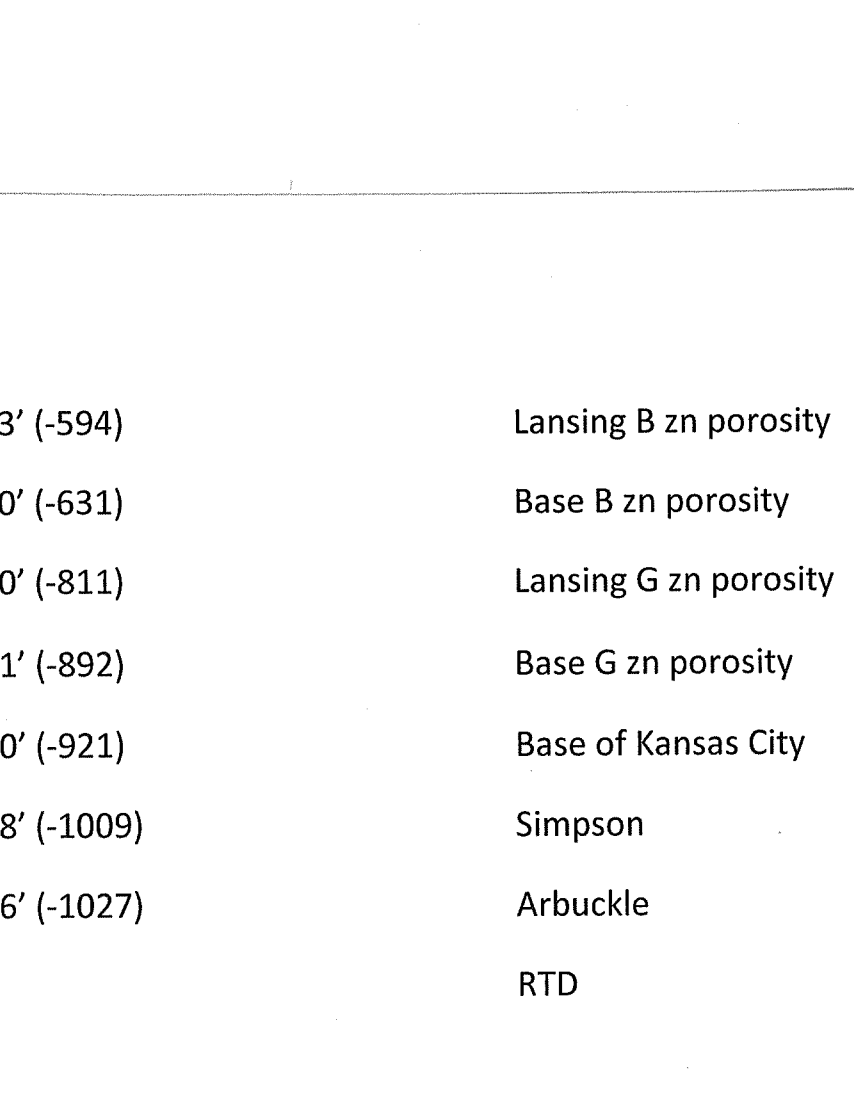


DARRAH

Geologic Report
#11 Kratzer
 15-053-1181
 880' FNL & 955' FEL
 SEC 21 T17S R8W
 Ellsworth County KS

All measurements taken from KB.
 Contractor: Mallard JV
 Drilling Fluid: Chem mud
 Spud date: January 16th, 2013
 Drilling Complete: January 22nd, 2013
 Geologist: Seth Evenson on location January 20th, 2013 @ 4:56^{PM} M.D.
 TO: 177' (-1406)
 Drill time kept from 2300' to TD
 Samples examined from 2400' to TD
 Elogs on None



Sample Tops

Severy shale	2363' (-594)	Lansing B zn porosity	2820' (-1051)
Topeka	2400' (-631)	Base B zn porosity	2842' (-1073)
Oread	2580' (-811)	Lansing G zn porosity	2908' (-1139)
Heebner	2661' (-892)	Base G zn porosity	2937' (-1168)
Douglas	2690' (-921)	Base of Kansas City	3108' (-1339)
Brown Lime	2778' (-1009)	Simpson	3118' (-1349)
Lansing	2796' (-1027)	Arbuckle	3164' (-1395)
		RTD	3175' (-1406)

Structural comparison:

#11 Kratzer	#10 Kratzer	#5 Kratzer/Janssen	#8 Janssen
SW/NE/NE 21-17S-8W	SE/NW/SE/NE 21-17S-8W	N2/NE/NE 21-17S-8W	N2/N2/NE 21-17S-8W
Heeb -892	-884 (-8)	-896 (+4)	NA
Doug -921	-912 (-9)	-925 (+4)	NA
Brn Lm -1009	-1003 (-6)	-1017 (+8)	-1027 (+18)
Lans -1027	-1022 (-5)	-1037 (+10)	-1046 (+19)
B zn -1051	-1049 (-2)	-1064 (+13)	-1070 (+19)
G zn -1139	-1127 (-10)	-1144 (+5)	-1146 (+7)
BKC -1339	-1326 (-13)	-1343 (+4)	-1351 (+12)
Simp -1349	-1337 (-12)	-1373 (+24)	-1393 (+44)
Arb -1395	-1385 (-10)	-1417 (+22)	-1418 (+23)

Formation Tests:

DST #1
 Lansing B
 2814'-2850'
 15-30-30-60
 IHP 1322#
 IHP 240#-246#
 ISIP 997#
 FSP 217#-248#
 FSP 997#
 FHP 1324#

Gas rates:
 Initial rate= 1248 MCFG/D @ 29 PSI
 Max rate= 1564 MCFG/D @ 40 PSI
 Final rate= 1535 MCFG/D @ 39 PSI

Rec:
 2815' GIP
 120' mud

The Kratzer #11 was drilled over a closed structural 3D seismic anomaly. Once again the 3D survey over the Kratzer/Janssen lease has been proven accurate. While not as high structurally as the #10; the #11 has adequately beaten all the offsetting wells surrounding it, and should prove to be a high ultimate recovery well. In addition to the positive indications from the Arbuckle, the Lansing B zone was tested since the zone developed so well on e-logs from the #10; but was not formation tested in that well. The B zone in the #11 gave up a large amount of gas at high rates, as shown by the DST results. Due in part to significant structural advantage, coupled with fair oil shows; it was decided to run 5.5 inch casing to 3166' MD; without formation testing the Arbuckle. The plug was set, and holding at 6:12pm on January 22nd, 2013. Darrah Oil can look forward to having another long lived commercial oil well on this lease, and possibility to produced significant gas reserves from the lease; sometime down the road.

Respectfully submitted by,

 Seth Evenson
 Geologist
 Darrah Oil Company
 June 4th, 2013

Dr Log 4:38 am January 20, 2013 @ 2:56^{PM}

DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
2300'				Severy shale 2363' (-594)
2400'				Topeka 2400' (-631)
2580'				Oread 2580' (-811)
2661'				Heebner 2661' (-892)
2690'				Douglas 2690' (-921)
2778'				Brown Lime 2778' (-1009)
2796'				Lansing 2796' (-1027)
2820'				Lansing B zone 2820' (-1051)
2842'				Base of Lansing B zone 2842' (-1073)
2908'				Lansing G zone 2908' (-1139)
2937'				Base of Lansing G zone 2937' (-1168)
3108'				Base of Kansas City 3108' (-1339)
3118'				Simpson 3118' (-1349)
3164'				Arbuckle 3164' (-1395)
3175'				RTD 3175' (-1406)

CONTRACTOR Mallard JV LOCATION 880' FNL & 955' FEL
 LEASE Kratzer #11 SEC 21 T17S R8W RNC 8 W
 ELEVATION KB 174' COUNTY Ellsworth STATE Kansas
 RTD 3175'