

## Wilson, Tabatha

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**From:** Gilliam, Allen  
**Sent:** Monday, March 24, 2014 2:00 PM  
**To:** Jeff.Wages@united-in.com; Jon.Cummins@united-in.com  
**Cc:** Fuller, Kim; Wilson, Tabatha; helenawater@sbcglobal.com  
**Subject:** AR0043389\_United Initiators SPI ARP001013 Feb 2014 non compliant semi annual Pretreatment report with ADEQ reply\_20140324  
**Attachments:** United Initiators Wastewater Report 1402.pdf; Wastewater Composite SOP 1402.pdf; United Initiators SPI 14-022-0215 20140128 report\_far\_2833815-333.PDF; Syrgis Performance Initiators Inc 14-021-0301 20140203 report\_far\_2840672-336.PDF

Jeff,

United Initiators' (UI) February 2014 semi-annual Pretreatment report was e-received, reviewed and deemed non-compliant.

As per our phone conversation this morning, the streamlining modifications to the Federal Pretreatment Regulations in 40 CFR 403, specifically 40 CFR 403.6(c)(6) state, "[ADEQ] may convert the mass limits of the categorical Pretreatment Standards at 40 CFR parts 414, 419, and 455 to concentration limits for purposes of calculating limitations applicable to individual Industrial Users under the following conditions. When converting such limits to concentration limits, the Control Authority must use the concentrations listed in the applicable subparts of 40 CFR parts 414, 419, and 455 and document that dilution is not being substituted for treatment as prohibited by paragraph (d) of this section." Documentation that dilution is not being substituted for treatment will be discussed below.

Prior to these streamlining revisions UI, covered under Subpart H with standards pursuant to 40 CFR 414.111(a) stated, "Any point source subject to this subpart must achieve discharges not exceeding the quantity (mass) determined by multiplying the process wastewater flow subject to this subpart times the concentration listed in the following table." ADEQ will allow the concentration limits in CFR 414.111 to be UI's categorical standards.

Violations:

- 1) The Dimethyl phthalate concentration discharged from UI to the City exceeded both the Maximum for any one day limit (47 ug/l) and the Maximum for any monthly average limit of 19 ug/l.
- 2) The Pretreatment reporting requirements in 40 CFR 403.12(g)(2) state, "If sampling performed by [UI] indicates a violation, [UI] shall notify [ADEQ] within 24 hours of becoming aware of the violation. [UI] shall also repeat the sampling and analysis and submit the results of the repeat analysis to [ADEQ] within 30 days after becoming aware of the violation." No documentation can be located UI notified ADEQ of the violation nor repeated the analysis and submitted its results within 30 days.

Considering the size of your treatment/holding ponds (~6.5 acres), please provide within thirty (30) days from the date on this correspondence a proper dilution factor taking into account the average rainfall and evaporation for your area. Include stormwater piped to the pond as indicated by Mr.

Torrence's correspondence dated 8/12/11. Provide the resources from which your dilution factor is based upon.

For example, <http://www.usclimatedata.com/climate.php?location=USAR0261> indicates Helena's average annual precipitation is ~51".

Table I of [NOAA Technical Report NWS 34 - National Weather Service](#) (albeit old) indicates the average rate of evaporation at Stuttgart is ~53". Depending on how much stormwater is discharged into your treatment ponds, this exercise may be a moot point with UI not having a dilution factor.

Provide within thirty (30) days from the date on this correspondence a repeat analysis of a representative sample of wastewater discharged to the City indicating compliance for all parameters listed in 40 CFR 414.111. If not compliant, UI must repeat these analysis until it can take corrective actions and show compliance.

Sincerely,

Allen Gilliam  
ADEQ State Pretreatment Coordinator  
501.682.0625

ec: Terry McGinister, Helena General Manager

E/NPDES/NPDES/Pretreatment/Reports

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**From:** Jeff Wages [mailto:Jeff.Wages@united-in.com]  
**Sent:** Monday, February 17, 2014 2:41 PM  
**To:** Gilliam, Allen  
**Cc:** Jon.Cummins@united-in.com  
**Subject:** United Initiators SPI Water Report February 2014

Dear Mr. Gilliam,

In accordance with 40 CFR Part 403.12(e) industrial users with processes regulated by categorical pretreatment standards (40 CFR Part 414, et al), please find attached our most recent monitoring report for the wastewater discharged from the United Initiators SPI, Inc. facility in Helena, Arkansas. Also attached are two sets of wastewater analytical results and the procedure used to composite the wastewater sample analyzed for zinc and lead.

Please contact me by phone at 870.572.2935 ext. 307 or by e-mail at [jeff.wages@united-in.com](mailto:jeff.wages@united-in.com) if you have any questions or require additional information regarding this report.

<<United Initiators Wastewater Report 1402.pdf>> <<Wastewater Composite SOP 1402.pdf>>

<<United Initiators SPI 14-022-0215 20140128 report\_far\_2833815-333.PDF>> <<Syrgis Performance Initiators Inc 14-021-0301 20140203 report\_far\_2840672-336.PDF>>

Best Regards,

**Jeff Wages**  
Regulatory Manager  
Phone : +1 (870) 572-3297 Ext. 307

Fax: +1 (870) 572-1416  
Mobile: +1 (870) 995-3443  
[jeff.wages@united-in.com](mailto:jeff.wages@united-in.com)

UNITED INITIATORS SPI, INC  
334 Phillips 311 Road  
Helena, AR 72342

[www.syrgispi.com](http://www.syrgispi.com)

[www.united-initiators.com](http://www.united-initiators.com)



**40CFR414 SEMI-ANNUAL REPORT CON'D FACILITY NAME:**

**(4) FLOW MEASUREMENT (CON'D)**

B. INDIVIDUAL PROCESS FLOWS IN GALLONS PER DAY

Process	Average Flow Rate (gpd)	Maximum Flow Rate (gpd)	Type of Discharge (Batch, etc)
Regulated	45,101	52,897	
Unregulated*			
Cooling Water			
Sanitary	730	856	

\*"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
- Biological
- G Cyanide Destruction
- G Other \_\_\_\_\_
- G None

B. COMMENTS ON TREATMENT SYSTEM

**Two aerated ponds with a total surface area of ~6.5 acres.**

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. ZERO CONCENTRATIONS ARE NOT ACCEPTABLE; LIST THE DETECTION LIMIT IF CONCENTRATION WAS BELOW DETECTION LIMIT.

TABULATE THE FOLLOWING INFORMATION ON PAGE 3

AEC Ψ AVERAGE EQUIVALENT CONCENTRATION

Sample Location Pond 2 effluent

Sample Type (Grab or Composite) Composite & Grab per testing requirements

Number of Samples and Frequency Collected 2/Semiannually

40CFR136 Preservation and Analytical Methods Use:  Yes G No

D. WAS THE COMBINED WASTESTREAM FORMULA USED TO DETERMINE ALTERNATE LIMITS?  Yes G No

**40CFR414 SEMI-ANNUAL REPORT CON'D FACILITY NAME:**

Pollutant	AEC	MEC	AMAC	AMMC
Benzene	56 ug/L	132 ug/L	9.11 ug/L	9.11 ug/L
Carbon Tetrachloride	140 ug/L	374 ug/L	<1.00 ug/L	<1.00 ug/L
Chlorobenzene	140 ug/L	374 ug/L	<1.00 ug/L	<1.00 ug/L
1,2,4 - Trichlorobenzene	193 ug/L	781 ug/L	<20.0 ug/L	<20.0 ug/L
Hexachlorobenzene	193 ug/L	781 ug/L	<20.0 ug/L	<20.0 ug/L
1,2 - Dichloroethane	177 ug/L	565 ug/L	<1.00 ug/L	<1.00 ug/L
1,1,1 - Trichloroethane	22 ug/L	58 ug/L	<1.00 ug/L	<1.00 ug/L
Hexachloroethane	193 ug/L	781 ug/L	<20.0 ug/L	<20.0 ug/L
1,1 - Dichloroethane	22 ug/L	58 ug/L	<1.00 ug/L	<1.00 ug/L
1,1,2 - Trichloroethane	31 ug/L	125 ug/L	<1.00 ug/L	<1.00 ug/L
Chloroethane	108 ug/L	290 ug/L	<1.00 ug/L	<1.00 ug/L
Chloroform	109 ug/L	320 ug/L	1.30 ug/L	1.30 ug/L
1,2 - Dichlorobenzene	193 ug/L	781 ug/L	3.49 ug/L	3.49 ug/L
1,3 - Dichlorobenzene	140 ug/L	374 ug/L	<1.00 ug/L	<1.00 ug/L
1,4 - Dichlorobenzene	140 ug/L	374 ug/L	<1.00 ug/L	<1.00 ug/L
1,1 - Dichloroethylene	22 ug/L	59 ug/L	<1.00 ug/L	<1.00 ug/L
1,2 - trans - Dichloroethylene	25 ug/L	65 ug/L	<1.00 ug/L	<1.00 ug/L
1,2 - Dichloropropane	193 ug/L	781 ug/L	<1.00 ug/L	<1.00 ug/L
1,3 - Dichloropropylene	193 ug/L	781 ug/L	<1.00 ug/L	<1.00 ug/L
Ethylbenzene	140 ug/L	374 ug/L	<1.00 ug/L	<1.00 ug/L
Methylene Chloride	35 ug/L	167 ug/L	<10.0 ug/L	<10.0 ug/L
Methyl Chloride	108 ug/L	290 ug/L	<1.00 ug/L	<1.00 ug/L
Hexachlorobutadiene	140 ug/L	374 ug/L	<20.0 ug/L	<20.0 ug/L
Nitrobenzene	2201 ug/L	6300 ug/L	<20.0 ug/L	<20.0 ug/L
2 - Nitrophenol	64 ug/L	227 ug/L	<20.0 ug/L	<20.0 ug/L
4 - Nitrophenol	159 ug/L	567 ug/L	<80.0 ug/L	<80.0 ug/L
4,6 - Dinitro-o-cresol	77 ug/L	273 ug/L	<40.0 ug/L	<40.0 ug/L
Tetrachloroethylene	51 ug/L	161 ug/L	<1.00 ug/L	<1.00 ug/L
Toluene	28 ug/L	73 ug/L	<5.00 ug/L	<5.00 ug/L
Trichloroethylene	26 ug/L	68 ug/L	<1.00 ug/L	<1.00 ug/L
Vinyl Chloride	95 ug/L	169 ug/L	<1.00 ug/L	<1.00 ug/L
Total Cyanide	413 ug/L	1181 ug/L	<10 ug/L	<10 ug/L
Total Lead	57.6 ug/L	57.6 ug/L	<5.00ug/L	<5.00ug/L
Total Zinc	134.4 ug/L	134.4 ug/L	<50.0ug/L	<50.0ug/L

**40CFR414 SEMI-ANNUAL REPORT CON'D FACILITY NAME:**

(7) GENERAL COMMENTS

See attached procedure used for sampling and compositing waste water samples taken from the three United Initiators SPI processes to be analyzed for lead and zinc. ETC Report Number: 14-022-0215 analysis results correspond to the waste water sample taken utilizing this procedure.

(8) SIGNATORY REQUIREMENTS

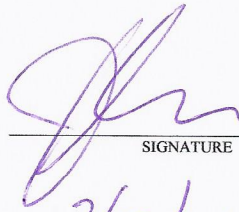
I certify under penalty of law that I have personally examined and am familiar with the information in this semi-annual compliance report and all attachments, and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the report, I believe that the 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.

**Jon Cummins**

NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

**Vice President of Operations**

OFFICIAL TITLE



SIGNATURE

2/17/2014

DATE SIGNED

## Procedure for determining percent of each process for composite sample to be analyzed for lead and zinc

The amount/percent of waste water from each of the three United Initiators SPI 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.

	February 2014 Report			
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>	28233	16733	135	45101
<b>% of Total</b>	0.626	0.371	0.003	

## 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 United Initiators SPI's analytical service provider for analysis.



1/28/2014

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

Ref: Analytical Testing  
ETC Report Number: 14-022-0215  
Client Project Description: United Initiators SPI  
Process

Dear Ms. Mia Dixon:

Environmental Testing and Consulting, Inc. received sample(s) on 1/22/2014 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		California	#09267CA	NC	#415	Oklahoma	#9311	Virginia	#00106
Kentucky	#90047	Tennessee	#TN02027	EPA	#TN00012	Kentucky UST	#41	Kansas	#E-10396





05424

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

Project United Initiators SPI  
Information : Process

Report Date : 1/28/2014

Report Number : **14-022-0215**

### REPORT OF ANALYSIS

Received : 1/22/2014

Lab No : **89300**  
Sample ID : **Process Waste Water**

Matrix: **Aqueous**  
Sampled: **1/21/2014 10:50**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Total Lead	<5.00	µg/L	5.00	10	01/24/14 14:56	RQE	EPA-200.8
Total Zinc	<50.0	µg/L	50.0	10	01/24/14 14:56	RQE	EPA-200.8

#### Qualifiers/ Definitions

\* Outside QC limit  
MQL Method Quantitation Limit

DF Dilution Factor

**Cooler Receipt Form**

Customer Number: **05424**

Customer Name: **Rineco Analytical Services**

Report Number: **14-022-0215**

**Shipping Method**

Fed Ex    UPS    US Postal    Client    Lab    Courier    Other :

Shipping container/cooler uncompromised?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Custody seals intact on shipping container/cooler?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Not Required
Custody seals intact on sample bottles?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Not Required
Chain of Custody (COC) present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC agrees with sample label(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC properly completed	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples in proper containers?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample containers intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient sample volume for indicated test(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
All samples received within holding time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cooler temperature in compliance?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun.	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Water - Sample containers properly preserved	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
Water - VOA vials free of headspace	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Trip Blanks received with VOAs	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Soil VOA method 5035 – compliance criteria met	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input type="checkbox"/> High concentration container (48 hr)		<input type="checkbox"/> Low concentration EnCore samplers (48 hr)	
<input type="checkbox"/> High concentration pre-weighed (methanol -14 d)		<input type="checkbox"/> Low conc pre-weighed vials (Sod Bis -14 d)	
Special precautions or instructions included?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	

Comments:

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

Signature:

Date & Time:



# ENVIRONMENTAL TESTING & CONSULTING, INC.

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



Rineco Analytical Services  
United Initiators SPI

14-022-0215  
05424  
01-22-2014  
10:33:08

<b>Company Name</b> Rineco Analytical Services		<b>Customer Number</b> 05424		<b>Telephone</b> (870) 572-2935		<b>RUSH</b>	<b>ICE</b>
<b>Site Name</b> SyrGIS - Wastewater <i>Process</i>		<b>Project Comment</b> Kit 1 of 2		<b>FID Number</b>			
<b>Project</b> Rineco - Syrgis		<b>Project Number</b>		<b>PO Number</b>			
<b>Project Manager / Contact</b> Mr. Jeff Wages		<i>United Initiators SPI</i>		<b>E-mail</b> <i>jeff.wages@united-inc.com</i>			
<b>Sample ID</b>	<b>Container Type</b>	<b>Collected Date / Time</b>	<b># Cont</b>	<b>Preservative</b>	<b>Grab / Comp</b>	<b>Matrix</b>	<b>Analyses</b>
<i>Process Wastewater</i>	Plastic - Pint	<i>1-21-2014 10:50 AM</i>	1	HNO3 - Nitric Acid		Aqueous	200.8 - Zn, Pb

<b>Sampled By</b> <i>Jeff Wages</i>	<b>Method of Shipment</b> <i>FedEx</i>	<b>Blank / Cooler Temperature</b> <i>N/A</i>	<b>Remarks</b>
<b>Relinquished By (sign)</b> <i>Jeff Wages</i>	<b>Date / Time</b> <i>1-21-2014 11:15 AM</i>	<b>Received By (sign)</b>	<b>Date / Time</b>
<b>Relinquished By (sign)</b>	<b>Date / Time</b>	<b>Received By (sign)</b>	<b>Date / Time</b>
<b>Relinquished By (sign)</b>	<b>Date / Time</b>	<b>Received by Lab (sign)</b> <i>B/Bowp</i>	<b>Date / Time</b> <i>1-22-14 09:30</i>

2/3/2014

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

Ref: Analytical Testing  
ETC Report Number: 14-021-0301  
Client Project Description: Syrgis Performance Initiators, Inc.  
Composite Sampling

Dear Ms. Mia Dixon:

Environmental Testing and Consulting, Inc. received sample(s) on 1/21/2014 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.

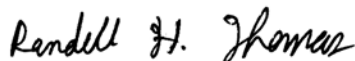
The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2012) 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.

Per EPA Methods Update Rule (May 2012), all methods from Standard Methods for the Examination of Water and Wastewater are reported to include the year of approval.

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		California	#09267CA	NC	#415	Oklahoma	#9311	Virginia	#00106
Kentucky	#90047	Tennessee	#TN02027	EPA	#TN00012	Kentucky UST	#41	Kansas	#E-10396



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Client: Rineco Analytical Services  
Project: Syrgis Performance Initiators, Inc.  
Lab Report Number: 14-021-0301  
Date: 2/3/2014

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**CASE NARRATIVE**

**Semivolatile Organic Compounds - GC/MS Method EPA-625**

Sample 89193 (Composite 1/20-21/14)

QC Batch No: L187470

Surrogates were flagged for recoveries in the associated project sample. During the extraction step, the extraction technician noted that a significant emulsion formed. Batch QC samples (Method Blank and Laboratory Control Samples) all showed surrogate recoveries within QC limits, indicating that the low recoveries were due to the sample matrix.

**Extraction and Conc. for 625 Method EPA-625 (PREP)**

QC Batch No: L187389

The weight/volume extracted was reduced during the extraction procedure due to the nature of the sample. Reporting limits are factored for the sample size reduction.



www.etcmemphis.com

# ENVIRONMENTAL TESTING & CONSULTING, INC.

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 : Composite Sampling

Report Date : 02/03/2014  
Received : 1/21/2014

Report Number : **14-021-0301**

## REPORT OF ANALYSIS

Lab No : **89192**  
Sample ID : **Grab**

Matrix: **Aqueous**  
Sampled: **1/21/2014 11:40**

Test	Results	Units	ML	DF	Date / Time Analyzed	By	Analytical Method
Total Cyanide	<0.010	mg/L	0.010	1	01/23/14 11:10	EWB	4500CNE-2011
Oil and Grease	<2.0	mg/L	2.0	1	01/28/14 15:00	ACP	1664A

### Qualifiers/ Definitions

\* Outside QC limit  
ML Method Quantitation Limit

DF Dilution Factor

05424

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

Project Syrgis Performance Initiators, Inc.  
 Information : Composite Sampling

Report Date : 02/03/2014  
 Received : 1/21/2014

Report Number : **14-021-0301**

**REPORT OF ANALYSIS**

Lab No : **89192**  
 Sample ID : **Grab**

Matrix: **Aqueous**  
 Sampled: **1/21/2014 11:40**

**Analytical Method:** 624

**Prep Method:** EPA-624 (PREP)

**Prep Batch(es):** L188448

**Date/Time Prepped:** 1/31/2014 10:03:00

Test	Results	Units	ML	DF	Date / Time Analyzed	By	Analytical Batch
Acrolein	<20.0	µg/L	20.0	1	01/31/14 16:18	SEB	L188452
Acrylonitrile	<20.0	µg/L	20.0	1	01/31/14 16:18	SEB	L188452
Benzene	<b>9.11</b>	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Bromodichloromethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Bromoform	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Bromomethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Carbon Tetrachloride	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Chlorobenzene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Chlorodibromomethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Chloroethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
2-Chloroethylvinyl Ether	<5.00	µg/L	5.00	1	01/31/14 16:18	SEB	L188452
Chloroform	<b>1.30</b>	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Chloromethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,2-Dichlorobenzene	<b>3.49</b>	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,3-Dichlorobenzene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,4-Dichlorobenzene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,1-Dichloroethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,2-Dichloroethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,1-Dichloroethene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
cis-1,2-Dichloroethene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,2-Dichloroethene (Total)	<1.00	µg/L	1.00	1	01/31/14 16:18		L188452

**Qualifiers/** \* Outside QC limit  
**Definitions** I Recovery out of range

DF Dilution Factor  
 MQL Method Quantitation Limit



05424

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

Project Syrgis Performance Initiators, Inc.  
Information : Composite Sampling

Report Date : 02/03/2014  
Received : 1/21/2014

Report Number : **14-021-0301**

**REPORT OF ANALYSIS**

Lab No : **89192**  
Sample ID : **Grab**

Matrix: **Aqueous**  
Sampled: **1/21/2014 11:40**

**Analytical Method:** 624

**Prep Method:** EPA-624 (PREP)

**Prep Batch(es):** L188448

**Date/Time Prepped:** 1/31/2014 10:03:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dichloropropane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,3-Dichloropropene (Total)	<1.00	µg/L	1.00	1	01/31/14 16:18		L188452
Ethylbenzene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Methylene Chloride	<10.0	µg/L	10.0	1	01/31/14 16:18	SEB	L188452
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,1,2,2-Tetrachloroethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Tetrachloroethene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Toluene	<5.00	µg/L	5.00	1	01/31/14 16:18	SEB	L188452
1,1,1-Trichloroethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
1,1,2-Trichloroethane	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Trichloroethene	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Vinyl Chloride	<1.00	µg/L	1.00	1	01/31/14 16:18	SEB	L188452
Surrogate: 4-Bromofluorobenzene	126		Limits: 71-131%	1	01/31/14 16:18	SEB	L188452
Surrogate: Dibromofluoromethane	103		Limits: 70-128%	1	01/31/14 16:18	SEB	L188452
Surrogate: 1,2-Dichloroethane - d4	103		Limits: 67-136%	1	01/31/14 16:18	SEB	L188452
Surrogate: Toluene-d8	97.0		Limits: 70-130%	1	01/31/14 16:18	SEB	L188452

Qualifiers/Definitions	*	Outside QC limit	DF	Dilution Factor
	I	Recovery out of range	MQL	Method Quantitation Limit



05424

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

Project Syrgis Performance Initiators, Inc.  
Information : Composite Sampling

Report Date : 02/03/2014  
Received : 1/21/2014

Report Number : **14-021-0301**

### REPORT OF ANALYSIS

Lab No : **89193**

Matrix: **Aqueous**

Sample ID : **Composite 1/20-21/14**

Sampled: **1/21/2014 0:00**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Biochemical Oxygen Demand (5-day)	<b>419</b>	mg/L	150	1	01/21/14 12:30	TKM	5210B-2011
Chloride	<b>6740</b>	mg/L	80.0	200	01/22/14 19:08	RQE	EPA-300.0
COD (Chemical Oxygen Demand)	<b>859</b>	mg/L	750	5	01/24/14 08:50	TKM	5220D-2011
Total Dissolved Solids	<b>11800</b>	mg/L	10	1	01/23/14 13:15	KM2	2540C-2011
Total Suspended Solids	<b>50</b>	mg/L	2	1	01/23/14 10:00	ALP	2540D-2011
Total Kjeldahl Nitrogen	<b>7.58</b>	mg/L	0.500	1	01/27/14 07:30	CLP	4500NH3D-2011
TOC	<b>150</b>	mg/L	10.0	1	01/23/14 08:55	JRS	5310C-2011
Total Lead	<b>0.672</b>	µg/L	0.500	1	01/22/14 13:52	RQE	EPA-200.8
Total Zinc	<b>51.9</b>	µg/L	5.00	1	01/22/14 13:52	RQE	EPA-200.8

#### Qualifiers/ Definitions

\* Outside QC limit  
MQL Method Quantitation Limit

DF Dilution Factor

05424

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

Project Syrgis Performance Initiators, Inc.  
 Information : Composite Sampling

Report Date : 02/03/2014  
 Received : 1/21/2014

Report Number : **14-021-0301**

**REPORT OF ANALYSIS**

Lab No : **89193**

Matrix: **Aqueous**

Sample ID : **Composite 1/20-21/14**

Sampled: **1/21/2014 0:00**

**Analytical Method:** 625

**Prep Method:** 625

**Prep Batch(es):** L187389

**Date/Time Prepped:** 1/22/2014 14:00:00

Test	Results	Units	ML	DF	Date / Time Analyzed	By	Analytical Batch
Acenaphthene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Acenaphthylene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Anthracene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Benzdine	<80.0	µg/L	80.0	1	01/22/14 23:41	NFP	L187470
Benzo(a)anthracene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Benzo(a)pyrene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Benzo(b)fluoranthene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Benzo(g,h,i)perylene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Benzo(k)fluoranthene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Bis(2-Chloroethoxy)methane	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Bis(2-Chloroethyl)ether	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Bis(2-Chloroisopropyl)ether	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Bis(2-ethylhexyl)phthalate	<40.0	µg/L	40.0	1	01/22/14 23:41	NFP	L187470
4-Bromophenyl phenyl ether	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Butyl benzyl phthalate	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
4-Chloro-3-methylphenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2-Chloronaphthalene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2-Chlorophenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
4-Chlorophenyl phenyl ether	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Chrysene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Dibenz(a,h)anthracene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
1,2-Dichlorobenzene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470

**Qualifiers/  
 Definitions**

\* Outside QC limit  
 I Recovery out of range

DF Dilution Factor  
 MQL Method Quantitation Limit

05424

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

Project Syrgis Performance Initiators, Inc.  
Information : Composite Sampling

Report Date : 02/03/2014  
Received : 1/21/2014

Report Number : **14-021-0301**

**REPORT OF ANALYSIS**

Lab No : **89193**

Matrix: **Aqueous**

Sample ID : **Composite 1/20-21/14**

Sampled: **1/21/2014 0:00**

**Analytical Method:** 625

**Prep Method:** 625

**Prep Batch(es):** L187389

**Date/Time Prepped:** 1/22/2014 14:00:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,3-Dichlorobenzene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
1,4-Dichlorobenzene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
3,3'-Dichlorobenzidine	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2,4-Dichlorophenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Diethyl phthalate	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Dimethyl phthalate	<b>445</b>	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2,4-Dimethylphenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Di-n-butyl phthalate	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
4,6-Dinitro-2-methylphenol	<40.0	µg/L	40.0	1	01/22/14 23:41	NFP	L187470
2,4-Dinitrophenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2,4-Dinitrotoluene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2,6-Dinitrotoluene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Di-n-Octyl Phthalate	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
1,2-Diphenylhydrazine/Azobenzene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Fluoranthene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Fluorene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Hexachlorobenzene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Hexachlorobutadiene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Hexachlorocyclopentadiene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Hexachloroethane	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Indeno(1,2,3-cd)pyrene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Isophorone	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470

**Qualifiers/** \* Outside QC limit  
**Definitions** I Recovery out of range

DF Dilution Factor  
MQL Method Quantitation Limit

05424

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

Project Syrgis Performance Initiators, Inc.  
Information : Composite Sampling

Report Date : 02/03/2014  
Received : 1/21/2014

Report Number : **14-021-0301**

**REPORT OF ANALYSIS**

Lab No : **89193**

Matrix: **Aqueous**

Sample ID : **Composite 1/20-21/14**

Sampled: **1/21/2014 0:00**

**Analytical Method:** 625

**Prep Method:** 625

**Prep Batch(es):** L187389

**Date/Time Prepped:** 1/22/2014 14:00:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Naphthalene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Nitrobenzene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2-Nitrophenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
4-Nitrophenol	<80.0	µg/L	80.0	1	01/22/14 23:41	NFP	L187470
N-Nitrosodimethylamine	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
N-Nitrosodiphenylamine	<40.0	µg/L	40.0	1	01/22/14 23:41	NFP	L187470
N-Nitroso-di-n-propylamine	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Pentachlorophenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Phenanthrene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
Phenol	<b>20.9</b>	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Pyrene	<8.00	µg/L	8.00	1	01/22/14 23:41	NFP	L187470
1,2,4-Trichlorobenzene	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
2,4,6-Trichlorophenol	<20.0	µg/L	20.0	1	01/22/14 23:41	NFP	L187470
Surrogate: 2-Fluorobiphenyl	<b>31.8 *</b>		Limits: 38-107%	1	01/22/14 23:41	NFP	L187470
Surrogate: 2-Fluorophenol	19.1		Limits: 8-88%	1	01/22/14 23:41	NFP	L187470
Surrogate: Nitrobenzene-d5	31.5		Limits: 29-105%	1	01/22/14 23:41	NFP	L187470
Surrogate: Phenol-d6	17.0		Limits: 7-58%	1	01/22/14 23:41	NFP	L187470
Surrogate: 4-Terphenyl-d14	67.0		Limits: 30-130%	1	01/22/14 23:41	NFP	L187470
Surrogate: 2,4,6-Tribromophenol	61.4		Limits: 16-138%	1	01/22/14 23:41	NFP	L187470

**Qualifiers/Definitions**

*	Outside QC limit	DF	Dilution Factor
I	Recovery out of range	MQL	Method Quantitation Limit

**Cooler Receipt Form**

Customer Number: **05424**

Customer Name: **Rineco Analytical Services**

Report Number: **14-021-0301**

**Shipping Method**

Fed Ex    UPS    US Postal    Client    Lab    Courier    Other :

Shipping container/cooler uncompromised?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Custody seals intact on shipping container/cooler?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Not Required
Custody seals intact on sample bottles?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Not Required
Chain of Custody (COC) present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC agrees with sample label(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC properly completed	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples in proper containers?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample containers intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient sample volume for indicated test(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
All samples received within holding time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cooler temperature in compliance?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun.	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Water - Sample containers properly preserved	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
Water - VOA vials free of headspace	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
Trip Blanks received with VOAs	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Soil VOA method 5035 – compliance criteria met	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input type="checkbox"/> High concentration container (48 hr)		<input type="checkbox"/> Low concentration EnCore samplers (48 hr)	
<input type="checkbox"/> High concentration pre-weighed (methanol -14 d)		<input type="checkbox"/> Low conc pre-weighed vials (Sod Bis -14 d)	
Special precautions or instructions included?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	

Comments:

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

Signature:

Date & Time:

14-021-0301  
05424  
01-21-2014  
14:15:47  
Rineco Analytical Services  
Syrgis Performance Initiators, Inc.

<b>Company Name</b> Rineco Analytical Services				<b>Customer Number</b> 05424	<b>Telephone</b> (870) 572-2935	<b>RUSH</b>	<b>ICE</b>
<b>Site Name</b> Syrgis Performance- Composite Sampling			<b>Project Comment</b>			<b>FID Number</b>	
<b>Project</b> Rineco - Syrgis Composite Sampling			<b>Project Number</b>	<b>PO Number</b>			
<b>Project Manager / Contact</b> Mr. Ray Williams Syrgis Performance				<b>E-mail</b>			
Sample ID	Container Type	Collected Date / Time	# Cont	Preservative	Grab / Comp	Matrix	Analyses
Effluent	Plastic - Pint	1-21-14 1140	1	NaOH - Sodium Hydroxide	G	Aqueous	CNT
Effluent	Glass Clear - Quart	1-21-14	2	HCL - Hydrochloric Acid	G	Aqueous	Oil & Grease
Effluent	Glass Vial Amber - 40ml	1-21-14	3	HCL - Hydrochloric Acid	G	Aqueous	624 - VOC Standard List
Effluent	Glass Amber - Liter	20 1-21-14	2	NONE	C	Aqueous	625 - SVOC Standard List
Effluent	Plastic - Quart	1-21-14	1	NONE	C	Aqueous	TDS, TSS, BOD, Chloride
Effluent	Plastic - Pint	1-21-14	1	H2SO4 - Sulfuric Acid	C	Aqueous	TKN, COD

<b>Sampled By</b> <i>[Signature]</i>	<b>Method of Shipment</b> 1-21-14 1140	<b>Blank / Cooler Temperature</b> 0.7°C	<b>Remarks</b>	
<b>Relinquished By (sign)</b>	<b>Date / Time</b>	<b>Received By (sign)</b>		<b>Date / Time</b>
<b>Relinquished By (sign)</b>	<b>Date / Time</b>	<b>Received By (sign)</b>		<b>Date / Time</b>
<b>Relinquished By (sign)</b> <i>[Signature]</i>	<b>Date / Time</b> 1-21-14 1355	<b>Received by Lab (sign)</b> <i>[Signature]</i>		<b>Date / Time</b> 1-21-14 1355



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# ENVIRONMENTAL TESTING & CONSULTING, INC.

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



Rineco Analytical Services  
Syraxis Performance Initiators, Inc

14-021-0301  
05424  
01-21-2014  
14:15:47

<b>Company Name</b> Rineco Analytical Services				<b>Customer Number</b> 05424		<b>Telephone</b> (870) 572-2935		<b>RUSH</b>	<b>ICE</b>
<b>Site Name</b> Syraxis Performance- Composite Sampling			<b>Project Comment</b>					<b>FID Number</b>	
<b>Project</b> Rineco - Syrgis Composite Sampling			<b>Project Number</b>		<b>PO Number</b>				
<b>Project Manager / Contact</b> Mr. Ray Williams Syrgis Performance					<b>E-mail</b>				
Sample ID	Container Type	Collected Date / Time	# Cont	Preservative	Grab / Comp	Matrix	Analyses		
Effluent	Plastic - Pint	1 <sup>20</sup> 1/21/14	1	HNO3 - Nitric Acid	C	Aqueous	Pb, Zn		
Effluent	Glass Vial Amber - 40ml	L L	2	H3PO4 - Phosphoric Acid	C	Aqueous	TOC		

<b>Sampled By</b> 	<b>Method of Shipment</b> 1-21-14 1140	<b>Blank / Cooler Temperature</b> 0.7°C	<b>Remarks</b>	
<b>Relinquished By (sign)</b>	<b>Date / Time</b>	<b>Received By (sign)</b>		<b>Date / Time</b>
<b>Relinquished By (sign)</b>	<b>Date / Time</b>	<b>Received By (sign)</b>		<b>Date / Time</b>
<b>Relinquished By (sign)</b> 	<b>Date / Time</b> 1-21-14 1355	<b>Received by Lab (sign)</b> 		<b>Date / Time</b> 1-21-14 1355