



GMG 290308 - PN

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6WQ-P

December 31, 2014

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  
Peregrine Oil & Gas, LP - GMG290308

Dear Mr. Chen

Per the permit requirements in Part I B.4.c - Produced Water Characterization Study, Peregrine Oil & Gas, LP has conducted an individual study and has collected one sample from each producing lease block for which they are the designated operator. Peregrine 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 are: Galveston 155 - Platform A and West Delta 64 - Platform C

The analytical results are presented in the attached Excel worksheet. 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 281-696-8557.

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.

PEREGRINE OIL & GAS, LP

Danny Crawford  
Principal

Attachment  
REF: DT5242716120

**Produced Water Characterization Study - Sampling Results**  
**Peregrine Oil & Gas, LP - GMG290308**

Lease Block/Area	Lease No.	Sampling Date
West Delta 64 -Platform C	OCS-G: 25008	11/12/2013

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	<0.100	<0.100	<0.100	0.100
Lead	<0.050	<0.050	<0.050	0.050
Mercury	<0.0002	<0.0002	<0.0002	0.000
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

Lease Block/Area	Lease No.	Sampling Date
Galveston 155 -Platform A	OCS-G: 30654	12/12/2013

Parameter *All metals analyzed for dissolved phase concentrations.	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	<0.100	<0.100	<0.100	0.100
Lead	<0.050	<0.050	<0.050	0.050
Mercury	<0.0002	<0.0002	<0.0002	0.000
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	0.404	0.404	0.404	0.200

# PEREGRINE OIL & GAS II, LLC

RECEIVED

January 9, 2014

FedEx Tracking No. 8018 159MM20 PM 4:11

Mr. Isaac Chen  
U.S. Environmental Protection Agency, Region 6  
Regional Oil & Gas Coordinator  
1445 Ross Avenue – Mail Code-6WQ-PP  
Dallas, Texas 75202-2735

PERMITS BRANCH  
6WQ-P

Subject: GMG290000 Permit – Produced Water and Water Based Drilling Mud Characterization Study  
Peregrine Oil & Gas II, LLC – GMG290345

Dear Mr. Chen:

Per the permit requirements in Part I D.4.c – Produced Water Characterization Study, Peregrine Oil & Gas II, LLC has conducted an individual study and has collected one sample from each producing lease block for which they are the designated operator. Peregrine Oil & Gas II 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.

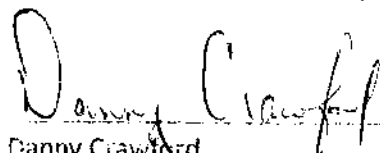
The lease block areas reported on include: North Padre Island 975 "A" and West Cameron 565 "A".

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.

PEREGRINE OIL & GAS II, LLC



Danny Crawford  
Principal

Attachment

REF: 015242/16130

**Produced Water Characterization Study - Sampling Results**  
**Peregrine Oil & Gas II, LP - GMG290345**

Lease Block/Area	Lease No.	Sampling Date
North Padre Island 975 -Pltfm A	OSC-G: 33388	11/21/2013

Parameter *All metals analyzed for dissolved phase concentrations.	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	<0.100	<0.100	<0.100	0.100
Lead	<0.050	<0.050	<0.050	0.050
Mercury	<0.0002	<0.0002	<0.0002	0.000
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

Lease Block/Area	Lease No.	Sampling Date
West Cameron 565 -Pltfm A	OSC-G: 02015	12/16/2013

Parameter *All metals analyzed for dissolved phase concentrations.	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	<0.100	<0.100	<0.100	0.100
Lead	<0.050	<0.050	<0.050	0.050
Mercury	<0.0002	<0.0002	<0.0002	0.000
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

### SAMPLING INFORMATION



Company: Peregrine Oil & Gas II, LLC

Location – Area/Block: West Cameron 565

Production Platform: A

OCS-G #: 2015

Sample Site: Skimmer

Type of Sampling: Chilled Grab

Control #	Date/Time Sampled	Date/Time Received	Sampled By
PER32679-A	12-16-13/1115	12-17-13/0930	Jeff Verzwuyvelt

Control #	Discharge Rate	Discharge Depth	Pipe Diameter	Temperature
	Bbl/Day	Feet	Inch	Deg F
PER32679-A				

#### TEST RESULTS

LELAP # 02070, LELAP # 02079 & LELAP # 02006

Control #	Test	Result	MAL	Analyst	Date/Time Analyzed
PER32679-A	Arsenic (Dissolved)	< .100 mg/l.	.100 mg/l.	MHB	12-24-13/1656
PER32679-A	Cadmium (Dissolved)	< .050 mg/L	.050 mg/L	MHB	12-24-13/1656
PER32679-A	Chromium VI (Dissolved)	< .010 mg/l.	.010 mg/l.	LA	12-17-13/1501
PER32679-A	Copper (Dissolved)	< .100 mg/l.	.100 mg/l.	MHB	12-24-13/1656
PER32679-A	Lead (Dissolved)	< .050 mg/L	.050 mg/l.	MHB	12-24-13/1656
PER32679-A	Mercury (Dissolved)	< .0002 mg/l.	.0002 mg/l.	MB	12-24-13/1302
PER32679-A	Nickel (Dissolved)	< .400 mg/L	.400 mg/l.	MHB	12-24-13/1656
PER32679-A	Selenium (Dissolved)	< .350 mg/l.	.350 mg/l.	MHB	12-24-13/1656
PER32679-A	Silver (Dissolved)	< .100 mg/l.	.100 mg/l.	MHB	12-24-13/1656
PER32679-A	Zinc (Dissolved)	< .200 mg/L	.200 mg/l.	MHB	12-24-13/1656
PER32679-A	Free Cyanide	< .100 mg/l.	.100 mg/l.	IP	12-30-13/1022

**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