

From: [Ungerank, Colby](#)
To: [Richardson, Stefanie](#)
Subject: FW: Georgia-Pacific LLC Crossett Paper Operations
Date: Wednesday, February 11, 2015 9:23:14 AM
Attachments: [Georgia Pacific WWTP solids analysis.pdf](#)

Permit No. AR0001210

Colby

From: Reiber, Loretta
Sent: Wednesday, February 11, 2015 9:06 AM
To: Ungerank, Colby
Subject: FW: Georgia-Pacific LLC Crossett Paper Operations

From: Johnson, Rachel M. (Crossett) [<mailto:Rachel.JOHNSON2@GAPAC.com>]
Sent: Thursday, November 20, 2014 4:27 PM
To: Reiber, Loretta
Cc: Ross, Sarah M.
Subject: Georgia-Pacific LLC Crossett Paper Operations

Ms. Loretta Reiber, PE

Re: Georgia-Pacific LLC Crossett Paper Operations
AFIN: 02-00013 NPDES Permit No. AR0001210
Solids Characterization Plan

Dear Ms. Reiber:

Georgia-Pacific LLC is submitting this email to request written concurrence from the Department that the following solids characterization plan is adequate to allow Georgia-Pacific to assess settled wastewater solids and ash collected in basins where peroxide or iron salts are applied, and to continue to dispose of these solids as part of the sludge pond closure. The application of these chemicals to the mill's wastewater treatment system on a trial basis was approved in a July 31, 2014 letter from Mo Shafii of ADEQ to Jim Cutbirth of GP.

Settled solids and ash from the wastewater treatment system have been used as fill materials as part of the DEQ-approved closure plan for the old sludge pond since 1995. The solids have been characterized several times since that time. Characterizations for these streams are included as attachments to this e-mail.

Both peroxide and iron salts (such as ferrous chloride or ferrous sulfide) are common chemicals used frequently in drinking water treatment as well as wastewater treatment. The use of peroxide and iron salts at any point in the wastewater treatment system do not significantly change the characteristics of the solids precipitated. Peroxide functions to oxidize inorganic sulfide to sulfur or sulfate, which are substances already present in our wastewater and settled solids. Iron salts may

combine with certain inorganic species such as phosphate and/or sulfide to allow these to more readily settle in the sludge. However, both of these substances are already present as well in the settled solids.

Our wastewater effluent has been tested several times for a full priority pollutant scan and does not contain hazardous components that could be precipitated or changed in any form by the action of either peroxide or iron salts. These levels have been documented in our permit renewal applications in the Form 2C analytical data submitted to the Department.

Thus, by the application of process knowledge of Form 2C data and the simple reactions of peroxide and iron salts, we ask the concurrence of the Department that the character of the waste characterizations remain unchanged, and that we can continue to dispose of any solids in the sludge pond closure based on the use of peroxide or iron salts anywhere in the treatment system, since the characterizations will remain unchanged.

Should the Department believe that additional information is needed to validate this, we would be glad to discuss how to best characterize the solids from the primary clarifier, ash basin/surge pond solids, and the ASB settled solids.

We will call you shortly to discuss this request and answer any questions you may have. If you have any questions regarding this request before then, please feel free to call me at 870-567-8170.

Rachel Johnson
Georgia-Pacific LLC
Crossett Paper Operations

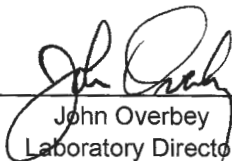


Georgia-Pacific Chemicals, LLC-Chemical Plant
ATTN: Mr. Tom Hudson
Highway 82 and Papermill Road
Crossett, AR 71635

This report contains the analytical results and supporting information for samples submitted on November 28, 2012. 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

This document has been distributed to the following:

PDF cc: Georgia-Pacific Chemicals, LLC-Chemical Plant
ATTN: Mr. Tom Hudson
thomas.hudson@gapac.com



Georgia-Pacific Chemicals, LLC-Chemical
Plant
Highway 82 and Papermill Road
Crossett, AR 71635

SAMPLE INFORMATION

Project Description:

Two (2) ash sample(s) received on November 28, 2012
Ash
P.O. No. P554122934

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:

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Sampled Date/Time</u>	<u>Notes</u>
162782-1	Ash Pond 11/27/12 9:15	27-Nov-2012 0915	
162782-2	Ash Basin 11/27/12 9:15	27-Nov-2012 0915	

Qualifiers:

- D Result is from a secondary dilution factor
- H Analytical holding time exceeded regulatory requirements

Case Narrative:

Analysis of soils/sludges are reported on a dry-weight basis unless otherwise specified.

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", 21st edition.
- "American Society for Testing and Materials" (ASTM).
- "Association of Analytical Chemists" (AOAC).

Georgia-Pacific Chemicals, LLC-Chemical
 Plant
 Highway 82 and Papermill Road
 Crossett, AR 71635

ANALYTICAL RESULTS
AIC No. 162782-1
Sample Identification: Ash Pond 11/27/12 9:15

Analyte	Result	RL	Units	Qualifier
TCLP: Solids EPA 1311	100 Analyzed: 28-Nov-2012 1800 by 271	0.5	% Batch: S33489	
TCLP: Arsenic EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.3 Analyzed: 30-Nov-2012 1128 by 305	0.3	mg/l Batch: S33569	D Dil: 5
TCLP: Barium EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	2.2 Analyzed: 30-Nov-2012 1128 by 305	0.01	mg/l Batch: S33569	D Dil: 5
TCLP: Cadmium EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.02 Analyzed: 30-Nov-2012 1128 by 305	0.02	mg/l Batch: S33569	D Dil: 5
TCLP: Chromium EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.04 Analyzed: 30-Nov-2012 1128 by 305	0.04	mg/l Batch: S33569	D Dil: 5
TCLP: Lead EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.2 Analyzed: 30-Nov-2012 1128 by 305	0.2	mg/l Batch: S33569	D Dil: 5
TCLP: Selenium EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.4 Analyzed: 30-Nov-2012 1128 by 305	0.4	mg/l Batch: S33569	D Dil: 5
TCLP: Silver EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.04 Analyzed: 30-Nov-2012 1128 by 305	0.04	mg/l Batch: S33569	D Dil: 5
TCLP: Mercury EPA 7470A Prep: 30-Nov-2012 0848 by 271	< 0.008 Analyzed: 30-Nov-2012 1747 by 271	0.008	mg/l Batch: S33570	D Dil: 40
pH EPA 9045C Prep: 28-Nov-2012 1356 by 306	8.6 Analyzed: 28-Nov-2012 1535 by 306		Units Batch: W41801	H
TCLP Chlorinated Herbicides By EPA 8321A				
2,4-D EPA 8321A	< 0.20 Analyzed: 29-Nov-2012 1448 by 07	0.20	mg/l Batch: C15571	
2,4,5-TP EPA 8321A	< 0.10 Analyzed: 29-Nov-2012 1448 by 07	0.10	mg/l Batch: C15571	
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D				
Cresols EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.10 Analyzed: 29-Nov-2012 2153 by 301	0.10	mg/l Batch: B8009	D Dil: 10
1,4-Dichlorobenzene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2153 by 301	0.050	mg/l Batch: B8009	D Dil: 10
2,4-Dinitrotoluene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2153 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Hexachlorobenzene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2153 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Hexachlorobutadiene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2153 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Hexachloroethane EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2153 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Nitrobenzene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2153 by 301	0.050	mg/l Batch: B8009	D Dil: 10

Georgia-Pacific Chemicals, LLC-Chemical
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ANALYTICAL RESULTS

AIC No. 162782-1 (Continued)

Sample Identification: Ash Pond 11/27/12 9:15

Analyte	Result	RL	Units	Qualifier
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D (Continued)				
Pentachlorophenol	< 0.050	0.050	mg/l	D
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	Dil: 10
Pyridine	< 0.050	0.050	mg/l	D
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	Dil: 10
2,4,5-Trichlorophenol	< 0.050	0.050	mg/l	D
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	Dil: 10
2,4,6-Trichlorophenol	< 0.050	0.050	mg/l	D
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	Dil: 10
Surrogate: 2-Fluorobiphenyl (50.0-110%)	88.5		%	
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	
Surrogate: 2-Fluorophenol (20.0-110%)	62.2		%	
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	
Surrogate: Nitrobenzene-D5 (40.0-110%)	84.0		%	
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	
Surrogate: Terphenyl-D14 (50.0-135%)	99.2		%	
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	
Surrogate: 2,4,6-Tribromophenol (40.0-125%)	85.0		%	
EPA 3510C, 8270D	Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2153 by 301	Batch: B8009	
TCLP Volatile Organic Compounds By EPA 5030C, 8260C				
Benzene	< 0.50	0.50	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Carbon tetrachloride	< 0.20	0.20	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Chlorobenzene	< 0.50	0.50	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Chloroform	< 0.50	0.50	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
1,2-Dichloroethane	< 0.50	0.50	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
1,1-Dichloroethylene	< 0.50	0.50	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Methyl ethyl ketone	< 1.0	1.0	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Tetrachloroethylene	< 0.50	0.50	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Trichloroethylene	< 0.50	0.50	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Vinyl chloride	< 0.20	0.20	mg/l	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100



Georgia-Pacific Chemicals, LLC-Chemical Plant
Highway 82 and Papermill Road
Crossett, AR 71635

ANALYTICAL RESULTS

AIC No. 162782-1 (Continued)

Sample Identification: Ash Pond 11/27/12 9:15

Analyte	Result	RL	Units	Qualifier
TCLP Volatile Organic Compounds By EPA 5030C, 8260C (Continued)				
Surrogate: 4-Bromofluorobenzene (75.0-120%)	97.8		%	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Surrogate: Dibromofluoromethane (85.0-115%)	92.1		%	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
Surrogate: Toluene-D8 (85.0-120%)	97.8		%	D
EPA 5030C, 8260C	Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1734 by 301	Batch: V8161	Dil: 100
TCLP Organochlorine Pesticides By EPA 3510C, 8081B				
Chlordane	< 0.010	0.010	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	Dil: 10
Endrin	< 0.0020	0.0020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	Dil: 10
gamma-BHC	< 0.0020	0.0020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	Dil: 10
Heptachlor	< 0.0010	0.0010	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	Dil: 10
Heptachlor epoxide	< 0.0010	0.0010	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	Dil: 10
Methoxychlor	< 0.0020	0.0020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	Dil: 10
Toxaphene	< 0.020	0.020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	Dil: 10
Surrogate: Decachlorobiphenyl (30.0-135%)	99.7		%	
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	
Surrogate: Tetrachloro-m-xylene (25.0-140%)	117		%	
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 1946 by 288	Batch: G9084	

AIC No. 162782-2

Sample Identification: Ash Basin 11/27/12 9:15

Analyte	Result	RL	Units	Qualifier
TCLP: Solids	100	0.5	%	
EPA 1311	Analyzed: 28-Nov-2012 1800 by 271		Batch: S33489	
TCLP: Arsenic	< 0.3	0.3	mg/l	D
EPA 3010A, 6010C	Prep: 30-Nov-2012 0847 by 271	Analyzed: 30-Nov-2012 1131 by 305	Batch: S33569	Dil: 5
TCLP: Barium	1.6	0.01	mg/l	D
EPA 3010A, 6010C	Prep: 30-Nov-2012 0847 by 271	Analyzed: 30-Nov-2012 1131 by 305	Batch: S33569	Dil: 5
TCLP: Cadmium	< 0.02	0.02	mg/l	D
EPA 3010A, 6010C	Prep: 30-Nov-2012 0847 by 271	Analyzed: 30-Nov-2012 1131 by 305	Batch: S33569	Dil: 5
TCLP: Chromium	< 0.04	0.04	mg/l	D
EPA 3010A, 6010C	Prep: 30-Nov-2012 0847 by 271	Analyzed: 30-Nov-2012 1131 by 305	Batch: S33569	Dil: 5

Georgia-Pacific Chemicals, LLC-Chemical
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ANALYTICAL RESULTS
AIC No. 162782-2 (Continued)
Sample Identification: Ash Basin 11/27/12 9:15

Analyte	Result	RL	Units	Qualifier
TCLP: Lead EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.2 Analyzed: 30-Nov-2012 1131 by 305	0.2	mg/l Batch: S33569	D Dil: 5
TCLP: Selenium EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.4 Analyzed: 30-Nov-2012 1131 by 305	0.4	mg/l Batch: S33569	D Dil: 5
TCLP: Silver EPA 3010A, 6010C Prep: 30-Nov-2012 0847 by 271	< 0.04 Analyzed: 30-Nov-2012 1131 by 305	0.04	mg/l Batch: S33569	D Dil: 5
TCLP: Mercury EPA 7470A Prep: 30-Nov-2012 0848 by 271	< 0.008 Analyzed: 30-Nov-2012 1752 by 271	0.008	mg/l Batch: S33570	D Dil: 40
pH EPA 9045C Prep: 28-Nov-2012 1356 by 306	7.8 Analyzed: 28-Nov-2012 1535 by 306		Units Batch: W41801	H
TCLP Chlorinated Herbicides By EPA 8321A				
2,4-D EPA 8321A	< 0.20 Analyzed: 29-Nov-2012 1448 by 07	0.20	mg/l Batch: C15571	
2,4,5-TP EPA 8321A	< 0.10 Analyzed: 29-Nov-2012 1448 by 07	0.10	mg/l Batch: C15571	
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D				
Cresols EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.10 Analyzed: 29-Nov-2012 2228 by 301	0.10	mg/l Batch: B8009	D Dil: 10
1,4-Dichlorobenzene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
2,4-Dinitrotoluene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Hexachlorobenzene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Hexachlorobutadiene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Hexachloroethane EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Nitrobenzene EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Pentachlorophenol EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Pyridine EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
2,4,5-Trichlorophenol EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
2,4,6-Trichlorophenol EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	< 0.050 Analyzed: 29-Nov-2012 2228 by 301	0.050	mg/l Batch: B8009	D Dil: 10
Surrogate: 2-Fluorobiphenyl (50.0-110%) EPA 3510C, 8270D Prep: 29-Nov-2012 1352 by 301	86.5 Analyzed: 29-Nov-2012 2228 by 301		% Batch: B8009	

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ANALYTICAL RESULTS

AIC No. 162782-2 (Continued)

Sample Identification: Ash Basin 11/27/12 9:15

Analyte	Result	RL	Units	Qualifier
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D (Continued)				
Surrogate: 2-Fluorophenol (20.0-110%) EPA 3510C, 8270D	62.2		%	
Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2228 by 301		Batch: B8009	
Surrogate: Nitrobenzene-D5 (40.0-110%) EPA 3510C, 8270D	81.5		%	
Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2228 by 301		Batch: B8009	
Surrogate: Terphenyl-D14 (50.0-135%) EPA 3510C, 8270D	102		%	
Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2228 by 301		Batch: B8009	
Surrogate: 2,4,6-Tribromophenol (40.0-125%) EPA 3510C, 8270D	90.2		%	
Prep: 29-Nov-2012 1352 by 301	Analyzed: 29-Nov-2012 2228 by 301		Batch: B8009	
TCLP Volatile Organic Compounds By EPA 5030C, 8260C				
Benzene EPA 5030C, 8260C	< 0.50	0.50	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Carbon tetrachloride EPA 5030C, 8260C	< 0.20	0.20	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Chlorobenzene EPA 5030C, 8260C	< 0.50	0.50	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Chloroform EPA 5030C, 8260C	< 0.50	0.50	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
1,2-Dichloroethane EPA 5030C, 8260C	< 0.50	0.50	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
1,1-Dichloroethylene EPA 5030C, 8260C	< 0.50	0.50	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Methyl ethyl ketone EPA 5030C, 8260C	< 1.0	1.0	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Tetrachloroethylene EPA 5030C, 8260C	< 0.50	0.50	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Trichloroethylene EPA 5030C, 8260C	< 0.50	0.50	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Vinyl chloride EPA 5030C, 8260C	< 0.20	0.20	mg/l	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Surrogate: 4-Bromofluorobenzene (75.0-120%) EPA 5030C, 8260C	97.4		%	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Surrogate: Dibromofluoromethane (85.0-115%) EPA 5030C, 8260C	92.4		%	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
Surrogate: Toluene-D8 (85.0-120%) EPA 5030C, 8260C	97.3		%	D
Prep: 29-Nov-2012 1515 by 301	Analyzed: 29-Nov-2012 1832 by 301		Batch: V8161	Dil: 100
TCLP Organochlorine Pesticides By EPA 3510C, 8081B				
Chlordane EPA 3510C, 8081B	< 0.010	0.010	mg/l	D
Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288		Batch: G9084	Dil: 10

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ANALYTICAL RESULTS

AIC No. 162782-2 (Continued)

Sample Identification: Ash Basin 11/27/12 9:15

Analyte	Result	RL	Units	Qualifier
TCLP Organochlorine Pesticides By EPA 3510C, 8081B (Continued)				
Endrin	< 0.0020	0.0020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	Dil: 10
gamma-BHC	< 0.0020	0.0020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	Dil: 10
Heptachlor	< 0.0010	0.0010	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	Dil: 10
Heptachlor epoxide	< 0.0010	0.0010	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	Dil: 10
Methoxychlor	< 0.0020	0.0020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	Dil: 10
Toxaphene	< 0.020	0.020	mg/l	D
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	Dil: 10
Surrogate: Decachlorobiphenyl (30.0-135%)	97.8		%	
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	
Surrogate: Tetrachloro-m-xylene (25.0-140%)	91.5		%	
EPA 3510C, 8081B	Prep: 29-Nov-2012 1449 by 301	Analyzed: 29-Nov-2012 2003 by 288	Batch: G9084	

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
pH	162782-1	8.6 Units			28Nov12 1356 by 306	28Nov12 1535 by 306		H
	Batch: W41801 Duplicate	8.6 Units	0.348	5.00	28Nov12 1356 by 306	28Nov12 1535 by 306		H
TCLP Volatile Organic Compounds								
Benzene	162782-1	< 0.50 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.50 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Carbon tetrachloride	162782-1	< 0.20 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.20 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Chlorobenzene	162782-1	< 0.50 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.50 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Chloroform	162782-1	< 0.50 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.50 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
1,2-Dichloroethane	162782-1	< 0.50 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.50 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
1,1-Dichloroethylene	162782-1	< 0.50 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.50 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Methyl ethyl ketone	162782-1	< 1.0 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 1.0 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Tetrachloroethylene	162782-1	< 0.50 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.50 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Trichloroethylene	162782-1	< 0.50 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.50 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Vinyl chloride	162782-1	< 0.20 mg/l			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	< 0.20 mg/l	0.00	30.0	29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
4-Bromofluorobenzene (75.0-120%)	162782-1	97.8 %			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	96.1 %			29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Dibromofluoromethane (85.0-115%)	162782-1	92.1 %			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	91.0 %			29Nov12 1516 by 301	29Nov12 1803 by 301	100	D
Toluene-D8 (85.0-120%)	162782-1	97.8 %			29Nov12 1515 by 301	29Nov12 1734 by 301	100	D
	Batch: V8161 Duplicate	97.3 %			29Nov12 1516 by 301	29Nov12 1803 by 301	100	D

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	5 mg/l	92.0	85.0-115			S33569	30Nov12 0847 by 271	30Nov12 1119 by 305		
TCLP: Barium	0.5 mg/l	90.1	85.0-115			S33569	30Nov12 0847 by 271	30Nov12 1119 by 305		
TCLP: Cadmium	5 mg/l	90.7	85.0-115			S33569	30Nov12 0847 by 271	30Nov12 1119 by 305		
TCLP: Chromium	0.5 mg/l	88.6	85.0-115			S33569	30Nov12 0847 by 271	30Nov12 1119 by 305		
TCLP: Lead	5 mg/l	92.9	85.0-115			S33569	30Nov12 0847 by 271	30Nov12 1119 by 305		
TCLP: Selenium	5 mg/l	87.7	85.0-115			S33569	30Nov12 0847 by 271	30Nov12 1119 by 305		
TCLP: Silver	0.1 mg/l	96.9	85.0-115			S33569	30Nov12 0847 by 271	30Nov12 1119 by 305		
TCLP: Mercury	0.0025 mg/l	90.0	85.0-115			S33570	30Nov12 0848 by 271	30Nov12 1732 by 271		
pH	-	99.5	98.0-102			W41801	28Nov12 1356 by 306	28Nov12 1535 by 306		
TCLP Volatile Organic Compounds										
Benzene	20 ug/l	86.8	80.0-120			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
2-Butanone	40 ug/l	122	30.0-150			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Carbon tetrachloride	20 ug/l	86.2	65.0-140			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Chlorobenzene	20 ug/l	91.1	80.0-120			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Chloroform	20 ug/l	82.0	65.0-135			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
1,2-Dichloroethane	20 ug/l	88.5	70.0-130			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
1,1-Dichloroethane	20 ug/l	108	70.0-130			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Tetrachloroethene	20 ug/l	96.2	45.0-150			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Trichloroethene	20 ug/l	85.8	70.0-125			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Vinyl chloride	20 ug/l	96.8	50.0-145			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
TCLP Volatile Organic Compounds Surrogates:										
4-Bromofluorobenzene	50 ug/l	103	75.0-120			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Dibromofluoromethane	50 ug/l	91.9	85.0-115			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
Toluene-D8	50 ug/l	102	85.0-120			V8161	29Nov12 1516 by 301	29Nov12 1537 by 301		
TCLP Chlorinated Herbicides										
2,4-D	0.251 mg/l	102	40.0-160			C15571		29Nov12 1448 by 07		
2,4,5-TP	0.254 mg/l	105	40.0-160			C15571		29Nov12 1448 by 07		
TCLP Base/Neutral and Acid Compounds										
Cresols	80 ug/l	81.5	38.0-98.0			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
1,4-Dichlorobenzene	40 ug/l	81.8	30.0-100			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
2,4-Dinitrotoluene	40 ug/l	104	50.0-120			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Hexachlorobenzene	40 ug/l	101	50.0-110			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Hexachlorobutadiene	40 ug/l	88.2	25.0-105			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Hexachloroethane	40 ug/l	76.2	30.0-100			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Nitrobenzene	40 ug/l	87.0	45.0-110			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Pentachlorophenol	40 ug/l	87.0	40.0-115			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Pyridine	40 ug/l	44.8	0.100-85.7			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
2,4,5-Trichlorophenol	40 ug/l	100	50.0-110			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
2,4,6-Trichlorophenol	40 ug/l	98.2	50.0-115			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		



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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP Base/Neutral and Acid Compounds (Continued)										
TCLP Base/Neutral and Acid Compounds Surrogates:										
2-Fluorobiphenyl	40 ug/l	81.2	50.0-110			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
2-Fluorophenol	40 ug/l	65.2	20.0-110			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Nitrobenzene-D5	40 ug/l	79.2	40.0-110			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
Terphenyl-D14	40 ug/l	88.2	50.0-135			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
2,4,6-Tribromophenol	40 ug/l	104	40.0-125			B8009	29Nov12 1352 by 301	29Nov12 2007 by 301		
TCLP Organochlorine Pesticides										
Endrin	10 ug/l	99.2	55.0-135			G9084	29Nov12 1450 by 301	29Nov12 1854 by 288		
gamma-BHC	10 ug/l	94.1	25.0-135			G9084	29Nov12 1450 by 301	29Nov12 1854 by 288		
Heptachlor	10 ug/l	93.2	40.0-130			G9084	29Nov12 1450 by 301	29Nov12 1854 by 288		
Heptachlor epoxide	10 ug/l	96.1	60.0-130			G9084	29Nov12 1450 by 301	29Nov12 1854 by 288		
Methoxychlor	10 ug/l	100	55.0-150			G9084	29Nov12 1450 by 301	29Nov12 1854 by 288		
TCLP Organochlorine Pesticides Surrogates:										
Decachlorobiphenyl	20 ug/l	90.6	30.0-135			G9084	29Nov12 1450 by 301	29Nov12 1854 by 288		
Tetrachloro-m-xylene	20 ug/l	78.2	25.0-140			G9084	29Nov12 1450 by 301	29Nov12 1854 by 288		

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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	162782-1	5 mg/l	99.7	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1122 by 305	5	D
	162782-1	5 mg/l	99.6	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1125 by 305	5	D
	Relative Percent Difference:		0.147	20.0	S33569				
TCLP: Barium	162782-1	0.5 mg/l	88.8	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1122 by 305	5	D
	162782-1	0.5 mg/l	89.1	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1125 by 305	5	D
	Relative Percent Difference:		0.114	20.0	S33569				
TCLP: Cadmium	162782-1	5 mg/l	89.9	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1122 by 305	5	D
	162782-1	5 mg/l	90.1	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1125 by 305	5	D
	Relative Percent Difference:		0.254	20.0	S33569				
TCLP: Chromium	162782-1	0.5 mg/l	90.2	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1122 by 305	5	D
	162782-1	0.5 mg/l	90.3	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1125 by 305	5	D
	Relative Percent Difference:		0.168	20.0	S33569				
TCLP: Lead	162782-1	5 mg/l	97.3	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1122 by 305	5	D
	162782-1	5 mg/l	97.7	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1125 by 305	5	D
	Relative Percent Difference:		0.446	20.0	S33569				
TCLP: Selenium	162782-1	5 mg/l	90.8	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1122 by 305	5	D
	162782-1	5 mg/l	91.1	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1125 by 305	5	D
	Relative Percent Difference:		0.293	20.0	S33569				
TCLP: Silver	162782-1	0.1 mg/l	94.7	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1122 by 305	5	D
	162782-1	0.1 mg/l	94.9	75.0-125	S33569	30Nov12 0847 by 271	30Nov12 1125 by 305	5	D
	Relative Percent Difference:		0.189	20.0	S33569				
TCLP: Mercury	162782-1	0.0025 mg/l	85.3	70.0-130	S33570	30Nov12 0848 by 271	30Nov12 1737 by 271	40	D
	162782-1	0.0025 mg/l	80.9	70.0-130	S33570	30Nov12 0848 by 271	30Nov12 1742 by 271	40	D
	Relative Percent Difference:		5.03	20.0	S33570				

TCLP Volatile Organic Compounds

Benzene	162782-1	20 ug/l	101	80.0-120	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
2-Butanone	162782-1	40 ug/l	125	30.0-150	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Carbon tetrachloride	162782-1	20 ug/l	94.8	65.0-140	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Chlorobenzene	162782-1	20 ug/l	101	80.0-120	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Chloroform	162782-1	20 ug/l	96.6	65.0-135	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
1,2-Dichloroethane	162782-1	20 ug/l	101	70.0-130	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
1,1-Dichloroethene	162782-1	20 ug/l	99.1	70.0-130	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Tetrachloroethene	162782-1	20 ug/l	99.7	45.0-150	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Trichloroethene	162782-1	20 ug/l	99.2	70.0-125	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Vinyl chloride	162782-1	20 ug/l	101	50.0-145	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D

TCLP Volatile Organic Compounds Surrogates:

4-Bromofluorobenzene	162782-1	50 ug/l	99.0	75.0-120	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Dibromofluoromethane	162782-1	50 ug/l	97.0	85.0-115	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D
Toluene-D8	162782-1	50 ug/l	99.1	85.0-120	V8161	29Nov12 1516 by 301	29Nov12 1606 by 301	100	D

TCLP Chlorinated Herbicides

2,4-D	162782-1	0.251 mg/l	96.8	40.0-160	C15571		29Nov12 1448 by 07		
	162782-1	0.251 mg/l	97.2	40.0-160	C15571		29Nov12 1448 by 07		
	Relative Percent Difference:		0.411	20.0	C15571				
2,4,5-TP	162782-1	0.254 mg/l	104	40.0-160	C15571		29Nov12 1448 by 07		
	162782-1	0.254 mg/l	104	40.0-160	C15571		29Nov12 1448 by 07		
	Relative Percent Difference:		0.380	20.0	C15571				

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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP Base/Neutral and Acid Compounds									
Cresols	162782-1	80 ug/l	76.2	35.2-107	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	80 ug/l	78.4	35.2-107	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		2.75	30.0	B8009				
1,4-Dichlorobenzene	162782-1	40 ug/l	77.0	30.0-100	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	78.8	30.0-100	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		2.25	30.0	B8009				
2,4-Dinitrotoluene	162782-1	40 ug/l	95.5	50.0-120	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	98.2	50.0-120	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		2.84	30.0	B8009				
Hexachlorobenzene	162782-1	40 ug/l	94.5	50.0-110	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	98.0	50.0-110	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		3.64	30.0	B8009				
Hexachlorobutadiene	162782-1	40 ug/l	82.8	25.0-105	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	84.5	25.0-105	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		2.09	30.0	B8009				
Hexachloroethane	162782-1	40 ug/l	71.8	30.0-100	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	72.8	30.0-100	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		1.38	30.0	B8009				
Nitrobenzene	162782-1	40 ug/l	82.0	45.0-110	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	81.2	45.0-110	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		0.919	30.0	B8009				
Pentachlorophenol	162782-1	40 ug/l	97.0	40.0-115	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	93.5	40.0-115	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		3.67	30.0	B8009				
Pyridine	162782-1	40 ug/l	43.0	0.100-73.6	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	45.5	0.100-73.6	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		5.65	29.7	B8009				
2,4,5-Trichlorophenol	162782-1	40 ug/l	95.2	50.0-110	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	94.8	50.0-110	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		0.526	30.0	B8009				
2,4,6-Trichlorophenol	162782-1	40 ug/l	92.5	50.0-115	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301	10	D
	162782-1	40 ug/l	94.2	50.0-115	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301	10	D
	Relative Percent Difference:		1.87	30.0	B8009				
TCLP Base/Neutral and Acid Compounds Surrogates:									
2-Fluorobiphenyl	162782-1	40 ug/l	87.8	50.0-110	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301		
	162782-1	40 ug/l	88.5	50.0-110	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301		
2-Fluorophenol	162782-1	40 ug/l	69.8	20.0-110	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301		
	162782-1	40 ug/l	70.0	20.0-110	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301		
Nitrobenzene-D5	162782-1	40 ug/l	87.8	40.0-110	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301		
	162782-1	40 ug/l	87.2	40.0-110	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301		
Terphenyl-D14	162782-1	40 ug/l	96.0	50.0-135	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301		
	162782-1	40 ug/l	98.8	50.0-135	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301		
2,4,6-Tribromophenol	162782-1	40 ug/l	113	40.0-125	B8009	29Nov12 1352 by 301	29Nov12 2042 by 301		
	162782-1	40 ug/l	114	40.0-125	B8009	29Nov12 1352 by 301	29Nov12 2118 by 301		

Georgia-Pacific Chemicals, LLC-Chemical
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Crossett, AR 71635

MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP Organochlorine Pesticides									
Endrin	162782-1	10 ug/l	96.2	55.0-135	G9084	29Nov12 1450 by 301	29Nov12 1911 by 288	10	D
	162782-1	10 ug/l	99.7	55.0-135	G9084	29Nov12 1450 by 301	29Nov12 1929 by 288	10	D
	Relative Percent Difference:		3.57	30.0	G9084				
gamma-BHC	162782-1	10 ug/l	91.8	25.0-135	G9084	29Nov12 1450 by 301	29Nov12 1911 by 288	10	D
	162782-1	10 ug/l	94.3	25.0-135	G9084	29Nov12 1450 by 301	29Nov12 1929 by 288	10	D
	Relative Percent Difference:		2.69	30.0	G9084				
Heptachlor	162782-1	10 ug/l	92.2	40.0-130	G9084	29Nov12 1450 by 301	29Nov12 1911 by 288	10	D
	162782-1	10 ug/l	91.3	40.0-130	G9084	29Nov12 1450 by 301	29Nov12 1929 by 288	10	D
	Relative Percent Difference:		0.981	30.0	G9084				
Heptachlor epoxide	162782-1	10 ug/l	92.3	60.0-130	G9084	29Nov12 1450 by 301	29Nov12 1911 by 288	10	D
	162782-1	10 ug/l	96.7	60.0-130	G9084	29Nov12 1450 by 301	29Nov12 1929 by 288	10	D
	Relative Percent Difference:		4.66	30.0	G9084				
Methoxychlor	162782-1	10 ug/l	99.7	55.0-150	G9084	29Nov12 1450 by 301	29Nov12 1911 by 288	10	D
	162782-1	10 ug/l	106	55.0-150	G9084	29Nov12 1450 by 301	29Nov12 1929 by 288	10	D
	Relative Percent Difference:		5.94	30.0	G9084				
TCLP Organochlorine Pesticides Surrogates:									
Decachlorobiphenyl	162782-1	20 ug/l	87.7	30.0-135	G9084	29Nov12 1450 by 301	29Nov12 1911 by 288		
	162782-1	20 ug/l	91.6	30.0-135	G9084	29Nov12 1450 by 301	29Nov12 1929 by 288		
Tetrachloro-m-xylene	162782-1	20 ug/l	100	25.0-140	G9084	29Nov12 1450 by 301	29Nov12 1911 by 288		
	162782-1	20 ug/l	111	25.0-140	G9084	29Nov12 1450 by 301	29Nov12 1929 by 288		

Georgia-Pacific Chemicals, LLC-Chemical
Plant
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LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
TCLP: Arsenic	< 0.05 mg/l	0.05	0.05	S33569-1	30Nov12 0847 by 271	30Nov12 1117 by 305	
TCLP: Barium	< 0.002 mg/l	0.002	0.002	S33569-1	30Nov12 0847 by 271	30Nov12 1117 by 305	
TCLP: Cadmium	< 0.004 mg/l	0.004	0.004	S33569-1	30Nov12 0847 by 271	30Nov12 1117 by 305	
TCLP: Chromium	< 0.007 mg/l	0.007	0.007	S33569-1	30Nov12 0847 by 271	30Nov12 1117 by 305	
TCLP: Lead	< 0.04 mg/l	0.04	0.04	S33569-1	30Nov12 0847 by 271	30Nov12 1117 by 305	
TCLP: Selenium	< 0.07 mg/l	0.07	0.07	S33569-1	30Nov12 0847 by 271	30Nov12 1117 by 305	
TCLP: Silver	< 0.007 mg/l	0.007	0.007	S33569-1	30Nov12 0847 by 271	30Nov12 1117 by 305	
TCLP: Mercury	< 0.0002 mg/l	0.0002	0.0002	S33570-1	30Nov12 0848 by 271	30Nov12 1727 by 271	
TCLP Chlorinated Herbicides							
2,4-D	< 0.20 mg/l	0.20	0.2	C15571-1		29Nov12 1448 by 07	
2,4,5-TP	< 0.10 mg/l	0.10	0.1	C15571-1		29Nov12 1448 by 07	
TCLP Base/Neutral and Acid Compounds							
Cresols	< 0.010 mg/l	0.010	0.010	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
1,4-Dichlorobenzene	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
2,4-Dinitrotoluene	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Hexachlorobenzene	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Hexachlorobutadiene	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Hexachloroethane	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Nitrobenzene	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Pentachlorophenol	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Pyridine	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
2,4,5-Trichlorophenol	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
2,4,6-Trichlorophenol	< 0.0050 mg/l	0.0050	0.0050	B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
TCLP Base/Neutral and Acid Compounds Surrogates:							
2-Fluorobiphenyl (50.0-110%)	89.5 %			B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
2-Fluorophenol (20.0-110%)	68.2 %			B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Nitrobenzene-D5 (40.0-110%)	85.8 %			B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
Terphenyl-D14 (50.0-135%)	106 %			B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
2,4,6-Tribromophenol (40.0-125%)	95.2 %			B8009-1	29Nov12 1352 by 301	29Nov12 1932 by 301	
TCLP Volatile Organic Compounds							
Benzene	< 0.0050 mg/l	0.0050	0.0050	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
2-Butanone	< 0.010 mg/l	0.010	0.010	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Carbon tetrachloride	< 0.0020 mg/l	0.0020	0.0020	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Chlorobenzene	< 0.0050 mg/l	0.0050	0.0050	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Chloroform	< 0.0050 mg/l	0.0050	0.0050	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
1,2-Dichloroethane	< 0.0050 mg/l	0.0050	0.0050	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
1,1-Dichloroethene	< 0.0050 mg/l	0.0050	0.0050	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Tetrachloroethene	< 0.0050 mg/l	0.0050	0.0050	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Trichloroethene	< 0.0050 mg/l	0.0050	0.0050	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Vinyl chloride	< 0.0020 mg/l	0.0020	0.0020	V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
TCLP Volatile Organic Compounds Surrogates:							
4-Bromofluorobenzene (75.0-120%)	97.0 %			V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Dibromofluoromethane (85.0-115%)	92.4 %			V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
Toluene-D8 (85.0-120%)	97.8 %			V8161-1	29Nov12 1516 by 301	29Nov12 1705 by 301	
TCLP Organochlorine Pesticides							
Chlordane	< 0.0010 mg/l	0.0010	0.0010	G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	
Endrin	< 0.00020 mg/l	0.00020	0.00020	G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	



Georgia-Pacific Chemicals, LLC-Chemical Plant
 Highway 82 and Papermill Road
 Crossett, AR 71635

LABORATORY BLANK RESULTS

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>PQL</u>	<u>QC Sample</u>	<u>Preparation Date</u>	<u>Analysis Date</u>	<u>Qual</u>
TCLP Organochlorine Pesticides							
gamma-BHC	< 0.00020 mg/l	0.00020	0.00020	G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	
Heptachlor	< 0.00010 mg/l	0.00010	0.00020	G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	
Heptachlor epoxide	< 0.00010 mg/l	0.00010	0.00020	G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	
Methoxychlor	< 0.00020 mg/l	0.00020	0.00020	G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	
Toxaphene	< 0.0020 mg/l	0.0020	0.0020	G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	
TCLP Organochlorine Pesticides Surrogates:							
Decachlorobiphenyl (30.0-135%)	81.6 %			G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	
Tetrachloro-m-xylene (25.0-140%)	74.4 %			G9084-1	29Nov12 1450 by 301	29Nov12 1836 by 288	

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: <u>GP Chemicals</u>			PO No.		No of B O T T L E S <u>TC/P</u>	Analyses Requested										AIC Control No: <u>162782</u>				
Project Reference: <u>Ash</u>			Sample Matrix													AIC Proposal No:				
Project Manager: <u>Tom Hudson</u>			WATER SOIL													Carrier: <u>Feed</u>				
Sampled By: <u>Everett Kelley</u>			G R A B	C O M P	W A T E R	S O I L	1	X											Received Temperature °C <u>2°C</u>	
AIC No.	Sample Identification	Date/Time Collected																	Remarks	
	<u>Ash Pond</u>	<u>11/27/12 9:15</u>	<u>X</u>			<u>X</u>	<u>1</u>	<u>X</u>												
	<u>Ash Basin</u>	<u>11/27/12 9:15</u>	<u>X</u>			<u>X</u>	<u>1</u>	<u>X</u>												
			Container Type				<u>G</u>											Field pH calibration on _____ @ _____		
			Preservative				<u>No</u>											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																	
Turnaround Time Requested: (Please circle) NORMAL or EXPEDITED IN _____ DAYS							Relinquished By:			Date/Time			Received By:			Date/Time				
Expedited results requested by: _____							Relinquished By:			Date/Time			Received in Lab By: <u>[Signature]</u>			Date/Time <u>11-28-12 10:40</u>				
Who should AIC contact with questions: _____							Comments:													
Phone: _____ Fax: _____																				
Report Attention to: _____																				
Report Address to: _____																				

4861 46576514



Georgia-Pacific Corporation
ATTN: Mr. Richard Freeman
Environmental DP33
100 Mill Supply Road
Crossett, AR 71635

This report contains the analytical results and supporting information for the sample submitted on November 11, 2014. 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.

A handwritten signature in cursive script that reads 'Steve Bradford'. The signature is written in black ink and is positioned above a horizontal line.

Steve Bradford
Deputy Laboratory Director

This document has been distributed to the following:

PDF cc: Georgia-Pacific Corporation
ATTN: Ms. Rachel Johnson
rachel.childress@gapac.com



Georgia-Pacific Corporation
Environmental DP33
100 Mill Supply Road
Crossett, AR 71635

SAMPLE INFORMATION

Project Description:

One (1) Ash sample(s) received on November 11, 2014
Primary Clarifier Sludge
P.O. No. 1201274

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:

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Sampled Date/Time</u>	<u>Notes</u>
184528-1	Primary Clarifier Sludge	11/10/14 11AM	10-Nov-2014 1100

Qualifiers:

- D Result is from a secondary dilution factor
- H Analytical holding time exceeded regulatory requirements

Case Narrative:

Analysis of soils/sludges are reported on a dry-weight basis unless otherwise specified.

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).



Georgia-Pacific Corporation
Environmental DP33
100 Mill Supply Road
Crossett, AR 71635

ANALYTICAL RESULTS

AIC No. 184528-1

Sample Identification: Primary Clarifier Sludge 11/10/14 11AM

Analyte	Result	RL	Units	Qualifier
TCLP: Solids EPA 1311	100 Analyzed: 11-Nov-2014 1700 by 271	0.5	% Batch: S37651	
TCLP: Arsenic EPA 3010A, 6010C Prep: 12-Nov-2014 1520 by 311	< 0.3 Analyzed: 12-Nov-2014 1629 by 235	0.3	mg/l Batch: S37729	D Dil: 5
TCLP: Barium EPA 3010A, 6010C Prep: 12-Nov-2014 1520 by 311	2.0 Analyzed: 12-Nov-2014 1629 by 235	0.01	mg/l Batch: S37729	D Dil: 5
TCLP: Cadmium EPA 3010A, 6010C Prep: 12-Nov-2014 1520 by 311	< 0.02 Analyzed: 12-Nov-2014 1629 by 235	0.02	mg/l Batch: S37729	D Dil: 5
TCLP: Chromium EPA 3010A, 6010C Prep: 12-Nov-2014 1520 by 311	< 0.04 Analyzed: 12-Nov-2014 1629 by 235	0.04	mg/l Batch: S37729	D Dil: 5
TCLP: Lead EPA 3010A, 6010C Prep: 12-Nov-2014 1520 by 311	< 0.2 Analyzed: 12-Nov-2014 1629 by 235	0.2	mg/l Batch: S37729	D Dil: 5
TCLP: Selenium EPA 3010A, 6010C Prep: 12-Nov-2014 1520 by 311	< 0.4 Analyzed: 12-Nov-2014 1629 by 235	0.4	mg/l Batch: S37729	D Dil: 5
TCLP: Silver EPA 3010A, 6010C Prep: 12-Nov-2014 1520 by 311	< 0.04 Analyzed: 12-Nov-2014 1629 by 235	0.04	mg/l Batch: S37729	D Dil: 5
TCLP: Mercury EPA 7470A Prep: 12-Nov-2014 1349 by 311	< 0.008 Analyzed: 12-Nov-2014 1626 by 311	0.008	mg/l Batch: S37727	D Dil: 40
pH EPA 9045C Prep: 11-Nov-2014 1115 by 93	7.4 Analyzed: 11-Nov-2014 1230 by 93		Units Batch: W49901	H
TCLP Chlorinated Herbicides By EPA 8321A				
2,4-D EPA 8321A	< 0.20 Analyzed: 13-Nov-2014 0904 by 07	0.20	mg/l Batch: C17236	
2,4,5-TP EPA 8321A	< 0.10 Analyzed: 13-Nov-2014 0904 by 07	0.10	mg/l Batch: C17236	
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D				
Cresols EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.10 Analyzed: 12-Nov-2014 2113 by 301	0.10	mg/l Batch: B9245	D Dil: 10
1,4-Dichlorobenzene EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050 Analyzed: 12-Nov-2014 2113 by 301	0.050	mg/l Batch: B9245	D Dil: 10
2,4-Dinitrotoluene EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050 Analyzed: 12-Nov-2014 2113 by 301	0.050	mg/l Batch: B9245	D Dil: 10
Hexachlorobenzene EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050 Analyzed: 12-Nov-2014 2113 by 301	0.050	mg/l Batch: B9245	D Dil: 10
Hexachlorobutadiene EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050 Analyzed: 12-Nov-2014 2113 by 301	0.050	mg/l Batch: B9245	D Dil: 10
Hexachloroethane EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050 Analyzed: 12-Nov-2014 2113 by 301	0.050	mg/l Batch: B9245	D Dil: 10
Nitrobenzene EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050 Analyzed: 12-Nov-2014 2113 by 301	0.050	mg/l Batch: B9245	D Dil: 10

Georgia-Pacific Corporation
Environmental DP33
100 Mill Supply Road
Crossett, AR 71635

ANALYTICAL RESULTS

AIC No. 184528-1 (Continued)

Sample Identification: Primary Clarifier Sludge 11/10/14 11AM

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D (Continued)				
Pentachlorophenol EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050	0.050	mg/l	D
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	Dil: 10
Pyridine EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050	0.050	mg/l	D
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	Dil: 10
2,4,5-Trichlorophenol EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050	0.050	mg/l	D
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	Dil: 10
2,4,6-Trichlorophenol EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	< 0.050	0.050	mg/l	D
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	Dil: 10
Surrogate: 2-Fluorobiphenyl (50.0-110%) EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	89.0		%	
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	
Surrogate: 2-Fluorophenol (20.0-110%) EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	63.6		%	
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	
Surrogate: Nitrobenzene-D5 (40.0-110%) EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	82.5		%	
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	
Surrogate: Terphenyl-D14 (50.0-135%) EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	114		%	
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	
Surrogate: 2,4,6-Tribromophenol (40.0-125%) EPA 3510C, 8270D Prep: 12-Nov-2014 1439 by 306	51.9		%	
	Analyzed: 12-Nov-2014 2113 by 301		Batch: B9245	
TCLP Volatile Organic Compounds By EPA 5030C, 8260C				
Benzene EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.50	0.50	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Carbon tetrachloride EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.20	0.20	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Chlorobenzene EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.50	0.50	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Chloroform EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.50	0.50	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
1,2-Dichloroethane EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.50	0.50	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
1,1-Dichloroethylene EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.50	0.50	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Methyl ethyl ketone EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 1.0	1.0	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Tetrachloroethylene EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.50	0.50	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Trichloroethylene EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.50	0.50	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Vinyl chloride EPA 5030C, 8260C Prep: 12-Nov-2014 1013 by 301	< 0.20	0.20	mg/l	D
	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100

Georgia-Pacific Corporation
Environmental DP33
100 Mill Supply Road
Crossett, AR 71635

ANALYTICAL RESULTS

AIC No. 184528-1 (Continued)

Sample Identification: Primary Clarifier Sludge 11/10/14 11AM

Analyte	Result	RL	Units	Qualifier
TCLP Volatile Organic Compounds By EPA 5030C, 8260C (Continued)				
Surrogate: 4-Bromofluorobenzene (75.0-120%) EPA 5030C, 8260C	95.5		%	D
Prep: 12-Nov-2014 1013 by 301	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Surrogate: Dibromofluoromethane (85.0-115%) EPA 5030C, 8260C	100		%	D
Prep: 12-Nov-2014 1013 by 301	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
Surrogate: Toluene-D8 (85.0-120%) EPA 5030C, 8260C	98.7		%	D
Prep: 12-Nov-2014 1013 by 301	Analyzed: 12-Nov-2014 1511 by 301		Batch: V8635	Dil: 100
TCLP Organochlorine Pesticides By EPA 3510C, 8081B				
Chlordane EPA 3510C, 8081B	< 0.010	0.010	mg/l	D
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	Dil: 10
Endrin EPA 3510C, 8081B	< 0.0020	0.0020	mg/l	D
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	Dil: 10
gamma-BHC EPA 3510C, 8081B	< 0.0020	0.0020	mg/l	D
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	Dil: 10
Heptachlor EPA 3510C, 8081B	< 0.0010	0.0010	mg/l	D
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	Dil: 10
Heptachlor epoxide EPA 3510C, 8081B	< 0.0010	0.0010	mg/l	D
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	Dil: 10
Methoxychlor EPA 3510C, 8081B	< 0.0020	0.0020	mg/l	D
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	Dil: 10
Toxaphene EPA 3510C, 8081B	< 0.020	0.020	mg/l	D
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	Dil: 10
Surrogate: Decachlorobiphenyl (30.0-135%) EPA 3510C, 8081B	80.9		%	
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	
Surrogate: Tetrachloro-m-xylene (25.0-140%) EPA 3510C, 8081B	97.6		%	
Prep: 12-Nov-2014 1339 by 306	Analyzed: 12-Nov-2014 1847 by 306		Batch: G9918	



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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
pH	184507-2	6.6 Units			11Nov14 0914 by 93	11Nov14 1145 by 93		
	Batch: W49901 Duplicate	6.5 Units	0.916	5.00	11Nov14 0914 by 93	11Nov14 1145 by 93		
Volatile Organic Compounds								
Benzene	184551-2	< 5.0 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	< 5.0 ug/l	0.00	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
2-Butanone	184551-2	44 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	41 ug/l	7.43	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
Carbon tetrachloride	184551-2	< 2.0 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	< 2.0 ug/l	0.00	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
Chlorobenzene	184551-2	58 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	61 ug/l	5.25	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
Chloroform	184551-2	10 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	10 ug/l	2.64	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
1,2-Dichloroethane	184551-2	52 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	53 ug/l	1.26	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
1,1-Dichloroethylene	184551-2	< 5.0 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	< 5.0 ug/l	0.00	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
Tetrachloroethylene	184551-2	< 5.0 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	< 5.0 ug/l	0.00	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
Trichloroethylene	184551-2	< 5.0 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	< 5.0 ug/l	0.00	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
Vinyl chloride	184551-2	< 2.0 ug/l			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	< 2.0 ug/l	0.00	30.0	12Nov14 1013 by 301	12Nov14 1405 by 301		
4-Bromofluorobenzene (75.0-120%)	184551-2	101 %			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	100 %			12Nov14 1013 by 301	12Nov14 1405 by 301		
Dibromofluoromethane (85.0-115%)	184551-2	105 %			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	103 %			12Nov14 1013 by 301	12Nov14 1405 by 301		
Toluene-D8 (85.0-120%)	184551-2	95.5 %			12Nov14 1013 by 301	12Nov14 1332 by 301		D
	Batch: V8635 Duplicate	95.2 %			12Nov14 1013 by 301	12Nov14 1405 by 301		



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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	5 mg/l	97.2	85.0-115			S37729	12Nov14 1520 by 311	12Nov14 1613 by 235		
TCLP: Barium	0.5 mg/l	96.2	85.0-115			S37729	12Nov14 1520 by 311	12Nov14 1613 by 235		
TCLP: Cadmium	5 mg/l	95.3	85.0-115			S37729	12Nov14 1520 by 311	12Nov14 1613 by 235		
TCLP: Chromium	0.5 mg/l	98.0	85.0-115			S37729	12Nov14 1520 by 311	12Nov14 1613 by 235		
TCLP: Lead	5 mg/l	95.6	85.0-115			S37729	12Nov14 1520 by 311	12Nov14 1613 by 235		
TCLP: Selenium	5 mg/l	97.1	85.0-115			S37729	12Nov14 1520 by 311	12Nov14 1613 by 235		
TCLP: Silver	0.1 mg/l	91.6	85.0-115			S37729	12Nov14 1520 by 311	12Nov14 1613 by 235		
TCLP: Mercury	0.0025 mg/l	97.9	85.0-115			S37727	12Nov14 1349 by 311	12Nov14 1611 by 311		
pH	-	100	98.0-102			W49901	11Nov14 0914 by 93	11Nov14 1145 by 93		
TCLP Volatile Organic Compounds										
Benzene	20 ug/l	107	80.0-120			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
2-Butanone	40 ug/l	101	30.0-150			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Carbon tetrachloride	20 ug/l	107	65.0-140			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Chlorobenzene	20 ug/l	111	80.0-120			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Chloroform	20 ug/l	110	65.0-135			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
1,2-Dichloroethane	20 ug/l	106	70.0-130			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
1,1-Dichloroethene	20 ug/l	103	70.0-130			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Tetrachloroethene	20 ug/l	107	45.0-150			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Trichloroethene	20 ug/l	107	70.0-125			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Vinyl chloride	20 ug/l	92.9	50.0-145			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
TCLP Volatile Organic Compounds Surrogates:										
4-Bromofluorobenzene	50 ug/l	100	75.0-120			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Dibromofluoromethane	50 ug/l	103	85.0-115			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
Toluene-D8	50 ug/l	99.4	85.0-120			V8635	12Nov14 1013 by 301	12Nov14 1027 by 301		
TCLP Chlorinated Herbicides										
2,4-D	0.25 mg/l	100	87.8-107			C17236		13Nov14 0904 by 07		
2,4,5-TP	0.252 mg/l	110	96.1-110			C17236		13Nov14 0904 by 07		
TCLP Base/Neutral and Acid Compounds										
Cresols	80 ug/l	64.0	40.0-110			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
1,4-Dichlorobenzene	40 ug/l	69.8	30.0-100			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
2,4-Dinitrotoluene	40 ug/l	70.0	50.0-120			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Hexachlorobenzene	40 ug/l	87.5	50.0-110			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Hexachlorobutadiene	40 ug/l	71.0	25.0-105			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Hexachloroethane	40 ug/l	71.2	30.0-100			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Nitrobenzene	40 ug/l	74.4	45.0-110			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Pentachlorophenol	40 ug/l	44.8	40.0-115			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Pyridine	40 ug/l	43.6	8.40-70.2			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
2,4,5-Trichlorophenol	40 ug/l	58.6	50.0-110			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
2,4,6-Trichlorophenol	40 ug/l	62.8	50.0-115			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP Base/Neutral and Acid Compounds (Continued)										
TCLP Base/Neutral and Acid Compounds Surrogates:										
2-Fluorobiphenyl	40 ug/l	85.0	50.0-110			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
2-Fluorophenol	40 ug/l	57.6	20.0-110			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Nitrobenzene-D5	40 ug/l	82.5	40.0-110			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
Terphenyl-D14	40 ug/l	84.9	50.0-135			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
2,4,6-Tribromophenol	40 ug/l	68.1	40.0-125			B9245	12Nov14 1440 by 306	12Nov14 1925 by 301		
TCLP Organochlorine Pesticides										
Endrin	10 ug/l	85.2	55.0-135			G9918	12Nov14 1340 by 306	12Nov14 1812 by 306		
gamma-BHC	10 ug/l	82.8	25.0-135			G9918	12Nov14 1340 by 306	12Nov14 1812 by 306		
Heptachlor	10 ug/l	95.9	40.0-130			G9918	12Nov14 1340 by 306	12Nov14 1812 by 306		
Heptachlor epoxide	10 ug/l	80.3	60.0-130			G9918	12Nov14 1340 by 306	12Nov14 1812 by 306		
Methoxychlor	10 ug/l	82.6	55.0-150			G9918	12Nov14 1340 by 306	12Nov14 1812 by 306		
TCLP Organochlorine Pesticides Surrogates:										
Decachlorobiphenyl	20 ug/l	86.2	30.0-135			G9918	12Nov14 1340 by 306	12Nov14 1812 by 306		
Tetrachloro-m-xylene	20 ug/l	96.0	25.0-140			G9918	12Nov14 1340 by 306	12Nov14 1812 by 306		



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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	184523-1	5 mg/l	92.6	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1617 by 235	5	D
	184523-1	5 mg/l	92.4	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1621 by 235	5	D
	Relative Percent Difference:		0.128	20.0	S37729				
TCLP: Barium	184523-1	0.5 mg/l	91.8	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1617 by 235	5	D
	184523-1	0.5 mg/l	89.8	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1621 by 235	5	D
	Relative Percent Difference:		1.56	20.0	S37729				
TCLP: Cadmium	184523-1	5 mg/l	89.7	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1617 by 235	5	D
	184523-1	5 mg/l	88.2	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1621 by 235	5	D
	Relative Percent Difference:		1.71	20.0	S37729				
TCLP: Chromium	184523-1	0.5 mg/l	91.8	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1617 by 235	5	D
	184523-1	0.5 mg/l	91.8	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1621 by 235	5	D
	Relative Percent Difference:		0.0300	20.0	S37729				
TCLP: Lead	184523-1	5 mg/l	91.3	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1617 by 235	5	D
	184523-1	5 mg/l	90.9	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1621 by 235	5	D
	Relative Percent Difference:		0.503	20.0	S37729				
TCLP: Selenium	184523-1	5 mg/l	88.1	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1617 by 235	5	D
	184523-1	5 mg/l	88.2	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1621 by 235	5	D
	Relative Percent Difference:		0.0651	20.0	S37729				
TCLP: Silver	184523-1	0.1 mg/l	89.2	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1617 by 235	5	D
	184523-1	0.1 mg/l	87.9	75.0-125	S37729	12Nov14 1520 by 311	12Nov14 1621 by 235	5	D
	Relative Percent Difference:		1.47	20.0	S37729				
TCLP: Mercury	184523-1	0.0025 mg/l	89.2	70.0-130	S37727	12Nov14 1349 by 311	12Nov14 1614 by 311	40	D
	184523-1	0.0025 mg/l	88.1	70.0-130	S37727	12Nov14 1349 by 311	12Nov14 1618 by 311	40	D
	Relative Percent Difference:		1.22	20.0	S37727				

TCLP Volatile Organic Compounds

Benzene	184551-2	20 ug/l	113	80.0-120	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
2-Butanone	184551-2	40 ug/l	67.7	30.0-150	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Carbon tetrachloride	184551-2	20 ug/l	106	65.0-140	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Chlorobenzene	184551-2	20 ug/l	94.2	80.0-120	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Chloroform	184551-2	20 ug/l	101	65.0-135	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
1,2-Dichloroethane	184551-2	20 ug/l	88.4	70.0-130	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
1,1-Dichloroethene	184551-2	20 ug/l	105	70.0-130	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Tetrachloroethene	184551-2	20 ug/l	96.4	45.0-150	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Trichloroethene	184551-2	20 ug/l	91.8	70.0-125	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Vinyl chloride	184551-2	20 ug/l	88.6	50.0-145	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		

TCLP Volatile Organic Compounds Surrogates:

4-Bromofluorobenzene	184551-2	50 ug/l	101	75.0-120	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Dibromofluoromethane	184551-2	50 ug/l	110	85.0-115	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		
Toluene-D8	184551-2	50 ug/l	96.3	85.0-120	V8635	12Nov14 1013 by 301	13Nov14 1410 by 301		

TCLP Chlorinated Herbicides

2,4-D	184528-1	0.25 mg/l	98.4	94.0-103	C17236		13Nov14 0904 by 07		
	184528-1	0.25 mg/l	99.2	94.0-103	C17236		13Nov14 0904 by 07		
	Relative Percent Difference:		0.810	20.0	C17236				
2,4,5-TP	184528-1	0.252 mg/l	108	96.3-112	C17236		13Nov14 0904 by 07		
	184528-1	0.252 mg/l	108	96.3-112	C17236		13Nov14 0904 by 07		
	Relative Percent Difference:		0.367	20.0	C17236				

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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP Base/Neutral and Acid Compounds									
Cresols	184528-1	80 ug/l	67.3	40.0-110	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	80 ug/l	68.6	40.0-110	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		1.97	30.0	B9245				
1,4-Dichlorobenzene	184528-1	40 ug/l	68.9	30.0-100	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	69.9	30.0-100	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		1.41	30.0	B9245				
2,4-Dinitrotoluene	184528-1	40 ug/l	82.3	50.0-120	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	81.1	50.0-120	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		1.41	30.0	B9245				
Hexachlorobenzene	184528-1	40 ug/l	76.9	50.0-110	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	79.4	50.0-110	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		3.17	30.0	B9245				
Hexachlorobutadiene	184528-1	40 ug/l	69.8	25.0-105	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	69.4	25.0-105	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		0.467	30.0	B9245				
Hexachloroethane	184528-1	40 ug/l	69.2	30.0-100	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	67.7	30.0-100	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		2.23	30.0	B9245				
Nitrobenzene	184528-1	40 ug/l	72.4	45.0-110	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	74.4	45.0-110	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		2.69	30.0	B9245				
Pentachlorophenol	184528-1	40 ug/l	67.2	40.0-115	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	68.7	40.0-115	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		2.17	30.0	B9245				
Pyridine	184528-1	40 ug/l	37.7	9.30-74.1	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	42.1	9.30-74.1	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		11.0	41.1	B9245				
2,4,5-Trichlorophenol	184528-1	40 ug/l	74.0	50.0-110	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	74.7	50.0-110	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		1.01	30.0	B9245				
2,4,6-Trichlorophenol	184528-1	40 ug/l	76.0	50.0-115	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301	10	D
	184528-1	40 ug/l	76.9	50.0-115	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301	10	D
	Relative Percent Difference:		1.28	30.0	B9245				
TCLP Base/Neutral and Acid Compounds Surrogates:									
2-Fluorobiphenyl	184528-1	40 ug/l	80.1	50.0-110	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301		
	184528-1	40 ug/l	80.2	50.0-110	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301		
2-Fluorophenol	184528-1	40 ug/l	58.7	20.0-110	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301		
	184528-1	40 ug/l	59.5	20.0-110	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301		
Nitrobenzene-D5	184528-1	40 ug/l	78.8	40.0-110	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301		
	184528-1	40 ug/l	77.9	40.0-110	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301		
Terphenyl-D14	184528-1	40 ug/l	81.4	50.0-135	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301		
	184528-1	40 ug/l	90.7	50.0-135	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301		
2,4,6-Tribromophenol	184528-1	40 ug/l	72.6	40.0-125	B9245	12Nov14 1440 by 306	12Nov14 2001 by 301		
	184528-1	40 ug/l	73.2	40.0-125	B9245	12Nov14 1440 by 306	12Nov14 2037 by 301		



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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP Organochlorine Pesticides									
Endrin	184528-1	10 ug/l	94.2	55.0-135	G9918	12Nov14 1340 by 306	12Nov14 1824 by 306	10	D
	184528-1	10 ug/l	80.7	55.0-135	G9918	12Nov14 1340 by 306	12Nov14 1836 by 306	10	D
	Relative Percent Difference:		15.4	30.0	G9918				
gamma-BHC	184528-1	10 ug/l	97.2	25.0-135	G9918	12Nov14 1340 by 306	12Nov14 1824 by 306	10	D
	184528-1	10 ug/l	91.9	25.0-135	G9918	12Nov14 1340 by 306	12Nov14 1836 by 306	10	D
	Relative Percent Difference:		5.61	30.0	G9918				
Heptachlor	184528-1	10 ug/l	89.7	40.0-130	G9918	12Nov14 1340 by 306	12Nov14 1824 by 306	10	D
	184528-1	10 ug/l	89.7	40.0-130	G9918	12Nov14 1340 by 306	12Nov14 1836 by 306	10	D
	Relative Percent Difference:		0.00	30.0	G9918				
Heptachlor epoxide	184528-1	10 ug/l	104	60.0-130	G9918	12Nov14 1340 by 306	12Nov14 1824 by 306	10	D
	184528-1	10 ug/l	85.2	60.0-130	G9918	12Nov14 1340 by 306	12Nov14 1836 by 306	10	D
	Relative Percent Difference:		19.5	30.0	G9918				
Methoxychlor	184528-1	10 ug/l	95.2	55.0-150	G9918	12Nov14 1340 by 306	12Nov14 1824 by 306	10	D
	184528-1	10 ug/l	84.8	55.0-150	G9918	12Nov14 1340 by 306	12Nov14 1836 by 306	10	D
	Relative Percent Difference:		11.6	30.0	G9918				
TCLP Organochlorine Pesticides Surrogates:									
Decachlorobiphenyl	184528-1	20 ug/l	108	30.0-135	G9918	12Nov14 1340 by 306	12Nov14 1824 by 306		
	184528-1	20 ug/l	104	30.0-135	G9918	12Nov14 1340 by 306	12Nov14 1836 by 306		
Tetrachloro-m-xylene	184528-1	20 ug/l	92.8	25.0-140	G9918	12Nov14 1340 by 306	12Nov14 1824 by 306		
	184528-1	20 ug/l	112	25.0-140	G9918	12Nov14 1340 by 306	12Nov14 1836 by 306		

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LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
TCLP: Arsenic	< 0.05 mg/l	0.05	0.05	S37729-1	12Nov14 1520 by 311	12Nov14 1609 by 235	
TCLP: Barium	< 0.002 mg/l	0.002	0.002	S37729-1	12Nov14 1520 by 311	12Nov14 1609 by 235	
TCLP: Cadmium	< 0.004 mg/l	0.004	0.004	S37729-1	12Nov14 1520 by 311	12Nov14 1609 by 235	
TCLP: Chromium	< 0.007 mg/l	0.007	0.007	S37729-1	12Nov14 1520 by 311	12Nov14 1609 by 235	
TCLP: Lead	< 0.04 mg/l	0.04	0.04	S37729-1	12Nov14 1520 by 311	12Nov14 1609 by 235	
TCLP: Selenium	< 0.07 mg/l	0.07	0.07	S37729-1	12Nov14 1520 by 311	12Nov14 1609 by 235	
TCLP: Silver	< 0.007 mg/l	0.007	0.007	S37729-1	12Nov14 1520 by 311	12Nov14 1609 by 235	
TCLP: Mercury	< 0.0002 mg/l	0.0002	0.0002	S37727-1	12Nov14 1349 by 311	12Nov14 1607 by 311	
TCLP Chlorinated Herbicides							
2,4-D	< 0.20 mg/l	0.20	0.2	C17236-1		13Nov14 0904 by 07	
2,4,5-TP	< 0.10 mg/l	0.10	0.1	C17236-1		13Nov14 0904 by 07	
TCLP Base/Neutral and Acid Compounds							
Cresols	< 0.010 mg/l	0.010	0.010	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
1,4-Dichlorobenzene	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
2,4-Dinitrotoluene	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Hexachlorobenzene	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Hexachlorobutadiene	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Hexachloroethane	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Nitrobenzene	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Pentachlorophenol	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Pyridine	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
2,4,5-Trichlorophenol	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
2,4,6-Trichlorophenol	< 0.0050 mg/l	0.0050	0.0050	B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
TCLP Base/Neutral and Acid Compounds Surrogates:							
2-Fluorobiphenyl (50.0-110%)	82.1 %			B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
2-Fluorophenol (20.0-110%)	47.2 %			B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Nitrobenzene-D5 (40.0-110%)	76.6 %			B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
Terphenyl-D14 (50.0-135%)	95.2 %			B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
2,4,6-Tribromophenol (40.0-125%)	45.0 %			B9245-1	12Nov14 1440 by 306	12Nov14 1848 by 301	
TCLP Volatile Organic Compounds							
Benzene	< 0.0050 mg/l	0.0050	0.0050	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
2-Butanone	< 0.010 mg/l	0.010	0.010	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Carbon tetrachloride	< 0.0020 mg/l	0.0020	0.0020	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Chlorobenzene	< 0.0050 mg/l	0.0050	0.0050	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Chloroform	< 0.0050 mg/l	0.0050	0.0050	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
1,2-Dichloroethane	< 0.0050 mg/l	0.0050	0.0050	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
1,1-Dichloroethene	< 0.0050 mg/l	0.0050	0.0050	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Tetrachloroethene	< 0.0050 mg/l	0.0050	0.0050	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Trichloroethene	< 0.0050 mg/l	0.0050	0.0050	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Vinyl chloride	< 0.0020 mg/l	0.0020	0.0020	V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
TCLP Volatile Organic Compounds Surrogates:							
4-Bromofluorobenzene (75.0-120%)	96.8 %			V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Dibromofluoromethane (85.0-115%)	101 %			V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
Toluene-D8 (85.0-120%)	98.5 %			V8635-1	12Nov14 1013 by 301	12Nov14 1221 by 301	
TCLP Organochlorine Pesticides							
Chlordane	< 0.0010 mg/l	0.0010	0.0010	G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	
Endrin	< 0.00020 mg/l	0.00020	0.00020	G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	



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LABORATORY BLANK RESULTS

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>PQL</u>	<u>QC Sample</u>	<u>Preparation Date</u>	<u>Analysis Date</u>	<u>Qual</u>
TCLP Organochlorine Pesticides							
gamma-BHC	< 0.00020 mg/l	0.00020	0.00020	G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	
Heptachlor	< 0.00010 mg/l	0.00010	0.00020	G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	
Heptachlor epoxide	< 0.00010 mg/l	0.00010	0.00020	G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	
Methoxychlor	< 0.00020 mg/l	0.00020	0.00020	G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	
Toxaphene	< 0.0020 mg/l	0.0020	0.0020	G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	
TCLP Organochlorine Pesticides Surrogates:							
Decachlorobiphenyl (30.0-135%)	84.1 %			G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	
Tetrachloro-m-xylene (25.0-140%)	106 %			G9918-1	12Nov14 1340 by 306	12Nov14 1800 by 306	

