

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.

LEASE #1-21 ZIEGELMEIER

FIELD WILDCAT

LOCATION 2310' ENL & 1630' FWL

SEC 21 TWP 5s RGE 32w

COUNTY RAWLINS STATE KANSAS

CONTRACTOR L. D. DRILLING, INC.

SPUD 7-18-14 COMP 7-26-14

RTD 4527 LTD _____

MUD UP 3500 TYPE MUD CHEMICAL

ELEVATIONS

KB 2981 *

DF _____

GL 2976 *

Measurements Are All From 2981 KB

CASING SURFACE 8 5/8" @ 328'

PRODUCTION _____

ELECTRICAL SURVEYS None

SAMPLES SAVED FROM 3600 TO 4527

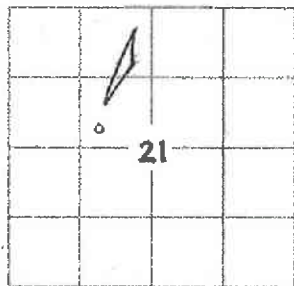
DRILLING TIME KEPT FROM 3500 TO 4527

SAMPLES EXAMINED FROM 3600 TO 4527

GEOLOGICAL SUPERVISION FROM 3700 TO 4527

GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE		2676+305
B/ANH.		2715+266
TDPEKA		3736-755
HEEBNER		3910-929
LANSING		3956-975
STARK		4139-1158
B/KC		4195-1214
PAWNEE		4316-1335
FORT SCOTT		4352-1371
CHEROKEE		4364-1383
MISSISSIPPI		4507-1526



REMARKS

7-16-14 Mine In. Rig up
 7-17 Heavy Run
 7-18 SPUD
 7-19 @ 466'
 7-20 @ 1970'
 7-21 @ 2970'
 7-22 @ 3500'
 7-23 @ 3995'
 7-24 @ 4085'
 7-25 @ 4363'
 7-26 @ 4527'

API: 15-153-21032

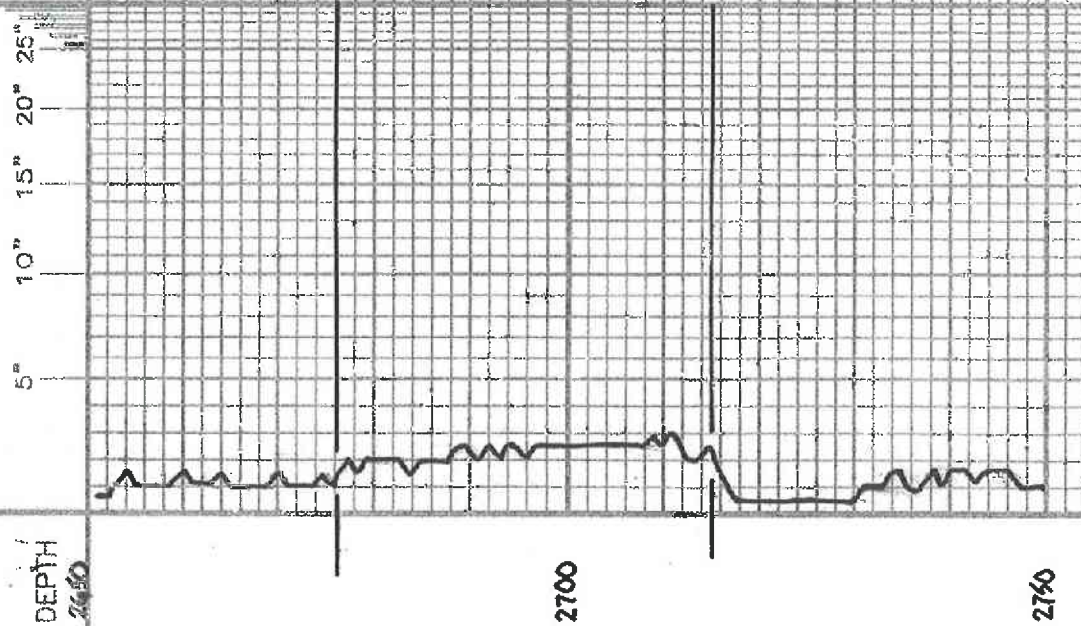
* Elevation reported by Cal. Dwyer to be lowered 16" (Not used, 2981 KB)

LEGEND

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

SHOE01-06

DRILLING TIME IN MINUTES
 PER FOOT
 Rate of Penetration Increases



DEPTH
 2650

2700

2750

SAMPLE DESCRIPTIONS

REMARKS

ANHYDRITE 2676+305

B/ANH. 2715+266

LITHOLOGY

3500

3600

3700



Samples are Labeled

Sh. Ltg. G. Silty

Sh. Gy.

LS. silty. YSi. Foss. sil. Chl.

LS. Yellow Sil. Foss. Sil. A

LS. w/ small Chl.

LS. w/ Foss. Sil. A

Sh. Ltg.

LS. w/ Yellow Sil. Foss. Sil. A
A w/ Dmg c.

Sh. Ltg.

LS. Tng. YSi. Foss.

Sh. Ltg.

TOPEKA 3736-755

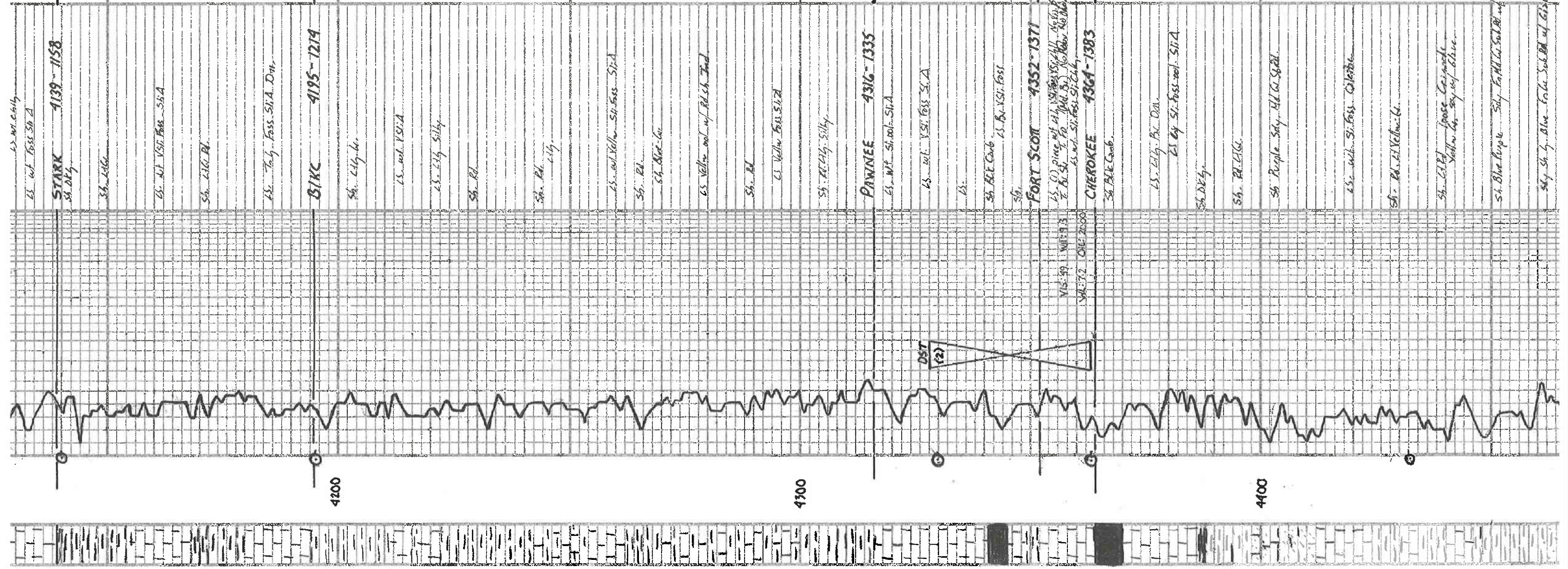
LS. Ltg. YSi. Foss.

LS. w/ Foss. Cobalt.

LS. w/ Foss. Cobalt. Sil. Chl.

Sh. Rd. Silty

LS. G. YFoss. Sil. Silty



LS. wt. Foss. Sil. A

STARK 4139-4158
Sh. Dk. G.

Sh. L.G.

LS. wt. V.Si. Foss. Sil. A

Sh. L.G. Bl.

LS. Foss. Sil. A. Dnr.

81KC 4195-4214

Sh. L.G. G.

LS. wt. V.Si. A

LS. L.G. Silty

Sh. Bl.

Sh. Bl. Silty

LS. wt. Yellow Sil. Foss. Sil. A

Sh. Bl.

Sh. Bl. G.

LS. Yellow wt. w/ Bl. Sil. Foss.

Sh. Bl.

LS. Yellow Foss. Sil. A

Sh. Bl. G. Silty

PAWNEE 4316-4335

LS. wt. Sil. wt. Sil. A

LS. wt. V.Si. Foss. Sil. A

LS.

Sh. Bl. Carb. LS. Bl. V.Si. Foss.

Sh.

FORT SCOT 4352-4371

LS. (D) Ring wt. Sil. V.Si. Foss. Sil. A. No. 611
LS. Sil. Foss. Sil. A. No. 612
LS. Sil. Foss. Sil. A. No. 613

VIS. 99 WTS. 9.3

VAL. 72 OIL. 2000

CHEROKEE 4364-4383

Sh. Bl. Carb.

LS. L.G. Bl. Carb.

LS. G. Sil. Foss. wt. Sil. A

Sh. Dk. G.

Sh. Bl. L.G.

Sh. Purple Silty. Bl. G. Sil. A.

LS. wt. Sil. Foss. Sil. A.

Sh. Bl. L.G. Yellow-G.

Sh. L.G. Bl. loose. Calc. nodules
Yellow to grey w/ blue.

Sh. Blue Purple Silty. Foss. Sil. A. Bl. w/ blue.

Sh. Sh. G. blue. Foss. Sil. A. Bl. w/ blue.

DST (2) 4328-4363

Pressure - Blow Dried in 5 min.
240 psi: No Blow

30. 30 - 30 : 30

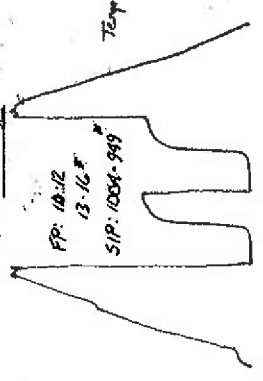
Rec. 25' Mud

FP: 10.12

13.16"

SIP: 1004-999

Temp. 129.0 F



Tool Sample: Mud w/ few oil sats.

564 Sh by Blue Fossil Sub BA w/ R. Blue.

Sh Black Foss. M. G. Sub BA Dm.

Sh Pt. Bi. 504

Sh Pt. Yellow G.

MISSISSIPPI 4507-1526

L3 Yellow w/ Sh Foss. S. A.

A w/ Sh Foss. Fossil L.

L3 G. V. S. G. S. A.

RTD 4527-1546

4500

0

