

State Geological Survey
WICHITA, BRANCH

24-22-16W
RECEIVED
STATE CORPORATION COMMISSION

FEB 27 1974

GEOLOGICAL REPORT

CONSERVATION DIVISION
Wichita, Kansas

#1 BARSTOW
NW NW SW Sec. 24
T 22S R 16W
Pawnee County, Kansas

Company	: Hershberger Explorations, Inc.	Elevation	: 2007 K.B.
Contractor	: H-30	R.T.D.	: 4000
Pool	: Zook Gas Area	Production	: Gas
Commenced	: 11-29-72	Completed	: 12-10-72

Surface casing: 8 5/8" at 200 ft. with 150 sax

Formation testing: Sun, Arrow

Samples were examined from 3570 - 90, and 5 foot samples were examined from 3900 to total depth. One foot drilling time was recorded from 3400 to total depth. An Electra Radiation - Guard - Caliper log was run in the open hole.

* Two straps of the drill pipe confirmed that the hole is actually 15 ft. deeper than indicated by the geolograph. Total depth recorded by the electric log was 4009 feet, as compared to the rotary total depth of 4000 ft. Electric log and sample formation tops differ correspondingly.

* FORMATION TOPS

<u>Sample</u>		<u>Electric Log</u>
Anhydrite	964 (+1043)	Not shown on field print
Heebner	3451 (-1444)	3462 (-1455)
Toronto	3468 (-1461)	3478 (-1471)
Brown Lime	3563 (-1556)	3576 (-1569)
Lansing - K. C.	3571 (-1564)	3584 (-1577)
Conglomerate	3906 (-1899)	3916 (-1909)
Viola	3945 (-1938)	3956 (-1949)
Simpson	Not picked	3978 (-1971)
Total Depth	4000 (-1993)	4009 (-2002)

POROSITY AND SHOWS OF OIL/GAS

Lansing - Kansas City

3577 - 81 (D.T.)

3589 - 93 (E. Log) Cream to light gray partly chalkey limestone and gray to tan, dense, fossiliferous limestone. Poor visible porosity. No show.

This zone was tested, due to the apparent high structural position of the well, and indications of hydrocarbons from the same zone in nearby wells.

24-22-1644

Drill stem test #1 (Sun)

3568 - 85 Open 60", Shut in 30", Open 60", Shut in 30". Fair blow. Recovered 300' muddy salt water. ICIP 1263# IFP 76# FFP 161# FCIP 1162#.

Conglomerate

3921 - 25 (D.T.) Vari-colored to light gray unweathered to partly
3932 - 37 (E. Log) tripolitic chert. Scattered good staining.
3925 - 31 (D.T.) Chert as previously described. Gray, tan, and vari-
3937 - 43 (E. Log) colored. Scattered staining.
3931 - 35 (D.T.) Bone to light gray unweathered to partly tripolitic
3945 - 49 (E. Log) chert. Good staining.

Drill stem test #2 (Arrow)

3873 - 3950 Open 30", Shut in 30", Open 45", Shut in 30". Strong blow, gas to surface in 22 min. Gauged 34,690 in 30 min. After second opening, gauged 49,000 in 10 min. and stabilized. Recovered 150 ft. mud. ICIP 938# IFP 105# FFP 105# FCIP 938#.

Viola

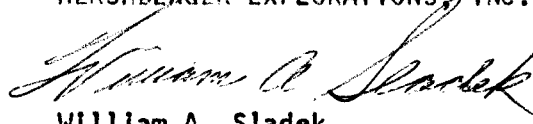
3960 - 64 (D.T.) Light gray, tan, and bone unweathered to partly tripolitic
3973 - 77 (E. Log) chert. Very scattered dark staining. Trace of free oil.

Drill stem test #3 (Arrow)

3957 - 70 Open 30", Shut in 30", Open 30", Shut in 30". Weak blow for 30". Recovered 65 ft. mud. ICIP 352# FCIP 362#
No flow pressures -- tool partially plugged.

R.T.D. 4000 ft. Log T.D. 4909. 4½" production casing set one ft. off bottom with 125 sax salt saturated posmix cement, gilsonite added.

HERSHBERGER EXPLORATIONS, INC.


William A. Sladek
Geologist at Wellsite

WAS:ms