

WAYNE LEBSACK  
PETROLEUM GEOLOGIST  
603 S. Douglas  
LYONS, KS. 67554

**Geological Report**

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Lebsack Oil Production  
Box 489  
Hays, Kansas 67601

VanDoren Tr. #2-14  
Sec. 14-T21s-R35w  
Kearney Co. Ks.

Contractor	Abercrombie RTD
Date Spudded	September 19 1997
Date Rotary Completed	September 27 1997
Total Depth	4970'
Casing	Surface 8 1/8" @ 258'
Elevations	Ground Level 3084' Zero & K.B. 3089'
Samples	2400' to 2800' 3400' to T.D.
Logs	Gas Detector, Halliburton Micro, Dual Induction & Density-Neutron

# Geological Formation Tops

Formation	Drilling Depth	Electric-Log Depth	Sub-Sea Depth
Heebner	3932	3925	-836
Lansing	3984	3971	-882
Base of K.C.	4450	4447	-1358
Marmaton	4486	4474	-1385
Cherokee	4603	4603	-1514
Morrow Shale	4808	4806	-1717
Morrow Sand	4865	4863	-1774
Mississippi	4874	4873	-1784
T.D.	4970	4968	-1879

INTERVALS OF INTEREST

Marmaton Group

- No Shows

Cherokee

4672' -82'

- White fine crystalline (granular) limestone, w/trace of light oil staining. Log porosity - 9%

D.S.T. No. 2

4750-79

(Straddle Test)

- Tool was open 30/min. closed 60/min.  
Very weak blow-died in 13/min.  
Recovered 5' mud  
Flow pressure - 20/20 psi  
Final Flow Pressure 1464 psi

Morrow Sand

4863-69'

clear, very fine grained well sorted sand, with trace of light oil stain.  
Log porosity 15%

D.S.T. No. 1

4790-4880'

Tool was open 30/min. closed 60/min.  
Very weak blow, died in 20/min.  
Recovered 30 feet, slightly oil cut mud, w/good show of oil in tool.  
Flow pressure - 30/34 psi  
Final Flow Pressure 501 & building psi

Mississippi

- No Shows

## SUMMARY

### Structural Comparisons

FORMATION	Van Doren 2-14 This well	Van Doren 1-14 NE/Offset Morrow well	Scott 4-14 2/locations NE Morrow Well
Lansing	-882	-892	-866
Cherokee	-1514	-1525	-1514
Morrow Sand	-1774	-1781	-1777
Mississippi	-1784	-1803	-1794

The samples & electric logs indicated a thin oil pay interval in the Morrow. The drill stem test indicated, a low permeable pay zone, and probably a marginal oil well. The structural attitude and electric-logs indicate a sand pinchout, immediately South of the Van Doren #2-14; therefore, future development drilling will be to the North and West, depending on structural mapping - based on seismic data.

The Van Doren #2-14 was plugged and abandoned as a dry hole.

Submitted by

Wayne Lebsack  
Petroleum geologist

# LEBSACK OIL PRODUCTION, INC.

BOX 489

HAYS, KANSAS 67601

(913) 625-5444

<b>DRILLING CONTRACTOR:</b> Abercrombie RTD, Inc. 150 N. Main, Suite #801 Wichita, KS 67202-1383  <b>Rig #4</b> Walt Brown, Tool Pusher  316-793-4884 Home;  Rig #4 Phone #'s:  (316) 792-9906 Doghouse	<b>LOCATION</b> <b>VANDOREN TRUST 2-14</b> <b>C SE/4</b> <b>Sec. 14 21s-35w</b> <b>Kearny County, Kansas</b> <b>Field: Christabelle</b>  <b>API#</b> <b>Elevations: GL = 3084', KB = 3089'</b>  <b>Geologist: Wayne Lebsack</b>	<b>DIRECTIONS TO LOCATION:</b>     <b>NOTE!!!</b> Stay on Right-of-Way
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!!!! Tight Hole !!!

The following are the geological requirements for the referenced well:

**SAMPLES:** From: 2400' to 2900' - 20' Dry samples are requested.  
2900' to TD - 10' Dry samples are requested. Samples should be washed thoroughly, dried and tied in 100' bundles. All bags should be properly labeled.

**SPECIAL EQUIPMENT:** A Gas/Logging Detector will be used on this well. Have it on location and operating by 2400'. Mark all connections on both charts from 2400' to RTD. Clean out the extractor breather hole every 4 hours, and mark all light plant checks on the graph(s).

**DRILLING TIME:** Keep a written record of 1' drilling time from 2400' to TD. Complete headings, date each sheet, note all mud checks, and note any roughness in drilling on the drilling time sheet. Make sure the date and the (am/pm) is written on the header of each drilling time sheet. Use 1/2 minutes!

**MUD:** Have mud in condition for good sample returns by approximately 3700'. We want an 10 or less water loss before entering the Marmaton at 4400'.

**CHECK DEPTH:** A straight hole check should be run on the first DST. The drill pipe should also be strapped at this time. An additional straight hole test should be run at TD.

**CALL DEPTH:** Call the geologist when you have reached a depth of 3900'.

**STOP POINT:** Stop and circulate for samples if the geologist has not been on location by 4800'

**ANTICIPATED TOPS:**

2150' Anhydrite	Topeka	3970' Lansing	4880' Morrow SS
2200' B/Anhydrite	3930' Heebner Sh	4428' BKC	4905' Miss.
		4596' Cherokee	5000' Est. RTD

**SERVICE COMPANIES:**

Cement .....	Testing .....	Gas Det. ....	MBC (316) 873-2953
Pipe .....	Mud .....	Logging .....	

**PHONE NUMBERS:**

1 <sup>st</sup> call: Wayne Lebsack	(316) 257-3825 (Home)	(316) 938-2396 (Work)	Cellular (785) 224-3712
2 <sup>nd</sup> call: Steve McClain	(316) 672-5417 (Home)	(316) 672-9508 (Work)	Cellular (316) 546-3253