

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

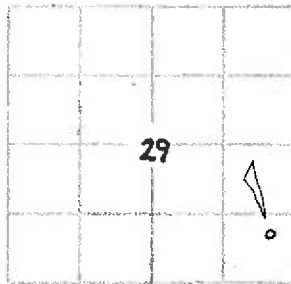
DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.
 LEASE * 1-29 JERRY
 FIELD WILDCAT
 LOCATION 965' FSL & 491' FEL
 SEC 29 TWP 6s RGE 35w
 COUNTY THOMAS STATE KANSAS
 CONTRACTOR L. D. DRILLING, INC.
 SPUD 11-3-16 COMP 11-12-16
 RTD 4900 LTD 4901
 MUD UP 3600 TYPE MUD CHEMICAL

ELEVATIONS
 KB 3312
 DF _____
 GL 3307
 Measurements Are All From 3312 KB
 CASING
 SURFACE 8 5/8" @ 353'
 PRODUCTION 5 1/2" @
 ELECTRICAL SURVEYS
 DUAL IND., DENS-N. MICRO

SAMPLES SAVED FROM 3700 TO 4900
 DRILLING TIME KEPT FROM 3500 TO 4900
 SAMPLES EXAMINED FROM 3700 TO 4900
 GEOLOGICAL SUPERVISION FROM 3800 TO 4900
 GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2917+395	2920+392
B/ANN.	2954+358	2956+356
WAB., STOTLER	3832-520	3828-516
HEEBNER	4140-828	4138-826
LANSING	4190-878	4183-871
B/KC	4448-1136	4442-1130
PAWNEE	4556-1244	4556-1244
FORTSCOTT	4622-1310	4620-1308
CHEROKEE	4649-1337	4648-1336
MISSISSIPPI	4790-1478	4790-1478



API: 15-193-20978

REMARKS

11-3-16 SPUD
 11-4 @ 353'
 11-5 @ 1665'
 11-6 @ 2735'
 11-7 @ 3490'
 11-8 @ 4000'
 11-9 @ 4408'
 11-10 @ 4520'
 11-11 @ 4600'
 11-12 @ 4900'

LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Coar. sh.
- Limestone
- Col. Lime
- Chert
- Dolomite

DRILLING TIME IN MINUTES
 PER FOOT
 Rate of Penetration Increases



DEPTH
 2900

LITHOLOGY

SAMPLE DESCRIPTIONS

REMARKS

ANHYDRITE 2920+392

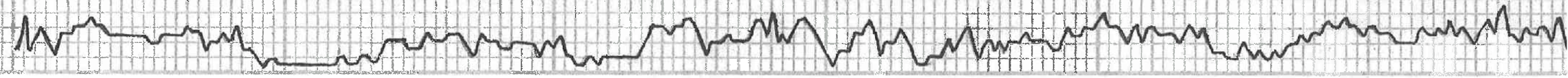
B/ANN. 2956+356

3500

3600

3700

Wt: 30
Wt: 9.8
Wt: 1000



Samples are logged

Sh. 1000 y

Sh. 1000 y. Pink

Sh. 1000 y. 1000 y. 1000 y. 1000 y.

15. 1000 y. 1000 y. 1000 y.

Sh. 1000 y

15. 1000 y. 1000 y. 1000 y. 1000 y.

15. 1000 y. 1000 y.

LS. Mt. St. Vrain - Vail City

LS. Mt. St. Vrain / RL. Ford

HEESNER 4138-826

LS. Mt. St. Vrain - City

Sh. RL Blue ls. 344

Sh. Blue ls. 344

LS. Mt. St. Vrain - 2nd
DE. DE. Blue ls. 550. No Blue. No color

LANSING 4183-871

LS. Mt. St. Vrain - Sh. RL

Sh. RL

Sh. RL 344

LS. Mt. St. Vrain - 1500 ft. No color

Sh. RL
A. D. 344

LS. Mt. St. Vrain - 1500 ft.

LS. Mt. St. Vrain - 1500 ft.

LS. 1144. RL

LS. Road. Ford. 511. A.

LS. Mt. St. Vrain - Chert

LS. Mt. St. Vrain - Chert

LS. Mt. St. Vrain - Chert

MUNCIE CREEK 4310-998

LS. Mt. St. Vrain - 1500 ft.

Sh. RL 344

LS. Mt. St. Vrain - Chert

LS. Mt. St. Vrain - 1500 ft. No color

Sh. RL

LS. 1144. RL

Sh. RL

LS. Mt. St. Vrain - 1500 ft.

STARK 4381-1069

Sh. RL

Sh. RL

LS. Mt. St. Vrain - 1500 ft. - Sh. RL. 511. A.

Sh. RL

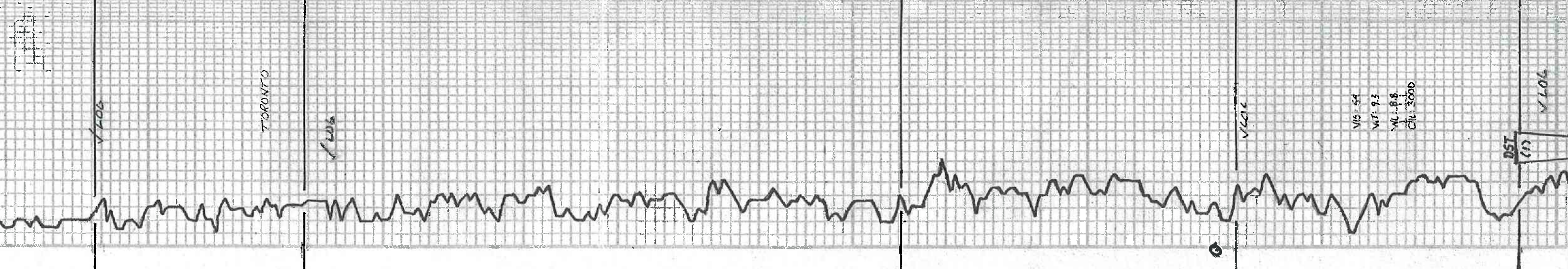
Sh. RL

LS. Mt. St. Vrain - 1500 ft.

BIKC 4412-1130

Sh. RL

MIRAMON 4452-1140



4200

4300

4400

V107 54
V108 93
V109 88
CH. 3000

DST (1)

V106

DST (1) 4411-9520
1st level flow built to 2 1/2"

Sb. Yellow Cl. Westford & Yellow

MISSISSIPPI 4790-4718

65.5.18.4. Foss. Celestite

Dol. G. Fresh. Sive.

Sb. 65.5.18.4

Dol. Sp. 4.4. 51.5.5. Fresh. Sive.

Dol. 4.4. Fresh. w/ Dol. Incl.

Dol. 4.4. Fresh. Sive. Foss. Loggy

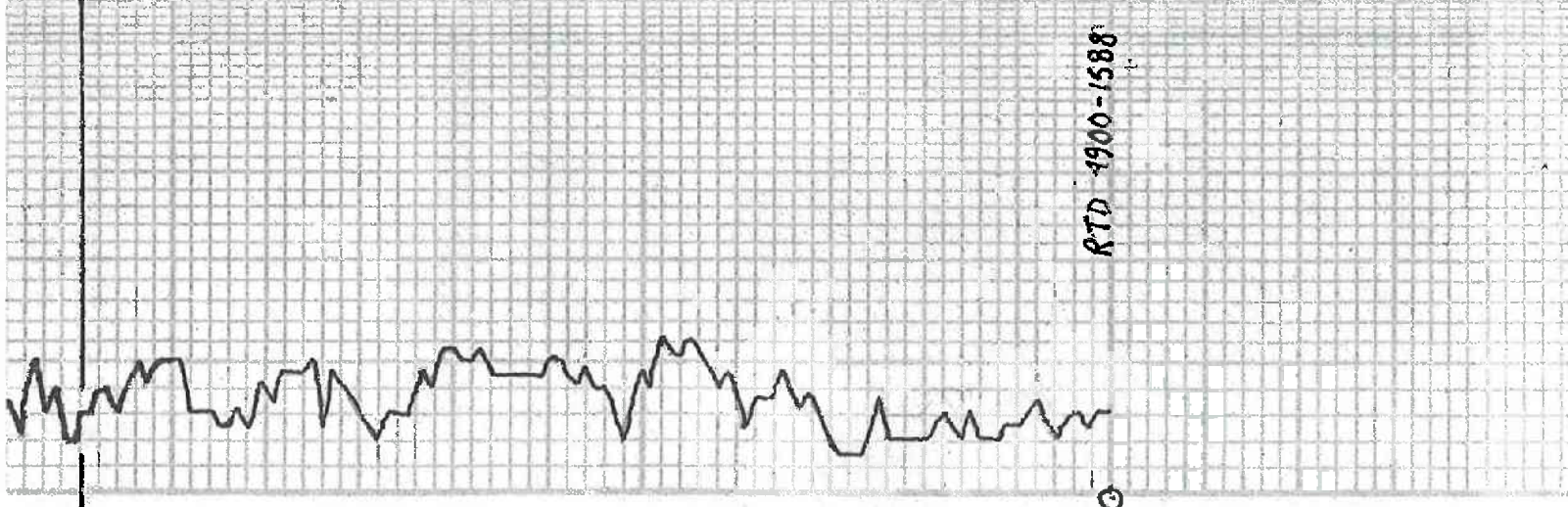
Sb. Yellow Cl.

Dol. 4.4. Fresh. w/ Dol. Incl.

4.4.4.4. Foss.

Dol. 4.4. Fresh. Sive.

4.4.4.4. Sive.



4800

4900

RTD 4900-1588

