22-16-11W

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Geologist

July 10, 1964

GEOLOGICAL REPORT

Kenneth Rupp #1 Esfeld
NW NE NW Section 22-16S-11W
Barton County, Kansas

CONTRACTOR: Terrel Drilling Co.
CASING: 8-5/8 337 w/200 sax
COMMENCED: June 22, 1964
COMPLETED: July 2, 1964
INITIAL PRODUCTION: D & A

ELEVATION: 1917 KB
TOTAL DEPTH: 3601
ELECTRICAL SURVEY:
Gamma Ray-Neutron-Guard
Caliper-sonic

GENERAL REMARKS: This well was under geological supervision from 2750 feet to total depth. Drilling time was recorded by geolograph from surface to total depth. Samples were caught and saved from 2000 feet to total depth.

GEOLOGIGAL FORMATIONS AND DEPTHS:

FORMATION	SAMPLE TOPS	ELECTRIC LOG TOPS
CIMarron Anhydrite	743 (+1174)	748 (+1169)
Topeka	2658 (-741)	2662 (-743)
Heebner	2953 (-1036)	2957 (-1040)
Toronto	2970 (-1053)	2975 (-1053)
Brown Lime	3049 ~~3069~~ (-1132)	3053 (-1136)
Lansing-Kansas City	3070 (-1153)	3074 (-1157)
Conglomerate	3341 (-1424)	3345 (-1428)
Arbuckle	3382 (-1465)	3389 (-1472)
Reagan	3581 (-1664)	3586 (-1669)
TOTAL DEPTH	3601 (-1684)	3604 (-1687)

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ZONES OF INTEREST: Samples were examined from 2000 feet to total depth. There was abundant porosity above the Topeka but these shallow zones will not be described in this report--since no shows were noted.

TOPEKA

2734-2746 - Limestone, light buff, very fine crystalline, slightly dolomitic, slightly cherty, and vuggy. Fair porosity. NO SHOW.

2899-2902 - Limestone, Cream to light buff, slightly chalky, fine crystalline, oolitic and oolitastic. Poor porosity. Scattered spotted oil stain.

TORONTO

2970-2973 - Limestone, white, fine crystalline to chalky, Poor porosity. Trace of spotted oil stain.

LANSING-
KANSAS CITY

3160-3178 - Limestone, white to light buff, slightly chalky to fine crystalline, oolicastic. Good porosity. NO SHOW.

3244-3250 - Limestone, Cream to light buff, slightly chalky to fine crystalline, oolitic and oolicastic. Poor porosity. Scattered show of free oil.

3296-3303 - Limestone, white to light buff, gray, chalky to fine crystalline, slight fossilliferous. Poor porosity. Trace spotted oil stain.

ARBUCKLE

3382-3400 - Dolomite, light gray, fine granular becoming fine crystalline toward base. Poor porosity. Scattered show of free oil.

3400-3415 - Dolomite, white to light gray, medium to coarse crystalline with an occasional embedded large sand grain. Fair porosity. Scattered show of free oil.

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REAGAN

3481-3501 - Sandstone, subangular, fine to very coarse quartz sand, with some dolomite as cementing material. FAIR POROSITY - NO SHOW.

DRILL STEM TESTS:

DST #1
3240-3261 Open 40 minutes. Weak blow of air for three minutes and died. Recovered 10 feet of mud.
IFP - 23# FFP - 26#
IBHSIP - 1087#/30 minutes FBHSIP - 949#/30 Min.
IHH - 1818# FHH - 1603#
BOTTOM HOLE TEMPERATURE - 108°

DST #2
3386-3391 Open 45 minutes, Weak blow of air for 13 minutes and died. Recovered 5 feet of mud.
IFP - 15# FFP - 15#
IBHSIP - 54#/30 minutes FBHSIP - 54#/30 Min.
IHH - 1812# FHH - 1796#

DST #3
3388-3400 Open 35 minutes. Weak blow of air for 8 minutes and died. Recovered 35 feet of mud.
IFP - 47# FFP - 54#
IBHSIP - 1146#/30 minutes FBHSIP - 1050#/30 Min.
IHH - 1812# FHH - 1796#
BOTTOM HOLE TEMPERATURE - 108°

DST #4
3388-3415 Open 65 minutes, Weak blow of air increasing to good blow in 30 minutes and remained steady. Recovered 280 feet muddy sulphur water and 240 feet clean sulphur water.
IFP - 39# FFP - 259#
IBHSIP - 1097#/30 minutes FBHSIP - 1031#/30 Min.
IHH - 1820# FHH - 1796#
BOTTOM HOLE TEMPERATURE - 110°

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COMMENT

Kenneth Rupp #1 ESFELD was drilled in an attempt to extend ARBUCKLE production in Kraft-Prussa field. All formations were encountered structurally low to nearby producing oil wells. The evaluation of drill stem test data and electric logs indicate no commercial oil zones to be present in this test. Therefore, permission was granted to plug and abandon this test.

Respectfully submitted,
Charles I. Slagle
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CIS/cn
Attachment

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Barton County, Kansas

DEPTH	DRILLING TIME	REMARKS
	1 - foot Drilling Time from 200 feet to Total Depth	
2000-20	5-4-4-4-4-5-5-1-2-1--1-2-2-2-3-6-6-3-4-4	
40	2-2-2-4-2-3-4-4-5-5--5-4-3-3-3-3-3-2-3-3	
60	3-2-3-2-3-2-2-2-2-3--2-1-1-1-2-1-2-3-5-5	
80	5-6-5-5-5-5-5-5-6-7--6-5-5-7-6-2-1-1-1-1	Trip @ 2075
2100	1-2-2-2-2-2-2-3-2-1--2-1-2-2-2-1-2-1-2-1	
2100-20	1-2-2-1-1-2-1-2-1-1--1-1-1-1-1-2-1-1-1-1	
40	1-1-2-1-1-1-1-2-1-1--1-1-2-1-1-2-1-2-1-2	
60	2-1-2-1-1-1-1-1-1-2--1-1-1-1-2-1-1-1-1-2	
80	1-1-1-2-1-1-1-½-½-1--2-2-1-1-1-1-2-1-2-1	
2200	2-1-2-1-1-1-2-1-1-1--2-1-1-1-2-1-2-1-1-1	
2200-20	2-2-2-2-1-2-1-1-2-2--1-1-1-1-1-2-1-1-1-1	
40	1-1-1-1-1-1-1-1-1-1--1-2-2-1-1-2-1-1-1-2	
60	1-1-1-1-1-1-2-1-1-1--1-1-½-½-½-½-½-1-1	
80	1-1-1-2-1-1-2-3-2-2--1-1-1-1-1-1-1-1-1-1	
2300	1-1-1-1-1-2-2-1-1-1--2-1-1-1-2-1-1-2-3-2	
2300-20	1-1-2-1-1-2-2-1-1-1--1-1-1-1-1-1-1-1-1-1	
40	1-1-2-2-2-2-1-2-1-1--1-2-1-1-1-2-3-2-2-2	
60	1-2-2-1-1-1-1-2-2-2--1-1-1-1-1-1-1-1-1-1	
80	1-2-2-1-1-1-1-1-1-1--1-1-2-1-1-1-1-1-1-1	
2400	1-1-1-1-1-1-1-1-1-1--1-1-1-1-1-1-1-1-1-1	
2400-20	1-1-1-1-1-1-1-1-1-½--½-2-2-2-3-3-2-4-1-2	
40	2-1-2-2-2-2-2-1-1-1--2-2-2-2-1-1-½-½-1-1	
60	1-1-1-1-1-1-1-1-1-1--1-1-1-1-1-1-1-1-1-1	
80	1-1-1-1-1-1-1-1-1-1--1-1-1-1-1-1-2-1-1-1	
2500	2-3-1-2-1-2-2-2-3-2--3-2-2-2-2-2-1-2-2-1	
2500-20	1-1-1-1-2-4-3-3-3-2--1-2-1-1-1-1-1-2-2-2	
40	2-2-1-2-1-2-1-1-1-2--2-3-2-4-3-2-2-2-1-2	
60	1-2-2-1-2-1-2-1-2-1--1-2-1-2-3-2-2-4-2-1	
80	2-1-2-1-2-2-1-1-2-2--1-2-1-2-1-2-1-2-2-1	
2600	2-2-2-1-2-1-1-1-1-1--1-1-1-1-2-1-1-1-1-1	
2600-20	2-1-1-2-2-1-1-1-1-1--1-1-1-3-2-1-1-2-1-1	
40	1-1-1-3-3-3-3-2-2-2--2-4-2-1-1-2-4-2-2	
60	1-2-2-1-2-2-2-2-1-2--1-2-2-2-2-2-1-2-3-4	