

COCHON PROPERTIES

July 2, 2015

FedEx Tracking No. 803457848946

Mr. Isaac Chen
U.S. Environmental Protection Agency, Region 6
Regional Oil & Gas Coordinator
1445 Ross Avenue – Mail Code-6WQ-PP
Dallas, Texas 75202-2733

Subject: GMG290000 Permit – Produced Water and Water Based Drilling Mud Characterization Study
Cochon Properties, LLC – GMG290549

Dear Mr. Chen

Per the permit requirements in Part I.B.4.c – Produced Water Characterization Study, Cochon Properties, LLC (Cochon) has conducted an individual study and has collected one sample from each producing lease block for which they are the designated operator. Cochon has not and will not have any drilling projects within the 3-year study time frame.

The produced water samples were analyzed for the required metals, including:

Dissolved arsenic, dissolved cadmium, dissolved chromium (VI), dissolved copper, free cyanide, dissolved lead, dissolved mercury, dissolved nickel, dissolved selenium, dissolved silver, and dissolved zinc.

The lease block areas reported on include: Vermillion 67 – Platform A and West Delta 45 –Platforms A and C.

A summary of the analytical results are presented in the attached Excel worksheet and summary page of the laboratory report. This letter and electronic report are being submitted via hard copy and email to chen.isaac@epa.gov. The complete analytical report from the laboratory can be provided upon request.

Should you have any questions, please call me or our consultant, Ms. Marsha Lutz, of J. Connor Consulting, Inc. at 281-698-8557.

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.

COCHON PROPERTIES, LLC



Brett Blanchard
Vice President

Attachment

REF: DT5509/03180

**Produced Water Characterization Study - Sampling Results
Cochon Properties, LLC - GMG290549**

Lease Block/Area	Lease No.	Sampling Date
Vermilion 67 -Platform A	OSC-G: 00560	12/17/2013

Parameter *All metals analyzed for dissolved phase	Min. Conc. mg/L	Max. Conc. mg/L	Avg. Conc. mg/L	MAL mg/L
Arsenic	<0.100	<0.100	<0.100	0.100
Cadmium	<0.050	<0.050	<0.050	0.050
Chromium, VI	<0.010	<0.010	<0.010	0.010
Copper	<0.100	<0.100	<0.100	0.100
Free Cyanide	0.0047	0.052	<0.100	0.1/0.004
Lead	<0.050	<0.050	<0.050	0.050
Mercury	<0.0002	<0.0002	<0.0002	0.0002
Nickel	<0.400	<0.400	<0.400	0.400
Selenium	<0.350	<0.350	<0.350	0.350
Silver	<0.100	<0.100	<0.100	0.100
Zinc	<0.200	<0.200	<0.200	0.200

Also sampled for CN on 03/04/15

Lease Block/Area	Lease No.				Sampling Date		
West Delta 45	OSC-G: 00138				2/3/2015*		
	Platform A		Platform C		West Delta 45 Block		
Parameter *All metals analyzed for dissolved phase concentrations.	Conc. mg/L	MAL mg/L	Conc. mg/L	MAL mg/L	Min. Conc. mg/L	Max. Conc. mg/L	Avg. Conc. mg/L
Arsenic	<0.100	0.100	0.106	0.100	<0.100	0.106	0.103
Cadmium	<0.010	0.010	0.014	0.010	<0.010	0.014	0.012
Chromium, VI	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010
Copper	<0.050	0.050	<0.050	0.050	<0.100	<0.100	<0.100
Free Cyanide	<0.040	0.004	<0.040	0.004	<0.100	<0.100	<0.100
Lead	<0.050	0.050	<0.050	0.050	<0.050	<0.050	<0.050
Mercury	<0.0002	0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
Nickel	<0.050	0.050	<0.050	0.050	<0.400	<0.400	<0.400
Selenium	<0.200	0.200	<0.200	0.200	<0.200	<0.200	<0.200
Silver	<0.100	0.020	<0.100	0.020	<0.100	<0.100	<0.100
Zinc	<0.200	0.100	<0.200	0.100	<0.200	<0.200	<0.200

* Chromium 6 and Free Cyanide Samples Collected on 02/25/15

MAL = RL - Reporting Detection Limit

MAL = LOQ (Limit of Quantification) - for Free Cyanide

SAMPLING INFORMATION



Company: Cochon Properties, LLC

Location – Area/Block: Vermilion 67
 Production Platform: B
 OCS-G #: 0560
 Sample Site: Float Cell

Type of Sampling: Chilled Grab

Control #	Date/Time Sampled	Date/Time Received	Sampled By
CCP32685-A	12-17-13/1300	12-18-13/0820	Ed LeBlanc

Control #	Discharge Rate	Discharge Depth	Pipe Diameter	Temperature
CCP32685-A	95 Bbl/Day	25 Feet	4 Inch	79 Deg F

TEST RESULTS
 LELAP # 02070, LELAP # 02079 & LELAP # 02006

Control #	Test	Result	MAL	Analyst	Date/Time Analyzed
CCP32685-A	Arsenic (Dissolved)	< .100 mg/L	.100 mg/L	MHB	12-24-13/1704
CCP32685-A	Cadmium (Dissolved)	< .050 mg/L	.050 mg/L	MHB	12-24-13/1704
CCP32685-A	Chromium VI (Dissolved)	< .010 mg/L	.010 mg/L	LA	12-18-13/1230
CCP32685-A	Copper (Dissolved)	< .100 mg/L	.100 mg/L	MHB	12-24-13/1704
CCP32685-A	Lead (Dissolved)	< .050 mg/L	.050 mg/L	MHB	12-24-13/1704
CCP32685-A	Mercury (Dissolved)	< .0002 mg/L	.0002 mg/L	MB	12-24-13/1304
CCP32685-A	Nickel (Dissolved)	< .400 mg/L	.400 mg/L	MHB	12-24-13/1704
CCP32685-A	Selenium (Dissolved)	< .350 mg/L	.350 mg/L	MHB	12-24-13/1704
CCP32685-A	Silver (Dissolved)	< .100 mg/L	.100 mg/L	MHB	12-24-13/1704
CCP32685-A	Zinc (Dissolved)	< .200 mg/L	.200 mg/L	MHB	12-24-13/1704
CCP32685-A	Free Cyanide	< .100 mg/L	.100 mg/L	IP	12-30-13/1023

NOTE: Sample was diluted for analysis. When samples have to be diluted for analysis due to interferences that would damage the test equipment or mask the test results, the detection levels for various parameters are elevated as a result.

TEST REFERENCES: 40 CFR 136

CERTIFICATION

A project file was maintained during this test. Two persons checked all data transcribed to the report for accuracy. The test result(s) is / are only representative of the sample(s) submitted for analysis.

I certify that this report is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within. Release of the data contained in this hardcopy report or, an alternate means of electronic transmission, has been authorized by the Laboratory Operations Manager or the Manager's designee, as verified by the following signature.	
Signature:	Name: Leonard Johnson
Date: 1-2-14	Title: Operations Manager

Produced Water OCS-G or S/L Field Sampling Information
 Monthly Oil & Grease



Laboratory Use Only
 Lab Control # CCP 22685-A Reviewed 4-04-10 Rev 9

NOTE: Do Not Fill Completely - Leave 1 Inch From Top Of Bottle
 Sample to be Collected Past Final Treatment Point

Company Name: Cochran Properties
 OFFICE CONTACT Randy Guillory TELEPHONE #: (337) 385-5082
 FAX #: ()

Location Info: Vermillion 67 B
 (AREA - BLOCK # - PLATFORM - WELL # - OCS-G # or S/L #)
 RIG _____ Rig Phone #: (337) 371-3093
 Rig Fax #: ()

Platform Phone # (337) 371 3093 Platform Fax /E-Mail () _____

Date/Time #1 Collected: 12-17-13 / 1:00 PM
 Date/Time #2 Collected: _____ / _____
 Date/Time #3 Collected: _____ / _____
 Date/Time #4 Collected: _____ / _____

Chilled Grab Sample With 1:1 HCl

Brief Description of Sample Point: Float Cell (i.e. Float Cell, Skimmer, etc)

Sample Taken By: Ed LeBlanc Operator
(Signature) (Title)

Print Name: Ed LeBlanc

Temp at Discharge: 79 Degrees F Diam of Discharge Pipe: 4 Inches

BBL's/Day Discharge: 95 Depth of Discharge: 25 Feet (End of pipe to sea Floor)

Chain of Custody Please Print

1. Relinquished By Sampler: <u>Ed LeBlanc</u>	Date/Time <u>12-17-13</u>	<u>1:30 PM</u>
2. Received By & Co: <u>[Signature]</u>	Date/Time <u>12/17/13</u>	<u>1:50 p.m.</u>
3. Relinquished By: <u>[Signature]</u>	Date/Time <u>12/18/13</u>	<u>6:00</u>
4. Received By & Co: <u>John Bulligan Patriot</u>	Date/Time <u>12-18-13</u>	<u>0600</u>
5. Relinquished By: <u>John Bulligan</u>	Date/Time <u>12-18-13</u>	<u>0820</u>
6. Received By & Co: _____	Date/Time _____	<u>1</u>
7. Relinquished By: _____	Date/Time _____	<u>1</u>

This part to be filled in by the Testing Lab

Date/Time Received at Lab: 12-18-13 0820 Temperature of Sample upon
 Received By: Conrad Nutman Arrival at Lab 32 Deg C

Sample Results

VR 67 B

Collect Date 03/04/2015 11:45

GCAL ID 21503110901

Receive Date 03/11/2015 10:30

Matrix Water

SM 4500-Cn G-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
03/17/2015 10:00	554304	Cyanide Prep	1	03/18/2015 16:28	DMT	554440

CAS#	Parameter	Result	LOQ	Units
57-12-5A	Cyanide Amenable to Chlor.	0.0047	0.0040	mg/L



Chain of Custody

Laboratory Number: 1603059

Client Information: Cochoon Properties Ready Solutions (337) 371-3693 Ext. (337) 371-3694 Ext. E-mail: <u>cedward67@comcast.net</u>	Billing Information: PO Number: Quote Number: 2134 Required QC Level Bill Monthly: <input type="checkbox"/> Yes <input type="checkbox"/> No	Project Name/Number: <u>VACTB</u> EPA Produced Water Characterization Study Sampler's Signature: <u>[Signature]</u> Shipping Method: <u>UPS / FedEx / Airborne</u> <u>DHL / Element Hand / Mail</u>	Matrix Code DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous SL = Sludge O = Oil F = Food NG = Natural Gas NGL = Natural Gas Liquid PW = Produced Water CF = Completion Fluid
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Sample ID/Description	Date	Time	Collection Information		Matrix	Quantity	Container Type	Pres.	Requested Tests	Comments
			Date	Time						
Fluor Cell	3/4/15	11:45			AQ		P-Plastic	HCl, HNO ₃ , H ₂ SO ₄ , NaOH, Na ₂ S ₂ O ₈		
Cyanide Kit	V	V			AQ	1	P	NaOH	X	

Relinquished by	Date/Time	Received by	Date/Time	Field Notes
<u>[Signature]</u>	3/4/15	<u>[Signature]</u>	3-4-15	
<u>[Signature]</u>	3-4-15	<u>[Signature]</u>	3-9-15	Received at lab on ice?
<u>[Signature]</u>	3/10/15 13:05	<u>[Signature]</u>	3/10/15 13:05	Yes <input type="checkbox"/> No <input type="checkbox"/> Temp: <u>5.3</u>

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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 F 766-378-4109

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 P 574-277-0707
 F 574-273-6699

2417 W. Pinhook Rd
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 F 337-235-6540



CHAIN OF CUSTODY RECORD

Omega COCID 3616

PAGE 1

OF 1

ADDRESS
 Element Materials Technology
 Lafayette
 2417 W. Pinhook Road
 Lafayette, LA 70508-3344
 TEL: (337) 233-0483
 FAX: (337) 233-6540
 Website: www.element.com

SUB CONTRACTOR: G.C.A.L.		COMPANY: Gulf Coast		SPECIAL INSTRUCTIONS / COMMENTS: Amenable Cyanide (Method 5M-4500-CN 0)			
ADDRESS: 7979 GSRI Avenue							
CITY, STATE, ZIP: Baton Rouge, LA 70820							
PHONE: (225) 769-4900		FAX: (225) 767-5717					
ACCOUNT #:		EMAIL:					
ITEM #	SAMPLED	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS Method Prepared Weight, HOT Sample Notation, Additional Sample Description
1	15030459-001A	VR 67 B	1LONAH	Aqueous	3/4/2015 11:45:00 AM	1	
		CN_A_SUF (E3E5.1)					

Client ID: 4462 - Element Materials Technology
 SDG: 215031109
 Due Date: 03/19/15



Relinquished by: <i>[Signature]</i>	Date: 3/10/2015	Time: 15:30	Received by: <i>[Signature]</i>	Date: 3/10/15	Time: 17:30
Relinquished by: <i>[Signature]</i>	Date: 3-11-15	Time: 10:30	Received by: <i>[Signature]</i>	Date: 3-11-15	Time: 10:30
Standard: <input type="checkbox"/>	RU/SI: <input type="checkbox"/>	2nd BD: <input type="checkbox"/>	1st BD: <input type="checkbox"/>	REPORT TRANSMITTAL DESIRED: <input type="checkbox"/> HARD COPY (extra cost) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE	
Temp of sample: 4.7°C			Temp of sample: 4.7°C		
Comments:			Comments: Accept as Cool?		



Element Materials Technology Lafayette
 2417 W. Pinhook Road
 Lafayette, LA 70508-3344
 TEL: (337) 235-0483 FAX: (337) 233-6540
 Website: www.element.com

Analytical Report

(consolidated)

WO#: 15020260

Date Reported: 2/19/2015

CLIENT: Cochon Properties LLC **Collection Date:** 2/3/2015 5:00:00 PM
Project: EPA Produced Water Study/WD 45 A
Lab ID: 15020260-001 **Matrix:** AQUEOUS
Client Sample ID EPA Produced Water Study/WD 45 A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY IN GROUND WATER, DISSOLVED					SW7470A	Analyst: BAS
Mercury	< 0.0002	0.0002		mg/L	1	2/18/2015 3:31:34 PM
METALS BY ICP FOR WATER, DISSOLVED					E200.7	Analyst: STS
Arsenic	< 0.100	0.100		mg/L	10	2/12/2015 2:30:01 AM
Cadmium	< 0.0100	0.0100		mg/L	10	2/12/2015 2:30:01 AM
Chromium	< 0.100	0.100		mg/L	10	2/12/2015 2:30:01 AM
Copper	< 0.0500	0.0500		mg/L	10	2/12/2015 2:30:01 AM
Lead	< 0.0500	0.0500		mg/L	10	2/12/2015 2:30:01 AM
Nickel	< 0.0500	0.0500		mg/L	10	2/12/2015 2:30:01 AM
Selenium	< 0.200	0.200		mg/L	10	2/12/2015 2:30:01 AM
Silver	< 0.0200	0.0200		mg/L	10	2/12/2015 2:30:01 AM
Zinc	< 0.100	0.100		mg/L	10	2/12/2015 2:30:01 AM

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	C Value is below Minimum Compound Limit.	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	M Matrix Interference
	N Tentatively identified compounds	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Second column confirmation exceeds
	PL Permit Limit	R RPD outside accepted recovery limits
	RL Reporting Detection Limit	S Spike Recovery outside accepted recovery limits



Chain of Custody

Laboratory Number: 15020260

Client Information: **Cochon Properties**
 9 Bayou Dolarge Rd
 HOUMA LA 70363
 337-371-3096 Ext
 COCHON WD 95 @ 5Mili

Billing Information:
 PO Number:
 Quote Number: 2134
 Required QC Level
 Bill Monthly Yes No

Project Name/Number: EPA Produced Water Characterization Study W045A
 Sampler's Signature
 Shipping Method: UPS / FedEx / Airborne
 DHL / Element / Hand / Mail

Page of Matrix Code
 DW = Drinking Water
 WW = Waste Water
 GW = Ground Water
 AQ = Aqueous
 OT = Other
 SL = Sludge
 O = Oil
 F = Food
 NG = Natural Gas
 PW = Produced Water
 CF = Completion Fluid
 SOL = Solid
 SO = Soil
 SW = Swab
 NGL = Natural Gas Liquid

Sample ID/Description	Turn Time		Rush turn times will incur a surcharge and must be pre-approved by lab.)	Container Type P=Plastic, G=Glass, V=Vial	Pres.	Requested Tests	Comments
	Date	Time					
WD45-A PW	2-3-15	5PM		P	HCl, HNO ₃ , H ₂ SO ₄ , NaOH, Amenable Cyanide		Metals List: As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn Dissolved Metals sample to be filtered in lab upon receipt
WD45-A PW	2-3-15	5PM		P			

Relinquished by	Date/Time	Received by	Date/Time	Field Notes
<i>[Signature]</i>	2/3/15 14:30	Allye Johnson	2-5-15 10:25	Received at lab on ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp 25.0
Cody Reed	2/5/15 4:10am	Allye Johnson	2/5/15 2:30pm	
		Allye Johnson	2/5/15 10:10	

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590 South Zimmer Road Warsaw, IN 46580-2368 USA P 574-267-3305 F 574-269-6568

3371 Cleveland Road, Suite 100A South Bend, IN 46628-9786 USA P 574-377-0787 F 574-373-8699

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 Website: www.element.com

Analytical Report

(consolidated)

WO#: 15021112

Date Reported: 3/3/2015

CLIENT: Cochon Properties LLC **Collection Date:** 2/25/2015 6:00:00 PM
Project: EPA Produced Water Study WD45 A
Lab ID: 15021112-001 **Matrix:** AQUEOUS
Client Sample ID WD 45 A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM				SM3500CR-B		Analyst: TBB
Chromium VI	< 0.010	0.010		mg/L	1	2/27/2015 2:00:00 PM

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	C Value is below Minimum Compound Limit.	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	M Matrix Interference
	N Tentatively identified compounds	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Second column confirmation exceeds
	PL Permit Limit	R RPD outside accepted recovery limits
	RL Reporting Detection Limit	S Spike Recovery outside accepted recovery limits



Chain of Custody

Laboratory Number: **1502112**

Client Information: Cochon Properties 9 Dukey Rd Hoama, LA 70863 337-371-3096 Ext:		Billing Information: PG Number: Quote Number: 2134 Required QC Level Bill Monthly <input type="checkbox"/> Yes <input type="checkbox"/> No		Project Name/Number: EPA Produced Water Characterization Study WD 45 A Sampler's Signature Shipping Method UPS / FedEx / Airborne DHL / Element / Hand / Mail		Page of Matrix Code DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous OT = Other SL = Sludge SOL = Solid O = Oil SO = Soil F = Food SW = Swab NG = Natural Gas NGL = Natural Gas Liquid PW = Produced Water CF = Completion Fluid	
Company Information: 5381 Innovation Drive, Suite 115 Daleville, IN 47334-0569 USA P 765-378-4103 F 765-378-4108		625 Washington St, Suite 300 Columbus, IN 47201-6221 USA P 812-375-0531 F 812-375-0731		2121 East Washington Boulevard Fort Wayne, IN 46803-1328 USA P 260-471-7000 F 260-471-7777		558 South Zimmer Road Warsaw, IN 46580-2358 USA P 574-267-3305 F 574-268-6560	
3371 Cleveland Road, Suite 100A South Bend, IN 46628-0780 USA P 574-277-0707 F 574-273-6696		2417 W. Pinhook Rd Lafayette, LA 70508-3344 USA P 337-235-0483 F 337-233-6546					

Sample ID/Description	Which Regulations Apply: <input type="checkbox"/> RCRA <input type="checkbox"/> POTW <input type="checkbox"/> NPDES <input type="checkbox"/> USDA/FDA <input type="checkbox"/> RECAP/IRIS	Turn Time <input type="checkbox"/> Standard <input type="checkbox"/> RUSH <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> Other	(Rush turn times will incur a surcharge and must be pre-approved by lab.)	Container Type Quantity	Pres. HCl, HNO ₃ , H ₂ SO ₄ , NaOH, Na ₂ S ₂ O ₈	Requested Tests	Comments
WD-45-A/Cochon				1	Buffer		Log in tank pH upon receipt. (9.3-9.7)

Relinquished by	Date/Time	Received by	Date/Time	Field Notes
Francis Heary	2-25-15 6:00pm	Francis Heary	2-26-15 9:25	
Francis Heary	2-26-15 12:00	Cathy Rice	2-26-15 12:00	Received at lab on ice?
Cathy Rice	2-26-15 1:50pm	Cathy Rice	2-26-15 1:50pm	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp. 2.3

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 70508-3344 USA
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Report#: 215030401

Project ID: 15021114

Report Date: 03/17/2015

Sample Results

WD 45 A	Collect Date	02/25/2015 18:00	GCAL ID	21503040101
	Receive Date	03/03/2015 13:00	Matrix	Water

SM 4500-Cn G-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
03/06/2015 12:00	553455	Cyanide Prep	1	03/10/2015 12:43	DMT	553776

CAS#	Parameter	Result	LOQ	Units
57-12-5A	Cyanide Amenable to Chlor.	ND	0.0040	mg/L



Element Materials Technology Lafayette
 2417 W. Pinhook Road
 Lafayette, LA 70508-3344
 TEL: (337) 235-0483 FAX: (337) 233-6540
 Website: www.element.com

Analytical Report

(consolidated)

WO#: 15020264

Date Reported: 2/19/2015

CLIENT: Cochon Properties LLC **Collection Date:** 2/3/2015 6:00:00 PM
Project: EPA Produced Water Study/WD 45 C
Lab ID: 15020264-001 **Matrix:** AQUEOUS
Client Sample ID EPA Produced Water Study/WD 45 C

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY IN GROUND WATER, DISSOLVED				SW7470A		Analyst: BAS
Mercury	< 0.0002	0.0002		mg/L	1	2/18/2015 3:33:54 PM
METALS BY ICP FOR WATER, DISSOLVED				E200.7		Analyst: STS
Arsenic	0.106	0.100		mg/L	10	2/12/2015 2:44:20 AM
Cadmium	0.0140	0.0100		mg/L	10	2/12/2015 2:44:20 AM
Chromium	< 0.100	0.100		mg/L	10	2/12/2015 2:44:20 AM
Copper	< 0.0500	0.0500		mg/L	10	2/12/2015 2:44:20 AM
Lead	< 0.0500	0.0500		mg/L	10	2/12/2015 2:44:20 AM
Nickel	< 0.0500	0.0500		mg/L	10	2/12/2015 2:44:20 AM
Selenium	< 0.200	0.200		mg/L	10	2/12/2015 2:44:20 AM
Silver	< 0.0200	0.0200		mg/L	10	2/12/2015 2:44:20 AM
Zinc	< 0.100	0.100		mg/L	10	2/12/2015 2:44:20 AM

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	C Value is below Minimum Compound Limit.	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	M Matrix Interference
	N Tentatively identified compounds	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Second column confirmation exceeds
	PL Permit Limit	R RPD outside accepted recovery limits
	RL Reporting Detection Limit	S Spike Recovery outside accepted recovery limits



Chain of Custody

Laboratory Number: **15020264**

Client Information:		Billing Information:		Project Name/Number:		Page of	
Company Name: Cochoon Properties		PO Number:		EPA Produced Water Characterization Study		Matrix Code	
Contact Name: 9 Bayou Dolargue Rd		Quote Number: 2134		Sampler's Signature: <i>[Signature]</i>		DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous OT = Other	
Address: Houma LA 70363		Required QC Level: <input type="checkbox"/> Yes <input type="checkbox"/> No		Shipping Method: UPS / FedEx / Airborne		SL = Sludge SOL = Solid D = Oil SO = Soil F = Food SW = Swab NG = Natural Gas NGL = Natural Gas Liquid PW = Produced Water CF = Completion Fluid	
City, State Zip: 337-371-3096		Bill Monthly: <input type="checkbox"/> Yes <input type="checkbox"/> No		DHL / Element / Hand / Mail			
Phone Number: CochoonWB 45 @Plat 1		Ext:					
Fax Number:							
E-mail Address:							

Sample ID/Description	Turn Time			Rush turn times will incur a surcharge and must be pre-approved by lab.)	Container	Pres.	Requested Tests	Comments			
	Which Regulations Apply:	Standard	RUSH						Type	Quantity	Matrix
WD45C PW	<input type="checkbox"/> RCRA <input type="checkbox"/> POTW <input type="checkbox"/> NPDES <input type="checkbox"/> USDA/FDA <input type="checkbox"/> RECAP/RISC	<input type="checkbox"/> Drinking Water <input type="checkbox"/> Distribution <input type="checkbox"/> Special <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Standard <input type="checkbox"/> RUSH <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> Other		P	HCl, HNO ₃ , H ₂ SO ₄ , NaOH, Amenable Cyanide	Metals List: As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn Dissolved Metals sample to be filtered in lab upon receipt				
ND45C PW				P	1	NONE					
				P	1	NaOH					

Relinquished by	Date/Time	Received by	Date/Time	Field Notes	
				Yes	No
<i>[Signature]</i>	2-3-15/6PM	<i>[Signature]</i>	2-5-15 10:25	<input checked="" type="checkbox"/>	Received at lab on ice? <input checked="" type="checkbox"/> OH
<i>[Signature]</i>	2/3/15 14:30	<i>[Signature]</i>	2/5/15 2:30	<input type="checkbox"/>	Temp: 2.5°C
<i>[Signature]</i>	2/5/15 4:10	<i>[Signature]</i>	2/5/15 16:10	<input type="checkbox"/>	

All samples submitted to Element Materials Technology for analysis are accepted on a custodial-basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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560 South Zimmer Road
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F 674-289-6668

3371 Cleveland Road, Suite 100A
South Bend, IN 46625-9700 USA
P 574-277-0707
F 574-273-6688

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F 337-233-6540



Element Materials Technology Lafayette
 2417 W. Pinhook Road
 Lafayette, LA 70508-3344
 TEL: (337) 235-0483 FAX: (337) 233-6540
 Website: www.element.com

Analytical Report

(consolidated)

WO#: 15021111

Date Reported: 3/3/2015

CLIENT: Cochon Properties LLC
Project: EPA Produced Water Study WD 45 C
Lab ID: 15021111-001
Client Sample ID WD 45 C

Collection Date: 2/25/2015 6:00:00 PM

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM				SM3500CR-B		Analyst: TBB
Chromium VI	< 0.010	0.010		mg/L	1	2/27/2015 2:00:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- C Value is below Minimum Compound Limit.
- H Holding times for preparation or analysis exceeded
- N Tentatively identified compounds
- O RSD is greater than RSDlimit
- PL Permit Limit
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- M Matrix Interference
- ND Not Detected at the Reporting Limit
- P Second column confirmation exceeds
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits



Chain of Custody

Laboratory Number: **1502111**

Client Information: Cochon Properties 9 Bayou DeLarge Rd Hoover LA 70863 504-371-3099 Ext. Cochon WD 45 @ Email		Billing Information: PO Number: Quote Number: 2134 Required QC Level Bill Monthly <input type="checkbox"/> Yes <input type="checkbox"/> No Ext:		Project Name/Number: EPA Produced Water Characterization Study WD 45 C Sampler's Signature Shipping Method: UPS / FedEx / Airborne DHL / Element / Hand / Mail		Page of Matrix Code DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous OT = Other SL = Sludge SO = Soil F = Food NG = Natural Gas PW = Produced Water CF = Completion Fluid	
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Sample ID/Description	Which Regulations Apply: <input type="checkbox"/> RCRA <input type="checkbox"/> POTW <input type="checkbox"/> NPDES <input type="checkbox"/> USDA/FDA <input type="checkbox"/> RECAP/RISC	Turn Time <input type="checkbox"/> Standard <input type="checkbox"/> RUSH <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> Other	Collection Information		Date	Time	Matrix	Quantity	Container Type Plastic Glass Vial	Pres. HCl, HNO ₃ , H ₂ SO ₄ NaOH, Na ₂ S ₂ O ₈ Buffer	Requested Tests	Comments
			(Rush turn times will incur a surcharge and must be pre-approved by lab.)									
			Grab/Composite	Matrix								
WD45 C / PW				2-25-15	6PM	PW	1	Hex Cr	X			login to logph upon receipt (9.3.9.7)

Relinquished by	Date/Time	Received by	Date/Time	Field Notes
Kennedy Meach	2-25-15 6PM	Allye Bellan	2-26-15 9:25	Received at lab on ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp 2.2
Wentzel	2-26-15 12:00	Cochon	2-26-15 1:50	
Cooper	2-26-15 1:50			

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3371 Cleveland Road, Suite 100A
 South Bend, IN 46628-8780 USA
 P 574-277-0707 F 574-273-6599

2417 W. Pinhook Rd
 Lafayette, LA 70508-3544 USA
 P 337-335-0483 F 337-335-6540

Sample Results

WD 45 C	Collect Date	02/25/2015 18:00	GCAL ID	21503040201
	Receive Date	03/03/2015 13:00	Matrix	Water

SM 4500-Cn G-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
03/06/2015 12:00	553455	Cyanide Prep	1	03/10/2015 12:44	DMT	553776

CAS#	Parameter	Result	LOQ	Units
57-12-5A	Cyanide Amenable to Chlor.	ND	0.0040	mg/L



Chain of Custody

Laboratory Number: 15021113

Client Information: Cochoon Properties 9 Bayou Delarge Houma LA 70363 337-371-3998 Ext. COCHOON V DYS @ gmail		Billing Information: P.O. Number: Quote Number: 2134 Required QC Level Bill Monthly: <input type="checkbox"/> Yes <input type="checkbox"/> No Ext.:		Project Name/Number: EPA Produced Water Characterization Study Sampler's Signature: <i>Scott B...</i> Shipping Method: UPS / FedEx / Airborne DHL / Element / Hand / Mail		Page of Matrix Code DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous OT = Other SL = Sludge O = Oil F = Food NG = Natural Gas NGL = Natural Gas Liquid PW = Produced Water CF = Completion Fluid	
---	--	---	--	--	--	--	--

Sample ID/Description	Which Regulations Apply:			Turn Time	Container	Pres.	Requested Tests	Comments
	<input type="checkbox"/> RCRA	<input type="checkbox"/> POTW	<input type="checkbox"/> NPDES					
West Delta 45 C	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Distribution	<input type="checkbox"/> Special	<input type="checkbox"/> 1 Day	<input type="checkbox"/> 2 Day	<input type="checkbox"/> Other	HCl, HNO ₃ , H ₂ SO ₄ NaOH, Na ₂ S ₂ O ₃	
	<input type="checkbox"/> Standard	<input type="checkbox"/> RUSH	<input type="checkbox"/> Other					
	<input type="checkbox"/> Standard	<input type="checkbox"/> RUSH	<input type="checkbox"/> Other					
	<input type="checkbox"/> Standard	<input type="checkbox"/> RUSH	<input type="checkbox"/> Other					

Relinquished by	Date/Time	Received by	Date/Time	Field Notes
Kennedy Meaux	2-25-15/6:30am	Majo DeBlanc	2-26-15 9:25	Received at lab on ice?
Hyatt DeBlanc	2-26-15 12:00	Cady Rin	2-26-15 1:50	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp. 2.2
Lois Rin	2-26-15 1:50			

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