

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

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GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY <u>L. D. DRILLING, INC.</u>	ELEVATIONS
LEASE <u># 1-23 SHEILA</u>	KB <u>1891</u>
FIELD <u>WILDCAT</u>	DF _____
LOCATION <u>1372' FNL ; 316' FWL</u>	GL <u>1886</u>
SEC <u>23</u> TWSP <u>20S</u> RGE <u>14W</u>	Measurements Are All From <u>1891 KB</u>
COUNTY <u>BARTON</u> STATE <u>KANSAS</u>	
CONTRACTOR <u>PETROMARK DRILLING RIG 2</u>	CASING
SPUD <u>10-5-03</u> COMP <u>10-11-13</u>	SURFACE <u>8 5/8" @ 851'</u>
RTD <u>3691</u> LTD <u>3694</u>	PRODUCTION <u>4 1/2" @</u>
MUD UP <u>2841</u> TYPE MUD <u>CHEMICAL</u>	ELECTRICAL SURVEYS
	DUAL IND., DENS.-N., MICRO

SAMPLES SAVED FROM <u>3000</u> TO <u>3691</u>
DRILLING TIME KEPT FROM <u>2700</u> TO <u>3691</u>
SAMPLES EXAMINED FROM <u>3000</u> TO <u>3691</u>
GEOLOGICAL SUPERVISION FROM <u>3200</u> TO <u>3639</u>
GEOLOGIST ON WELL <u>KIM B. SHOEMAKER</u>

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	815+1076	809+1082
TOPEKA	2819-928	2819-928
HEEBNER	3162-1271	3160-1269
BROWN LIME	3266-1375	3265-1374
LANSING	3275-1384	3276-1385
B/KC	3490-1599	3489-1598
ARBUCKLE	3624-1733	3620-1729



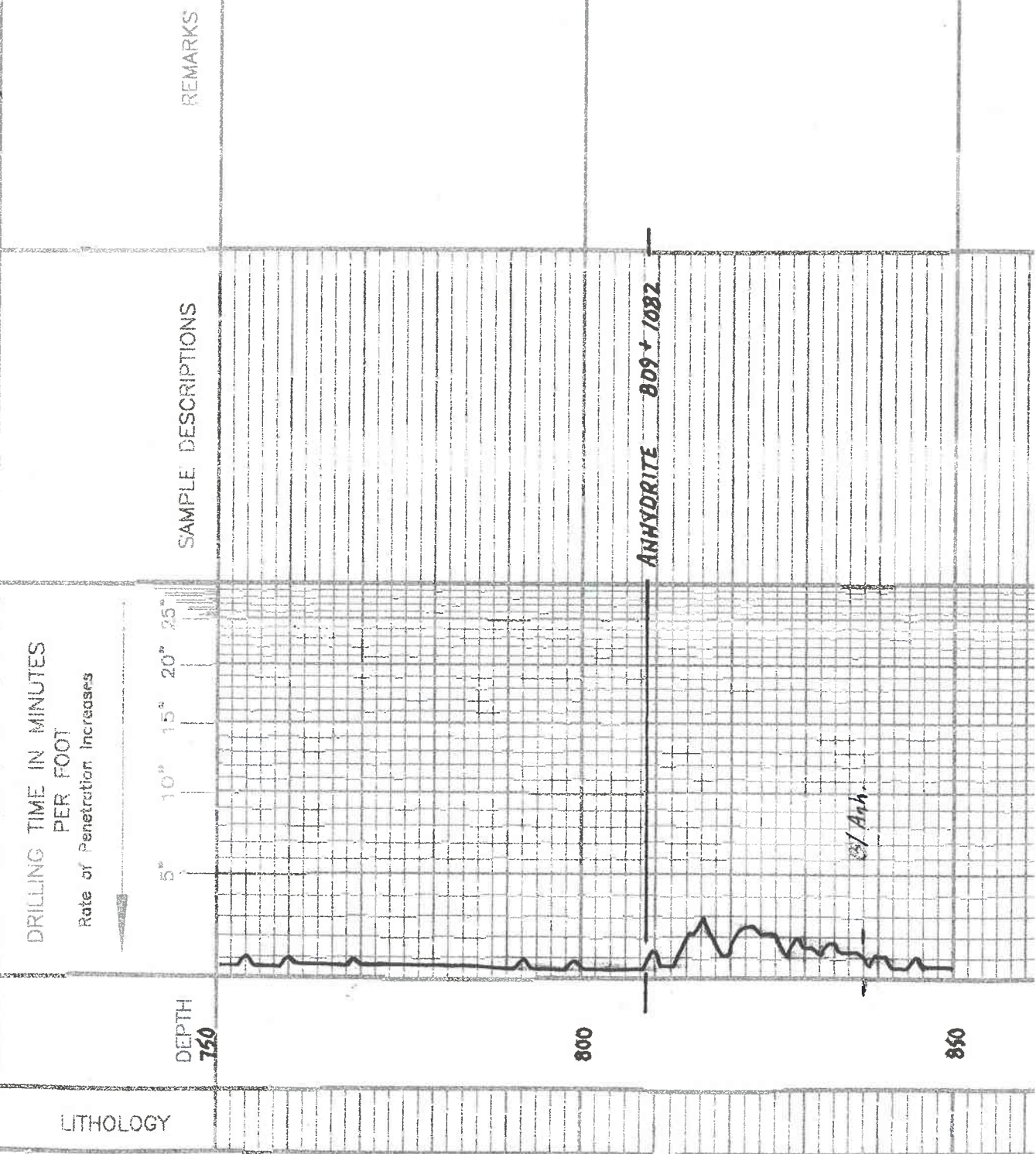
REMARKS

APL 15-009-25885

10-5-13 SPUD
10-6 @ 856'
10-7 @ 1830'
10-8 @ 2841'
10-9 @ 3355'
10-10 @ 3468'
10-11 @ 3691'

LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Carb sh
- Limestone
- Coil Lime
- Chert
- Dolomite



SHOE01-06

2700

2800

2900

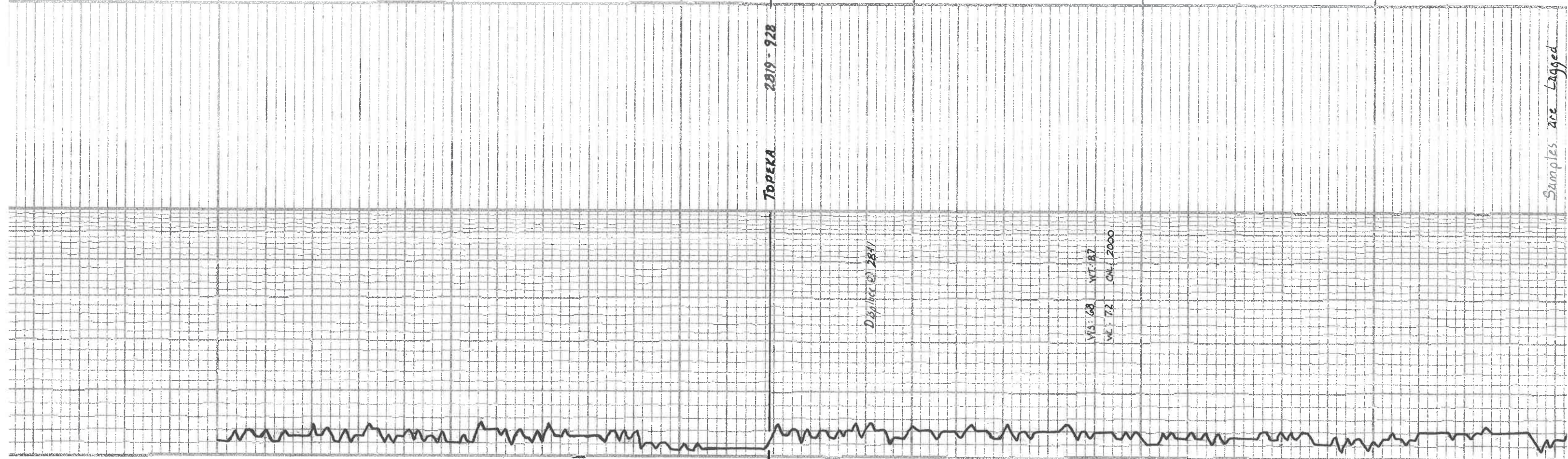
TOPEKA 2819 - 928

Displaced @ 2831'

WT 68 WT 87

WL 72 CAL 2000

Samples are Lagged



3000

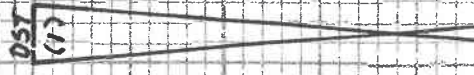
3100

3100

3300

Sh. DKy. Blu.
 Sh. Lloyon Silky
 Ls. wt. Sil. Foss. Sil. Chalky
 Sh. G. Silky
 Ls. L. G. V. Sil. Foss.
 Ls. L. G. To. V. Sil. Foss. Sil. Chalky
 Sh. DKy. Blu.
 Ls. wt. Foss. Sil. Chalky
 Ls. To. Sil. Foss. Sil. A
 Ls. wt. L. G. ool. Sil. ool. V. Sil. Chalky
 Ls. wt. V. Sil. Foss. Sil. Chalky
 Ls. wt. V. Sil. Foss. Chalky
 HEEBNER 3160-1269
 Sh. Bl. Carb.
 Sh. H. G.
 Ls. To. wt. V. Sil. Foss. Sil. A
 Ls. wt. V. Sil. Foss. Sil. Chalky
 Sh. L. G. Silky Silky
 Sh. H. G.
 Ls. wt. L. G. V. Sil. Foss.
 BROWN LIME 3265-1374
 Ls. Bl. DE. A. V. Sil. Foss.
 Sh. G. G.
 LANSING 3276-1385
 Ls. wt. L. G. V. Sil. Foss.
 Ls. To. wt. Sil. Foss. Sil. A. P. H. P. P.
 Ls. Bl. Sil. Sil. Tr. G. S. S. S. P. F. P. P. P.
 Fr. Ool.
 Ls. G. Bl. Sil. Foss.
 Ls. To. wt. Sil. Foss. P. K. P. P.
 Bl. Sil. Sil. Sil. V. Sil. Foss. Dull. Flour. F. Ool.
 Ls. G. Foss. Sil. A. Sil. Chalky. Dac.
 L. A. Sil. Sil. Sil. Sil. Sil. A. P. H. P. P.
 L. A. Sil. Sil. Sil. S. S. P. S. S. P. Dull. Flour. V. F. Ool.

TORONTO
 DOUGLAS



DST (1) 3280-3355

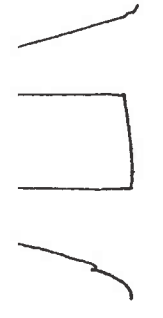
150 PEN: Surface Blow T/Out
 30.30

Rec. 5' Mod

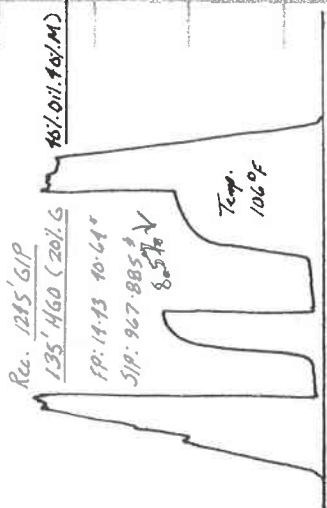
SP: 9.13
 SIP: 54"

VEE BAR

Temp. 99°F



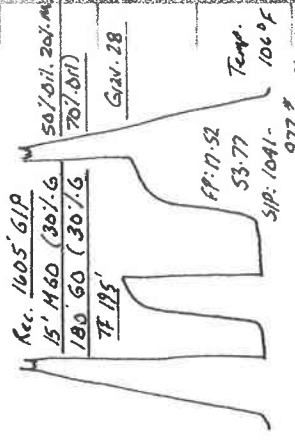
DST (2) 3390-3125
 1st OPEN: Bottom bucket 7 min. SS: None
 2nd OPEN: " " " " " " SS: "



Rec. 1285' GIP
 135' H60 (20% G)
 FP: 14-13 40-64°
 SIP: 967-885
 8.57%

DST (3) 3420-3195
 1st OPEN: Bottom bucket 4 min. SS: 3"
 2nd OPEN: " " " " " " SS: 8"

30-45-45-60



Rec. 1605' GIP
 15' H60 (20% G)
 180' G0 (30% G)
 7F 195'
 Grav. 28
 FP: 17-52
 53-77
 SIP: 1041-977
 6.17%

LS. Blk. Foss. vol. Dan

LS. wt. Sil. Foss. Sil. A. P. h. p
 1st. Sp. Sil. Sil. Foss. Dull Blue

LS. wt. Chlg. sh. Chlg.

LS. Tan. Lt. Chlg. ool. Sil. Ool. Sil. Chlg.

LS. wt. Chlg.

LS. Tan. Lt. Chlg. Dal. sh. Ool.

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LS. Tan. Lt. Chlg. Dal. sh. Ool.

3350

60

70

3400

30

3500

3600

ARBuckle 3620-1729

Del. Tan. Lt. Foss. Sil. Ool.

Del. Tan. Lt. Foss. Sil. Ool.

Del. Tan. Lt. Foss. Sil. Ool.

Del. Tan. Lt. Foss. Sil. Ool.

Del. Tan. Lt. Foss. Sil. Ool.

Pol. Ta Gy. M&Xln

A. wt.

Pol. Ta wt M&Xln

Pol. Ta wt M&Xln

RTD 36.91/1800

3700

