



PHIL ASKEY
PETROLEUM GEOLOGIST



GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

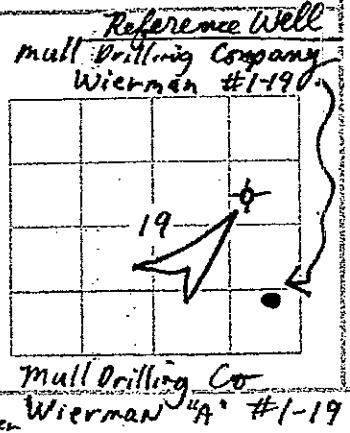
COMPANY Mull Drilling Company, Inc.
LEASE Wierman "A" #1-19
FIELD 2319' FNL & 1099' FEL
LOCATION Wildcat
SEC 19 TWSP 16S RGE 22W
COUNTY Ness STATE Kansas
CONTRACTOR WW Drilling Rig #2
SPUD 6/28/10 COMP 7/5/10
RTD 4520' LTD 4519'
MUD UP 3400' TYPE MUD Chemical-Mud-Co

ELEVATIONS
KB 2440'
DF 2438'
GL 2435'
Measurements Are All
From KB

CASING
SURFACE 8 5/8" @ 219' w/ 150 SXS
PRODUCTION _____
ELECTRICAL SURVEYS
Superior Well Services PE
CVE/COL; DIL; Sonic; Micro

SAMPLES SAVED FROM 3700' TO RTD
DRILLING TIME KEPT FROM 1700'-1900'; 3600' TO RTD
SAMPLES EXAMINED FROM 3700' TO RTD
GEOLOGICAL SUPERVISION FROM 3910' TO RTD
GEOLOGIST ON WELL Phil Askey, P.G.

FORMATION TOPS	LOG	SAMPLES	
Anhydrite	1774 +666	1776	Flat
Hellman	3842 -1902	3842	-6 L
Lansing	3877 -1437	3878	-3
B/KCO	4152 -1712	4153	-3
Marmaton	4187 -1747	4188	-4
Pawnee	4250 -1810	4250	-4
Et. Scott	4348 -1908	4348	-2
Cherokee Shale	4365 -1925	4365	-4
Base Penn Lime	4418 -1978	4419	-1
Cherokee Sand	4453 -2013	4453	-5
MISS WARSW.	4460 -2020	4462	Flat
LTD/RTD	4519 -2079	4520	42' higher



REMARKS

The Mull Drilling Wierman "A" #1-19 ran slightly low structurally to the reference well, the Mull Drilling Wierman #1-19 except the Miss Wierman was flat structurally. The Cherokee Sand did not develop in this well and did not contain an oil show w/ negative DST results. The lower Cherokee Sand had a poor Miss Wierman carbon oil show but had unfavorable DST results. After review of all samples, DST results, and E-log evaluation, it was decided to plug and abandon this well.

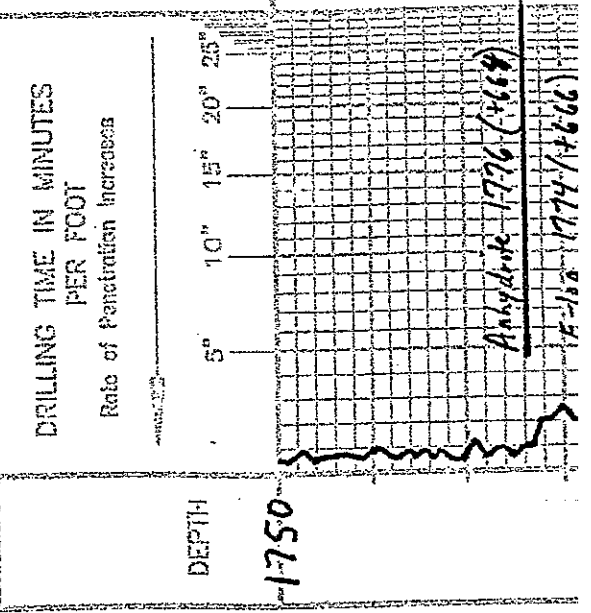
Phil Askey, P.G.

Well API # 15-135-25082

LEGEND

- Anhydrite
- Soil
- Sandstone
- Shale
- Carbonaceous Limestone
- Dolomite
- Chert
- Oil Limestone

SCALE 1" = 100'



LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS

LOG 7700

1750

Andy Duke 17776 (-669)

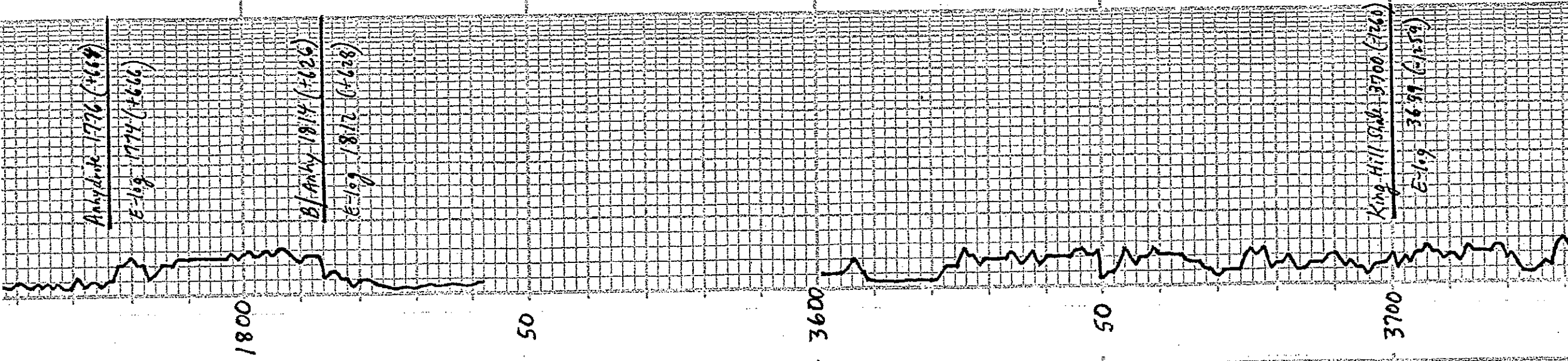
E-log 1774 (+666)

B/Andy 1814 (+626)

E-log 1812 (+628)

King Hill Side 3700 (-726)

E-log 3699 (-729)



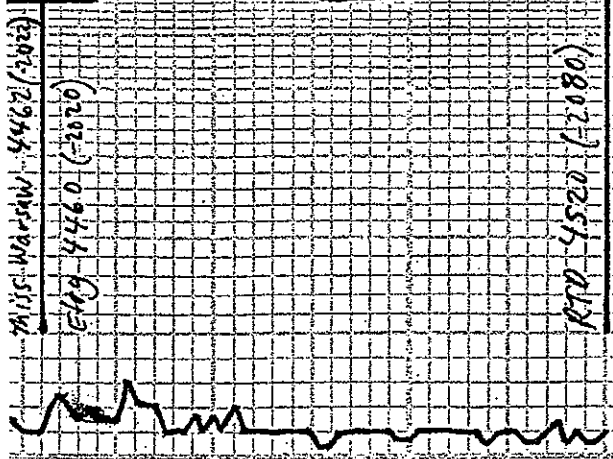
<p style="text-align: center;">10' Wet today 3700'-RTD good samples</p>	<p style="text-align: center;">800' # 850' # RPM 75-85</p>
<p style="text-align: center;">Mud-co data @ 3752' WT 8.6 vis 51 WL 9.6 pH 11.0 CL 3700ppm con 0 #</p>	<p style="text-align: center;">Bit data: Smith 7 7/8" P-27 218' RTD 94 3/4 hrs</p>
<p style="text-align: center;">Der Surveys: 3/4" @ 218' 1" @ 4393'</p>	<p style="text-align: center;">Pipe Strap: Strap 4382.37' Board 4383.02' Strap short .65' (no correction made)</p>

LS, con tan, dem-stip, black
scat ph-SW-9, NS

Stipple, fr, calc

LS, con tan, dem-stip, black
scat ph-SW-9, NS

LS, con tan, dem-stip, black
scat ph-SW-9, NS



Miss. Warsaw 4462 (2022)
 4460 (-2020)
 4520 (-2080)
 4519 (-2079)

DST # 3 4425-4465'
 Times: 5" - 30" - 60" - 120"
 1st open: 1/4 inch blow
 increase to 2 1/4 inches
 (no blow back)
 2nd open: 1/4 inch blow
 increase to 1 1/8 inches
 (no blow back)
 Rec: 112' WM (33% W 67% M)
 oil spec and 1' Fo on top
 123' SW (100% SW w/ oil spec)
 CL 17,000 ppm
 Total fluid 235'
 IFP 29-38# FSIP 127#
 PFP 41-115# FSIP 1190#
 BHT 121°F
 Mud-co data @ 4465'
 WT 8.9 VIS 50 WL 112
 pH 9.5 CL 4,800 ppm CCN 2#

Interc. of...
 1st open...
 2nd open...
 Rec...
 Total fluid...
 IFP...
 PFP...
 BHT...
 Mud-co data...
 WT...
 pH...

DLG...
 38...
 45...
 DLG...
 38...
 45...

LITHOLOGY

REMARKS

SAMPLE DESCRIPTIONS

DEPTH
 DRILLING TIME Minutes/Foot
 Rate of Penetration Increases

COMPANY Mull Drilling Company, Inc.
 LEASE Wiernan 4A 4 #1-19
 LOCATION 2319' FNL § 1099' PSL
 COUNTY Ness STATE Kansas

ELEVATION: KB 2440'

SECTION 19 TWP 16S. RING 22W