



Operator Name Rains & Williamson Oil Co., Inc. Lease Name ZERR Well # 1

Sec. 17 Twp. 12 S Rge. 30 East West County Gove

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates of gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken [X] Yes [ ] No
Samples Sent to Geological Survey [X] Yes [ ] No
Cores Taken [ ] Yes [X] No

Formation Description [X] Log [ ] Sample

DST #1 3899' - 3978'. 30 30 30 30. Rec. 60' mud. IFP 32# - 32#, FFP 54# - 75#. ISIP 937#, FSIP 894#. Temp. 115°.
DST #2 4005' - 4020'. 30 30 30 30. Rec. 10' mud. IFP 21# - 21#, FFP 21# - 10#. ISIP 1023#, FSIP 991#. Temp. 110°.
DST #3 4070' - 4209'. 30 30 30 30. Rec. 70' mud with a few specks of oil in tool. IFP 32# - 32#, FFP 54# - 64#. ISIP 1184#, FSIP 1151#. Temp. 117°.
DST #4 4494' - 4522'. 30 30 30 30. Rec. 60' mud. IFP 32# - 32#, FFP 32# - 43#. ISIP 679#, FSIP 421#. Temp. 120°.

Table with 3 columns: Name, Top, Bottom. Rows include Anhydrite, B/Anhydrite, Heebner, Lansing, Stark Shale, B/KC, Marmaton, Pawnee, Ft. Scott, Cherokee Sh., Johnson Zone, B. Penn Congl., Mississippi, L.T.D.

\*\*Adjust all Drill Stem Test intervals 6' up hole to correlate to Electric Log.

CASING RECORD, PERFORATION RECORD, TUBING RECORD, Date of First Production, Producing Method, Estimated Production Per 24 Hours. Includes fields for Purpose of String, Size Hole, Size Casing, Weight, Setting Depth, Type of Cement, #Sacks Used, Type and Percent Additives, Shots Per Foot, Acid, Fracture, Shot, Cement Squeeze Record, Depth, Size, Set At, Packer at, Liner Run, Date of First Production, Producing Method, Estimated Production Per 24 Hours.

METHOD OF COMPLETION Production Interval

Disposition of gas: [ ] Vented [ ] Sold [ ] Used on Lease [ ] Open Hole [ ] Perforation [ ] Other (Specify) [ ] Dually Completed [ ] Commingled

DRILLER'S LOG

COMPANY: Rains & Williamson Oil Co., Inc. SEC. 17 T. 12S R. 30W  
WELL NAME: ZERR #1 LOC. 60' W. & 20' S. of  
RIG NO. #2 COUNTY: Gove  
TOTAL DEPTH 4580 ELEVATION 2873 GL 2883 KB  
COMMENCED: 8-22-87 COMPLETED: 8-30-87  
CONTRACTOR: Rains & Williamson Oil Co., Inc.

CASING RECORD:

SURFACE: 8 5/8" @ 289' w/195 sx. 60-40 poz., 2% gel, 3% cc.

PRODUCTION: D&A

LOG

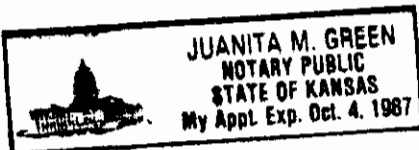
(Figures Indicate Bottom of Formations)

Shells and Shale	290
Shale and Shells	750
Sand and Shale	1519
Shells and Shale	1710
Shale	2057
Sand	2150
Shale and Shells	2230
Shale	2610
Shale and Lime	3530
Lime and Shale	4020
Shale and Lime	4040
Lime and Shale	4580
Rotary Total Depth	4580

SEP 04 1987

STATE OF KANSAS )  
COUNTY OF SEDGWICK ) SS:

I, Wilson Rains, President of Rains & Williamson Oil Co., Inc.  
upon oath state that the above and foregoing is a true and correct copy of the log of the  
ZERR #1 well.



KANSAS GEOLOGICAL SURVEY  
WICHTIA BRANCH

Wilson Rains  
WILSON RAINS

Subscribed and sworn to before me this 2nd day of September, 1987.

My Appointment Expires: SEP 3 1987  
10-4-87

Juanita M. Green  
Juanita M. Green - Notary Public