	< 0.01 mg/l	0.01	0.01	S39073-1	03Jun15 1019 by 313	03Jun15 1446 by 235	
Silver	< 0.007 mg/l	0.007	0.007	S39073-1	03Jun15 1019 by 313	03Jun15 1446 by 235	
Zinc	< 0.002 mg/l	0.002	0.002	S39073-1	03Jun15 1019 by 313	03Jun15 1446 by 235	

AMERICAN INTERPLEX CORPORATION LABORATORIES

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE 1 OF 1

Client: Maclean / ESNA
Project Reference:
Project Manager:
Sampled By: Eric White

PO No.

MATRIX: WATER, SOIL

ANALYSES REQUESTED: Cyanide, Metals

AIC CONTROL NO: 191070
AIC PROPOSAL NO:
Carrier: UPS
Received Temperature C: 1.5

AIC No.	Sample Identification	Date/Time Collected	GRAB	COMP	WATER	SOIL	NO OF BOTTLES	Cyanide	Metals	Remarks
1	001	6/2/15 7:04am	X		X		1	X		
2	001	6/1/15 8:40am	X		X		1		X	METALS TAKEN FROM SAMPLE LABEL
				X						
		6/2/15 7:04am		X						
		Container Type						P	P	
		Preservative						B	N	

Field pH calibration on _____ @ _____
Buffer:

G = Glass, P = Plastic, V = VOA vials, H = HCl to pH2, T = Sodium Thiosulfate
NO = none, S = Sulfuric acid pH2, N = Nitric acid pH2, B = NaOH to pH12, Z = Zinc acetate, A=$(NH_4)_2SO_4$, NH_4OH

Turnaround Time Requested: (Please circle)
NORMAL or EXPEDITED IN ____ DAYS
Expedited results requested by: _____
Who should AIC contact with questions:
Phone 310-978-6166 Fax:
Report Attention to: Eric White
Report Address to:
Email Address:

Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received in Lab By: D. Brown	Date/Time 6-3-15 0940

Comments: UPS: 1Z 718 314 01 5460 4698

9/2014 FORM 0080