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2017-03-03 16:33:36 Kansas Corporation Commission /s/ Amy L. Green

## THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

Before Commissioners:

Jay Scott Emler, Chairman Shari Feist Albrecht Pat Apple

IN THE MATTER OF THE APPLICATION OF KENT A. DEUTSCH, D/B/A DEUTSCH OIL COMPANY AND GLOBE OPERATING, INC., FOR A WELL LOCATION EXCEPTION FOR THE MORRISON A, MORRISON B, AND BATMAN MORRISON #1 WELLS IN E/2 NE/4 OF SECTION 28-21-13, STAFFORD COUNTY, KANSAS Docket No. 17-CONS-3026-CWLE

License No. 3180 (Deutsch) License No. 6170 (Globe)

Conservation Division

## PREFILED TESTIMONY OF KENT A. DEUTSCH ON BEHALF OF DEUTSCH OIL COMPANY

1 Q: Please state your name, address and your position. 2 A: My name is Kent A. Deutsch. My address is 13307 E. Castlewood, Wichita, Kansas 3 67230. I am the named operator of the three wells operated by Deutsch Oil Company 4 (Deutsch) that are the subject matter of the well location exception in its Application. 5 Q: Are you one of the Applicants? 6 Yes, the other is my partner, Globe Operating, Inc., of Great Bend, Kansas. A: 7 What is your educational background? Q: 8 A: I graduated in 1979 from the University of Kansas with a degree in geology. 9 Would you please relate your experience in the oil and gas industry? Q: 10 A: I have worked in the oil industry since 1986. I am the owner of Deutsch Oil Company 11 headquartered in Wichita, Kansas. 12 Q: Is Deutsch an oil and gas operator licensed by the Kansas Corporation Commission? 13 A: Yes, our License No. is 3180. 14 Q: How many oil and gas wells does Deutsch operate?

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15	A:	Presently 50 oil and/or gas wells.
16	Q:	Is Deutsch the operator of the lease and the wells located within the East Half of the
17		Northeast Quarter (E/2 NE/4) of Section 28-21-13, Stafford County, Kansas?
18	A:	Yes.
19	Q:	Does your Application for a well location exception relate to the Morrison A #1, Morrison
20		B and Batman-Morrison wells located within the East Half of the Northeast Quarter (E/2
21		NE/4) of Section 28-21-13, Stafford County, Kansas?
22	A:	Yes.
23	Q:	Is the attached document a true and correct copy of the Application as filed?
24	A:	Yes.
25	Q:	Are the allegations and statements in the Application true today as they were in August
26		of 2016 when this was filed?
27	A:	Yes.
28	Q:	What is your basis of ownership in the lease which holds the Morrison A #1, Morrison
29		B and Batman-Morrison wells?
30	A:	It is a single lease dated October 6, 1967, from Helen W. Morrison, lessor, to Albert M.
31		Austin, lessee, recorded in Book 67, page 337, and presently covering all of the East
32		Half of the Northeast Quarter (E/2 NE/4) of Section 28.
33	Q:	Is there a division in ownership between the minerals in the East Half of the Northeast
34		Quarter (E/2 NE/4) of Section 28?
35	A:	Yes.
36	Q:	What is that division according to your information?
37	A:	The Trustees of the Oliver Batman Trust, own all the surface together with all the
38		minerals under the entire 80 acre tract, except for a ten acre tract which is owned in part
39		by the Protestants. The Protestants apparently own an undivided 87.93877% interest

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40		in the ten (10) acre tract which is described as immediately surrounding and centered
41		on the Morrison A #1 well. That well is described as being located in the Southwest
42		Quarter of the Northeast Quarter of the Northeast Quarter (SW/4 NE/4 NE/4) of Section
43		28.
44	Q:	When did the Morrison A #1 begin producing?
45	A:	1970
46	Q:	How many barrels of oil are reported as having been produced from that well?
47	A:	More than 75,000 barrels of oil have been produced.
48	Q:	Is it currently producing, and if so, to what extent?
49	A:	It produces approximately 1.67 barrels of oil and 17 barrels of water per day.
50	Q:	What is the drilling background to the other two wells?
51	A:	The Morrison A #2 (B), also known as the Morrison B well, was drilled in 2012 and was
52		put into production in January 2013. This well was drilled 355 ft. FNL and 670 ft. FEL
53		of Sec. 28-21-13W, Stafford County, Kansas. This well is located 25 ft. south of the
54		center of the 10 acre production unit (a tract measuring 660 feet north and south and
55		located along the north edge of the E/2 NE/4 of Section 28), due to interference with the
56		irrigation system wheel tracks.
57		The Batman-Morrison #1 was drilled in February 2014 and is located 1430 ft. FNL and
58		1197 ft. FEL of Sec. 28-21-13W, Stafford County, Kansas. This well was put into
59		production in April 2014. This well is located 110 ft. north and east of the center of the
60		Batman-Morrison 10 acre production unit.
61	Q:	Based on what study or analysis were those wells drilled?
62	A:	Both the Morrison A #2 (B) and the Batman-Morrison #1 wells were drilled based on 3-D
63		seismic information. The 3-D seismic Lansing Time Structure was believed to be the
64		best indicator of the Arbuckle subsurface structure. So these locations were drilled to

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65		optimize production and prevent waste.
66	Q:	What did you learn about the wells as a result of the drilling process?
67	A:	The Arbuckle Structure and Arbuckle Drill Stem Test (DST) map indicates the actual
68		Arbuckle subsea depths on each well. The Arbuckle drill stem test results of the
69		Morrison A #1, Morrison A #2 (B) and the Batman-Morrison #1 are also listed on this
70		map. Note the bottom hole pressure difference between the wells. Morrison A #1:
71		865#-836#. Morrison A #2 (B): 1201#-1201#. Batman-Morrison #1: 1150#-1169#.
72		These pressure differences would indicate the lack of pressure communication between
73		the wells in the Arbuckle.
74	Q:	Have you prepared a production map for these wells?
75	A:	Yes.
76	Q:	Is it a part of the documents previously produced in this case?
77	A:	Yes.
78	Q:	What does it show?
79	A:	The map shows the Morrison A #1 well has produced 75,182 barrels of oil from the
80		Arbuckle formation from 1970 to 2016. The well is now a stripper well and is currently
81		producing 1.67 barrels of oil per day and 17 barrels of water per day, based on a
82		production barrel test conducted on February 22, 2017. The Morrison A #1 is reaching
83		its economic limit and the 75,182 barrels of oil produced would indicate that it has
84		adequately drained the 10 acre production unit on which it is located.
85		It is also significant that the production from the Morrison A #2 (B) is 15,416 barrels of
86		oil (Arbuckle) from 2013-2016 and is currently shut in due to water encroachment and
87		KCC order. The Batman-Morrison #1 well has produced 13,805 barrels of oil (Arbuckle)
88		from 2014-2016 and is currently shut in due to KCC order.
89	Q;	Have you prepared a production curve for the oil produced from each of these three

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90		wells?
91	A:	Yes.
92	Q:	Have you produced that document to the Protestants?
93	A:	It is shown on the production curve prepared by my engineer, Zach Wolken.
<b>9</b> 4	Q:	What does the production curve reflect?
95	A:	The blue decline curve is the production curve of the Morrison A #1 well. Note that
96		there is no change in the decline curve of the Morrison A #1, as a result of the Morrison
97		A #2 (B) or Batman-Morrison #1 wells going into production. This is also an indication
98		of no undue drainage, correlative right infringement, or waste caused by the Morrison
99		A #2 (B), and Batman-Morrison #1, upon the Morrison A #1.
100	Q:	Is the decline curve shown for the Morrison A #1 typical for a Stafford County, Kansas,
101		oil well which has produced for 46 years?
102	A:	Yes.
103	Q:	Are you familiar with the complaints raised by the Protestants in their Response to your
104		Application?
105	A:	Yes.
106	Q:	What do the Protestants allege that their correlative rights are being violated by the
107		drilling and production of oil from the Morrison B and Batman-Morrison wells?
108	A:	Yes. They allege their reserves under the ten acre tract in which they have a partial
109		mineral interest described as being centered around the Morrison A are being drained
110		by the newer nearby wells known as the Morrison B and the Batman-Morrison.
111	Q:	What is the history of production for the Morrison A #1 well?
112	A:	The Morrison A #1 well was drilled in 1970 by Birmingham-Bartlett Company and has
113		produced pretty much non-stop since that time. The more than 75,000 barrels of oil it
114		has produced to date is a relatively large amount of oil from an Arbuckle well in Stafford

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115 County. The well initially began producing at the rate of 45 per day, and is now 116 producing 1.67 barrels of oil per day and 17 barrels of water per day. The pressure in 117 the well is low. The most recent fluid level test reflected low levels of fluid in the hole. 118 This is indicative of a low pressure well having very limited productive reservoir. The 119 well is considered a low fluid well, which is unusual for Kansas Arbuckle wells and is 120 strong evidence that the reserves associated with the ten acre tract and that particular 121 well site are nearly fully depleted. The well has been the subject matter of work-overs 122 in the past, and the Arbuckle zone has been perforated at a number of spots. The well 123 and surrounding acreage does not hold the promise of further work-overs or 124 development.

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- 125 Q: In your Application, you alleged the well location exception which you seek will not
  126 violate the correlative rights of the Protestants and that permitting production from the
  127 wells is needed to prevent waste. Is that correct?
- 128 A: Yes.

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129 Q: What is the basis for this belief on your part?

- 130A:The low total production of barrels of oil from both the Morrison A #2 (B), and the131Batman-Morrison #1 in relationship to the barrels of oil produced by the Morrison A #1132(75,182 BO) would also indicate no violation of correlative rights or drainage of the133Morrison A #1.
- 134The gravity of the oil is different on the wells. Morrison A #1: 31.5 degree gravity oil.135Morrison A #2 (B): 34.2 degree gravity oil. Batman-Morrison #1: 36.1 degree gravity oil.136Although all three wells are producing Arbuckle oil, the lower gravity oil on the Morrison137A #1 would indicate that the Morrison A #1 is, indeed, isolated from the Morrison A #2138(B), and the Batman-Morrison #1 production. Otherwise, gravity would be the same139among all three wells. Lower gravity is, additionally, a typical outcome of oil quality as

140a reservoir depletes. This would indicate that the Morrison A #1 well has indeed drained141the ten acre production unit on which it is located and that there is no drainage of oil142from beneath the ten acre location owned by Protestants which is being recovered by143the Morrison A #2 (B) or the Batman-Morrison #1 wells.

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- 144Therefore, due to the Arbuckle Structural position of the wells, along with pressure145differential indicated with drill stem test information, production decline curves, produced146barrels of oil, and oil gravity differential, it is demonstrated that no waste, undue
- 147 drainage, or violation of correlative rights is being suffered by the Morrison A #1
- 148 production unit.

- 149 Q: Does this conclude your testimony?
- 150 A: Yes.

EXHIBITS: The Exhibits to be offered by Applicant will be those documents produced by Applicant in

response to the Protestant's First Data Request.

## CERTIFICATE OF SERVICE

I, Timothy R. Keenan, hereby certify that on this 3rd day of March, 2017, I caused the original of the foregoing to be Fax-filed and by United States Mail, first class, postage prepaid, and properly addressed to the following:

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