

# KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 \* WICHITA, KS

## GEOLOGIST'S REPORT

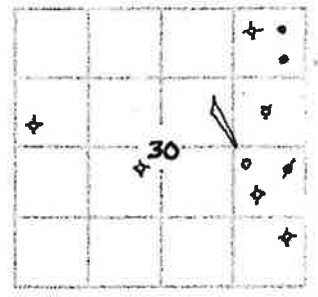
DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.  
 LEASE # 1-30 COUSE  
 FIELD ORDWAY WEST  
 LOCATION 2280' FSL 1/4 1200' FEL  
 SEC 30 TWP 10s RGE 18W  
 COUNTY ROOKS STATE KANSAS  
 CONTRACTOR L. D. DRILLING, INC.  
 SPEC 3-28-18 COMP 4-30-18  
 RTD 3725 LTD 3726  
 MUD UP 2721 TYPE MUD CHEMICAL

ELEVATIONS  
 KB 2055  
 DF \_\_\_\_\_  
 GL 2050  
 Measurements Are All  
 From 2055 KB  
 CASING  
 SURFACE 8 5/8" @ 256'  
 PRODUCTION 5 1/2" @  
 ELECTRICAL SURVEYS  
 DUAL IND., DENS-N, MICRO

SAMPLES SAVED FROM 2900 TO 3725  
 DRILLING TIME KEPT FROM 2900 TO 3725  
 SAMPLES EXAMINED FROM 2900 TO 3725  
 GEOLOGICAL SUPERVISION FROM 3000 TO 3725  
 GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	1416 + 639	1416 + 639
B/ANK.	1443 + 612	1446 + 609
TOPEKA	3032 - 977	3032 - 977
HEEBNER	3250 - 1195	3251 - 1196
LANSING	3290 - 1235	3291 - 1236
B/KC	3520 - 1465	3518 - 1463
ARBUCKLE	3652 - 1597	3651 - 1596



REMARKS

API: 15-163-24356

3-28-18 SPUD  
 3-29 @ 258'  
 3-30 @ 1568'  
 3-31 @ 2370 \* Breakdown, Drawworks.

4-23 @ 2440'  
 4-24 @ 2800'  
 4-25 @ 3230'  
 4-26 @ 3282'  
 4-27 @ 3340'  
 4-28 @ 3495'

LEGEND

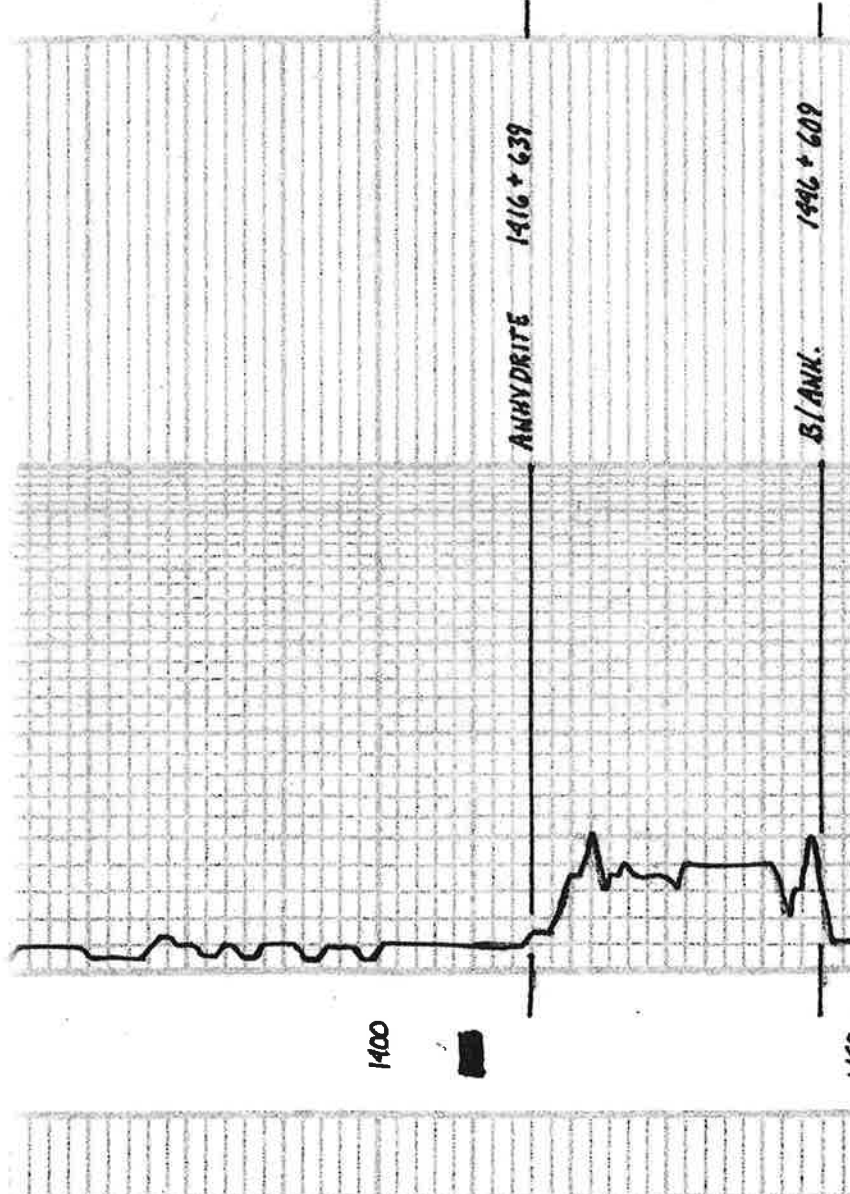
- Anhydrite
- Salt
- Sandstone
- Shale
- Carb an
- Limestone
- Col. Linn.
- Chert
- Detonite



LITHOLOGY

REMARKS

SAMPLE DESCRIPTIONS



B/ANK. 1496 + 609

1450

1500

2900

3000

3100

Mud V @ 2855  
VIS: 60  
WT: 8.8  
WC: 6.0  
CIV: 2100

Samples are Lagged

Sh. Lt. G.

Ls. Tan. wt. Sil. Foss.

Sb. G. Silty.

Ls. G. Lt. G. V. Sil. Foss.

Sh. Sb. Lt. G.

Sh. Lt. G.

Ls. Tan. G. Sil. Foss.

Sh. Lt. G.

Sh. Lt. Blue G. Silty. Sb. G.

Sh. Lt. G. Silty.

Ls. Tan. Lt. G. Sil. Foss.

Sh. G. Lt. G. Sil. Silty.

TOPEKA 3032 - 977

Ls. Sb. G. V. Sil. Foss.

Ls. Tan. wt. Sil. Foss. Sil. A.

Ls. wt. Foss. vs. Ch. G.

Ls. B. Sil. Foss.  
Sh. Red. G.

Ls. Tan. Sil. Foss. Sil. Ch. G.

Ls. Lt. G. V. Sil. Foss.

Ls. Tan. wt. Foss. Ch. G.



LS. wt. Sl. Foss. Chilly.  
 Sh. Blue.  
 LS. Blue. Sl. Foss.  
 LS. Fowl. Sl. Foss. V.S. Chilly.

Sh. G.  
 LS. Chilly. V.S. Foss.  
 Sh. Blue

LS. wt. Sl. Foss. Sl. Chilly. F. Vis. d  
 DE. Bl. Sp. Sh. V.S. Foss. No. Duber. (3210)

LS. Chilly. V.S. Chilly.

LS. Fowl. Foss. F. Vis. d. L. D. M. H. L. R. F. M. S. H. S. H. (3230-30)  
 S.S. F. V.S. F. Dull Floor.

LS. wt. Sl. Foss. Sl. Chilly.

LS. wt. V.S. Foss. V.S. Chilly.

LS. G. Sl. Foss.

**HERNER 3251-1196**

Sh. Blue Carb.  
 Sh. Blue Carb.

LS. Fowl. Foss. Sl. Foss. V.S. Chilly. F. Vis. d  
 L. Bl. Sp. H. S. H. S. H. V.S. F. Dull Floor. No. Duber. (3270, 82)

LS. wt. V.S. Foss. V.S. Chilly.

Sh. Rd.

**LANSING 3291-1236**

LS. wt. L. G. V.S. Foss. Sl. A

LS. Fowl. Sl. Foss. Sl. A. D. S.

LS. L. G. L. V.S. Foss. V.S. A

Sh. Rd.  
 A. Orange Br.

LS. Fowl. Foss. Sl. Foss. F. Vis. d. F. L. H. S. H. S. H. V.S. F. Dull Floor. No. Duber. (3350, 52)

LS. V.S. Foss. Chilly.

Sh. Rd.

LS. Fowl. Foss. Sl. Foss. F. Vis. d. F. L. H. S. H. S. H. V.S. F. Dull Floor. No. Duber. (3350, 55)

LS. Fowl. Foss. L. D. M. H. L. R. F. M. S. H. S. H. V.S. F. Dull Floor. No. Duber. (3350, 55)

Sh. D. G.

LS. Bl. G. Sl. Foss.

LS. Fowl. Sl. A

Sh. by L. Blue

LS. Fowl. Foss. Sl. Foss. Sl. A. F. Vis. d  
 Fowl. Sl. Foss. Sl. A. F. Vis. d. S. H. S. H. V.S. F. Dull Floor. No. Duber. (3380, 50)

LS. wt. Sl. Foss. Chilly.

A. Blue.

LS. wt. Sl. Chilly.

LS. L. G. Dull.

Sh. D. G.  
 Sh. L. G.

LS. wt. Sl. Foss. Sl. A. No. Vis. d  
 L. Bl. Sp. H. S. H. V.S. F. Dull Floor. No. Duber. (3440)

LS. Bl. Sl. Foss. V.S. A

Sh. Blue Carb.

DST

3200

3300

3400

**DST (1) 3205-3230**

1<sup>st</sup> OPEN: Blow built to 6 1/4"

30.45.45-60

Rec. 15' CO 31.7 Grav. 60°F

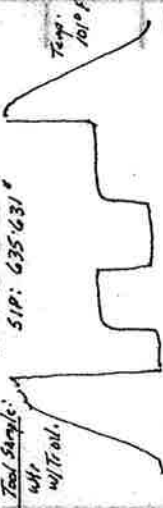
30' SHAW (47' OH 57' W 2' M)

65' SHAW w/Trail (93' W 7' M)

TR: 110'

FP: 1130 32.55°

SIP: 635-631°



**DST (2) 3250-3282**

1<sup>st</sup> OPEN: Blow built to 3 3/4"

2<sup>nd</sup> OPEN: " " 6 1/2"

30.45.45-60

Rec. 25' G.I.P.

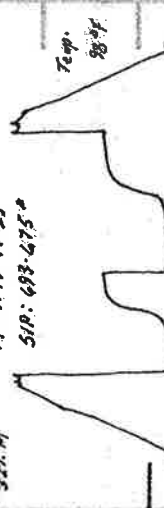
S'MCO (89' OH. 11' M) 60°F 20.5

30' MCO (74' OH. 26.7' M) 60°F

TR: 35'

FP: 1115 17.25°

SIP: 693-675°



**DST (3) 3313-3355**

1<sup>st</sup> OPEN: Blow built to 5 1/2"

2<sup>nd</sup> OPEN: " " 5 1/4"

30.45.45-60

PH: 7.0

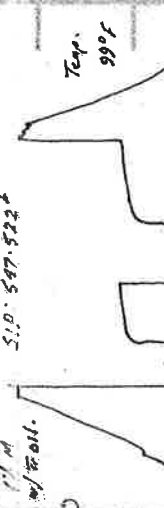
Rec. 40' MW w/Trail (70' W 30' M)

60' SHAW w/Trail (86' W 14' M)

TR: 100'

FP: 1132 34.59°

SIP: 547-522°



**DST (4) 3365-3380**

1<sup>st</sup> OPEN: Bottom bucket 27 1/2 min.

2<sup>nd</sup> OPEN: " " 32 "

30.45.45-60

Rec. 250' SHAW (95' W 5' M)

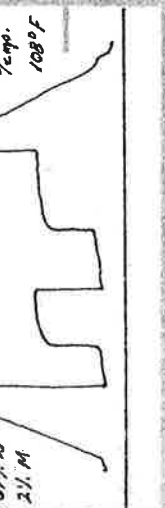
PH: 6.0

RV: 1.07

@ BC: F

FP: 12.65 67.134°

SIP: 740-734°



**DST (5) 3456-3510**

2<sup>nd</sup> OPEN: " " " " 1 1/4"



