

**From:** Jeff Wages <JWages@Syrgis.com>  
**Sent:** Tuesday, October 09, 2012 10:46 AM  
**To:** Torrence, Rufus  
**Cc:** Henderson, Katie; JCummins@syrgis.com  
**Subject:** RE: AFIN 54-00429 AR0043389 ARP001013 Syrgis Performance Initiators August 2012 Semi-Annual Report..Repeated Zinc Analysis Due  
**Attachments:** Syrgis Wastewater 1210.pdf

Mr. Torrence,

Please find attached the lab report for the composited waste water sample that was analyzed for zinc. Also find attached a calculation sheet indicating how the composite sample percentages were determined and the procedure used for compositing the samples. These documents are being mailed to you.

Please let me know if you require additional information.

Sincerely,  
Jeff Wages



Syrgis Performance Initiators, Inc.

*Jeff Wages*

Regulatory Manager  
870.572.2935 x307  
<http://www.syrgispi.com/>

A United Initiators, Inc. Company  
[www.united-initiators.com](http://www.united-initiators.com)

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**From:** Torrence, Rufus [<mailto:TORRENCE@adeq.state.ar.us>]  
**Sent:** Thursday, September 13, 2012 1:40 PM  
**To:** Jeff Wages  
**Cc:** Henderson, Katie  
**Subject:** FW: AFIN 54-00429 AR0043389 ARP001013 Syrgis Performance Initiators August 2012 Semi-Annual Report..Repeated Zinc Analysis Due



September 11, 2012

Mr. Jeff Wages  
Syrgis Performance Initiators, Inc.  
334 Phillips 311 Road  
Helena, AR 72342-9033

Re: Syrgis 2012 August Semi-Annual Pretreatment Report  
(Tracking Number: ARP001013 AFIN: 54-00429 City of Helena NPDES No.:  
AR0043389)

Dear Mr. Wages:

The Department has reviewed Syrgis' August 2012 semi-annual report. In accordance with the terms in the Department's letter dated August 6, 2010, Syrgis appears to be **non-compliant** with the calculated limit for zinc. The calculated limit for zinc is 132 µg/l. Syrgis reported 264 µg/l for zinc in the "effluent".

Referring to the Department's letter dated August 12, 2011, find:

*Syrgis must sample only the process wastewater to verify compliance with the limits in 40 CFR 414.85 (Sub Part H). In accordance with 40 CFR 414.111(b), since Syrgis does not have a lead or zinc bearing waste stream listed in Appendix A, Syrgis must comply with the lead and zinc limits shown in the Department letter dated August 6, 2010. To verify compliance Syrgis must sample the process wastewater before it enters the pond and commingles with the stormwater. Syrgis' process wastewater enters the pond in three different lines. Syrgis must sample each line and may take grab samples (in lieu of flow proportional sampling). Syrgis may composite the three samples in proportion to flow and submit only the one composited sample to the lab for analysis.*

Referring to the telephone conversation on March 6, 2012 (see below), Syrgis sampled the pond effluent for the February 2012 report. The ETC analysis dated 7-9-2012 indicated after the heading, "Sample ID:", the term "Effluent". The ETC analysis dated 7-30-2012 indicated that the "City Water" had only 62.8 µg/l of zinc. Based on these two observations, Syrgis appears to have sampled the pond effluent again. However, because the submitted results indicated a "violation", in accordance with 40 CFR 403.12(g)(2), Syrgis must resample the process water to verify compliance. **Please be careful (1) to sample the three process lines and (2) to composite the sample in proportion to flow.**

Syrgis must submit the sampling analysis results to ADEQ along with supporting documented compositing procedure. Please submit the calculation sheet which shows how Syrgis determined the percentages. This may be a handwritten page, an Excel spreadsheet or a formal tabulated form. In either case, the submitted item must clearly show how Syrgis determined the percentages.

Please submit the lab results and the calculation information within thirty days of receiving this letter/email or by **November 1, 2012** (whichever comes first). In the future, please submit the calculation information with each semi-annual report.

If Syrgis has concerns or requires more details, please contact Rufus Torrence at (501) 682-0626 or [torrence@adeq.state.ar.us](mailto:torrence@adeq.state.ar.us).

Sincerely,

Rufus J. Torrence, Water Division Engineer

Encl: ADEQ Letter dated March 6, 2012 and e-mail dated March 06, 2012 2:39 pm

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**From:** Torrence, Rufus  
**Sent:** Tuesday, March 06, 2012 2:39 PM  
**To:** Jeff Wages ([jwages@syrgis.com](mailto:jwages@syrgis.com))  
**Cc:** Henderson, Katie; Fuller, Kim  
**Subject:** RE: AFIN 54-00429 AR0043389 ARP001013 Syrgis Performance Initiators: Process Water Analysis (Zinc)

Jeff,

In reference to our telephone conversation today, Syrgis sampled the pond effluent for the February 2012 report. Therefore, no calculation sheet is available for the February report.

Syrgis has agreed to sample the three process lines for future reports. Syrgis next report is due by August 31, 2012.

Rufus

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**From:** Torrence, Rufus  
**Sent:** Tuesday, March 06, 2012 1:41 PM  
**To:** Jeff Wages ([jwages@syrgis.com](mailto:jwages@syrgis.com))  
**Cc:** Henderson, Katie

**Subject:** AFIN 54-00429 AR0043389 ARP001013 Syrgis Performance Initiators: Process Water Analysis (Zinc)



March 6, 2012

Mr. Jeff Wages  
Syrgis Performance Initiators, Inc.  
334 Phillips 311 Road  
Helena, AR 72342-9033

Re: Syrgis 2012 February Semi-Annual Pretreatment Report  
(Tracking Number: ARP001013 AFIN: 54-00429 City of Helena NPDES No.:  
AR0043389)

Dear Mr. Wages:

The Department has reviewed Syrgis' February 2012 semi-annual report. In accordance with the terms in the Department's letter dated August 6, 2010, Syrgis appears to be compliant with the calculated effluent limits for lead and zinc. The calculated limit for lead is 57.6 µg/l and for zinc is 132 µg/l. Syrgis reported 1.24 µg/l for lead and 45.7 µg/l for zinc in the effluent.

Referring to the Department's letter dated August 12, 2011, find:

*Syrgis must sample only the process wastewater to verify compliance with the limits in 40 CFR 414.85 (Sub Part H). In accordance with 40 CFR 414.111(b), since Syrgis does not have a lead or zinc bearing waste stream listed in Appendix A, Syrgis must comply with the lead and zinc limits shown in the Department letter dated August 6, 2010. To verify compliance Syrgis must sample the process wastewater before it enters the pond and commingles with the stormwater. Syrgis' process wastewater enters the pond in three different lines. Syrgis must sample each line and may take grab samples (in lieu of flow proportional sampling). Syrgis may composite the three samples in proportion to flow and submit only the one composite sample to the lab for analysis.*

The Department cannot verify that the submitted lead and zinc analyses were composited samples. Please submit the calculation sheet which shows how Syrgis determined the percentages. This may be a handwritten page, an Excel spreadsheet or a formal tabulated

form. In either case, the submitted item must clearly show how Syrgis determined the percentages.

Please submit the calculation information within thirty days of receiving this letter/email or by **April 20, 2012** (whichever comes first). In the future, please submit the calculation information with each semi-annual report.

If Syrgis has concerns or requires more details, please contact Rufus Torrence at (501) 682-0626 or [torrence@adeq.state.ar.us](mailto:torrence@adeq.state.ar.us).

Sincerely,

Rufus J. Torrence, Water Division Engineer

Encl: ADEQ Letters dated 9-4-2009, 8-6-2010 and 8-12-2011

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK / ARKANSAS 72118-5317 / TELEPHONE 501-682-0744 / FAX 501-682-0880  
[www.adeq.state.ar.us](http://www.adeq.state.ar.us)



# Syrgis Performance Initiators, Inc.

334 Phillips 311 Road  
Industrial Park Road  
Helena, Arkansas 72342-9033

Customer Service: (800) 786-6722  
Customer Service Fax: (800) 987-0845  
Phone: (870) 572-2935  
Fax: (870) 572-1416

October 9, 2012

Mr. Rufus J. Torrence  
ADEQ NPDES Pretreatment Engineer  
Arkansas Department of Environmental Quality  
Water Division  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

Dear Mr. Torrence:

Please find attached the lab results for Syrgis Performance Initiators composited waste water sample. Also find attached a calculation sheet indicating how the composite sample percentages were determined and the procedure used for compositing the samples.

Please contact me by phone at 870.572.2935 ext. 307 or by e-mail at [iwages@syrgis.com](mailto:iwages@syrgis.com) if you have any questions or require additional information.

Sincerely,

Jeff Wages  
Regulatory Manager

Enclosures

cc:

Jon Cummins - Syrgis



### Determining percent of each process for composite sample

The amount/percent of waste water from each of the three Syrgis process water samples to be contributed to the composite sample of all three processes was determined by dividing the average daily discharge of each process by the total average daily discharge of the entire facility.

2012				
Composite sample by percent of process wastewater for zinc and lead analysis				
<b>Process</b>	<b>BPO</b>	<b>MEKP</b>	<b>MIBKP</b>	<b>Total</b>
<b>Average GPD</b>	28,224	16,727	135.26	45,086
<b>% of Total</b>	0.626	0.371	0.003	
<b>Water Usage</b>	<b>from 1/5/2012</b>		<b>to 6/6/2012</b>	
Average GPD	45,086			
<b>BPO process discharge</b>				
28,224/45,086			62.6%	
<b>MEKP process discharge</b>				
16,727/45,086			37.1%	
<b>MIBKP process discharge</b>				
135/45,086			0.3%	

### Compositing Procedure

Three sample containers are used to collect 500 milliliters of waste water from each of the three Syrgis processes. One container is used for each separate process. Each container is labeled with the process name from which it was taken, i.e., BPO, MIBKP, and MEKP.

The three waste water samples are taken to the R&D Lab. 313 milliliters of the BPO process waste water sample are placed into the composite sample container. 185.5 milliliters of the MEKP process waste water sample is placed into the composite sample container. 1.5 milliliters of the MIBKP waste water sample is placed into the composite sample container. The composite sample container is sealed and shipped to Syrgis' analytical service provider for analysis.



# ENVIRONMENTAL TESTING & CONSULTING, INC.

2790 Whitten Road

Memphis, Tennessee 38133

(901) 213-2400

Fax (901) 213-2440

"A Laboratory Management Partner"

10/5/2012

Rineco Analytical Services  
Ms. Mia Dixon  
P O Box 729  
Benton, AR, 72018

Ref: Analytical Testing  
ETC Report Number: 12-277-0208  
Client Project Description: Syrgis Performance Initiators, Inc.

Dear Ms. Mia Dixon:

Environmental Testing and Consulting, Inc. received sample(s) on 10/3/2012 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an as-received basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Randy Thomas  
Project Manager

*Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.*

Alabama #40750	Louisiana #04015	VA NELAP #460181	Texas #T104704180-11-6	Arkansas #88-0650
Mississippi #90047	California #09267CA	NC #415	Oklahoma #9311	Virginia #00106
Kentucky #90047	Tennessee #TN02027	EPA #TN00012	Kentucky UST #41	Kansas #E-10396







# ENVIRONMENTAL TESTING & CONSULTING, INC.

www.etcmemphis.com

2790 Whitten Road

Memphis, Tennessee 38133

(901) 213-2400

Fax (901) 213-2440

"A Laboratory Management Partner"

05424

Rineco Analytical Services

Ms. Mia Dixon

P O Box 729

Benton, AR 72018

Project Syrgis Performance Initiators, Inc.  
Information :

Report Date : 10/5/2012

Report Number : **12-277-0208**

## REPORT OF ANALYSIS

Received : 10/3/2012

Lab No : **98746**

Sample ID : **Process Waste Water 3**

Matrix: **Aqueous**

Sampled: **10/2/2012 11:30**

Test	Results	Units	ML	DF	Date / Time Analyzed	By	Analytical Method
Total Zinc	<b>30.6</b>	µg/L	25.0	5	10/04/12 16:18	RQE	EPA-200.8

### Qualifiers/ Definitions

\*

Outside QC limit

ML

Method Quantitation Limit

DF

Dilution Factor



Cooler Receipt Form

Customer Number: 05424

Customer Name: Rineco Analytical Services

Report Number: 12-277-0208

Shipping Method

Fed Ex UPS US Postal Client Lab Courier Other:

Shipping container/cooler uncompromised? Custody seals intact on shipping container/cooler? Custody seals intact on sample bottles? Chain of Custody (COC) present? COC agrees with sample label(s)? COC properly completed? Samples in proper containers? Sample containers intact? Sufficient sample volume for indicated test(s)? All samples received within holding time? Cooler temperature in compliance? Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun. Water - Sample containers properly preserved Water - VOA vials free of headspace Trip Blanks received with VOAs Soil VOA method 5035 - compliance criteria met High concentration container (48 hr) Low concentration EnCore samplers (48 hr) High concentration pre-weighed (methanol -14 d) Low conc pre-weighed vials (Sod Bis -14 d) Special precautions or instructions included?

Comments:

Any regulatory non-compliance issues will be recorded on non-compliance report.

Signature: Brooke Shoup

Date & Time: 10/03/2012 09:54:45



# ENVIRONMENTAL TESTING & CONSULTING, INC.

2790 Whitten Road Memphis, Tennessee 38133 (901) 213-2400 Fax (901) 213-2440



Rineco Analytical Services  
Syrgis Performance Indicators, Inc.

13-277 0268  
05-124  
2012-10-03  
08 53 59

Company Name Rineco Analytical Services		Customer Number 05424	Telephone (870) 572-2935	RUSH <input checked="" type="checkbox"/>	ICE <input type="checkbox"/>		
Site Name Syrgis - Wastewater		Project Comment Kit 2 of 2			FID Number		
Project Rineco - Syrgis		Project Number	PO Number				
Project Manager / Contact Mr. Jeff Wages Syrgis Performance			E-mail jwages@syrgis.com				
Sample ID	Container Type	Collected Date / Time	# Cont	Preservative	Grab / Comp	Matrix	Analyses
Process Waste Water 3	Plastic - Pint	10-2-2012 11:30 AM	1	HNO <sub>3</sub> - Nitric Acid	COMP	Aqueous	200.8 - Zn

Sampled By Jeff Wages	Method of Shipment FedEx	Blank / Cooler Temperature	Remarks N/A 3 Processes Waste water
Relinquished By (sign) Jeff Wages	Date / Time 10-2-2012 11:45 AM	Received By (sign)	Date / Time
Relinquished By (sign)	Date / Time	Received By (sign)	Date / Time
Relinquished By (sign)	Date / Time	Received By Lab (sign) B. H. [Signature]	Date / Time 10-3-12 09:03