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GEOLOGIC REPORT
Jerry Lutz #1 Kerns
NW NW SE 15-9S-19E, Jefferson County, Kansas

Daily Progress:

4/8 Moved on location, set 8 5/8 inch surface casing at 40' with 15 sacks regular cement, 2% CaCl.
4/19 Drilled out beneath surface casing at 8:00 a.m.
4/20 Drilled at 990' at 7:00 a.m.
4/21 Drilling at 1570' at 7:00 a.m.; RTD of 1687' reached at 3:20 p.m.; ran E-Logs.
4/22 Plugged as D & A.

Service Companies:

Drilling Contractor: Hutton Drilling Company
Drilling Mud: Trotter Supply
Cement: Halliburton
Electric Logs: Log Tech

Formation Tops (E-Logs Depths):

<u>Formations</u>	#1 Kerns GL 1057	Structural Relation to Lutz #1 McCullough SW SW SW 9-9S-19E
Lecompton	84(+ 973)	
Heebner	216(+ 841)	+25
Lansing	488(+ 569)	+17
Base Kansas City	830(+ 227)	+19
Cherokee	1058(+ 1)	+25
McLouth (Shaley)	1578(- 521)	+31
Mississippi	1623(- 575)	Does not correlate
"40 Foot Zone"	1654(- 597)	-43
Total Depth*	1672(- 615)	+ 8
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* Log Total Depth of 1672 was 6 feet short of actual TD (1678) due to fill up. Rotary Total Depth was 1687, 9 feet deeper. Sample tops were consistently 8 to 10 feet off from the Base of Kansas City to total depth.

Oil and Gas Shows (E-Log Depths):

McLouth Sandstone

1578-90 Sandstone, white, medium to coarse grained, sub rounded, poorly sorted, mostly loose coarse grains, tight in top few feet, very good porosity throughout balance, good odor, saturated with tar, trace of free oil in tighter upper portion, 60 unit hot wire gas kick which recirculated for several hours.

E-Log Calculations:

<u>Depth</u>	<u>Porosity</u>	<u>Resistivity</u>	<u>Water Saturation</u>
1590-92	20	15	49
1592-94	21	12	53
1594-96	25	11	47
1596-98	24	11	49
1598-1600	23	10	53

There was no "gas effect" on the Neutron-Density Log and only a trace of free oil indicating the main hydrocarbon contained in the sandstone is immovable tar.

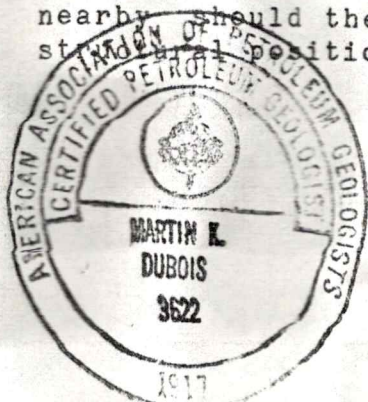
Recommendation/Summary:

Due to lack of commercial hydrocarbon shows, the #1 Kern well was plugged and abandoned as recommended.

The drilling of the well confirmed the presence of the surface structure mapped, and the structure held up down to a depth of 1400' but fell off substantially below that depth with respect to all well control within a few miles. The loss of structure is mostly due to erosion of the Mississippi surface where more than 50 feet of section was absent when compared to the #1 McCullough well located 1.8 miles to the northwest.

Though the McLouth Sandstone was separated from the Mississippi by more than 40 feet of shale, it appears to be correlative with that which is productive in the McLouth West Field found 3 miles to the Southeast where it lies directly on top of the Mississippi.

Despite being correlative and approximately the same age, it is felt that the sand encountered in the #1 Kerns well is part of a completely separate reservoir system. The shows encountered may indicate commercial oil or gas production can be established nearby. Should the reservoir be encountered in a more favorable structural position.



Respectfully Submitted,

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