

# KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 \* WICHITA, KS

## GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L.D. DRILLING, INC.

LEASE \* 2-10 WAT.

FIELD DOLL EAST

LOCATION 2300' FSL & 1850' EWL

SEC 10 TWPSP 16s RGE 30w

COUNTY LANE STATE KANSAS

CONTRACTOR WW DRILLING RIG 2

SPUD 1-5-15 COMP 1-13-15

RTD 4530 LTD 4530

MUD UP 3412 TYPE MUD CHEMICAL

### ELEVATIONS

KB 2727

DF \_\_\_\_\_

GI 2722

Measurements Are All From 2727 KB

### CASING

SURFACE 8 5/8" @ 291'

PRODUCTION 5 1/2" @

### ELECTRICAL SURVEYS

DUAL IND, DENSN., MIRO

SAMPLES SAVED FROM 3600 TO 4530

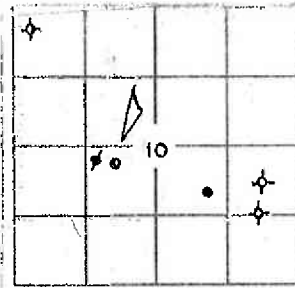
DRILLING TIME KEPT FROM 3300 TO 4530

SAMPLES EXAMINED FROM 3600 TO 4530

GEOLOGICAL SUPERVISION FROM 3700 TO 4530

GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2137±590	2129±598
B/ANK.	2165±562	2163±564
STOTLER	3398-671	3397-670
HEEBNER	3782-1055	3780-1053
LANSING	3820-1093	3814-1087
STARK	4074-1347	4073-1346
MARMATON	4185-1458	4184-1457
FORT SCOTT	4328-1601	4327-1600
CHEROKEE	4352-1625	4351-1624
MISSISSIPPI	4420-1693	4425-1698



ARI: 15-101-22557

### REMARKS

1-5-15 SPUD  
1-6 @ 935'  
1-7 @ 2700'  
1-8 @ 3425'  
1-9 @ 4065'  
1-10 @ 4195'  
1-11 @ 4370'  
1-12 @ 4417'  
1-13 @ 4530'

### LEGEND

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

SHOF01-11

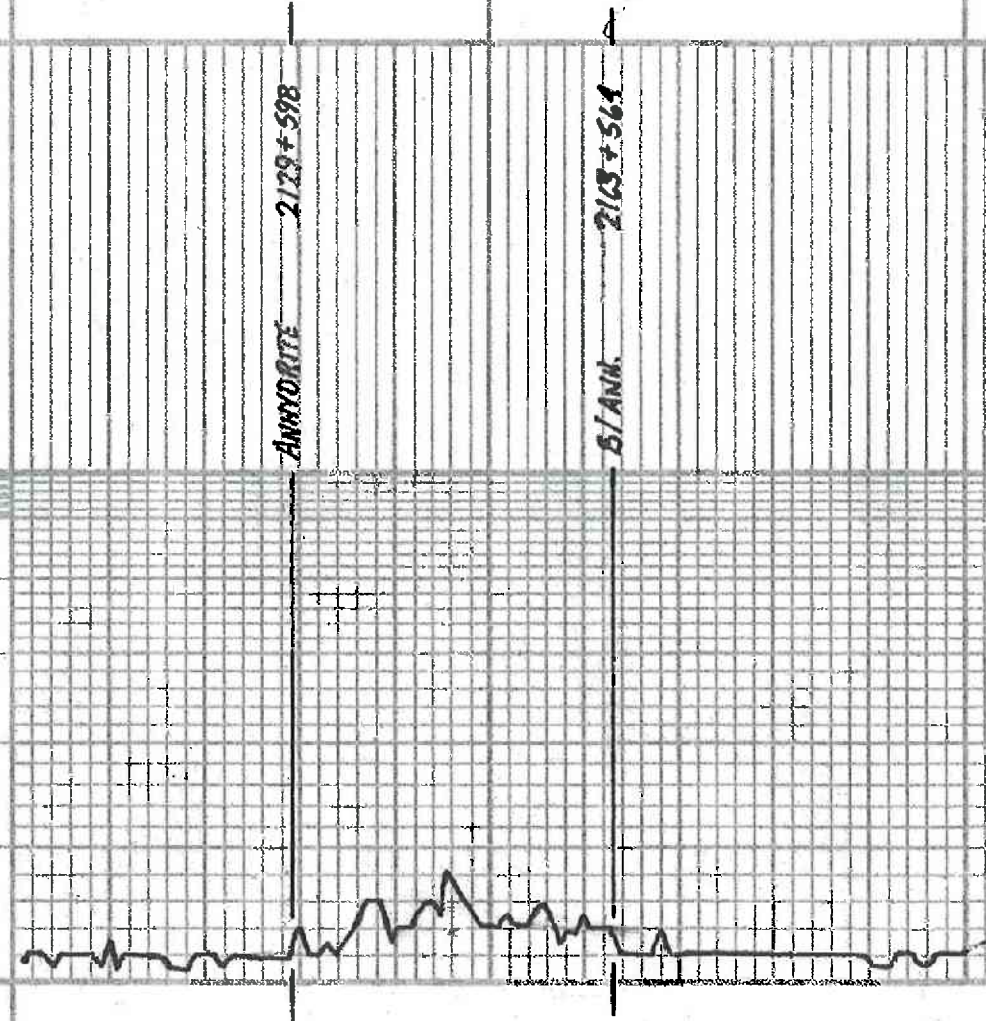
DRILLING TIME IN MINUTES  
PER FOOT  
Rate of Penetration Increases

DEPTH  
2100

LITHOLOGY

REMARKS

SAMPLE DESCRIPTIONS



2200

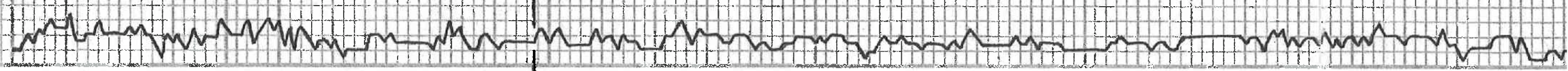
3300

3400

3500

STOYLER 3397-670

V/5: 79



VIS 79  
WT: 8.6  
MC: 8.8  
OM: 2400

3600

3700

3800

3900

SAMPLES ARE LAGED

Sh. Clay  
15. Tr. Foss. A  
Sh. Clay

15. W. sh. Foss. Y. Chalky  
15. Bl. Sh. Foss.

15. Bl. Foss. Calcite.

Sh. BL. DE. G.

Sh. H. Clay. G.

15. Gy. V. Sh. Foss.

15. W. Foss. Calcite. Sh. Chalky

Sh. A. G.

15. W. V. Sh. Foss. Sh. A.

15. Tr. W. Foss. Sh. A.

15. W. Foss. Sh. Chalky

15. G. V. Sh. Foss.

15. Tr. Foss. Sh. A.

15. W. Chalky

15. Tr. Foss. V. Sh. Foss. Chalky

HEESNER 3780-1053  
Sh. BL. DE. G.  
15. Bl. Sh. Foss.

Sh. LG. Blue G.

15. W. V. Sh. Foss.  
A. W.

TORONTO

LANSTING 3814-1087  
Sh. Bl.

LANSTING LOG

15. W. Sh. Foss. Sh. A.

15. W. Sh. Chalky

Sh. DE. G. 15. Tr. W. Sh. A.

Sh. Bl.

15. W. Foss. Sh. A.

Sh. Gy.

15. Tr. W. V. Sh. Foss. Sh. A.

15. A. G. V. Sh. Foss.

KANSAS CITY

Sh. DE. G.

Sh. DE. G.

15. W. Foss. Sh. A.

Sh. LG.

15. Tr. W. Sh. Foss. Sh. A.

LS. Tan. Silty. Siltstone

LS. wt. Chalky

LS. Tan. Silty. Dns.

LS. Silty. Dns.

**MUNCIE CREEK 3983-7256**

LS. Tan. Silty. Dns.

Sh. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

Sh. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

Sh. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

**STARK 4073-7346**

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

**HUSKINNEY 4112-7385**

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

**BLK 4156-7429**

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

**MARMATON 4181-7457**

LS. Tan. Silty. Dns.

Sh. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

Sh. Silty. Dns.

LS. Tan. Silty. Dns.

Sh. Silty. Dns.

LS. Tan. Silty. Dns.

LS. Tan. Silty. Dns.

**DST (1) 4068-4130**

16' open: Bottom bucket 2 1/2 min.

24' open: " " 6 1/2 "

30-45-45-60 58' 1 1/2 "

35' 58' "

Rec. 210' GIP US CO (99/01/1/04) 35' Grav.

315 RWCO (167/01/1/04) 35' Grav.

315 GMWO (02/01/1/04) 30' Grav.

505 SMDV 247' 01" 68' 10" 31' 01"

TF: 1300

CM: 34,000

PH: 7.0

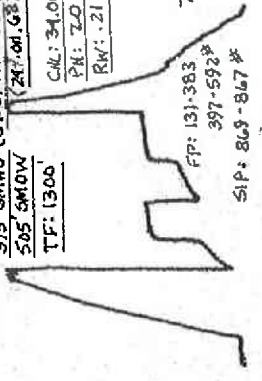
RW: 21 @ 80°F

FP: 131-383

997-592 #

Temp. 128°F

SIP: 809-867 #



Tool Sample: 91-011 851-w 67' Mud

VIS: 53  
WFI: 89  
WL: 8.0  
CML: 2400

4000

4100

4200

VIS: 53 WFI: 90

**DST (2) 4268-4320**

17' open: Surface Bounded 4 min.

24' open: No Blow

30-30-30-30

\* Mechanical Recorder Rec. 10' Mud

No. Electromechanical Recorder

