

Robert L. Milford

PETROLEUM GEOLOGIST
Wichita, Kansas

GEOLOGISTS REPORT

DRILLING TIME AND SAMPLE LOG

OPERATOR: Murfin Drilling Company, Inc.
LEASE: Torluenke #1-18
LOC SPOT: 110' E of NW NW SE

ELEVATIONS
KB: 2,787'
GL: 2,782'

LOC FOOTAGE: 2,310' FSL & 2,200' FEL
SEC: 18 TWP: 25 RANG: 29W
COUNTY: Decatur STATE: Kansas

API: 15-039-2133-00-00
CONTRACTOR: Murfin Drilling Co., Inc. RIG NO.: 3
DRILLING STARTED: 6-8-2011 COMPLETED: 6-18-2011
MUD DISPLACED: 3,000' MUD TYPE: Chemical
DRILLING TIME FEET FROM: 3,100' TO RTD
SAMPLES SAVED FROM: 3,100' TO RTD
SAMPLES EXAMINED FROM: 3,100' TO RTD
GEOLOGICAL SUPERVISION FROM: 2,832' TO

MEASUREMENTS
CASING RECORD
Conductor

Surface: 8.5/8" @ 282'
w/ 165 sacks cement
Production 5.1/2" @ 4064'
w/ 150 sacks cement

ELECTRICAL SURVEYS
Log-Tech, Inc.
Dad Induction Log
Dad Compensated -

FORMATION NAME

FORMATION NAME	LOG TOP	DATUM	LOG TOP	SAMPLE DATUM
Stone Corral	2,532'	+223	2,535'	+219
Base Stone Corral	2,564'	-409	3,200'	-413
Neva	3,196'	-525	3,196'	-529
Foraker	3,312'	-798	3,588'	-801
Topeka	3,745'	-1003	3,747'	-1005
Heebner	3,799'	-1003	3,792'	-1005
Lansing	3,954'	-1167	3,957'	-1170
Stark	3,998'	-1211	4,001'	-1214
B/KC	4,068'	-1281	4,070'	-1283

DATE	7:00 AM DEPTH	REMARKS
6-8-11	0'	Spud @ 3:45 pm. Plug down @ 9:00 pm. Drilled out plug @ 5:00 am on 6-9-11
6-9-11	350'	Cut 350' in last 24 hrs. Dev.: 0.2° @ 898', 0.5° @ 1367'. Lost Circ @ 1435' (dwn 1 hr).
6-10-11	1,590'	Cut 1,240' in last 24 hrs; 19.75 hrs drlg.
6-11-11	2,390'	Cut 800' in last 24 hrs; 21.5 hrs drlg. Dev.: 1.5° @ 2769'.
6-12-11	3,160'	Cut 770' in last 24 hrs; 22 hrs drlg.
6-13-11	3,650'	Cut 490' in last 24 hrs; 23 hrs drlg. DST #1 @ 3805'
6-14-11	3,805'	Cut 155' in last 24 hrs; 6.75 hrs drlg. DST #2 @ 3842', DST #3 @ 3891'
6-15-11	3,891'	Cut 86' in last 24 hrs; 4.5 hrs drlg. DST #4 @ 3925'
6-16-11	3,950'	Cut 59' in last 24 hrs; 3.75 hrs drlg. DST #5 @ 3960', DST #6 @ 4003'
6-17-11	4,003'	Cut 53' in last 24 hrs; 3.5 hrs drlg. RTD 4070' @ 6:40 pm
6-18-11	4,070'	Cut 67' in last 24 hrs; 5.75 hrs drlg. Ran production casing.

Remarks

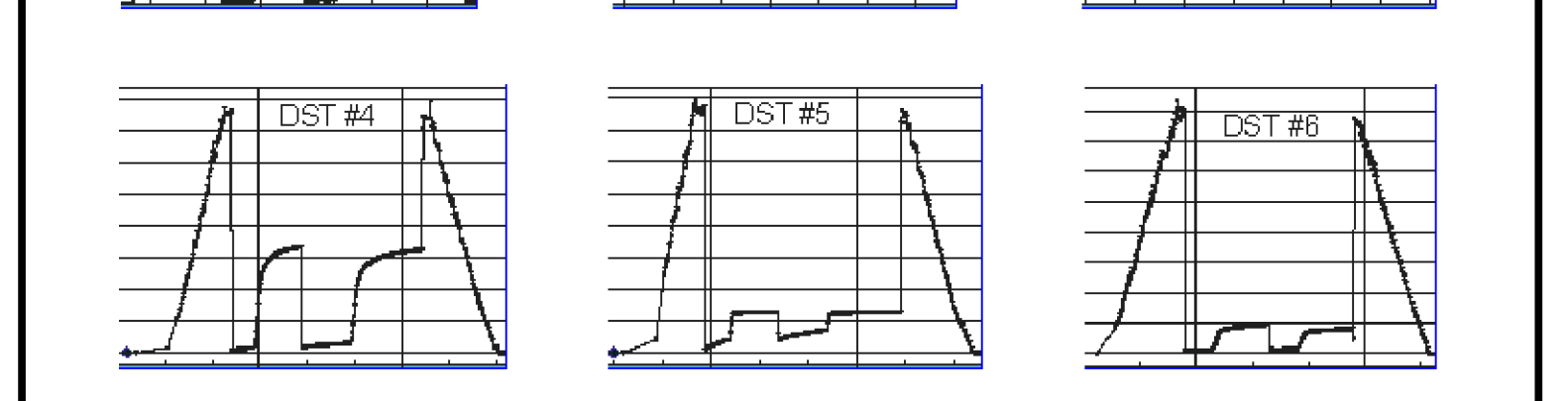
The electric log measurements correlate from 2' to 4' higher to the drilling measurements.

Formation tops and lithology on this report have been corrected to the electric log.

The drilling samples were deposited at the Kansas Geological Survey office in Wichita.

Respectfully submitted,

Robert L. Milford



LITH	DRILL TIME (MIN/FT)	DEPTH	SAMPLE DESCRIPTIONS	REMARKS
		2500		Stone Corral 2532' (+255) EL
		2564		B/Stone Corral 2564' (+223) EL

