

HOACTZIN PARTNERS, L.P.

P.O. BOX 16867
FERNANDINA BEACH, FL 32035
(904) 491-5003

August 19, 2015

FedEx Tracking No. 803457848523

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
– GMG290540

Dear Mr. Chen:

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

The lease block area reported on is Ship Shoal 145 – Platform E. 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.

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

Should you have any questions, please call me or Lan Lam at 469-320-6069.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

HOACTZIN PARTNERS, L.P.,
a Delaware limited partnership

By: Dolphin Advisors (Hoactzin), LLC,
its Managing Partner

By: 
Peter E. Salas, President

Produced Water Characterization Study - Sampling Results
Hoactzin- GMG290540

Lease Block/Area	Lease No.	Sampling Date
Ship Shoal 145 -Platform E	OCS-G: 01929	2/16/2015 *

Parameter *All metals analyzed for dissolved phase	Min. Conc. mg/L	Max.Conc. mg/L	Avg. Conc. mg/L	MAL mg/L
Arsenic	0.146	0.146	0.146	0.100
Cadmium	< 0.010	< 0.010	< 0.010	0.010
Chromium, VI	< 0.010	< 0.010	< 0.010	0.010
Copper	< 0.050	< 0.050	< 0.050	0.050
Free Cyanide	< 0.004	< 0.004	< 0.004	0.004
Lead	< 0.050	< 0.050	< 0.050	0.050
Mercury	< 0.0002	< 0.0002	< 0.0002	0.0002
Nickel	< 0.050	< 0.050	< 0.050	0.050
Selenium	< 0.200	< 0.200	< 0.200	0.200
Silver	< 0.020	< 0.020	< 0.020	0.020
Zinc	< 0.100	< 0.100	< 0.100	0.100

* Chromium 6 Sample Collected on 03/23/15

MAL = RL - Reporting Detection Limit

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



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#: 15020709

Date Reported: 3/4/2015

CLIENT: Prime 8 Offshore, LLC **Collection Date:** 2/16/2015 11:00:00 AM
Project: EPA Produced Water Characterization Study SS 145
Lab ID: 15020709-001 **Matrix:** AQUEOUS
Client Sample ID SS 145 E

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 3:23:35 PM
METALS BY ICP FOR WATER, DISSOLVED					E200.7	Analyst: STS
Arsenic	0.146	0.100		mg/L	10	2/20/2015 2:02:12 AM
Cadmium	< 0.0100	0.0100		mg/L	10	2/20/2015 2:02:12 AM
Chromium	< 0.100	0.100		mg/L	10	2/20/2015 2:02:12 AM
Copper	< 0.0500	0.0500		mg/L	10	2/20/2015 2:02:12 AM
Lead	< 0.0500	0.0500		mg/L	10	2/20/2015 2:02:12 AM
Nickel	< 0.0500	0.0500		mg/L	10	2/20/2015 2:02:12 AM
Selenium	< 0.200	0.200		mg/L	10	2/20/2015 2:02:12 AM
Silver	< 0.0200	0.0200		mg/L	10	2/20/2015 2:02:12 AM
Zinc	< 0.100	0.100		mg/L	10	2/20/2015 2:02:12 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: 15020709

Client Information: **Prime 8 Offshore**
 Jerry Mitchelson
 18 Augusta Pines Dr.
 SPRING, TX 77351
 832-559-157E
 E-mail Address: Jerry.mitchelson@prime8.com

PO Number: _____
 Quote Number: _____
 Required QC Level: _____
 Bill Monthly: Yes No

Shipping Method: UPS / FedEx / Airborne
 DHL / Element / Hand / Mail

Project Name/Number: EPA Produced Water Characterization Study
 Sample's Signature: *[Signature]*
 Shipping Method: _____

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	Collection Information		Quantity	Container Type	Pres.	Requested Tests	Comments
	Date	Time					
SS145E	2-16-15	11:00 am	1	P	NONE	Disolved Metals Amendable Cyanide	Metals List: As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn Dissolved Metals sample to be filtered in lab upon receipt
SS145E	2-16-15	11:00 am	1	P	NaOH		

Relinquished by	Date/Time	Received by	Date/Time	Field Notes
<i>[Signature]</i>	2-16-15 12:46pm	Daniel Hale	2-16-15 12:40pm	Received at lab on ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: 20.4°C
	05-16-15			

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.

5201 Innovation Drive, Suite 115
 Daleville, IN 47334-0569 USA
 P 765-378-4103 F 765-378-4106

629 Washington St. Suite 300
 Columbus, IN 47201-4231 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

500 South Zimmer Road
 Warsaw, IN 46580-2388 USA
 P 574-267-3205 F 574-268-6669

3371 Cleveland Road, Suite 109A
 South Bend, IN 46625-8780 USA
 P 574-277-4767 F 574-273-6699

2417 W. Pinhook Rd
 Lafayette, LA 70508-3344 USA
 P 337-235-6483 F 337-233-6540

Sample Results

SS 145 E	Collect Date	02/16/2015 11:00	GCAL ID	21502201301
	Receive Date	02/20/2015 08:35	Matrix	Water

SM 4500-Cn G-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
02/27/2015 11:00	552569	Cyanide Prep	1	03/01/2015 17:31	DMT	553010

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



CHAIN OF CUSTODY RECORD

Omega CUCID 3548 PAGE 1 OF 1

ADDRESS
 Element Materials Technology
 Lafayette
 2417 W. Pinhook Road
 Lafayette, LA 70508-5544
 TEL: (337) 235-0483
 FAX: (337) 233-6290
 Website: www.element.com

SUB CONTRACTOR: GCAL		COMPANY: Gulf Coast		SPECIAL INSTRUCTIONS / COMMENTS: Amenable Cyanide			
ADDRESS: 7979 GSRI Avenue							
CITY, STATE, ZIP: Baton Rouge, LA 70820							
PHONE: (225) 769-4900		FAX: (225) 767-5717					
ACCOUNT #:		EMAIL:					
ITEM #	SAMPLE ID	CLIENT/SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights NOT Sample Notation, Additional Sample Description.
1	15020709-001B C/A SUB (E335.1)	SS 145 E	IL/DNAOH	aqueous	2/16/2015 11:00:00 AM	1	01531, 1

Client ID: 4462 - Element Materials Technology
 SDG: 215022013
 Due Date: 03/03/15



Retrieved By: <i>Dominic Adams</i>	Date Retrieved: 2-19-15	Time: 7:50	Retrieved By: <i>Peter Abenot</i>	Date: 2-19-15	Time: 7:50	REPORT TRANSMITTAL DESIRED: <input type="checkbox"/> HARD COPY (add fee) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE
Retrieved By: <i>Peter Abenot</i>	Date: 2-20-15	Time: 8:35	Retrieved By: <i>Peter Abenot</i>	Date: 2-20-15	Time: 8:35	FOR LAB USE ONLY Temp of samples: <u>0.2</u> °C Comments: _____
TAT: <input type="checkbox"/> Skipped <input type="checkbox"/> RUSH <input type="checkbox"/> NO ID <input type="checkbox"/>	Note: RUSH requests will incur a charge!					



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Analytical Report

(consolidated)

WO#: 15031018

Date Reported: 3/30/2015

CLIENT: Prime 8 Offshore, LLC

Collection Date: 3/23/2015 12:45:00 PM

Project: SS 145 E

Lab ID: 15031018-001

Matrix: AQUEOUS

Client Sample ID SS 145 E

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM		SM3500CR-B			Analyst: TBB	
Chromium VI	< 0.010	0.010		mg/L	1	3/26/2015 9:15:00 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: **15031013**

Client Information: **Headlin**
 Contact Name: **Jerry Michelson**
 Address: **18 Augusta Pkwy**
 City, State Zip: **Dallas, TX 75251**
 Phone Number: **832-559-1514** Ext:
 Fax Number:
 E-mail Address: **jerry.michelson@headlin.com**

PO Number:
 Quote Number:
 Required QC Level:
 Bill Monthly: Yes No

Project Name/Number: **SS145E**
 Sampler's Signature: *[Signature]*
 Shipping Method: **UPS / FedEx / Airborne**
DHL / Element / Hand / Mail

Matrix Code:
 DW = Drinking Water
 WW = Waste Water
 GW = Ground Water
 AQ = Aqueous
 SL = Sludge
 O = Oil
 F = Food
 NG = Natural Gas
 PW = Produced Water
 CF = Completion Fluid
 SO = Soil
 SW = Sewer
 NL = Natural Gas Liquid
 CF = Completion Fluid

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/PRIS	Turn Time <input type="checkbox"/> Standard <input type="checkbox"/> RUSH <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 4 Day	Collection Information		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 , Hex Cr	Requested Tests	Comments
			Date	Time					
SS145E			3-23-15	12:45pm	X	P 1	See Bottle		Log in run pH when sample arrives. pH must be between 9.3-9.7. If within 24 hours add NaOH until sample is within desired range.

Relinquished by	Date/Time	Received by	Date/Time	Field Notes
Carol A. Keenan	3-23-15 15:00	Daniel Hall	3-23-15 15:00	Received at lab on ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp: 11.9°C

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 F 812-375-6731

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 P 360-471-7000
 F 260-471-7777

590 South Zimmer Road
 Warsaw, IN 46580-3268 USA
 P 574-287-3306
 F 574-288-6666

3371 Cleveland Road, Suite 100A
 South Bend, IN 46508-3344 USA
 P 874-277-0767
 F 874-273-6666

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