

F.W. MORGAN
GEOLOGIST

305 S. WASHINGTON
ELDORADO, KANSAS 67042

Aug. 4, 1985

(316) 263-0134
ELDORADO (316) 321-1463

Watson Petroleum, Inc.
403 Hillcrest
Wichita, Kansas, 67208

Re: No. 1 Shaffer
Sec. 14-29S-3E
Butler County, Ks.

Gentlemen:

Enclosed is my geological log on this well. I can find no evidence of structure, and the well seems to be about flat with others drilled in this Section. However, there were shows of oil and/or gas as follows:

Topeka: 1606-1611 - show of gas as recorded on the gas detector.

Toronto: 1636-1650 - show of gas as recorded on the gas detector.
this is not all porous, but there are porous
breaks in the interval.

Kansas City: 2256-2280 - in this porous interval there were shows of oil in the upper 8 or 10 feet. The porosity is fine, vugular, irregular, to pinpoint.

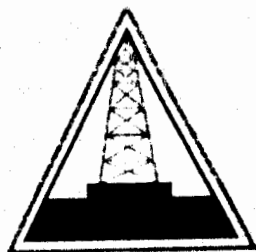
Simpson Sand: 2968 - 2970 - Sand, white to clear, poor porosity with some odor, free oil, flouresence. In the dry samples the stain was dark but even.

The depths and intervals given are subject to log correlation and correction.

Sincerely,


F. W. Morgan





Watson Petroleum, Inc.

403 NORTH HILLCREST

• WICHITA, KANSAS 67208

• (316) 682-7131

July 18, 1985

White & Ellis Drilling Co.
Box 448
El Dorado, Kansas 67042

RE: Shaffer #1, 1320 FNL & 330 FEL
NW/4 Sec. 14-29S-3E, Butler
County, Kansas
Operator - Watson Petroleum, Inc.
License #5587
Drilling Permit 15-015-22,767

GEOLOGICAL INSTRUCTIONS:

1. Drill and set 200 ft. of 8 5/8" new surface pipe furnished by you and cement with United Cementing Co., El Dorado, Kansas.
2. Call Davis Mud, Great Bend/Wichita, for delivery of drilling mud and gas detector which should be operating from below surface to total depth.
3. Keep 1 foot drilling time and 10 ft. dry samples from 1500 ft. to 2200 ft., then 5 ft. dry samples from 2200 ft., to total depth. If odor is noticed in samples, or if gas detector alarm sounds with a corresponding break in drilling time, stop and circulate for a 20 min., 40 min. sample, keeping it wet under water in a cup, and sack each circulating sample dry, while call is made to operator for instructions.
4. Mud up around 1500 ft. for catching samples, and we will condition hole for any drill stem test or for logging.
5. Take straight hole test every 500 ft. and at total depth.
6. If any loss circulation problems encountered, call operator.
7. As much as possible, use one road into location to prevent excessive damages.
8. Keep record of any water hauling on report sheet.
9. Phone morning reports, each morning from first day of rig move until total depth is reached, both to operator and geologist at below numbers:

L.A. Watson, Watson Pet., Inc. 682-7131 off., 686-0568 res.
Frank Morgan, 321-1463.

TIGHT HOLE: NO INFORMATION TO BE GIVEN TO ANY PERSONS OF FORMATIONS OR TOTAL DEPTH, EXCEPT WATSON & MORGAN. Thank you.

Yours very truly,

L.A. Watson *by dks*
Watson Petroleum, Inc. by
L.A. Watson, President

LAW/dks