

# KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 \* WICHITA, KS

## GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.

LEASE # 2-31 DODGE

FIELD FINN

LOCATION 620' FSL & 680' FWL

SEC 31 TWSP 176 RGE 13W

COUNTY BARTON STATE KANSAS

CONTRACTOR PETROMARK DRILLING RIG 2

SPUD 11-19-14 COMP 11-20-14

RTD 3360 LTD \_\_\_\_\_

MUD UP 2640 TYPE MUD CHEMICAL

ELEVATIONS

KB 1837

DF \_\_\_\_\_

GL 1832

Measurements Are All From 1837 KB

CASING SURFACE 8 5/8" @ 800'

PRODUCTION \_\_\_\_\_

ELECTRICAL SURVEYS  
None

SAMPLES SAVED FROM 2700 TO 3360

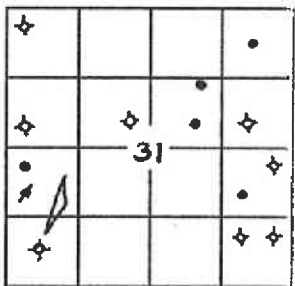
DRILLING TIME KEPT FROM 2700 TO 3360

SAMPLES EXAMINED FROM 2700 TO 3360

GEOLOGICAL SUPERVISION FROM 2900 TO 3360

GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE		784 + 1053
B/ANH.		806 + 1031
TOPEKA		2779 - 942
HEEBNER		3025 - 1188
BROWN LIME		3100 - 1263
LANSING		3109 - 1272
B/KC		3311 - 1474
ARBUCKLE		3335 - 1498
RTD		3360 - 1523



API: 15-009-26053

REMARKS

11-14-14 5200  
11-15 @ 805'  
11-16 @ 1365'  
11-17 @ 2315'  
11-18 @ 2975'  
11-19 @ 3347'  
11-20 @ 3360'

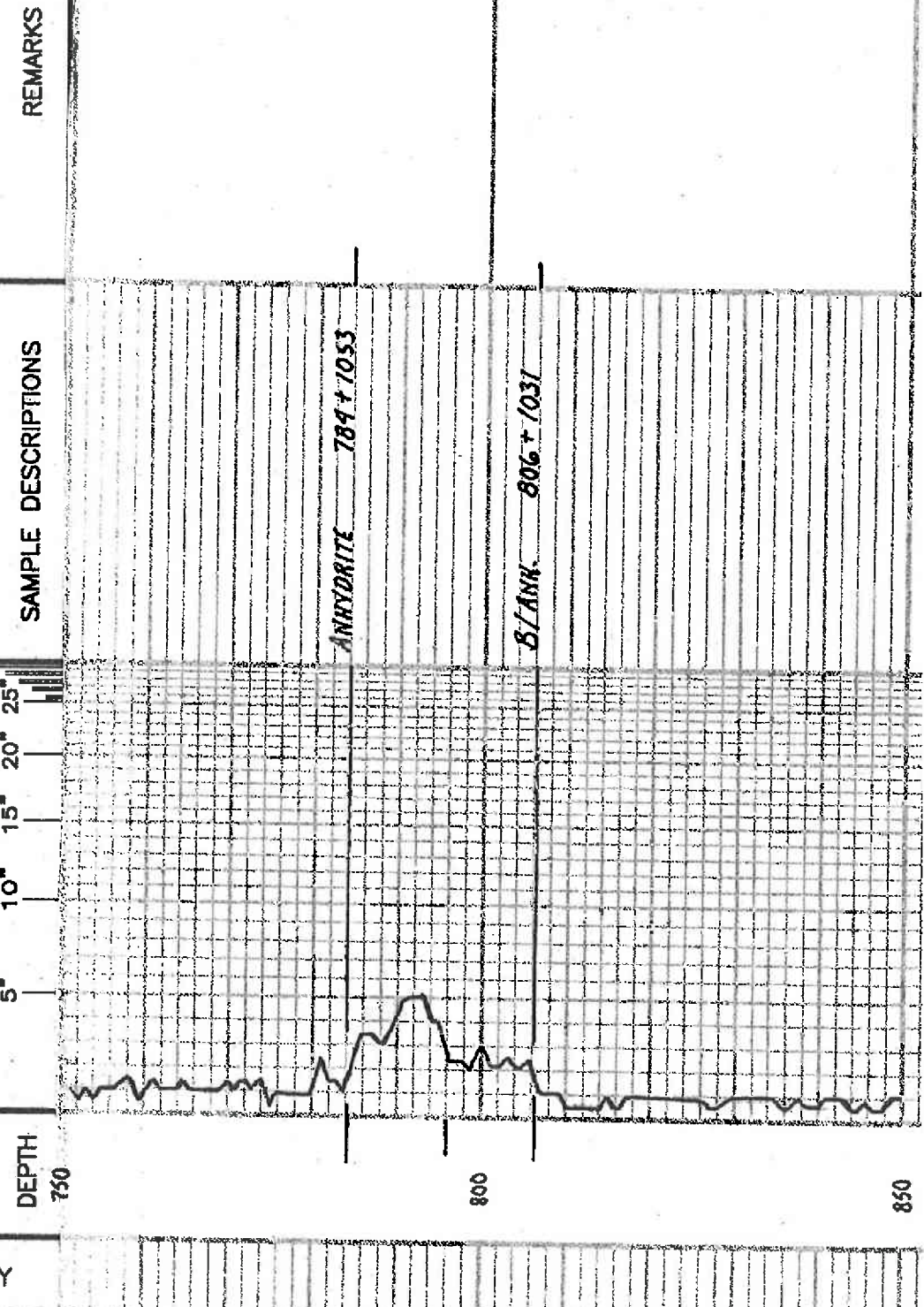
### LEGEND

-  Dolomite
-  Chert
-  Ool. Lime
-  Limestone
-  Carb sh
-  Shale
-  Sandstone
-  Salt
-  Anhydrite

DRILLING TIME IN MINUTES PER FOOT  
Rate of Penetration Increases

DEPTH  
750 800 850

LITHOLOGY



SHOE01-06



850

2700

2800

2900

Samples are logged

Sh. 614

TOPEKA 2779-912

ls. Topt. Sh. Foss. Si. Chly.

ls. 614. Sh. Foss. w/ DECP. Foss.

ls. w/ ool. chly.

ls. To. Sh. Foss. Si. A

ls. Gy. Dai.

ls. Gy. YSI. Foss.

sh. alk

ls. To. Gy. Si. Foss.

sh. 614

ls. To. YSI. Co. SRA

sh. 614

ls. To. YSI. Foss. YSI. A. YSI. Chly.

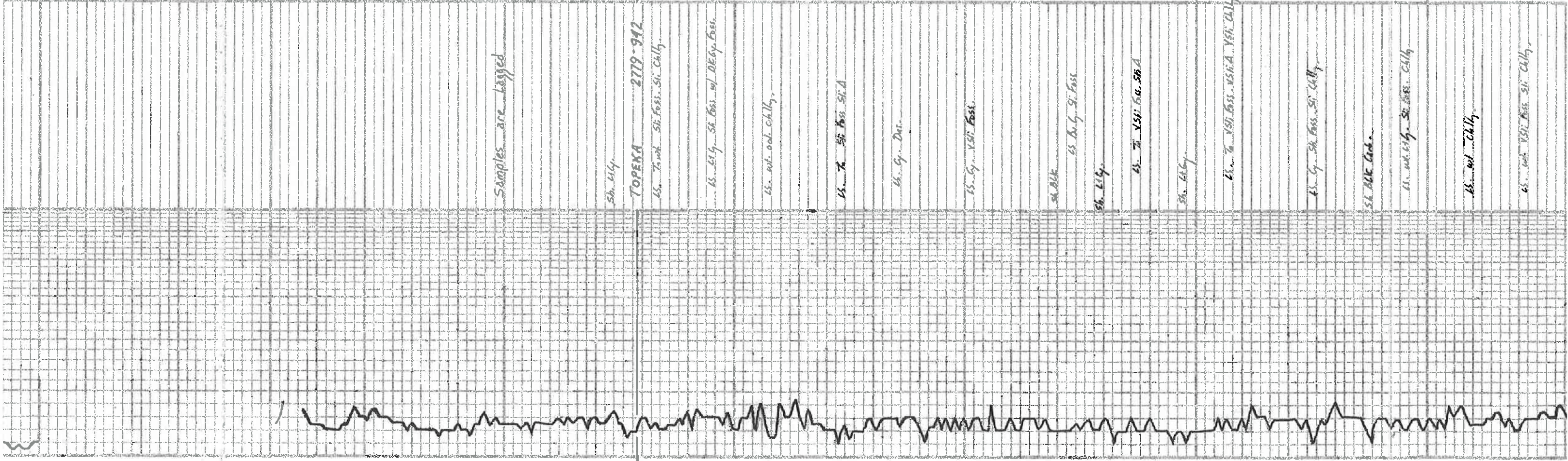
ls. Gy. Sh. Foss. Si. Chly.

sh. alk. Co.

ls. w/ 614. Sh. Foss. Chly.

ls. w/ ... Chly.

ls. w/ YSI. Foss. Si. Chly.





ls. to wt. wt. sil. cherty,  
ls. wt. cherty,  
ls. sil. y. v. sh. a.

HEEBNER 3025-1188

W. 50 W. 189  
W. 80 CHE 9600

TORONTO

DOUGLAS

sh. sil.

ls. wt. v. sh. sil. sh. a.

sh. sil.

sh. sil. sh. y. sil. y. sh. y.

sh. sil. sh. y. sil. y.

BROWN LIME 3100-1263

ls. sil. v. sh. sil.

LANSING 3109-1272

ls. wt. sil. sh. a. B. west of LANSING Bldg  
Dullerow Feeder

ls. wt. sil. sh. sil. cherty.

ls. wt. sil. sh. a. of y. fac.

ls. to y. sh. sil. sh. a.

sh. sil.

ls. y. sh. sil. sh. a.

ls. wt. sil. sh. sil. sh. a. v. sh. cherty. P. top of  
R. Sand Sil. v. sh. sil. No flow No other

ls. wt. cherty.

ls. sand. sil. sh. a. of sil. sh. a.

ls. wt. sil. sh. a. sil. sh. a. sh. a. sh. a.

ls. wt. cherty.

ls. sil. sh. a.

sh. sil.

ls. to wt. sil. sh. sil. sh. a.

sh. sil.

ls. to wt. sil. sh. sil. sh. a.

sh. sil.

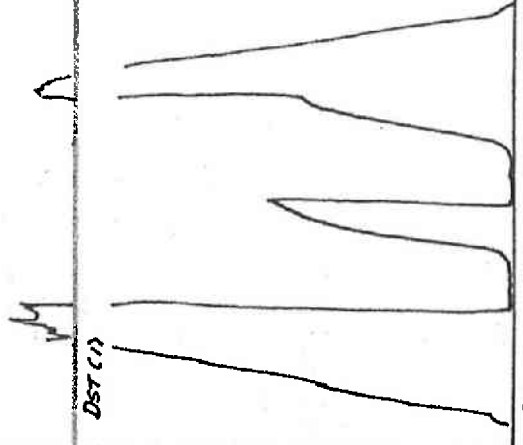
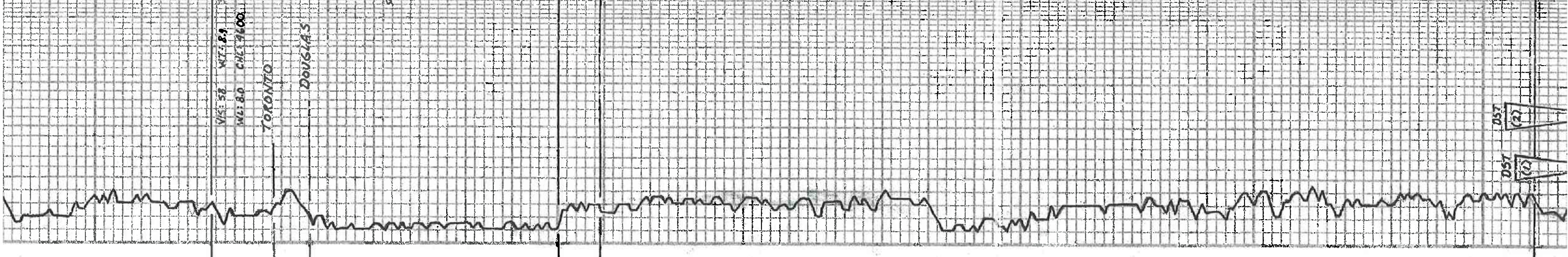
ls. wt. sil. sh. sil. cherty.

ls. to wt. sil. sh. sil. sh. a.

sh. sil.

ls. wt. cherty. sh. sil. sh. a. sh. a.

sh. sil. 3311-1479



DST (1) 3307-3347

1st OPEN: Blow built to 114"

2nd OPEN: Surf. Blow

30.30-30-30

Rec. 2' CO 35.6m @ 60°F  
26' 50cm (57.011 85.1m)



1<sup>st</sup> OPEN: Blow built to 1 1/4"  
 2<sup>nd</sup> OPEN: Surf. Blow  
 30-30-30-30  
 Rec. 2' CO 35 Grav. @ 60°F  
 26' SOCM (57.011 987.1M)  
 TF: 28'  
 FP: 9-20 21-27" Temp. 100°F  
 SIP: 849-732 #  
 Tool Sample: (227.011 787.1M)

DST (2) 3305-3359  
 1<sup>st</sup> OPEN: Blow built to 3 1/2"  
 2<sup>nd</sup> OPEN: " " 2 1/4"  
 30-45-45-60  
 Rec. 113' VSOCM (27.011 987.1M)  
 FP: 12-37 40-46"  
 SIP: 857-794 #  
 Temp. 98°F  
 Tool Sample: (57.011 987.1M)

DST (3) 3350-3360  
 1<sup>st</sup> OPEN: Blow built to 5 1/2"  
 2<sup>nd</sup> OPEN: " " " "  
 30-45-45-60  
 Rec. 138' MW (87.1M)  
 FP: 12-45 47-75"  
 SIP: 1071-1086 #  
 Temp. 103°F  
 CW: 20.000  
 RW: 40.587  
 Tool Sample: (11.011 592.6 401.60)

SH. BL 3311-1474  
 SH. BL A Multistage Washed  
 SH. BL BIVE ARBUCKLE 3335-1998  
 Dst. with 100% N2O, 10% CO2, 10% CH4, 10% H2S, 10% H2O  
 P. Int. Flow 100000

Dst. with 100% N2O, 10% CO2, 10% CH4, 10% H2S, 10% H2O  
 Dst. with 100% N2O, 10% CO2, 10% CH4, 10% H2S, 10% H2O  
 Dst. with 100% N2O, 10% CO2, 10% CH4, 10% H2S, 10% H2O

