Geological Report

DK Operating, Inc.

Dink #2

2570' FSL & 335' FEL

Sec. 17 T21s R22w

Hodgeman County, Kansas





KGS LIBRARY

DK Operating, Inc.

General Data

Well Data: DK Operating, Inc.

Dink #2

2570' FSL & 335' FEL Sec. 17 T21s R22w

Hodgeman County, Kansas API # 15-083-21840-0000

Drilling Contractor: Pickrell Drilling Co. Inc. Rig #1

Geologist: Jason T Alm

Spud Date: September 6, 2012

Completion Date: September 15, 2012

Elevation: 2275' Ground Level

2285' Kelly Bushing

Directions: Hanston KS, 6 Mi. North on NE 228 Rd. to V Rd. 2

mi. West to NE 226 Rd. ½ mi. North, West into

location.

Casing: 223' 8 5/8" surface casing

4396' 5 1/2" production casing

Samples: 10' wet and dry, 4000' to RTD

Drilling Time: 3600' to RTD

Electric Logs: None

Drillstem Tests: Two, Trilobite Testing, Inc. "Dustin Rash"

Problems: None

Remarks: Bar was dropped on fluid for DST #2, circulated

into reserve pit.

Formation Tops

	DK Operating, Inc.		
	Dink #2		
	Sec. 17 T21s R22w		
Formation	2570' FSL & 335' FEL		
Anhydrite	1450', +835		
Base	1475', +810		
Heebner	3749', -1464		
Lansing	3801', -1516		
Stark	4043', -1758		
BKc	4146', -1861		
Pawnee	4234', -1949		
Fort Scott	4306', -2021		
Cherokee	4331', -2046		
Mississippian	4378', -2093		
Osage	4390', -2105		
RTD	4397', -2112		

Sample Zone Descriptions

Fort Scott

(4306', -2021): Covered in DST #1

Ls – Fine crystalline with poor to fair inter-crystalline porosity, light spotted oil stain in porosity, slight show of free oil when broken, light odor, 20 units hotwire.

Miss. Osage

(4390', -2105): Covered in DST #2

 Δ – Dolo – Fine sucrosic crystalline with good inter-crystalline and vuggy porosity, very heavy triptolic chert with good scattered vuggy porosity, light to heavy oil stain in porosity, good show of free oil, good odor, bright yellow fluorescents, 45 units hotwire.

Drill Stem Tests

Trilobite Testing Inc. "Dustin Rash"

DST #1 Fort Scott

Interval (4290' - 4345') Anchor Length 55'

IHP -2106#

IFP - 30" - Built to 5 in. 40-33 #
ISI - 30" - Dead 186 #
FFP - 30" - B.O.B. 27 min. 39-45 #
FSI - 45" - Dead 374 #

FHP -2101 # BHT -119°F

Recovery:

268' GIP

10' GOCM 10% Oil 30' OCM 5% Oil

DST #2 Mississippian Osage

Interval (4391' -4397') Anchor Length 6'

IHP - 2158 #

IFP -5" - B.O.B. 30 sec. 251-422 # ISI -30" - Built to 6 in. 1372 # FFP -5" - B.O.B. 30 sec. 471-617 # FSI -30" - Built to 3 in. 1365 #

FHP - 2071 # BHT - 130°F

Recovery:

126' GIP

1143' GCO Gravity 38° API 180' GWCMO 60% Oil, 15% Water

Structural Comparison

	DK Operating, Inc.	Pickrell Drilling, Inc.		DK Operating, Inc.	
	Dink #2	Antrim A #3		Antrim Unit #1-17	
	Sec. 17 T21s R22w	Sec. 17 T21s R22w		Sec. 17 T21s R22w	
Formation	2570' FSL & 335' FEL	C SE NE		70' FNL & 450' FEL	
Anhydrite	1450', +835	1455', +840	(-5)	1432', +850	(-15)
Base	1475', +810	NA	NA	NA	NA
Heebner	3749', -1464	3750', -1455	(-9)	3708', -1426	(-38)
Lansing	3801', -1516	3801', -1506	(-10)	3758', -1476	(-40)
Stark	4043', -1758	NA	NA	4008', -1726	(-32)
BKc	4146', -1861	NA	NA	4108', -1826	(-35)
Pawnee	4234', -1949	NA	NA	4190', -1908	(-41)
Fort Scott	4306', -2021	4316', -2021	FL	4262', -1980	(-41)
Cherokee	4331', -2046	NA	NA	4284', -2002	(-44)
Mississippian	4378', -2093	4391', -2096	(+3)	4332', -2050	(-43)
Osage	4390', -2105	NA	NA	NA	NA

Summary

The location for the Dink #2 well was found via 3-D seismic survey. The new well ran slightly lower than expected via the survey. Two drill stem tests were conducted one of which recovered commercial amounts of oil from the Mississippian Osage Formation. After all gathered data had been examined the decision was made to run 5 1/2 inch production casing to further evaluate the Dink #2 well.

Recommended Perforations

Primary:

Mississippian Osage (4390' – 4395') DST #2

Before Abandonment:

Fort Scott (4323' – 4329') DST #1

Respectfully Submitted

Jason I Alm

Hard Rock Consulting, Inc.