

**james r. craig**  
PETROLEUM CONSULTANT

ORIGINAL

**GEOLOGICAL REPORT**

JUN 28 1996

OPERATOR: PETROLEUM RESOURCES LTD.  
P.O. BOX 467  
NEWKIRK, OKLA 74647

WELL SOEKEN # 1  
API # 15-009-24585

LOCATION: 1825' FNL, 1075' FWL  
SECTION 30 T 20S R 11W  
BARTON COUNTY, KANSAS

CONTRACTOR: DUKE DRILLING RIG 2  
WICHITA, KANSAS

DATE SPUD: OCTOBER 14, 1994

DATE COMPLETE: OCTOBER 19, 1994

SURFACE CASING: 265' 8 5/8" CASING CEMENTED  
WITH 200 SACKS 60/40 POZMIX

PRODUCTION CASING: NONE

ZONES DST: ARBUCKLE

ELECTRIC LOGS: WIRE-TECH GUARD, DUAL  
INDUCTION & COMP DEN/NEUTRON

STATUS: DRY & ABANDONED

October 22, 1994

Petroleum Resources Ltd.  
P. O. Box 467  
Newkirk, Okla. 74647

RE: Soeken # 1  
1825' FNL/ 1075FWL  
Sec 30 T 20.s R 11.w  
Barton County, Kansas

Dear Sirs;

The above captioned well was under my geological supervision from a depth of 3000' to a total depth of 3480'. Drilling time and samples were saved from 3000' to TD. All samples were checked with the black light and microscope for shows of hydrocarbons. Good shows of oil were observed in the Arbuckle Formation at a depth of 3382', however drill stem testing and electric log condemned this zone, due to lack of permeability. The subject well would not be commercial and was plugged October 19, 1994.

**FORMATION TOPS**  
**E-LOG**  
**ELEVATION: 1826 KB**

( All measurements from Kelly Bushing)

	DEPTH	SUB SEA
Anhydrite	586	+1240
Heebner	3002	- 1176
Brown Lime	3134	-1308
Lansing	3148	-1322
Base Kansas City	3374	-1548
Arbuckle	3382	-1556
RTD	3480	-1654

# **SAMPLE DESCRIPTIONS**

## **Pertinent Zones**

### **LANSING/KANSAS CITY 3148 (-1322)**

**3164-3167**      **Limestone.** White to Gray, dense, with some oomoldic barren porosity. **WEAK SHOW**  
E-Log 7-8% porosity, 71-84% Salt Water

**3317-3321**      **Limestone.** Cream to Tan dense crystalline fossiliferous, pin point porosity. **NO SHOW**  
E-Log 7% porosity, 71% Salt Water

### **ARBUCKLE DOLOMITE 3382 (-1556)**

**3382-3391**      **Dolomite.** Tan to Brown, granular, oolitic to oomoldic, Fair odor, light brown stain, 30% yellow fluorsence, fair show free oil, instant blue cut.  
E-Log 18% porosity, 62# Salt Water

**DST # 1 3383/3391** IF: Weak Blow throught (1/2"-3/4")  
FF: Weak surface Blow, died in 16". Recovered 15' Slightly oil cut mud. (2% oil 98% mud) IF 41#/30" ICIP 520#/60" FF 41#/30" FCIP 62#/60"

**3391-3405**      **Dolomite.** Light Tan to Dark Brown, granular vuggy, oomoldic, fractures, Light oil stain, some asphaltic, good odor, good show free 40% yellow fluorsence, slow blue cut.  
E-Log 13% porosity, 60% Salt Water

**DST # 2 3391/3405** IF: Weak Blow throught (1/4" to surface) FF: NO Blow, recovered 5' slightly oil cut mud (1%oil 99% mud) IF 31#/30", ICIP 62# 60" FF 31#/10".

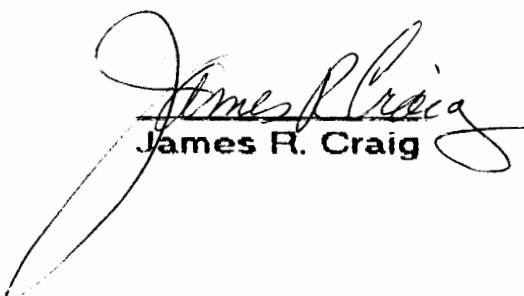
## DAILY DRILLING PROGRESS

10-14-94 Move in , rig up set 265' 8 5/8" surface casing with  
160 sacks 60/40 pozmix. plug down @ 4:45 AM  
10-15-94 Drilling @ 1857', Jet @ 1554.  
10-16-94 Drilling @ 2665' Jet @ 2456 & 2641  
10-17-94 Drilling @ 3212' Displaced @ 2796  
10-18-94 Depth 3405. Run DST # 1  
10-19-94 RTD 3480', Run DST # 2 & logged. plug hole

## MUD CHECKS

Date	Depth	Wt.	Vis.	Fil.	Chlorides
10-17-94	2995'	8.81	39	12.8	2500
10-18-94	3391	9.51	63	8.8	2000
10-19-94	3480	9.41	45	12.8	5000

Due to the negative results of the Drill Stem Test's and the Electric Log analysis ,the subject well was plugged on 10-19-94.

  
James R. Craig