

# KIM B. SHOEMAKER

CONSULTING GEOLOGIST

318-684-9709 \* WICHITA, KS

## GEOLOGIST'S REPORT

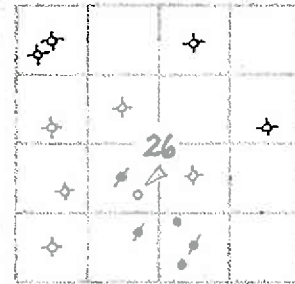
DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.  
 LEASE \*1-26 SCHREIBER  
 FIELD MINER  
 LOCATION 1650' FSL & 2310' FWL  
 SEC 26 TWP 17s RGE 24w  
 COUNTY NESS STATE KANSAS  
 CONTRACTOR L. D. DRILLING, INC.  
 SPUD 10-3-16 COMP 10-11-16  
 RTD 4585 LTD 4587  
 MUD UP 3404 TYPE MUD CHEMICAL

ELEVATIONS  
 KB 2458  
 DF \_\_\_\_\_  
 GL 2453  
 Measurements Are All From 2458 KB  
 CASING SURFACE 8 5/8" @ 356'  
 PRODUCTION 5 1/2" @  
 ELECTRICAL SURVEYS  
 DUAL IND, DENS.-N. MICRO

SAMPLES SAVED FROM 3700 TO 4585  
 DRILLING TIME KEPT FROM 3500 TO 4585  
 SAMPLES EXAMINED FROM 3700 TO 4585  
 GEOLOGICAL SUPERVISION FROM 4000 TO 4585  
 GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	1752+706	1758+700
B/ANH.	1788+670	1791+667
HEEBNER	3826-1368	3827-1369
LANSING	3868-1410	3868-1410
B/KC	4164-1706	4162-1704
RAWNEE	4280-1822	4280-1822
FORT SCOTT	4369-1911	4369-1911
CHEROKEE	4392-1934	4393-1935
MISSISSIPPI DOL.	4472-2014	4473-2015



REMARKS

10-3-16, SPUD  
 10-4 @ 353'  
 10-5 @ 1852'  
 10-6 @ 2874'  
 10-7 @ 3545'  
 10-8 @ 4045'  
 10-9 @ 4270'  
 10-10 @ 4414'  
 10-11 @ 4585'

API: 15-135-25920

### LEGEND

- Dolomite
- Chert
- Cellulose
- Limestone
- Core sh
- Shale
- Sandstone
- Salt
- Anhydrite

DRILLING TIME IN MINUTES  
 Rate of Penetration Increases

5" 10" 15" 20" 25"

DEPTH  
 1700

LITHOLOGY

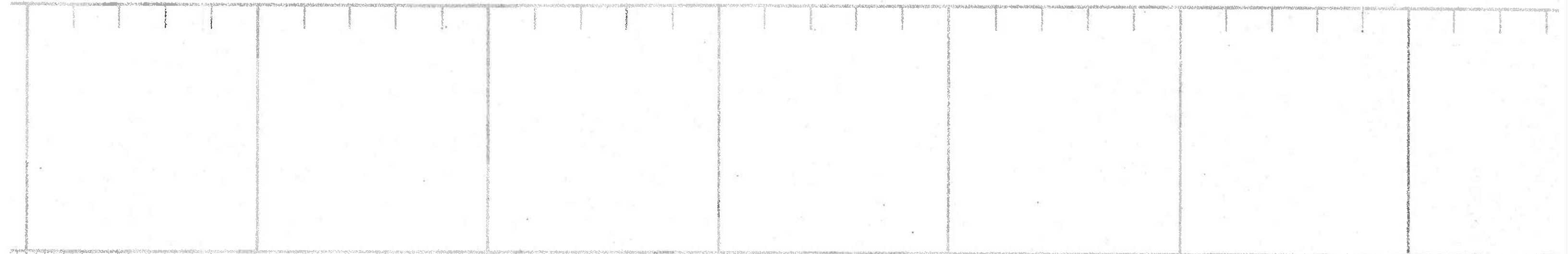
REMARKS

SAMPLE DESCRIPTIONS

ANHYDRITE 1758+700

B/ANH 1791+667





Samples are tagged

ES. Mt. North St. Pass V. S. 0.15

Sh. 4.4

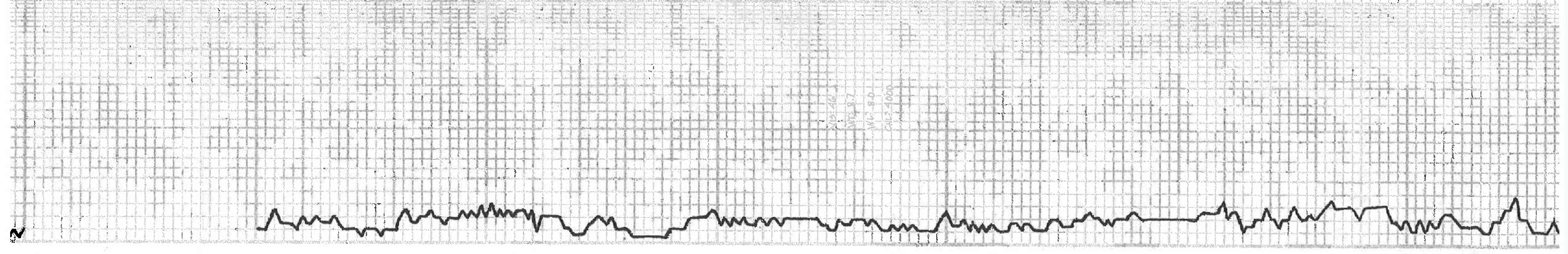
ES. Ridge V. S. 0.15

Sh. 0.6

Sh. 4

ES. Foot East St. Pass

ES. Mt. North St. Pass



1800

3500

3600

3700





3800

3900

4000

4100

TORONTO

HEERNER 3827-1369

Sh. clay. G. ss. to red. Y. Fe. in. S. w. Sh. Dolomitic

Sh. clay. G.

ss. wt. Sh. Foss. Sil. A.

Sh. clay. G. LANSING 3868-1410

ss. wt. Y. Sil. Foss. Y. Sil. A.

A. wt.

ss. G. Y. Sil. Foss. Sil. G.

ss. G. Y. D. M.

Sh. clay. G.

ss. wt. Y. Sil. Foss. Y. Sil. Ch. G.

Sh. G.

ss. wt. Sh. Foss. Sil. A.

Sh. clay.

ss. Foss. wt. Y. Sil. Foss.

Sh. G.

ss. wt. Y. Sil. Foss. Sil. Ch. G. A. wt. Ch. G.

ss. G. Y. Sil. A.

ss. G. Y. Sil. A.

ss. Foss. Sil. Foss. Sil. A.

Sh. G.

ss. Foss. Y. Sil. Foss. Ch. G.

Sh. clay.

ss. G. Y.

ss. wt. Y. Sil. Foss. Y. Sil. A.

ss. wt. Ch. G.

Sh. G.

A. wt.

ss. Foss. wt. Y. Sil. Foss. Y. Sil. Ch. G.

ss. wt. Ch. G.

Sh. G.

ss. G. Y. Sil. Foss.

MS 91



CM 6500

LS 1/2" Blk. Drm

Sh. Red. L. Blk.

Sh. Blk.

LS Tan. Sil. A. Drm

**BKIC 4162-1704**

Sh. Red. Blk.

LS Tan. Sil. A. Drm

LS Blk. Sil. A. Drm

Sh. Red. Blk.

LS Tan. Sil. A. Drm

Sh. Blk. Sil. A.

LS Blk. Sil. A. Drm

LS Tan. Sil. A. Drm

Sh. Blk.

LS Tan. Sil. A. Drm

LS Blk. Sil. A.

**PAWNEE 4280-1822**

LS Blk. Sil. A.

LS Tan. Sil. A. Drm

Sh. Blk. Sil. A.

LS Blk. Sil. A.

LS Tan. Sil. A. Drm

Sh. Blk. Sil. A.

Sh. Blk. Sil. A.

**FORT SCOTT 4369-1911**

LS Tan. Sil. A. Drm

LS Blk. Sil. A. Drm

LS Tan. Sil. A. Drm

LS Blk. Sil. A. Drm

**CHEROKEE 4393-1935**

Sh. Blk. Sil. A.

Sh. Blk. Sil. A.

Sh. Blk. Sil. A.

LS Tan. Sil. A. Drm

Sh. Blk. Sil. A.

LS Blk. Sil. A.

Sh. Blk. Sil. A.

LS Tan. Sil. A. Drm

LS Blk. Sil. A.

LS Tan. Sil. A. Drm

4200

4300

4400

B.T. TIP

Vis: 48

WT: 9.1

WL: 8.8

Cal: 6800

DST (1)

DST (2)

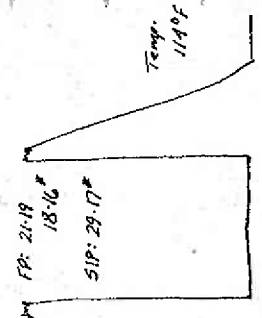
**DST (1) 4348-4419**

1st Open: 1/2" Blow

2nd Open: No Blow

30.30.30.30

Rec. 2' Mud



Tool Sample: 100% Mud

**DST (2) 4412-4480**

1st Open: Bottom bucket 27 min.

2nd Open: " " " "

3rd Open: " " " "



30-45-45-60

32"

60"

Rec. 155' G.I.P.  
36 CO 35 Grav. 0.60°F  
157' 100cc M (4.7, 6, 70, 70, 100) 0.14 245  
207' 1147

180000  
A. W. L. 1/4" Blue Sandstone

A. Yellowish sh. Blue Sandstone No flow  
No oil

Sh. Blue yellow Saly.

MISSISSIPPI Dol. 4173-2016  
Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

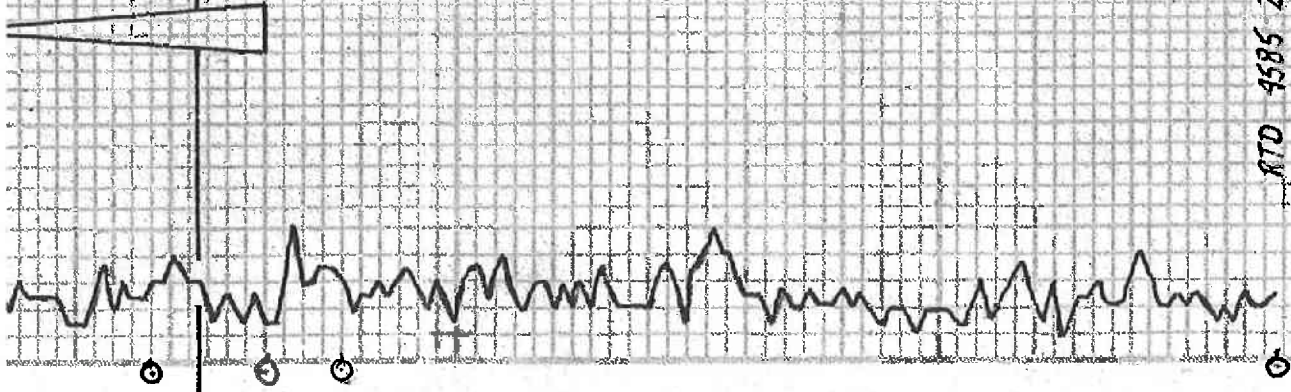
Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

Dol. 1/4" to 1/2" N. East. S. West. Blue sandstone  
No flow No oil

4500

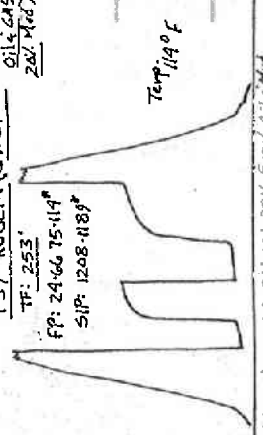
WB-52  
WF-84  
WL-88  
CAL-4600



4500

RTD 4585 2127

4600



Temp 140°F

Temp 140°F  
157' 100cc M (4.7, 6, 70, 70, 100) 0.14 245  
207' 1147