G E O L O G I C A L R E P O R T

Wayne Lebsack
Petroleum Geologist
603 S. Douglas
Lyons, Kansas 67554

Steve E. McClain
Geologist
Box 8731
Pratt, Kansas 67124

Lebsack Oil Production, Inc.
Foster 2-18
380' E of the Sw Nw
Sec. 18 21S-34W
Finney County, Kansas

Contractor ..... Abercrombie Drilling, Inc., Rig 5

Date Commenced ..... December 26, 1990 at 3:30pm

Date Rotary Completed ..... January 4, 1990 at noon

Total Depth ..... RTD = 4900', LTD = 4896'

Casing Record ..... Surface - 8 5/8" set at 271' KB
..... Cemented with 220 sx.

Elevations ..... Ground Level = 3056'
..... Kelly Bushing = 3061'
..... All Measurements taken from KB.

Drilling Time Logged ..... 2500' to 2900' and
..... 3700' to TD.

Samples Logged ..... 3870' to 4900' (10' samples)
..... Stored at Lebsack Oil Production

Open Hole Logs ..... HLS: Compensated Density/Neutron
..... Log, Dual Induction Log,
..... Computer Analyzed Log

Gas Detector ..... Payne Logging, Preston Payne
..... Detector logging 3809' to TD.

Mud Company ..... Service Mud, Inc. (Chemical Mud)

Testing ..... Western Testing (Colby, KS)

GEOLOGICAL FORMATION TOPS

Formation	Drilling Time Depth	Electric Log Depth (Thick)	Sub-Sea (E-Log) Depth
Anhydrite Top	Couldn't	2127'	+934
Anhydrite Base	define	2170'	+891
Heebner Shale	3899'	3897'	-836
Lansing	3950'	3948'	-887
Stark Shale	4344'	4342'	-1281
B/KC	4430'	4428'	-1367
Marmaton Top	4466'	4461'	-1400
Cherokee Shale	4596'	4596'	-1535
Morrow Shale	4807'	4806'	-1745
Morrow Sand	4850'	4852'	-1791
Mississippian	4872'	4878'	-1817
RTD/LTD	4900'	4896'	-1835

INTERVALS CONTAINING HYDROCARBONS

Lansing (4222'- 4228') (6' thick) ..... (Oil)

Samples from this limestone were light gray to brown and medium to fine crystalline with some clear calcite crystals. Some samples had some slight poor oolitic development with poor oolitic porosity. A slight show of oil was logged with some gas bubbles. No odor was noted. No Hot Wire kicks were logged.

Log analysis calculates the following averages:

Porosity ..... = .15
Deep Induction (ohms) .. = 13 ohm-m
Water Saturation ..... = .41 *Using Rw=.05

Cherokee Ls (4604'- 4606') (2' thick) ..... (Oil)

This interval contained a limestone that was tan/gray, medium crystalline with fair intercrystalline porosity. Some pinpoint porosity was observed. A fair show of oil was logged when the samples were broken. Dry samples had fair staining. No gas kicks from this limestone were observed.

Log analysis calculates the following averages:

Porosity ..... = .05
Deep Induction (ohms) .. = 15 ohm-m
Water Saturation ..... = 1.00 *Using Rw=.07

INTERVALS CONTAINING HYDROCARBONS

Morrow Sandstone #1 (4852'- 4858') (6' thick) ..... (Oil)
#2 (4867'- 4871') (4' thick) ..... (Oil)

These intervals contained a very friable quartz arenite sandstone, that was very fine grained, well rounded with good sorting. Very few sand clusters were observed. Mostly loose sand grains were observed in the tray. I only found one sample that was consolidated with a slight show of oil. A more noticeable calcite cement was logged in the #2 sand. Porosity could not be observed in sand #1, but the friable nature of the sand hints towards a good porosity. The loose Morrow sand grains that were recovered in DST #1 would not react with HCL. A 51 unit gas kick was recorded on the hot wire detector. These intervals were tested by DST #1 (see below).

Log analysis calculates the following averages:

	Sand #1	Sand #2	
Porosity	= .18	.17	
Deep Induction (ohms) ..	= 2.2	2.4	ohm-m
Water Saturation	= .99	1.00	

*Using Rw=.07 from DST #1.

Drill Stem Test No. 1

Interval: (4795' to 4870')
Formations tested: Morrow Sandstone #1 and #2

Period	Time	Pressure Data	Description
IHSP		2276	
IFP	30 min	40 - 50	A weak blow in the bucket increased to 8".
ISIP	30 min	876	Still building slightly.
FFP	30 min	121 - 355	Off the bottom of the bucket in 20 minutes.
FSIP	60 min	856	Still building slightly.
FHSP		2276	

Recovered: 107' of Mud with a few oil specks (<1% oil),
644' of Water 32,000 chlorides Rw=.07 (HLS)
5' of Morrow sand above the tool. BHT=118 deg.

FOSTER 2-18

LOG STRUCTURAL COMPARISON

Formations	Foster 2-18 380'E Sw Nw 18 21S-34W Finney Co. D&A	Christabelle #1 C Sw Nw 18 21S-34W Finney Co. P&A	Foster 1-18 810'FNL,600'FWL NW/4,18 21S-34W Finney County Morrow Well
Anhydrite Top	+934	----	+943
Anhydrite Base	+891	+891	+890
Heebner Shale	-836	-833	-827
Lansing Top	-887	-883	-877
Stark Shale	-1281	-1275	-1273
B/KC	-1367	-1363	-1361
Marmaton Top	-1400	-1395	-1393
Cherokee Shale	-1535	-1531	-1527
Morrow Shale	-1745	-1740	-1741
Morrow Sand	-1791	-1780	-1775
Mississippian	-1817	-1803	-1807
Total Depth	-1835	-2008	-1866

SUMMARY

Due to the negative results of DST #1 that tested the Morrow sandstones and the low structural position, the decision was made to plug and abandon the Foster 2-18. The shows in the Lansing and Cherokee appear noncommercial.

Submitted by,

Wayne Lebsack
Petroleum Geologist

Steve E. McClain
Geologist