Jeff Christian
PETROLEUM GEOLOGIST
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GEOLOGIST'S REPORT

OPERATOR	MURFIN DRILLING COMPANY
CONTRACTOR	MURFIN DRILLING COMPANY
WELL NAME	BUCKLES #1
LOCATION	2310' FSL & 330' FWL
	SEC. 25 T. 20 S. R. 19 W.
	EDWARDS COUNTY, KANSAS
COMMENCED	8/5/13
COMPLETED	8/13/13
TOTAL DEPTH	4650'
ELEVATION	2242' KB
	2237' DF
	2232' GL
CASING RECORD	8 5/8" @ 221' w/ 150 sx cmt
	5 1/2" @ 4650' w/ 175 sx cmt
STATUS	Dry & Abandoned

DATE	TVD AND DEPTH	REMARKS
8/5/13	460ft	SPUD @ 9:00 am.
8/6/13	1460'	DRLG. on. 1/4 deg.
8/8/13	3400'	DRLG.
8/9/13	3980'	DRLG. on. 1/4 deg @ 3934'
8/10/13	3990'	Short Trip Pipe to 3400' R.L. dev. 1/2 deg.
8/11/13	4250'	DRLG. on. 1/4 deg.
8/12/13	4434'	Trip out 3:00 A.M.
8/13/13	4434'	DRLG. dev. 1 deg. @ 4410'
8/13/13	4650'	TD'd at 3:00 A.M. RTD 4650' @ 7:30 am. dev. 3/4 deg.
8/13/13	4650'	Finish Logging @ 9:00 am.

Remarks

5 1/2" production casing set to further test the Lansing/Kansas City and Cherokee formations.

Electric log measurements corrected about mere to 2' high compared to rotary measurements.

Samples deposited at the Kansas Geological Survey.

Respectfully Submitted,

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TIME	DAILY TIME BREAKS	DEPTH	SAMPLE DESCRIPTIONS	REMARKS
		2550		
		2600		ANADARKO# 25B2 (+246) Eng. Rept. (+244)
		2650		Base ANADARKO# 25B2 (+270) Eng. Rept. (+270)
		3550	Lt. cream gray, fine crystalline, poor intercryst. porosity, no show, no odor.	
		3600	Dk. gray, marine mud.	
		3650	Lt. cream to gray, fine crystalline, dol. siltstone, dk. fissure, no show, no odor.	Morgan Board #3994 8/10/13 Wt 9.0 Vis 45 WL 9.6 LCM 0 PH 10.5 MBT 1.0 Chl 5
		3700	Dk. gray, marine mud.	
		3750	Gdbk. Dk gray, dk. dk. fissure, sub rounded, poor sort, no show, no odor.	
		3800	Lt. & med. gray, dk. dk. dk. dk. dk. fissure, no show, no odor.	
		3850	Lt. & med. gray, fine crystalline, dk. dk. dk. dk. dk.