2019-10-07 16:05:09 Kansas Corporation Commission /s/ Lynn M. Retz

## BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

)

)

)

)

)

)

)

)

)

)

In the matter of the failure of Prairie Gas Operating, LLC ("Operator") to comply with K.A.R. 82-3-104 at the Boltz #1 well in Hamilton County, Kansas.

In the matter of the failure of Prairie Gas Operating, LLC ("Operator") to comply with K.A.R. 82-3-603 at the Bounds lease in Greeley County, Kansas.

In the matter of the failure of Prairie Gas Operating, LLC ("Operator") to comply with K.A.R. 82-3-104 at the Beard #1 well in Greeley County, Kansas. Docket No. 19-CONS-3396-CPEN

CONSERVATION DIVISION

License No. 35442

Docket No. 20-CONS-3007-CPEN

CONSERVATION DIVISION

License No. 35442

Docket No. 20-CONS-3018-CPEN

CONSERVATION DIVISION

License No. 35442

## **PRE-FILED TESTIMONY**

### OF

## **KEN JEHLIK**

**On Behalf of Commission Staff** 

October 7, 2019

Direct Testimony Prepared by Ken Jehlik Docket No. 19-CONS-3396-CPEN Docket No. 20-CONS-3007-CPEN Docket No. 20-CONS-3018-CPEN

#### 1 Q. What is your name and business address?

2 A. Ken Jehlik, 210 E. Frontview, Suite A, Dodge City, Kansas 67801.

#### **3 Q.** By whom are you employed and in what capacity?

- 4 A. I am employed by the Conservation Division of the Kansas Corporation Commission, District
- 5 #1 Office, as an Environmental Compliance and Regulatory Specialist.

#### 6 Q. Would you please briefly describe your educational background and work experience?

- 7 A. I have a Bachelor's degree in Geology from Kansas State University in Manhattan, Kansas.
- 8 I have worked 10 years as an engineer for the Dowell Division of Dow Chemical Company
- 9 involved in cementing, acidizing and fracturing; 21 years as an engineer and superintendent

10 for Helmerich and Payne Oil Co.; and 15 years as an ECRS with the Commission.

11 Q. Have you previously testified before this Commission?

12 A. No.

#### 13 Q. Are you familiar with Docket 20-CONS-3007-CPEN?

- A. Yes. I have reviewed all filings in this docket and conducted lease inspections on all of the
  properties subject to this hearing.
- 16 Q. When was the first inspection of the Bounds lease?
- 17 A. The date of the inspection was April 9, 2019.

#### 18 Q. What did you discover upon inspecting the Bounds lease?

- 19 A. I discovered an unreported salt water spill of approximately 15 20 barrels. I drafted a report
- and took pictures, which are attached as K.J. Exhibit 1.

Direct Testimony Prepared by Ken Jehlik Docket No. 19-CONS-3396-CPEN Docket No. 20-CONS-3007-CPEN Docket No. 20-CONS-3018-CPEN

1	Q.	What was the nature of your communications with the Operator regarding this issue?
2	A.	On April 9, 2019, I called the lead pumper, Brett Cook, and told him of the spill and asked
3		him to report it.
4	Q.	Did you conduct a follow-up inspection on the lease?
5	A.	Yes, I conducted a follow-up inspection on April 18, 2019.
6	Q.	What did you discover upon conducting the follow-up inspection?
7	A.	I discovered that the first spill had not been cleaned up. Additionally, I found a much larger
8		unreported salt water spill had occurred. I calculated this second spill to be a minimum of 160
9		barrels of high chloride brine. My report for the follow-up inspection is in K.J. Exhibit 1.
10		Pictures of the second spill are attached as K.J. Exhibit 2.
11	Q.	How do you calculate the size of a spill?
12	A.	We can calculate a minimum estimate as follows: Average length of spill multiplied by the
13		average width of spill multiplied by the depth of fluid penetration. The depth of penetration
14		is an estimate based on the porosity of the soil, i.e. sand 30%, clay 20%, mixture or loam 25%.
15		We use 0.2 foot as a minimum which is about 2.5 inches. In my experience, I have observed
16		that oil spills may not penetrate this deep but salt water spills almost always do. Another factor

3

to consider is how long the spilled fluid stayed on the ground before it was cleaned up or

possibly soaked into the ground. Example: Average spill length is 70' and average width is

45' and assume a penetration depth of 0.2' (analyzing the soil samples is the only way to

know depth for sure). So  $70 \times 45 \times 0.2 = 644$  cubic feet of total affected soil. Take 644 cubic

17

18

19

20

1		feet x 0.178 <sup>1</sup> and you get 114 bbls of affected soil. Multiply the 114 bbls by the porosity of		
2		25% and you get about 29 bbls of fluid. This is essentially the same formula developed by		
3		ExxonMobil and BP America several years ago. Since no salt water was removed from the		
4		two Bounds 2 spills I used 0.4' (5'') rather than .2 since the brine just soaked into the soil.		
5		The 6" is still a very conservative penetration depth. If soil samples were analyzed the depth		
6		of water penetration would probably be well over 1'.		
7	Q.	What were the nature of your communications with Operator upon discovering a second		
7 8	Q.	What were the nature of your communications with Operator upon discovering a second spill?		
8		spill?		
8 9	A.	spill? I called the lead pumper, Brett Cook, again and advised him of the larger spill. He reported		

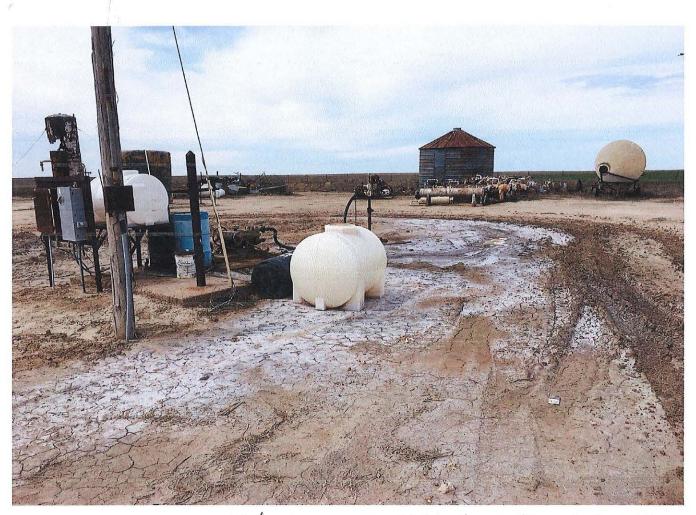
<sup>&</sup>lt;sup>1</sup> I consulted with the Haliburton Cementing Tables to determine the standard number for converting cubic feet to barrels.

# KCC OIL/GAS REGULATORY OFFICES

,

Date: <u>04/23/19</u>	District: Case #:
	✓ New Situation Lease Inspection
	Response to Request Complaint
	Follow-Up
Operator License No: <u>35442</u>	API Well Number: <u>15-071-20089-00-00</u>
Op Name: Prairie Gas Operating, LLC	Spot: <u>SW SW SW</u> Sec <u>13</u> Twp <u>20</u> S Rng <u>34</u> [] [] W
Address 1: 114 E. 5th ST, Ste 100	133 Feet from N/V S Line of Section
Address 2: P.O. Box 2170	5063 Feet from VE / W Line of Section
City: <u>Tulsa</u>	GPS: Lat: <u>38.30650</u> Long: <u>101.69564</u> Date: <u>4/9/19</u>
State: Okla Zip Code: 74101 -2170	Lease Name: Bounds Well #: 2 SWD
Operator Phone #: (817) 681-7600	County: Greeley
Reason for Investigation:	
Unreported salt water spill	
Problem:	
Spill has not been reported or cleaned up	
Persons Contacted:	
None	
Findings:	
	x 60' area on the east and north sides of the well head.
Calculate 15-20 bbls 100 000 ppm br	rine spilled. No attempt has been made to clean up the spill.
Called the lead pumper Brett Cook. S	Said he did not know about the spill but would go check on it.
He never called the spill in or called the	back.
4-18-19 Went to check on the above spill and	d found a second much larger spill that had not been reported.
Apparently happened within the last	9 days. Calculated a minimum of 160 bbls of 100,000 ppm ximately 12000 square feet. No apparent attempt to recover
any free fluids.	ximately 12000 square reet. No apparent attempt to receiver
4-23-19 Re check. Same as 4-18-19. No call	in or cleanup.
Action/Recommendations: Follow	w Up Required Yes No 🔊 Date:
Send the operator an unreported spill form for	or both spills.
Send unreported spill letter	& form.
sena unreportes spirit	
J. J	allitratorms and 4/24/1912
Verification Sources:	Photos Taken: <u>Yes 8</u>
RBDMS KGS	TA Program
	Courthouse By: Ken Jehlik
Other:	ECRS
Retain 1 Copy District Office	
Send 1 Copy to Conservation Division	574 Form: <u>02/22/2008</u>

K.J. Exhibit 1 Page 1 of 4



1.00

13t5 p.11 Unreported

Prairie Cass Bounds 2 5 WD SW See 13.20-40 Greeken Co Bolt woterspill Facily north 4-3-13 KJ Est 15.20 bids Brine



1<sup>st</sup> spill Unreported

Proirie loos Bounds Z SWD SW See 13-20-40 Greekyls Bolt water spill Facing SW 4-9-19 KJ Est 15-206/05 brine





1st spill Clareported

Proirie 6005 Bunds # 2 SWD SW Sec 13-20-40 Greeden Co Sol+ woter Spill Found NW 4-9-19KJ Est 15-20645 brine



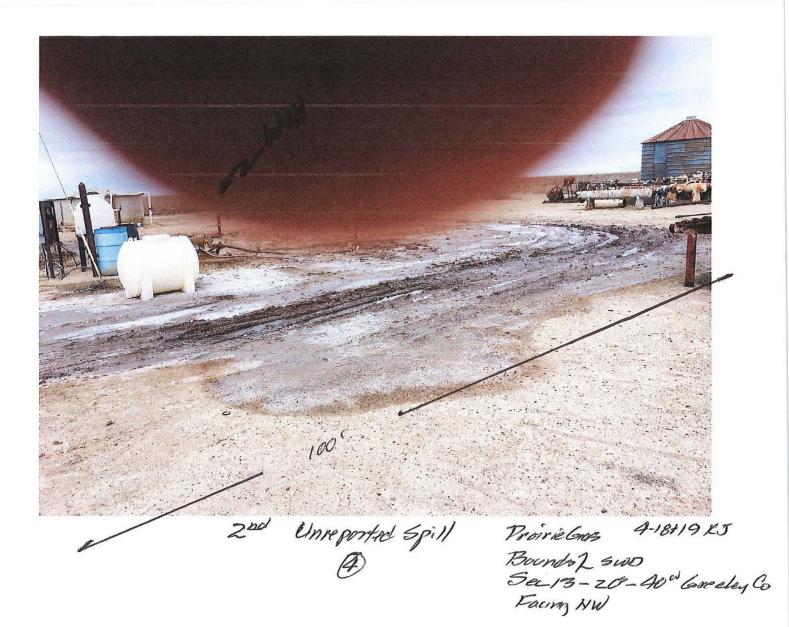
Znd Unreported 5 pill

Proiriebas 4-18.19 KJ Bounds #2 SWD See 13-209-400 Greeten Co Facing North west



Znd Unreported 5 pill

Droirie lass 4-18-19KS Bounds "ISND Sec 13. 202-40" Goreeley Co Facing cost





Znd Unreported Spill

Prairie Gas 4-18-19 KJ Bounds 2 5WD Sec 13-203-404 Gorreley Co. Facing South west

## **CERTIFICATE OF SERVICE**

19-CONS-3396-CPEN, 20-CONS-3007-CPEN, 20-CONS-3018-CPEN

I, the undersigned, certify that a true copy of the attached Prefiled Testimony of Ken Jehlik has been served to the following by means of electronic service on <u>October 7, 2019</u>.

FRED MACLAREN KANSAS CORPORATION COMMISSION DISTRICT OFFICE NO. 1 210 E. FRONTVIEW SUITE A DODGE CITY, KS 67801 Fax: 785-271-3354 e.maclaren@kcc.ks.gov

JONATHAN R. MYERS, ASSISTANT GENERAL COUNSEL KANSAS CORPORATION COMMISSION 266 N. Main St., Ste. 220 WICHITA, KS 67202-1513 Fax: 316-337-6211 j.myers@kcc.ks.gov

LEE THOMPSON, ATTORNEY THOMPSON LAW FIRM, LLC D/B/A THOMPSON LAW FIRM, LLC 322 N MAIN PO BOX 1480 WICHITA, KS 67201-1480 Fax: 316-267-3901 Ithompson@tslawfirm.com

KEN JEHLIK KANSAS CORPORATION COMMISSION DISTRICT OFFICE NO. 1 210 E. FRONTVIEW SUITE A DODGE CITY, KS 67801 k.jehlik@kcc.ks.gov MICHAEL GLAMANN, LITIGATION COUNSEL KANSAS CORPORATION COMMISSION CENTRAL OFFICE 266 N. MAIN ST, STE 220 WICHITA, KS 67202-1513 Fax: 785-271-3354 m.glamann@kcc.ks.gov

KELCEY MARSH, LITIGATION COUNSEL KANSAS CORPORATION COMMISSION CENTRAL OFFICE 266 N. MAIN ST, STE 220 WICHITA, KS 67202-1513 Fax: 785-271-3354 k.marsh@kcc.ks.gov

MICHELE PENNINGTON KANSAS CORPORATION COMMISSION DISTRICT OFFICE NO. 1 210 E. FRONTVIEW SUITE A DODGE CITY, KS 67801 Fax: 785-271-3354 m.pennington@kcc.ks.gov

/S/ Paula J. Murray Paula J. Murray