

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-884-8709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.

LEASE # 2-30 BAIRD

FIELD LD

LOCATION 1650' FSL & 1650' FEL SE NW SE

SEC 30 TWP 6s RGE 35 W

COUNTY THOMAS STATE KANSAS

CONTRACTOR L. D. DRILLING, INC.

SPUD 4-8-17 COMP 4-19-17

RTD 4850 LTD 4852

MUD UP 3536 TYPE MUD CHEMICAL

ELEVATIONS

KB 3264

DF _____

GL 3259

Measurements Are All From 3264 KB

CASING
SURFACE 8 5/8" @ 344'
PRODUCTION 5 1/2" @

ELECTRICAL SURVEYS
DUAL IND., DENS-N., MICRO

SAMPLES SAVED FROM 3700 TO 4850

DRILLING TIME KEPT FROM 3500 TO 4850

SAMPLES EXAMINED FROM 3700 TO 4850

GEOLOGICAL SUPERVISION FROM 3700 TO 4850

GEOLOGIST ON WELL KIM B. SHOEMAKER








FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2870+394	2868+396
B/ANN.	2904+360	2903+361
STOTLER	3770-506	3765-501
HEEGNER	4079-815	4076-812
LANSING	4132-868	4122-858
B/KC	4382-1118	4371-1113
PAWNEE	4504-1240	4500-1236
FORT SCOTT	4570-1306	4568-1304
CHEROKEE	4598-1334	4600-1336
MISSISSIPPI	4750-1486	4742-1478

30

API: 15-193-20988

REMARKS
4-8-17 SPUD
4-9 @ 347'
4-10 @ 1650'
4-11 @ 2620'
4-12 @ 3317'
4-13 @ 3847'
4-14 @ 4025'
4-15 @ 4411'
4-16 @ 4465'
4-17 @ 4534'
4-18 @ ~~4850~~ 4850'
4-19 @ 4850'

LEGEND

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



LITHOLOGY

REMARKS

SAMPLE DESCRIPTIONS

ANHYDRITE 2868+396

B/ANN. 2903+361

SHOERT-11

Dbl. Dlg. Vfrash. Sur. Fr. Vfrash. Fr. Sals. SW
60560 No Floor. Fldon

DST (1) 3771-3847

1st OPEN: Blow built to 2 1/2"

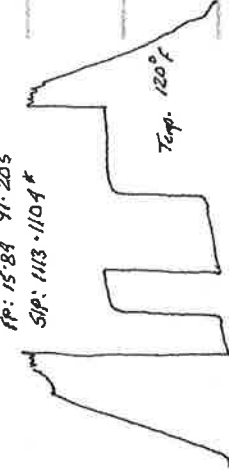
2nd OPEN: " " " " 2

30-45-45-60

Rec. 440' HGL w/ scum oil
(30% M 70% W)

FP: 15-89 91-205*

SIP: 1113-1104*



Sh. Dlg.

ES. Dlg. Vfrash. Calc.

Sh. Dlg.

ES. Tr. wt. Sl. Foss. P. Vfrash. DE. Sals. SW
Vfrash. No Floor. Fldon

ES. wt. Sl. Foss. Sl. Chl.

ES. wt. Foss. Vfrash. Calc. dd. Sals.

ES. Tr. Dlg. Sl. Foss. R. G. P. R. G. P. R. G. P. R. G. P.
No Floor. No. Obs.

ES. wt. Sl. Foss. Chl.

Sh. Dlg.

ES. wt. Foss. Calcite

Sh. Rd.

ES. wt. Sl. Foss. Sl. Chl.

ES. wt. Sl. Foss. Foss. Fr. G. P. R. G. P. R. G. P. R. G. P.

Sh. HGL Soly.

Sh. Calc. Fr. G. Sub. Rd.

Sh. Rd.

ES. Tr. wt. Sl. Foss. Calcite

ES. Tr. wt. Foss. Sl. A

Dbl. Tr. wt. Vfrash. Sur. Vfrash. Foss.

Sh. Dlg. G.

ES. Dlg. Vfrash.

Sh. Rd.

Dbl. Tr. wt. Vfrash. Sur.

Sh. Rd.

ES. Tr. wt. Foss. Sl. D. Sl. Calcite

Sh. Calcite

ES. Tr. G. Sl. A

ES. Tr. wt. Foss. Calcite

ES. Tr. G. Sl. D

HEEGER 4076-812

Sh. Calcite

ES. Tr. wt. Sl. Foss.

Sh. Dlg. Blue. Soly.

Sh. Calc. Blue. Vfrash. G. Sub. Rd.

Sh. Rd.

ES. wt. Sl. Foss.

Sh. Rd.

VIS: 50
WT: 8.9
NL: 6.8
CIL: 2000

VIS: 59
WT: 9.0
NL: 7.2
CIL: 3000

3800

3900

4000

4100

TORONTO

TORONTO

LANSING 4122-859

- LS. wt. Sil. Foss.
- Sh. Rd.
- LS. wt. Sil. Foss. Calcite
- LS. wt. Sil. Foss. VSI. Chly. F. y. p. To blk. del. Str.
- Sil. Cl. G. G. Fa. G. Sub Rd.
- Sh. Rd.
- LS. wt. Foss. Sil. A
- Sh. Rd.
- LS. wt. Sil. Foss. Foss. Calcite
- A. D. Org.
- LS. To wt. Sil. Foss.
- Sh. Rd.
- LS. wt. Foss. Calcite
- LS. wt. Ltg. Sil. Foss. VSI. Chly.

MUNCIE CREEK 4244-980

- Sh. Bl. G. G. LS. Sil. VSI. Foss.
- Sh. Ltg. G.
- LS. To G. Sil. Foss. Sil. A
- Sh. D. G.
- LS. To G. VSI. Foss. No. V. G. Spid. Bl. Sil. del. Str. No Flow. Noodor
- Sh. Rd.
- LS. Ltg. VSI. Foss. VSI. Chly.
- LS. wt. Ltg. Foss. Sil. Chly. VSI. A
- Sh. G. G.

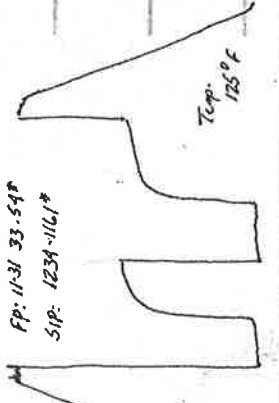
STARK 4321-1057

- LS. To G. Sil. Foss. Sil. Chly.
- Sh. G. G.

DST (2) 4374-4441

1st OPEN: Blow with 7 1/2"
2nd OPEN: " " 2 1/2"
30-45-45-60
Rec. 100' Mud

FP: 11-31 33-54P
SIP: 1231-1111*



B/KC 4377-1113
MARMATON 4386-1122

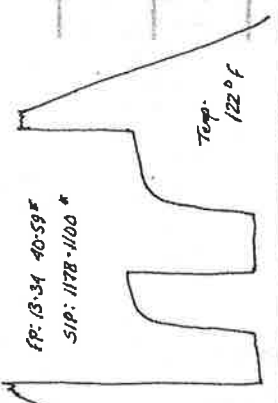
- LS. To G. VSI. Foss. VSI. A
- Sh. Rd.
- LS. Ltg. Sil. Foss. Foss. P. y. p. DE. Bl. Spid. Str. No Flow. Noodor.
- To Sil. Chly. Bl. V. G. Sub Rd. Bl. Sil.
- LS. Ltg. VSI. Calcite
- Sh. Ltg. G. Silty

VIS: 59 WT: 9.1
WIL: 8.0 CHL: 4000

ALTMONT 4412-1148

V LOG

DST (3) 4372-4465
1st OPEN: Blow with 7 1/2"
2nd OPEN: " " 3 1/2"
30-45-45-60
Rec. 110' Mud w/ oil spots (V. 60000)



18' 4434-1170

- LS. wt. w/ large A. Foss.
- Sh. Ltg. Rd. G. Sil. A
- LS. G. Foss. F. y. p. DE. Bl. Spid. Str. No Flow. Noodor. Rec. Material. Colonial. Calc. Silty.
- Sh. Ltg. G. Silty. Bl. Silty.

DST (4) 4474-4534

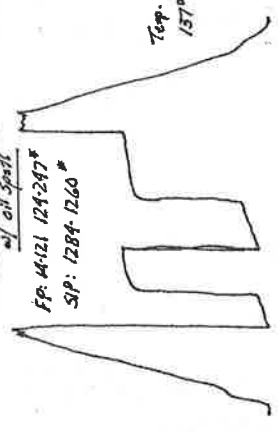
DST (4) 4474-4534

1 STAPEN: Bottom Bucket 8 min. 88° None
2nd ADEN: " " 14 " 88: "

30. 95-95-60

Pic. 550' MOM (300' M. 20' M.)
w/ oil Spout

FR 44121 129297°
SP: 1284-1260 "



Sh. Lt. Bl. G. G. Soft Gummy.

✓ LCG 4452-1188

LS. Tn. w/ oil. Foss. Chalk. Fr. 1/2 in. Rd. M. Sat. Sp. 500' 550'

VS: 61 WT: 9.2

VS: 59 WT: 9.2

VS: 9.6 CNL: 5200

VS: 10.4 CNL: 5000

LS. Lt. G. Dun.

Sh. G. Lt. G. Silty

Sh. G. Neg.

PANNEE 4500-1236

✓ LCG

LS. w/ F. oil. Foss. VSI: Chalk. Fr. 1/2 in. Rd. M. Sat. Sp. 500' 550'

LS. Bl. G. VSI: Foss. Sil. Calcitic

LS. Bl. G. Foss.

Sh. Blk. Carb.

LS. Lt. G. VSI: A

Sh. Bl. G.

LS. w/ Sil. Foss. VSI: Chalk.

Sh. Blk. Carb.

FORT SCOTT 4568-1304

LS. Tn. Sil. Carb. w/ Bl. Carb. VSI: A

LS. Tn. VSI: Foss. Sil. A

Sh. Blk. Carb.

CHEROKEE 4600-1336

LS. Lt. G. VSI: Foss. VSI: Chalk.

Sh. Lt. Bl. G.

LS. w/ VSI: Foss. VSI: Calcitic

Sh. Blk. Carb.

LS. G. VSI: A T. Chalk.

Sh. Blk. Carb.

Sh. Lt. G. Silty Sdy.

Sdy. Sh. Lt. Blk. Carb. VSI: Sil. A

Sh. Lt. Blk. Carb. Sdy.

Sdy. Ch. G. Fr. Hd. G. Sub. Blk.

Sh. Blk. Lt. Blk. G.

Sh. Blk. Blue G.

LS. Yellow.

Sh. Yellow Blue G.

Sh. Ch. Blk. Hd. G. Bl. Sil. Blk.

Sh. Yellow Blk.

MISSISSIPPI 4742-1478

Sh. Yellow Lt. Blue G.

Sh. Ch. Blk. Hd. G. Bl. Sil. Blk.

Sh. Yellow Blk.

Ded. Tn. Bl. V. Foss. Sil. Foss.

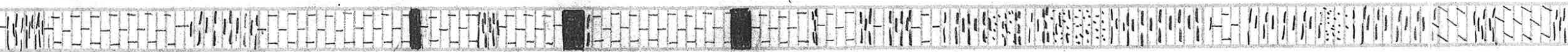
Sh. Yellow



4500

4600

4700



✓ MISSISSIPPI LOG

S4. Yellow

Del. To the V. Park. Sur.

S4. G. J.

Del. G. J. Park. Sur. and G. J. Park. Sur.

Del. G. J. Park. Sur. and G. J. Park. Sur.

Del. G. J. Park. Sur. and G. J. Park. Sur.

Vis: 57 Wt: 95

Wt: 88 Cal: 4000

RTD 4850-1586

4800

