

Jeff Christian

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GEOLOGISTS' REPORT

DRILLING TIME AND SAMPLE LOG

<p>OPERATOR MURFIN DRILLING COMPANY</p> <p>LEASE GERSTBERGER # 1-29</p> <p>LOCATION 1800' FNL & 660' FEL</p> <p>SEC. 29 TWP. 17 S R. 36 W</p> <p>COUNTY WICHITA STATE KANSAS</p> <p>FIELD WILD CAT</p> <p>API 15-203-20233</p> <p>COMPANION TOOLS RIE NO. 22</p> <p>CONTRACTOR COMPANY TOOLS</p> <p>DRILLING STARTED 09/24/2013 COMPLETED 10/04/2013</p> <p>MUD DISP. APT. 3360' MUD TYPE CHEMICAL</p> <p>DRILLING TIME: LEFT FROM 3600' TO RTD</p> <p>DRILLING TIME: FROM 3600' TO RTD</p> <p>SAMPLES SAVED FROM 3600' TO RTD</p> <p>SAMPLES EXAMINED FROM 3600' TO RTD</p> <p>GEOLOGICAL SUPERVISION FROM 3600' TO RTD</p>	<p>ELEVATIONS</p> <p>KR 3298'</p> <p>GL 3287'</p> <p>MEASUREMENTS FROM K.B.</p> <p>CASING RECORD</p> <p>CONDUIT NONE</p> <p>Surface 8.5/8" @ 272'</p> <p>W/ 200' SX</p> <p>Production 1 1/2" @ 4450'</p> <p>Pipe Stuck</p> <p>Electrical Surveys</p> <p>PLOTTER:</p> <p>DIL:</p> <p>CNL/CDL:</p>
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FORMATION NAME	LOG TOP	DATE	LOG TOP	SAMPLE DATE	DEPTH
Base Anhydrite	2436'	(-882)	2337'	(-963)	
TOPEKA	3686'	(-388)	3682'	(-384)	
HEBNER	3920'	(-622)	3917'	(-619)	
LANSING	3970'	(-672)	3963'	(-665)	
STARK	4244'	(-946)	4242'	(-944)	
PAWNEE	4494'	(-1192)	4492'	(-1194)	
CHEROKEE	4566'	(-1268)	4562'	(-1264)	
MORROW SH	4722'	(-1424)	4720'	(-1422)	
MISISSIPPIAN	4800'	(-1502)	4815'	(-1487)	
TOTAL DEPTH	4917'	(-1619)	4915'	(-1617)	

DATE	7:00 AM DEPTH	REMARKS
9/24/13	1080'	SPUD 11:00 am
9/25/13	2991'	DRLG. dev. 1/4 deg. @ 272'
9/26/13	3675'	DRLG. dev. 0 deg. @ 3600'
9/28/13	4055'	DRLG.
9/29/13	4155'	DRLG. dev. 3 1/4 deg. @ 4090'
9/30/13	4351'	DRLG.
10/1/13	4453'	TIH after DST # 2 dev. 3 deg.
10/2/13	4535'	TIH after DST # 3
10/3/13	4673'	DRLG. dev. 2 1/4 deg.
10/4/13	4908'	DRLG. RTD 4915' @ 7:30 am dev. 2 deg. Finish Logging @ 4:30 pm

Remarks

5 1/2" production casing set to further test the Marmaton formation.

Electric log measurements correlate 2' to 4' deep compared to rotary measurements.

Samples deposited at the Kansas Geological Survey.

Respectfully Submitted,

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