GEOLOGICAL REPORT

Larry A. Nicholson

COMPANY	Murfin Drilling Company, Inc.
API #	15-063-22212
LEASE	Lundgren 'B'
WELL #	1-36
SURVEY	SE Tw. NW Rw.
SECTION	36
TWP	14S
RGE	20W
COUNTY	Ogle
STATE	Kansas

WELL # 1-36 36 T 14 S R 20 W

ELEVATIONS

KB 2667
GL 2656
KB - GL 11
DF
KB - DF

CASING RECORD

Surface	8 5/8	23#	220'
Production	5 1/2	15.5#	4500'

Drilling Contractor: **Red Tiger Drilling, Inc. Rig #1**
SPUD: 9-11-2012 COMPLETED: 9-19-2012
TOTAL DEPTH: RTD 4500' LTD 4497'
MUD UP @ 3270'
MUD TYPE: Chemical / Bergen Mud

SAMPLE SAVED:	None
DRILLING TIME:	From 3400' to 4500'
DRILLING MEDIUM:	Air / Mud
SECONDARY SUPERVISION:	Dave Schmidt
WELLSITE GEOLOGIST:	LARRY A. NICHOLSON

ELECTRICAL SURVEYS Pioneer - Dual Ind. Micro, Sonic

FORMATION TOPS & STRUCTURAL POSITION

FORMATION	SAMPLE TOPS	ELECTRICAL SURVEY TOPS	STRUCTURAL POSITION
Anhydrite	2080	+587	2080	+587	2081	+586	+6
Base Anhydrite	2110	+557	2110	+557	2112	+555	+8
Topeka	3456	-789	3456	-789	3457	-790	+7
Heebner Sh.	3679	-1012	3679	-1012	3672	-1015	+4
Toronto	3700	-1033	3700	-1033	3692	-1035	+2
Dark Sh.	3722	-1055	3722	-1055	3722	-1055	+2
Plawson	4152	-1485	4153	-1486	4151	-1484	+2
Lansing-KC	4196	-1529	4196	-1529	4195	-1528	+2
Johnson Zone	4395	-1728	4395	-1728	4395	-1728	+2
Mbrs	4420	-1753	4420	-1753	4420	-1753	+2
Mbr.Sh.	4445	-1778	4445	-1778	4445	-1778	+2
Stark Sh.	4476	-1809	4476	-1809	4476	-1809	+2
LKC	4483	-1816	4483	-1816	4483	-1816	+2

REFERENCE WELLS: Perm Corporation - Doherty #1-36 - 240 NE/NE - Sec. 36 T14S R20W - KB 2656

REMARKS & RECOMMENDATIONS

Based on the results and sample shows cap was run

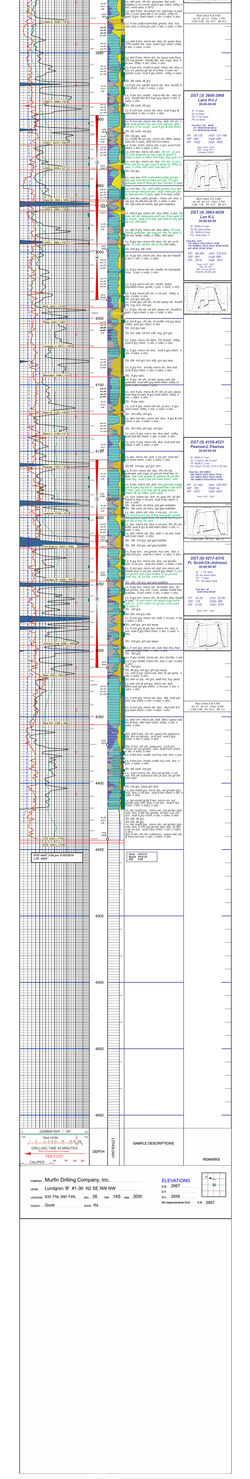
NOTE: Ellis Lynes were 3 feet shallow to the drillers depth

Dorthland has been shifted up 3 feet to match electric log.

LKA TBC Modified 2010, 1/17, 4/12 Version: KS 2009 Total = 20 Ann. 8.2 & EPS 2 Ann = 240 Unit

LEGEND

Limestone | Dolomite | Anhydrite | Shale | Chert | Oolitic | Fossiliferous | Sandy | Sandstone | Arkosic | Arkosic Sandstone | Salt | Gypsum | Anhydrite



GAMMA RAY - SP
Gas Units
DRILLING TIME IN MINUTES
PEN POST
CALIPER
DEPTH
LITHOLOGY
SAMPLE DESCRIPTIONS
REMARKS

COMPANY Murfin Drilling Company, Inc.
LEASE Lundgren 'B' 1-36 NE NW NW
LOCATION 930 FNL 990 FWL SECTION 36 TWP 14S RGE 20W
COUNTY Ogle STATE KS

ELEVATIONS
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DF
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36 T 14 S R 20 W

Mr.Gaspard@hotmail.com KB 2667