

## Gage, Hannah

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**From:** Gilliam, Allen  
**Sent:** Tuesday, March 01, 2016 3:25 PM  
**To:** 'Wages Jeff'  
**Cc:** Cummins Jon; Arnold Anthony; Gage, Hannah; McWilliams, Clark  
**Subject:** AR0043389\_United Initiators ARP001013 Feb 2016 semi annual Pretreatment report and indeterminate compliance\_20160301  
**Attachments:** CFR 414 semi annual report United Initiators 1601.pdf; Certification Statement United Initiators 1602.pdf; United Initiators SPI Inc 15-272-0281 20151012 report\_far\_3677428-371.pdf; United Initiators SPI Inc 15-350-0207 20151230 report\_far\_3796586-374.pdf; Wastewater Composite SOP 1602.pdf

Jeff,

United Initiator's February 2016 semi-annual Pretreatment report was electronically received, reviewed and deemed complete with the reporting requirements in 40 CFR 403.12(e).

Compliance with almost half the Federally regulated parameters using method 625 could not be determined apparently because of matrix interference causing your contract lab to dilute those samples by 50 times to "find" a detection level higher than those parameters' CFR 414.111 limits. It's advised to consult with your lab to determine what might be causing the interference and determine how to address this problem.

Thank you for the providing the calculations showing the compositing procedures for compliance with the Zn and Pb limitations. Please continue submission of these calculations in the future.

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:** Wages Jeff [<mailto:Jeff.Wages@united-in.com>]  
**Sent:** Thursday, February 25, 2016 8:31 AM  
**To:** Gilliam, Allen  
**Cc:** Cummins Jon; Arnold Anthony  
**Subject:** United Initiators Wastewater Report February 2016

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, Inc. facility in Helena, Arkansas. Also attached are two sets of wastewater analytical results and some supplemental information.

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.

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, INC  
334 Phillips 311 Road  
Helena, AR 72342

# SEMI-ANNUAL REPORT FOR INDUSTRIAL USERS REGULATED BY 40 CFR 414

Return to: Water Div/NPDES Pretreatment

## (1) IDENTIFYING INFORMATION

A. LEGAL NAME & MAILING ADDRESS

**United Initiators, Inc.  
334 Phillips 311 Road  
Helena, AR 72342-9033**

B. FACILITY & LOCATION ADDRESS

**United Initiators, Inc.  
334 Phillips 311 Road  
Helena, AR 72342-9033**

C. FACILITY CONTACT: **Jeff Wages**  
e-mail address jeff.wages@united-in.com

TELEPHONE NUMBER: **870.572.2935 x307**

## (2) REPORTING PERIOD

A. MONTHS WHICH REPORTS ARE DUE

February & August

B. PERIOD COVERED BY THIS REPORT

FROM: **August 2015** TO: **February 2016**

## (3) DESCRIPTION OF OPERATION

A. REGULATED PROCESSES

### CORE PROCESS(ES)

Specify Category and Sub-Categor(ies)

Check each applicable Subpart

- Subpart A--General
- Subpart B--Rayon Fibers
- Subpart C--Other Fibers
- Subpart D--Thermoplastic Resins
- Subpart E--Thermosetting Resins
- Subpart F--Commodity Organic Chemicals
- Subpart G--Bulk Organic Chemicals
- Subpart H--Specialty Organic Chemicals

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 49

## (4) FLOW MEASUREMENT

A. Total Plant Flow to POTW in Gallons per Day

Average: 67,388 gpd      Maximum: 85,303 gpd

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

<b>(4) FLOW MEASUREMENT (CON'D)</b>				
B. INDIVIDUAL PROCESS FLOWS IN GALLONS PER DAY				
Process	Average Flow Rate (gpd)	Maximum Flow Rate (gpd)	Type of Discharge (Batch, etc)	
Regulated	66,568	84,265	Batch & continuous	
Unregulated*				
Cooling Water				
**Sanitary	820	1,037		
**"Unregulated" has a precise legal meaning; see 40CFR403.6(e).				

<b>(5) MEASUREMENT OF POLLUTANTS</b>	
<p>A. TYPE OF TREATMENT SYSTEM</p> <p>CHECK EACH APPLICABLE BLOCK</p> <p>G Neutralization</p> <p>G Chemical Precipitation and Sedimentation</p> <p><input checked="" type="checkbox"/> Biological</p> <p>G Cyanide Destruction</p> <p>G Other _____</p> <p>G None</p>	<p>B. COMMENTS</p> <p><b>Two aerated ponds with a total surface area of ~6.5 acres.</b></p> <p><b>** Sanitary plus dilution from rain water equals ~0.92.</b></p>

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

CFR 414	PSES and PSNS Limits (ug/l)		Measured Max for any 1 day (ug/l)	Measured Max for any <u>monthly</u> avg (ug/l)
	**Max for any 1 day	**Max for any monthly avg		
<b>Effluent characteristics</b>				
Acenaphthene	44	18	<400	<400
Anthracene	44	18	<400	<400
Benzene	124	53	1.78	1.78
Bis(2-ethylhexyl) phthalate	240	88	<2000	<2000
Carbon Tetrachloride	353	132	<1.00	<1.00
Chlorobenzene	353	132	<1.00	<1.00
Chloroethane	274	102	<1.00	<1.00
Chloroform	302	103	<1.00	<1.00
Di-n-butyl phthalate	40	19	<1000	<1000
1,2-Dichlorobenzene	737	182	<1000	<1000
1,3-Dichlorobenzene	353	132	<1000	<1000
1,4-Dichlorobenzene	353	132	<1000	<1000
1,1-Dichloroethane	55	20	<1.00	<1.00
1,2-Dichloroethane	533	167	<1.00	<1.00

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

1,1-Dichloroethylene	56	20	<1.00	<1.00
1,2-trans-Dichloroethylene	61	23	<1.00	<1.00
1,2-Dichloropropane	737	182	<1.00	<1.00
1,3-Dichloropropylene	737	182	<1.00	<1.00
Diethyl phthalate	105	43	<1000	<1000
Dimethyl phthalate	44	18	<1000	<1000
4,6-Dinitro-o-cresol	257	72	<2000	<2000
Ethylbenzene	353	132	<1.00	<1.00
Fluoranthene	50	20	<400	<400
Fluorene	44	18	<400	<400
Hexachlorobenzene	737	182	<1000	<1000
Hexachlorobutadiene	353	132	<1000	<1000
Hexachloroethane	737	182	<1000	<1000
Methyl Chloride	274	102	<1.00	<1.00
Methylene Chloride	158	33	<10.0	<10.0
Naphthalene	44	18	<400	<400
Nitrobenzene	5,945	2,077	<1000	<1000
2-Nitrophenol	214	60	<1000	<1000
4-Nitrophenol	535	150	<4000	<4000
Phenanthrene	44	18	<400	<400
Pyrene	45	19	<400	<400
Tetrachloroethylene	152	48	<1.00	<1.00
Toluene	69	26	<5.00	<5.00
Total Cyanide	1,114	390	<5.00	<5.00
Total Lead	57.6	57.6	1.11	1.11
Total Zinc <sup>2</sup>	134.4	134.4	31.8	31.8
1,2,4-Trichlorobenzene	737	182	<1000	<1000
1,1,1-Trichloroethane	55	20	<1.00	<1.00
1,1,2-Trichloroethane	118	30	<1.00	<1.00
Trichloroethylene	64	24	<1.00	<1.00
Vinyl Chloride	160	90	<1.00	<1.00

(7) GENERAL COMMENTS

See attached procedure used for sampling and compositing waste water samples taken from the three United Initiators, Inc. processes to be analyzed for lead and zinc. ETC Report Number 15-350-0207 analysis results correspond to the waste water sample taken utilizing this procedure.

United Initiators' analytical service provider offered the following comments regarding the interference present in the wastewater samples that prevented the achievement of more accurate lab analysis results: The last sample submitted for testing (L 93549) was diluted at a 1:50 dilution due to the presence of benzoic acid. The concentration present in the sample was 13,300 ug/L. Analyzing such a sample without a dilution could damage the mass spectrometer and at the very least would provide unusable results due to the resulting interference with internal standards. We are not aware of any step to remove the interference.

(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



SIGNATURE

**Vice President of Operations**

OFFICIAL TITLE

**2/2/14**

DATE SIGNED



# United 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

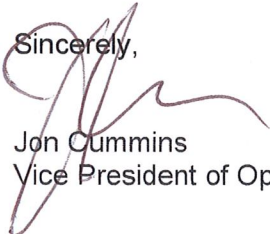
2/2/2016

Allen Gilliam  
ADEQ State Pretreatment Coordinator  
Water Division  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

Dear Mr. Gilliam:

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.

Sincerely,



Jon Cummins  
Vice President of Operations



10/12/2015

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

Ref: Analytical Testing  
Lab Report Number: 15-272-0281  
Client Project Description: United Initiators, SPI, Inc.  
Semi-annual Sampling

Dear Ms. Mia Dixon:  
Waypoint Analytical, Inc. received sample(s) on 9/29/2015 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.

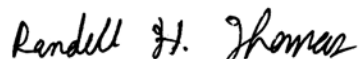
The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established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

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

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 #2904	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: United Initiators, SPI, Inc.  
Lab Report Number: 15-272-0281  
Date: 10/12/2015

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**CASE NARRATIVE**

**Metals Analyses Method EPA-200.8**

Sample 93549 (Composite 9/28-29/15)

Analyte: K

QC Batch No: L258211

MS/MSD Recovery failed, PDS confirmed matrix interference

Analyte: Na

QC Batch No: L258550

MS/MSD Recovery failed, DT confirmed matrix interference

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

Analyte: Benzidine

QC Batch No: L259115

Analyte was flagged for 0% recovery in the LCS and/or LCSD due to the result being below the MQL. The actual result was 17.3 ug/L which calculates to a recovery of 17.3%.

Sample 93549 (Composite 9/28-29/15)

QC Batch No: L259115

Sample requires dilution due to high levels of target and/or non-target analytes.

QC Batch No: L259115

Surrogate(s) flagged for recovery outside QC limits in this project sample due to a required dilution. The dilution factor resulted in surrogate concentration(s) below the minimum detectable level. Batch QC samples (method blank and laboratory control samples) all showed surrogates within QC limits.

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

QC Batch No: L258323

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.

05424

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

Project United Initiators, SPI, Inc.  
Information : Semi-annual Sampling

Report Date : 10/12/2015  
Received : 9/29/2015

Report Number : **15-272-0281**

**REPORT OF ANALYSIS**

Lab No : **93548**  
Sample ID : **Grab**

Matrix: **Aqueous**  
Sampled: **9/29/2015 11:25**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Cyanide, Total	<5.00	µg/L	5.00	1	09/30/15 10:58	EWB	4500CNE-2011

**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 United Initiators, SPI, Inc.  
Information : Semi-annual Sampling

Report Date : 10/12/2015  
Received : 9/29/2015

Report Number : **15-272-0281**

**REPORT OF ANALYSIS**

Lab No : **93548**

Matrix: **Aqueous**

Sample ID : **Grab**

Sampled: **9/29/2015 11:25**

**Analytical Method:** 624

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

**Prep Batch(es):** L258439

**Date/Time Prepped:** 10/2/2015 08:00:00

Test	Results	Units	ML	DF	Date / Time Analyzed	By	Analytical Batch
Benzene	<b>1.78</b>	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Carbon Tetrachloride	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Chlorobenzene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Chloroethane	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Chloroform	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Methyl Chloride	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
1,1-Dichloroethane	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
1,2-Dichloroethane	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
1,1-Dichloroethylene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
1,2-trans-Dichloroethylene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
1,2-Dichloropropane	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
1,3-Dichloropropylene	<1.00	µg/L	1.00	1	10/02/15 19:15		L258440
Ethylbenzene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Methylene Chloride	<10.0	µg/L	10.0	1	10/02/15 19:15	HAL	L258440
Tetrachloroethylene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Toluene	<5.00	µg/L	5.00	1	10/02/15 19:15	HAL	L258440
1,1,1-Trichloroethane	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
1,1,2-Trichloroethane	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Trichloroethylene	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440

**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 United Initiators, SPI, Inc.  
Information : Semi-annual Sampling

Report Date : 10/12/2015  
Received : 9/29/2015

Report Number : **15-272-0281**

**REPORT OF ANALYSIS**

Lab No : **93548**  
Sample ID : **Grab**

Matrix: **Aqueous**  
Sampled: **9/29/2015 11:25**

<b>Analytical Method:</b> 624		<b>Prep Batch(es):</b> L258439		<b>Date/Time Prepped:</b> 10/2/2015 08:00:00			
<b>Prep Method:</b> EPA-624 (PREP)							
<b>Test</b>	<b>Results</b>	<b>Units</b>	<b>MLQ</b>	<b>DF</b>	<b>Date / Time Analyzed</b>	<b>By</b>	<b>Analytical Batch</b>
Vinyl Chloride	<1.00	µg/L	1.00	1	10/02/15 19:15	HAL	L258440
Surrogate: 4-Bromofluorobenzene	89.8		Limits: 71-131%	1	10/02/15 19:15	HAL	L258440
Surrogate: Dibromofluoromethane	93.8		Limits: 70-128%	1	10/02/15 19:15	HAL	L258440
Surrogate: 1,2-Dichloroethane - d4	79.8		Limits: 67-136%	1	10/02/15 19:15	HAL	L258440
Surrogate: Toluene-d8	93.6		Limits: 70-130%	1	10/02/15 19:15	HAL	L258440

<b>Qualifiers/ Definitions</b>	<b>*</b>	<b>Outside QC limit</b>	<b>DF</b>	<b>Dilution Factor</b>
	<b>MLQ</b>	<b>Method Quantitation Limit</b>		

05424

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

Project United Initiators, SPI, Inc.  
Information : Semi-annual Sampling

Report Date : 10/12/2015  
Received : 9/29/2015

Report Number : **15-272-0281**

**REPORT OF ANALYSIS**

Lab No : **93549**

Matrix: **Aqueous**

Sample ID : **Composite 9/28-29/15**

Sampled: **9/29/2015 0:00**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Total Lead	<b>0.961</b>	µg/L	0.500	1	10/02/15 00:22	CGC	EPA-200.8
Total Zinc	<b>48.9</b>	µg/L	5.00	1	10/02/15 00:22	CGC	EPA-200.8

**Qualifiers/  
Definitions**

\* Outside QC limit  
MQL Method Quantitation Limit

DF Dilution Factor

05424

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Ms. Mia Dixon  
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Project United Initiators, SPI, Inc.  
Information : Semi-annual Sampling

Report Date : 10/12/2015  
Received : 9/29/2015

Report Number : **15-272-0281**

**REPORT OF ANALYSIS**

Lab No : **93549**

Matrix: **Aqueous**

Sample ID : **Composite 9/28-29/15**

Sampled: **9/29/2015 0:00**

**Analytical Method:** 625

**Prep Method:** 625

**Prep Batch(es):** L258323

**Date/Time Prepped:** 10/2/2015 14:00:00

Test	Results	Units	ML	DF	Date / Time Analyzed	By	Analytical Batch
Acenaphthene	<400	µg/L	400	50	10/07/15 20:59	RQE	L259115
Anthracene	<400	µg/L	400	50	10/07/15 20:59	RQE	L259115
Bis(2-ethylhexyl)phthalate	<2000	µg/L	2000	50	10/07/15 20:59	RQE	L259115
1,2-Dichlorobenzene	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
1,3-Dichlorobenzene	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
1,4-Dichlorobenzene	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
Diethyl phthalate	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
Dimethyl phthalate	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
Di-n-butyl phthalate	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
4,6-Dinitro-o-cresol	<2000	µg/L	2000	50	10/07/15 20:59	RQE	L259115
Fluoranthene	<400	µg/L	400	50	10/07/15 20:59	RQE	L259115
Fluorene	<400	µg/L	400	50	10/07/15 20:59	RQE	L259115
Hexachlorobenzene	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
Hexachlorobutadiene	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
Hexachloroethane	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
Naphthalene	<400	µg/L	400	50	10/07/15 20:59	RQE	L259115
Nitrobenzene	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
2-Nitrophenol	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
4-Nitrophenol	<4000	µg/L	4000	50	10/07/15 20:59	RQE	L259115
Phenanthrene	<400	µg/L	400	50	10/07/15 20:59	RQE	L259115
Pyrene	<400	µg/L	400	50	10/07/15 20:59	RQE	L259115

**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 United Initiators, SPI, Inc.  
Information : Semi-annual Sampling

Report Date : 10/12/2015  
Received : 9/29/2015

Report Number : **15-272-0281**

**REPORT OF ANALYSIS**

Lab No : **93549**

Matrix: **Aqueous**

Sample ID : **Composite 9/28-29/15**

Sampled: **9/29/2015 0:00**

**Analytical Method:** 625

**Prep Method:** 625

**Prep Batch(es):** L258323

**Date/Time Prepped:** 10/2/2015 14:00:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2,4-Trichlorobenzene	<1000	µg/L	1000	50	10/07/15 20:59	RQE	L259115
Surrogate: 2-Fluorobiphenyl	<b>23.3 *</b>		Limits: 38-107%	50	10/07/15 20:59	RQE	L259115
Surrogate: 2-Fluorophenol	13.0		Limits: 8-88%	50	10/07/15 20:59	RQE	L259115
Surrogate: Nitrobenzene-d5	<b>22.6 *</b>		Limits: 29-105%	50	10/07/15 20:59	RQE	L259115
Surrogate: Phenol-d6	10.1		Limits: 7-58%	50	10/07/15 20:59	RQE	L259115
Surrogate: 4-Terphenyl-d14	38.5		Limits: 30-130%	50	10/07/15 20:59	RQE	L259115
Surrogate: 2,4,6-Tribromophenol	24.6		Limits: 16-138%	50	10/07/15 20:59	RQE	L259115

**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: **15-272-0281**

**Shipping Method**

Fed Ex       US Postal       Lab       Other :   
 UPS       Client       Courier      Thermometer ID: #6

Shipping container/cooler uncompromised?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Number of coolers received	<input type="text" value="1"/>		
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 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:



CHAIN-OF-CUSTODY

 15-272-0281  
 Rineco Analytical Services 05424  
 United Initiators, SPI, Inc. 09-29-2015 14:30:48

Project Comment

<b>Company Name</b> Rineco Analytical Services	<b>Project Number</b> 05424	<b>Client Project Manager/Contact</b> Rineco Analytical Services	<b>Purchase Order Number</b>
<b>Site Name</b> United Initiators, SPI, Inc.	<b>Project Number</b>	<input type="checkbox"/> RUSH -- Additional charges apply <input type="checkbox"/> Special Detection Limits(s) Date Results Needed	<b>Method of Shipment</b> <input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Courier <input type="checkbox"/> Client Drop Off Other
<b>LIMS Project ID</b> Rineco - Semi-annual	<b>Project Manager Phone #</b> (501) 778-9089	<b>Project Manager Email</b>	<b>Site/Facility ID #</b>

Date	Time	Sample ID	Matrix	Grab/Comp	# of Cont	Container Type	Preservation	Analyses
9-29-15	1125	Grab	Aqueous	G	3	Glass Vial Amber - 40ml	HCL - Hydrochloric Acid	VOC
↓	↓	Grab	Aqueous	G	1	Plastic - Pint	NaOH - Sodium Hydroxide	CNT
9-28-15		Composite	Aqueous	C	1	Plastic - Pint	HNO3 - Nitric Acid	Pb/Zn
↓	↓	Composite	Aqueous	C	2	Glass Amber - Liter	Na2S2O3 - Sodium Thiosulfate	SVOC

For Laboratory Use Only			Sampled by (Name - Print)	Client Remarks/Comments			
Ice Y/N	Custody Seals Y/N	Lab Comments	<i>John DeLoach</i>				
			Relinquished by: (SIGNATURE)	Date Time	Received by: (SIGNATURE)	Date Time	
			Relinquished by: (SIGNATURE)	Date Time	Received by: (SIGNATURE)	Date Time	
Blank/Cooler Temp 76 1-1°C			Relinquished by: (SIGNATURE)	Date Time 1330 9-29-15	Received by: (SIGNATURE)	Date Time 1330 9-29-15	

12/30/2015

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

Ref: Analytical Testing  
Lab Report Number: 15-350-0207  
Client Project Description: United Initiators, SPI, Inc.

Dear Ms. Mia Dixon:

Waypoint Analytical, Inc. received sample(s) on 12/16/2015 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.

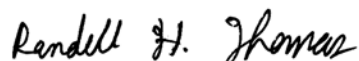
The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established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

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

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 #2904	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, Inc.  
Information :

Report Date : 12/30/2015

Report Number : **15-350-0207**

**REPORT OF ANALYSIS**

Received : 12/16/2015

Lab No : **90733**  
Sample ID : **Effluent**

Matrix: **Aqueous**  
Sampled: **12/15/2015 7:30**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Total Lead	<b>1.11</b>	µg/L	0.500	1	12/28/15 19:41	JTR	EPA-200.8
Total Zinc	<b>31.8</b>	µg/L	5.00	1	12/28/15 19:41	JTR	EPA-200.8

**Qualifiers/  
Definitions**

DF

Dilution Factor

MQL

Method Quantitation Limit

**Cooler Receipt Form**

Customer Number: **05424**

Customer Name: **Rineco Analytical Services**

Report Number: **15-350-0207**

**Shipping Method**

Fed Ex       US Postal       Lab       Other :   
 UPS       Client       Courier      Thermometer ID:

Shipping container/cooler uncompromised?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Number of coolers received	<input type="text" value="1"/>		
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:

**CHAIN-OF-CUSTODY**

**Kit ID:** 0000056322  
**Initiated By:** Kenny Mulligan



15-350-0207  
 05424  
 12-16-2015  
 09:00:54  
 Rineco Analytical Services  
 United Initiators, SPI, Inc.

<b>Company Name</b> Rineco Analytical Services		<b>Company Number</b> 05424		<b>Client Project Manager/Contact</b> United InitiatorsAttn: Jeff Wages			<b>Purchase Order Number</b>		
<b>Site Name</b> United Initiators, SPI, Inc.		<b>Project Number</b>		<input type="checkbox"/> RUSH – Additional charges apply <input type="checkbox"/> Special Detection Limits(s) Date Results Needed			<b>Method of Shipment</b> <input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Courier <input type="checkbox"/> Client Drop Off Other		
<b>LIMS Project ID</b>		<b>Project Manager Phone #</b> (501) 778-9089		<b>Project Manager Email</b>			<b>Site/Facility ID #</b>		
Date	Time	Sample ID	Matrix	Grab/Comp	# of Cont	Container Type	Preservation	Analyses	
12/15/15	0730	Composite	Aqueous	C	1	Plastic - Pint	HNO3 - Nitric Acid	Pb/Zn	

For Laboratory Use Only			Sampled by (Name - Print)		Client Remarks/Comments			
Ice Y/N	Custody Seals Y/N	Lab Comments						
			Relinquished by: (SIGNATURE)	Date	Time	Received by: (SIGNATURE)	Date	Time
Blank/Cooler Temp N/A			Relinquished by: (SIGNATURE)	Date	Time	Received by: (SIGNATURE)	Date	Time
			Relinquished by: (SIGNATURE)	Date	Time	Received by: (SIGNATURE)	Date	Time
						R Thomas	12/16/15	0640

## 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' 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 2016 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>	41,672	24,697	199	66,568
<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 United Initiators' 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' analytical service provider for analysis.