

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

118-334-9709 • WICHITA, KS

GEOLOGIST'S REPORT

WELL NO. 2719

COMPANY L.D. DRILLING, INC.

WELL NO. 1-4 RIEMANN

WELL NO. WILDCAT

LOCATION 2122' FNL 1/4 1848' FEL

SEC. 4 T18S R28W

COUNTY LANE STATE KANSAS

CONTRACTOR L.D. DRILLING, INC.

DATE 11-5-18 11-22-18

WELL NO. 4687 4690

WELL NO. 3407 CHEMICAL

SAMPLES SAVED FROM 3500 TO 4687

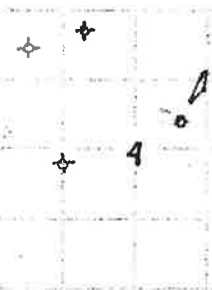
DRILLING TIME - REST FROM 3400 TO 4687

SAMPLES EXAMINED FROM 3500 TO 4687

GEOLOGICAL SUPERVISION FROM 3800 TO 4687

GEOLOGIST ON WELL KIM B. SHOEMAKER

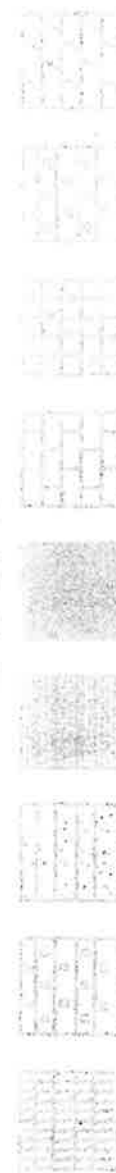
FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2120+599	2123+596
B/ANH.	2149+570	2153+566
STOTLER	3532+813	3531+812
HEEBNER	3930+1211	3928+1209
LANSING	3970+1251	3969+1250
STARK	4230+1511	4228+1509
MARMATON	4328+1609	4326+1607
FORT SCOT	4480+1761	4476+1757
CHEROKEE	4504+1785	4499+1780
MISSISSIPPI	4591+1872	4586+1867



API: 15-101-22614

11-5-18 5700 11-18 @ 4057'
11-6 @ 417' 11-19 @ 4219'
11-7 @ 2015' 11-20 @ 4340'
11-8 @ 2800' 11-21 @ 4500'
11-9 Down Repairs 11-22 @ 4687'
11-10 "
11-12 "
11-13 "
11-14 "
11-15 "
11-16 3155'
11-17 3710'

LEGEND



DRILLING TIME IN MINUTES
PER FOOT

Scale of 1/1000th inch

2050

2100

ANHYDRITE 2123+596

B/ANK. 2153 + 566

2200

3400

Samples are lagged

Sh Lt Blue Gy. Silty.

STOTLER 3531 - 812

ls. Th. Br. Silty Foss.

ls. Th. wt. Foss. Crin. etc.

ls. Gy. Silty Foss.

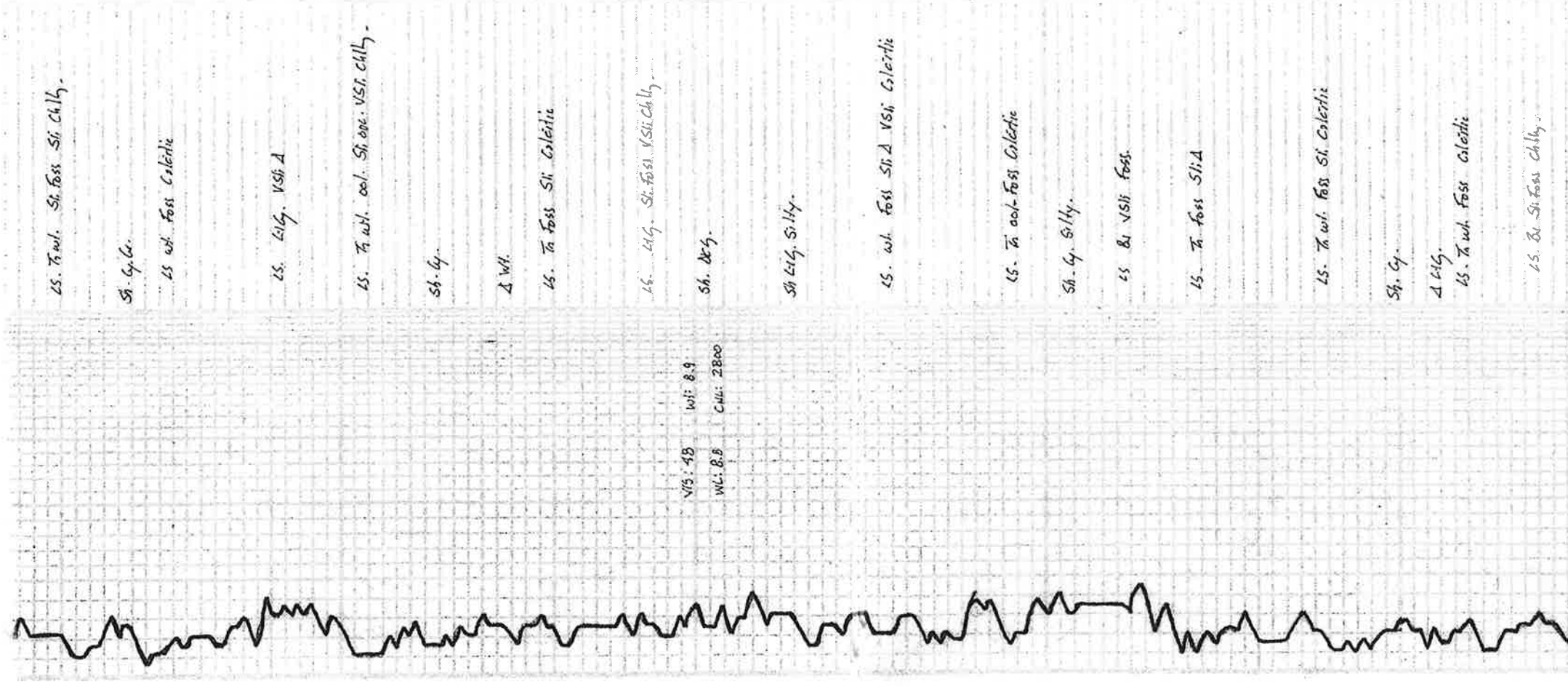
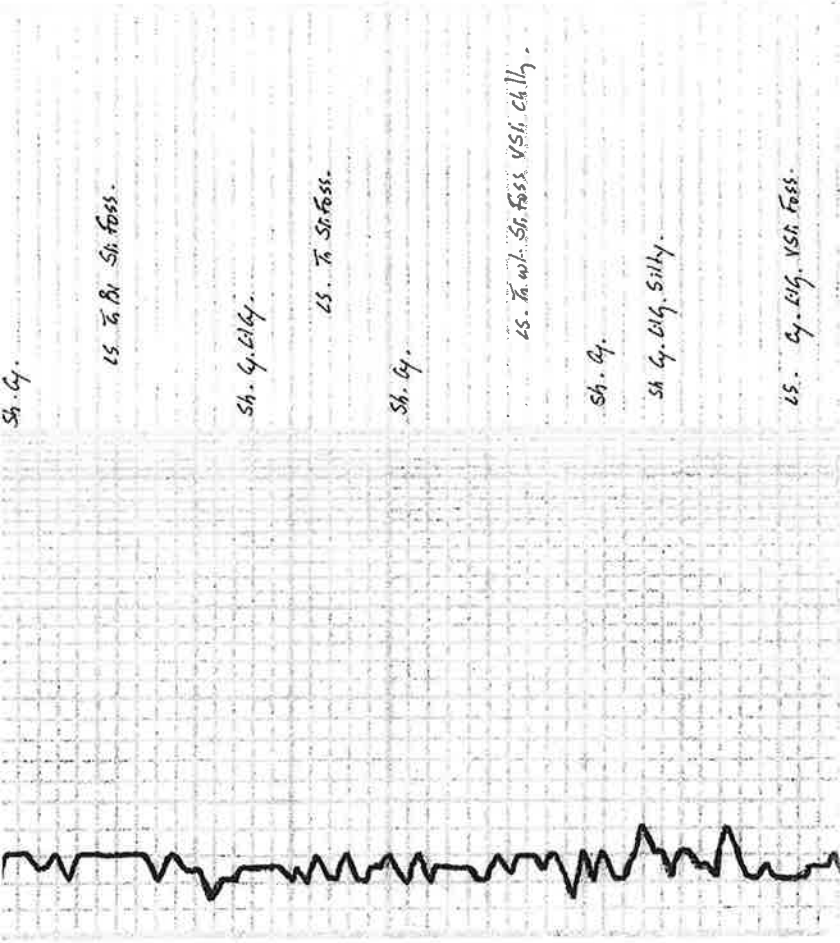
ls. Th. wt. Silty Foss. Sh. chly.

ls. Th. wt. Silty Foss. Silty

Sh Gy.

3500

3600



V/S: 48 Wt: 8.9
Wt: 8.8 C/W: 2800

HEEBNER 3928-1209

Sh. Br. Clay. Sh. Foss.

Sh. A Blue Gy.

LS. T. & B. Sil. A. Sil. Calcitic

LS. G. V. Sil. A. V. Sil. Calcitic

LS. T. & B. Sil. A. Sil. Calcitic

4300

DST (3)

B/KC

4306-1587

DST (3) 4305-4340

1500 ft. Blow built to 18"

2nd OPEN: " " 19"

30-45-95-60

Rec. 45' SWCH

(15' 14" 85-2-2)

FP: 11-21 22-29

SIP: 1030-1000

Temp. 119°F

Tool Sample:

11-61

48% W

50% M

PM: 7

FW: 60-330

PM: 19-20 119°F

CM: 25000

Silly sh. Lt. Blue G.

MARMATON 4326-1607

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

Spld. B. d. Sil. T. & B. No Foss. No odor

Sh. Lt. Blue.

VIS: 50

WT: 95

WE: 95

CHL: 3500

LS. T. & B. V. Sil. A.

LS. G. V. Sil. Ch. G.

LS. G. V. Sil. Ch. G.

Sh. G. G.

LS. G. V. Sil. Foss.

Δ Oyster

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

DE B. G. Sil. d. Sil. V. Sil. A. No Foss. (410)

No odor.

LS. G. V. Sil. A. V. Sil. Calcitic

Sh. G. G.

PAWNEE

4422-1703

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

V. Sil. A. Sil. Foss. F. G. d. No Foss. YFA odor

4400

DST (4)

DST (4) 4390-4500

1500 ft. Blow built to 1 1/2"

2nd OPEN: No Blow

30-30-30-30

Rec. 10' Mud

FP: 12-19 14-14

SIP: 234-105

Temp. 115°F

Tool Sample:

100% M

Δ Blue. G. G.

Sh. G. G.

LS. G. V. Sil. Foss.

Sh. G. G.

LS. G. V. Sil. Foss.

Sh. G. G.

FORT SCOTT

4476-1757

LS. G. V. Sil. Foss. Sil. A. Foss. F. G. d.

Δ B. G. G.

Δ Wh.

LS. T. & B. Sil. Foss. Sil. A. V. Sil. A.

4500

DST (5)

CHEROKEE

4499-1780

Sh. G. G.

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

Δ B. G. G.

Δ Wh.

LS. T. & B. Sil. Foss. Sil. A.

Sh. G. G.

LS. T. & B. Sil. Foss. Sil. A.

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

Sh. G. G. Sil. Foss. Sil. A. Foss. F. G. d.

No odor.

LS. T. & B. Sil. Foss. Sil. A.

Sh. G. G.

Sh. G. G.

LS. T. & B. Sil. Foss. Sil. A.

Sh. G. G.

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

No odor.

MISSISSIPPI 4586-1867

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

No odor.

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

No odor.

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

No odor.

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

No odor.

LS. T. & B. Sil. Foss. Sil. A. Foss. F. G. d.

No odor.

Do! Yellow Earthy Suv.

4700