



GEOLOGISTS' REPORT

OPERATOR **MURFIN DRILLING COMPANY, INC.**

LEASE **ORTH 'A' # 1-4**

LOCATION **660 FSL & 330 FWL**

SEC **4** TWSP **14S** RGE **19W**

COUNTY **ELLIS** STATE **KANSAS**

FIELD **ALWERTH**

CONTRACTOR **Murfin Drilling Company** FIG NO. **8**

COMMENCED **25 Nov. 2011** COMPLETED **3 Dec. 2011**

MUD DISPLACED **2942** MUD TYPE **Chemical**

DRILLING TIME KEPT FROM **3180** TO **4000**

SAMPLES SAVED FROM **3180** TO **4000**

SAMPLES EXAMINED FROM **3180** TO **4000**

GEOLOGICAL SUPERVISION FROM **3019** TO **4000**

GEOLOGIST ON WELL **Paul Gurezelman**

FORMATION **TOP** LOG **SAMPLE**

FORMATION NAME	TOP DATUM	TOP DATUM	SAMPLE DATUM
Stone Corral	1540	+724	1540
Base/Anhydrite	1586	+678	1585
Topoka	3282	-1018	3280
Heebner Shale	3527	-1263	3524
Toronto	3548	-1284	3545
Lansing	3570	-1306	3569
Base/Kansas City	3816	-1552	3811
Arbuckle	3929	-1665	3930
Total Depth	4004	-1740	4000

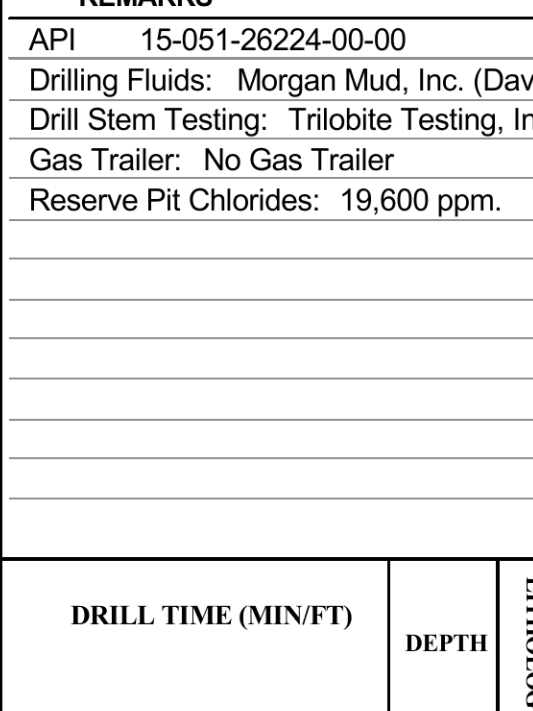
ELEVATIONS
KB **2264 Ft.**

GL **2259 Ft.**

CASING RECORD
Conductor None
Surface **8 5/8" @ 220'**
Production None

ELECTRICAL SURVEYS:
Log-Tech, Inc.
Comp. Neutron Density

LOG
Dual Induction
Micro-resistivity
Comp. Sonic



DRILL TIME (MIN/FT)	DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS
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REMARKS
API 15-051-26224-00-00
Drilling Fluids: Morgan Mud, Inc. (David Lines, engineer)
Drill Stem Testing: Trilobite Testing, Inc. (Ray Schwager, tester)
Gas Trailer: No Gas Trailer
Reserve Pit Chlorides: 19,600 ppm.

STONE CORRAL
1540 (+724)

BASE/ANHYDRITE
1585 (+679)

TOPEKA
3280 (-1016)

HEEBNER SHALE
3524 (-1260)

TORONTO
3545 (-1281)

LANSING
3569 (-1305)

BASE/KANSAS CITY
3812 (-1548)

ARBUCKLE
3930 (-1666)

TOTAL DEPTH
4000 (-1736)

11:45 pm, 2 December 2011

Operator: MURFIN DRILLING COMPANY, INC.
Lease: ORTH 'A' # 1-4
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County: ELLIS State: KANSAS

