

LINDER OIL COMPANY, A PARTNERSHIP

LINDER ENERGY COMPANY/LOUISIANA GENERAL OIL COMPANY - PARTNERS

December 31, 2014

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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
Linder Oil Company – GMG290059

Dear Mr. Chen

Per the permit requirements in Part I.B.4.c – Produced Water Characterization Study, Linder Oil Company, A Partnership (Linder) has conducted an individual study and has collected one sample from each producing lease block for which they are the designated operator. If Linder does begin a drilling project within the 3-year study time frame, the Water Based Mud Study results will be submitted separately.

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 area reported on include: West Cameron 168 – Platform A.

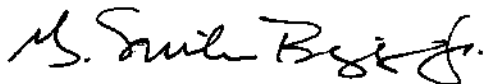
A summary of the analytical results are presented in the attached Excel worksheet. This letter and electronic report are being submitted via hard copy and email to chen.isaac@epa.gov. The complete analytical report from the laboratory can be provided upon request.

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

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.

Sincerely,

LINDER OIL COMPANY, A PARTNERSHIP



G. Miles Biggs, Jr.
Co-Manager

Attachment
REF: DT5245/12000

Produced Water Characterization Study - Sampling Results
Linder Oil Company - GMG290059

Lease Block/Area	Lease No.	Sampling Date
West Cameron 168-Platform A	OCS-G: 05283	1/1/2014

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	0.201	0.201	0.201	0.200

SAMPLING INFORMATION



Company: Linder Oil Company, A Partnership

Location - Area/Block: West Cameron 168

Production Platform: A

OCS-G #: 5283

Sample Site: Skimmer

Type of Sampling: Chilled Grab

Control #	Date/Time Sampled	Date/Time Received	Sampled By
LIN32693-A	1-1-14/0700	1-2-14/1400	Chad Reed

Control #	Discharge Rate	Discharge Depth	Pipe Diameter	Temperature
LIN32693-A	247 Bbl/Day	38 Feet	4 Inch	88 Deg F

TEST RESULTS

LELAP # 02070, LELAP # 02079 & LELAP # 02006

Control #	Test	Result	MAI	Analyst	Date/Time Analyzed
LIN32693-A	Arsenic (Dissolved)	< .100 mg/L	.100 mg/L	MHIB	1-15-14/1135
LIN32693-A	Cadmium (Dissolved)	< .050 mg/L	.050 mg/L	MHB	1-15-14/1135
LIN32693-A	Chromium VI (Dissolved)	.010 mg/L	.010 mg/L	LA	1-2-14/1529
LIN32693-A	Copper (Dissolved)	< .100 mg/L	.100 mg/L	MHB	1-15-14/1135
LIN32693-A	Lead (Dissolved)	.050 mg/L	.050 mg/L	MHIB	1-15-14/1135
LIN32693-A	Mercury (Dissolved)	< .0002 mg/L	.0002 mg/L	MB	1-15-14/1142
LIN32693-A	Nickel (Dissolved)	.400 mg/L	.400 mg/L	MHIB	1-15-14/1135
LIN32693-A	Selenium (Dissolved)	< .350 mg/L	.350 mg/L	MHIB	1-15-14/1135
LIN32693-A	Silver (Dissolved)	< .100 mg/L	.100 mg/L	MHIB	1-15-14/1135
LIN32693-A	Zinc (Dissolved)	.201 mg/L	.200 mg/L	MHIB	1-15-14/1135
LIN32693-A	Free Cyanide	< .100 mg/L	.100 mg/L	JP	1-13-14/1319

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: _____

1-16-14

Title: Operations Manager

Control # LIN32693-A

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