

**KANSAS GEOLOGICAL SOCIETY**  
**KANSAS WELL LOG BUREAU - KANSAS WELL SAMPLE BUREAU**  
**KANSAS GEOLOGICAL SOCIETY BUILDING**  
**508 EAST MURDOCK - WICHITA, KANSAS**

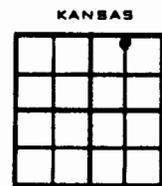
7-1-33W

COMPANY **EMPIRE DRILLING**  
 FARM **Palmer** NO. **4**

SEC. **7** T. **1** R. **33W**  
 LOC. **N½ N½ NE**  
**1320' FEL & 440' FNL NE**

TOTAL DEPTH **4196'**  
 COMM. **8-19-68** COMP. **9-3-68**  
 SHOT OR TREATED  
 CONTRACTOR **Leben Drilling**  
 ISSUED **11-9-68**

COUNTY **Rawlins**



CASING  
 20 10  
 15 8 5/8" 237' cem w/ 160 sx  
 12 6  
 13 5 ½" 4194' cem w/ 125 sx

ELEVATION **3028' KB**

PRODUCTION **PMP 99 BOED, NW**  
**LKC 4110-16**

FIGURES INDICATE BOTTOM OF FORMATIONS

0	1650	Shale, Sand
1650	2556	Shale, Shells
2556	2859	Shale
2859	2897	Anhydrite
2897	3101	Red Bed, Shale
3101	3775	Lime, Shale
3775	4195	Lime
	<u>4195</u>	<u>RTD Set @ 5½"</u>
	4196	Total Depth

Ran 12 Jts. 8 5/8" used casing 229.53 set @ 237' with 160 sacks  
 Common 2% c.c.

I, Leslie Kite, do hereby certify that the above and foregoing is  
 a true and correct copy of the log of the Palmer #4 Well, located  
 NE NW NE of Section 7, Township 1 South, Range 33 West, Rawlins  
 County, Kansas, as reflected by the records of Leben Drilling, Inc.

*Leslie Kite*

Leslie Kite

TOPS: LOG

Anhydrite	2854
Base Anhydrite	2890
Topeka	3709
Deer Creek	3761
Oread	3826
Base Leavenworth	3873
Douglas sand	3878
Lansing Kansas	
City	3911
Sandy Zone	3933
Base Kansas City	4172
LTD	4195
RTD	4196