

DRILLING TIME AND SAMPLE LOG

OPERATOR B.M.G., Inc.
 LEASE Miller No. 1
 S. 1/4 T. 11 R. 15 W. Field Wild Cat
 LOCATION NE NE SW
 COUNTY Russell STATE Kansas

CONTRACTOR B & N Drilling Rig No. 8
 COMM. 12-15-77 COMP. 12-20-77
 MUD UP TYPE MUD
 SUR. CSG. 2 1/2" 243/245X PROD. CSG.

DRILLING TIME RECORDED
 FROM 2300 TO 2880
 SAMPLES SAVED FROM 2300 TO 2880
 SAMPLES EXAMINED FROM 2300 TO 2880
 GEOLOGICAL SUPERVISION FROM 12/18/77 TO 12/20/77
 GEOLOGIST ON WELL FROM 11 AM 12/18/77 TO 2:00 PM 12/19/77
 ELECTRIC LOG SURVEY Walex - Doherty 1000-1095C, 1000-2710
Radioactivity Log

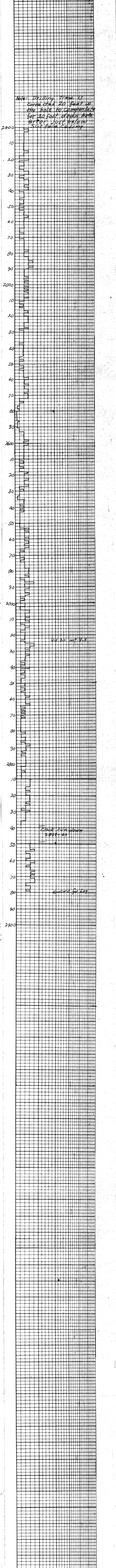
ELEVATION GR. 1902 OF 0 KB 1907
 Measurements Are From K.B. FORMATION TOPS SAMPLES

FORMATION TOPS	SAMPLES	ELECTRIC LOG
<u>Base Dakota</u>	<u>1073</u>	<u>+ 889</u>
<u>Grand Haven ls</u>	<u>1070</u>	<u>+ 887</u>
<u>Dawson ls</u>	<u>1053</u>	<u>- 608</u>
<u>Lawrence ls</u>	<u>2516</u>	<u>- 641</u>
<u>Zacharia ls</u>	<u>2593</u>	<u>- 686</u>
<u>Elwood ls</u>	<u>2653</u>	<u>- 681</u>
<u>Howard</u>	<u>2810</u>	<u>- 746</u>
<u>Tapeka (Est)</u>	<u>2942</u>	<u>- 903</u>
<u>Total Depth</u>	<u>2880</u>	<u>- 973</u>
		<u>2710**</u>

* Drilling Time
 ** Log would not go below 2710

Daily progress - 8:00 AM
 Dec. 15 - MIRT - sur hole evening tour
 Dec. 16 TD 246 WOC
 Dec. 17 Drig 1302
 Dec. 18 Drig 2156
 Dec. 19 Drig 2700 TD 2880 reached at 1:00 PM
 Dec. 20 TD 2880 - Circ. for log after two mis-runs

Note: Drilling time is corrected 20 feet up the hole to compensate for 20 foot clay hole error just below surface casing



DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
0				
10				
20				
30				
40				
50				
60				
70				
80				
90				
100				
110				
120				
130				
140				
150				
160				
170				
180				
190				
200				
210				
220				
230				
240				
2500				
2600				
2700				
2800				
2880				
2900				

DRILLING TIME - In Minutes Per Foot
 Rate of Penetration Decreases

CONTRACTOR _____ LOCATION _____
 LEASE _____ IP _____ SEC _____ TWSP _____ RNG _____
 ELEVATION _____ RTD _____ COUNTY _____ STATE _____